AIPHONE

General Line Catalog | 2022

Proud to be your trusted business partner since 1970

Security Communication Solutions

Modern Intercoms for Any Industry

Check out the latest IXG Commercial Series
IP Video Intercom with Mobile App → p. 10

IP Intercoms | Emergency Towers | Multi-Tenant Systems | Mobile Apps

Aiphone Solution Showcases

Featuring Out-of-the-Box Ideas to Help Solve Your Customers' Most Challenging Requests

THE APPLICATION
With a wide selection of Solution Showcases to check out, we are sure to have an application for your customers.

THE SCENARIO
Each showcase outlines a real-world scenario of different challenges and unique situations that end-users faced.

THE SOLUTION
For every scenario, there was a reliable security communication solution, either installed or serviced, to meet the various needs.

THE BENEFITS
Highlighting the project's key points helps you to quickly understand how each end-user benefited from an Aiphone solution.

THE CONFIGURATION
An example layout of how each system was configured provides a snapshot of how easy it is to install and operate our intercoms.

Learn what others have done with our reliable security intercoms and discover the added value you get when working with our trustworthy brand.

Explore unique possibilities on our Solution Showcase page.

aiphone.com/glc_showcases

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Look for the QuikSpec Logo!

Many products can be specified using Aiphone's online system design tool. Plus, it's FREE to sign up.

quikspec.com

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Missing the IS Series? We have you covered.

If your customers are looking for the same features the IS Series had, they will be impressed with our IX Series Peer-to-Peer IP Video Intercom system.

IS Series

IX Series

	IS Series	IX Series
Infinite capacity with unlimited expansion		✓
Hardware and PC software master stations	✓	✓
Cloud-based mobile app		✓
PoE stations	✓	✓
SIP compliant		✓
Bell scheduling	✓	✓
ADA emergency stations	✓	✓
Compatible with wall boxes and towers	✓	✓
ONVIF Profile S integration		✓
UL Listed stations		✓
Paging integration	✓	✓
Scan monitoring	✓	✓
Large touchscreen		✓
Analog components	✓	

IP Intercoms

IX Series
Peer-to-Peer IP Video Intercom
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QuikSpec

IX Emergncy Series
Peer-to-Peer IP Video Intercom
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QuikSpec

IXG Commercial Series
IP Video Intercom with Mobile App
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NEW

IXG Series
IP Multi-Tenant Video Intercom
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QuikSpec

IS Series Components	IX Series Components
IS-CCU	N/A
IS-DV	IX-DV
IS-DVF	IX-DVF
IS-DVF-2RA	IX-DVF-2RA
IS-DVF-2RA-FR	IX-DVF-2RA-FR
IS-DVF-HID	IX-DVF-P
IS-DVF-RP10	IX-DVF-P
IS-IPC	N/A
IS-IPDV	IX-DV
IS-IPDVF	IX-DVF
IS-IPDVF-HID	IX-DVF-P
IS-IPDVF-RP10	IX-DVF-P
IS-IPMV	IX-MV7-B, IX-MV7-HB, IX-MV7-HW-JP, IX-MV7-W
IS-MB	IX-MB
IS-MV	IX-MV7-B, IX-MV7-HB, IX-MV7-HW-JP, IX-MV7-W
IS-PU-UL	N/A (PoE)
IS-RACK	N/A
IS-RCU	N/A
IS-RS	IX-RS-B, IX-RS-W
IS-SCU	N/A
IS-SOFT	IX-SOFT
IS-SS	IX-SSA
IS-SS-2G	IX-SS-2G
IS-SS-2RA-R	IX-SSA-2RA
IS-SS-RA-R	IX-SSA-RA

If you have an existing equipment list for an upcoming project with the discontinued IS Series, refer to this chart on the left to easily convert the system over to the IX Series.

Learn more at **aiphone.com/glc_ix**

STATIONS ∞ IX Series Peer-to-Peer IP Video Intercom

Box Set (an unlimited number of stations can be added)

IXS-HBDV
Box Set with IX-DV, IX-MV7-HB, PoE Switch, and USB Drive
- Preprogrammed equipment is ready to install
- PoE switch allows for easy expansion
- USB drive includes back-up programming files and how-to videos for future growth

START with a BOX SET

IP Door Stations: mix and match unlimited (can call up to 20 master stations at one time)

IX-EA
IP Video Door Station
- Fixed camera
- Plastic chassis
- Surface mount

IX-DVM
Mullion-Mount IP Video Door Station
- Fixed WDR camera
- Built-in touchless call sensor
- Aluminum die cast cover
- Vandal resistant
- Surface mount

IX-DV
IP Video Door Station *(included with IXS-HBDV box set–available soon)*
- Fixed camera
- Aluminum die cast cover
- Vandal resistant
- Surface mount

IX-DVF
IP Video Door Station
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

IX-DVF-L
IP Video Door Station with T-Coil Compatibility
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

IX-DVF-HW
IP Video Door Station with Hand Wave Call Sensor and Surface Mount Box
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Surface mount

IX-DVF-P
Card Access IP Video Door Station
- HID® multiCLASS SE® Proximity Card Reader *(requires a third-party host and additional wire to power card reader)*
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

IX-SS-2G
IP Audio Door Station
- Stainless steel panel
- Vandal resistant
- Flush mount *(fits 2-gang box)*

IX-SSA
IP Audio Door Station
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

Shared Features
- PoE
- SIP compliant
- On-board recording with a microSD™ card
- Weather resistant

→ p. 66 to 67

For more details and compatible door stations, see p. 66–67

For emergency stations, wall boxes, and modular towers, see p. 8

2 wires — Door Strike and Power

System Features

- Can register to a compatible IP PBX for enhanced SIP features, like call forwarding and dialing out
- Device supervision allows for scheduled or manual system checks to ensure all stations are operating as expected
- IP camera integration makes it easy to toggle between the close-up view of the video door station and the wide view of an IP camera
- Backward and forward compatible – easily upgrade IX Series systems, now and in the future
- Transfer calls between multiple stations based on a schedule or time delay
- PoE passthrough on IX-DV, IX-DVF, IX-DVF-4, IX-DVF-P, and IX-SSA stations can power additional device (requires PoE+)
- Peer-to-peer design saves on costly licensing fees and additional servers
- Scalable system is easy to expand – mix and match an infinite (∞) number of door stations, emergency stations, master stations, and sub stations
- Support Tool programming allows for batch configurations
- ONVIF® Profile S video streaming
- Interfaces with Lenel® OnGuard® (7.3 through 7.6 releases) and Software House® CCure 9000 (2.50 through 2.80 releases)
- All Call or group paging
- Priority call queueing
- Prerecorded message paging
- Bell scheduling
- Standard door release wiring to door/emergency station or to IXW-MA for added security

Calling Capacities

The IX Series has an unlimited station capacity, where an infinite number of door stations, emergency stations, master stations, and sub stations can be part of the same system. However, there is a **calling capacity for each station** (refer to the chart below). Each door station, emergency station, or sub station can call up to 20 master stations or sub stations at one time.

Chart illustrates calling capacities for each station.	Master Stations	Door Stations, Emergency Stations, or Sub Stations
Address Book	9,999 stations and 20 recent calls	N/A
Calling	1 station **OR** 1 group of up to 50 masters/apps	1 group of up to 20 masters/apps ***NOTE:*** *An additional group can be called with the optional input or via CGI (does not apply to 2-wire door/sub station adaptors).*
Paging	All stations (All Page) **OR** groups up to 50 stations	Receive only

Ask for stations available with UL Listing

QuikSpec

IP Master Stations: mix and match unlimited

(can call up to 500 door stations, emergency stations, or master stations)

IX-MV7-HB-L
IP Video Master Station with T-Coil Supported Handset

IX-MV7-HW-JP
IP Video Master Station
(TAA-compliant)

IX-MV7-B
IP Video Master Station

IX-MV7-W
IP Video Master Station

IX-MV7-HB
IP Video Master Station
(included with IXS-HBDV box set–available soon)

Shared Features
- PoE
- SIP compliant
- 7" LCD touchscreen
- Eight speed dial buttons
- Camera for two-way video calls
- On-board recording with a microSD™ card
- Hands-free communication
- Wall or desk mount *(stand included)*

→ p. 64

IX-SOFT
PC Master Station Software
(also available in bundles of 3, 5, and 10 USB dongles)
→ p. 64

LAN

Sub Stations: mix and match unlimited

IX-RS-B
Audio Room Sub Station

IX-RS-W
Audio Room Sub Station

Shared Features
- PoE
- SIP compliant
- Internal communication with other sub stations, hands-free or handset for privacy
- 2W external speaker output for communication or paging
- Wall mount

→ p. 64

Accessories

IXW-HWCBP
Hand Wave Call Sensor and Surface Mount Box
→ p. 67

SBX-2G/A
Surface Mount Box for IX-SS-2G
→ p. 90

SBX-IXDV30
30° Angle Box for IX-DV
→ p. 91

IX-MB
Mullion Mounting Bracket for IX-DV
→ p. 91

SBX-IDVFRA
Surface Mount Box for IX-DVF-4 or IX-DVF-P
→ p. 90

SBX-IDVF
Surface Mount Box for IX-DVF or IX-SSA
→ p. 90

TW-SPL
Tower Mounting Plate for IX-DVF or IX-SSA
(adapts standard door station to an Aiphone tower or wall box)
→ p. 71

IXW-MA
IP Relay Adaptor
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IPW-1VC
2-Wire Network Adaptor
→ p. 65

IXW-PBX
IP PBX for IX Series
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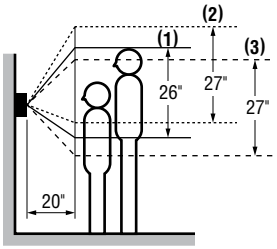
IPW-VPN
VPN Router
→ p. 65

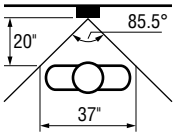
Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
IX-DV	8-1/16"	4-1/2"	2-1/16"	205.5	115	52.5
IX-DVF, IX-SSA	10-7/16"	5-7/8"	*	265	150	*
IX-DVF-L, IX-DVF-P	11-11/16"	7"	*	297	178	*
IX-DVF-HW	11-3/4"	7-3/16"	3-3/16"	299	181.9	80.3
IX-DVM	6-7/8"	1-7/8"	1-3/8"	175	48	34
IX-EA	6-5/16"	3-15/16"	1-11/16"	160	100	43.5
IX-SS-2G	4-3/4"	4-3/4"	*	120	120	*
IX-MV7-B, IX-MV7-W	6-3/4"	8-11/16"	1-1/4"	172	220	31.5
IX-MV7-HB, IX-MV7-HB-L, IX-MV7-HW-JP	8-1/16"	11"	2-3/16"	204	280	55.5
IX-RS-B, IX-RS-W	7-9/16"	3-9/16"	2-5/8"	192	90	67

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Camera View Area





(1) Standard fixed position
(2) Upward fixed position
(3) Lower fixed position

Specifications

Power Source PoE (802.3af)

IX-DV, IX-DVF, IX-DVF-4, IX-DVF-P, IX-SSA: PoE (802.3af) PoE+ (802.3at), or 24V DC—use PS-2420UL

Network Interface Hardwired Stations: 10 BASE-T/100 BASE-TX Ethernet (RJ-45)

Network Protocols IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP, RTCP, IGMP, MLD, SMTP, DHCP, NTP, DNS

Bandwidth Usage Audio (G.722): 64Kbps x 2 for communication, 64Kbps for monitoring

Video (H.264): 32Kbps–2,048Kbps

Video Streaming ONVIF® Profile S or RTSP

Communication Hands-free (full-duplex), push-to-talk (simplex), or handset (full-duplex)

Door Release IXW-MA: ten programmable dry contacts (four Form C, six Form A), 24V AC/DC, 500mA

IX-DV, IX-DVF, IX-DVF-4, IX-DVF-P, IX-MV7-B, IX-MV7-W, IX-MV7-HB, IX-MV7-HW-JP, IX-SSA: two Form C dry contacts, 24V AC/DC, 1A

IX-DVM, IX-EA, IX-RS-B, IX-RS-W, IX-SS-2G: Form C dry contact, 24V AC/DC, 1A

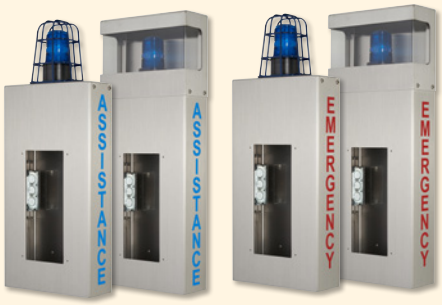
Wire Type Cat-5e or Cat-6

Distance Door Station, Emergency Station, Sub Station, Master Station, or Network Adaptor to Network Node: 330'

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

IX Emergency Series Peer-to-Peer IP Video Intercom

Emergency Wall Boxes, Modular Towers, & Solar Tower Sets (optional)



WB-CE* *(cage)*
WB-HE* *(hood)*
ADA Compliant Wall Box
- Beacon/strobe light
- EMERGENCY lettering
- UL Listed electrical box
- Stainless steel enclosure with slim, 4" depth
- Wall mount

→ p. 69

WB-CA* *(cage)* **WB-HA*** *(hood)*
ADA Compliant Wall Box
- Beacon/strobe light
- ASSISTANCE lettering
- UL Listed electrical box
- Stainless steel enclosure with slim, 4" depth
- Wall mount

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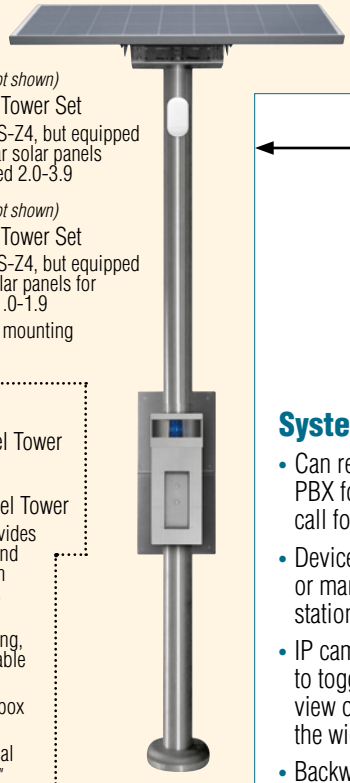
TWS-Z4
Zone 4 Solar Tower Set
- Includes WB-HE wall box with Sun Surveillance's solar panel and mounting components
- Wireless solar solution powers wall box beacon/strobe and emergency call station
- Equipped with one solar panel for zones rated 4.0+



TWS-Z2 *(not shown)*
Zone 2 Solar Tower Set
- Same as TWS-Z4, but equipped with two solar solar panels for zones rated 2.0-3.9

TWS-Z1 *(not shown)*
Zone 1 Solar Tower Set
- Same as TWS-Z4, but equipped with three solar panels for zones rated 1.0-1.9
- Direct-burial mounting

→ p. 69

TW-20B/A*
2-Module Mid-Level Tower

TW-23B/A*
3-Module High-Level Tower
- Modular design provides lower freight costs and easier assembly than non-modular towers
- Two sizes available with choice of lettering, custom colors available upon request
- UL Listed electrical box
- CCTV camera arm module with universal pipe threading *(1.50" NPT threading x 1" long)*
- Includes accessory mounting hardware with external threads *(male: M3 x .05, 1-gang spacing pattern)*
- Large access panel on each module
- Zinc-treated steel with powder coating

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PS-POE
PoE Splitter
→ p. 68

PoE+ (required) Network Switch

*Power is required for the beacon/strobe light on wall boxes and towers – use PS-POE splitter to draw power from an IX Series station's PoE passthrough

IP Emergency Stations: mix and match unlimited

(can call up to 20 sub stations or master stations at one time)

IX-DVF-2RA
ADA Compliant IP Video Emergency Station with Two Call Buttons

IX-DVF-RA
ADA Compliant IP Video Emergency Station

IX-SSA-2RA
ADA Compliant IP Video Emergency Station with Two Call Buttons

IX-SSA-RA
ADA Compliant IP Audio Emergency Station

Shared Features:
- PoE *(with passthrough port)* or 24V DC
- SIP compliant
- On-board recording with microSD™ card
- Lettering and braille signage
- LED call status indicator
- Two Form C relay outputs
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

→ p. 68

Stations are also available with French labels:

IX-DVF-2RA-FR → p. 68
IX-SSA-2RA-FR → p. 68
IX-DVF-RA-FR → p. 68
IX-SSA-RA-FR → p. 68

System Features

- Can register to a compatible IP PBX for enhanced SIP features, like call forwarding and dialing out
- Device supervision allows for scheduled or manual system checks to ensure all stations are operating as expected
- IP camera integration makes it easy to toggle between the close-up view of the video door station and the wide view of an IP camera
- Backward and forward compatible–easily upgrade IX Series systems, now and in the future
- Transfer calls between multiple stations based on a schedule or time delay
- PoE passthrough on IX-DVF-2RA, IX-DVF-RA, IX-SSA-2RA, and IX-SSA-RA stations can power additional device (requires PoE+)
- Peer-to-peer design saves on costly licensing fees and additional servers
- Scalable system is easy to expand–mix and match an infinite (∞) number of door stations, emergency stations, master stations, and sub stations
- Support Tool programming allows for batch configurations
- ONVIF® Profile S video streaming
- Interfaces with Lenel® OnGuard® (7.3 through 7.6 releases) and Software House® CCure 9000 (2.50 through 2.80 releases)
- All Call or group paging
- Priority call queueing
- Prerecorded message paging
- Bell scheduling
- Standard door release wiring to door/emergency station or to IXW-MA for added security

Ask for stations available with UL Listing

QuikSpec

IP Master Stations: mix and match unlimited

(can call up to 500 door stations, emergency stations, or master stations)

IX-MV7-HB-L
IP Video Master Station with T-Coil Supported Handset

IX-MV7-HW-JP
IP Video Master Station
(TAA-compliant)

IX-MV7-B
IP Video Master Station

IX-MV7-W
IP Video Master Station

IX-MV7-HB
IP Video Master Station

Shared Features
- PoE
- SIP compliant
- 7" LCD touchscreen
- Eight speed dial buttons
- Camera for two-way video calls
- On-board recording with a microSD™ card
- Hands-free communication
- Wall or desk mount *(stand included)*

→ p. 64

IX-SOFT
PC Master Station Software
(also available in bundles of 3, 5, and 10 USB dongles)
→ p. 64

Sub Stations: mix and match unlimited

LAN

IX-RS-B
Audio Room Sub Station

IX-RS-W
Audio Room Sub Station

Shared Features
- PoE
- SIP compliant
- Internal communication with other sub stations, hands-free or handset for privacy
- 2W external speaker output for communication or paging
- Wall mount

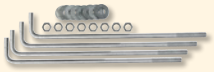
→ p. 64

Accessories

IXW-HWCBP
Hand Wave Call Sensor and Surface Mount Box
→ p. 67

MB-RF1
Retrofit Mounting Bracket for IX-DVF-2RA, IX-DVF-RA IX-SSA-2RA, or IX-SSA-RA
(adapts emergency station to an existing Code Blue® or Talk-A-Phone® tower or wall box)
→ p. 92

SBX-IDVFRA
Surface Mount Box for IX-DVF-2RA, IX-DVF-RA, IX-SSA-2RA, or IX-SSA-RA
→ p. 90



TW-MKL
L-Bolt Mounting Kit for Modular Towers
(an L-bolt mounting kit is required for tower installation – TW-MKL is recommended)
→ p. 71

IXW-MA
IP Relay Adaptor
→ p. 65

IPW-1VC
2-Wire Network Adaptor
→ p. 65

IXW-PBX
IP PBX for IX Series
→ p. 65

IPW-VPN
VPN Router
→ p. 65

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
WB-CA, WB-CE	26"	10-9/16"	4"	660	203	102
WB-HA, WB-HE	27"	10-13/16"	4"	686	203	102
IX-DVF-2RA, IX-DVF-RA, IX-SSA-2RA, IX-SSA-RA	11-11/16"	7"	*	297	178	*
IX-MV7-B, IX-MV7-W	6-3/4"	8-11/16"	1-1/4"	172	220	31.5
IX-MV7-HB, IX-MV7-HB-L, IX-MV7-HW-JP	8-1/16"	11"	2-3/16"	204	280	55.5
IX-RS-B, IX-RS-W	7-9/16"	3-9/16"	2-5/8"	192	90	67
TW-20B/A	67-1/4"	10"	8"	1708	254	203
TW-23B/A	100-1/4"	10"	8"	2546	254	203

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Calling Capacities

The IX Series has an unlimited station capacity, where an infinite number of door stations, emergency stations, master stations, and sub stations can be part of the same system. However, there is a **calling capacity for each station** (refer to the chart on page 6). Each door station, emergency station, or sub station can call up to 20 master stations or sub stations at one time.

Specifications

Power Source PoE (802.3af)

IX-DVF-2RA, IX-DVF-RA, IX-SSA-2RA, IX-SSA-RA: PoE (802.3af), PoE+ (802.3at), or 24V DC—use PS-2420UL

Network Interface Hardwired Stations: 10 BASE-T/100 BASE-TX Ethernet (RJ-45)

Network Protocols IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP, RTCP, IGMP, MLD, SMTP, DHCP, NTP, DNS

Bandwidth Usage Audio (G.722): 64Kbps x 2 for communication, 64Kbps for monitoring

Video (H.264): 32Kbps – 2,048Kbps

Video Streaming ONVIF® Profile S or RSTP

Communication Hands-free (full-duplex, half-duplex with IX Series stations), push-to-talk (simplex), or handset (full-duplex)

Door Release IXW-MA: ten programmable dry contacts (four Form C, six Form A), 24V AC/DC, 500mA

IX-DVF-2RA, IX-DVF-RA, IX-MV7-B, IX-MV7-W, IX-MV7-HB, IX-MV7-HW-JP, IX-SSA-2RA, IX-SSA-RA: two Form C dry contacts, 24V AC/DC, 1A

IX-RS-B, IX-RS-W: Form C dry contact, 24V AC/DC, 1A

Wire Type Cat-5e or Cat-6

Distance Door Station, Emergency Station, Sub Station, Master Station, or Network Adaptor to Network Node: 330'

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

STATIONS ∞ IXG Commercial Series IP Video Intercom with Mobile App

IP Door Stations: mix and match unlimited (can call up to 20 master stations at one time)

IX-EA
IP Video Door Station
- Fixed camera
- Plastic chassis
- Surface mount

IX-DVM
Mullion-Mount IP Video Door Station
- Fixed WDR camera
- Built-in touchless call sensor
- Aluminum die cast cover
- Vandal resistant
- Surface mount

IX-DV
IP Video Door Station
- Fixed camera
- Aluminum die cast cover
- Vandal resistant
- Surface mount

IX-DVF
IP Video Door Station
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

IX-DVF-L
IP Video Door Station with T-Coil Compatibility
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

IX-DVF-HW
IP Video Door Station with Hand Wave Call Sensor and Surface Mount Box
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Surface mount

IX-DVF-P
Card Access IP Video Door Station
- HID® multiCLASS SE® Proximity Card Reader *(requires a third-party host and additional wire to power card reader)*
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

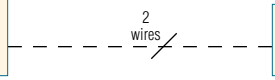
IX-SS-2G
IP Audio Door Station
- Stainless steel panel
- Vandal resistant
- Flush mount *(fits 2-gang box)*

IX-SSA
IP Audio Door Station
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

Shared Features
- PoE
- On-board recording with a microSD™ card
- Weather resistant

→ p. 66 to 67

For more details and compatible door stations, see p. 66–67



System Features

- Device supervision allows for scheduled or manual system checks to ensure all stations are operating as expected
- IP camera integration makes it easy to toggle between the close-up view of the video door station and the wide view of an IP camera
- Transfer calls between multiple stations based on a schedule or time delay
- PoE passthrough on IX-DV, IX-DVF, IX-DVF-4, IX-DVF-P, and IX-SSA stations can power additional device (requires PoE+)
- Peer-to-peer design saves on costly licensing fees and additional servers
- Scalable system is easy to expand – mix and match an infinite (∞) number of door stations, emergency stations, master stations, and sub stations
- Support Tool programming allows for batch configurations
- ONVIF® Profile S video streaming
- All Call or group paging
- Priority call queueing
- Standard door release wiring to door/emergency station or to IXW-MA for added security

Calling Capacities

The IX Series has an unlimited station capacity, where an infinite number of door stations, emergency stations, master stations, and sub stations can be part of the same system. However, there is a **calling capacity for each station** (refer to the chart below). Each door station, emergency station, or sub station can call up to 20 master stations or sub stations at one time.

Chart illustrates calling capacities for each station.	Master Stations	Door Stations, Emergency Stations, or Sub Stations
Address Book	9,999 stations and 20 recent calls	N/A
Calling	1 station **OR** 1 group of up to 50 masters/apps	1 group of up to 20 masters/apps ***NOTE:*** *An additional group can be called with the optional input or via CGI (does not apply to 2-wire door/sub station adaptors).*
Paging	All stations (All Page) **OR** groups up to 50 stations	Receive only

Ask for stations available with UL Listing

IP Master Stations: mix and match unlimited

(can call up to 500 door stations, emergency stations, or master stations)

IX-MV7-HB-L
IP Video Master Station with T-Coil Supported Handset

IX-MV7-HW-JP
IP Video Master Station
(TAA-compliant)

IX-MV7-B
IP Video Master Station

IX-MV7-W
IP Video Master Station

IX-MV7-HB
IP Video Master Station

Shared Features
- PoE
- 7" LCD touchscreen
- Eight speed dial buttons
- Camera for two-way video calls
- On-board recording with a microSD™ card
- Hands-free communication
- Wall or desk mount *(stand included)*

→ p. 64

Mobile App Gateway: mix and match unlimited

IXGW-GW
IXG Series Mobile App Gateway Adaptor
(required for AIPHONE IXG App – service fee will apply)

- PoE
- iOS® or Android®
- Up to eight mobile apps per tenant
- Visitor screening
- Two-way communication
- Audio/Video recording
- Remote door release

→ p. 73

Sub Stations: mix and match unlimited

IX-RS-B
Audio Room Sub Station

IX-RS-W
Audio Room Sub Station

Shared Features
- PoE
- Internal communication with other sub stations, hands-free or handset for privacy
- 2W external speaker output for communication or paging
- Wall mount

→ p. 64

LAN

Accessories

IXW-HWCBP
Hand Wave Call Sensor and Surface Mount Box
→ p. 67

SBX-2G/A
Surface Mount Box for IX-SS-2G
→ p. 90

SBX-IXDV30
30˚ Angle Box for IX-DV
→ p. 91

IX-MB
Mullion Mounting Bracket for IX-DV
→ p. 91

SBX-IDVFRA
Surface Mount Box for IX-DVF-4 or IX-DVF-P
→ p. 90

SBX-IDVF
Surface Mount Box for IX-DVF or IX-SSA
→ p. 90

TW-SPL
Tower Mounting Plate for IX-DVF or IX-SSA
(adapts standard door station to an Aiphone tower or wall box)
→ p. 71

IXW-MA
IP Relay Adaptor
→ p. 65

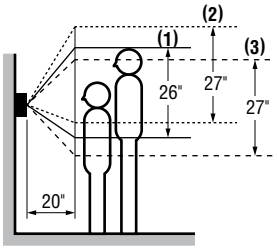
IPW-1VC
2-Wire Network Adaptor
→ p. 65

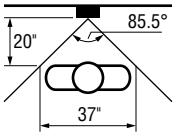
Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
IX-DV	8-1/16"	4-1/2"	2-1/16"	205.5	115	52.5
IX-DVF, IX-SSA	10-7/16"	5-7/8"	*	265	150	*
IX-DVF-L, IX-DVF-P	11-11/16"	7"	*	297	178	*
IX-DVF-HW	11-3/4"	7-3/16"	3-3/16"	299	181.9	80.3
IX-DVM	6-7/8"	1-7/8"	1-3/8"	175	48	34
IX-EA	6-5/16"	3-15/16"	1-11/16"	160	100	43.5
IX-SS-2G	4-3/4"	4-3/4"	*	120	120	*
IX-MV7-B, IX-MV7-W	6-3/4"	8-11/16"	1-1/4"	172	220	31.5
IX-MV7-HB, IX-MV7-HB-L, IX-MV7-HW-JP	8-1/16"	11"	2-3/16"	204	280	55.5
IX-RS-B, IX-RS-W	7-9/16"	3-9/16"	2-5/8"	192	90	67

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Camera View Area





(1) Standard fixed position
(2) Upward fixed position
(3) Lower fixed position

Specifications

Power Source	PoE (802.3af) IX-DV, IX-DVF, IX-DVF-4, IX-DVF-P, IX-SSA: PoE (802.3af) PoE+ (802.3at), or 24V DC—use PS-2420UL
Network Interface	10 BASE-T/100 BASE-TX Ethernet (RJ-45) Mobile App: WiFi, 3G/4G/5G
Network Protocols	IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RSTP, RTP, RTCP, IGMP, MLD, SMTP, DHCP, NTP, DNS
Bandwidth Usage	Audio (G.722): 64Kbps x 2 for communication, 64Kbps for monitoring Video (H.264): 32Kbps – 2,048Kbps
Video Streaming	ONVIF® Profile S or RTSP
Communication	Hands-free (full-duplex), push-to-talk (simplex), or handset (full-duplex)
Door Release	IXW-MA: ten programmable dry contacts (four Form C, six Form A), 24V AC/DC, 500mA IX-DV, IX-DVF, IX-DVF-4, IX-DVF-P, IX-MV7-B, IX-MV7-W, IX-MV7-HB, IX-MV7-HW-JP, IX-SSA: two Form C dry contacts, 24V AC/DC, 1A IX-DVM, IX-EA, IX-RS-B, IX-RS-W, IX-SS-2G: Form C dry contact, 24V AC/DC, 1A
Wire Type	Cat-5e or Cat-6
Distance	Door Station, Emergency Station, Sub Station, Master Station, or Network Adaptor to Network Node: 330'

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

STATIONS/APPS
9,999

IXG Series IP Multi-Tenant Video Intercom

Entrance Station: mix and match up to 9,999

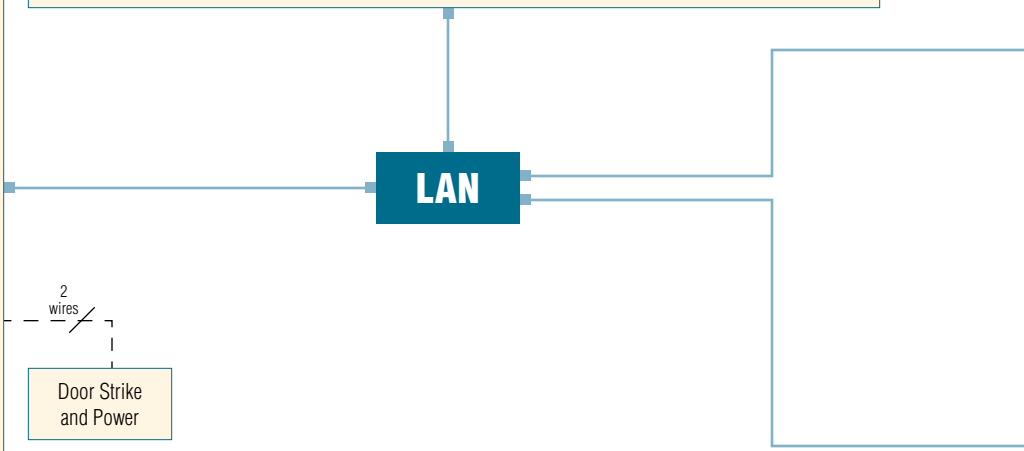
IXG-DM7-HID
IP Video Entrance Station
- Modern and simple user touchscreen interface
- PoE
- Programmable inputs and outputs
- On-board recording with a microSD™ card
- Rugged IP65 and IK08 ratings
- HD camera
- Stainless steel panel
- Flush mount *(back box sold separately)*

→ p.72

Guard Station: mix and match up to 9,999

IXG-MK
IP Video Guard Station
- 7" touchscreen
- PoE
- Programmable inputs and outputs
- On-board recording with a microSD™ card
- Video communication with other guard stations
- Wall or desk mount *(stand included)*

→ p.72



System Features

- Cloud-based app (service fee will apply)
- All stations are PoE
- Touchscreen entrance panel
- Updates can be programmed remotely
- Physical video guard station
- Compatible with select IX Series stations

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
IXG-2C7	5-13/16"	8-15/16"	1"	148	227	25.3
IXG-DM7-BOX	12-1/2"	6-1/8"	2-3/8"	317	156	60
IXG-DM7-HID	13-11/16"	7-3/16"	*	347	182	*
IXG-FMK-2C7	7-13/16"	11-7/16"	1-7/8"	199	290	47
IXG-MK	8-1/16"	11"	2-3/16"	204	280	55.5
IXGW-GW	4-1/4"	8-1/4"	2-3/8"	108.5	210	61
IXGW-LC	4-1/4"	8-1/4"	2-3/8"	108.5	210	61
SBX-IXGDM7	13-3/4"	7-5/16"	3-1/16"	349	185.9	78

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Tenant Station: mix and match up to 9,999

IXG-2C7-L
IP Video Tenant Station
with T-Coil Compatibility

IXG-2C7
IP Video Tenant Station

Shared Features
- 7" touchscreen
- PoE
- Programmable inputs and outputs
- On-board recording with a microSD™ card
- Up to eight stations within an apartment or suite
- Wall mount

→ p. 73

Accessories

IXG-DM7-BOX
Flush Mount Back Box
for IXG-DM7-HID
→ p. 72

SBX-IXGDM7
Surface Mount Back
Box for IXG-DM7-HID
→ p. 72

IXGW-LC-RY20
Elevator Lift Control
and Relay Adaptor
→ p. 73

IXGW-LC
Elevator Lift
Control Adaptor
→ p. 73

MCW-S/B
Desk Stand for IXG-2C7
or IXG-2C7-L
(mounting hardware included)
→ p. 92

IXG-FMK-2C7
Flush Mount Kit for
IXG-2C7 or IXG-2C7-L
→ p. 73

GT-RY
External
Signaling
Relay for
IXG-2C7
→ p. 60

Mobile App Gateway: mix and match up to 9,999

IXGW-GW
IXG Series Mobile App Gateway Adaptor
(required for AIPHONE IXG App – service fee will apply)
- PoE
- iOS® or Android®
- Up to eight mobile apps per tenant

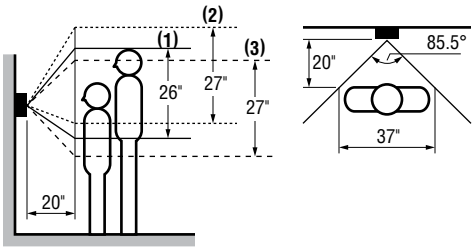
→ p. 73

- Visitor screening
- Two-way communication
- Audio/Video recording
- Remote door release

Compatible with IX Series Systems

See p. 6–9

Camera View Area



(1) Standard fixed position
(2) Upward fixed position
(3) Lower fixed position

Specifications

Power Source	PoE (802.3af)
Network Interface	10 BASE-T/100 BASE-TX Ethernet (RJ-45)
	Mobile App: WiFi, 3G/4G
Network Protocols	IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RSTP, RTP, RTCP, IGMP, MLD, SMTP, DHCP, NTP, DNS
Bandwidth Usage	Audio (G.722): 64Kbps x 2 for communication, 64Kbps for monitoring
	Video (H.264): 32Kbps – 2,048Kbps
Video Streaming	ONVIF® Profile S or RTSP
Communication	Hands-free (full-duplex), push-to-talk (simplex), or handset (full-duplex)
Door Release	IXG-DM7-HID: two programmable Form C dry contacts (Relay 1: 24V AC/DC, 3A Relay 2: 24V AC/DC, 500mA)
	IXG-MK: two programmable Form C dry contacts, 24V AC/DC, 1A
	IXGW-LC, IXGW-LC-RY20: 20 programmable Form C dry contacts, 24V AC/DC, 500mA
Wire Type	Cat-5e or Cat-6
Distance	Entrance Station, Tenant Station, or Guard Station to Network Node: 330'

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

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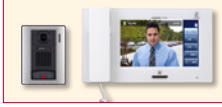
Spec a system at **aiphone.com/glc_quikspec**

Video Intercoms

JP Series
Hands-Free/Handset Video Intercom with 7" Touchscreen
→ p. 16



JO Series
Hands-Free Video Intercom with 7" Screen
→ p. 18

AX Series
Hands-Free Video Intercom with Integration
→ p. 20

KB Series
Handset Video Intercom with Tilt
→ p. 22

DOOR 4 x MSTR/SUB 8 JP Series Hands-Free/Handset Video Intercom w/ 7" Touchscreen

Box Sets: select 1 (up to 3 door stations and 7 sub master stations can be added)

JPS-4AED
Box Set with JP-DA, JP-4MED, and PS-2420UL

JPS-4AEDV
Box Set with JP-DV, JP-4MED, and PS-2420UL

JPS-4AEDF
Box Set with JP-DVF, JP-4MED, and PS-2420UL

Master Station

Removable media storage!
SD* or SDHC* card can store up to 1,000 calls!
*Not included

JP-4MED
Video Master Station
(included with all JPS box sets)
- 7" LCD touchscreen
- Picture Memory
- Removable media storage *(memory card not included)*
- Hands-free communication with handset for privacy

→ p. 76

Cat-5e/6 wire
N/A from Aiphone
(max. 650' between master and adaptor)

Door Stations: mix and match up to 4 (only up to 3 if a box set is selected)

JP-DA
Video Door Station
(included with JPS-4AED box set)
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 77

JP-DV
Video Door Station
(included with JPS-4AEDV box set)
- Zinc die cast cover
- Weather and vandal resistant
- Surface mount

→ p. 77

JP-DVF
Video Door Station
(included with JPS-4AEDF box set)
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

→ p. 77

JP-DVF-HID
Card Access Video Door Station
- HID® ProxPoint® Plus Proximity Card Reader
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

→ p. 77

JP-DVF-RP10
Card Access Video Door Station
- HID® multiCLASS SE® Proximity Card Reader
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

→ p. 77

GT-D
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 58

2 wires Aiphone #871802 (max. 330')

2 wires

2 wires Aiphone #871802 (max. 33')

Door Strike and Power

PS-2420UL
(included with all JPS box sets)
24V DC, 2A Power Supply

→ p. 95

Door Station Features

- Digital PanTilt and Zoom camera eliminates blind spots with 170° wide angle lens (video door stations)
- Card access door stations available

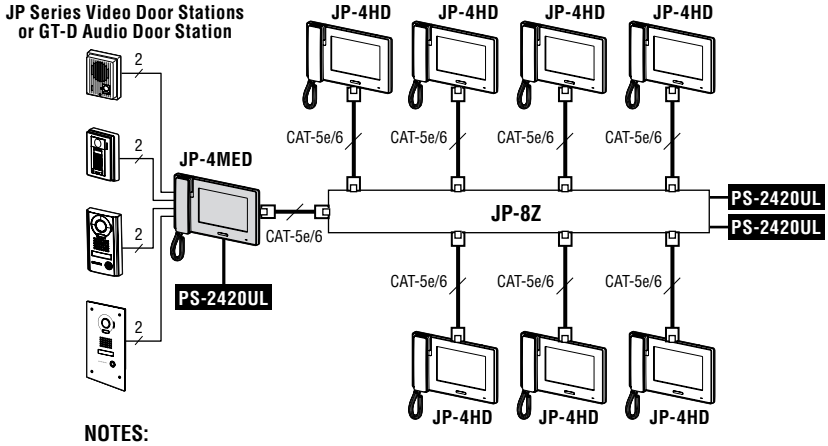
Master Station Features

- 7" LCD touchscreen
- Hands-free or handset communication
- Camera position and zoom can be set for call-in
- Includes two N/O or N/C door release contacts (add RY-3DL for three or four doors)
- Camera can be adjusted to compensate for bright illumination
- Picture memory records up to 20 calls to internal memory and max. 1,000 calls to removable SD/SDHC card (not included)
- Entry can be monitored via the master and sub master stations
- One output to control a secondary device like a light, gate, or additional door
- Video out to DVR via supplied connector

System Features

- Convenient box sets are complete with a master station, each with a different door station, and a power supply (up to three more door stations and seven sub master stations can be added for a full 4 x 8 system)
- Homerun or daisy chain wiring options (see installation manual for details)

Wiring



NOTES:
1. Total cumulative wiring distance between master and sub master stations is 980' (300m)
2. Master station (JP-4MED) requires one power supply
3. Up to four sub master stations (JP-4HD) can use one power supply (use two power supplies for additional sub master stations)

Distribution Adaptor
(required for homerun wiring method)

JP-8Z
Distribution Adaptor for Video Sub Master Stations
→ p. 76

2 wires
Aiphone #871802
(max. 33')

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

2 wires
Aiphone #871802
(max. 33')

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

Cat-5e/6 wire
N/A from Aiphone
(max. 165' between adaptor and sub masters)

Sub Master Station: select up to 7 (optional)

JP-4HD
Video Sub Master Station
- 7" LCD touchscreen
- Hands-free communication with handset for privacy

→ p. 76

JP-4HD → p. 76

JP-4HD → p. 76

JP-4HD → p. 76

JP-4HD → p. 76

JP-4HD → p. 76

JP-4HD → p. 76

Accessories

AC-10S
Stand-Alone Access Control Keypad
(body style matches JP-DV)
→ p. 89

KAW-D
30˚ Angle Box for JP-DA
→ p. 91

MKW-P
1-Gang Mounting Plate for JP-DV
→ p. 92

KMB-45
45˚ Mullion Mounting Bracket for GT-D or JP-DA
→ p. 91

JK-MB
Mullion Mounting Bracket for JP-DV
→ p. 91

SBX-DV30
30˚ Angle Box for JP-DV
→ p. 91

SBX-DVF
Surface Mount Box for JP-DVF
→ p. 90

SBX-IDVFRA
Surface Mount Box for JP-DVF-HID or JP-DVF-RP10
→ p. 90

SBX-ACE
Surface Mount Box for GT-D or JP-DA and one Access Control Device
→ p. 90

JPW-BA
Long Distance/ CCTV Adaptor for Door Stations
→ p. 76

EL-12S
Electric Door Strike for Wood Frames
(requires PT-1210NA)
→ p. 89

RY-1824L
Form C Door Release Relay
(one per door – max. two per system)
→ p. 89

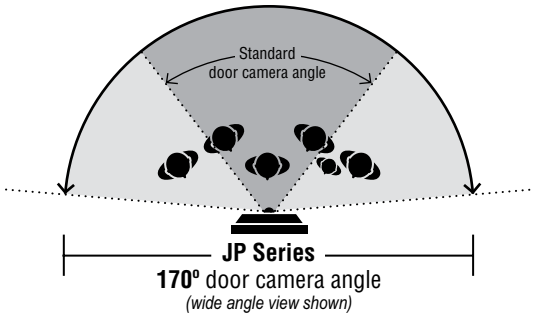
RY-3DL
Selective Door Release Adaptor
(for three or four doors – four doors require one RY-3DL and one RY-1824L)
→ p. 89

IER-2
Call Extension Speaker
→ p. 89

RY-ES
External Signaling Relay
→ p. 94

MCW-S/B
Desk Stand for JP-4MED or JP-4HD
(mounting hardware included)
→ p. 92

Camera View Area



Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
GT-D	5-1/8"	3-7/8"	1-1/8"	130	98	28.5
JP-4MED, JP-4HD	5-11/16"	10-1/16"	1-7/8"	145	255	48
JP-8Z	4-5/16"	4-13/16"	2-3/8"	109	123	61
JP-DA	5-1/16"	3-13/16"	1-3/16"	129	97	30.5
JP-DV	6-13/16"	3-7/8"	1-1/16"	173	98	27
JP-DVF	8-1/4"	5-5/16"	*	209	135	*
JP-DVF-HID, JP-DVF-RP10	11-11/16"	7"	*	297	178	*

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Specifications

Power Source 24V DC—use PS-2420UL

Communication Hands-free (VOX) or handset (full-duplex)

Door Release Two N/O or N/C dry contacts, 24V AC/DC, 500mA (use RY-1824L or RY-3DL for larger contact rating)

Wire Type Door Station to Master Station: 2-cond., mid cap, solid, non-shielded—use Aiphone #871802

Power Supply to Master Station: 2-cond., mid cap, solid, non-shielded—use Aiphone #871802

Master Station to Adaptor: Cat-5e or Cat-6

Adaptor to Sub Master Station: Cat-5e or Cat-6

Distance Door Station to Master Station: 330'

Master Station to Distribution Adaptor: 650'

Distribution Adaptor to Sub Master Station: 165'

Door Station to Long Distance/CCTV Adaptor: 650'

Long Distance/CCTV Adaptor to Master Station: 330'

Power Supply to Master Station: 16' (22 AWG) 33' (18 AWG)

Power Supply to Distribution Adaptor: 16' (22 AWG) 33' (18 AWG)

Total Cumulative Between Inside Stations: 980'

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

JO Series Hands-Free Video Intercom with 7" Screen

Box Sets: select 1 (a JO-DV and a JO-1FD can be added to any box set – up to 8 apps can be added to the app-compatible sets)

Box Sets with App-Compatible Master Station

JOS-1AW
Box Set with JO-DA, JO-1MDW, and PS-1820UL

JOS-1VW
Box Set with JO-DV, JO-1MDW, and PS-1820UL

JOS-1FW
Box Set with JO-DVF, JO-1MDW, and PS-1820UL

Box Sets (no app capability)

JOS-1A
Box Set with JO-DA, JO-1MD, and PS-1820UL

JOS-1V
Box Set with JO-DV, JO-1MD, and PS-1820UL

JOS-1F
Box Set with JO-DVF, JO-1MD, and PS-1820UL

START with a BOX SET

Door Stations: select a box set (see left) and a single JO-DV for the second door station option

JO-DA
Video Door Station
(included with JOS-1A and JOS-1AW box sets – not sold separately)
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 75

JO-DV
Video Door Station
(included with JOS-1V and JOS-1VW box sets – also sold separately)
- Zinc die cast cover
- Weather and vandal resistant
- Surface mount

→ p. 75

JO-DVF
Video Door Station
(included with JOS-1F and JOS-1FW box sets – not sold separately)
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

→ p. 75

2 wires from each station/ adaptor Aiphone #871802

2-Door Station Adaptor (required for 2 door stations)

JOW-2D
Two-Door Station Adaptor
→ p. 75

NOTE: *Use JO-DV for the second door station, which is sold separately.*

2 wires — Door Strike and Power

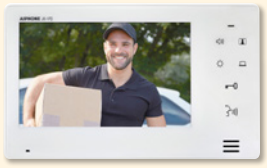
2 wires — Door Strike and Power

6 wires Aiphone #871802 x 3 (max. 330' from door to inside station)

PS-1820UL
(included with all JOS box sets)
18V DC, 2A Power Supply
→ p. 95

2 wires Aiphone #871802 (max. 33')

Expansion Station (optional)



JO-1FD
Video Expansion Station
- 7" LCD screen
- Touch buttons
- Hands-free or push-to-talk communication

→ p. 74

IMPORTANT WIRING NOTICE:
When the optional JO-1FD is part of the system, it must be wired in between the door station and master station (as shown in the wiring example **WITH** JO-1FD).

Door Station Features

- Fixed camera provides clear visitor identification

Master Station Features

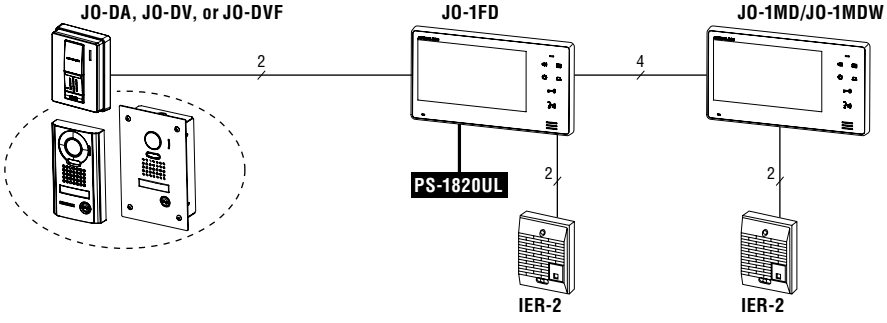
- Compact, attractive design complements most interiors
- Hands-free or push-to-talk communication
- N/O door release contact
- Screen brightness control
- Video monitoring
- 1 output to control a secondary device like a light or gate

System Features

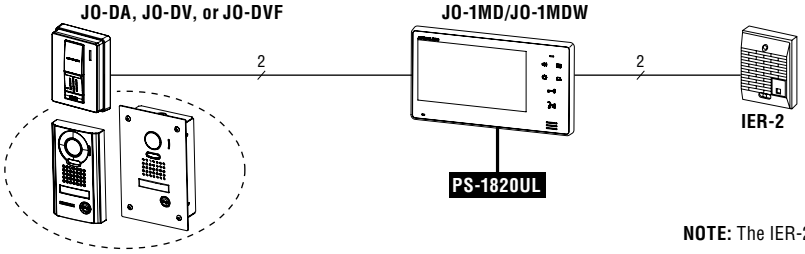
- Up to 8 mobile apps can be connected (requires JO-1MDW and 2.4Ghz WiFi connection)
- Convenient box sets are complete with a master station, each with a different door station, and a power supply (1 expansion master station can be added for a full 1x2 system)
- Simple daisy chain wiring

Wiring

Example WITH JO-1FD



Example WITHOUT JO-1FD



NOTE: The IER-2 is optional.

Master Station: select 1 (none if a box set is selected)

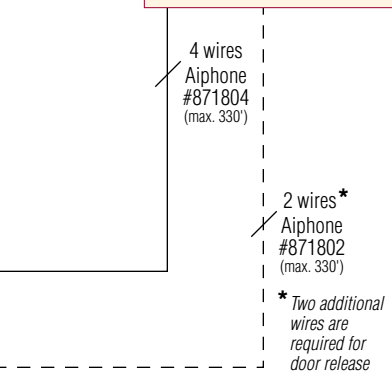
JO-1MDW
App-Compatible Video Master Station
(included with JOS-1AW, JOS-1VW, and JOS-1FW box sets – also sold separately)
- Connect up to eight free mobile apps
- 7" LCD touchscreen
- Built-in expandable memory for recording calls
- Hands-free or push-to-talk communication

→ p. 74

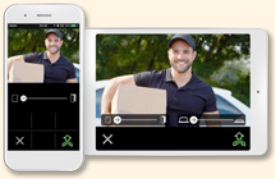
JO-1MD
Video Master Station
(included with JOS-1A, JOS-1V, and JOS-1F box sets – not sold separately and not app-compatible)
- 7" LCD screen
- Touch buttons
- Hands-free or push-to-talk communication

→ p. 74

IMPORTANT WIRING NOTICE:
When the optional JO-1FD is not part of the system, the door station, power supply, and door strike all wire directly to the JO-1MD or JO-1MDW (as shown in the wiring example **WITHOUT** JO-1FD).



Virtual Expansion Station Mobile App



Intercom App Type B
Virtual Expansion Station Mobile App for Smartphones and Tablets
(requires JO-1MDW)
- Up to eight free mobile apps per system
- Calls can be answered and doors can be unlocked while on-the-go
- Hands-free or push-to-talk communication
- Available on Google Play™ *(Google Play is a trademark of Google LLC.)*
- Available on the App Store℠ *(App Store is a service mark of Apple Inc.)*

→ p. 74

Accessories

AC-10S
Stand-Alone Access Control Keypad
(body style matches JO-DV)
→ p. 89

KAW-D
30˚ Angle Box for JO-DA
→ p. 91

MKW-P
1-Gang Mounting Plate for JO-DV
→ p. 92

KMB-45
45˚ Mullion Mounting Bracket for JO-DA
→ p. 91

JK-MB
Mullion Mounting Bracket for JO-DV
→ p. 91

SBX-DV30
30˚ Angle Box for JO-DV
→ p. 91

SBX-DVF
Surface Mount Box for JO-DVF
→ p. 90

SBX-ACE
Surface Mount Box for JO-DA and one Access Control Device
→ p. 90

EL-12S
Electric Door Strike for Wood Frames
(requires PT-1210NA)
→ p. 89

RY-1824L
Form C Door Release Relay
→ p. 89

IER-2
Call Extension Speaker
→ p. 89

RY-ES
External Signaling Relay
→ p. 94

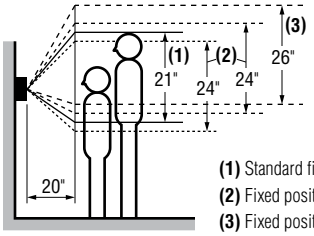
MCW-S/B
Desk Stand for JO-1MD, JO-1MDW, or JO-1FD *(mounting hardware included)*
→ p. 92

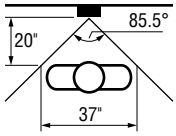
Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
JO-1MD, JO-1FD	5-1/8"	9-1/16"	13/16"	130	230	21
JO-1MDW	6-1/8"	8-1/4"	1-1/16"	155	210	27
JO-DA	5-1/16"	3-13/16"	1-3/8"	129	97	35.5
JO-DV	6-13/16"	3-7/8"	1-1/16"	173	98	26.8
JO-DVF	8-1/4"	5-5/16"	*	209	135	*

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Camera View Area





(1) Standard fixed position (all door stations)
(2) Fixed position with ±7° angle (JO-DA only)
(3) Fixed position with 17° angle (JO-DA only)

Specifications

Power Source 18V DC—use PS-1820UL

Communication Hands-free (VOX) or push-to-talk (simplex)

Door Release JO-1MDW: N/O dry contact, 24V AC/ DC, 1A

JO-1MD, JO-1FD: N/O dry contact, 24V AC/DC, 500mA (use RY-1824L for larger contact rating)

Wire Type Door Station to Master Station: 2-cond., mid cap, solid, non-shielded—use Aiphone #871802

Door Station to Expansion Station: 2-cond., mid cap, solid, non-shielded—use Aiphone #871802

Expansion Station to Master Station: 4-cond., mid cap, solid, non-shielded—use Aiphone #871804

Expansion Station to Master Station (with door release): 6-cond., mid cap, solid, non-shielded—use Aiphone #871804 + #871802

Distance Door Station to Master Station: 165' (22 AWG) 330' (18 AWG)

Door Station to Expansion Station: 165' (22 AWG) 330' (18 AWG)

Expansion Station to Master Station: 165' (22 AWG) 330' (18 AWG)

Power Supply to Master Station: 16' (22 AWG) 33' (18 AWG)

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

AX Series Hands-Free Video Intercom with Integration

Door Stations & Indoor Sub Stations: mix and match up to 120

AX-DV
Video Door Station
- Aluminum die cast cover
- Weather and vandal resistant
- Surface mount

→ p. 53

AX-DVF
Video Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

→ p. 53

AX-DV-P
Card Access Video Door Station
- HID® ProxPoint® Plus Proximity Card Reader
- Aluminum die cast cover
- Weather and vandal resistant
- Surface mount

→ p. 53

AX-DVF-P
Card Access Video Door Station
- HID® ProxPoint® Plus Proximity Card Reader
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

→ p. 53

AX-DM
Audio Door Station
- Plastic chassis
- Weather resistant
- Mullion surface mount

→ p. 53

IF-DA
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 62

IE-JA
Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

IE-SS/A
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

IE-SSR
Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

AX-A
Audio Sub Station
- Surface mount

→ p. 54

AX-AN
Privacy Audio Sub Station
- Privacy button
- Surface mount

→ p. 54

AX-B
Audio Sub Station
- Semi-flush mount

→ p. 54

AX-BN
Privacy Audio Sub Station
- Privacy button
- Semi-flush mount

→ p. 54

Central Exchange Units: select 1

AX-084C
Central Exchange Unit
- Supports up to 4 master stations and 8 door/sub stations

→ p. 53

AX-248C
Central Exchange Unit
- Supports up to 8 master stations and 24 door/sub stations

→ p. 53

Cat-5e wire
N/A from Aiphone
(max. 980')

x2

PS-2420UL
24V DC, 2A Power Supply

→ p. 95

2x2 wires
Aiphone #821802
(max. 33')

2x2 wires
Aiphone #821802
(max. 33')

Door Station Features

- Fixed camera provides clear visitor identification (video door stations)
- Card access door stations available

Master Station Features

- 3-1/2" LCD screen (AX-8MV, AX-8MV-W)
- Hands-free or push-to-talk communication
- Two talk channels
- Composite video output from CEU/video masters
- All Call or Group Call to master stations
- Scan monitoring

System Features

- Cat-5e wiring homerun from each station
- Selective calling between masters, and from masters to door/sub stations
- Normal or priority call levels
- Data output on CEU provides custom integration capability with CCTV and access control systems*
- PC programmable with a large variety of settings
- Transfer calls to an outside POTS line (requires Viking Model K-1900-5 programmable dialer)
- Optional features: headset, footswitch, call transfer to telephone, and PC remote control*

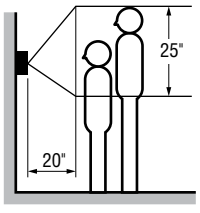
**Interface requires custom software (not supplied by Aiphone)*

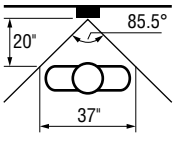
Dimensions

	INCHES				MILLIMETERS			
	Height	Width	Depth	Recessed	Height	Width	Depth	Recessed
AX-084C, AX-248C, AX-320C	3-7/16"	16-9/16"	13-3/16"	-	88	420	335	-
AX-8MV, AX-8M, AX-8MV-W	6-7/8"	7-5/8"	2-9/16"	-	175	194	65	-
AX-A, AX-AN	7-1/16"	5-5/8"	2-1/8"	-	180	143	53.5	-
AX-B, AX-BN	8-3/16"	6"	2"	9/16"	208	153	50.5	15
AX-DM	6-5/16"	1-11/16"	7/8"	-	160	43	22.5	-
AX-DV	7-11/16"	3-15/16"	1"	-	195	100	25	-
AX-DVF	9-11/16"	5-3/4"	*	-	246	146	*	-
AX-DVF-P	11-5/8"	5-3/4"	*	-	295	146	*	-
AX-DV-P	9-5/8"	3-15/16"	1"	-	245	100	25	-
IE-JA	4-1/2"	4-9/16"	*	-	115	116	*	-
IE-SS/A, IE-SSR	4-3/4"	4-3/4"	*	-	121	121	*	-
IF-DA	5-1/8"	3-7/8"	1-1/8"	-	130	98	28.5	-

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Camera View Area





Master Stations: mix and match up to 8

AX-8MV
Video Master Station
- 3-1/2" LCD screen
- Wall or desk mount

→ p. 52

AX-8MV-W
Video Master Station
(recommended for an 8 x 8 system only)
- 3-1/2" LCD screen
- White finish
- Wall or desk mount

→ p. 52

AX-8M
Audio Master Station
- Wall or desk mount

→ p. 52

Cat-5e wire
N/A from Aiphone
(max. 980')

Cat-5e wire
N/A from Aiphone
(max. 16')

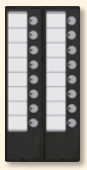
Cat-5e wire
N/A from Aiphone
(max. 980')

Add-On Central Exchange Unit: select up to 3 (optional)

AX-320C
Add-On Central Exchange Unit
- Supports up to 32 door/sub stations

→ p. 53

Accessories



AX-16SW
16-Call Add-On Selector for AX-8MV or AX-8M
(max. seven per master)

→ p. 52

SBX-2G/A
Surface Mount Box for IE-JA, IE-SS/A, or IE-SSR

p. 90

KMB-45
45˚ Mullion Mounting Bracket for IF-DA

→ p. 91

SBX-AXDV30
30˚ Angle Box for AX-DV

→ p. 91

SBX-AXDVF
Surface Mount Box for AX-DVF

→ p. 90

SBX-DVF-P
Surface Mount Box for AX-DVF-P

→ p. 90

AXW-AZ
CCTV Input Module

→ p. 54

AXW-AVT
Audio/Video Transmitter

→ p. 54

AXW-AVR
Audio/Video Receiver

→ p. 54

EL-12S
Electric Door Strike for Wood Frames
(requires PT-1210NA)

→ p. 89

RY-1824L
Form C Door Release Relay
(one per door)

→ p. 89

AXW-PA1
Paging Adaptor

→ p. 54

RY-ES
External Signaling Relay

→ p. 94

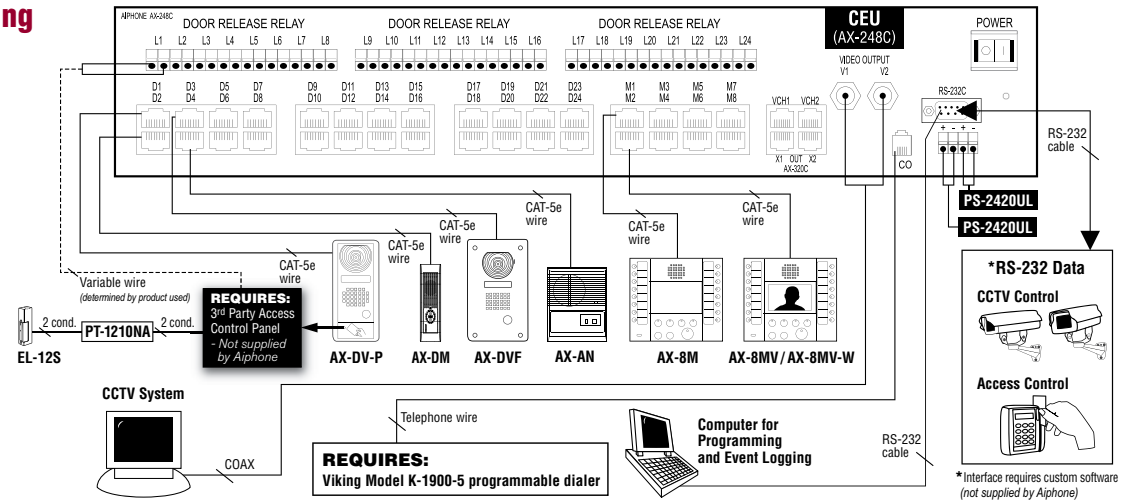
IER-2
Call Extension Speaker

→ p. 89

MCW-S/B
Desk Stand for AX-8MV, AX-8MV-W, or AX-8M
(mounting hardware included)

→ p. 92

Wiring



Specifications

Power Source 24V DC—use two PS-2420ULs

Communication Hands-free (VOX) or push-to-talk (simplex)

Door Release Programmable dry contact, 24V AC/DC, 500mA (use RY-1824L for larger contact rating)

Wire Type Between Door/Sub Station, Master Station, and Central Exchange Unit: Cat-5e

Power Supply to Central Exchange Unit and Add-On Central Exchange Unit: 2-cond., overall shield—use Aiphone 821802

Distance Door/Sub Station to Central Exchange Unit and Add-On Central Exchange Unit: 980'

Central Exchange Unit to Master Station: 980'

Central Exchange Unit to Add-On Central Exchange Unit: 16'

Power Supply to Central Exchange Unit and Add-On Central Exchange Unit: 16' (22 AWG) 33' (18 AWG)

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

KB Series Handset Video Intercom with Tilt

Door Stations: mix and match up to 3 (max. 1 audio door station per system)

KB-DAR
Video Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 78

KB-DAR-M
Video Door Station
- Motion detector contact input
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 78

AX-DM
Audio Door Station
- Plastic chassis
- Weather resistant
- Mullion surface mount

→ p. 53

IF-DA
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 62

IE-JA
Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

IE-SS/A
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

IE-SSR
Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

Master Station

KB-3MRD
Video Master Station
- 4" LCD screen
- Handset for privacy

→ p. 78

2 wires
Aiphone
#871802
(max. 650')

Door Strike and Power

2 wires

RY-3DL
Selective Door Release Adaptor

6 wires

2 wires

Door Strike and Power

2 wires
Aiphone
#871802
(max. 33')

PS-2420UL
24V DC, 2A
Power Supply

→ p. 95

Door Station Features

- Tilt camera provides larger viewing range (video door stations)

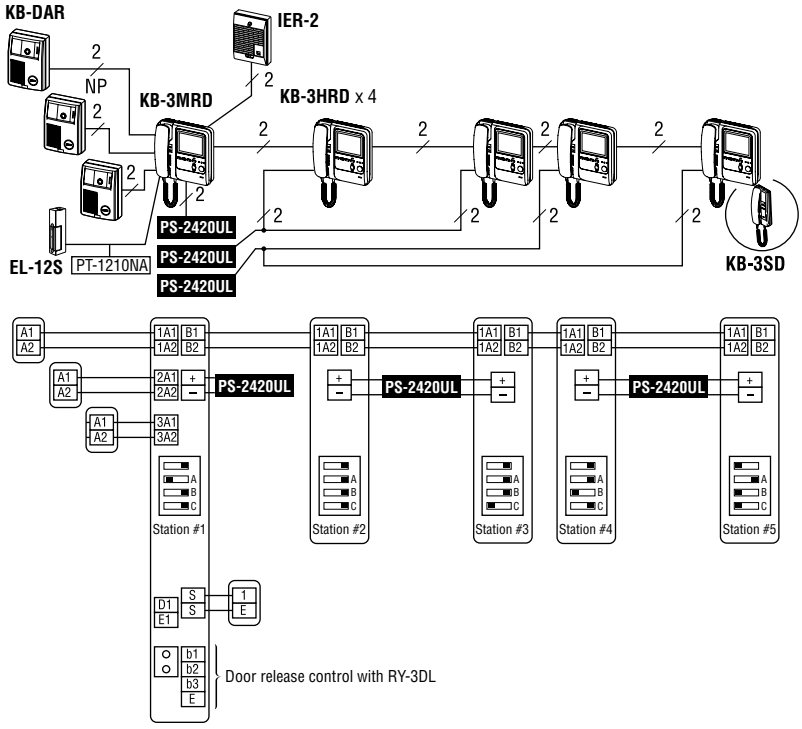
Master Station Features

- 4" LCD screen
- Instant voice call-in with image
- Selective Call or All Call
- Chime or receiver volume control
- Selective door release with RY-3DL
- Video out to DVR via supplied connector

System Features

- 330' total distance looped between monitors

Wiring



NOTES: 1. D1 and E1 for IE Series door stations (audio only) instead of third KB-DAR
2. Run audio/video wires in a separate jacketed cable from door release wires

Sub Master Stations: mix and match up to 4

(optional – max. 2 audio sub master stations per system)

KB-3HRD
Video Sub Master Station
- 4" LCD screen
- Handset for privacy

→ p. 78

KB-3SD
Audio Sub Master Station
(max. two per system)
- Handset for privacy

→ p. 78

2 wires
Aiphone #871802
(max. 330' between master and farthest sub master)

2 wires
Aiphone #871802
(max. 33')

PS-2420UL
24V DC, 2A Power Supply
(required for every two KB-3HRDs)
→ p. 95

Accessories

SBX-2G/A
Surface Mount Box for IE-JA, IE-SS/A, or IE-SSR
→ p. 90

SBX-ACE
Surface Mount Box for AX-DM, IF-DA, KB-DAR, or KB-DAR-M and one Access Control Device
→ p. 90

KMB-45
Mullion Mounting Bracket for IF-DA, KB-DAR, or KB-DAR-M
→ p. 91

KAW-D
30° Angle Box for IF-DA, KB-DAR, or KB-DAR-M
→ p. 91

KA-DGR
Surface Mount Housing Panel for KB-DAR or KB-DAR-M
(door station not included)
→ p. 78

IER-2
Call Extension Speaker
→ p. 89

EL-12S
Electric Door Strike for Wood Frames
(requires PT-1210NA)
→ p. 89

RY-1824L
Form C Door Release Relay
(for one door)
→ p. 89

RY-3DL
Selective Door Release Adaptor
(for two or three doors)
→ p. 89

RY-ES
External Signaling Relay
→ p. 94

MAW-B
Auxiliary Light Control Relay
→ p. 78

MCW-S/B
Desk Stand for KB-3MRD or KB-3HRD
(mounting hardware included)
→ p. 92

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
AX-DM	6-5/16"	1-11/16"	7/8"	160	43	22.5
IE-JA	4-1/2"	4-9/16"	*	115	116	*
IE-SS/A, IE-SSR	4-3/4"	4-3/4"	*	121	121	*
IF-DA	5-1/8"	3-7/8"	1-1/8"	130	98	28.5
KB-3MRD, KB-3HRD	7-11/16"	7-5/16"	3-5/16"	195	185	84
KB-3SD	8-1/4"	3-15/16"	2-7/8"	210	100	73.5
KB-DAR, KB-DAR-M	5-1/2"	4-1/8"	1-3/4"	140	105	44

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Specifications

Power Source 24V DC—use PS-2420UL

Communication Handset (full-duplex)

Door Release N/O dry contact, 12V AC, 400mA (use RY-1824L for larger contact rating or RY-3DL for two or three doors)

Wire Type 2-cond., mid cap, solid, non-shielded—use Aiphone #871802

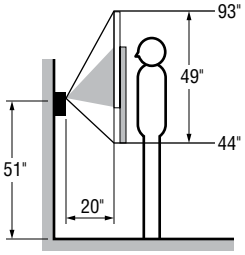
Distance Master Station to Door Station: 330' (22 AWG) 650' (18 AWG)

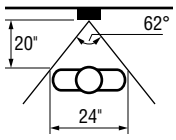
Master Station to farthest Sub Master Station: 165' (22 AWG) 330' (18 AWG)

Power Supply to Master Station: 16' (22 AWG) 33' (18 AWG)

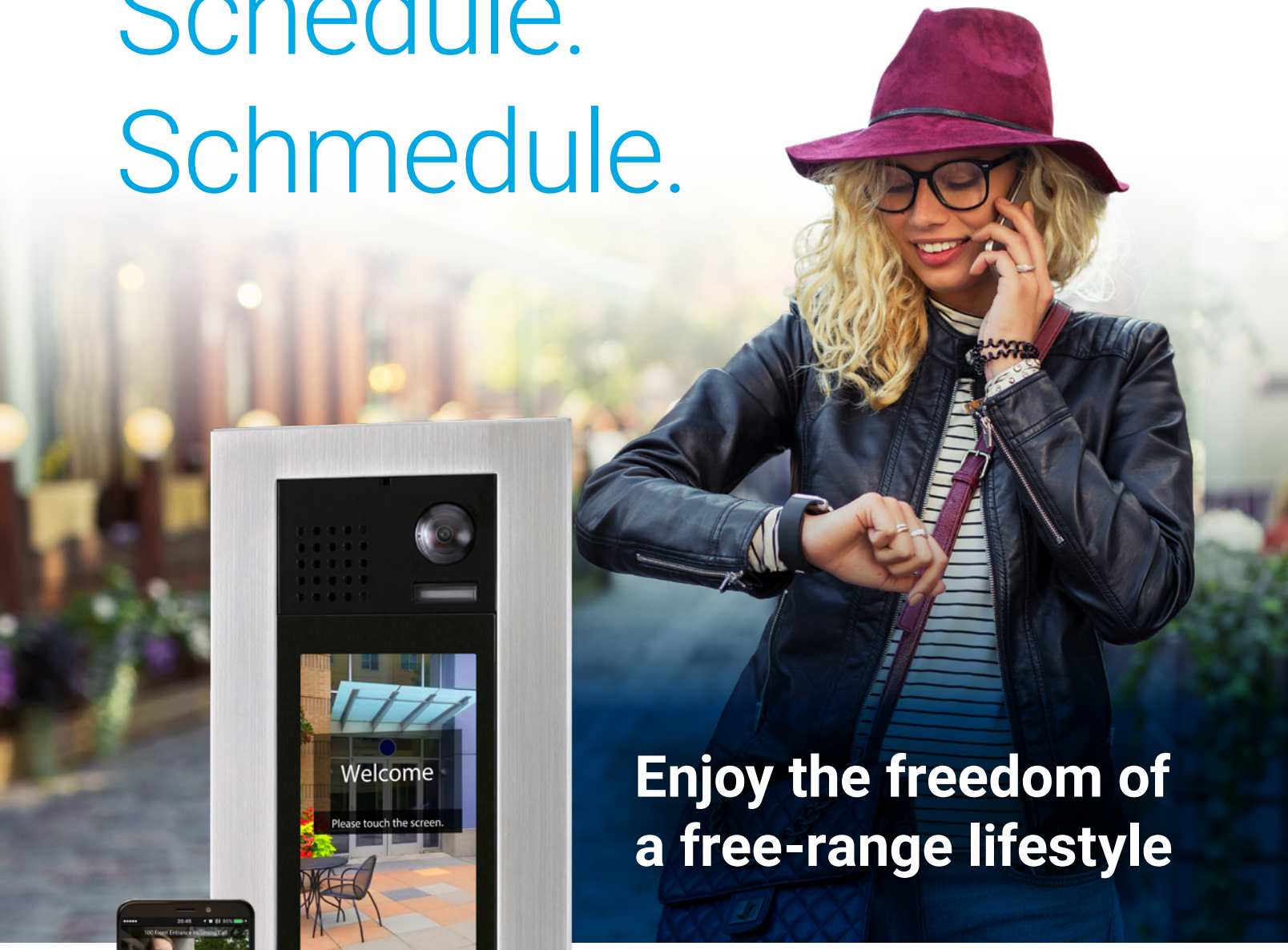
Power Supply to Sub Master Station: 16' (22 AWG) 33' (18 AWG)

Camera View Area





Schedule.
Schmedule.



Enjoy the freedom of a free-range lifestyle

Featuring IXG Series IP Multi-Tenant Video Intercom for apartment buildings, commercial high-rises, and campuses.
See page 12.

- Safely identify visitors with clear video
- Communicate to determine their intent
- Unlock the door with the in-app slider

...all while on-the-go with our mobile app!

Learn more at **aiphone.com/glc_ixg**

Multi-Tenant Intercoms

IXG Series
IP Multi-Tenant Video Intercom
→ p. 12

QuikSpec

GT Series
Standard Multi-Tenant Video Intercom
→ p. 26

QuikSpec

GT Series
Expanded Multi-Tenant Video Intercom
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QuikSpec

GT Series
Enterprise-Level Multi-Tenant Video Intercom
→ p. 30

DA Series
Single & Multi-Tenant Handset Intercom
→ p. 31

DB Series
Single & Multi-Tenant Hands-Free Intercom
→ p. 32

GT Series Standard Multi-Tenant Video Intercom

Entrance Stations: mix and match up to 5

Ready-to-Install Single Panel

GT-DMB-N
3-in-1 Video Entrance Station
- Tenant directory programming with NFC
- PTZ camera with 170° angle view
- Hands-free communication
- Access control and tenant directory scroll keypad
- Motion activated 3-1/2" LCD screen can display a customized greeting, operation instructions, or standby image
- Voice annunciation
- Stainless steel panel
- Weather and vandal resistant

→ p. 57

GT-DMBN-SSP
3-in-1 Video Entrance Station
- Same features as GT-DMB-N, plus:
- Designed to mount into Pedestal Pro Model #64TOW-AIP-001-304

→ p. 57

Pedestal Pro Model #64TOW-AIP-001-304
(available at www.pedestalpro.com)

Ready-to-Assemble Modular Kits

GTV-DES104B
Modular Video Entrance Station Kit
(includes GT-DB + GT-DBP, GT-VB + GT-VP, GT-NSB + GT-NSP-L, GT-10K + GF-10KP, GT-4B + GT-4F, and GT Operation Plate)
- Modular components
- Configuration can be customized
- Digital scroll buttons

→ p. 57

GTV-DES202B
Modular Video Entrance Station Kit
(includes GT-DB + GT-DBP, GT-VB + GT-VP, GT-NSB + GT-NSP-L, GT-10K + GF-10KP, GF-2B + GF-2F x2, and GT Operation Plate)
- Modular components
- Configuration can be customized
- Digital scroll buttons

→ p. 57

GTA-DESB
Modular Audio Entrance Station Kit
(includes GT-DB + GT-DBP, GT-NSB + GT-NSP-L, GT-10K + GF-10KP, GF-3B + GF-3F, and GT Operation Plate)
- Modular components
- Configuration can be customized
- Digital scroll buttons

→ p. 57

NOTE: *To build custom entrance stations, see modular components and mounting accessories p. 60–61*

2 wires

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

VIDEO Wire Aiphone #871802
AUDIO Wire Aiphone #872002
POWER Wire Aiphone #871802

2 wires

GT-VBC
Video Bus Control Unit
→ p. 59

2 wires

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

2 wires

GT-BC
Audio Bus Control Unit
→ p. 59

2 wires

2 wires

2 wires

2 wires

2 wires

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

Tenant Stations: mix and match up to 48*

Tenant Master Stations & Sub Master Stations with Internal Communication, Picture Memory, and Suite Security

1 GT-2C + 3 GT-2Hs per tenant (max. 48 GT-2Cs)

1 + 3

GT-2C
Video Tenant Master Station
(requires PS-2420UL or GT-4ZP)
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication
- Picture Memory
- Compatible with the GT-D audio tenant door station

→ p. 58

GT-2H
Video Tenant Sub Master Station
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication

→ p. 58

***Tenant Stations** – Up to 4 stations per tenant with these parameters: 1 GT-1C7/W + 3 audio stations **OR** 2 GT-1M3s + 2 audio stations **OR** 4 audio stations (max. 48 stations or max. 100 stations if only using GT-1Ds)

GT-1C7W
App-Compatible Video Tenant Station
(requires PS-2420UL or GT-4ZP)
- Connect up to eight free mobile apps
- 7" LCD touchscreen
- Hands-free or push-to-talk communication

→ p. 59

GT-1C7
Video Tenant Station
- 7" LCD screen
- Hands-free or push-to-talk communication

→ p. 59

GT-1M3
Video Tenant Station
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication

→ p. 59

GT-1A
Audio Tenant Station
- Hands-free or push-to-talk communication

→ p. 59

GT-1D
Audio Tenant Station
- Handset for privacy

→ p. 59

Video Guard Station: select up to 2

2 wires

2 wires

GT-MKB-N
Video Guard Station
- 3-1/2" LCD screen
- Tenant directory programming with NFC
- Hands-free communication with handset for privacy
- Includes desk stand
- Compatible with JO-DV for single-door video entry

→ p. 58

NOTE: Maximum cumulative audio wire distance = 8,200 ft. If exceeded, contact Technical Support for system configuration assistance.

Specifications
See p. 57–61

Camera View Area
See p. 60

Tenant Stations: mix and match up to 48*

Tenant Master Stations & Sub Master Stations with Internal Communication, Picture Memory, and Suite Security

1 GT-2C + 3 GT-2Hs per tenant (max. 48 GT-2Cs)

Suite Security

GT-2C
→ p. 58

1 + 3

GT-2H
→ p. 58

***Tenant Stations** – Up to 4 stations per tenant with these parameters:
1 GT-1C7/W + 3 audio stations **OR** 2 GT-1M3s + 2 audio stations **OR**
4 audio stations (max. 48 stations or max. 100 stations if only using GT-1Ds)

2 wires

2 wires

GT-1C7W
App-Compatible Video Tenant Station
(requires PS-2420UL or GT-4ZP)
- Connect up to eight free mobile apps
- 7" LCD touchscreen
- Hands-free or push-to-talk communication

→ p. 59

GT-1C7
Video Tenant Station
- 7" LCD screen
- Hands-free or push-to-talk communication

→ p. 59

GT-1M3
Video Tenant Station
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication

→ p. 59

GT-1A
Audio Tenant Station
- Hands-free or push-to-talk communication

→ p. 59

GT-1D
Audio Tenant Station
- Handset for privacy

→ p. 59

Accessories

NFC-CARD
Access Card for GT-DB-VN and GT-DMB-N
(image not available)
→ p. 57

NFC-FOB
Access Fob for GT-DB-VN and GT-DMB-N
(image not available)
→ p. 57

SBX-GTDMB
Surface Mount Box for GT-DMB-N
→ p. 61

GT-102H
2-Module Rain Hood
(GT-103H, GT-104H, GT-202H, and GT-203H are also available)
→ p. 61

GT-102HB
2-Module Hooded Surface Mount Box
(GT-102HB, GT-103HB, GT-104HB, GT-202HB, GT-203HB, and GT-303HB are also available)
→ p. 61

GT-HSA
Optional Add-On Handset for GT-2C or GT-2H
→ p. 58

MCW-S/B
Desk Stand for GT-2C, GT-2H, GT-1C7, GT-1M3, or GT-1A
(mounting hardware included)
→ p. 92

GFK-PS
Urgent Call Pull Cord
→ p. 60

GT-RY
External Signaling Relay
→ p. 60

GTW-VOA
Video Output Adaptor
→ p. 59

GT-MCX
Network Adaptor
(includes mounting rail)
→ p. 59

GTW-DP
Distribution Point Adaptor
(includes mounting rail)
→ p. 59

GT-1Z
1-Way Video Distribution Adaptor
→ p. 59

GT-4ZP
4-Way Video/Power Distribution Adaptor for GT-1C7W
→ p. 59

GT-4Z
4-Way Video Distribution Adaptor
→ p. 59

W-DIN11
DIN Mounting Rail for Control Units
→ p. 61

Entrance Station Features

- CCTV camera input provides additional surveillance of entry area (GT-DMB-N, GT-VB)
- Both video and audio entrance panels can be combined in the same system
- LEDs at door allow use in low light conditions (video system)

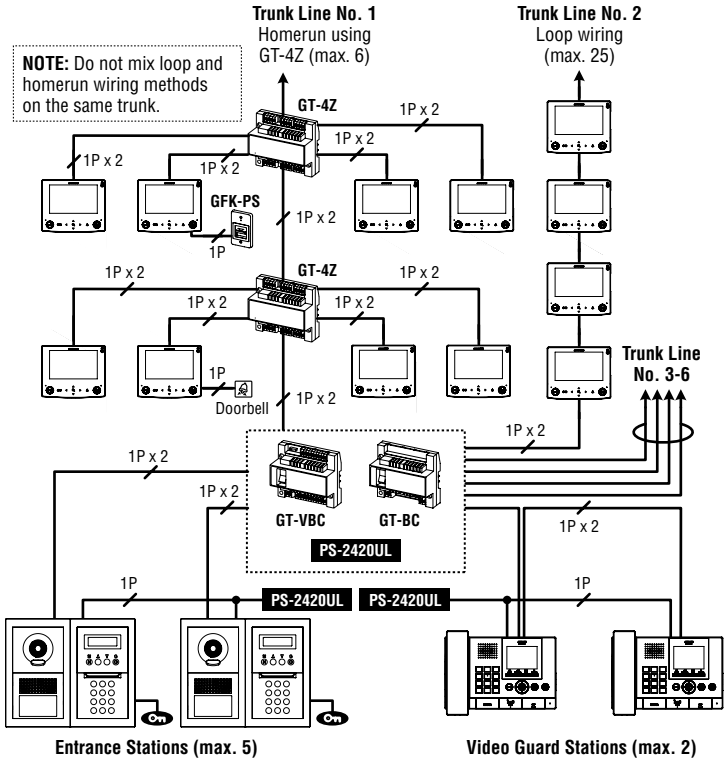
Tenant Station Features

- Mobile app can be used as a sub tenant station (requires GT-1C7W)
- Unlock entrance from tenant station
- Optional individual doorbell to ring tenant stations
- Panic call switch for emergency calling to guard or concierge
- Tenant can monitor the entryway (video system)
- Option button

System Features

- Tenant directory can quickly be updated with NFC-compatible stations (GT-DB-VN, GT-DMB-N, GT-MKB-N, GT-BCXB-N)
- Link data allows easy programming of multiple entrance and video guard stations
- Setting via dip switch for digital systems provides faster and easier installation (GT-2C, GT-1C7, GT-1C7W, GT-1M3)
- Simple wiring with only two common wires for audio and only two additional wires for video
- Video guard station(s) can be included to provide communication between office/lobby and tenants
- Security guard can screen calls from visitors (Reception Mode)

Wiring **GT Standard** Configuration Sample



ENTRANCE 16 x GUARD 4 x TENANT 500

GT Series Expanded Multi-Tenant Video Intercom

Entrance Stations: mix and match up to 16

Ready-to-Install Single Panel

GT-DMB-N
3-in-1 Video Entrance Station
- Tenant directory programming with NFC
- PTZ camera with 170° angle view
- Hands-free communication
- Access control and tenant directory scroll keypad
- Motion activated 3-1/2" LCD screen can display a customized greeting, operation instructions, or standby image
- Voice annunciation
- Stainless steel panel
- Weather and vandal resistant

→ p. 57

GT-DMBN-SSP
3-in-1 Video Entrance Station
- Same features as GT-DMB-N, plus:
- Designed to mount into Pedestal Pro Model #64TOW-AIP-001-304

→ p. 57

Pedestal Pro Model #64TOW-AIP-001-304
(available at www.pedestalpro.com)

Ready-to-Assemble Modular Kits

GTV-DES104B
Modular Video Entrance Station Kit
(includes GT-DB + GT-DBP, GT-VB + GT-VP, GT-NSB + GT-NSP-L, GT-10K + GF-10KP, GT-4B + GT-4F, and GT Operation Plate)
- Modular components
- Configuration can be customized
- Digital scroll buttons

→ p. 57

GTV-DES202B
Modular Video Entrance Station Kit
(includes GT-DB + GT-DBP, GT-VB + GT-VP, GT-NSB + GT-NSP-L, GT-10K + GF-10KP, GF-2B + GF-2F x2, and GT Operation Plate)
- Modular components
- Configuration can be customized
- Digital scroll buttons

→ p. 57

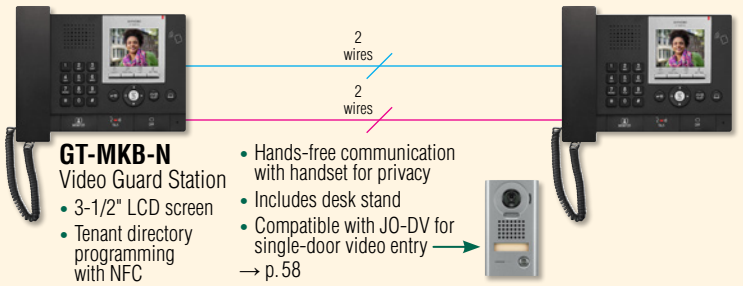
GTA-DESB
Modular Audio Entrance Station Kit
(includes GT-DB + GT-DBP, GT-NSB + GT-NSP-L, GT-10K + GF-10KP, GF-3B + GF-3F, and GT Operation Plate)
- Modular components
- Configuration can be customized
- Digital scroll buttons

→ p. 57

NOTE: *To build custom entrance stations, see modular components and mounting accessories p. 60–61*

VIDEO Wire Aiphone #871802
AUDIO Wire Aiphone #872002
POWER Wire Aiphone #871802

Video Guard Station: select up to 2



GT-MKB-N
Video Guard Station
- 3-1/2" LCD screen
- Tenant directory programming with NFC
- Hands-free communication with handset for privacy
- Includes desk stand
- Compatible with JO-DV for single-door video entry

→ p. 58

2 wires

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

GT-BC
Audio Bus Control Unit
→ p. 59

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

GT-VBC
Video Bus Control Unit
→ p. 59

GT-VBC
Video Bus Control Unit
→ p. 59

GT-VBX
Expanded Video Bus Control Unit
→ p. 59

Connected with 16" cable supplied by GT-VBX

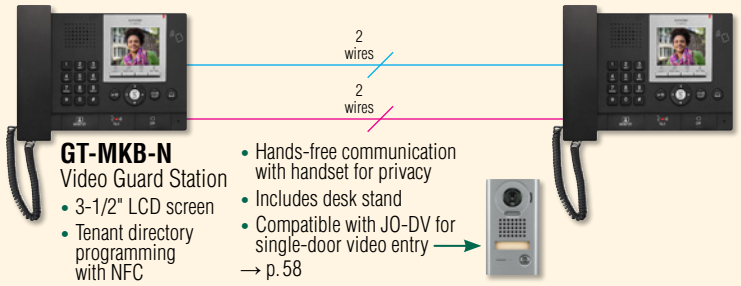
GT-BCXB-N
Expanded Audio Control Unit with NFC Programming
(includes mounting rail)
→ p. 59

GT-BC
Audio Bus Control Unit
→ p. 59

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

Video Guard Station: select up to 2



GT-MKB-N
Video Guard Station
- 3-1/2" LCD screen
- Tenant directory programming with NFC
- Hands-free communication with handset for privacy
- Includes desk stand
- Compatible with JO-DV for single-door video entry

→ p. 58

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

Specifications
See p. 57–61

Camera View Area
See p. 60

GT-BC
Audio Bus Control Unit
→ p. 59

GT-VBC
Video Bus Control Unit
→ p. 59

2 wires

2 wires

2 wires

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

Tenant Stations: mix and match up to 125 (Sub Trunk 1a)

1 + 3

GT-2C
Video Tenant Master Station
(requires PS-2420UL or GT-4ZP)
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication
- Compatible with the GT-D audio tenant door station

→ p. 58

GT-2H
Video Tenant Sub Master Station
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication

→ p. 58

GT-1C7W
App-Compatible Video Tenant Station
(requires PS-2420UL or GT-4ZP)
- Connect up to eight free mobile apps
- 7" LCD touchscreen
- Hands-free or push-to-talk communication

→ p. 59

GT-1C7
Video Tenant Station
- 7" LCD screen
- Hands-free or push-to-talk communication

→ p. 59

GT-1M3
Video Tenant Station
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication

→ p. 59

GT-1A
Audio Tenant Station
- Hands-free or push-to-talk communication

→ p. 59

GT-1D
Audio Tenant Station
- Handset for privacy

→ p. 59

Accessories

NFC-CARD
Access Card for GT-DB-VN and GT-DMB-N
(image not available)
→ p. 57

NFC-FOB
Access Fob for GT-DB-VN and GT-DMB-N
(image not available)
→ p. 57

SBX-GTDMB
Surface Mount Box for GT-DMB-N
→ p. 61

GT-102H
2-Module Rain Hood
(GT-103H, GT-104H, GT-202H, and GT-203H are also available)
→ p. 61

GT-102HB
2-Module Hooded Surface Mount Box
(GT-102HB, GT-103HB, GT-104HB, GT-202HB, GT-203HB, and GT-303HB are also available)
→ p. 61

GT-HSA
Optional Add-On Handset for GT-2C or GT-2H
→ p. 58

MCW-S/B
Desk Stand for GT-2C, GT-2H, GT-1C7, GT-1M3, or GT-1A
(mounting hardware included)
→ p. 92

GFK-PS
Urgent Call Pull Cord
→ p. 60

GT-RY
External Signaling Relay
→ p. 60

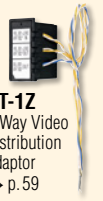
GTW-VOA
Video Output Adaptor
→ p. 59

GT-MCX
Network Adaptor
(includes mounting rail)
→ p. 59

GTW-LC
Multi-Relay Control Unit
(for use with Expanded System only – requires GT-BCXB-N)
→ p. 59

GTW-DP
Distribution Point Adaptor
(includes mounting rail)
→ p. 59

GT-4ZP
4-Way Video/Power Distribution Adaptor for GT-1C7W
→ p. 59

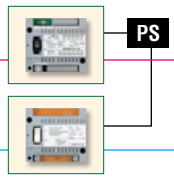


GT-1Z
1-Way Video Distribution Adaptor
→ p. 59

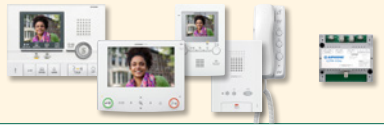
GT-4Z
4-Way Video Distribution Adaptor
→ p. 59

W-DIN11
DIN Mounting Rail for Control Units
→ p. 61

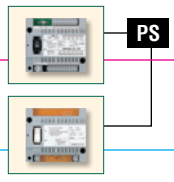
See Sub Trunk 1a above for details



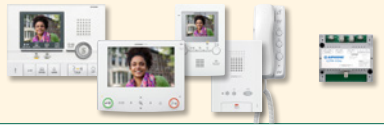
Tenant Stations: mix and match up to 125 (Sub Trunk 1b)



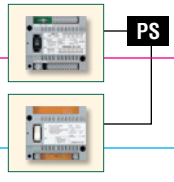
See Sub Trunk 1a above for details



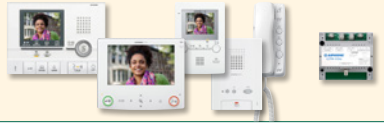
Tenant Stations: mix and match up to 125 (Sub Trunk 2a)



See Sub Trunk 1a above for details



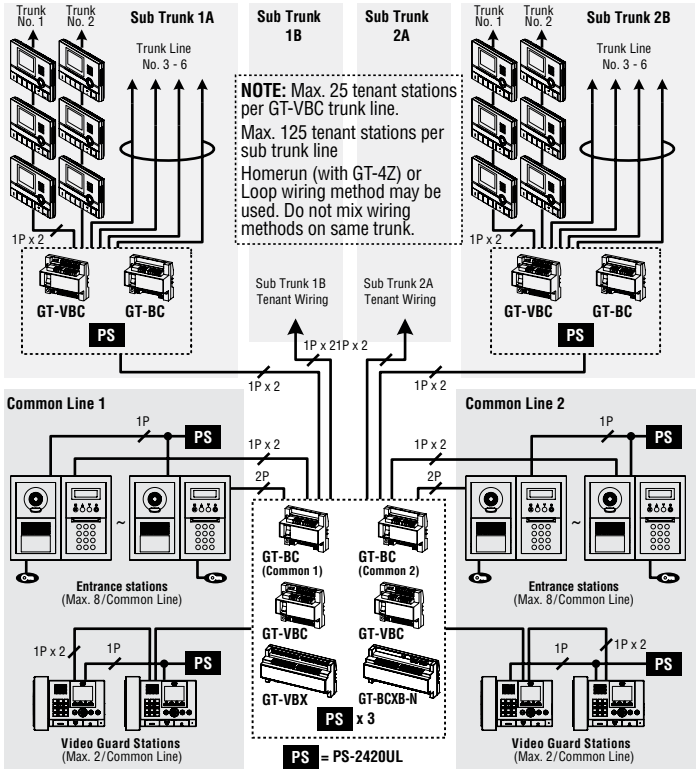
Tenant Stations: mix and match up to 125 (Sub Trunk 2b)



Features – same as Standard System, plus:

- Up to 16 entrance panels, 4 video guard stations, and 500 tenant stations

Wiring GT Expanded Configuration Sample

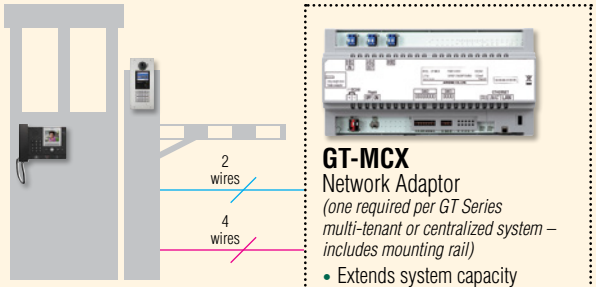


Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

GT Series Enterprise-Level Multi-Tenant Video Intercom

GT Series Centralized System: mix and match up to 8

Main Entrance, Gate, or Security Center (can communicate between stations within the same system, as well as all networked multi-tenant and centralized systems)



2 wires

4 wires

2 wires

PS-2420UL
24V DC, 2A
Power Supply
→ p. 95

GT-MCX
Network Adaptor
(one required per GT Series multi-tenant or centralized system – includes mounting rail)

- Extends system capacity to 5,000 tenant stations
- Connects multiple GT Series systems together for building-to-building communication
- IPv4 or IPv6 network protocols
- Extends wiring distance between buildings/systems

→ p. 59

VIDEO Wire Aiphone #871802

AUDIO Wire Aiphone #872002

POWER Wire Aiphone #871802

LAN Cat-5e or Cat-6

LAN

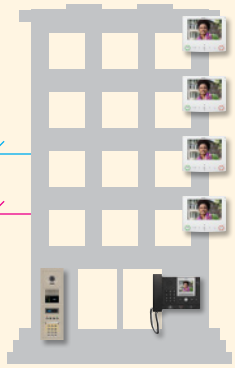
GT Series Standard or Expanded Multi-Tenant Video Intercom System (→p.26, 28): mix and match up to 24

Multi-Tenant Building 1 (can communicate between stations within the same system, as well as all networked centralized systems)

GT-MCX
Network Adaptor
(one required per GT Series multi-tenant or centralized system – includes mounting rail)
→ p. 59

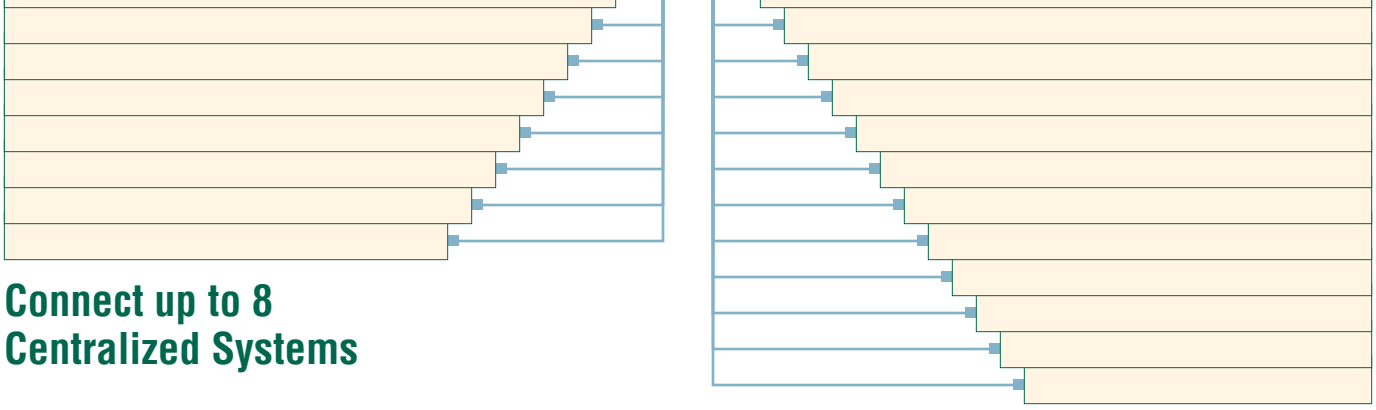
2 wires

4 wires



2 wires

PS-2420UL
24V DC, 2A
Power Supply
→ p. 95



Connect up to 8 Centralized Systems

Connect up to 24 Standard or Enhanced Multi-Tenant Video Intercom Systems

NOTE: *Each building in a networked system can have up to 500 tenant stations max., even if the capacity of 5,000 tenant stations has not been reached.*

Features – same as Standard System, plus:

- Network adaptor (GT-MCX) connects multiple GT Series systems together for building-to-building communication
- Up to 480 entrance panels, 96 video guard stations, and 5,000 tenant stations

Specifications

See p. 57 – 61

Camera View Area

See p. 60

Wiring

There are many different wiring configurations possible with the GT Series.

For additional help, contact Aiphone's Technical Support.

800.692.0200

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

DOOR 1 x TENANT 4

DA Series Single & Multi-Tenant Handset Intercom

Box Set: select if DA-1DS is the desired entrance station
(for 1x1 applications only)

DA-1AS:
Box Set with DA-1DS, DA-1MD, and PT-1211CA

Entrance Stations: select 1
(for a la carte applications)

DA-1DS
1-Call Audio Entrance Station
(included with DA-1AS box set – also sold separately)
- Direct select button
- Backlit directory
- Weather resistant

→ p. 56

DA-2DS
2-Call Audio Entrance Station
- Direct select buttons
- Backlit directory
- Weather resistant

→ p. 56

DA-4DS
4-Call Audio Entrance Station
- Direct select buttons
- Backlit directory
- Weather resistant

→ p. 56

2 wires
Aiphone
#871802
(max. 1,020')

2 wires

Door Strike

2 wires
Aiphone
#871802
(max. 510')

PT-1211CA
15V AC Transformer
(included with DA-1AS box set)

→ p. 95

Tenant Station: select up to 4

DA-1MD
(included with DA-1AS box set)
Audio Tenant Station
- Handset for privacy

→ p. 56

Accessories

EL-12S
Electric Door Strike for Wood Frames

→ p. 89

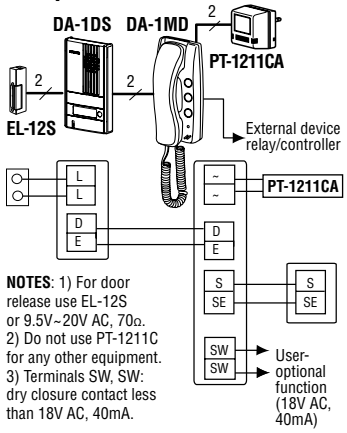
Entrance Station Features
- Door strike (EL-12S) powered by door station without the need of an additional transformer or wiring
- Backlit directory

Tenant Station Features
- Option button to control an external device
- Call tone volume control with mute indicator

System Features
- Convenient box set complete with a tenant station, a 1-call entrance station, and a power supply available for 1x1 applications
- 2-wire system is quick and easy to install

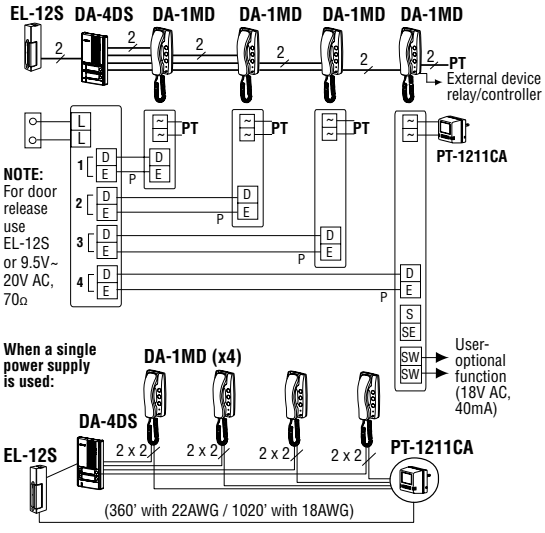
Wiring

Example with DA-1DS



NOTES: 1) For door release use EL-12S or 9.5V~20V AC, 70Ω. 2) Do not use PT-1211C for any other equipment. 3) Terminals SW, SW: dry closure contact less than 18V AC, 40mA.

Example with DA-4DS



Specifications

Power Source	15V AC—use PT-1211CA
Communication	Handset (full-duplex)
Door Release	9.5–20V AC, 70Ω or higher resistance—use EL-12S
Wire Type	Entrance Station to Tenant Station: 2-cond., overall shield—use Aiphone #822202 or 2-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871802
	Power Supply to Tenant Station: 2-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871802
Distance	Power Supply to Entrance Station or Door Strike (cumulative): 360' (22 AWG) 1,020' (18 AWG)
	Power Supply to Tenant Station: 180' (22 AWG) 510' (18 AWG)

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
DA-1DS, DA-2DS, DA-4DS	6-7/8"	3-15/16"	7/8"	175	100	22
DA-1MD	7-7/8"	3-1/2"	2-1/2"	200	89	63

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

DB Series Single & Multi-Tenant Hands-Free Intercom

Box Set: select if DA-1DS is the desired entrance station (for 1x1 applications)

DBS-1A
Box Set with
DA-1DS, DB-1MD,
and PT-1211CA

START with a BOX SET

Entrance Stations: select 1 (for a la carte applications)

DA-1DS
1-Call Audio
Entrance Station
(included with DBS-1A box set)
- Direct select button
- Backlit directory
- Weather resistant

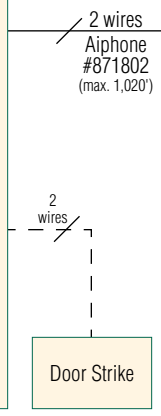
→ p. 56

DA-2DS
2-Call Audio
Entrance Station
- Direct select buttons
- Backlit directory
- Weather resistant

→ p. 56

DA-4DS
4-Call Audio
Entrance Station
- Direct select buttons
- Backlit directory
- Weather resistant

→ p. 56



Entrance Station Features

- Door release powered by door station without the need of an additional transformer or wiring
- Backlit directory

Tenant Station Features

- All Call between stations within same tenant residence or office
- Option button to control an external device
- Call tone volume control with mute indicator

System Features

- Convenient box set is complete with a tenant master station, a 1-call entrance station, and a power supply available for 1x1 applications
- Optional call extension speaker

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
DA-1DS, DA-2DS, DA-4DS	6-7/8"	3-15/16"	7/8"	175	100	22
DB-1MD, DB-1SD	7-5/16"	3-1/8"	1-1/16"	185	80	27

Specifications

Power Source 15V AC—use PT-1211CA (requires one per tenant master station and one per two tenant sub stations)

Communication Hands-free (VOX) or push-to-talk (simplex)

Door Release 9.5–20V AC, 70Ω or higher resistance—use EL-12S

Wire Type Entrance Station to Tenant Master Station: 2-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871802

Tenant Master Station to Tenant Sub Station: 4-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871804

Between Tenant Sub Stations: 4-cond. + 2-cond. when sharing power—use Aiphone #822206 or #871804

Power Supply to Tenant Station: 2-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871802

Distance Power Supply to Entrance Station or Door Strike (cumulative): 360' (22 AWG) 1,020' (18 AWG)

Power Supply to Tenant Master Station: 180' (22 AWG) 510' (18 AWG)

Tenant Master Station to farthest Tenant Sub Station: 330'

Tenant Master Station: select up to 4

DB-1MD
Audio Hands-Free
Tenant Master Station
(included with DBS-1A box set)
→ p. 56

Tenant Sub Station: select up to 4 per tenant master station (optional)

DB-1SD
Audio Hands-Free
Tenant Sub Station
→ p. 56

Accessories

EL-12S
Electric Door Strike
for Wood Frames
→ p. 89

RY-ES
External
Signaling Relay
→ p. 94

IER-2
Call Extension
Speaker
→ p. 89

MCW-S/B
Desk Stand for
DB-1MD or DB-1SD
(mounting hardware included)
→ p. 92

2 wires
Aiphone
#871802
(max. 510')

4 wires
Aiphone #871804
(max. 330' between
master and farthest sub)

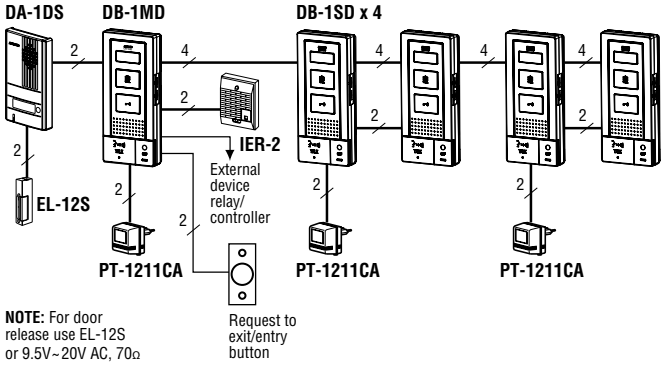
2 wires
Aiphone
#871802
(max. 510')

PT-1211CA
15V AC
Transformer
*(included with
DBS-1A box set)*
→ p. 95

PT-1211CA
15V AC
Transformer
*(one PT-1211CA
per two DB-1SDs)*
→ p. 95

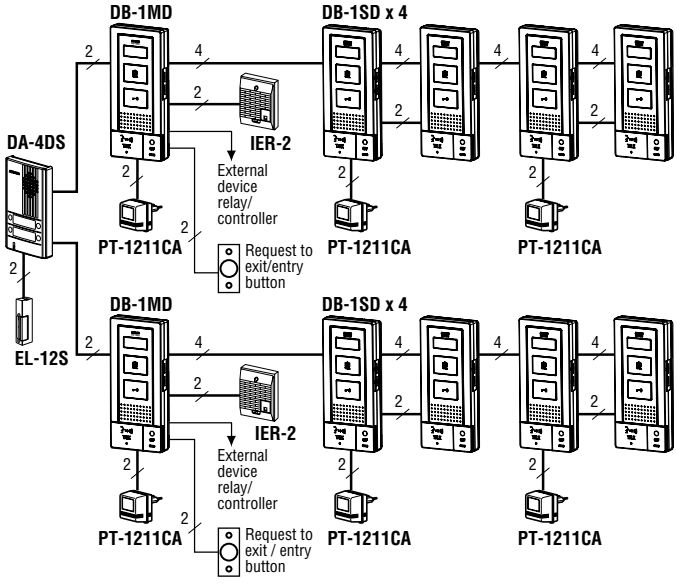
Wiring

Example with DA-1DS



NOTE: For door release use EL-12S or 9.5V~20V AC, 70Ω

Example with DA-4DS



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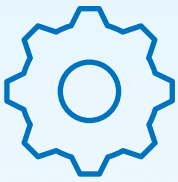
QuikTech is highly searchable, well organized, and includes answers to the questions we hear the most.

It is written in your language, with the goal to quickly resolve any on-site challenges while reducing installation time.

The knowledge base is constantly reviewed and updated too. Articles cover both current and legacy systems, which are available online to help you 24/7/365.

Common Issues


Programming

Videos

Application Notes

Specifications

Tips

Search articles at **aiphone.com/glc_quiktech**

Audio Intercoms

LEF Series
Selective Call &
All Call Intercom
→ p. 36

LEM Series
Open Voice Intercom
→ p. 38

LEM-1DL Series
Access Sentry Intercom
→ p. 39

C-123L/A & C-123LW Sets
ChimeCom
→ p. 40

CCS-1A Set
ChimeCom2
→ p. 41

IE-8 Series
Chime Tone Intercom
→ p. 42

AT-406 Series
Handset to Handset Intercom
→ p. 43

MC Series
MarketCom
→ p. 44

TD-H Series
Selective Call Intercom
→ p. 45

IM Series
Security Window Intercom
→ p. 46

NHX Series
Nurse Call Intercom (UL 1069 Listed)
→ p. 47

NIM Series
Nurse Call Intercom
→ p. 48

LEF Series Selective Call & All Call Intercom

Door Stations, Sub Stations, Speakers, & Paging Adaptor: mix and match up to 10 (requires 1 master station)

LE-D
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 80

LE-SS-1G
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 1-gang box)*

→ p. 80

LE-DA
Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LE-SS/A
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LE-SSR
Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LS-NVP/C
Audio Door Station
- Powder-coated steel
- Weather and vandal resistant
- Flush mount *(fits 3-gang box)*

→ p. 80

LE-A
Audio Sub Station
- Surface mount

→ p. 79

LE-AN
Privacy Audio Sub Station
- Surface mount
- Privacy button

→ p. 79

LE-B
Audio Sub Station
- Semi-flush mount

→ p. 79

LE-BN
Privacy Audio Sub Station
- Semi-flush mount
- Privacy button

→ p. 79

LEF-1C
Audio Sub Master Station *(requires BG-10C)*
- All Call button
- Semi-flush mount

→ p. 79

SP-20N/A
Ceiling Speaker Sub Station *(requires NP-25V)*
- 8Ω with 20Ω transformer
- Indoor use
- Flush mount

→ p. 93

BA-1
Paging Adaptor

→ p. 93

Master/Sub Station Features

- Monitoring and Selective Call
- 3, 5, and 10-call master stations
- Push-to-talk at master, hands-free reply at called station
- Call tone and LED annunciation at master
- Selective door release (with 1 RY-PA per door) on LEF-3L, LEF-5, LEF-5C, LEF-10, LEF-10S, and LEF-10C master stations
- All Call with LEF-10S and all LEF-C masters (requires BG-10C)

System Features

- Intermix doors, masters, subs, speakers, and paging adaptors to create desired communication (up to 11 total components)
- Wide variety of master and sub stations available

Specifications

Power Source	12V DC—use PS-1208UL (use PS-1225UL if installing BG-10C)
Communication	Push-to-talk (simplex)
Door Release	N/O dry contact, 24V DC, 1A (one RY-PA required per door strike)
Wire Type	Variable wire types – see table on page 36
Distance	Door Station or Sub Station to farthest Master Station: 650' (22 AWG) 1,600' (18 AWG)

LEF Series Wire Types	Wire #	Gauge	Conductor
▼ LEF Standard Wiring			
LEF-3	822210	22 AWG	10-conductor, overall shield
LEF-5	822212	22 AWG	12-conductor, overall shield
LEF-10, LEF-10S	822220	22 AWG	20-conductor, overall shield
▼ LEF-C Wiring			
LEF-1C homerun to BG-10C	822212	22 AWG	12-conductor, overall shield
LEF-1C looped (max. 9 stations)	822220	22 AWG	20-conductor, overall shield
LEF-3C	822212	22 AWG	12-conductor, overall shield
LEF-5C	822215	22 AWG	15-conductor, overall shield
LEF-10C	822220	22 AWG	20-conductor, overall shield
BG-10C to Master Station	822220	22 AWG	20-conductor, overall shield
▼ Sub/Door Station Wiring			
Homerun (22AWG)	822203	22 AWG	3-conductor, overall shield
Homerun (18AWG)	821803	18 AWG	3-conductor, overall shield
Looped (max. 4 stations)	822206	22 AWG	6-conductor, overall shield
Looped (max. 8 stations)	822210	22 AWG	10-conductor, overall shield
▼ LEF + Door Release Wiring			
LEF-3L	822212	22 AWG	12-conductor, overall shield
LEF-5, LEF-5C	822220	22 AWG	20-conductor, overall shield
LEF-10, LEF-10S, LEF-10C	822220 + 822210	22 AWG	20-conductor, overall shield + 10-conductor, overall shield

Mix and match up to 11 LEF components

QuikSpec

Master Stations: mix and match up to 11

LEF-3
3-Call Audio Master Station
- Surface mount

→ p. 79

LEF-3L
3-Call Audio Master Station
- Selective door release
- Surface mount

→ p. 79

LEF-3C
3-Call Audio Master Station
- All Call button *(requires BG-10C)*
- Semi-flush mount

→ p. 79

LEF-5
5-Call Audio Master Station
- Selective door release
- Surface mount

→ p. 79

LEF-5C
5-Call Audio Master Station
- All Call button *(requires BG-10C)*
- Selective door release
- Semi-flush mount

→ p. 79

LEF-10
10-Call Audio Master Station
- Selective door release
- Surface mount

→ p. 79

LEF-10S
10-Call Audio Master Station
- All Call button *(requires BG-10C)*
- Selective door release
- Surface mount

→ p. 79

LEF-10C
10-Call Audio Master Station
- All Call button *(requires BG-10C)*
- Selective door release
- Semi-flush mount

→ p. 79

IMPORTANT VOLTAGE NOTICE:
Use 12V DC voltage only! Connecting AC voltage to an LEF master station can damage the component.

PS-1225UL
12V DC, 2.5A Power Supply
(required if using BG-10C, otherwise use PS-1208UL)

→ p. 95

PS-1208UL
12V DC, 800mA Power Supply

→ p. 95

Accessories

KMB-45
45° Mullion Mounting Bracket for LE-D

→ p. 91

SBX-1G
Surface Mount Box for LE-SS-1G

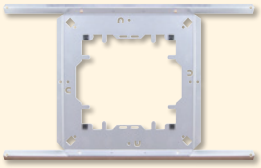
→ p. 90

SBX-2G/A
Surface Mount Box for LE-DA, LE-SS/A, or LE-SSR

→ p. 90

SBX-NVP/A
Surface Mount Box for LS-NVP/C

→ p. 90



SSB-2
Ceiling Support Bracket for SP-20N/A

→ p. 93

EL-12S
Electric Door Strike for Wood Frames *(requires PT-1210NA)*

→ p. 89

RY-PA
Door Release Relay

→ p. 80

LT-1
20Ω-to-8Ω Matching Transformer

→ p. 80

LEW-5, LEW-10, LEW-10S
Terminal Box

→ p. 80

BG-10C
All Call, Chime, and Music Adaptor *(requires PS-1225UL)*

→ p. 80

NP-25V
33µF, 25V Non-Polarized Capacitor

→ p. 93

RY-AC/A
External Signaling Relay

→ p. 94

Dimensions

	INCHES					MILLIMETERS				
	Height	Width	Depth	Recessed	Diameter	Height	Width	Depth	Recessed	Diameter
BA-1	4-1/8"	2-1/2"	1-1/2"	-	-	105	64	38	-	-
LE-A, LE-AN	6-5/16"	5-3/16"	2"	-	-	160	131	51	-	-
LEF-3, LEF-3L	7-1/16"	5-5/8"	2-1/8"	-	-	180	143	53.5	-	-
LE-B, LE-BN, LEF-1C, LEF-3C	8-3/16"	6"	2"	9/16"	-	208	153	50.5	15	-
LE-D	4-3/4"	3-7/16"	1-1/8"	-	-	120	88	29	-	-
LE-DA	4-1/2"	4-9/16"	*	-	-	115	116	*	-	-
LEF-5, LEF-10, LEF-10S	8-1/8"	7-1/2"	2-3/16"	-	-	206	190	55	-	-
LEF-5C, LEF-10C	9-3/8"	7-7/8"	3"	1-9/16"	-	238	200	75.5	40	-
LE-SS/A, LE-SSR	4-3/4"	4-3/4"	*	-	-	119.89	119.89	*	-	-
LE-SS-1G	4-1/2"	2-3/4"	*	-	-	114.3	69.85	*	-	-
LS-NVP/C	7-1/2"	5-1/2"	*	-	-	191	140	*	-	-
SP-20N/A	-	-	**	-	12-7/8"	-	-	**	-	327

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.
**SP-20N/A has a 3/8" depth projection from the surface.

Wiring

There are many different wiring configurations possible with the LEF Series.

For additional help, contact Aiphone's Technical Support.

800.692.0200

DOOR/SUB 3 x MASTER 1

LEM Series Open Voice Intercom

QuikSpec

Door Stations, Sub Stations, Speakers, & Paging Adaptor: mix and match up to 3

LE-D
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 80

LE-SS-1G
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 1-gang box)*

→ p. 80

LE-DA
Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LE-SS/A
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LE-SSR
Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LS-NVP/C
Audio Door Station
- Powder-coated steel panel
- Weather and vandal resistant
- Flush mount *(fits 3-gang box)*

→ p. 80

LE-A
Audio Sub Station
- Surface mount

→ p. 79

LE-AN *(not shown)*
Privacy Audio Sub Station
- Surface mount
- Privacy button

→ p. 79

LE-B
Audio Sub Station
- Semi-flush mount

→ p. 79

LE-BN *(not shown)*
Privacy Audio Sub Station
- Semi-flush mount
- Privacy button

→ p. 79

SP-20N/A
Ceiling Speaker Sub Station
(requires NP-25V)
- 8Ω with 20Ω transformer
- Indoor use
- Flush mount

→ p. 93

BA-1
Paging Adaptor

→ p. 93

Master Stations: select 1

LEM-1
1-Call Audio Master Station
(for applications using one door/sub station)
- Surface mount

→ p. 81

LEM-3
3-Call Audio Master Station
(for applications using two or three door/sub stations)
- Surface mount

→ p. 81

2 wires
Aiphone #822202
(max. 650' between master and farthest sub)

2 wires (max. 66')

SKK-620C
6V DC, 200mA Power Supply

→ p. 95

Accessories

KMB-45
45° Mullion Mounting Bracket for LE-D

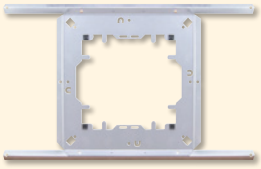
→ p. 91

SBX-1G
Surface Mount Box for LE-SS-1G

→ p. 90

SBX-2G/A
Surface Mount Box for LE-DA, LE-SS/A, or LE-SSR

→ p. 90



SSB-2
Ceiling Support Bracket for SP-20N/A

→ p. 93

SBX-NVP/A
Surface Mount Box for LS-NVP/C

→ p. 90

NP-25V
33µF, 25V Non-Polarized Capacitor

→ p. 93

LT-1
20Ω-to-8Ω Matching Transformer

→ p. 80

Master Station Features

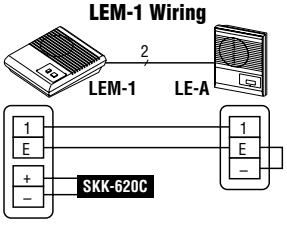
- Voice volume control

System Features

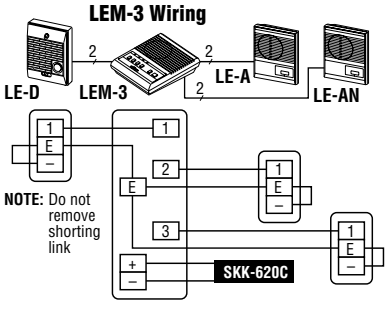
- Push-to-talk at master and hands-free at remote

Wiring

LEM-1 Wiring



LEM-3 Wiring



NOTE: Do not remove shorting link

Dimensions

	INCHES					MILLIMETERS				
	Height	Width	Depth	Recessed	Diameter	Height	Width	Depth	Recessed	Diameter
BA-1	4-1/8"	2-1/2"	1-1/2"	-	-	105	64	38	-	-
LE-A, LE-AN, LEM-1	6-5/16"	5-3/16"	2"	-		160	131	51	-	
LEM-3	7-1/16"	5-5/8"	2-1/8"	-		180	143	53.5	-	
LE-B, LE-BN	8-3/16"	6"	2"	9/16"		208	153	50.5	15	
LE-D	4-3/4"	3-7/16"	1-1/8"	-		120	88	29	-	
LE-DA	4-1/2"	4-9/16"	*	-		115	116	*	-	
LE-SS/A, LE-SSR	4-3/4"	4-3/4"	*	-		119.89	119.89	*	-	
LE-SS-1G	4-1/2"	2-3/4"	*	-		114.3	69.85	*	-	
LS-NVP/C	7-1/2"	5-1/2"	*	-		191	140	*	-	
SP-20N/A	-	-	**	-	12-7/8"	-	-	**	-	327

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.
**SP-20N/A has a 3/8" depth projection from the surface.

Specifications

Power Source	6V DC—use SKK-620C
Communication	Push-to-talk (simplex)
Door Release	N/A
Wire Type	Door Station or Sub Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station or Sub Station to Master Station: 650' (22 AWG) 1,570' (18 AWG)

DOOR 1 x MASTER 4

LEM-1DL Series Access Sentry Intercom

QuikSpec

Door Stations: select 1

LE-D
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 80

LE-SS-1G
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 1-gang box)*

→ p. 80

LE-DA
Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LE-SS/A
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LE-SSR
Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 80

LS-NVP/C
Audio Door Station
- Powder-coated steel
- Weather and vandal resistant
- Flush mount *(fits 3-gang box)*

→ p. 80

2 wires
Aiphone #822202
(max. 650' between door and farthest master)

2 wires

Door Strike and Power

2 wires

PT-1210NA
12V AC Transformer
(one required per master station)

→ p. 95

Master Stations: select 1

LEM-1DL
Audio Master Station
- Door release button

→ p. 81

LEM-1DLC
Audio Master Station
- Multi-master *(max. four)*
- Door release button
- Occupied LED

→ p. 81

PT-1210NA
12V AC Transformer
(one required per master station)

→ p. 95

LEM-1DL
2 + 2 wires
Aiphone #822202
(max. 650' between door and farthest master)

LEM-1DLC
3 + 2 wires
Aiphone #822203 and #822202
(max. 650' between door and farthest master)

Master Stations: select 1 (optional)

LEM-1DL
Audio Master Station
(requires one DAK-2S per every two LEM-1DL master stations in the system)
- Door release button

→ p. 81

LEM-1DLC
Audio Master Station
- Multi-master *(max. four)*
- Door release button
- Occupied LED

→ p. 81

Accessories

KMB-45
45˚ Mullion Mounting Bracket for LE-D

→ p. 91

SBX-1G
Surface Mount Box for LE-SS-1G

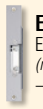
→ p. 90

SBX-2G/A
Surface Mount Box for LE-DA, LE-SS/A, or LE-SSR

→ p. 90

SBX-NVP/A
Surface Mount Box for LS-NVP/C

→ p. 90



EL-12S
Electric Door Strike *(requires PT-1210NA)*

→ p. 89

DAK-2S
Dual Master Adaptor Kit *(required per two LEM-1DL master stations–not required for LEM-1DLC master stations)*

→ p. 94

RY-AC/A
External Signaling Relay
(requires shared PS-1208UL with LEM-1DL and DAK-2S or shared PS-1208UL with LEM-1DLC)

→ p. 94

Box Set

LEM-1DLS:
LEM-1DL, LE-D, and PT-1210NA

Master Station Features

- Door release (N/O contact)
- Calling and two-way communication with door station
- Call tone and voice volume control

System Features

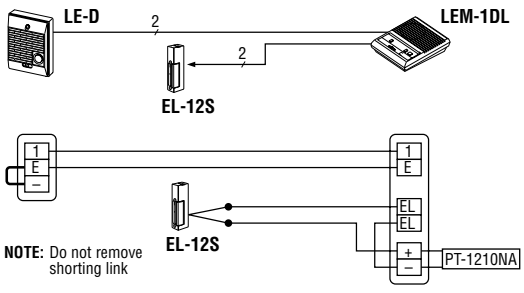
- 12–16V AC or 12–24V DC powered
- Any LE or LS Series door station is compatible

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
LE-D	4-3/4"	3-7/16"	1-1/8"	120	88	29
LE-DA	4-1/2"	4-9/16"	*	115	116	*
LEM-1DL, LEM-1DLC	7-1/16"	5-5/8"	2-1/8"	180	143	53.5
LE-SS/A, LE-SSR	4-3/4"	4-3/4"	*	119.89	119.89	*
LE-SS-1G	4-1/2"	2-3/4"	*	114.3	69.85	*
LS-NVP/C	7-1/2"	5-1/2"	*	191	140	*

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Wiring



Specifications

Power Source: 12–16V AC—use PT-1210NA or 12–24V DC—use PS-1208UL

Communication: Push-to-talk (simplex)

Door Release: N/O dry contact, 30V AC/DC, 1A

Wire Type: Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802

Between LEM-1DLCs: 3-cond., overall shield—use Aiphone #822203 or #821803

Distance: Door Station to farthest Master Station: 650' (22 AWG) 1,570' (18 AWG)

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

C-123L/A & C-123LW Sets ChimeCom

QuikSpec

Box Sets: select 1 (door station not sold separately – choose C-123L/A for a 1 x 1 system or C-123LW for a 1 x 2 system)

C-123L/A
Single Master Station Box Set with C-D and C-ML/A

C-123LW
Dual Master Station Box Set with C-D, 2 C-ML/As, and DAK-2S

available only as BOX SETS

Door Station (select a box set)

C-D
Audio Door Station
(included with both C-123L/A and C-123LW box sets – not sold separately)
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 55

Master Station (one included with C-123L/A box set and two included with C-123LW box set)

C-ML/A
Audio Master Station
(includes DAK-2S dual master adaptor kit)
- Surface mount

→ p. 55

2 x 2 wires
Aiphone #822202
(max. 245' between door and farthest master)

C-ML/A
Audio Master Station
(includes DAK-2S dual master adaptor kit)
- Surface mount

→ p. 55

2 wires
Aiphone #822202
(max. 245' between door and farthest master)

2 wires

Door Strike and Power

2 wires
Aiphone #822202

SKK-620C
6V DC, 200mA Power Supply
→ p. 95
or four C batteries

2 wires
Aiphone #822202

SKK-620C
6V DC, 200mA Power Supply
→ p. 95
or four C batteries

Accessories

KMB-45
45° Mullion Mounting Bracket for C-D
→ p. 91

EL-12S
Electric Door Strike for Wood Frames
(requires PT-1210NA)
→ p. 89

Door Station Features

- Any LE or LS Series door station can replace C-D
- LE-D is physically identical to C-D

Master Station Features

- Adjustable communication volume
- Batteries or 6V DC power supply (one per master)
- Automatically turns off in 20 seconds

System Features

- Single master station box set includes a door station and master station (power sold separately)
- Dual master station box set includes a door station, two master stations, and a dual master adaptor kit (power sold separately)
- Push-to-talk door answering with door release

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
C-D	4-3/4"	3-7/16"	1-1/8"	120	88	29
C-ML/A	7-1/2"	5-1/8"	1-3/4"	190	130	43

Specifications

Power Source: 6V DC—use SKK-620C or four C batteries

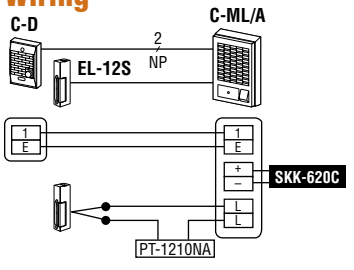
Communication: Push-to-talk (simplex)

Door Release: N/O dry contact, 50V AC, 1A

Wire Type: Door Station to Master Station: 2-cond., overall shield – use Aiphone #822202 or #821802

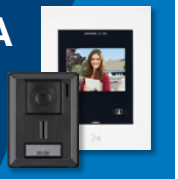
Distance: Door Station to farthest Master Station: 245' (22 AWG) 590' (18 AWG)

Wiring



Are your customers looking for a solution similar to our C-123L/A or C-123LW Sets, but need video with the door release feature?

Check out the JS Series Economy Video Doorbell | aiphone.com/glc_js-series



DOOR 1 x MASTER 1

CCS-1A Set ChimeCom2

QuikSpec

Box Set

CCS-1A
Box Set with
CC-DA and CC-1M

available only as a ***BOX SET***

Door Station (select the box set)

CC-DA
Audio Door Station
(included with CCS-1A box set—not sold separately)
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 55

2 wires
Aiphone #822202
(max. 245' between door and master)

PT-1210NA
12V AC
Transformer
→ p. 95

2 wires
Aiphone
#822202

Master Station (select the box set)

CC-1M
Audio Master Station
(included with CCS-1A box set—not sold separately)
- Chime and voice volume controls

→ p. 55

Door Station Features

- Backlit call button

Master Station Features

- Chime and voice volume controls

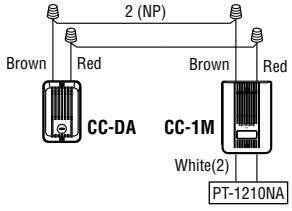
System Features

- Box set includes a door station and master station (power sold separately)
- Push-to-talk door answering with automatic shut-off
- Powered by AC transformer PT-1210NA

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
CC-1M	7-1/16"	4-13/16"	1-5/16"	180	123	33
CC-DA	4-1/2"	2-3/4"	1-3/16"	114	70	30

Wiring



Specifications

Power Source	12–16V AC (with no-load voltage rating, 20V or less)—use PT-1210NA
Communication	Push-to-talk (simplex)
Door Release	N/A
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station to Master Station: 245' (22 AWG) 590' (18 AWG)

Are your customers looking for a solution similar to our CCS-1A Set, but need video too?

Check out the WL-11 Wirless Video Intercom | aiphone.com/glc_WL-11

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

IE-8 Series Chime Tone Intercom

QuikSpec

Door Stations: mix and match up to 2

AX-DM
Audio Door Station
- Plastic chassis
- Weather resistant
- Mullion surface mount

→ p. 53

IF-DA
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 62

IE-JA
Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

IE-SS/A
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

IE-SSR
Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

2 wires
Aiphone #822202
(max. 500')

2 wires

Door Strike and Power

Master Station

IE-8MD
6-Call Audio Master Station
- Handset for privacy

→ p. 62

2 wires
Aiphone #822202
(max. 33')

PT-1210NA
12V AC Transformer

→ p. 95

4 wires
Aiphone #822206
(max. 245' between master and farthest sub master)

Sub Master Station: select up to 5 (optional)

IE-8HD
6-Call Audio Sub Master Station
- Handset for privacy

→ p. 62

Accessories

SBX-2G/A
Surface Mount Box for IE-JA, IE-SS/A, or IE-SSR

→ p. 90

EL-12S
Electric Door Strike for Wood Frames
(requires PT-1210NA)

→ p. 89

RY-AC/A
External Signaling Relay

→ p. 94

Door Station Features

- Two wires to door stations, same as doorbell

Master Station Features

- Selective Call or All Call between handsets
- Simple 4-conductor wiring between handsets

System Features

- Two doors with Selective Door Release
- External doorbell can be added
- 12–16V AC or 12–18V DC powered

Specifications

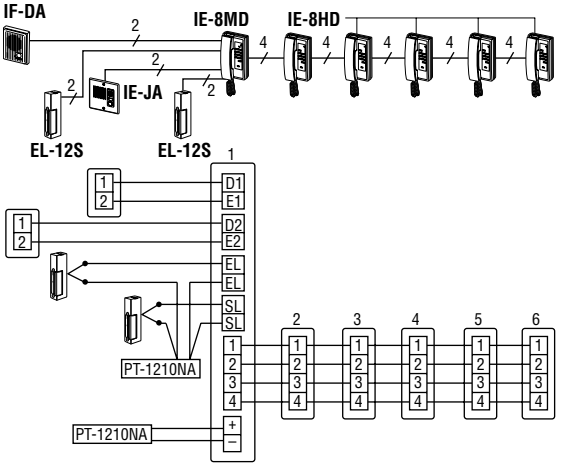
Power Source	12–16V AC—use PT-1210NA or 12–18V DC—use PS-1225UL
Communication	Handset (full-duplex)
Door Release	N/O dry contact, 24V AC/DC, 350mA
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 Master Station to Sub Stations: 4-cond., overall shield—use Aiphone #822206
Distance	Door Station to Master Station: 500' (22 AWG) 1,180' (18 AWG) Master Station to farthest Sub Master Station: 245' (22 AWG) 580' (18 AWG)

Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
AX-DM	6-5/16"	1-11/16"	7/8"	160	43	22.5
IE-8MD, IE-8HD	8-1/4"	4-5/16"	3-1/8"	210	110	79
IE-JA	4-1/2"	4-9/16"	*	115	116	*
IE-SS/A, IE-SSR	4-3/4"	4-3/4"	*	121	121	*
IF-DA	5-1/8"	3-7/8"	1-1/8"	130	98	28.5

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.

Wiring



MASTER 1 x SUB 3 or 1

AT-406 Series Handset to Handset Intercom

Master Station

AT-206
White Audio Master Station
(not sold separately)
- Handset for privacy

→ p. 52

2 wires
Aiphone #822202
(max. 2,300')

2 wires (max. 12')

SKK-620C
6V DC, 200mA Power Supply
→ p. 95
or four AA batteries

Sub Station: select up to 3

AT-306
White Audio Sub Station
- Handset for privacy

→ p. 52

or

Master Station

AT-206B
Charcoal Gray Audio Master Station
(not sold separately)
- Handset for privacy
- 4' coil cord
- Designed for use in limos, RVs, boats, and other recreational vehicles

→ p. 52

2 wires
Aiphone #822202
(max. 2,300')

2 wires (max. 12')

SKK-620C
6V DC, 200mA Power Supply
→ p. 95
or four AA batteries

Sub Station

AT-306B
Charcoal Gray Audio Sub Station
(not sold separately)
- Handset for privacy
- 4' coil cord
- Designed for use in limos, RVs, boats, and other recreational vehicles

→ p. 52

Box Sets

AT-406 (white):
AT-206 and AT-306

AT-406B/A (charcoal gray):
AT-206B and AT-306B with 4' coil cord

Master/Sub Station Features

- Call button on master rings all the subs
- Power supply or battery powered
- Sub(s) ring master only

System Features

- Up to two additional subs can be added (AT-306)

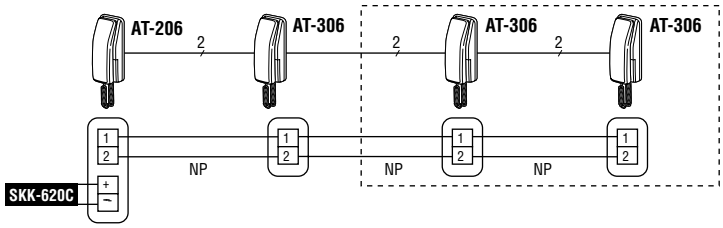
Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
AT-206, AT-206B, AT-306, AT-306B	8-1/4"	3-1/8"	2-1/16"	210	80	52

Specifications

Power Source	6V DC—use SKK-620C or four AA batteries
Communication	Handset (full-duplex)
Door Release	N/A
Wire Type	Master Station to Sub Station: 2-cond., overall shield—use Aiphone #822202
Distance	Two-Station Set: 2,300' (22 AWG) 5,250' (18 AWG)
	Master Station to third Sub Station: 1,350' (22 AWG) 3,100' (18 AWG)

Wiring



Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

MC Series MarketCom

Master Station: select up to 60

MC-60/4A
Audio MarketCom Master Station
- Four communication channels with LED indicators
- Easy access page button
- Handset for privacy

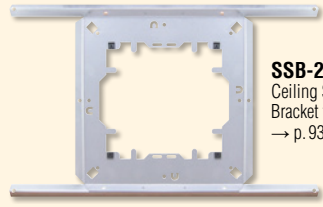
→ p. 82

7 wires
Aiphone #852207
(see wire distance in specifications below)

MC-60/4A
Audio MarketCom Master Station
- Four communication channels with LED indicators
- Easy access page button
- Handset for privacy

→ p. 82

Accessories



SSB-2
Ceiling Support Bracket for SP-2570N
→ p. 93

7 wires
Aiphone #852207
(see wire distance in specifications below)

Paging Amplifiers (1 required for system paging)

MD35M
35W Paging Amplifier
→ p. 93

MD60M
60W Paging Amplifier
→ p. 93

MD120M
120W Paging Amplifier
→ p. 93

Paging Adaptor
(1 required for system paging)

MC-A/A
Paging Adaptor
→ p. 82

Paging Speaker: install number of speakers needed (based on amplifier wattage)

MH-15W
Multi-Tap Horn Speaker
- 8Ω direct tap
- Built-in transformer for 25/70/100V systems
- Lightweight aluminum
- Weatherproof and waperproof
- Indoor and outdoor use
- Universal mounting bracket

→ p. 92

SP-2570N
Ceiling Speaker
- 8Ω, 25/70V, 5W
- Indoor use
- Flush mount

→ p. 93

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

2 wires
Aiphone #822202
(max. 16')

2 wires
Aiphone #822202
(max. 500')

2 wires
Aiphone #821802

System Features

- Maximum 60 station paging and communication system
- Selective four talk channels with in-use LED's
- Conference call among three stations
- Music goes mute while paging
- Reinforced modular coil cord on MC-60/4A

Dimensions

	INCHES				MILLIMETERS			
	Height	Width	Depth	Diameter	Height	Width	Depth	Diameter
MC-60/4A	9-3/16"	3-9/16"	3-11/16"	-	234	90	94	-
MC-A/A	2"	3-9/16"	5-5/8"	-	51.5	91	143	-
MD35M, MD60M, MD120M	1-3/4"	8-1/2"	12-1/2"	-	44.5	215.9	317.5	-
MH-15W	9''	9''	9-1/2''	-	229	229	241	-
SP-2570N	-	-	**	12-7/8"	-	-	**	327

**SP-2570N has a 3/8" depth projection from the surface.

Specifications

Power Source: 24V DC—use PS-2420UL

Communication: Handset (full-duplex)

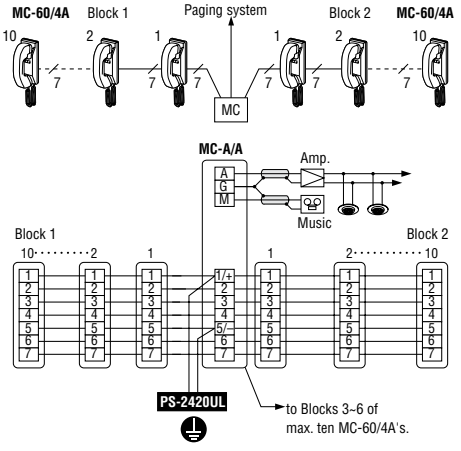
Door Release: N/A

Wire Type: 7-cond., non-twisted, low capacitance, PE insulation—use Aiphone #852207

Distance: Paging Adaptor to farthest Master Station on block: 1,700' (22 AWG) 4,000' (18 AWG)

Total cumulative wiring between Paging Adaptor and Master Stations: 5,000' (22 AWG)

Wiring



STATIONS 25

TD-H Series Selective Call Intercom

Door Stations: mix and match up to 2
(counts toward total capacity of 25 stations)

AX-DM Audio Door Station
- Plastic chassis
- Weather resistant
- Mullion surface mount

→ p. 53

IF-DA Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

→ p. 62

IE-JA Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

IE-SS/A Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

IE-SSR Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 62

Master Stations: mix and match up to 25 (mix and match up to 23 if using the maximum of 2 door stations or mix and match up to 11 if using the maximum of 2 door stations and 12 paging adaptors)

TD-1H/B 1-Call Audio Master Station *(cannot be used for door answering)*
- Handset for privacy

→ p. 86

TD-6H/B *(not shown)* 6-Call Audio Master Station
- Handset for privacy

→ p. 86

TD-3H/B *(not shown)* 3-Call Audio Master Station
- Handset for privacy

→ p. 86

TD-12H/B *(not shown)* 12-Call Audio Master Station
- Handset for privacy

→ p. 86

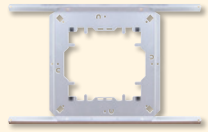
TD-24H/B 24-Call Audio Master Station
- Handset for privacy

→ p. 86

Accessories

SBX-2G/A Surface Mount Box for IE-JA, IE-SS/A, or IE-SSR

→ p. 90



SSB-2 Ceiling Support Bracket for SP-2570N

→ p. 93

TDW-nA Terminal Box for TD-nH/B *(n=1, 3, 6, 12 or 24)*

→ p. 87

RY-AC/A External Signaling Relay

→ p. 94

4 wires Aiphone #822206

2 wires Aiphone #822202 (max. 500')

Door Station Adaptor (1 required per door station)

DE-UR Door Station Adaptor

→ p. 86

2 wires Aiphone #822202

3 wires Aiphone #822203

PS-1225UL 12V DC, 2.5A Power Supply

→ p. 95

Paging Adaptors: mix and match up to 12 (counts toward total capacity of 25 stations and requires 1 paging amplifier per paging adaptor)

PD-1 Zone Paging Adaptor

→ p. 87

PD-2 Zone Paging / Talkback Adaptor

→ p. 87

Paging Speaker: install number of speakers needed (based on amplifier wattage)

MH-15W Multi-Tap Horn Speaker
- 8Ω direct tap
- Built-in transformer for 25/70/100V systems
- Lightweight aluminum
- Weatherproof and waterproof
- Indoor and outdoor use
- Universal mounting bracket

→ p. 92

SP-2570N Ceiling Speaker
- 8Ω, 25/70V, 5W
- Indoor use
- Flush mount

→ p. 93

2 wires Aiphone #822202

2 wires Aiphone #822202

Paging Amplifiers (1 required per paging adaptor)

MD35M *(not shown)* 35W Paging Amplifier

→ p. 93

MD60M *(not shown)* 60W Paging Amplifier

→ p. 93

MD120M 120W Paging Amplifier

→ p. 93

System Features

- Up to 2 door stations and 23 master stations can be installed
- 1, 3, 6, 12, and 24-call handset audio master stations available
- Paging zone(s) with optional talkback
- External signaling device when calling a handset (requires RY-AC/A)

Wiring

There are many different wiring configurations possible with the TD-H Series. For additional help, contact Aiphone's Technical Support.

tech_dept@aiphone.com | 800.692.0200

Specifications

Power Source 12V DC—use PS-1225UL

Communication Handset (full-duplex)

Door Release N/O dry contact, 30V AC/DC, 1A (at DE-UR)

Wire Type
Door Station to DE-UR: 2-cond., overall shield—use Aiphone #822202

DE-UR to Master Station: 6-cond., overall shield—use Aiphone #822206

TD-1H/B: 6-cond., overall shield—use Aiphone #822206

TD-3H/B, TD-6H/B: 10-cond., overall shield—use Aiphone #822210

TD-12H/B, TD-24H/B: 16-cond., overall shield—use Aiphone #812216 (two runs of 812216 are required for full functionality of the TD-24H/B)

Distance
Door Station to Adaptor: 500' (22 AWG) 1,200' (18 AWG)

Between Master Stations: 2,000' (22 AWG) 4,800' (18 AWG)

Dimensions

	INCHES				MILLIMETERS			
	Height	Width	Depth	Diameter	Height	Width	Depth	Diameter
AX-DM	6-5/16"	1-11/16"	7/8"	-	160	43	22.5	-
DE-UR	6-5/16"	5-7/8"	1-3/4"	-	160	150	45	-
IE-JA	4-1/2"	4-9/16"	*	-	115	116	*	-
IE-SS/A, IE-SSR	4-3/4"	4-3/4"	*	-	121	121	*	-
IF-DA	5-1/8"	3-7/8"	1-1/8"	-	130	98	28.5	-
MD35M, MD60M, MD120M	1-3/4"	8-1/2"	12-1/2"	-	44.5	215.9	317.5	-
MH-15W								
PD-1, PD-2	2"	3-9/16"	5-7/16"	-	51.5	90	138	-
SP-2570N	-	-	**	12-7/8"	-	-	**	327
TD-nH/B (n = 1, 3, 6, or 12)	8-1/4"	3-15/16"	2-7/8"	-	210	100	73	-
TD-24H/B	8-1/4"	3-15/16"	3-1/4"	-	210	100	83	-

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.
**SP-2570N has a 3/8" depth projection from the surface.

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

SPEAKER KIT 1 x CONTROL KIT 1

IM Series Security Window Intercom

Box Set

IM-1
Box Set with IMU-100, IAI-100, IAX-100, IME-100, ISE-100, and PS-2420UL

START with a BOX SET

Speaker Driver, Acoustic I/O Tube, & Tube Extension

IAI-100
Speaker Driver and Acoustic I/O Tube Kit
(includes DR-100 Speaker Driver and AI-100 Acoustic I/O Tube with noise cancelling microphone.)
→ p. 63

NOTE: *Image shown with IAX-100 acoustic tube extension (not included in IAI-100 kit).*

DR-100
Speaker Driver
(not sold separately)
- Window or ceiling mount
- Indoor or outdoor use
- Access panel for future maintenance

→ p. 63

AI-100
Acoustic I/O Tube
(not sold separately)
- Noise cancelling microphone
- Mounting rails included

→ p. 63

IAX-100
Acoustic Tube Extension
(one required per system)
→ p. 63

Control Unit & Operation Unit

IMU-100
Control and Operation Unit Kit
(includes MU-100 Control Unit and OU-100 Operation Unit with supplied connector. IME-100 Gooseneck Microphone sold separately.)
→ p. 63

IME-100
Gooseneck Microphone
(sold separately)
- Flexible neck
- Hands-free communication

→ p. 63

MU-100
Control Unit
(not sold separately)
- Operation, sensitivity, volume, and power controls
- Rubber feet prevent slipping
- Desk mount or mount under the counter with supplied bracket

→ p. 63

OU-100
Operation Unit
(not sold separately)
- Supplied connector
- Rubber feet prevent slipping
- Desk mount

→ p. 63

2 wires Aiphone #822202 (max. 66')
2 wires Aiphone #821802 (max. 66')
2 wires Aiphone #821802 (max. 66')

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

Accessories

ISE-100
Proximity Sensor
→ p. 63

SP-2570N
8Ω, 25/70V, 5W Ceiling Speaker
→ p. 93

SSB-2
Ceiling Support Bracket for SP-2570N
→ p. 93

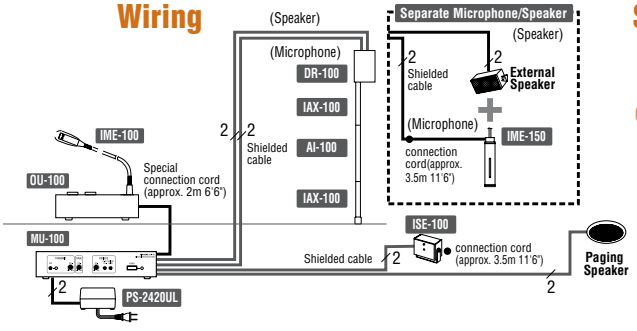
System Features

- Inconspicuous units do not obscure faces of those approaching a ticket/ customer window for added visibility and security
- Flexible gooseneck microphone can be adjusted to virtually any position
- Computer style headset can be used (not supplied by Aiphone)
- Uses voice-actuated communication (VOX) system, requiring no additional operations during conversation
- When the TALK switch is off, the Operation Unit is put on standby, but sound from public side is still heard at reduced volume
- By linking the system to a motion sensor, communication mode is automatically activated when a customer is present

Dimensions

	INCHES				MILLIMETERS			
	Height	Width	Depth	Diameter	Height	Width	Depth	Diameter
AI-100	15-1/4"	1-1/16"	15/16"	-	388	27	24	-
DR-100	5-7/8"	3-5/16"	1-7/16"	-	150	84	36	-
IAX-100	39-3/8"	1-1/16"	15/16"	-	1000	27	24	-
IME-100	20-1/16"	-	-	9/16"	510	-	-	14
ISE-100	2-3/8"	2-7/8"	1-3/16"	-	60	72	30	-
MU-100	1-3/4"	8-1/4"	8-1/8"	-	45	210	206	-
OU-100	1-15/16"	5-1/8"	6-5/16"	-	49	130	160	-

Wiring



Specifications

Power Source 24V DC, 120mA standby, 780mA max.—use PS-2420UL

Communication Hands-free (VOX) or push-to-talk (simplex)

Transmit output: 3W 4Ω

Receive output: 1.5W 16Ω

Door Release N/A

Wire Type Speaker Driver to Control Unit: 2 x 2-cond., overall shield—use Aiphone #822202 or #821802

Power Supply to Control Unit: 2-cond., overall shield—use Aiphone #822202 or #821802

Distance Power Supply or Speaker Driver to Control Unit: 66' (22 AWG/18 AWG)

SUB 80 x MASTER 1 x DUTY 1

NHX Series Nurse Call Intercom (UL 1069 Listed)

QuikSpec

Sub Stations: mix and match up to 10 per trunk with up to 8 trunks

NH-1SA/A
Single-Jack Bedside Audio Sub Station
- One jack for bedside call button
- Hands-free communication
- Flush mount *(fits 2-gang box)*

→ p. 83

NH-2SA/A *(not shown)*
Dual-Jack Bedside Audio Sub Station
- Two jacks for bedside call buttons
- Hands-free communication
- Flush mount *(fits 2-gang box)*

→ p. 83

NHR-3TS
Dual Corridor Light Sub Station
(required for NHR-7A if NH-1SA/A or NH-2SA/A are not used)
- Allows the urgent call pull cord to be used without the need for a bedside station
- Two lights indicate call location
- Stainless steel cover
- Flush mount *(fits 2-gang box)*

→ p. 83

One bedside call button is required per sub station jack

NHR-8C
Bedside Call Button
- Button activates routine call at master
- Cord-out activates urgent call at master

→ p. 83

NHR-8A-L *(not shown)*
Bedside Call Button
(not UL 1069 Listed)
- Button activates routine call at master
- Cord-out activates urgent call at master
- Latching call button
- Gray color

Central Control Unit

NHX-80X
Central Control Unit
- Controls system functions with microprocessor
- Compact, slim design
- Screwless wire connectors

→ p. 82

NHR-30K
30-Call Add-On Truck Card
(required for NHX-30G)
- Installs into NHX-80X
- Provides additional capacity for NHX-30G Add-On Selector

→ p. 82

Master Station

NHX-50M
50-Call Audio Master Station
- Priority level LED indicator
- Automatically connects to next call in priority
- Handset or push-to-talk communication
- Desk mount

→ p. 83

NHX-30G
30-Call Add-On Selector
(requires NHR-30K to be installed into NHX-80X)
- Plugs into NHX-50M with supplied connectors
- Expands NHX-50M to an 80-call master station

→ p. 83

4P Aiphone #862208 (max. 330' per trunk line)

4P Aiphone #862208 (max. 65')

5P Aiphone #862210 (max. 65')

2 wires Aiphone #821802

2 wires Aiphone #821802

Duty Station (optional)

NHR-SP
Audio Duty Station
- Ideal for break rooms, hallways, or locations without a master station
- Alerts staff when a master station receives a call
- Urgent calls override routine calls
- Flush mount *(fits 2-gang box)*

→ p. 83

x2

PS-2420UL
24V DC, 2A Power Supply

→ p. 95

Accessories

NHR-7A
Urgent Call Pull Cord

→ p. 83

NHR-4A/A
LED Corridor Light
(red and amber LEDs)

→ p. 83

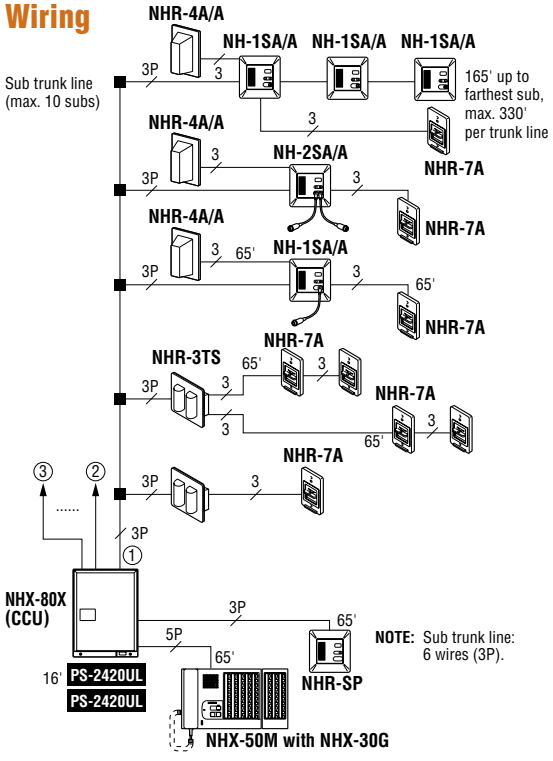
System Features

- One master, one duty, and up to 80 sub stations
- Single- and dual-jack bedside sub stations
- Multi-station capability per patient room
- Three types of call-ins from sub stations: routine call, bathroom call and cord-out trouble call, identified by tone and blinking LED (with priority according to urgency and time of call)
- NHR-3TS sub station is ideal for common areas
- Duty station for call annunciation in separate area

Specifications

See p. 82-83

Wiring



Dimensions

	INCHES			MILLIMETERS		
	Height	Width	Depth	Height	Width	Depth
NH-1SA/A, NH-2SA/A, NHR-SP	4-3/4"	4-9/16"	1-13/16"	120	116	46
NHR-3TS	4-3/4"	4-9/16"	2-7/8"	120	116	73
NHR-4A/A	4-3/4"	2-3/4"	1-1/16"	120	70	27
NHR-7A	4-1/2"	2-13/16"	1-3/4"	115	71	44
NHX-30G	8-1/4"	3-9/16"	2-5/16"	210	90	58.5
NHX-50M	8-1/4"	11"	3-11/16"	210	280	94
NHX-80X	18-1/8"	13-3/8"	3-7/8"	460	340	98

Diagrams are for illustrative purposes only. System wiring may vary by installation. Refer to instructions for actual installation directions.

DOOR/SUB/SPEAKER/JACK **20** or **40** x MASTER **1**

NIM Series Lamp Tone Intercom

Door Station, Sub Station, Ceiling Speaker, & Wall Jacks: mix and match up to 20 or 40 (based on master station selection)

NI-JA
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

→ p. 84

NI-BA
Audio Sub Station
- Surface mount

→ p. 84

NI-LB
Ceiling Speaker
(use NI-SB or NIR-MB for hands-free reply)
- Call-in LED
- Indoor use
- Flush mount

→ p. 84

NIR-HP
Wall Jack for NI-RC
- Flush mount *(fits 1-gang box)*

→ p. 85

NIR-HPF
Wall Jack for NI-RC
- Includes hook to hang NI-RC
- Flush mount *(fits 2-gang box)*

→ p. 85

NIR-7BS
Wall Jack with LED Call Indicator for NIR-8
- Flush mount *(fits 1-gang box)*

→ p. 85

2 wires Aiphone #821802

2 x 2 wires Aiphone #821802

2 wires Aiphone #821802

3 wires Aiphone #821803 (max. 650')

Ceiling Microphone

NI-SB
Ceiling Microphone
(use with NI-LB)
- Hands-free reply
- Indoor use
- Flush mount

→ p. 84

Bedside Sub Station

NI-RC
Bedside Sub Station
- Handheld

→ p. 84

Call Button & Wall Jack: select desired quantity per sub station or ceiling speaker

NIR-6
Call Button
(use with NI-BA or NI-LB only)
- Flush mount *(fits 1-gang box)*

→ p. 85

NIR-1
Wall Jack for NIR-8
(use with NI-BA or NI-LB only)
- Flush mount *(fits 1-gang box)*

→ p. 85

Wall Jack: select 1 per ceiling speaker

NIR-MB
Wall Jack with Mic for NIR-8
(can be used in place of NI-SB)
- Flush mount *(fits 1-gang box)*

→ p. 85

Bedside Call Button

NIR-8
Bedside Call Button
(requires NIR-1, NIR-MB, or NIR-7BS)
- Handheld

→ p. 85

Master Station Features

- Master in 20 and 40-station sizes
- Built-in All Call, Selective Call, and Group Call
- Push-to-talk at master or use handset
- Group Call up to five subs at a time
- Incoming calls remain lit until answered (max. 10)
- Separate transmit and receive volume controls
- Adjustable ring tone (melody or chime)
- Automatic ringtone volume level (increases after 90 seconds)

System Features

- Optional software for call event logging (NI-SOFT)

Specifications

Power Source	48V DC—use IS-PU-UL
Communication	Handset (VOX) or push-to-talk (simplex)
Door Release	N/A
Wire Type	Door Station, Sub Station, Ceiling Speaker, or Wall Jack to Master Station: 3-cond. overall shield—use Aiphone #821803 Call Button or Corridor Lamp to Sub Station: 2 cond. overall shield—use Aiphone #821802 NIR-MB to Ceiling Speaker: 4-cond. overall shield—use two runs of #821802
Distance	Door Station or Sub Station to Master Station: 650' (18 AWG) Power Supply to Master Station: 33' (18 AWG)

NOTE: *If your application requires product to be UL 1069 Listed for hospital signaling and skilled nursing facilities, please see the NHX Series on p. 47*

Wiring

There are many different wiring configurations possible with the NIM Series.

For additional help, contact Aiphone's Technical Support.

800.692.0200

Master Stations: select 1

NIM-20B
20-Call Audio
Master Station

- Supports up to 20 door stations, sub stations, ceiling speakers, and wall jacks
- Selective Call, Group Call, and All Call
- Volume controls
- Handset for privacy

→ p. 84

NIM-40B
40-Call Audio
Master Station

- Supports up to 40 door stations, sub stations, ceiling speakers, and wall jacks
- Selective Call, Group Call, and All Call
- Volume controls
- Handset for privacy

→ p. 84

2 wires
Aiphone
#821802
(max. 33')

IS-PU-UL
48V DC, 2A
Power Supply
→ p. 95

Accessories

NIR-2
Call Reset
Button
→ p. 85

NIR-4
Single Room
Corridor Call Light
→ p. 85

NIR-4S
Multi-Room
Corridor Call Light
→ p. 85

NIR-4BZ
Corridor Light with
Tone Indicator
→ p. 85

NIR-42
Corridor Light with
Call Reset Button
→ p. 85

NIR-31
Corridor Light with One
Magnetic Nameplate
→ p. 85

NIR-32
Corridor Light with Two
Magnetic Nameplates
→ p. 85

NIR-34
Corridor Light with Four
Magnetic Nameplates
→ p. 85

NIR-7HW
Bathroom
Call Button
with Pull Cord
→ p. 85

NIR-7W
Bathroom
Call Button
→ p. 85

NI-SOFT
Call Event Log
PC Software
(includes RS-232 cable, approx. 40")
→ p. 85

IER-2
Call Extension
Speaker
→ p. 89

SBX-2G/A
Surface Mount
Box for NI-JA
→ p. 90

RY-ES
External
Signaling Relay
→ p. 94

Dimensions

	INCHES				MILLIMETERS			
	Height	Width	Depth	Diameter	Height	Width	Depth	Diameter
NI-BA	5-7/8"	5-1/8"	1-5/16"	-	150	130	33	-
NI-JA	4-3/4"	4-3/4"	*	-	120	120	*	-
NI-LB	-	-	**	7-1/16"	-	-	**	180
NIM-20B	9-1/16"	13"	5-1/2"	-	230	330	140	-
NIM-40B	9-1/16"	18-7/8"	5-1/2"	-	230	480	140	-
NIR-1, NIR-2, NIR-4, NIR-4S, NIR-6, NIR-7BS, NIR-7HW, NIR-7W, NIR-HP, NIR-MB	4-3/4"	2-3/4"	*	-	120	70	*	-
NIR-31, NIR-32	5-11/16"	7-1/2"	1-9/16"	-	144	190	40	-
NIR-34	5-11/16"	12-1/16"	1-9/16"	-	144	306	40	-
NIR-42, NIR-4BZ, NIR-HPF	4-3/4"	4-9/16"	*	-	120	116	*	-
NIR-8	3-3/4"	-	-	1-7/16"	95	-	-	36
NI-RC	6-3/4"	2-3/16"	1-1/8"	-	171.5	56	28	-
NI-SB	-	-	**	4-1/8"	-	-	**	105

*Aiphone recommends a 2-1/2" minimum back box depth for all flush mount stations.
**NI-LB has a 9/16" depth projection from the surface and NI-SB has a 3/16" depth projection from the surface.

IX Series Stations with UL Certification

Check out the IX Series product line for popular stations that make it easier to meet building code requirements.

Why is having UL Certification important?

- UL is recognized as the leader in product safety testing
- UL certification is only granted through comprehensive procedures and guidelines
- UL requires that all standards are met prior to granting certification

aiphone.com/glc_ixul

Accommodating Customers with ADA Compliancy

See a variety of simple intercom solutions to help comply with common ADA regulations.

- Door and master stations with t-coil compatibility
- Emergency call stations with lettering, braille, and LED call status indicator
- Compact wall boxes have proper signage and call button mounting height

aiphone.com/glc_ada

GSA Products Take Out the Guess Work

- Automatically meet TAA standards
- Wide selection of components
- Renewed contract for five years

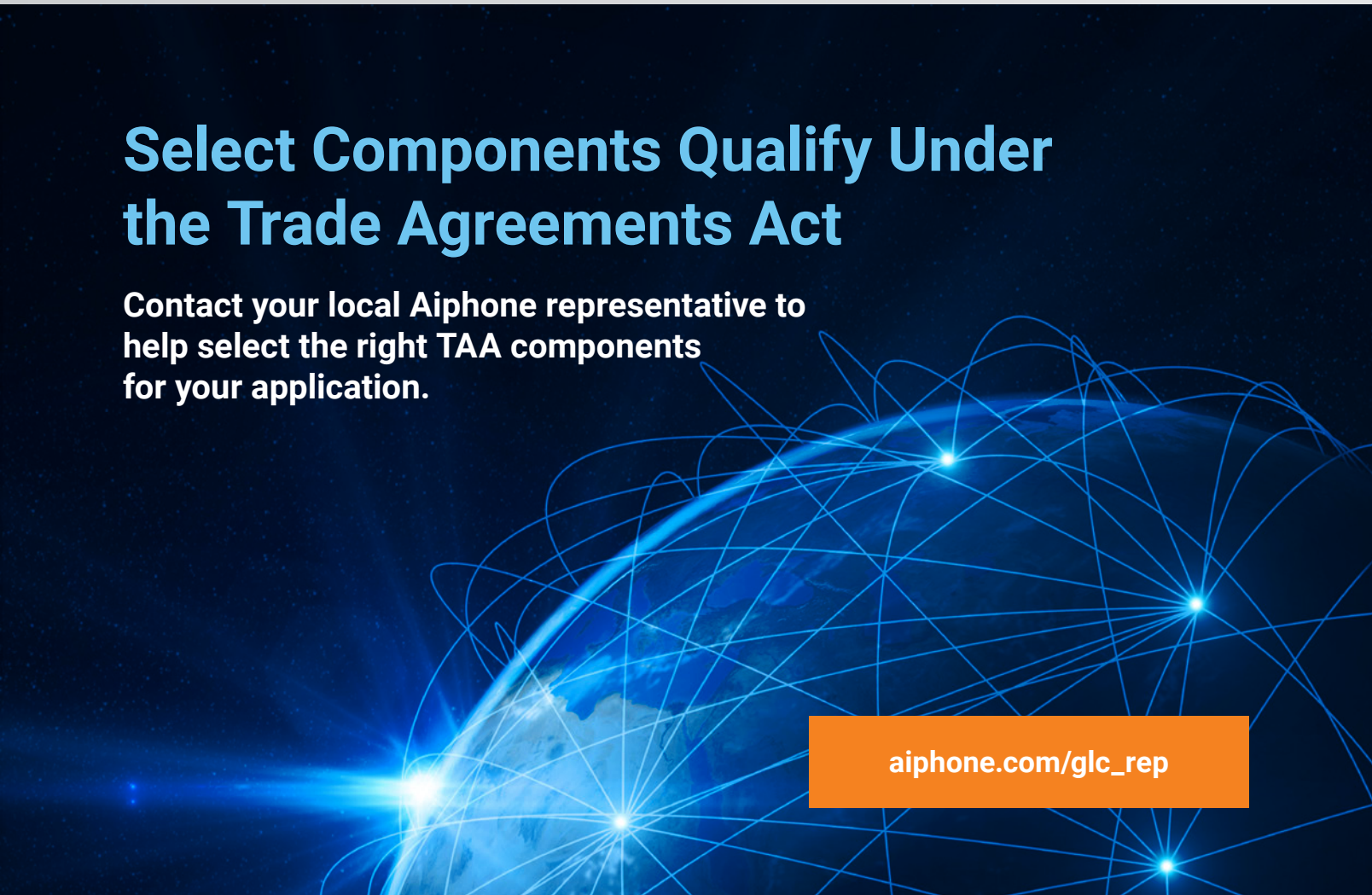
GSA Schedule

For information on our qualified components, reach out to your local rep or email us.

gsa@aiphone.com

Select Components Qualify Under the Trade Agreements Act

Contact your local Aiphone representative to help select the right TAA components for your application.



aiphone.com/glc_rep

Components

AT-406 Series Components

Audio Master & Sub Stations

AT-206
White Audio Master Station
(not sold separately)
- Handset for privacy

AT-306
White Audio Sub Station
- Handset for privacy

AT-206B
Charcoal Gray Audio Master Station
(not sold separately)
- Handset for privacy
- 4' coil cord
- Designed for use in limos, RVs, boats, and other recreational vehicles

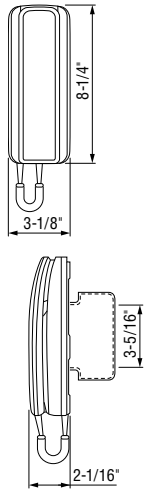
AT-306B
Charcoal Gray Audio Sub Station
(not sold separately)
- Handset for privacy
- 4' coil cord
- Designed for use in limos, RVs, boats, and other recreational vehicles

Features
- Call button on master rings all the subs
- Power supply or battery powered
- Sub(s) ring master only

Specifications

Power Source	6V DC—use SKK-620C or four AA batteries
Communication	Handset (full-duplex)
Wire Type	Master Station to Sub Station: 2-cond., overall shield—use Aiphone #822202
Distance	Two-Station Set: 2,300' (22 AWG) 5,250' (18 AWG) Master Station to third Sub Station: 1,350' (22 AWG) 3,100' (18 AWG)

AT-206, AT-206B, AT-306, AT-306B



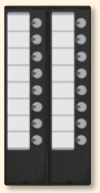
AX Series Components

Master Stations & Add-On Selector

AX-8MV
Video Master Station
- 3-1/2" LCD screen
- Wall or desk mount

AX-8MV-W
Video Master Station
(recommended for an 8 x 8 system only)
- 3-1/2" LCD screen
- White finish
- Wall or desk mount

AX-8M
Audio Master Station
- Wall or desk mount



AX-16SW
16-Call Add-On Selector for AX-8MV or AX-8M
(max. 7 per master)

Features (AX-8MV, AX-8MV-W, AX-8M)
- Hands-free or push-to-talk communication
- Two talk channels
- Composite video output from CEU/video master stations
- All Call or Group Call to master stations
- Scan monitoring

Features (AX-16SW)
- Provides ability to select/call 16 additional door stations
- Aesthetically matches AX-8M or AX-8MV

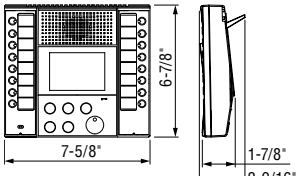
Specifications (AX-8MV, AX-8MV-W, AX-8M)

Power Source	Supplied by Central Exchange Unit
Communication	Hands-free (VOX) or push-to-talk (simplex)
Video Display	AX-8MV, AX-8MV-W: 3-1/2" LCD screen AX-8M: N/A
Door Release	Programmable dry contact, 24V AC/DC, 500mA (use RY-1824L for larger contact rating)
Mounting	Surface mount directly to wall or desk mount—use MCW-S/B for an adjustable desk angle
Wire Type	Between Door/Sub Station, Master Station, and Central Exchange Unit: Cat-5e
Distance	Central Exchange Unit to Master Station: 980'

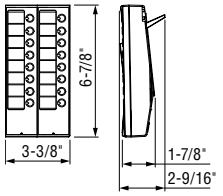
Specifications (AX-16SW)

Power Source	Supplied by Master Station
Calling Capacity	16 door/sub stations
Unit Capacity	Max. 7 for up to 112 additional door/sub stations (max. 120 door/sub stations per system)
Mounting	Mounts directly to Master Station or other AX-16SW with supplied brackets
Wire Type	Add-On Selector to Master Station: Ribbon cable (included with AX-16SW)

AX-8M, AX-8MV, AX-8MV-W



AX-16SW



AX Series Components (continued)

Video Door Stations

AX-DV
Video Door Station
- Aluminum die cast cover
- Weather and vandal resistant
- Surface mount

AX-DV-P*
Card Access Video Door Station
- HID® ProxPoint® Plus Proximity Card Reader
- Aluminum die cast cover
- Weather and vandal resistant
- Surface mount

AX-DVF
Video Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

AX-DVF-P*
Card Access Video Door Station
- HID® ProxPoint® Plus Proximity Card Reader
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

* *HID® stations require a third-party host. Power for card reader and door strike require additional wire.*

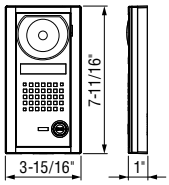
Surface mount boxes available for flush mount stations! See p. 90

Features
- Cat-5e wired to central exchange unit (980' max)
- Polycarbonate lens cover
- Fixed camera provides clear video
- LED illumination automatically turns on in low light conditions
- Embedded HID® ProxPoint® Plus card reader (AX-DV-P, AX-DVF-P)

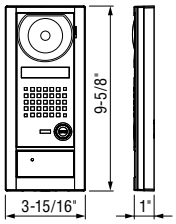
Specifications

Power Source	Supplied by Central Exchange Unit
Communication	Hands-free
Camera	Type: 1/4" CCD
	Area View: 2' 1" vertical x 3' 1" horizontal at 20"
Temp. Rating	14°~140°F (-10°~60°C)
Material	AX-DV, AX-DV-P: aluminum die cast
	AX-DVF, AX-DVF-P: stainless steel
Mounting	AX-DV, AX-DV-P: surface mount directly to wall
	AX-DVF: flush mount with included back box or surface mount with SBX-AXDVF
	AX-DVF-P: flush mount with included back box or surface mount with SBX-DVF-P
Wire Type	Door Station to Central Exchange Unit: Cat-5e
Distance	Door Station to Central Exchange Unit: 980'

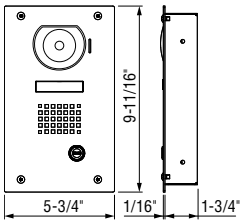
AX-DV



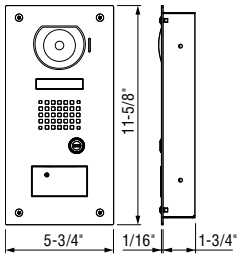
AX-DV-P



AX-DVF



AX-DVF-P



Audio Door Stations

AX-DM
Audio Door Station
- Plastic chassis
- Weather resistant
- Mullion surface mount

IF-DA
→ p. 62

IE-JA
→ p. 62

IE-SS/A
→ p. 62

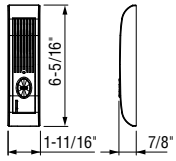
IE-SSR
→ p. 62

Features (AX-DM)
- Mullion mounted door station
- Constructed with sturdy ABS plastic
- Weather resistant
- Can be used with AX Series, IE-8 Series, KB Series, or TD-H Series

Specifications (AX-DM)

Power Source	Supplied by Central Exchange Unit
Communication	Hands-free
Temp. Rating	14°~140°F (-10°~60°C)
Material	ABS plastic
Mounting	Surface mount directly to wall or mullion
Wire Type	Door Station to Central Exchange Unit: Cat-5e or 2-cond.
Distance	Door Station to Central Exchange Unit: 980'

AX-DM



Features (IF-DA, IE-JA, IE-SS/A, IE-SSR)
See p. 62

Specifications (IF-DA, IE-JA, IE-SS/A, IE-SSR)
See p. 62

Central Exchange Units

AX-084C
Central Exchange Unit
- Supports up to 4 master stations and 8 door/sub stations

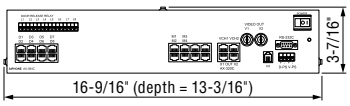
AX-248C
Central Exchange Unit
- Supports up to 8 master stations and 24 door/subs stations

AX-320C
Add-On Central Exchange Unit
- Supports up to 32 door/sub stations

Features
- Wiring hub for AX system using Cat-5e
- Two 24V DC power supply input terminals
- Rack mountable

Features (additional for AX-084C, AX-248C)
- Controls all functionality of AX system
- Two BNC composite video outputs and video switching triggers
- CO line transfer (requires Viking K-1900-5 programmable auto-dialer)
- Programmable functionality via supplied software

AX-084C, AX-248C, AX-320C



Specifications

Power Source	24V DC—use two PS-2420ULs
Consumption	Video: 0.62A max. Audio: 0.65A max.
CO Line Port	RJ11 for Viking K-1900-5 programmable auto-dialer
Door Release	Programmable dry contact, 24V AC/DC, 500mA (use RY-1824L for larger contact rating)
Mounting	19" EIA rack (2U) or wall mount
Wire Type	Between Door/Sub Station, Master Station, and Central Exchange Unit: Cat-5e
	Power Supply to Central Exchange Unit and Add-On Central Exchange Unit: 2-cond., overall shield—use Aiphone 821802
Distance	Door/Sub Station to Central Exchange Unit and Add-On Central Exchange Unit: 980'
	Central Exchange Unit to Master: 980'
	Central Exchange Unit to Add-On Central Exchange Unit: 16'
	Power Supply to Central Exchange Unit and Add-On Central Exchange Unit: 16' (22 AWG) 33' (18 AWG)

AX Series Components (continued)

Audio Sub Stations

AX-A
Audio Sub Station
- Surface mount

AX-AN
Privacy Audio Sub Station
- Privacy button
- Surface mount

AX-B
Audio Sub Station
- Semi-flush mount

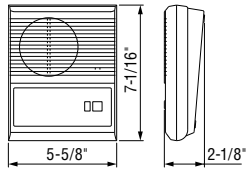
AX-BN
Privacy Audio Sub Station
- Privacy button
- Semi-flush mount

Features
- Hands-free communication when master answers
- Constructed with sturdy ABS plastic
- Desk or wall mount (AX-A, AX-AN)
- Mounts directly to wall or 1-gang box (AX-A, AX-AN)
- Privacy feature blocks unwanted monitoring from master (AX-AN, AX-BN)

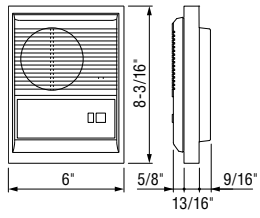
Specifications

Power Source	Supplied by Central Exchange Unit
Communication	Hands-free
Material	ABS plastic
Mounting	AX-A, AX-AN: surface mount directly to wall AX-B, AX-BN: semi-flush mount
Wire Type	Sub Station to Central Exchange Unit: Cat-5e or 2-cond.
Distance	Sub Station to Central Exchange Unit: 980'

AX-A, AX-AN



AX-B, AX-BN



Transmission & Reception Interface Units

AXW-AVT
Audio/Video Transmitter

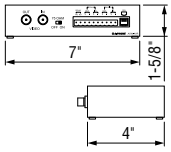
AXW-AVR
Audio/Video Receiver

Features
- Interfaces AX Series video door station with third-party alternate transmission methods for longer distances

Specifications

Power Source	AXW-AVT: 24V DC, 500mA—use PS-2420UL AXW-AVR: supplied by Central Exchange Unit
Video In & Out	Composite 1Vpp, NTSC
Video Connectors	BNC
Relay	N/O contact output, 30V DC, 1A
Sensor	N/C contact input
Wire Type	Cat-5e, 24AWG UTP-4
Distance	AXW-AVT to Door Station (cumulative): max. 980' using Cat-5e AXW-AVR to Central Exchange Unit (cumulative): max. 980' using Cat-5e AXW-AVT or AXW-AVR to third-party devices: do not exceed 16'

AXW-AVR, AXW-AVT



For a list of approved devices, visit **www.aiphone.com/ax** to download the AXW-AVT(R) instructions or contact Aiphone Technical Support at **(800) 692-0200/tech@aiphone.com**

CCTV Input Module

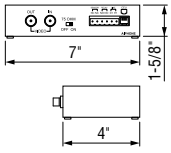
AXW-AZ
CCTV Input Module

Features
- Allows CCTV camera to be viewed on Aiphone video master station(s)
- Standard motion detector used to auto-activate camera
- Audio door station can be used for communication to camera location
- Relay output to trigger external device when CCTV camera is activated
- Video output for connection to standard CCTV monitor or recorder for full time video signal
- Sensor input to trigger CCTV automatically
- Video output allows constant viewing of CCTV Camera

Specifications

Power Source	Supplied by Central Exchange Unit
Video In/Out	75Ω composite video, 1V p-p
Video Connector	BNC
Video Monitoring	30 sec., controlled by Master Station
Camera Activation	N/C sensor input, or by Master Station
Wire Type	Cat-5e
Distance	Input Module to Central Exchange Unit: 980'

AXW-AZ



Paging Adaptor

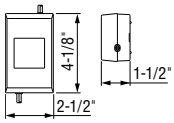
AXW-PA1
Paging Adaptor for AX Series

Features
- Page from an intercom master station out to a PA system to make announcements or to locate a person
- Takes the place of a separate microphone for paging where there is an intercom
- School uses: page hallways, playground areas, cafeteria, etc.
- Medical facilities and/or office uses: page waiting areas, hallways, break rooms, etc.

Specifications

Power Source	Supplied by Master Station or Central Exchange Unit
Input	Direct Central Exchange Unit connection
Output	600Ω
Output to Adaptor	0dB and -20dB, selectable
Requirements	AUX input (10kΩ) or 100mV for rated output
Wire Type	2-cond., overall shield—use Aiphone #822202

AXW-PA1



Components

CCS-1A Set Components

Audio Master Station

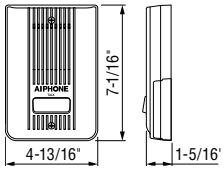
CC-1M
Audio Master Station
(not sold separately)
- Chime and voice volume controls

Features
- Chime and voice volume controls

Specifications

Power Source	12–16V AC (with no-load voltage rating, 20V or less)—use PT-1210NA
Communication	Push-to-talk (simplex)
Door Release	N/A
Mounting	Surface mount directly to wall
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station to Master Station: 245' (22 AWG) 590' (18 AWG)

CC-1M



Audio Door Station

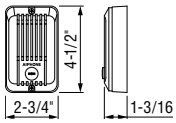
CC-DA
Audio Door Station
(not sold separately)
- Plastic chassis
- Weather resistant
- Surface mount

Features
- Backlit call button

Specifications

Power Source	Supplied by Master Station
Communication	Push-to-talk (simplex)
Material	Fire resistant ABS plastic
Mounting	Surface mount directly to wall
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station to Master Station: 245' (22 AWG) 590' (18 AWG)

CC-DA



C-123L/A & C-123LW Sets Components

Audio Master Station

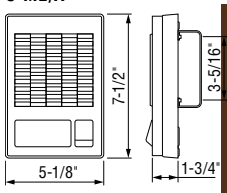
C-ML/A
Audio Master Station
(includes DAK-2S dual master adaptor kit)
- Surface mount

Features
- Adjustable communication volume
- Batteries or 6V DC power supply (one per master)
- Automatically turns off in 20 seconds

Specifications

Power Source	6V DC—use SKK-620C or four C batteries
Consumption	85mA
Output	100mW
Communication	Push-to-talk (simplex)
Door Release	N/O dry contact, 50V AC, 1A
Mounting	Surface mount directly to wall
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station to farthest Master Station: 245' (22 AWG) 590' (18 AWG)

C-ML/A



Audio Door Station

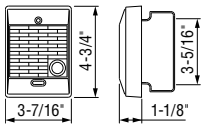
C-D
Audio Door Station
(not sold separately)
- Plastic chassis
- Weather resistant
- Surface mount

Features
- Can be replaced with any LE or LS Series door station
- Physically identical to LE-D

Specifications

Power Source	Supplied by Master Station
Communication	Push-to-talk (simplex)
Temp. Rating	14°~140°F (-10°~60°C)
Material	Fire resistant ABS plastic
Mounting	Surface mount directly to wall
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station to farthest Master Station: 245' (22 AWG) 590' (18 AWG)

C-D



Dual Master Adaptor Kit

DAK-2S
→ p. 94

Features
See p. 94

Specifications
See p. 94

DA Series Components

Audio Tenant Station

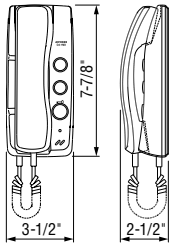
DA-1MD
Audio Tenant Station
(included with DA-1AS box set)
- Handset for privacy

Features
- Handset for privacy
- Service button to control an external device
- Call tone volume control with mute indicator
- Door release button (powered by door station)

Specifications

Power Source	15V AC—use PT-1211CA
Communication	Handset (full-duplex)
Wire Type	Entrance Station to Tenant Station: 2-cond., overall shield—se Aiphone #822202 or 2-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871802
	Power Supply to Tenant Station: 2-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871802
Distance	Power Supply to Tenant Station: 180' (22 AWG) 510' (18 AWG)
	Entrance Station to Power Supply (cumulative): 360' (22 AWG) 1,020' (18 AWG)

DA-1MD



Entrance Stations

DA-1DS

DA-2DS

DA-4DS

Features
See below

Specifications
See below

DB Series Components

Audio Tenant Stations

DB-1MD
Audio Hands-Free
Tenant Master Station
(included with DBS-1A box set)

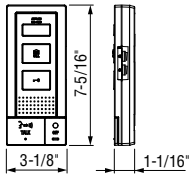
DB-1SD
Audio Hands-Free
Tenant Sub Station

Features
- All Call between stations in same residence/office
- Option button for external device control (N/O dry contact, AC/DC 24V 1.6A Max)
- Call tone volume control with LED mute indicator
- Receive volume control
- Optional Call Extension Speaker (IER-2)
- Optional external signaling to third-party bell or light using RY-ES (used in lieu of IER-2)
- Door release button (powered by door station)

Specifications

Power Source	15V AC—use PT-1211CA (requires one per tenant master station and one per two tenant sub stations)
Communication	Hands-free (VOX) or push-to-talk (simplex)
Wire Type	Entrance Station to Tenant Master Station: 2-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871802
	Tenant Master Station to Tenant Sub Station: 4-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871804
	Between Tenant Sub Stations: 4-cond. + 2-cond. when sharing power - use Aiphone #822206 or #871804
Distance	Power Supply to Tenant Master Station: 180' (22 AWG) 510' (18 AWG)
	Tenant Master Station to farthest Tenant Sub Station: 330'
	Power Supply to Entrance Station (cumulative): 360' (22 AWG) 1,020' (18 AWG)

DB-1MD



Entrance Stations

DA-1DS
1-Call Audio
Entrance Station
(included with both DA-1AS and DBS-1A box sets)
- Direct select button
- Backlit directory
- Weather resistant

DA-2DS
2-Call Audio
Entrance Station
- Direct select buttons
- Backlit directory
- Weather resistant

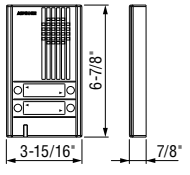
DA-4DS
4-Call Audio
Entrance Station
- Direct select buttons
- Backlit directory
- Weather resistant

Features
- Door release powered by door station without the need of an additional transformer or wiring

Specifications

Power Source	Supplied by Tenant Station
Communication	Hands-free
Door Release	9.5–20V AC, 70Ω or higher resistance—use EL-12S
Temp. Rating	14°~140°F (-10°~60°C)
Material	Aluminum cover
Mounting	Surface mount directly to wall
Wire Type	Entrance Station to Tenant Station: 2-cond., overall shield—use Aiphone #822202 or 2-cond., low cap, PE insulation, solid, non-shielded—use Aiphone #871802
Distance	Power Supply to Entrance Station (cumulative): 360' (22 AWG) 1,020' (18 AWG)

DA-1DS, DA-2DS, DA-4DS



GT Series Components

Entrance Stations & Access Card/Fob

Ready-to-Install Single Panel

GT-DMB-N
3-in-1 Video Entrance Station

- Tenant directory programming with NFC
- PTZ camera with 170° angle view
- Hands-free communication
- Access control and tenant directory scroll keypad
- Motion activated 3-1/2" LCD screen can display a customized greeting, operation instructions, or standby image
- Voice annunciation
- Stainless steel panel
- Weather and vandal resistant

GT-DMBN-SSP
3-in-1 Video Entrance Station

- Same features as GT-DMB-N, plus:
- Designed to mount into Pedestal Pro Model #64TOW-AIP-001-304 *(available at www.pedestalpro.com)*

Ready-to-Assemble Modular Kits

GTV-DES104B
Modular Video Entrance Station Kit
(includes GT-DB+GT-DBP, GT-VB+GT-VP, GT-NSB+GT-NSP-L, GT-10K+GF-10KP, GT-4B+GT-4F, and GT Operation Plate)

- Modular components
- Configuration can be customized
- Digital scroll buttons

NOTE: *To build custom entrance stations, see modular components and mounting accessories p. 60–61*

GTV-DES202B
Modular Video Entrance Station Kit
(includes GT-DB+GT-DBP, GT-VB+GT-VP, GT-NSB+GT-NSP-L, GT-10K+GF-10KP, GF-2B+GF-2F x2, and GT Operation Plate)

- Modular components
- Configuration can be customized
- Digital scroll buttons

GTA-DESB
Modular Audio Entrance Station Kit
(includes GT-DB+GT-DBP, GT-NSB+GT-NSP-L, GT-10K+GF-10KP, GF-3B+GF-3F, and GT Operation Plate)

- Modular components
- Configuration can be customized
- Digital scroll buttons

NFC-CARD
Access Card for GT-DB-VN and GT-DMB-N
(image not available)

NFC-FOB
Access Fob for GT-DB-VN and GT-DMB-N
(image not available)

Features

- Wide angle camera allows user to view up to 170° of the entry area (GT-DMB-N, GT-DES104B, GT-DES202B)
- Direct digit dialing, alphabetical scrolling, or "jump" scrolling by letter to select tenant name
- Digital panel stores up to 500 tenant names/number locations and 500 unique access codes to activate door release
- Voice annunciation in English, French, German, Spanish, Dutch, and Italian
- Alpha-numeric room numbers and/or names can be programmed
- Scrolling welcome message, up to 160 characters, adjustable scroll speed
- VFD (vacuum fluorescent display) displays calling unit name and number (GTA-DESB, GTV-DES104B, GTV-DES202B)
- Hands-free communication

Features
(additional for GT-DMB-N, GT-DMBN-SSP)

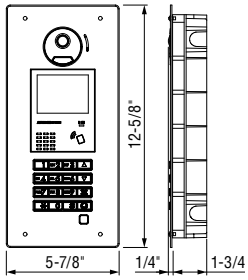
- PC configuration via USB or NFC
- LCD screen with energy conservation mode activated by built-in motion sensor

For descritpion and technical details of Pedestal Pro Model #64TOW-AIP-001-304, visit www.pedestalpro.com

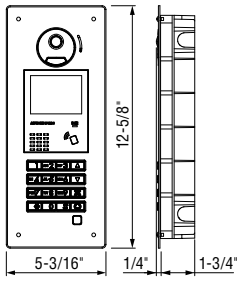
Specifications

Power Source	24V DC—use specified number of PS-2420ULs per system configuration
Communication	Hands-free (VOX)
Camera	Type: 1/4" CMOS (not GTA-DESB) View Area: 100° vertical x 170° horizontal (not GTA-DESB)
Door Release	Form C dry contact, 24V AC/DC, 4A
Temp. Rating	14°~140°F (-10°~60°C)
Material	GT-DMB-N: stainless steel GTA-DESB, GTV-DES104B, GTV-DES202B: zinc die cast
Mounting	GT-DMB-N: flush mount with GF-3B (sold separately) or surface mount with SBX-GTDMB (sold separately) GT-DMBN-SSP: flush mount with Pedestal Pro Model #64TOW-AIP-001-304 (sold separately at www.pedestalpro.com) GTA-DESB, GTV-DES104B, GTV-DES202B: semi-flush mount with GF-3B (included), semi-flush mount with GT-nH (sold separately), or surface mount with GT-nHB (sold separately)
Wire Type	2-cond., solid, non-shielded, PE insulation—use Aiphone #872002 for audio and #871802 for video and power
Distance	Variable wiring distances—see table on p. 59

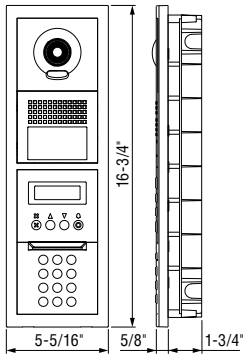
GT-DMB-N



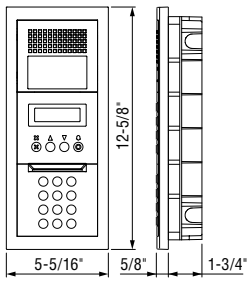
GT-DMBN-SSP



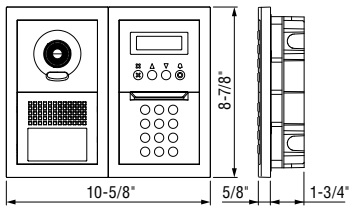
GTV-DES104B



GTA-DESB



GTV-DES202B



GT Series Components (continued)

Video Guard Station

GT-MKB-N
Video Guard Station
- 3-1/2" LCD screen
- Tenant directory programming with NFC
- Hands-free communication with handset for privacy
- Includes desk stand
- Compatible with JO-DV for single-door video entry

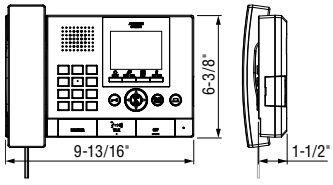
JO-DV
Video Door Station
(one per GT-MKB-N for single-door video entry)
→ p. 75

Features
- For audio or video systems
- Video identification and monitoring
- Calls entrance or tenant stations
- Reception Mode intercepts visitor calls for screening by guard or concierge
- Door release
- PC configuration via USB or NFC

Specifications

Power Source	24V DC—use PS-2420UL
Communication	Handset
Video Display	3-1/2" LCD screen
Temp. Rating	32°~104°F (0°~40°C)
Mounting	Wall or desk mount (stand included)
Wire Type	2-cond., solid, non-shielded, PE insulation—use Aiphone #872002 for audio and #871802 for video and power

GT-MKB-N



Audio Tenant Door Station

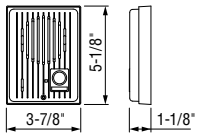
GT-D
Audio Tenant Door Station
(one per GT-2C for single-door audio entry)

Features
- Compatible with GT-2C video tenant master station
- Provides additional access control at individual tenant doorways
- Calls tenant's personal master and sub master stations simultaneously
- Hands-free communication

Specifications

Power Source	Supplied by GT-2C
Communication	Hands-free (VOX)
Temp. Rating	14°~140°F (-10°~60°C)
Material	Plastic
Mounting	Surface mount
Wire Type	2-cond., low cap, PE, solid, non-shielded—use Aiphone #871802
Distance	Variable wiring distances – see table on p. 59

GT-D



Video Tenant Master & Sub Master Stations

GT-2C
Video Tenant Master Station
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication
- Picture Memory
- Compatible with the GT-D audio tenant door station

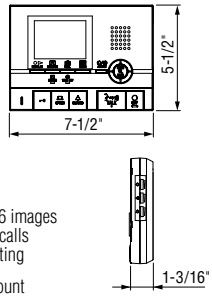
GT-2H
Video Tenant Sub Master Station
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication

Features
- Video identification and monitoring with 3-1/2" screen
- Hands-free or push-to-talk communication
- Internal Picture Memory (GT-2C)
- Door release, video guard station call, and optional service buttons
- PTZ, brightness, call tone, and communication volume control
- Simple station programming via dip switch setting
- Security inputs for alerting tenant and guard
- Input for GT-D audio tenant door station
- Internal communication with up to three GT-2H sub master stations
- Missed call from guard notification
- Menu can be displayed in six languages

Specifications

Power Source	GT-2C: 24V DC—use PS-2420UL GT-2H: supplied by GT-2C
Communication	Hands-free (VOX) or push-to-talk (simplex)
Video Display	3-1/2" LCD screen
Picture Memory	Record max. 40 calls (6 images per call) with up to 10 calls protected from overwriting
Mounting	Wall mount or desk mount with MCW-S/B
Wire Type	2-cond., solid, non-shielded, PE insulation—use Aiphone #872002 for audio and #871802 for video and power
Distance	Variable wiring distances - see table on p. 59

GT-2C, GT-2H

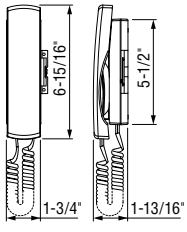


Optional Add-On Handset

GT-HSA
Optional Add-On Handset for GT-2C or GT-2H

Features
- Handset for privacy
- Easy to attach and remove
- Compatible with GT-2C or GT-2H

GT-HSA



Components

GT Series Components (continued)

Video & Audio Tenant Stations

GT-1C7W
App-Compatible Video Tenant Station
(requires PS-2420UL or GT-4ZP)
- Connect up to 8 free mobile apps
- 7" LCD touchscreen
- Hands-free or push-to-talk communication

GT-1C7
Video Tenant Station
- 7" LCD screen
- Hands-free or push-to-talk communication

GT-1M3
Video Tenant Station
- 3-1/2" LCD screen
- Hands-free or push-to-talk communication

GT-1A
Audio Tenant Station
- Hands-free or push-to-talk communication

GT-1D
Audio Tenant Station
- Handset for privacy

Features (GT-1C7W, GT-1C7, GT-1M3, GT-1A)
- Hands-free or push-to-talk communication
- Door release, video guard station call, and optional service buttons
- Call tone and communication volume control

Features (additional for GT-1M3, GT-1C7, GT-1C7W)
- Simple station programming via dip switch setting

Features (additional for GT-1M3)
- Video identification and monitoring with 3-1/2" screen

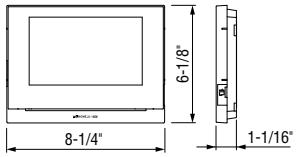
Features (additional for GT-1C7, GT-1C7W)
- Video identification and monitoring with 7" screen
- PTZ and brightness control

Features (GT-1D)
- Handset communication for privacy
- Door release and video guard station call buttons
- Call tone volume control

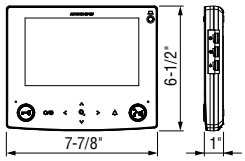
Specifications

Power Source	GT-1C7, GT-1M3, GT-1A, GT-1D: 24V DC—supplied by GT-BC or GT-VBC
	GT-1C7W: 24V DC—supplied by GT-4ZP or power supply
Communication	GT-1C7W, GT-1C7, GT-1M3, GT-1A: hands-free (VOX) or push-to-talk (simplex)
	GT-1D: handset
Video Display	GT-1C7, GT-1CW7: 7" LCD screen
	GT-1M3: 3-1/2" LCD screen
	GT-1A, GT-1D: N/A
Mounting	GT-1C7, GT-1M3, GT-1A: wall mount or desk mount with MCW-S/B
	GT-1D: wall mount
Wire Type	2-cond., solid, non-shielded, PE insulation—use Aiphone #872002 for audio and #871802 for video (GT-1A or GT-1D do not need video wire)
Distance	Variable wiring distances—see table below

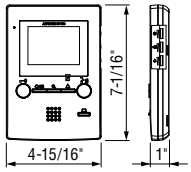
GT-1C7W



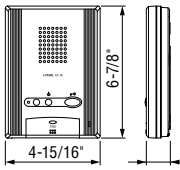
GT-1C7



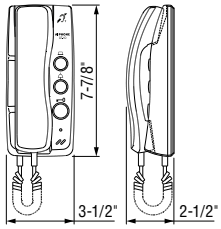
GT-1M3



GT-1A



GT-1D



Adaptors & Control Units

GTW-VOA
Video Output Adaptor

GT-MCX
Network Adaptor
(includes mounting rail)

GT-1Z
1-Way Video Distribution Adaptor

GT-BC
Audio Bus Control Unit

GT-VBC
Video Bus Control Unit

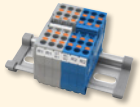
GT-BCXB-N
Expanded Bus Control Unit
(includes mounting rail)

GT-VBX
Expanded Video Bus Control Unit
(includes mounting rail)

GT-4Z
4-Way Video Distribution Adaptor

GT-4ZP
4-Way Video/Power Distribution Adaptor for GT-1C7W

GTW-LC
Multi-Relay Control Unit
(for use with GT Series Expanded System only and requires GT-BCXB-N – includes mounting rail)

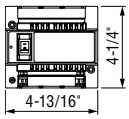


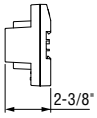
GTW-DP
Distribution Point Adaptor
(includes mounting rail)

Specifications

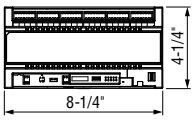
Power Source	GT-4ZP, GT-BC, GT-VBC, GT-BCXB-N, GT-MCX: 24V DC—use PS-2420UL
	GT-VBX: supplied by GT-BCXB-N
	GTW-LC: supplied by GT-BC
	GT-1Z, GT-4Z: power not required
	GTW-VOA: supplied by GT-VBC
Mounting	DIN rail (equipped with large units)—use W-DIN11 for small units
Wire Type	2-cond., solid, non-shielded, PE insulation—use Aiphone #872002 for audio and #871802 for video and power
Distance	Variable wiring distances – see table below

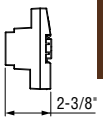
GT-4Z, GT-4ZP, GT-BC, GT-VBC, GTW-VOA



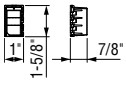


GT-BCXB-N, GT-MCX, GT-VBX, GTW-LC





GT-1Z



GT Wiring Distances	22 AWG	20 AWG	18 AWG
GT-BC to Distribution Point	10'	16'	16'
GTW-DP to Entrance Station	490'	980'	980'
GTW-DP to GT-MKB-N	490'	980'	980'
GTW-DP to farthest Tenant Station	490'	980'	980'
GT-VBC to farthest Tenant Station	330'	490'	490'
GT-VBC (standard) to GT-VBC (expanded)	330'	490'	490'
GT-BC or GT-VBC to Power Supply	10'	16'	16'
GT-NSB or GT-AC to Power Supply	980'	980'	980'
GT-MKB-N to Power Supply	490'	980'	980'
Total cumulative wiring per common line (max. two) and per sub trunk line (max. four)	5,400'	8,200'	8,200'

GT Series Components (continued)

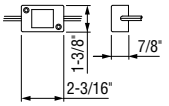
External Signaling Relay

GT-RY
External
Signaling Relay

Features
- N/O contact output
- Provides relay for entrance light control or an additional buzzer at residence

Specifications
Power Source 24V DC – supplied by station
Contact Rating 24V AC/DC, 500mA

GT-RY



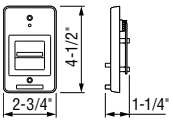
Urgent Call Pull Cord

GFK-PS
Urgent Call
Pull Cord

Features
- Latching call switch
- Suitable for bathrooms and high-moisture areas
- Durable 7' nylon pull cord with pendant
- Easily resets by pushing back up
- Flush mount with standard 1-gang box

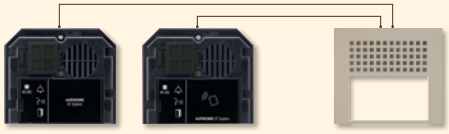
Specifications
Contact Rating N/C 24V DC, 500mA

GFK-PS



Modular Components for Custom Entrance Stations

Audio Module & Panel (required for custom entrance stations)



GT-DB
Audio
Module

GT-DB-VN
Audio Module with NFC Programming
- Quickly update tenant directory with NFC-equipped device

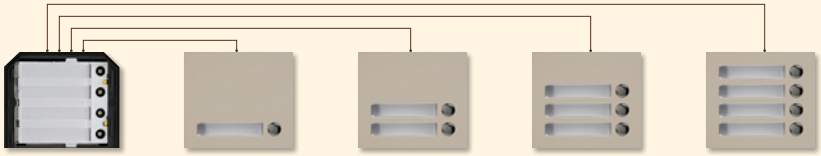
GT-DBP
Panel for GT-DB or GT-DB-VN

Video Module & Panel

GT-VB
Video Module with PTZ Camera
- 170° horizontal wide angle view

GT-VP
Camera Panel for GT-VB

Direct Select Module & Panels



GT-SW
Call Switch
Module

GF-1P
1-Call Panel
for GT-SW

GF-2P
2-Call Panel
for GT-SW

GF-3P
3-Call Panel
for GT-SW

GF-4P
4-Call Panel
for GT-SW

Digital Scroll Modules & Panels

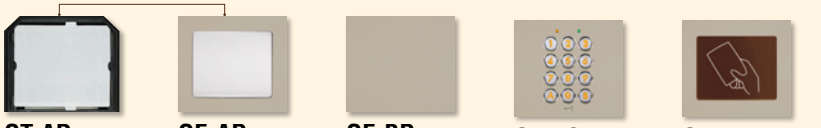
GT-NSB
Display
Module

GT-NSP-L
Panel for
GT-NSB

GT-10K
Keypad
Module

GF-10KP
Panel for
GT-10K

Other Optional Modules, Panels, & Operation Plate



GT-AD
Address
Module

GF-AP
Address Panel
for GT-AD

GF-BP
Blank Panel
(can be used as a placeholder)

GT-AC
Access Control
Keypad Module

GT-HID*
ProxPoint Plus®
Embedded
HID® Card
Reader Module

GT Operation Plate
Instruction Plate for GT Digital Display Entrance Stations
(top or bottom mount – included with GTA-DESB, GTV-DES202B, and GTV-DES104B)

* *HID® stations require a third-party host. Power for card reader and door strike require additional wire.*

Specifications

Power Source GT-10K, GT-AD, GT-DB, GT-DB-VN, GT-SW, GT-VB: supplied by system
GT-AC, GT-NSB: PS-2420UL

Door Release GT-DB, GT-DB-VN: Form C dry contact, 24V AC/DC, 4A

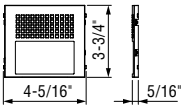
Temp. Rating 14°~140°F (-10°~60°C)

Material Panels: zinc die cast
Modules: fire resistant ABS plastic

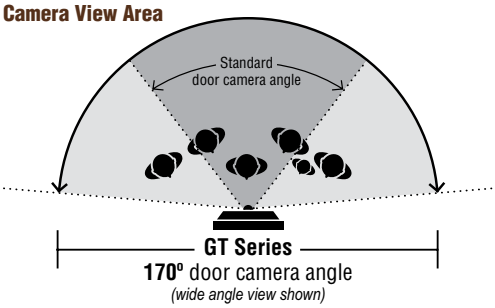
Wire Type 2-cond., solid, non-shielded, PE insulation—use Aiphone #872002 for audio and #871802 for video and for power to GT-AC

Distance Variable wiring distances – see table on p. 59

All GT & GF Panels



Camera View Area



Components

GT Series Components (continued)

Mounting Accessories

SBX-GTDMB
Surface Mount Box for GT-DMB-N

GF-2B
2-Module Back Box

GF-3B
3-Module Back Box

GT-4B
4-Module Back Box

GT-202H
4-Module Rain Hood
(for 2x2 layout)

GT-203H
6-Module Rain Hood

GT-102H
2-Module Rain Hood

GT-103H
3-Module Rain Hood

GT-104H
4-Module Rain Hood
(for 1x4 layout)

GT-102HB
2-Module Hooded Surface Mount Box

GT-103HB
3-Module Hooded Surface Mount Box

GT-104HB
4-Module Hooded Surface Mount Box
(for 1x4 layout)

GT-202HB
4-Module Hooded Surface Mount Box
(for 2x2 layout)

GT-303HB
9-Module Hooded Surface Mount Box

GT-203HB
6-Module Hooded Surface Mount Box

GF-2F
2-Module Front Frame

GF-3F
3-Module Front Frame

GT-4F
4-Module Front Frame

W-DIN11
DIN Mounting Rail for Control Units

Features

- Hood provides additional weather protection
- Includes space inside for wiring
- Can mount directly to wall surface
- Openings at bottom allow for moisture drainage

Specifications

Material 16GA stainless steel

Mounting Surface mount directly to wall with included hardware (8 x 32 with T-15 Torx head)

There are many different entrance station and mounting configurations possible with the GT Series.

For additional help, contact Aiphone's Technical Support.

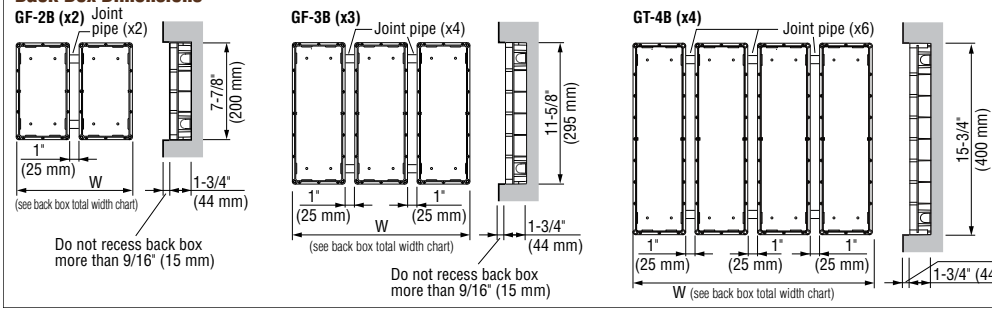
800.692.0200

Rain Hood & Hooded Surface Mount Box Dimensions

Component	Height (in / mm)	Width (in / mm)
SBX-GTDMB	12-11/16" / 323	6-1/16" / 154
GT-102H / HB	9-9/16" / 243	6-1/8" / 155
GT-202H / HB	9-9/16" / 243	11-7/16" / 290
GT-103H / HB	13-5/16" / 338	6-1/8" / 155
GT-203H / HB	13-5/16" / 338	11-7/16" / 290
GT-104H / HB	17-7/16" / 443	6-1/8" / 155
GT-303HB	13-5/16" / 338	16-3/4" / 425
GF-2F	8-7/8" / 225	5-5/16" / 135
GF-3F	12-5/8" / 320	5-5/16" / 135
GT-4F	16-3/4" / 425	5-5/16" / 135

Component	Depth (in / mm)
SBX-GTDMB	2-1/2" / 64
GT-nH	7/8" / 23
GT-nHB	2-11/16" / 68
GF/T-nF	5/8" / 16

Back Box Dimensions



Back Box Total Width

GF-2B / GF-3B / GT-4B	Width (in / mm)
1 back box	4-5/16" / 110
2 back boxes	9-5/8" / 245
3 back boxes	15" / 380
4 back boxes	20-1/4" / 515
5 back boxes	25-9/16" / 650
6 back boxes	30-7/8" / 785
7 back boxes	36-1/4" / 920
8 back boxes	41-9/16" / 1,055
9 back boxes	46-7/8" / 1,190

GT Series Components (continued)

Postal Lock Modules for Custom Entrance Stations

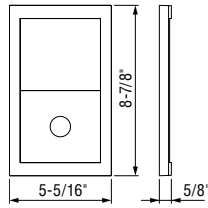
GT-OP2
2-Module
Postal Lock

GT-OP3
3-Module
Postal Lock
(top position open for additional module)

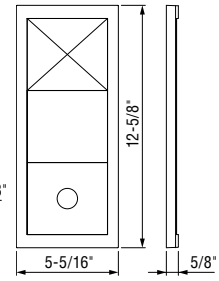
Specifications

Power Source	24V DC—use PS-2420UL
Output Rating	N/O: 30V DC, 5A 125V AC, 10A 250V AC, 3A
	N/C: 30V DC or 125V AC, 3A
Mounting	GT-OP2: surface mount* or flush mount with GF-2B
	GT-OP3: surface mount* or flush mount with GF-3B
	*Surface mount box selection depends on entry panel layout
Wire Type	2-cond., non-shielded—use Aiphone #872002

GT-OP2



GT-OP3



IE-8 Series Components

Audio Master & Sub Master Stations

IE-8MD
6-Call Audio
Master Station
- Handset for privacy

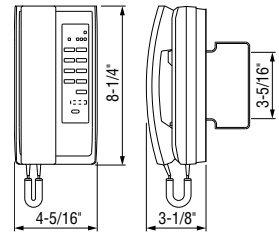
IE-8HD
6-Call Audio
Sub Master
Station
- Handset for privacy

Features
- Selective Call or All Call between handsets
- Simple 4-conductor wiring between handsets

Specifications

Power Source	12–16V AC—use PT-1210NA or 12–18V DC—use PS-1225UL
Communication	Handset (full-duplex)
Door Release	N/O dry contact, 24V AC/DC, 350mA
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202
	Master Station to Sub Stations: 4-cond., overall shield—use Aiphone #822206
Distance	Door Station to Master Station: 500' (22 AWG) 1,180' (18 AWG)
	Master Station to farthest Sub Master Station: 245' (22 AWG) 580' (18 AWG)

IE-8MD, IE-8HD



Audio Door Stations

AX-DM
Audio Door Station
- Plastic chassis
- Weather resistant
- Mullion surface mount

→ p. 53

IF-DA
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount

IE-JA
Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount *(fits 2-gang box)*

IE-SS/A
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

IE-SSR
Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(fits 2-gang box)*

Surface mount boxes available for flush mount door stations! **See p. 90**

Features (All)
- Can be used with AX Series, IE-8 Series, KB Series, or TD-H Series

Features (AX-DM)
For AX-DM, see p. 53

Features (IF-DA)
- Compact surface mount design
- Mounts to 1-gang box or ring
- Locator LED beside call button

Features (IE-JA)
- Slim flush mount design with stainless steel cover
- Mounts to 2-gang box or ring
- Locator LED above call button

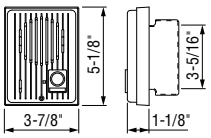
Features (IE-SS/A, IE-SSR)
- Moisture and puncture resistant speaker
- 3-layer steel baffle protects speaker from tampering
- Pigtail wires for connection to master station
- Includes tamper proof mounting screws
- Stainless steel, mechanical call button (IE-SS/A)
- Red mushroom call button (IE-SSR)

Specifications (AX-DM)
For AX-DM specifications, see p. 53

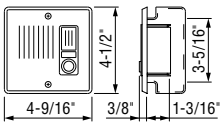
Specifications

Power Source	Supplied by Master Station
Communication	Hands-free
Temp. Rating	14°~140°F (-10°~60°C)
Material	IF-DA: ABS plastic
	IE-JA: ABS plastic with stainless steel cover
	IE-SS/A, IE-SSR: stainless steel
Mounting	IF-DA: surface mount directly to wall
	IE-JA, IE-SS/A, IE-SSR: flush mount with 2-gang box/ring or surface mount with SBX-2G/A
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station to Master Station: varies by system

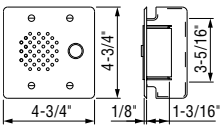
IF-DA



IE-JA

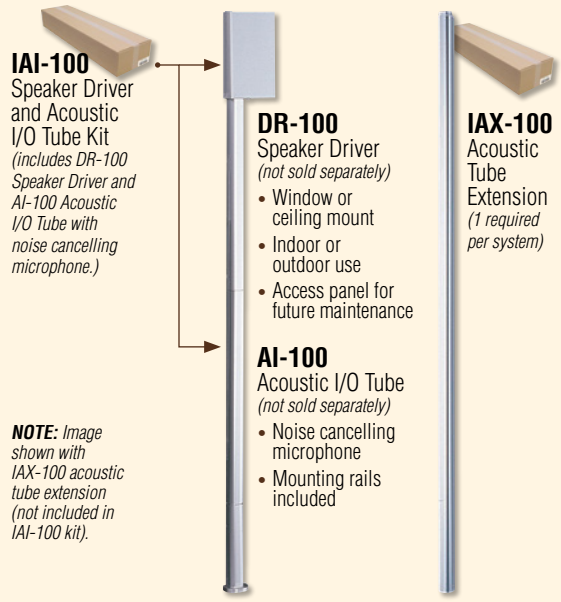


IE-SS/A, IE-SSR



IM Series Components

Speaker Driver, Acoustic I/O Tube, & Tube Extension



IAI-100
Speaker Driver and Acoustic I/O Tube Kit
(includes DR-100 Speaker Driver and AI-100 Acoustic I/O Tube with noise cancelling microphone.)

DR-100
Speaker Driver
(not sold separately)
- Window or ceiling mount
- Indoor or outdoor use
- Access panel for future maintenance

AI-100
Acoustic I/O Tube
(not sold separately)
- Noise cancelling microphone
- Mounting rails included

IAX-100
Acoustic Tube Extension
(1 required per system)

NOTE: *Image shown with IAX-100 acoustic tube extension (not included in IAI-100 kit).*

Features (DR-100)
- Driver access panel
- Speaker driver can be mounted directly to, or inside, ceiling above ticket window

Features (AI-100)
- Optimum acoustic tube location is 12"–16" from the center of the ticket pass-through
- For smaller windows, acoustic tube may be mounted at the junction of the window and frame

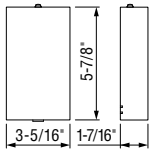
Specifications (IAI-100)

Power Source	Supplied by Control Unit
Temp. Rating	14°~140°F (-10°~60°C)
Acoustic Output	Impedance: 4Ω
	Rated Input: 4.5W
	Max. Input: 6W
Microphone	Type: condenser microphone
	Directivity: non-directional
	Input Sensitivity: -41dB
Wire Type	Speaker Driver to Control Unit: 2 x 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Speaker Driver to Control Unit: 66' (22 AWG/18 AWG)

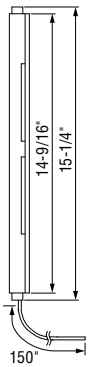
Specifications (IAX-100)

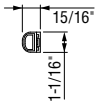
Material	Aluminum

DR-100

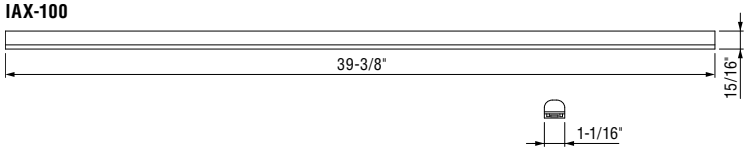


AI-100

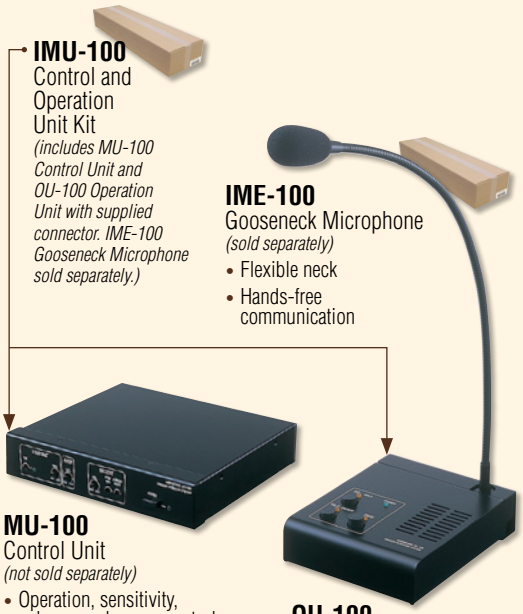




IAX-100



Control Unit, Operation Unit, & Gooseneck Mic



IMU-100
Control and Operation Unit Kit
(includes MU-100 Control Unit and OU-100 Operation Unit with supplied connector. IME-100 Gooseneck Microphone sold separately.)

IME-100
Gooseneck Microphone
(sold separately)
- Flexible neck
- Hands-free communication

MU-100
Control Unit
(not sold separately)
- Operation, sensitivity, volume, and power controls
- Rubber feet prevent slipping
- Desk mount or mount under the counter with supplied bracket

OU-100
Operation Unit
(not sold separately)
- Supplied connector
- Rubber feet prevent slipping
- Desk mount

Features (MU-100)
- VOX sensitivity adjustment
- VOX operation LED
- Transmit, speaker, receive, and standby volume control
- Ambient noise cancelling control
- Can be desk mounted or mounted under the counter with the supplied bracket

Features (OU-100)
- Volume control switch (hi/lo)
- Socket for optional gooseneck microphone
- Designed for desk mounting
- Can mount up to 6' away from the MU-100 via the supplied connector

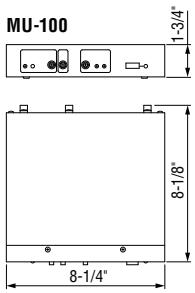
Specifications (IMU-100)

Power Source	24V DC, 120mA standby, 780mA max.—use PS-2420UL
Temp. Rating	14°~140°F (-10°~60°C)
Communication	Hands-free (VOX) or push-to-talk (simplex)
	Transmit output: 3W 4Ω
	Receive output: 1.5W 16Ω
Headset	Φ3.5mm plug
	Rated input: 40mW or more
	Max. input: 100mW or more
	Impedance: 32Ω
External Speaker	Rated input: 3W or more—use SP-2570N
	Max. input: 6W or more
	Impedance: 4 to 8Ω
Wire Type	Speaker Driver to Control Unit: 2 x 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Speaker Driver to Control Unit: 66' (22 AWG/18 AWG)

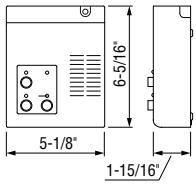
Specifications (IME-100)

Microphone	Condenser microphone, unidirectional
Input Sensitivity	-46dB

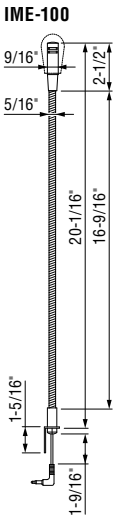
MU-100



OU-100



IME-100



NOTE: *Compatible ceiling speaker is located in the Paging Accessories section (p. 93)*

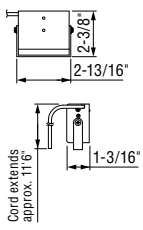
Proximity Sensor

ISE-100
Proximity Sensor

Specifications

Power Source	24V DC – supplied by MU-100
Material	Aluminum
Wire	Aiphone #821802

ISE-150



IX Series Components

Video Master Stations & PC Software

IX-MV7-HB-L
IP Video Master Station with T-Coil Supported Handset

IX-MV7-HW-JP
IP Video Master Station
(TAA-compliant)

IX-MV7-HB UL
IP Video Master Station
(included with IXS-HBDV box set – available soon)

IX-MV7-B UL
IP Video Master Station

IX-MV7-W UL
IP Video Master Station

IX-SOFT
PC Master Station Software

IX-SOFT-3
PC Master Station Software
(bundle includes 3 USB dongles)

IX-SOFT-5
PC Master Station Software
(bundle includes 5 USB dongles)

IX-SOFT-10
PC Master Station Software
(bundle includes 10 USB dongles)

Features

- PoE
- SIP compliant
- Video identification and monitoring with 7" LCD touchscreen
- 8 speed dial buttons
- Camera for two-way video calls, includes privacy shutter
- On-board recording with a microSD™ card (sold separately)
- Hands-free communication (IX-MV7-HB, IX-MV7-HB-L, and IX-MV7-HW-JP have a handset for privacy)
- Door release
- Brightness control
- Wall or desk mount (stand included)
- Connects using Cat-5e or Cat-6 wire
- Toggle between a close-up view and a CCTV camera view with picture-in-picture

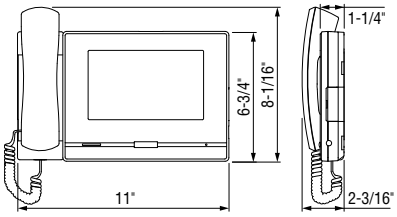
Features
(additional for IX-SOFT)

- Interactive map is a visual, efficient way of selecting stations
- Feature-rich PC intercom helps to reclaim valuable desk space
- Device check and Line Supervision ensure the system will operate as expected
- Video conversations can easily be recorded
- Computer screen offers a larger viewing platform
- Up to 50 speed-dials can be programmed

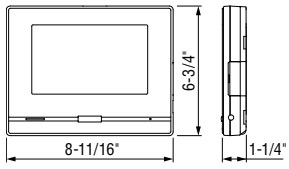
Specifications

Power Source	PoE (802.3af)
Network Interface	10 BASE-T/100 BASE-TX Ethernet (RJ-45)
Network Protocols	IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP, RTCP, IGMP, MLD, SMTP, DHCP, NTP, DNS
Bandwidth Usage	Audio (G.722): 64Kbps x 2 for communication, 64Kbps for monitoring Video (H.264): 32Kbps- 2,048Kbps
Video Stream	ONVIF® Profile S
Communication	IX-MV7-HB, IX-MV7-HB-L, IX-MV7-HW-JP: hands-free (full-duplex), push-to-talk (simplex), or handset (full-duplex) IX-MV7-B, IX-MV7-W: hands-free (full-duplex) or push-to-talk (simplex)
Video Display	IX-MV7-HB, IX-MV7-HB-L, IX-MV7-HW-JP, IX-MV7-B, IX-MV7-W: 7" LCD touchscreen
Door Release	IX-MV7-HB, IX-MV7-HB-L, IX-MV7-HW-JP, IX-MV7-B, IX-MV7-W: N/O dry contact, 24V AC/DC, 1A
Mounting	Wall or desk mount (stand included)
Wire Type	Cat-5e or Cat-6
Distance	Master Station to Network Node: 330'

IX-MV7-HB,IX-MV7-HB-L, IX-MV7-HW-JP



IX-MV7-B, IX-MV7-W



IX-SOFT USB Dongle Actual Size

Sub Stations

IX-RS-B UL
Audio Room Sub Station

IX-RS-W UL
Audio Room Sub Station

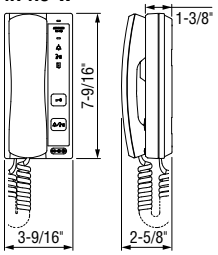
Features

- PoE
- SIP compliant
- Hands-free communication or handset for privacy
- Internal communication with other sub stations
- 8Ω, 2W external speaker output for communication or paging (use 8Ω tap on SP-2570N)
- Illuminated call button indicator
- Communication/call tone volume control switch
- One contact output
- One trigger input

Specifications

Power Source	PoE (802.3af)
Audio Codec	G.722 (μ-law, A law), G.722
Protocols	IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP, RTCP, IGMP, MLD, SMTP, FTP, DHCP, NTP, DNS
Operating Temp	32° ~ 104°F (0° ~ 40°C)
Mounting	Wall mount
Wire Type	Cat-5e or Cat-6
Distance	Master Station to Network Node: 330'

IX-RS-B, IX-RS-W



Components

Adaptors

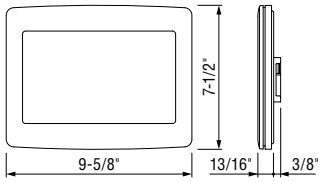
IXW-MA
IP Relay Adaptor for IX Series

Features (IXW-MA)
- Compatibility with IX Support Tool makes programming efficient – no need to program adaptors separately
- PoE
- 10 outputs

Specifications (IXW-MA)

Power Source	PoE (802.3af)
Consumption	43mA standby, 135mA max.
Relay Output	Relays 1-4: Form C, 24V AC/DC, 500mA
	Relays 5-10: Form A, 24V AC/DC, 500mA
Network Interface	Ethernet (10BASE-T, 100BASE-TX)
Network Protocols	IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, SMTP, SFTP, DHCP, NTP, DNS
Encryption System	TLS1.0, TLS1.1, TLS1.2
Port Security	IEEE 802.1X
Temp. Rating	14°~ 122°F (-10°~ 50°C)

IXW-MA



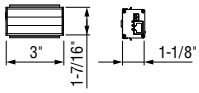
IPW-1VC
2-Wire Network Adaptor
(includes power supply)

Features (IPW-1VC)
- Upgrade 2-wire analog systems to an IP video intercom
- Use existing wire – up to 1,000' (18-22AWG shielded, unshielded)
- PoE
- Compact design is small enough to fit behind most door or sub stations

Specifications (IPW-1VC)

Power Source	48V DC, 1A
Consumption	< 2 Watts
Temp. Rating	-4°~140°F (-20°~ 60°C)
Mounting	Supplied mounting bracket
Wire Type	Network Adaptor to Network Node: Cat-5e or Cat-6
	Between Network Adaptors: existing 2 cond., shielded or non-shielded
Distance	Network Adaptor to Network Node: 15'
	Between Network Adaptors: 1,000' (22 AWG, 18 AWG)

IPW-1VC



IXW-PBX
IP PBX for IX Series

Features (IXW-PBX)
- Supports up to 500 registered SIP devices and up to 50 concurrent calls
- Dual Gigabit network ports with integrated PoE+
- Built-in call recording server; recordings accessed via web interface
- Supports H.264, H.263, and H.263+ video codecs

Specifications (IXW-PBX)

Power Source	12V DC, 1.5A (supplied)
Network Interface	Dual Gigabit with integrated PoE+ (IEEE 802.3at)
Network Protocols	TCP/UDP/IP, RTP/RTCP, ICMP, ARP, DNS, DDNS, DHCP, NTP, TFTP, SSH, HTTP/HTTPS, PPPoE, SIP, STUN, SRTP, TLS, LDAP
Ports	2 FXO, 2 FXS
Encryption	TLS
Temp. Rating	32°~ 104°F (0°~ 40°C)
Dimensions	6-1/8" H x 8-7/8" W x 1-3/8" D

IPW-VPN
VPN Router

Features (IPW-VPN)
- Secure communication via encrypted tunnel
- Supports 30Mbps
- Supports broadcast and multicast
- Supports mesh applications
- Simple installation

Specifications (IPW-VPN)

Power Source	12V DC (supplied)
Talkpaths	2
Temp. Rating	-40°~ 158°F (-40°~ 70°C)
Mounting	Supplied mounting tabs
Dimensions	7-1/2" H x 6-1/2" W x 1-1/8" D

Video Door Stations

IX-EA
IP Video Door Station
- Fixed camera
- Plastic chassis
- Surface mount

IX-DVM
Mullion-Mount IP Video Door Station
- Fixed WDR camera
- Built-in touchless call sensor
- Aluminum die cast cover
- Vandal resistant
- Mullion surface mount

IX-DV UL
IP Video Door Station
(included with IXS-HBDV box set–available soon)
- Fixed camera
- Aluminum die cast cover
- Vandal resistant
- Surface mount

IX-DVF UL
IP Video Door Station
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

IX-DVF-4
IP Video Door Station
- Fixed camera
- Four call buttons
- Stainless steel panel
- Flush mount *(back box included)*

IX-DVF-L
IP Video Door Station with T-Coil Compatibility
- Fixed camera
- Stainless steel panel
- Vandal resistant
- Flush mount *(back box included)*

IX-DVF-HW
IP Video Door Station with Hand Wave Call Sensor and Surface Mount Box
- Fixed camera
- Stainless steel panel
- Vandal resistant

IX-DVF-P*
Card Access IP Video Door Station
- HID® multiCLASS SE® Proximity Card Reader
- Fixed camera
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

Surface mount boxes available for flush mount stations! See p. 90

* *HID® station requires a third-party host. Power for card reader and door strike require additional wire.*

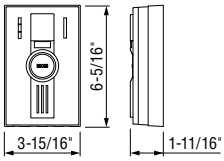
Features
- PoE
- SIP compliant
- On-board recording with a microSD™ card
- Fixed camera provides clear video
- Weather and vandal resistant (IX-EA and IX-DVF-4 are weather resistant only)
- Indoor or outdoor use
- Connects using Cat-5e or Cat-6 wire
- 802.3af PoE compliant

Features (additional for IX-DV, IX-DVF, IX-DVF-4, IX-DVF-HW, IX-DVF-L IX-DVF-P,)
- PoE passthrough can power additional device (requires PoE+)

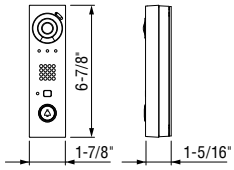
Specifications

Power Source	IX-EA: PoE (802.3af)
	IX-DV, IX-DVF, IX-DVF-4, IX-DVF-P: PoE (802.3af), PoE+ (802.3at), or 24V DC—use PS-2420UL
Communication	Hands-free
Camera	IX-EA, IX-DV, IX-DVM, IX-DVF, IX-DVF-4, IX-DVF-P: 1/3" color CMOS 1.2 megapixel
	Area View: 2' 1" vertical x 3' 1" horizontal at 20"
Temp. Rating	IX-EA: 14°~140°F (-10°~60°C)
	IX-DV, IX-DVF, IX-DVF-4: -40°~140°F (-40°~60°C)
	IX-DVF-P: -22°~140°F (-30°~60°C)
Material	IX-EA: self-extinguishing ABS resin
	IX-DV, IX-DVM: aluminum die cast cover
	IX-DVF, IX-DVF-4, IX-DVF-HW, IX-DVF-L IX-DVF-P: stainless steel
Door Release	IX-DVM, IX-EA: Form C dry contact, 24V AC/DC, 1A
	IX-DV, IX-DVF, IX-DVF-4, IX-DVF-P: two Form C dry contacts, 24V AC/DC, 1A
Mounting	IX-DVM, IX-EA: surface mount
	IX-DVF: flush mount with included back box or surface mount with SBX-IDVF
	IX-DVF-4, IX-DVF-P: flush mount with included back box or surface mount with SBX-IDVFRA
Wire Type	Cat-5e or Cat-6
Distance	Door Station to Network Node: 330'
	Door Station to Power Supply: 50'

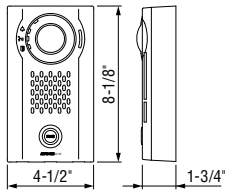
IX-EA



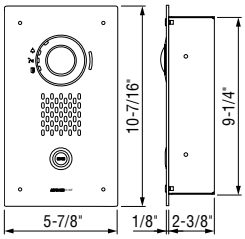
IX-DVM



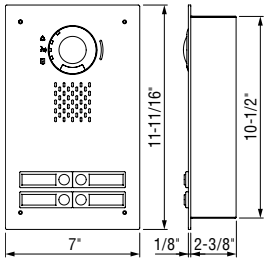
IX-DV



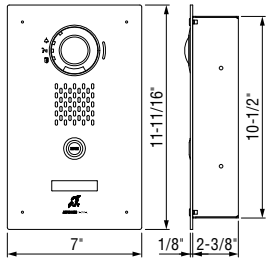
IX-DVF



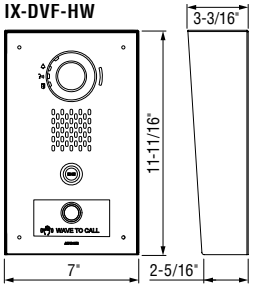
IX-DVF-4



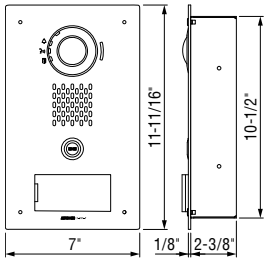
IX-DVF-L



IX-DVF-HW



IX-DVF-P



IX Series Components (continued)

Audio Door Stations

IX-SS-2G UL
IP Audio Door Station
- Stainless steel panel
- Flush mount *(fits 2-gang box)*

IX-SSA UL
IP Audio Door Station
- Stainless steel panel
- Flush mount *(back box included)*

IX-NVP
IP Audio Door Station
- PoE
- Powder-coated steel panel
- Weather and vandal resistant
- Flush mount *(fits 3-gang box)*

IX-NVP2
IP Audio Door Station
- Two call buttons
- PoE
- Powder-coated steel panel
- Weather and vandal resistant
- Flush mount *(fits 3-gang box)*

Surface mount boxes available for flush mount stations! See p. 90

Features

- PoE
- SIP compliant
- Weather and vandal resistant
- Indoor or outdoor use
- Connects using Cat-5e or Cat-6 wire

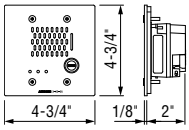
Features (additional for IX-SSA)

- PoE passthrough can power additional device (requires PoE+)
- On-board recording with a microSD™ card

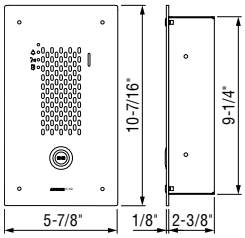
Specifications

Power Source	IX-SS-2G, IX-NVP, IX-NVP2: PoE (802.3af) IX-SSA: PoE (802.3af), PoE+ (802.3at) or 24V DC—use PS-2420UL
Communication	Hands-free
Temp. Rating	-40°~140°F (-40°~60°C)
Material	IX-SS-2G, IX-SSA: stainless steel IX-NVP, IX-NVP2: powder-coated steel
Door Release	IX-SSA: two Form C dry contacts, 24V AC/DC, 1A IX-SS-2G, IX-NVP, IX-NVP2: Form C dry contact, 24V AC/DC, 1A
Mounting	IX-SS-2G: flush mount with 2-gang box or surface mount with SBX-2G/A IX-SSA: flush mount with included back box or surface mount with SBX-IDVF IX-NVP, IX-NVP2: flush mount with 3-gang back box or surface mount with SBX-NVP/A
Wire Type	Cat-5e or Cat-6
Distance	Door Station to Network Node: 330' Door Station to Power Supply: 50'

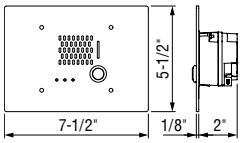
IX-SS-2G



IX-SSA



IX-NVP, IX-NVP2



Add-On Call Sensor

IXW-HWCBP
Hand Wave Call Sensor and Surface Mount Box

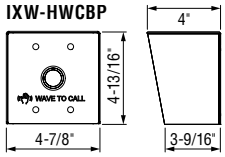
Features

- Weather resistant
- Includes the SBX-2G/A surface mount box and PS-POE splitter to power the sensor
- Powered from either a PoE network drop or from the LAN 2 output on an IX Series door station (requires PoE+ switch)
- Form C dry contact output can be connected to the trigger input of an IX Series door station
- Allows visitors to place a call without touching the call button on the door station
- Sensor is illuminated in blue while in standby and turns green when activated

Specifications

Power Source	PoE (IEEE 802.3af class 0)
Power Draw	30mA standby, 50mA active
Sensor Type	Infrared with LED ring
Detection Range	0-10 cm
Temp. Rating	-4°~131°F (-20°~55°C)
Material	Stainless steel
Contact Rating	30V AC/DC, 3A
Mounting	Surface mount with included SBX-2G/A

IXW-HWCBP



ADA Compliant Emergency Stations

IX-DVF-2RA
ADA Compliant IP Video Emergency Station with Two Call Buttons

IX-DVF-RA
ADA Compliant IP Video Emergency Station

IX-SSA-2RA
ADA Compliant IP Audio Emergency Station with Two Call Buttons

IX-SSA-RA
ADA Compliant IP Audio Emergency Station

Stations are also available with French labels:

IX-DVF-2RA-FR
IX-DVF-RA-FR
IX-SSA-2RA-FR
IX-SSA-RA-FR

Surface mount box available! **See p. 90**

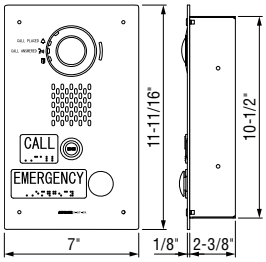
Features

- PoE (with passthrough port) or 24V DC
- Passthrough can power additional device (requires PoE+)
- SIP compliant
- On-board recording with a microSD™ card
- Lettering and braille signage
- LED call status indicator
- Two Form C relay outputs
- Stainless steel panel
- Weather and vandal resistant
- Fixed camera provides clear video (IX-DVF-2RA, IX-DVF-RA)
- Indoor or outdoor use
- Connects using Cat-5e or Cat-6 wire
- Tamper resistant screws
- Flush mount (back box included)
- Can be mounted into emergency wall boxes or towers

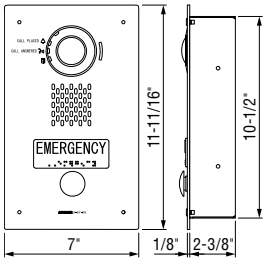
Specifications

Power Source	PoE (802.3af) or 24V DC—use PS-2420UL
Communication	Hands-free
Camera	Type: 1/3" color CMOS 1.2 megapixel
	Area View: 2' 1" vertical x 3' 1" horizontal at 20"
Temp. Rating	-40°~140°F (-40°~60°C)
Material	Stainless steel
Door Release	Two Form C dry contacts, 24V AC/DC, 1A
Mounting	Flush mount with included back box or surface mount with SBX-IDVFRA
Wire Type	Cat-5e or Cat-6
Distance	Emergency Station to Network Node: 330'
	Door Station to Power Supply: 50'

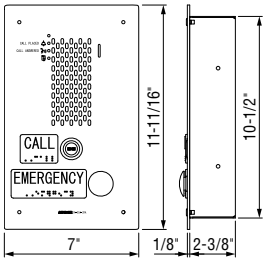
IX-DVF-2RA, IX-DVF-2RA-FR



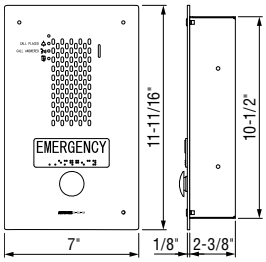
IX-DVF-RA, IX-DVF-RA-FR



IX-SSA-2RA, IX-SSA-2RA-FR



IX-SSA-RA, IX-SSA-RA-FR



PoE Splitter

PS-POE
PoE Splitter

Features

- Powers strobe light, eliminating the need of a separate power supply
- Avoid added wire – only one cable is needed from the PoE+ switch when wired with an IX Series emergency station
- Mounts directly to the back of an IX Series emergency call station or 1-gang box
- Can withstand temperatures ranging from -40 to 140° F

Specifications

Power Source	PoE (803.2af)
Consumption	8.4W
Output	24V DC, 350mA
Temp. Rating	-40°~140°F (-40°~60°C)
Dimensions	3-1/4" H x 2-1/2" W x 1" D

IX Series Wall Boxes

ADA Compliant Wall Boxes

UL LISTED Electrical Box

WB-CA* *(cage)*
WB-HA* *(hood)*
ADA Compliant Wall Box

- Beacon/strobe light
- ASSISTANCE lettering
- UL Listed electrical box
- Stainless steel enclosure with slim, 4" depth
- Wall mount

WB-CE* *(cage)*
WB-HE* *(hood)*
ADA Compliant Wall Box

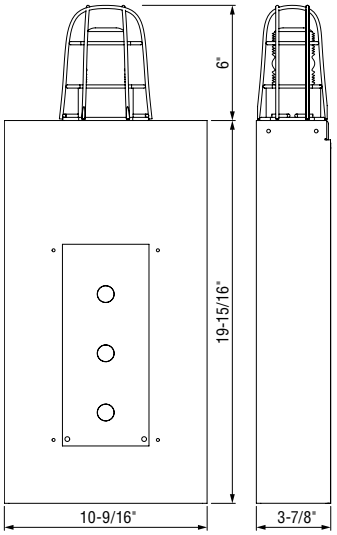
- Beacon/strobe light
- EMERGENCY lettering
- UL Listed electrical box
- Stainless steel enclosure with slim, 4" depth
- Wall mount

NOTE: *Power required for the beacon/strobe light—use PS-POE splitter to draw power from PoE+ network switch.*

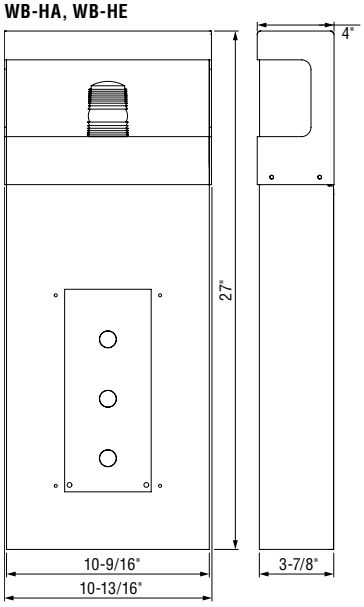
Features

- Includes UL Listed electrical box
- Made of 12-gauge stainless steel
- Beacon/Strobe light on top is protected by a cage enclosure or full hood enclosure
- Compatible with IX Series emergency stations
- Lettering on sides available in either EMERGENCY or ASSISTANCE
- 4" depth, proper signage, and call button mounting height meet ADA requirements
- Interior bracket (right side) has 1-gang mounting pattern
- Built-in accessory mounting hardware with internal threads (female: M3 x .05, 1-gang spacing pattern)

WB-CA, WB-CE

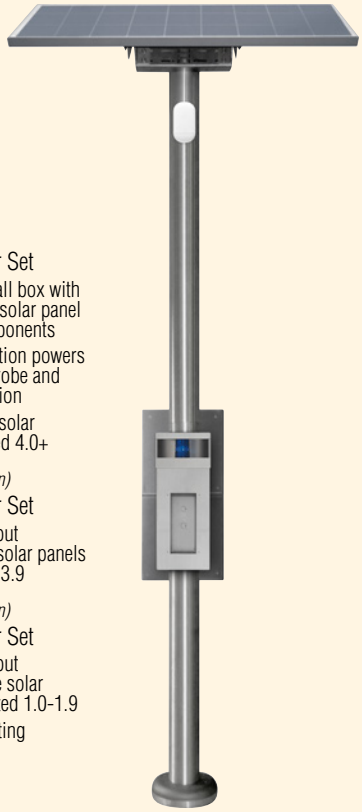


WB-HA, WB-HE



IX Series Solar Tower Sets

Solar Tower Sets



TWS-Z4
Zone 4 Solar Tower Set

- Includes WB-HE wall box with Sun Surveillance's solar panel and mounting components
- Wireless solar solution powers wall box beacon/strobe and emergency call station
- Equipped with one solar panel for zones rated 4.0+

TWS-Z2 *(not shown)*
Zone 2 Solar Tower Set

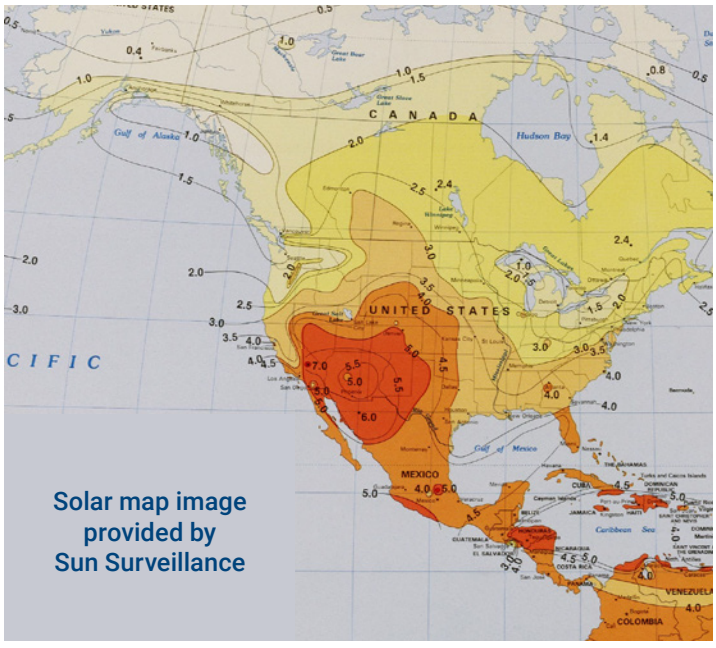
- Same as TWS-Z4, but equipped with two solar panels for zones rated 2.0-3.9

TWS-Z1 *(not shown)*
Zone 1 Solar Tower Set

- Same as TWS-Z4, but equipped with three solar panels for zones rated 1.0-1.9
- Direct-burial mounting

Features

- Wireless solar solution uses the sun to power all components
- Pre-assembled sets include WB-HE wall box with mounting pole, battery and electrical enclosure, WiFi device, and one, two, or three solar panels (see solar map as a guideline to determine the model best suitable for a region based on its sun rating zone)
  - TWS-Z1 with three panels is recommended for zones rated 1.0 to 1.9
  - TWS-Z2 with two panels is recommended for zones rated 2.0 to 3.9
  - TWS-Z4 with one panel is recommended for zones rated 4.0+
- TWS-Z4 and TWS-Z2 can be mounted above ground (TWS-Z1 requires underground mounting due to weight)



Solar map image provided by Sun Surveillance

IX Series Modular Towers

Modular Towers

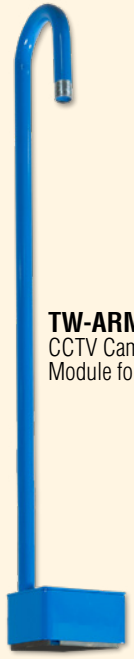
STEP 1 (required)
Choose modular tower size.

TW-20B/A
2-Module Tower

TW-23B/A
3-Module Tower

CCTV Camera Arm for Modular Towers

STEP 2 (optional)
Add the optional CCTV camera arm. Skip this step if module is not required.

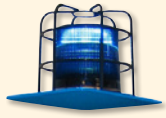


TW-ARM-CB
CCTV Camera Arm Module for Tower

NOTE: *The CCTV camera arm module is only compatible with new tower modules that have the 'A' in the model name.*

Cap Option for Modular Towers

STEP 3 (required)
Add the required top plate.



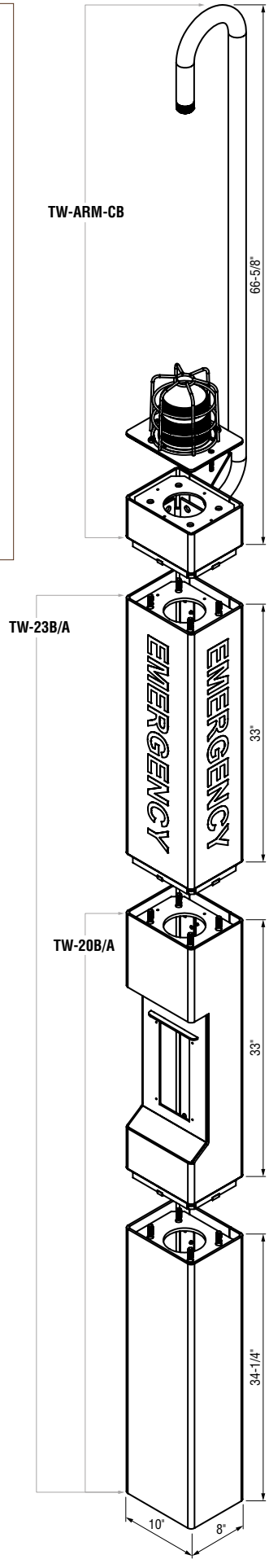
TW-LCB
Top Plate with Cage and Beacon/Strobe Light

UL LISTED
Electrical Box

- CCTV camera arm module with universal pipe threading (1.50" NPT threading x 1" long)
- Includes accessory mounting hardware with external threads (male: M3 x .05, 1-gang spacing pattern)
- Large access panel on each module

Features

- 1/4" zinc-treated steel with powder coating
- Weather and vandal resistant
- Modular design provides lower freight costs and easier assembly than non-modular towers
- Two sizes available with choice of lettering, custom colors available upon request
- Compatible with any IX Series emergency station
- Beacon/Strobe light on top of tower and LED on front panel can share same power supply—use PS-POE with IX Series systems (requires PoE+)
- Beacon is always lit and flashes during emergency call-in
- Call button mounting height meets ADA regulations



Components

Lettering Options for Modular Towers

STEP 4 (required)
Choose ASSISTANCE or EMERGENCY lettering.
Refer to chart for applicable lettering quantities.

- **TW-ASW** White ASSISTANCE Lettering
- **TW-EMW** White EMERGENCY Lettering

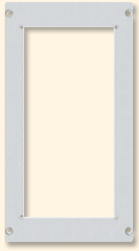
Lettering Order Quantities

	TW-20/B 2-Module Tower	TW-23/B 3-Module Tower
All 4 Sides		Order qty of 4
3 Sides Left, Right, and Front		Order qty of 3
3 Sides Left, Right, and Back	Order qty of 3	Order qty of 3
2 Sides Left and Right	Order qty of 2	Order qty of 2
1 Side Left, Right, or Back	Order qty of 1	Order qty of 1
No Lettering	N/A	N/A

NOTE: *All lettering is applied to the tower at the factory.*

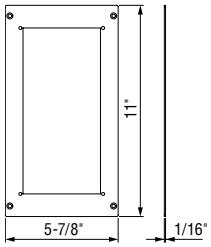
Tower Mounting Plate

STEP 6 (optional)
Add the tower mounting plate ONLY if installing a non-emergency station into the tower AND strobe function is not needed.



TW-SPL
Tower Mounting Plate for IX-DVF or IX-SSA
- 14-guage stainless steel
- Adapts standard door station to an Aiphone tower or wall box
- Mounts directly to tower or wall box

TW-SPL



Power Supply

STEP 7 (recommended)
Add power for the beacon/strobe and LED illuminator lights.
Aiphone's PS-POE and PS-2420UL are recommended.

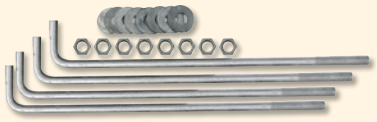
PS-POE
PoE Splitter
→ p. 68

PS-2420UL
24V DC, 2A Power Supply
→ p. 95

NOTE: *Power required for the beacon/strobe light—use PS-POE splitter to draw power from PoE+ network switch.*

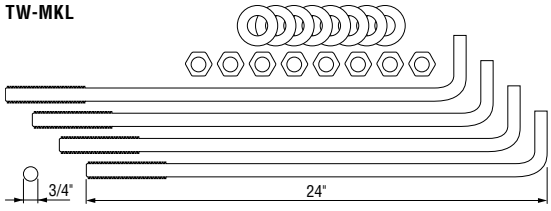
Mounting Kit for Modular Towers

STEP 5 (recommended)
Add a mounting kit for tower installation.
Aiphone's TW-MKL is recommended.



TW-MKL
L-Bolt Mounting Kit for Modular Towers

TW-MKL



Does your project require customized solutions? Contact Aiphone's Technical Support to learn about custom color and lettering options.

800.692.0200

IXG Series Components

Entrance Station

IXG-DM7-HID
IP Video Entrance Station

- Modern and simple user touchscreen interface
- PoE
- Programmable inputs and outputs
- On-board recording with a microSD™ card
- Rugged IP65 and IK08 ratings
- HD camera
- Stainless steel panel
- Flush mount *(back box sold separately)*

SBX-IXGDM7
Surface Mount Back Box for IXG-DM7-HID

IXG-DM7-BOX
Flush Mount Back Box for IXG-DM7-HID

Features (IXG-DM7-HID)

- Built-in HID® reader connects to third-party access control
- LCD directory screen
- Welcome screen can be customized
- Up to 9,999 names/numbers can be stored
- Motion sensor activates the screen when a visitor approaches
- Up to ten entrance stations can be within the same interior or exterior unit, with multiple units allowed in the system
- Hands-free communication

Features (SBX-IXGDM7)

- 1-gang and 2-gang mounting hole patterns
- One conduit knockout at bottom
- Stainless steel construction
- Built-in rain hood

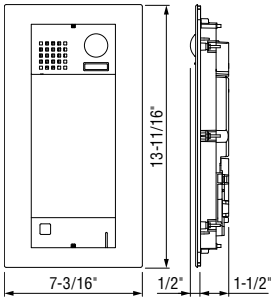
Features (IXG-DM7-BOX)

- Steel construction
- Six conduit knockouts
- Sold separately for pre-installation convenience

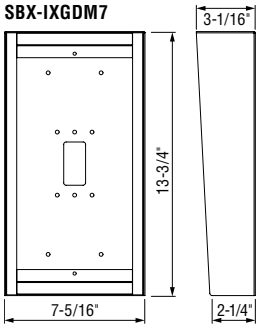
Specifications (IXG-DM7-HID)

Power Source	PoE (IEEE 802.3af Class 0)
Consumption	5.3W standby, 11.6W max.
Video Display	7" TFT LCD touchscreen (800 x 400 resolution)
Communication	Hands-free (full-duplex)
Audio Codec	G.711 (μ-law, A-law)
Video Codec	H.264
Protocol	IPv4/v6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP/RTCP, IGMP, MLD, SMTP, FTP, DHCP, NTP, DNS, TLS
Temp. Rating	-22°~140°F (-30°~60°C)
Material	Stainless steel
Door Release	Two programmble Form C dry contacts, 24V AC/DC
	Relay 1: 3A
	Relay 2: 500mA
Mounting	Flush mount with IXG-DM7-BOX or surface mount with SBX-IXGDM7
Wire Type	Cat-5e or Cat-6
Distance	Entrance Station, Tenant Station, or Guard Station to Network Node: 330'

IXG-DM7-HID



SBX-IXGDM7



Guard Station

IXG-MK
IP Video Guard Station

- 7" touchscreen
- PoE
- Programmable inputs and outputs
- On-board recording with a microSD™ card
- Video communication with other guard stations
- Wall or desk mount *(stand included)*

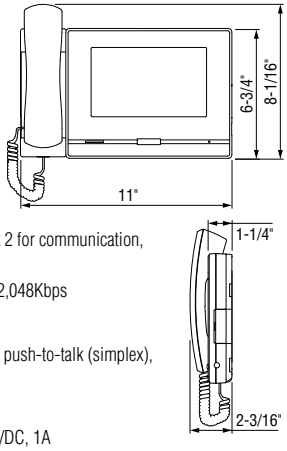
Features

- Video identification and monitoring
- Hands-free communication with a handset for privacy
- Door release
- Brightness control
- Wall or desk mount (stand included)
- Connects using Cat-5e or Cat-6 wire
- Record events and save to a microSD™ card (sold separately)
- Camera for two-way video calls, includes privacy shutter
- Toggle between a close-up view and a CCTV camera view with picture-in-picture

Specifications

Power Source	PoE (802.3af)
Network Interface	10 BASE-T/100 BASE-TX Ethernet (RJ-45)
Network Protocols	IPv4, IPv6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP, RTCP, IGMP, MLD, SMTP, DHCP, NTP, DNS
Bandwidth Usage	Audio (G.722): 64Kbps x 2 for communication, 64Kbps for monitoring
	Video (H.264): 32Kbps- 2,048Kbps
Video Stream	ONVIF® Profile S
Communication	Hands-free (full-duplex), push-to-talk (simplex), or handset (full-duplex)
Video Display	7" LCD touchscreen
Door Release	N/O dry contact, 24V AC/DC, 1A
Mounting	Wall or desk mount (stand included)
Wire Type	Cat-5e or Cat-6
Distance	Master Station to Network Node: 330'

IXG-MK



Components

IXG Series Components (continued)

Tenant Station

NEW

IXG-2C7-L
IP Video Tenant Station with T-Coil Compatibility

- 7" touchscreen
- PoE
- Programmable inputs and outputs
- On-board recording with a microSD™ card
- Up to eight stations within an apartment or suite
- Wall mount

IXG-2C7
IP Video Tenant Station

- 7" touchscreen
- PoE
- Programmable inputs and outputs
- On-board recording with a microSD™ card
- Up to eight stations within an apartment or suite
- Wall mount

IXG-FMK-2C7
Flush Mount Kit for IXG-2C7

Features

- Internal communication with up to eight stations within apartment/suite
- Hands-free communication
- Can call concierge/ guard station directly
- Can call elevator to floor
- Video monitoring
- Answers calls from an entrance station, guard station, or individual door station
- Selectively call other IXG-2C7s or IXG-2C7-Ls in the same apartment/suite
- Call all associated mobile apps connected to the same apartment/suite

Features (IXG-FMK-2C7)

- Provides ability to flush mount IXG-2C7 or IXG-2C7-L directly into the wall
- Includes mounting hardware

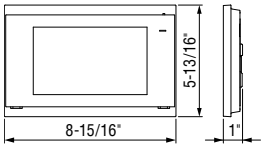
Specifications (IXG-2C7, IXG-2C7-L)

Power Source	PoE
Consumption	1.9W standby, 5.9W max.
Video Display	7" TFT LCD touchscreen (800 x 400 resolution)
Communication	Hands-free (full-duplex)
Audio Codec	G.711 (μ-law, A-law)
Video Codec	H.264, MJPEG
Protocol	IPv4/v6, TCP, UDP, SIP, HTTP, HTTPS, RTSP, RTP/RTCP, IGMP, MLD, SMTP, FTP, DHCP, NTP, DNS, TLS
Encryption	TLS 1.0, 1.1, 1.2
Temp. Rating	32°~104°F (0°~40°C)
Material	Stainless steel
Door Release	Two Form C dry contacts, 24V AC/DC, 1A
Mounting	Flush mount with IXG-FMK-2C7 or surface mount to wall
Wire Type	Cat-5e or Cat-6
Distance	Tenant Station to Network Node: 330'

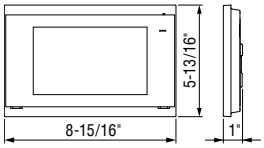
Specifications (IXG-FMK-2C7)

Mounting	Flush mount
Materials	Panel: self-extinguishing resin Frame and Back Box: Self-extinguishing plastic

IXG-2C7, IXG-2C7-L



IXG-2C7, IXG-2C7-L



Adaptors

IXGW-GW
IXG Series Mobile App Gateway Adaptor
(required for AIPHONE IXG App– service fee will apply)

- PoE
- iOS® or Android®
- Up to eight mobile apps per tenant

IXGW-LC
Elevator Lift Control Adaptor

- PoE
- Programmable outputs
- Compatible with IXG-DM7-HID and IXG-2C7
- Wall mount with DIN rail *(sold separately)*

NEW

IXGW-LC-RY20
Elevator Lift Control and Relay Adaptor

- PoE
- Programmable outputs
- Compatible with IXG-DM7-HID and IXG-2C7
- Wall mount with DIN rail *(sold separately)*

Features (IXGW-GW)

- One adaptor per system
- DIN Rail mountable
- Eight simultaneous call paths
- Supports up to 9,999 IXG Series mobile apps

Features (IXGW-LC, IXGW-LC-20RY)

- PoE
- 20 Form C relays, each can be configured and assigned to a specific entrance station, tenant station, or mobile app
- Ensures visitors only have access to the proper guest floor
- Up to 16 adaptors per building

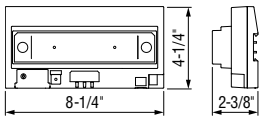
Specifications (IXGW-GW)

Power Source	PoE
Consumption	2.4W standby, 2.9W max.
LAN	Ethernet (10BASE-T, 100BASE-TX)
Packet Delivery	Unicast, Multicast
Protocol	IPv4/v6, TCP, UDP, SIP, HTTPS, RTP, RTCP, SRTP, SRTCP, IGMP, MLD, SFTP, DHCP, NTP, DNS, MQTT, ICE, DTLS, SDP
Encryption	TLS 1.0, 1.1, 1.2
Temp. Rating	14°~122°F (-10°~50°C)
Wire Type	Cat-5e or Cat-6
Distance	Adaptor to Network Node: 330'

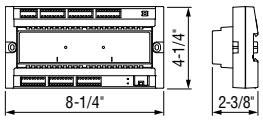
Specifications (IXGW-LC, IXGW-LC-RY20)

Power Source	PoE
Consumption	2.1W standby, 4.4W max.
Relay Rating	24V AC/DC, 500mA
LAN	Ethernet (10BASE-T, 100BASE-TX)
Packet Delivery	Unicast, Multicast
Protocol	IPv4/v6, TCP, UDP, HTTP,HTTPS, IGMP, MLD, FTP, DHCP, NTP, DNS, TLS
Encryption	TLS 1.0, 1.1, 1.2
Temp. Rating	14°~122°F (-10°~50°C)
Distance	Adaptor to Network Node: 330'

IXGW-GW



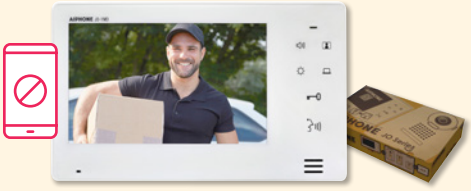
IXGW-LC, IXGW-LC-RY20



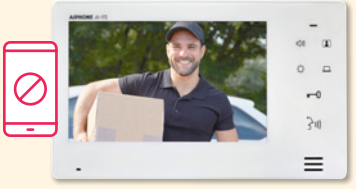
JO Series Components

Video Master & Expansion Stations

JO-1MDW
App-Compatible Video Master Station
(included with JOS-1AW, JOS-1VW, and JOS-1FW box sets – also sold separately)
- Connect up to eight free mobile apps
- 7" LCD touchscreen
- Built-in expandable memory for recording calls
- Hands-free or push-to-talk communication



JO-1MD
Video Master Station
(included with JOS-1A, JOS-1V, and JOS-1F box sets – not sold separately)
- 7" LCD screen
- Touch buttons
- Hands-free or push-to-talk communication



JO-1FD
Video Expansion Station
- 7" LCD screen
- Touch buttons
- Hands-free or push-to-talk communication

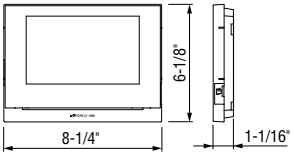
Features
- Video identification and monitoring
- Slim design
- Hands-free communication or push-to-talk

Features (additional for JO-1MDW)
- Up to eight free mobile apps can be connected with app-compatible video master station
- 7" touchscreen
- Built-in expandable memory for recording calls

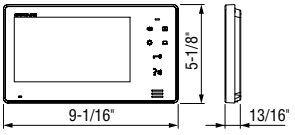
Specifications

Power Source	18V DC—use PS-1820UL
Communication	Hands-free (VOX) or push-to-talk (simplex)
Video Display	JO-1MDW: 7" LCD touchscreen
	JO-1MD, JO-1FD: 7" LCD screen
Picture Memory	Internal/Built-In: record ten calls max. (ten seconds per call) with up to five calls protected from overwriting
	SD/SDHC card: record max. 1,000 calls (10 seconds per call) with up to 100 calls protected from overwriting
Door Release	JO-1MDW: N/O dry contact, 24V AC/DC, 1A
	JO-1MD, JO-1FD: N/O dry contact, 24V AC/DC, 500mA
Wireless Frequency	2.4GHz
Wireless Protocols	802.11b/g/n
Mounting	Surface mount directly to wall or desk mount using MCW-S/B
Wire Type	Door Station to Master Station: 2-cond., mid cap, solid, non-shielded—use Aiphone #871802
	Door Station to Expansion Station: 2-cond., mid cap, solid, non-shielded—use Aiphone #871802
	Expansion Station to Master Station: 4-cond., mid cap, solid, non-shielded—use Aiphone #871804
	Expansion Station to Master Station with door release: 6-cond., mid cap, solid, non-shielded—use Aiphone #871804 + #871802
Distance	Door Station to Master Station: 165' (22 AWG) 330' (18 AWG)
	Door Station to Expansion Station: 165' (22 AWG) 330' (18 AWG)
	Expansion Station to Master Station: 165' (22 AWG) 330' (18 AWG)
	Power Supply to Master Station: 16' (22 AWG) 33' (18 AWG)

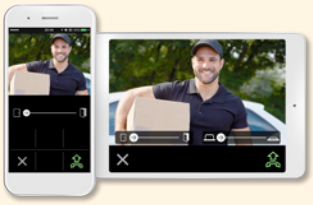
JO-1MDW



JO-1MD, JO-1FD



Virtual Expansion Station Mobile App



Intercom App Type B
Virtual Expansion Station Mobile App for Smartphones and Tablets
(requires JO-1MDW)
- Up to eight free mobile apps per system
- Calls can be answered and doors can be unlocked while on-the-go
- Hands-free or push-to-talk communication
- Available on Google Play™
  (Google Play is a trademark of Google LLC.)
- Available on the App Store℠
  (App Store is a service mark of Apple Inc.)

Features
- Visitors can be answered from virtually anywhere for on-the-go security and convenience
- Works with a variety of smartphones and tablets
- Up to eight free mobile apps can be downloaded per system
- Provides ability to activate the video door station camera to monitor entry from a remote location
- Recorded calls can be viewed directly from a smartphone or tablet
- In-app door release slider prevents accidental unlocking

Specifications

Capacity	Up to eight mobile apps per JO Series system
Door Release	In-app slider activates dry contacts on JO-1MDW
Requirements	One JO-1MDW
Network Interface	WiFi or 4G
Network Protocols	IPv4, TCP, UDP, SIP, RTP, RTCP, IGMP, DHCP
Bandwidth Usage	1.3MBs upload and download minimum
Operating System	Android™
	Apple® iOS
Communication	Hands-free (VOX), push-to-talk (simplex), or "handset mode"

JO Series Components (continued)

2-Door Station Adaptor

JOW-2D
Two-Door Station Adaptor

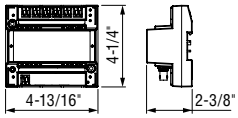
Features

- Allows a second door station to be connected to any JO Series system
- Can be added to existing systems for upgrade opportunities
- Combined with mobile app, system can now be a full 2x10 capacity
- Selective door release is routed to the door station where communication is established

Specifications

Power Source	18V DC (supplied by JO Series master station)
Consumption	18mA standby, 100mA max.
Relay Outputs	JO-1MDW: 24V DC, 1A
	JO-1MD, JO-1FD: 24V DC, 500mA
Temp. Rating	32°~104°F (0°~40°C)

JOW-2D



Video Door Stations

JO-DA
Video Door Station
(included with JOS-1A and JOS-1AW box sets – not sold separately)

- Plastic chassis
- Weather resistant
- Surface mount

JO-DV
Video Door Station
(included with JOS-1V and JOS-1VW box sets – also sold separately)

- Zinc die cast cover
- Weather and vandal resistant
- Surface mount

JO-DVF
Video Door Station
(included with JOS-1F and JOS-1FW box sets – not sold separately)

- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

Surface mount box available for flush mount station!
See p. 90

Features

- Fixed camera provides clear video
- LED illumination automatically turns on in low light conditions

Features
(additional for JO-DA)

- Mounts directly to wall or 1-gang box
- LED backlit call button

Features
(additional for JO-DV)

- Compatible with GT-MKB-N video guard station

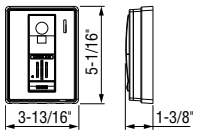
Features
(additional for JO-DV, JO-DVF)

- LED backlit nameplate

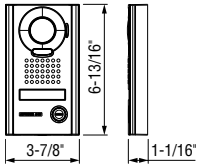
Specifications

Power Source	Supplied by Master Station or Expansion Station
Communication	Hands-free
Camera	Type: 1/4" CMOS
	View Area: 2'1" vertical x 3'1" horizontal at 20"
Temp. Rating	-4°~140°F (-20°~60°C)
Material	JO-DA: fire resistant PC + ABS plastic
	JO-DV: zinc die cast
	JO-DVF: stainless steel
Mounting	JO-DA: surface mount directly to wall or 1-gang box
	JO-DV: surface mount directly to wall
	JO-DVF: flush mount with included back box or surface mount with SBX-DVF
Wire Type	Door Station to Master Station or Expansion Station: 2-cond., low cap, non-shielded—use Aiphone #871802
Distance	Door Station to Master Station or Expansion Station: 330' (18 AWG)

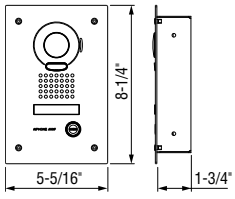
JO-DA



JO-DV



JO-DVF



JP Series Components

Video Master & Sub Master Stations

JP-4MED
Video Master Station
(included with all JPS box sets)
- 7" LCD touchscreen
- Picture Memory
- Removable media storage *(memory card not included)*
- Hands-free communication with handset for privacy

JP-4HD
Video Sub Master Station
- 7" LCD touchscreen
- Hands-free communication with handset for privacy

Features

- Video identification and monitoring with 7" touchscreen
- Hands-free communication with handset for privacy
- Door release button
- Optional service button
- PTZ and brightness control
- Eight selectable call tones
- Station partitioning with security code
- All Call to inside stations
- Door monitoring
- Continuous room monitoring

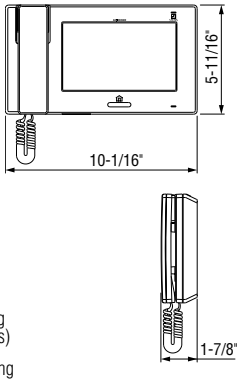
Features
(additional for JP-4MED)

- Camera position and zoom can be set for call-in
- Video out via supplied connector
- Picture Memory
- Security inputs for alerting stations

Specifications

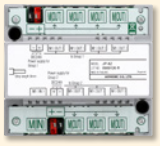
Power Source	24V DC—use PS-2420UL
Consumption	Max. 340mA
Communication	Hands-free (VOX) or handset (full-duplex)
Video Display	7" LCD touchscreen
Picture Memory	Internal/Built-In: record max. 20 calls (6 images per call) with up to 5 calls protected from overwriting
	SD/SDHC card: record max. 1,000 calls (40 images per call) with up to 100 calls protected from overwriting
Door Release	N/O dry contact, 24V AC/DC, 500mA (use RY-1824L for larger contact rating and use RY-3DL for three or four doors)
Mounting	Surface mount directly to wall or 1-gang box or desk mount using MCW-S/B
Wire Type	Door Station to Master Station: 2-cond., mid cap, solid, non-shielded—use Aiphone #871802
	Power Supply to Master Station: 2-cond., mid cap, solid, non-shielded—use Aiphone #871802
	Master Station to Adaptor: Cat-5e or Cat-6
	Adaptor to Sub Master Station: Cat-5e or Cat-6
Distance	Door Station to Master Station: 330'
	Master Station to Distribution Adaptor: 650'
	Distribution Adaptor to Sub Master Station: 165'
	Long Distance/CCTV Adaptor to Master Station: 330'
	Total Cumulative Between Inside Stations: 980'
	Power Supply to Master Station: 16' (22 AWG) 33' (18 AWG)
	Power Supply to Distribution Adaptor: 16' (22 AWG) 33' (18 AWG)

JP-4MED, JP-4HD



Long Distance/CCTV & Distribution Adaptors

JPW-BA
Long Distance/ CCTV Adaptor for Door Stations



JP-8Z
Distribution Adaptor for Video Sub Master Stations
(only required for homerun wiring methods)

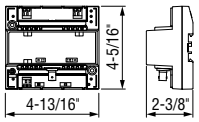
Features

- Extends wiring distance from door stations to master stations up to 980' max.

Specifications

Power Source	24V DC—use PS-2420UL
Capacity	One adaptor unit for each video door/ sub master station located beyond the standard specified wire distance
Mounting	DIN rail (included)
Wire Type	JPW-BA: 2-cond., low cap, PE, solid, non-shielded—use Aiphone #871802
	JP-8Z: Cat-5e
Distance	JPW-BA to Door Station: 650'
	JPW-BA to Master Station: 330'
	JP-8Z to Master Station: 650'
	JP-8Z to Sub Master Station: 165'

JPW-BA, JP-8Z



Audio Door Station

GT-D
→ p. 58

Features
See p. 58

Specifications
See p. 58

Video Door Stations

JP-DA
Video Door Station
(included with JPS-4AED box set)
- Plastic chassis
- Weather resistant
- Surface mount

JP-DV
Video Door Station
(included with JPS-4AEDV box set)
- Zinc die cast cover
- Weather and vandal resistant
- Surface mount

JP-DVF
Video Door Station
(included with JPS-4AEDF box set)
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

JP-DVF-HID*
Card Access
Video Door Station
- HID® ProxPoint® Plus Proximity Card Reader
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

JP-DVF-RP10*
Card Access
Video Door Station
- HID® multiCLASS SE® Proximity Card Reader
- Stainless steel panel
- Weather and vandal resistant
- Flush mount *(back box included)*

Surface mount boxes available for flush mount stations! See p. 90

* *HID® stations require a third-party host. Power for card reader and door strike require additional wire.*

Features
- Digital PTZ camera provides clear video
- LED illumination automatically turns on in low light conditions

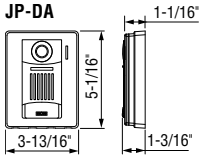
Features
(additional for JP-DA)
- Mounts directly to wall or 1-gang box
- LED backlit call button

Features
(additional for JP-DV, JP-DVF, JP-DVF-HID, JP-DVF-RP10)
- LED backlit nameplate

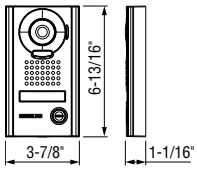
Specifications

Power Source	Supplied by Master Station
Communication	Hands-free
Camera	Type: 1/4" CMOS
	View Area: 100° vertical x 170° horizontal
Temp. Rating	-14°~140°F (-10°~60°C)
Material	JP-DA: fire resistant PC + ABS plastic
	JP-DV: zinc die cast
	JP-DVF, JP-DVF-HID, JP-DVF-RP10: stainless steel
Mounting	JP-DA: surface mount directly to wall or 1-gang box
	JP-DV: surface mount directly to wall
	JP-DVF: flush mount with included back box or surface mount with SBX-DVF
	JP-DVF-HID, JP-DVF-RP10: flush mount with included back box or surface mount with SBX-IDVFRA
Wire Type	Door Station to Master Station: 2-cond., low cap, non-shielded—use Aiphone #871802
Distance	Door Station to Master Station: 330'
	Door Station to Long Distance/CCTV Adaptor: 650'

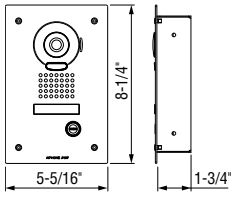
JP-DA



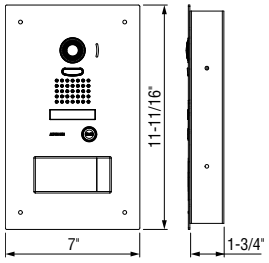
JP-DV



JP-DVF



JP-DVF-HID, JP-DVF-RP10



KB Series Components

Video & Audio Master Stations

KB-3MRD
Video Master Station
- 4" LCD screen
- Handset for privacy

KB-3HRD
Video Sub Master Station
- 4" LCD screen
- Handset for privacy

KB-3SD
Audio Sub Master Station
- Handset for privacy

Features
- All Call
- Chime and receiver volume control
- Optional selective door release with RY-3DL
- Two-way communication between inside stations

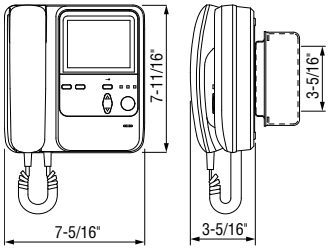
Features (additional for KB-3MRD)
- Video out to DVR via supplied connector

Features (additional for KB-3MRD, KB-3HRD)
- Video identification and monitoring with 4" screen
- Instant voice call-in with image
- Built-in illumination for low light conditions
- Selective Call

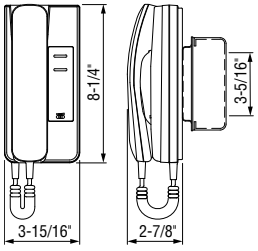
Specifications

Power Source	24V DC—use PS-2420UL
Communication	Handset (full-duplex)
Video Display	KB-3MRD, KB-3HRD: 4" LCD screen KB-3SD: N/A
Door Release	N/O dry contact, 12V AC, 400mA (use RY-1824L for larger contact rating or RY-3DL for two or three doors)
Mounting	Surface mount directly to wall or desk mount using MCW-S/B
Wire Type	2-cond., mid cap, solid, non-shielded—use Aiphone #871802
Distance	Master Station to Door Station: 330' (22 AWG) 650' (18 AWG) Master Station to farthest Sub Master Station: 165' (22 AWG) 330' (18 AWG) Power Supply to Master Station: 16' (22 AWG) 33' (18 AWG) Power Supply to Sub Master Station: 16' (22 AWG) 33' (18 AWG)

KB-3MRD, KB-3HRD



KB-3SD



Video Door Stations

KB-DAR
Video Door Station
- Plastic chassis
- Weather resistant
- Surface mount
- Fits 1-gang box

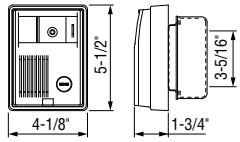
KB-DAR-M
Video Door Station
- Motion detector interface
- Plastic chassis
- Weather resistant
- Surface mount
- Fits 1-gang box

Features
- Tilt controlled camera
- Mounts directly to wall or 1-gang box
- Locator LED backlit on CALL button
- LED illumination automatically turns on in low light conditions

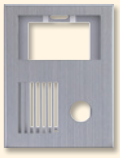
Specifications

Power Source	Supplied by Master Station
Communication	Hands-free
Camera	Type: 1/4" CCD View Area: 3' 8"– 7' 1" vertical x 2' horizontal at 20"
Temp. Rating	14°~140°F (-10°~60°C)
Material	Fire resistant ABS plastic
Mounting	Surface mount directly to wall
Wire Type	Door Station to Master Station: 2-cond., low cap, non-shielded—use Aiphone #871802
Distance	Door Station to Master Station: 330' (22 AWG) 650' (18 AWG)

KB-DAR, KB-DAR-M



Housing Panel for KB-DAR & KB-DAR-M



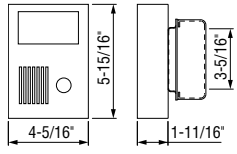
KA-DGR
Surface Mount Housing Panel for KB-DAR or KB-DAR-M

Features
- Stainless steel construction
- Weather resistant for outdoor use
- Can be added to any existing KB-DAR or KB-DAR-M video door station

Specifications

Material	Stainless steel
Mounting	Surface mount directly to wall

KA-DGR



Audio Door Stations

AX-DM
→ p. 53

IF-DA
→ p. 62

IE-JA
→ p. 62

IE-SS/A
→ p. 62

IE-SSR
→ p. 62

Features (AX-DM)
See p. 53

Features (IE Series Door Stations)
See p. 62

Specifications (AX-DM)
See p. 53

Specifications (IE Series Door Stations)
See p. 62

Auxiliary Light Control Relay

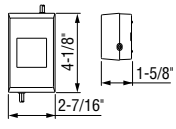
MAW-B
Auxiliary Light Control Relay

Features
- Used for turning on an auxiliary light to spotlight a caller at the entrance
- Light is illuminated when the door call button is pushed and during visual monitoring mode

Specifications

Power Source	Supplied by Master Station
Contact Rating	Dry closure contact for general lighting of less than 100W

MAW-B



Components

LEF Series Components

Audio Master Stations

LEF-3
3-Call Audio Master Station
- Surface mount

LEF-3L
3-Call Audio Master Station
- Selective door release
- Surface mount

LEF-3C
3-Call Audio Master Station
- All Call button *(requires BG-10C)*
- Semi-flush mount

LEF-5
5-Call Audio Master Station
- Selective door release
- Surface mount

LEF-5C
5-Call Audio Master Station
- All Call button *(requires BG-10C)*
- Selective door release
- Semi-flush mount

LEF-10
10-Call Audio Master Station
- Selective door release
- Surface mount

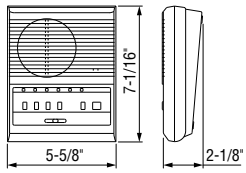
LEF-10S
10-Call Audio Master Station
- All Call button *(requires BG-10C)*
- Selective door release
- Surface mount

LEF-10C
10-Call Audio Master Station
- All Call button *(requires BG-10C)*
- Selective door release
- Semi-flush mount

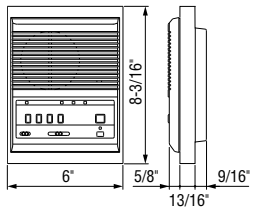
Features
- Mix and match a variety of stations
- Complements CCTV system
- Push-to-talk communication
- LED and call-tone indicators
- Selective Call and Optional All Call

Specifications
Power Source	12V DC—use PS-1208UL (use PS-1225UL if installing BG-10C)
Consumption	300mA
Output	800mW
Communication	Push-to-talk (simplex)
Door Release	N/O dry contact, 24V DC, 1A—use one RY-PA per door being released
Mounting	Wall or desk mount
Wire Type	Variable wire types—see table on page 36
Distance	Sub Station to farthest Master Station: 650' (22 AWG) 1,600' (18 AWG)

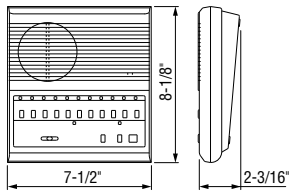
LEF-3, LEF-3L



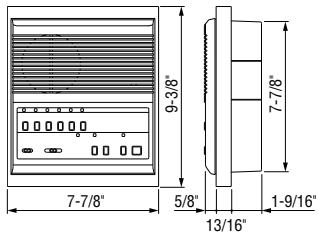
LEF-3C



LEF-5, LEF-10, LEF-10S



LEF-5C, LEF-10C



NOTE: *Compatible ceiling speaker and paging adaptor are located in the Paging Accessories section (p.93).*

Audio Sub Master Stations

LEF-1C
Audio Sub Master Station
(requires BG-10C)
- All Call button
- Semi-flush mount

LE-A
Audio Sub Station
- Surface mount

LE-AN
Privacy Audio Sub Station
- Surface mount
- Privacy button

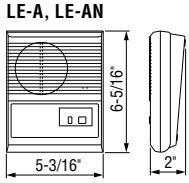
LE-B
Audio Sub Station
- Semi-flush mount

LE-BN
Privacy Audio Sub Station
- Semi-flush mount
- Privacy button

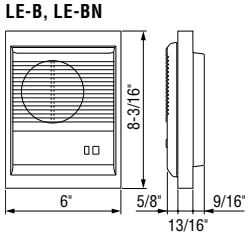
Features
- Provides internal communication to master stations

Specifications
Power Source	Supplied by Master Station
Communication	Push-to-talk (simplex)
Mounting	Wall or desk mount
Wire Type	Variable wire types – see table on page 36
Distance	Sub Station to farthest Master Station: 650' (22 AWG) 1,600' (18 AWG)

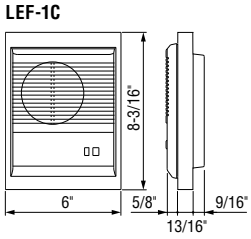
LE-A, LE-AN



LE-B, LE-BN



LEF-1C



LEF Series Components (continued)

Audio Door Stations

LE-D
Audio Door Station
- Plastic chassis
- Weather resistant
- Surface mount
- Fits 1-gang box

LE-DA
Audio Door Station
- Stainless steel cover
- Weather resistant
- Flush mount
(fits 2-gang box)

LE-SS-1G
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount
(fits 1-gang box – internal door station dimensions are 2-15/16" H x 1-15/16" W x 1-13/16" D)

LE-SS/A
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount
(fits 2-gang box)

LE-SSR
Audio Door Station
- Red mushroom call button
- Stainless steel panel
- Weather and vandal resistant
- Flush mount
(fits 2-gang box)

LS-NVP/C
Audio Door Station
- Powder-coated steel panel
- Weather and vandal resistant
- Flush mount
(fits 3-gang box)

Surface mount boxes available for flush mount stations!
See p. 90

Features (LE-D)
- Weather resistant for outdoor use
- Push button to call master station(s)
- Hands-free communication when master answers
- Compact surface mount design
- Mounts directly to wall or 1-gang box

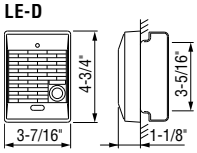
Features (LE-DA)
- Weather resistant for outdoor use
- Push button to call master station(s)
- Hands-free communication when master answers
- Slim flush mount design with stainless steel cover
- Mounts to 2-gang box or ring

Features (LE-SS-1G, LE-SS/A, LE-SSR, LS-NVP/C)
- Weather and vandal resistant
- Stainless steel, mechanical call button (LE-SS/A, LS-NVP/C)
- Red mushroom call button (LE-SSR)
- Moisture and puncture resistant speaker
- 3-layer steel baffle protects speaker from tampering
- Hands-free communication when master answers
- Pigtail wires for connection to master station
- Includes tamper proof mounting screws

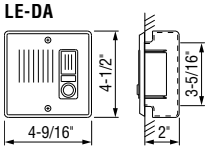
Specifications

Power Source	Supplied by Master Station
Communication	Hands-free
Temp. Rating	14°~140°F (-10°~60°C)
Material	LE-D: fire resistant ABS plastic
	LE-DA: ABS plastic with stainless steel cover
	LE-SS-1G, LE-SS/A, LE-SSR: stainless steel
	LS-NVP/C: carbon steel with powder-coated white baked epoxy finish
Mounting	LE-D: surface mount directly to wall
	LE-SS-1G: flush mount with 1-gang box/ring or surface mount with SBX-1G
	LE-DA, LE-SS/A, LE-SSR: flush mount with 2-gang box/ring or surface mount with SBX-2G/A
	LS-NVP/C: flush mount with 3-gang box/ring or surface mount with SBX-NVP/A
Wire Type	Door Station to LEF Master Station: 3-cond., overall shield—use Aiphone #822203
	Door Station to LEM Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station to Master Station: 650' (22 AWG) 1,600' (18 AWG)

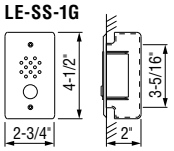
LE-D



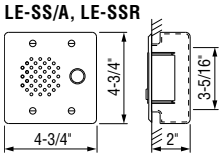
LE-DA



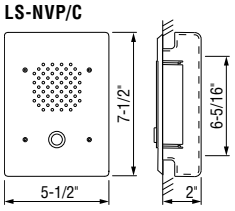
LE-SS-1G



LE-SS/A, LE-SSR



LS-NVP/C



Door Release Relay

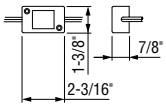
RY-PA
Door Release Relay

Features
- Door release activation
- N/O contact output

Specifications

Power Source	12V DC
Contact Rating	24V DC, 1A or 240V AC, 300mA

RY-PA



All Call, Music, & Chime Adaptor

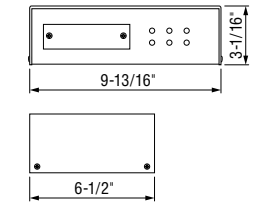
BG-10C
All Call, Chime, and Music Adaptor
(1 BG-10C is required for up to 11 stations)

Features
- Music ON/OFF switch plus music and chime selector switch for each station
- Chime volume control plus music, bass, and treble controls
- All Call pre-tone volume and speech volume controls
- Terminals for power supply, music and door station connection and LEF-C network (All Call and music receiving)
- Provides All Call and door chime for LEF-C and LEF-10S systems
- Background music input

Specifications

Power Source	12V DC, 2.5A—use PS-1225UL
	Standby: 100mA
All Call Transmit	From LEF-1C, LEF-3C, LEF-5C, LEF-10C, LEF-10S
All Call Receive	All LEF Master Stations
BGM Input	AUX R, E and AUX L, E
Controls	Music ON/OFF, 11 selector switches of music and chime (off or chime only)
Wire Type	BG-10C to LEF-10C: 19 wires max.—use Aiphone #822220
	To each LE-D or LE-DA: 3 wires—use Aiphone #822203

BG-10C



Matching Transformer & Terminal Boxes

LT-1
20Ω-to-8Ω
Matching Transformer

LEW-5, LEW-10, LEW-10S
Terminal Box

Features (LT-1)
- Matches impedance when using an 8Ω speaker
- Provides better sound quality

Features (LEW-5, LEW-10, LEW-10S)
- Remote terminal box for wire organization to masters mounted on a table or desk

Components

LEM Series Components

Audio Master Stations

LEM-1
1-Call Audio
Master Station
(for applications using one door/sub station)
- Surface mount

LEM-3
3-Call Audio
Master Station
(for applications using two or three door/sub stations)
- Surface mount

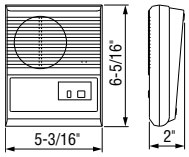
Features
- Voice volume control
- Push-to-talk communication

NOTE:
Compatible ceiling speaker and paging adaptor are located in the Paging Accessories section (p. 93).

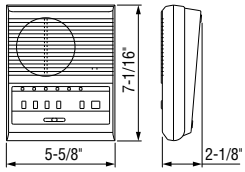
Specifications

Power Source	6V DC—use SKK-620C
Consumption	200mA
Output	350mW
Communication	Push-to-talk (simplex)
Door Release	N/A
Mounting	Wall or desk mount
Wire Type	Door Station or Sub Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802
Distance	Door Station or Sub Station to Master Station: 650' (22 AWG) 1,570' (18 AWG)

LEM-1



LEM-3



Audio Sub Master Stations

LE-A → p. 79

LE-AN → p. 79

LE-B → p. 79

LE-BN → p. 79

Features
See p. 79

Specifications
See p. 79

Audio Door Stations

LE-D → p. 80

LE-DA → p. 80

LE-SS-1G → p. 80

LE-SS/A → p. 80

LE-SSR → p. 80

LS-NVP/C → p. 80

Features
See p. 80

Specifications
See p. 80

Matching Transformer

LT-1 → p. 80

Features
See p. 80

LEM-1DL Series Components

Audio Master Stations

LEM-1DL
Audio Master Station
(requires one DAK-2S per every two master stations in the system)
- Door release button

LEM-1DLC
Audio Master Station
- Multi-master *(max. four)*
- Door release button
- Occupied LED

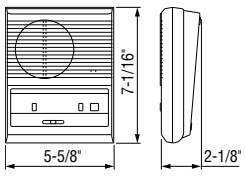
Features
- Door release (N/O contact)
- Calling and two-way communication with door station
- Call tone and voice volume control

NOTE: *Compatible door stations are located in the LEF Series Components (p. 80). Compatible dual master adaptor kit is located in the Relay & Adaptor Accessories section (p. 94).*

Specifications

Power Source	12–16V AC—use PT-1210NA or 12–24V DC—use PS-1208UL
Consumption	4W (16V AC) max., 200mA (24V DC) max.
Output	100mW
Communication	Push-to-talk (simplex)
Door Release	N/O dry contact, 30V AC/DC, 1A
Mounting	Wall or desk mount
Wire Type	Door Station to Master Station: 2-cond., overall shield—use Aiphone #822202 or #821802 Between LEM-1DLCs: 3-cond., overall shield—use Aiphone #822203 or #821803
Distance	Door Station to farthest Master Station: 650' (22 AWG) 1,570' (18 AWG)

LEM-1DL, LEM-1DLC



MC Series Components

Audio Master Station

MC-60/4A
Audio MarketCom
Master Station

- Four communication channels with LED indicators
- Easy access page button
- Handset for privacy
- Wall mount

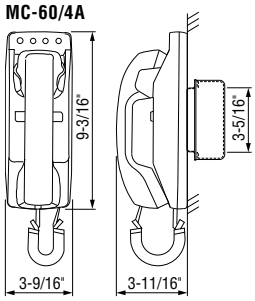
Features

- Four selectable talk channels with in-use LEDs
- Crosstalk reduction circuit
- Reinforced modular coil cord

Specifications

Power Source	24V DC—use PS-2420UL
Consumption	70mA (paging mode)
Communication	Handset (full-duplex)
Mounting	Surface mount directly to wall
Wire Type	7 wires in loop, non-twisted, low capacitance, PE insulation—use Aiphone #852207
Distance	Paging Adaptor to farthest Master Station on block: 1,700' (22 AWG) 4,000' (18 AWG)
	Total cumulative wiring between Paging Adaptor and Master Station: 5,000' (22 AWG)

MC-60/4A



NOTE: *Compatible ceiling speaker and paging amplifiers are located in the Paging Accessories section (p. 93).*

Paging Adaptor

MC-A/A
Paging Adaptor
for MC Series

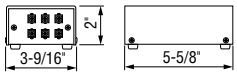
Features

- Separate music and paging controls: bass, treble and volume
- Paging pre-tone volume control
- Connects to standard paging amplifier
- Background music can be included and automatically mutes during page

Specifications

Power Source	24V DC—use PS-2420UL
Input	AUX 10kΩ, 0.3V – 0.5V
Music Output	Range 100mV – 1.2V, 10kΩ or less

MC-A/A



NHX Series Components

Central Control Unit

NHX-80X UL
Central Control Unit

NHR-30K UL
30-Call Add-On
Truck Card
(required for NHX-30G)

Features (NHX-80X)

- UL 1069 Listed
- Controls system functions with microprocessor
- All wire terminations are made inside with easy "screwless" wire connections

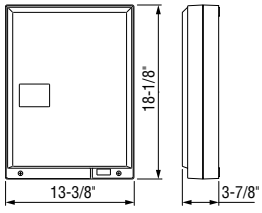
Features (NHR-30K)

- Provides additional capacity for NHX-30G add-on selector

Specifications (NHX-80X)

Power Source	24V DC—use two PS-2420ULs
Wire Type	Sub/Duty Station to Central Control Unit: 4 twisted pair, low cap, PE, overall shield—use Aiphone #862208
	Master Station to Central Control Unit: 5 twisted pair, low cap, PE, overall shield—use Aiphone #862210
Distance	Sub Station to Central Control Unit: 165' (22 AWG)
	Duty Station to Central Control Unit: 65' (22 AWG)
	Master Station to Central Control Unit: 65' (22 AWG)

NHX-80X



NHX Series Components (continued)

Master Station & Add-On Selector

NHX-50M Ⓤ
50-Call Audio
Master Station

NHX-30G Ⓤ
30-Call Add-On
Selector
(requires NHR-30K to be installed into NHX-80X)

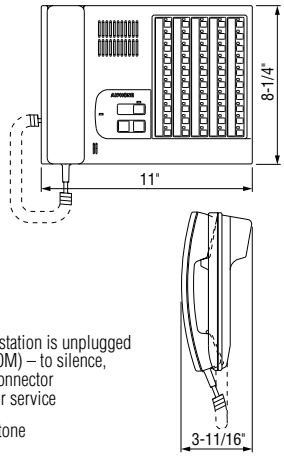
Features (NHX-50M)
- 3 call levels with distinct tone and light signalling for routine, urgent, and cord-out trouble calls
- Auto-connect to next call-in priority (no need to select station)
- Alert tone sounds if power or data wire is interrupted, or if handset is off-hook for more than 90 sec.
- Tone off button

Features (NHX-30G)
- Plugs into NHX-50M with supplied connectors
- Expands NHX-50M to an 80-call master station

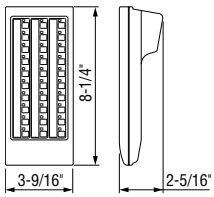
Specifications (NHX-50M)

Power Source	Supplied by Central Control Unit (NHX-80X)
Communication	Handset (VOX) or push-to-talk (simplex)
Call-In Priority	1) Cord-out trouble call 2) Urgent bathroom call and NHR-3TS common area bathroom/staff call 3) Routine call (sub station call-ins on standby connected according to urgency level and time of call)
Warning Tones	1) Line-off trouble alert when station is unplugged (buzzer activated at NHX-50M) – to silence, plug in CN1047 shorting connector inside NHX-80X and call for service 2) 90 sec. elapse timer – call tone goes up to HIGH level 3) 90 sec. off-hook timer – steady tone will notify handset is off-hook
Wire Type	Master Station to Central Control Unit: 5 twisted pair, low cap, PE, overall shield—use Aiphone #862210
Distance	Master Station to Central Control Unit: 65' (22 AWG)

NHX-50M



NHX-30G



Sub & Duty Stations

NH-1SA/A Ⓤ
Single-Jack Bedside
Audio Sub Station

NH-2SA/A Ⓤ
Dual-Jack Bedside
Audio Sub Station

NHR-SP Ⓤ
Audio Duty
Station

NHR-3TS Ⓤ
Dual Corridor
Light Sub Station
(required for NHR-7A if NH-1SA/A or NH-2SA/A are not used)

One bedside call button is required per sub station jack

NHR-8C Ⓤ
Bedside Call
Button

Features
(NH-1SA/A, NH-2SA/A)
- Bedside sub station for calling and communication
- Single-jack (NH-1SA/A) and dual-jack (NH-2SA/A) for NHR-8C bedside call button(s)
- Hands-free communication
- Flush mount with standard 2-gang box

Features (NHR-SP)
- Alerts staff when a master station receives a call (urgent calls override routine calls)
- Acknowledges any station call with tone and blinking LED (use NHX-50M to identify caller or to answer call)
- Ideal for break rooms, hallways, or locations without a master station
- Flush mount with standard 2-gang box

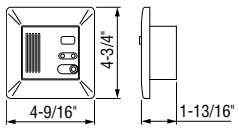
Features (NHR-3TS)
- Provides call from common area, restrooms, or staff location
- Allows NHR-7A pull cord to be used without the need for a bedside sub station
- Two corridor lights indicate call location
- Wires the same as a bedside sub station
- Flush mount with standard 2-gang box
- Stainless steel cover

Features (NHR-8C)
- Button activates routine call at master
- Cord-out activates urgent call at master

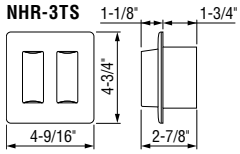
Specifications (NH-1SA/A, NH-2SA/A, NHR-SP, NHR-3TS)

Power Source	Supplied by Central Control Unit (NHX-80X)
Wire Type	Sub Station or Duty Station to Central Control Unit: 4 twisted pair, low cap, PE, overall shield—use Aiphone #862208
Distance	Sub Station to Central Control Unit: 165' (22 AWG) Duty Station to Central Control Unit: 65' (22 AWG)

NH-1SA/A, NH-2SA/A, NHR-SP



NHR-3TS



Accessories

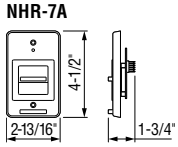
NHR-7A Ⓤ
Urgent Call
Pull Cord

NHR-4A/A Ⓤ
LED Corridor Light
(red and amber LEDs)

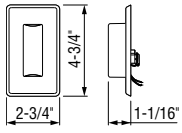
Features (NHR-7A)
- Latching call switch
- Waterproof for bathroom areas
- Durable and strong nylon pull cord with pendant
- Can be used without cord as urgent call station (with NHR-3TS)
- LED "call placed" indicator
- Flush mount with standard 1-gang box

Features (NHR-4A/A)
- Amber lamp for bedside call, red lamp for bathroom call
- Easy wiring to bedside sub station
- Flush mount with standard 1-gang box

NHR-7A



NHR-4A/A



NIM Series Components

Master Stations

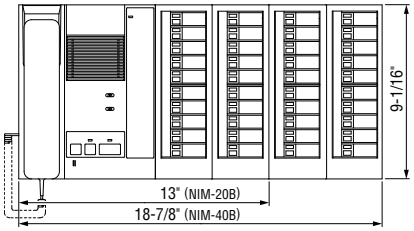
NIM-20B
20-Call Audio Master Station
- Supports up to 20 door stations, sub stations, ceiling speakers, and wall jacks
- Selective Call, Group Call, and All Call
- Volume controls
- Handset for privacy

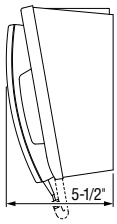
NIM-40B
40-Call Audio Master Station
- Supports up to 40 door stations, sub stations, ceiling speakers, and wall jacks
- Selective Call, Group Call, and All Call
- Volume controls
- Handset for privacy

Specifications

Power Source	48V DC—use IS-PU-UL
Communication	Handset (VOX) or push-to-talk (simplex)
Door Release	N/A
Material	Panel: fire resistant ABS plastic Chassis: SPCC
Wire Type	Door Station, Sub Station, Ceiling Speaker, or Wall Jack to Master Station: 3 cond. overall shield—use Aiphone #821803
Distance	Door Station or Sub Station to Master Station: 650' (18 AWG) Power Supply to Master Station: 33' (18 AWG)

NIM-20B, NIM-40B





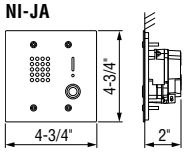
Door Station

NI-JA
Audio Door Station
- Stainless steel panel
- Weather and vandal resistant
- Flush mount
  (fits 2-gang box)

Specifications

Power Source	Supplied by Master Station
Communication	Hands-free
Temp. Rating	14°~140°F (-10°~60°C)
Material	Stainless steel
Mounting	Flush mount with 2-gang box or surface mount with SBX-2G/A
Wire Type	Door Station to Master Station: 3 cond. overall shield—use Aiphone #821803
Distance	Door Station to Master Station: 650' (18 AWG)

NI-JA



Sub Stations

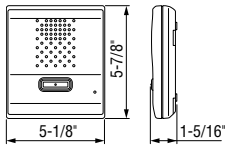
NI-BA
Audio Sub Station
- Surface mount

NI-RC
Bedside Sub Station
- Handheld

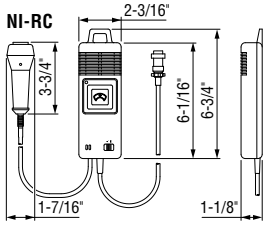
Specifications

Power Source	Supplied by Master Station
Communication	Hands-free
Material	Plastic
Mounting	NI-BA: surface mount directly to wall or desk mount NI-RC: hang from hook on NIR-HPF
Wire Type	Sub Station to Master Station: 3 cond. overall shield—use Aiphone #821803
Distance	Sub Station to Master Station: 650' (18 AWG)

NI-BA



NI-RC



Ceiling Speaker & Ceiling Microphone

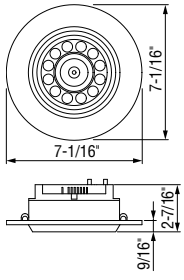
NI-LB
Ceiling Speaker
(use NI-SB or NIR-MB for hands-free reply)
- Call-in LED
- Indoor use
- Flush mount

NI-SB
Ceiling Microphone
(for use with NI-LB)
- Stainless steel panel
- Hands-free reply
- Indoor use
- Flush mount

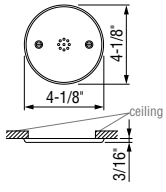
Specifications

Power Source	Supplied by Master Station
Communication	NI-LB: hands-free (receive) NI-SB: hands-free (transmit)
Material	NI-LB: ABS plastic NI-SB: stainless steel
Mounting	Ceiling flush mount
Wire Type	Ceiling Speaker to Master Station: 3 cond. overall shield—use Aiphone #821803 NIR-MB to Ceiling Speaker: 4-cond. overall shield—use two runs of #821802

NI-LB



NI-SB



Components

Call Buttons & Wall Jacks

NIR-6
Call Button
- Flush mount *(fits 1-gang box)*

NIR-8
Bedside Call Button *(requires NIR-1, NIR-MB, or NIR-7BS)*
- Handheld

NIR-1
Wall Jack for NIR-8
- Flush mount *(fits 1-gang box)*

NIR-MB
Wall Jack with Mic for NIR-8
- Flush mount *(fits 1-gang box)*

NIR-7BS
Wall Jack with LED Call Indicator for NIR-8
- Flush mount *(fits 1-gang box)*

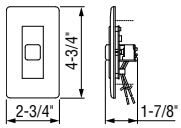
NIR-HP
Wall Jack for NI-RC
- Flush mount *(fits 1-gang box)*

NIR-HPF
Wall Jack for NI-RC
- Includes hook to hang NI-RC
- Flush mount *(fits 2-gang box)*

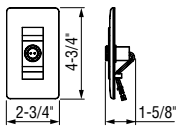
Specifications

Power Source	Supplied by Master Station
Material	Fire resistant ABS plastic
Mounting	NIR-6, NIR-1, NIR-MB, NIR-7BS, NIR-HP: flush mount with 1-gang box NIR-HPF: flush mount with 2-gang box
Wire Type	Variable wire types – refer to installation manual

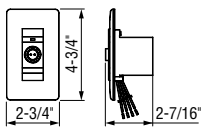
NIR-6



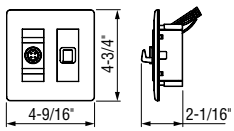
NIR-1



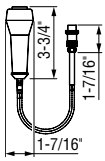
NIR-7BS



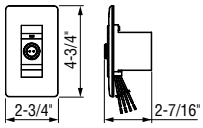
NIR-HPF



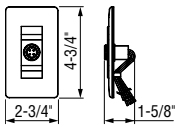
NBR-8A



NIR-MB



NIR-HP



Accessories

NIR-2
Call Reset Button

NIR-4
Single Room Corridor Call Light

NIR-4S
Multi-Room Corridor Call Light

NIR-4BZ
Corridor Light with Tone Indicator

NIR-42
Corridor Light with Call Reset Button

NIR-31
Corridor Light with 1 Magnetic Nameplate

NIR-32
Corridor Light with 2 Magnetic Nameplates

NIR-34
Corridor Light with 4 Magnetic Nameplates

NIR-7W
Bathroom Call Button

NIR-7HW
Bathroom Call Button with Pull Cord

NI-SOFT
Call Event Log PC Software *(includes RS-232 cable, approx. 40")*

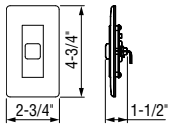
Specifications (NIR-2, NIR-4, NIR-4S, NIR-4BZ, NIR-42, NIR-31, NIR-32, NIR-34, NIR-7W, NIR-7HW)

Power Source	Supplied by Master Station
Material	Fire resistant ABS plastic
Mounting	NIR-2, NIR-4, NIR-4S, NIR-7W, NIR-7HW: flush mount with 1-gang box NIR-4BZ, NIR-42: flush mount with 2-gang box NIR-31, NIR-32, NIR-34: surface mount directly to wall
Wire Type	Variable wire types – refer to installation manual

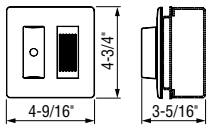
Specifications (NI-SOFT)

Software	OS: Windows® 7 (32/64 bit), Windows® 8 (32/64 bit), Windows® 10 Processor: 3GHz or faster Memory: 2GB of RAM Hard Drive: 100MB or more

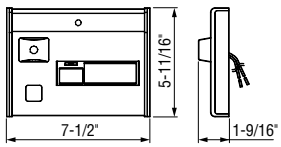
NIR-2



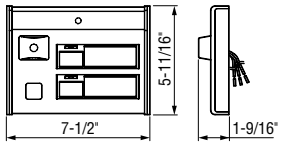
NIR-4BZ



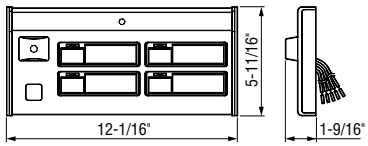
NIR-31



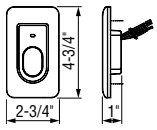
NIR-32



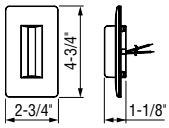
NIR-34



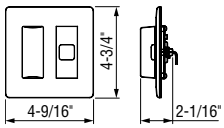
NIR-7W, NIR-7HW



NIR-4, NIR-4S



NIR-42



TD-H Series Components

Audio Master Stations

TD-1H/B
1-Call Audio
Master Station
(cannot be used for door answering)
- Handset for privacy

TD-3H/B
3-Call Audio
Master Station
- Handset for privacy

TD-6H/B
6-Call Audio
Master Station
- Handset for privacy

TD-12H/B
12-Call Audio
Master Station
- Handset for privacy

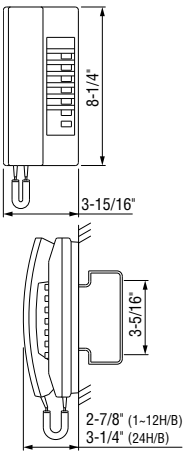
TD-24H/B
24-Call Audio
Master Station
- Handset for privacy

Features
- Multiple talk paths for communication and paging
- Handset cradle for wall mounting can be reversed for desk use
- Station-select break-in call

Specifications

Power Source	12V DC—use PS-1225UL
Consumption	70mA per station
Communication	Handset (full-duplex)
Door Release	N/O dry contact, 30V AC/DC, 1A (at DE-UR)
Mounting	Desk mount or surface mount directly to wall or 1-gang box
Wire Type	TD-1H/B: 6-cond., overall shield—use Aiphone #822206 TD-3H/B, TD-6H/B: 10 cond., overall shield—use Aiphone #822210 TD-12H/B, TD-24H/B: 16 cond., overall shield—use Aiphone #812216 (two runs of 812216 are required for full functionality of the TD-24H/B)
Distance	Between Master Stations: 2,000' (22 AWG) 4,800' (18 AWG)

TD-nH/B
(n = 1, 3, 6, 12, 24)



Door Station Adaptor

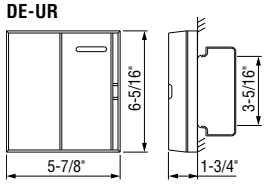
DE-UR
Door Station Adaptor

Features
- Activates door release
- Call tone modulating circuits (2-1/2 sec. timed)
- Includes door release control terminals

Specifications

Power Source	12V DC – supplied by Master Station
Consumption	120mA
Terminals	30V AC/DC, 1A
Wire Type	Door Station to Adaptor: 2-cond., overall shield—use Aiphone #822202 Adaptor to Master Station: 6-cond., overall shield—use Aiphone #822206
Distance	Door Station to Adaptor: 500' (22 AWG) 1,200' (18 AWG)

DE-UR



TD-H Series Components (continued)

Audio Door Stations

AX-DM
→ p. 53

IF-DA
→ p. 62

IE-JA
→ p. 62

IE-SS/A
→ p. 62

IE-SSR
→ p. 62

Features (AX-DM)
See p. 53

Features (IF-DA, IE-JA, IE-SS/A, IE-SSR)
See p. 62

Specifications (AX-DM)
See p. 53

Specifications (IF-DA, IE-JA, IE-SS/A, IE-SSR)
See p. 62

Paging Adaptors

PD-1
Zone Paging Adaptor
for TD-H Series

PD-2
Zone Paging/Talkback Adaptor
for TD-H Series

Features

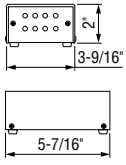
- Provides paging from TD-H handsets to an overhead PA system
- Single or multi-zones, one station capacity per zone
- PAGE button located in TD-H handsets
- Music source connection, automatically mutes when paging

NOTE: *Compatible ceiling speaker and paging amplifiers are located in the Paging Accessories section (p. 93).*

Specifications

Power Source	PD-1: 12V DC, 30mA – supplied by Master Station
	PD-2: 12V DC, 48mA (talkback) – supplied by Master Station
Output	5kΩ, 1.5V max.
Paging and Music Controls	Treble: 12dB at 10kHz
	Bass: 12dB at 100kHz
Amp. Input	AUX or PHONO 100K–500kΩ, 0.12V–0.5V
Music Input	17kΩ, 0.3V, 1kHz for full output
Tuner Output	Audio output range: 100mV–1.2V, 10kΩ or less
Talkback Gain	40dB, 1kHz at max. volume
Environmental Noise	Less than 80dB (phono)
Wire Type	Adaptor to Amplifier: 2-cond., overall shield—use Aiphone #822202
	Adaptor to Master Station: 3-cond. overall shield—use Aiphone #822203

PD-1, PD-2



Terminal Box

TDW-nA
Terminal Box for TD-nH/B
(n=1, 3, 6, 12 or 24)

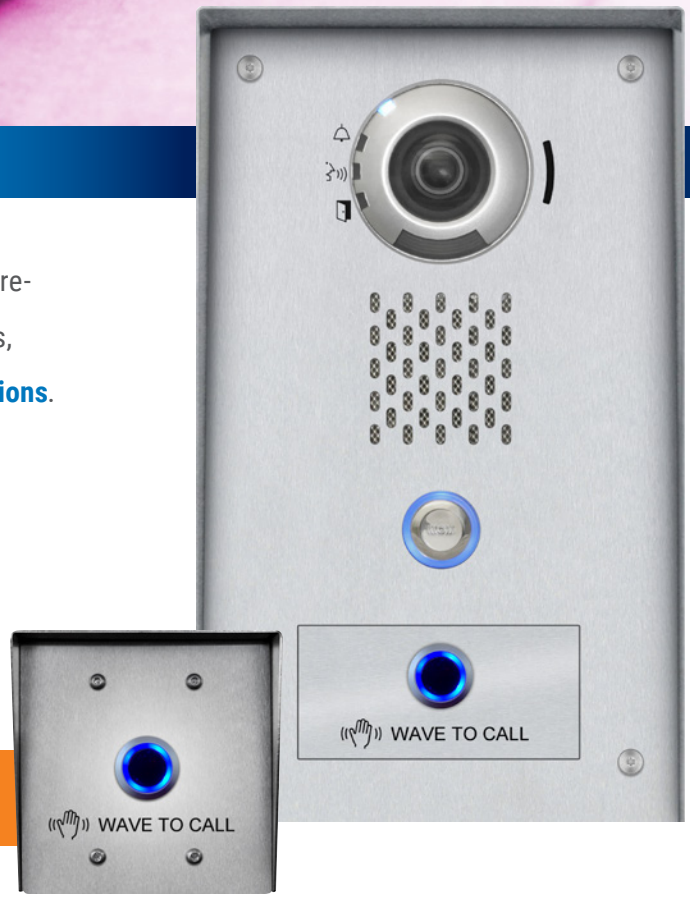
Features

- Remote terminal box for wire organization to masters mounted on a table or desk

Wave Hello to Cleaner, Touch-Free Calling

Introducing Aiphone's NEW touchless sensor for gesture-activated calling. Compatible with our flexible IX Series, **it's easy to add the sensor to new or existing installations**.

- Contactless way for visitors to initiate a call
- Reduces the spread of germs and bacteria
- Aesthetic design complements building exteriors



Learn more at **aiphone.com/glc_wave**

Accessories

Access Control, Call Chime, and Door Release Accessories

Stand-Alone Access Control Keypads

AC-10S
Stand-Alone Access Control Keypad
- Body style matches JK-DV, JO-DV, and JP-DV
- Zinc die cast cover
- Surface mount

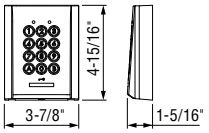
AC-10F
Stand-Alone Access Control Keypad
- Zinc die cast panel
- Flush mount

Features
- Access control with up to 100 unique user codes
- Can be used as a stand-alone access control device
- Compact size in a stylized design
- 12-digit backlit keypad
- Easy to install

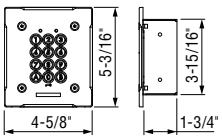
Specifications

Power Source	12–24V AC/DC, 100mA (AC) 70mA (DC)
Output Rating	Two Form C dry contacts, 24V AC/DC, 3A (resistive), 1A (inductive)
Temp. Rating	-4°~140°F (-20°~60°C)
Material	Zinc die cast
Mounting	AC-10S: surface mount directly to wall AC-10F: flush mount with included back box

AC-10S



AC-10F



Call Extension Speaker

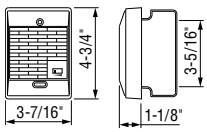
IER-2
Call Extension Speaker for DB Series, JF Series, JK Series, JO Series, JP Series, KB Series, or NIM Series

Features
- Announces chime tone only
- Adjustable volume (three positions)
- Indoor mounting

Specifications

Material	ABS plastic
Mounting	Surface mount directly to wall or 1-gang box
Wire Type	Single pair of wires, non-polarized

IER-2



Electric Door Strike

EL-12S
Electric Door Strike for Wood Frames
(requires PT-1210NA unless used with DA or DB Series)

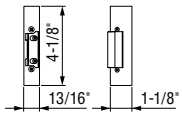
PT-1210NA
12V AC Transformer
→ p. 95

Features
- Controlled by N/O contact or voltage output
- Includes both flush mount plate (comes attached) and surface mount plate
- Can be used with AX Series, C-123L/A Set, C-123LW Set, DA-1DS, DA-2DS, DA-4DS, IE-8 Series, IX Series, JF Series, JO Series, JP Series, KB Series, LEF Series, LEM-1DL Series, or LEM-1DLC

Specifications

Power Source	12V AC/DC, 125mA (AC) 200mA (DC)—use PT-1210NA
Rated Resistance	DC 60Ω
Break-In Resistance	4,000 N
Temp. Rating	5°~140°F (-15°~60°C)
Material	Jaw/Body: zinc die cast Plate: steel

EL-12S



Door Release Adaptor

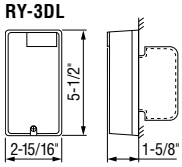
RY-3DL
Selective Door Release Adaptor for JF Series, JP Series, or KB Series

Features
- Selective door release with one button
- Door release contacts release the door where communication is established
- Normally open (N/O) contacts for electric strike
- Normally closed (N/C) contacts for magnetic locks

Specifications

Power Source	Shared with Master Station—use PS-1820UL (JF Series) or PS-2420UL (JP Series or KB Series)
Contact Rating	Three Form C dry contacts, 50V AC, 1A 30V DC, 1A
Distance	Master Station to Door Release Adaptor: 165' (22 AWG) 330' (18 AWG)

RY-3DL



Form C Door Release Relays

RY-1824L
Form C Door Release Relay for AX Series, JF Series, JO Series, JP Series, or KB Series

Features
- Normally open (N/O) contact with high current rating for door strikes
- Normally closed (N/C) contact with high current for magnetic locks
- Use with any 18-24V system that requires door release

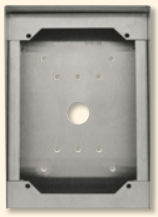
Specifications

Power Source	Supplied by Master Station or CEU
Relay Input	18-24V DC, red and black wires, 22AWG
Relay Output	Brown, yellow, and orange wires, 18AWG
Output Rating	30V DC, 5A 250V AC, 8A
Wire Type	2-cond. to door release and 2-cond. to strike with power for strike wired in system
Dimensions	1-7/16" H x 13/16" W x 7/16" D (with wires extending approx. 7-1/2")

Mounting Accessories

Surface Mount Boxes

SBX-ACE
Surface Mount Box for AX-DM, GT-D, IF-DA, JO-DA, JP-DA, KB-DAR, or KB-DAR-M and one Access Control Device



SBX-DVF
Surface Mount Box for JK-DVF, JO-DVF, or JP-DVF

SBX-AXDVF
Surface Mount Box for AX-DVF

SBX-DVF-P
Surface Mount Box for AX-DVF-P, JK-DVF-AC, or JK-DVF-HID

SBX-IDVF
Surface Mount Box for IX-DVF or IX-SSA

SBX-IDVFRA
Surface Mount Box for IX-DVF-2RA, IX-DVF-2RA-FR, IX-DVF-4, IX-DVF-RA, IX-DVF-RA-FR, IX-DVF-P, IX-SSA-2RA, IX-SSA-2RA-FR, IX-SSA-RA, IX-SSA-RA-FR, JP-DVF-HID, or JP-DVF-RP10

SBX-1G
Surface Mount Box for LE-SS-1G

SBX-2G/A
Surface Mount Box for IE-JA, IE-SS/A, IE-SSR, IX-SS-2G, LE-DA, LE-SS/A, LE-SSR, or NI-JA

SBX-NVP/A
Surface Mount Box for IX-NVP or LS-NVP/C

Features (SBX-ACE)
- Vandal resistant
- Hood provides weather resistance
- Includes blank stainless steel cover for wide range of mounting options
- Openings at bottom allow for moisture drainage

Features (SBX-DVF, SBX-AXDVF, SBX-DVF-P, SBX-IDVF, SBX-IDVFRA)
- Hood provides weather resistance
- Includes space inside for wiring
- Mounts directly to wall
- Openings at bottom allow for moisture drainage

Features (SBX-1G)
- Weather resistant
- Includes space inside for wiring
- Mounts directly to wall surface

Features (SBX-2G/A)
- Weather resistant
- Includes space inside for wiring
- Mounts to 1-gang box or ring
- Can mount directly to wall surface
- Includes hardware for mounting intercom

Features (SBX-NVP/A)
- Weather resistant
- Includes space inside for wiring
- Mounts to 1-gang box or ring
- Can mount directly to wall surface
- Powder-coated white baked epoxy finish

Specifications

Material: SBX-ACE, SBX-DVF-P, SBX-IDVF, SBX-IDVFRA, SBX-1G, SBX-2G/A: 18GA stainless steel

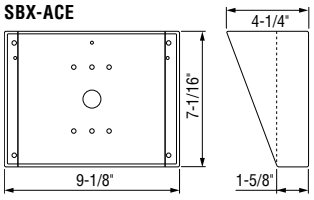
SBX-DVF, SBX-AXDVF: 16GA stainless steel (outer layer), 18GA stainless steel (inner layer)

SBX-NVP/A:1/8" rolled steel

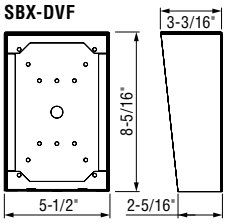
Mounting: SBX-ACE, SBX-DVF, SBX-AXDVF, SBX-DVF-P, SBX-IDVF, SBX-IDVFRA: surface mount directly to wall, 1-gang box, or 2-gang box with included hardware (8 x 32 with T-15 Torx head)

SBX-1G, SBX-2G/A, SBX-NVP/A: surface mount directly to wall or 1-gang box with included hardware (8 x 32 with T-15 Torx head)

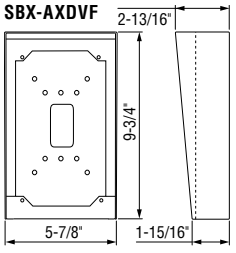
SBX-ACE



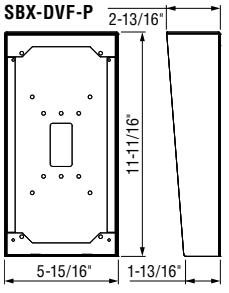
SBX-DVF



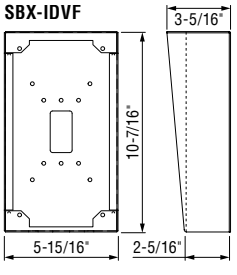
SBX-AXDVF



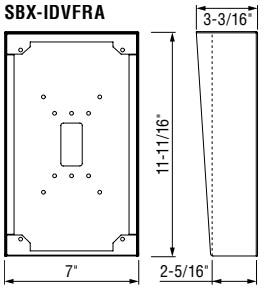
SBX-DVF-P



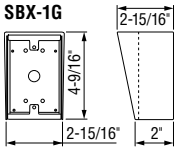
SBX-IDVF



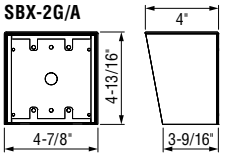
SBX-IDVFRA



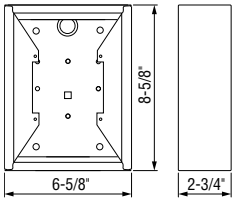
SBX-1G



SBX-2G/A



SBX-NVP/A



Accessories

Mounting Accessories (continued)

Angle Boxes

KAW-D
30˚ Angle Box for IF-DA, JO-DA, JP-DA, KB-DAR, or KB-DAR-M

SBX-AXDV30
30˚ Angle Box for AX-DV

SBX-DV30
30˚ Angle Box for JO-DV or JP-DV

SBX-IXDV30
30˚ Angle Box for IX-DV

Features (KAW-D)

- Provides a better viewing angle for the camera
- Compatible with Aiphone 1-gang surface mount door stations
- Angles 1-gang door stations outward by 30°
- Can mount to either right or left of door
- Hinged cover for mounting door station

Features (SBX-DV30, SBX-AXDV30, SBX-IXDV30)

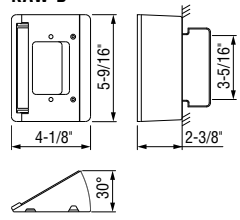
- Provides a better viewing angle for the camera
- Designed for angle mounting door stations outward by 30°
- Applicable for wide or double door entrances

Specifications

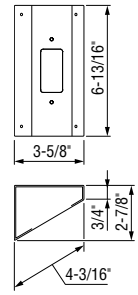
Material: KAW-D: ABS plastic
SBX-IXDV30: 16GA stainless steel
SBX-DV30, SBX-AXDV30, SBX-IXDV30: 18GA stainless steel

Mounting: Surface mount directly to wall or 1-gang box

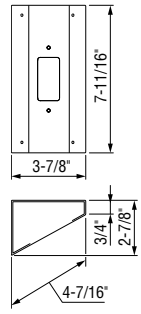
KAW-D



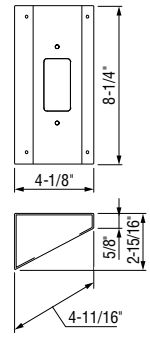
SBX-DV30



SBX-AXDV30



SBX-IXDV30



Mullion Mounting Brackets

IX-MB
Mullion Mounting Bracket for IX-DV

JK-MB
Mullion Mounting Bracket for JO-DV or JP-DV

KMB-45
45˚ Mullion Mounting Bracket for C-D, GT-D, IF-DA, JO-DA, JP-DA, KB-DAR, KB-DAR-M, or LE-D

Features (IX-MB, JK-MB)

- Mounts compatible station to a door frame or mullion
- Designed to fit station precisely and conceals wiring inside
- Can mount to either right or left of door

Features (KMB-45)

- Compatible with Aiphone 1-gang surface mount door stations
- Mounts door stations to mullion with a 45° angle
- Can mount to either right or left of door
- Provides a better viewing angle for the camera

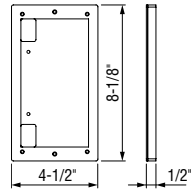
Specifications

Material: Aluminum

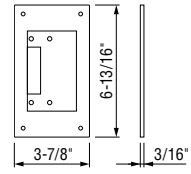
Mounting: IX-MB, JK-MB: surface mount directly to mullion or 1-gang box

KMB-45: surface mount directly to side of mullion

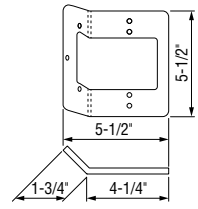
IX-MB



JK-MB



KMB-45



Mounting Accessories (continued)

Retrofit Mounting Bracket

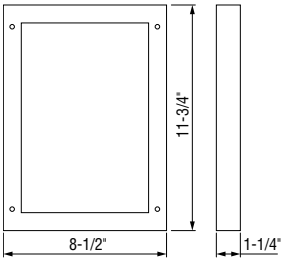
MB-RF1
Retrofit Mounting Bracket for IX-DVF-P, IX-DVF-2RA, IX-DVF-RA, IX-SSA-2RA, or IX-SSA-RA
(adapts station to an existing Code Blue® or Talk-A-Phone® tower or wall box)

Features
- Adapts IX Series emergency stations to existing Code Blue® or Talk-A-Phone® towers or wall boxes
- Powder-coated exterior

Specifications

Material	18GA CRS
Mounting	Surface mount directly to tower or wall box

MB-RF1

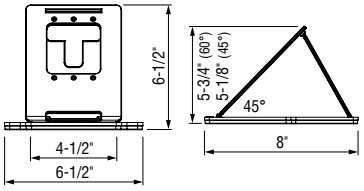


Desk Stand

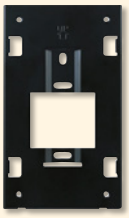
MCW-S/B
Desk Stand for AX-8M, AX-8MV, AX-8MV-W, DB-1MD, DB-1SD, GT-1A, GT-1C7, GT-1C7-L, GT-1M3, GT-2C, GT-2H, IXG-2C7, IXG-2C7-L, JO-1FD, JO-1MD, JO-1MDW, JP-4HD, JP-4MED, KB-3HRD, or KB-3MRD

Features
- Allows desk mounting of master and/or handset station
- Mounting hardware included
- Station is propped up for easier viewing
- Pre-drilled mounting holes
- Constructed with sturdy ABS plastic
- Adjustable to 45° or 60° angles

MCW-S/B



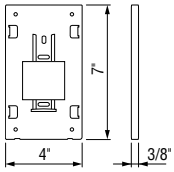
Mounting Plate



MKW-P
1-Gang Mounting Plate for JO-DV or JP-DV

Features
- Hardware included
- Adapts the JO-DV and JP-DV surface mount door stations to a standard 1-gang box or ring

MKW-P



Paging Accessories

Horn Speaker

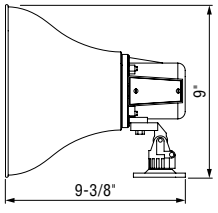
MH-15W
Multi-Tap Horn Speaker
- 8Ω direct tap
- Built-in transformer for 25/70/100V systems
- Lightweight aluminum
- Weatherproof and waterproof
- Indoor and outdoor use
- Universal mounting bracket

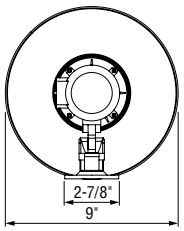
Features
- Robust, weatherproof paging horn speaker for indoor and outdoor use
- All-metal construction
- Wide frequency response
- External adjustable power taps
- Suitable for demanding environments and installations
- Can be used with intercom systems for two-way communication that require an 8Ω direct tap
- Mounts directly to a flat surface and can be adjusted to the desired angle

Specifications

Power Capacity	15W max.
Impedance	5.0K, 2.5K, 1.3K, 670, 330, 90, 8Ω
Sensitivity	120dB (measured at 1 meter on axis with 15W input)
Frequency Response	375Hz – 14kHz
Materials	Body: spun aluminum Driver Housing: die-cast aluminum

MH-15W





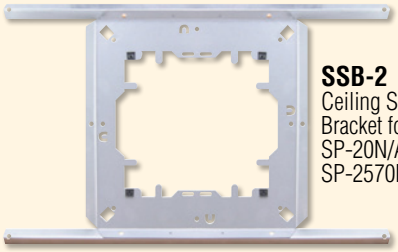
Paging Accessories (continued)

Indoor Ceiling Speakers & Support Bracket

SP-20N/A
Ceiling Speaker
Sub Station
(requires NP-25V)
- 8Ω with 20Ω transformer
- Indoor use
- Flush mount

SP-2570N
Ceiling Speaker
- 8Ω, 25/70V, 5W
- Indoor use
- Flush mount

NP-25V
33µF, 25V Non-Polarized Capacitor



SSB-2
Ceiling Support Bracket for SP-20N/A or SP-2570N

Features
(SP-20N/A, SP-2570N)
- Can be used with any Aiphone system that has paging ability (see specifications for requirements)
- Ceiling flush mount
- 8" dual cone speaker with 12-7/8" white baffle
- Excellent sound and voice reproduction
- Easy installation in a drop tile ceiling using the SSB-2

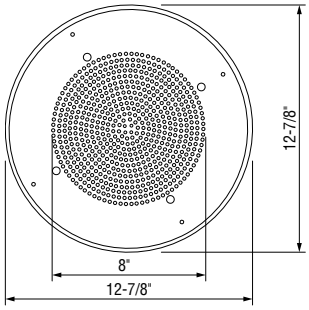
Features
(additional for SP-20N/A)
- Provides two-way communication with the LEF and LEM Series intercoms

Features (SSB-2)
- Optional ceiling support bracket for installations in drop tile ceilings

Specifications

Power Capacity	8W RMS
Impedance	SP-20N/A: 20Ω direct SP-2570N: 8Ω direct or 25/70V transformer
Frequency Response	65Hz – 17kHz
Wattage Taps	SP-20N/A: N/A SP-2570N (25V): 0.325W, 0.625W, 1.25W, 2.5W, and 5W SP-2570N (70V): 0.312W, 0.625W, 1.25W, 2.5W, and 5W

SP-20N/A, SP-2570N



Paging Amplifiers

MD35M
35W Paging Amplifier

MD60M
60W Paging Amplifier

MD120M
120W Paging Amplifier

Features
- Can be used with any Aiphone system with paging ability (see specifications for requirements)
- 3 channel inputs
- Wide frequency response with very low distortion
- Balanced microphone input
- Phantom power on MIC input with selector
- Balanced telephone paging input
- VoIP telephone paging input
- Tel and mic VOX sensitivity control
- Auxiliary input with stereo summing
- Auxiliary input gain
- Independent input controls (bass and treble)
- Direct muting or unmuting
- 12V accessory power output
- 600Ω or 10K (VoIP) MOH output with separate output level control
- 8Ω, 25V, and 70V output impedance
- Rack mounting with optional kits

Specifications

Power Source	120V AC, 50-60Hz
Output	35/60/120W RMS
Input	Microphone: 250Ω balanced Telephone: 600Ω balanced Auxiliary: 47kΩ VoIP: 50kΩ unbalanced
Distortion	Less than 0.5% THD
Frequency Response	20Hz – 20kHz ± 2dB
Dimensions (H x W x D)	1-3/4" x 8-1/2" x 12-1/2" 44.5mm x 215.9mm x 317.5mm

Paging Adaptor

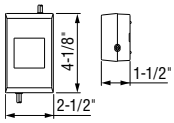
BA-1
Paging Adaptor for LEF Series or LEM Series

Features
- Can be used with LEF Series or LEM Series
- Provides outgoing paging to external speakers
- Takes the place of a separate microphone for paging where there is an intercom

Specifications

Power Source	Supplied by Master Station
Input	20Ω
Output	10kΩ
Output to Adaptor	0dB and -20dB, selectable
Requirements	AUX input (10kΩ) or 100mV for rated output
Wire Type	2-cond., overall shield—use Aiphone #822202

BA-1



Relay & Adaptor Accessories

External Signaling Relays

RY-AC/A
External Signaling Relay for C-123L/A Set, C-123LW Set, IE-8 Series, LEF Series, LEM Series, LEM-1DL Series, or TD-H Series
(requires DAK-2S when used with C-123L/A Set, C-123LW Set, LEM Series, or LEM-1DL Series)

RY-ES
External Signaling Relay for AX Series, DB Series, JF Series, JO Series, JP Series, KB Series, or NIM Series

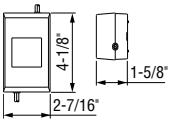
Features (RY-AC/A)
- Allows an external device to be triggered when the intercom is called
- External device will be activated momentarily as long as the call button on the door station is activated

Features (RY-ES)
- Allows an external device to be triggered when the intercom is called
- External device will be activated when the door station calls in

Specifications

Power Source	RY-AC/A: 12V DC—supplied by Master Station RY-ES: 12–24V DC, 12–16V AC—supplied by Master Station
Contact Rating	RY-AC/A: 240V AC, 0.3A, 24V DC, 1A (bell, buzzer, chime, etc., must be AC operated or DC mechanical type only) RY-ES: 125V AC, 1.0A 30V DC, 1.0A

RY-AC/A, RY-ES



Dual Master Adaptor Kit

DAK-2S
Dual Master Adaptor Kit for C-123L/A and LEM-1DL Systems

Features
- Allows second master station to be used in C-123L/A and LEM-1DL systems
- Allows RY-AC/A to be used for external signaling in C-123L/A and LEM-1DL systems
- Two component modules per kit
- Included with the C-123LW set and C-ML/A master station

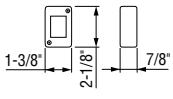
Surge Arrestor Accessory

Surge Arrestor

SA-1
Surge Arrestor for C-123L/A Set, CCS-1A Set, GT Series, IE-8 Series, KB Series, LEF Series, LEM Series, MC Series, or Power Supplies

Features
- A surge arrestor designed to protect Aiphone intercom systems from damage due to power surges and lightning strikes
- Can be used to protect power inputs to all Aiphone DC powered systems and intercom circuits by dispersing surges on the station wires
- Each SA-1 will protect two intercom station wires and discharge up to 180V of surge voltage

SA-1



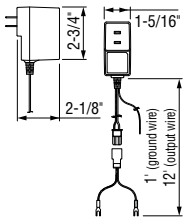
Power Supplies & Transformers

Power Supplies

SKK-620C Ⓤ
6V DC, 200mA Power Supply for AT-406 Series, C-123L/A Set, C-123LW Set, or LEM Series

Specifications (SKK-620C)
Cord Length 12'
Ground Wire Length 1'
Input 120V AC, 60Hz
Output 6V DC, 200mA

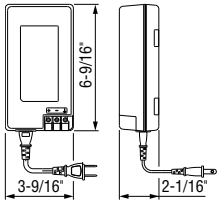
SKK-620C



PS-1225UL Ⓤ
12V DC, 2.5A Power Supply for LEF Series with All Call or TD-H Series
(required for the LEF Series if using BG-10C, otherwise use PS-1208UL)

Specifications (PS-1225UL, PS-1208UL)
Cord Length 6'2"
Input 100–240V AC, 50/60Hz
Output PS-1225UL: 12V DC, 2.5A
PS-1208UL: 12V DC, 800mA
Consumption 37W, 65–82VA

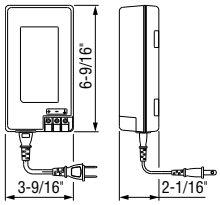
PS-1225UL, PS-1208UL



PS-1208UL Ⓤ
12V DC, 800mA Power Supply for LEF Series without All Call

Specifications (PS-1820UL)
Cord Length 6'2"
Input 100–240V AC, 50/60Hz
Output 18V DC, 2A
Consumption 45W, 75–95VA

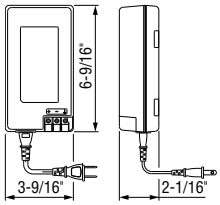
PS-1820UL



PS-1820UL Ⓤ
18V DC, 2A Power Supply for JF Series or JO Series

Specifications (PS-2420UL)
Cord Length 6'2"
Input 100–240V AC, 50/60Hz
Output 24V DC, 2A
Consumption 60W, 100–125VA

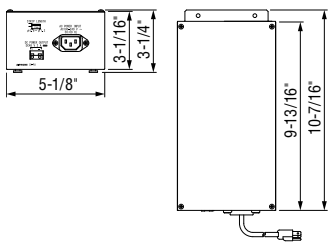
PS-2420UL



PS-2420UL Ⓤ
24V DC, 2A Power Supply for AX Series, GT Series, IM Series, IX Series, JP Series, KB Series, MC Series, NHX Series, or the Beacon/Strobe Light for Emergency Wall Boxes and Towers

Specifications (IS-PU-UL)
Cord Length 5'10"
Input 100–240V AC, 50/60Hz
Output 48V DC, 2.1A
Consumption 120W

IS-PU-UL



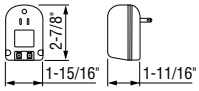
IS-PU-UL Ⓤ
48V DC, 2A Power Supply for NIM Series

Transformers

PT-1210NA
12V AC Transformer for CCS-1A Set, EL-12S, IE-8 Series, or LEM-1DL Series

Specifications (PT-1210NA)
Input 120V AC, 60Hz
Output 12V AC, 10VA, 830mA
Consumption 15W

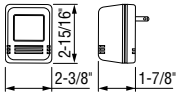
PT-1210NA



PT-1211CA
15V AC Transformer for DA-1DS, DA-4DS, or DB Series

Specifications (PT-1211CA)
Input 120V AC, 60Hz
Output 15V AC, 10VA, 700mA
Consumption 10.5W

PT-1211CA



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Technology Partners

All Connections Matter

By partnering with key brands for various integration needs, we are opening more opportunities for you.

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AIPHONE WIRE BY STOCK NUMBER

STOCK #	LENGTH	AWG	DESCRIPTION	INSULATION	CAPACITANCE	DC RES/1000
81221650C	500'	22	16-conductor, non-shielded	PVC	23.60 pf/ft	17.50 ohm
82180210C	1,000'	18	2-conductor, overall shield	PVC	47.00 pf/ft	6.92 ohm
82180310C	1,000'	18	3-conductor, overall shield	PVC	47.00 pf/ft	6.92 ohm
82220250C	500'	22	2-conductor, overall shield	PVC	44.65 pf/ft	17.50 ohm
82220210C	1,000'	22	2-conductor, overall shield	PVC	44.65 pf/ft	17.50 ohm
82220350C	500'	22	3-conductor, overall shield	PVC	44.62 pf/ft	17.50 ohm
82220650C	500'	22	6-conductor, overall shield	PVC	44.65 pf/ft	17.50 ohm
82221050C	500'	22	10-conductor, overall shield	PVC	44.65 pf/ft	17.50 ohm
82221250C	500'	22	12-conductor, overall shield	PVC	44.65 pf/ft	17.50 ohm
82221550C	500'	22	15-conductor, overall shield	PVC	44.65 pf/ft	17.50 ohm
82222050C	500'	22	20-conductor, overall shield	PVC	44.65 pf/ft	17.50 ohm
85160210C	1,000'	16	2-conductor, low cap, PE, solid, non-shielded	PE	12.50 pf/ft	4.02 ohm
851602DBW10C	1,000'	16	2-conductor, low cap, PE, solid, non-shielded, direct burial	PE	12.50 pf/ft	4.16 ohm
85220710C	1,000'	22	7-conductor, low cap, PE, non-shielded	PE	16.50 pf/ft	17.50 ohm
86220810C	1,000'	22	4 twisted pair, low cap, PE, overall shield	PE	15.28 pf/ft	10.15 ohm
86221025C	250'	22	5 twisted pair, low cap, PE, overall shield	PE	15.28 pf/ft	10.15 ohm
87180250C	500'	18	2-conductor, low cap, PE, solid, non-shielded	PE	11.05 pf/ft	6.39 ohm
87180210C	1,000'	18	2-conductor, low cap, PE, solid, non-shielded	PE	11.05 pf/ft	6.39 ohm
871802P10C	1,000'	18	2-conductor, low cap, PVC, solid, non-shielded, plenum rated	FEP	13.00 pf/ft	6.52 ohm
87180450C	500'	18	4-conductor, low cap, PE, solid, non-shielded	PE	13.60 pf/ft	6.39 ohm
871804P50C	500'	18	4-conductor, low cap, PE, solid, non-shielded, plenum rated	FEP	23.60 pf/ft	6.80 ohm
87200250C	500'	20	2-conductor, mid cap, PE, solid, non-shielded	PE	20.96 pf/ft	10.15 ohm
87200210C	1,000'	20	2-conductor, mid cap, PE, solid, non-shielded	PE	20.96 pf/ft	10.15 ohm
872002P10C	1,000'	20	2-conductor, mid cap, PE, solid, non-shielded, plenum rated	FEP	18 pf/ft	10.15 ohm

WIRE NUMBER CODING

1st digit: **8** = Aiphone approved wire

2nd digit: Type of wire → **1** = non-shielded **5** = low capacitance
2 = shielded **6** = twisted pair/shielded
3 = twisted pair **7** = solid PE, low/mid capacitance

3rd & 4th digits: Gauge → **22** = 22 AWG **20** = 20 AWG **18** = 18 AWG **16** = 16 AWG

5th & 6th digits: Number of-conductors → **02** = 2-conductors **12** = 12-conductors

7th & 8th digits: Length of wire → **10** = 1,000' box **50** = 500' box **25** = 250' box

9th digit: "C" indicates new wire

DB = Direct Burial

P = Plenum

WIRE NUMBER CODING EXAMPLE

1st: Aiphone Approved	2nd: TYPE - Shielded	3rd & 4th: GAUGE - 22 AWG	5th & 6th: CONDUCTORS 02=2 Conductors	7th & 8th: WIRE LENGTH 10=1,000' Box	9th: "C" is New Wire
8	2	22	02	10	C

WIRE INFORMATION

All wire is stranded unless otherwise indicated.

Non-plenum wires have a gray jacket. Plenum wires have a natural jacket.

All wire meets the following standards: UL, C(UL), UL 444, CA Fire Marshal

Contact Aiphone for current pricing.

Using Aiphone wire extends your product warranty by one year.

Ask about our wide range of products for remote and unique applications.

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