NET5501-XT
VIDEO ENCODER
Installation/Operation Manual

C5652M-B (05/15)

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Overview

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the points where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases shall be placed on the apparatus.
16. **WARNING** : To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
17. Installation should be done only by qualified personnel and conform to all local codes.
18. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
19. Use only installation methods and materials capable of supporting four times the maximum specified load.
20. A readily accessible disconnect device shall be incorporated in the building installation wiring.
21. The socket-outlet shall be installed near the equipment and shall be easily accessible.
22. A CCC approved power cord must be used to power this equipment when used in China.

CAUTION

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

WARNING : This product is sensitive to Electrostatic Discharge (ESD). To avoid ESD damage to this product, use ESD safe practices during installation. Before touching, adjusting or handling this product, correctly attach an ESD wrist strap to your wrist and appropriately discharge your body and tools. For more information about ESD control and safe handling practices of electronics, please refer to ANSI/ESD S20.20-1999 or contact the Electrostatic Discharge Association (www.esda.org).

Overview

IMPORTANT NOTICES

REGULATORY NOTICES

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RADIO AND TELEVISION INTERFERENCE

This equipment has been tested and found to comply with the limits of a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes and Modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

CAN ICES-3(A)/NMB-3(A)

LEGAL NOTICE [Audio Notice]

SOME PELCO EQUIPMENT CONTAINS, AND THE SOFTWARE ENABLES, AUDIO/VISUAL AND RECORDING CAPABILITIES, THE IMPROPER USE OF WHICH MAY SUBJECT YOU TO CIVIL AND CRIMINAL PENALTIES. APPLICABLE LAWS REGARDING THE USE OF SUCH CAPABILITIES VARY BETWEEN JURISDICTIONS AND MAY REQUIRE, AMONG OTHER THINGS, EXPRESS WRITTEN CONSENT FROM RECORDED SUBJECTS. YOU ARE SOLELY RESPONSIBLE FOR INSURING STRICT COMPLIANCE WITH SUCH LAWS AND FOR STRICT ADHERENCE TO ANY/ALL RIGHTS OF PRIVACY AND PERSONALTY. USE OF THIS EQUIPMENT AND/OR SOFTWARE FOR ILLEGAL SURVEILLANCE OR MONITORING SHALL BE DEEMED UNAUTHORIZED USE IN VIOLATION OF THE END USER SOFTWARE AGREEMENT AND RESULT IN THE IMMEDIATE TERMINATION OF YOUR LICENSE RIGHTS THEREUNDER.

VIDEO QUALITY CAUTION

FRAME RATE NOTICE REGARDING USER SELECTED OPTIONS

Pelco systems are capable of providing high quality video for both live viewing and playback. However, the systems can be used in lower quality modes, which can degrade picture quality, to allow for a slower rate of data transfer and to reduce the amount of video data stored. The picture quality can be degraded by either lowering the resolution, reducing the picture rate, or both. A picture degraded by having a reduced resolution may result in an image that is less clear or even indiscernible. A picture degraded by reducing the picture rate has fewer frames per second, which can result in images that appear to jump or move more quickly than normal during playback. Lower frame rates may result in a key event not being recorded by the system.

Judgment as to the suitability of the products for users' purposes is solely the users' responsibility. Users shall determine the suitability of the products for their own intended application, picture rate and picture quality. In the event users intend to use the video for evidentiary purposes in a judicial proceeding or otherwise, users should consult with their attorney regarding any particular requirements for such use.

OPEN SOURCE SOFTWARE

This product includes certain open source or other software originated from third parties that is subject to the GNU General Public License (GPL), GNU Library/Lesser General Public License (LGPL) and different and/or additional copyright licenses, disclaimers, and notices.

The exact terms of GPL, LGPL, and some other licenses are provided to you with this product. Please refer to the exact terms of the GPL and LGPL at http://www.fsf.org (Free Software Foundation) or http://www.opensource.org (Open Source Initiative) regarding your rights under said license. You may obtain a complete corresponding machine-readable copy of the source code of such software under the GPL or LGPL by sending your request to digitalsupport@pelco.com; the subject line should read Source Code Request. You will then receive an email with a link for you to download the source code.

This offer is valid for a period of three (3) years from the date of the distribution of this product by Pelco.

CCC POWER CORD STATEMENT

Models shipped to China do not include power cords.

Note : A CCC approved power cord must be used to power the equipment when used in China.

Korean Class A EMC

이 기기는 업무용 (A급) 전자파 적합기기로서 판매자 또는 사용자는 이 점을 주의하시길 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

ESD WARNING

WARNING: This product is sensitive to Electrostatic Discharge (ESD). To avoid ESD damage to this product, use ESD safe practices during installation. Before touching, adjusting or handling this product, correctly attach an ESD wrist strap to your wrist and appropriately discharge your body and tools. For more information about ESD control and safe handling practices of electronics, please refer to ANSI/ESD S20.20-1999 or contact the Electrostatic Discharge Association (www.esda.org).

The equipment shall be installed in a restricted access location which is not accessible by user.
L'équipement doit être installé dans une zone d'accès restreint, non accessible par l'utilisateur.

Warranty

For information about Pelco's product warranty and thereto related information, refer to www.pelco.com/warranty.

Overview

NETWORK TOPOLOGY STATEMENT

IMPORTANT NOTE. PLEASE READ. The network implementation is shown as a general representation only and is not intended to show a detailed network topology. Your actual network will differ, requiring changes or perhaps additional network equipment to accommodate the system as illustrated. Please contact your local Pelco representative to discuss your specific requirements.

LEGAL NOTICE (AUDIO NOTICE)

! Improper use of audio/visual recording equipment may subject you to civil and criminal penalties. Applicable laws regarding the use of such capabilities vary between jurisdictions and may require, among other things, express written consent from the recorded subjects. You are solely responsible for insuring strict compliance with such laws and for strict adherence to any/all right of privacy and personalty.

INTRODUCTION

The NET5501-XT Series video encoder is a network-based channel encoder with a built-in, Web-based viewer for live streaming to a standard Web browser (Microsoft® Internet Explorer®, Chrome®, Safari® or Mozilla® Firefox®). The encoder is built upon open standards and is part of an Endura® system for recording, managing, administering, and viewing video streams.

The encoder supports H.264 and MJPEG compression. It can generate two independently configurable H.264 streams, each up to D1 resolution (720 x 480 for NTSC, 720 x 576 for PAL) and 30/25 images per second (ips) in addition to an MJPEG stream for Web viewing.

The NET5501-XT can be configured for one alarm input for one video channel. When an alarm event is triggered, the unit can send a message to an operator, and trigger a relay.

The unit also supports motion detection for one video channel. You can configure one motion zone, with its own independent sensitivity and threshold settings. When the NET5501-XT detects activity in any of these areas, it can trigger an alarm event.

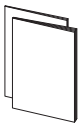
The video encoder supports one audio input for one video channel over the network. The system operator (security personnel) can see and hear activity in any target area in which a microphone is present.

The NET5501-XT supports control of remote peripherals such as pan/tilt/zoom (PTZ) cameras by way of D-Protocol, P-Protocol, and Coaxitron® protocols.

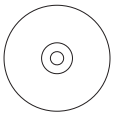
FEATURES

- Open standards-based architecture
- H.264 baseline, main, or high profile compression
- Dual-stream at up to D1, 30/25 images per second (ips) per stream
- Integrated audio, alarm, and relay outputs
- Integrated D-Protocol, P-Protocol, and Coaxitron protocols
- Support for multicast transmissions

PACKAGE CONTENTS



Installation Manual, Safety Instruction (2ea)



Resource Disc

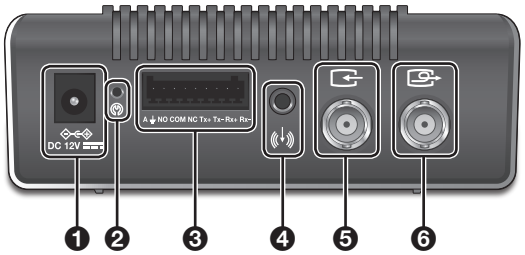
9-Pin Terminal Block (1 ea)

Anchor (4ea) for Wall Mount

Screw (4ea) for Wall Mount

Overview

FRONT PANEL DESCRIPTION

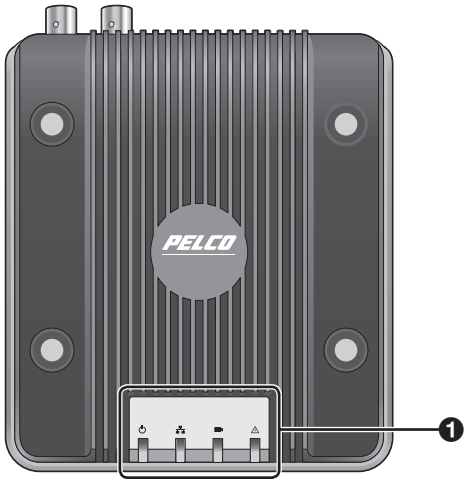


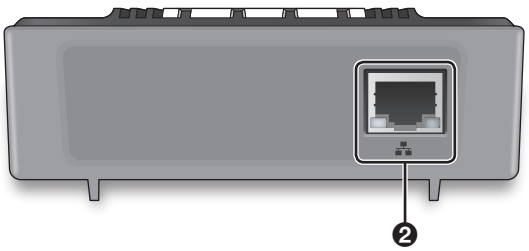
No.	Name	Description
❶	DC 12V	Power input socket. For connection of 12V adapter.
❷		Press this switch to reset device to the factory default. If you perform the factory reset, all your settings to device will be lost. For more information, please see Factory Default (Page 13).
❸	A	Alarm input sensor terminal
		Ground terminal.
	NO/NC	Relay control
	COM	Relay common
	TX+/TX-	RS-422/RS-485 Data line
	RX+/RX-	RS-422 RX Data line Disabled in RS-485 mode.
❹		Video Encoder. Audio input terminal for sound input. A microphone or other source of sound may be connected to this.
❺		Video input BNC terminal.
❻		Video output BNC terminal.

PTZ, Relay and Alarm Pin Assignments

Label	Lead	Label	Lead
A	Alarm	TX+	RS-422 Data TX+
	Ground	TX-	RS-422 Data TX-
NO	Relay Normally Open	RX+	RS-422 Data RX+
COM	Relay Common	RX-	RS-422 Data RX-
NC	Relay Normally Closed		

REAR PANEL DESCRIPTION

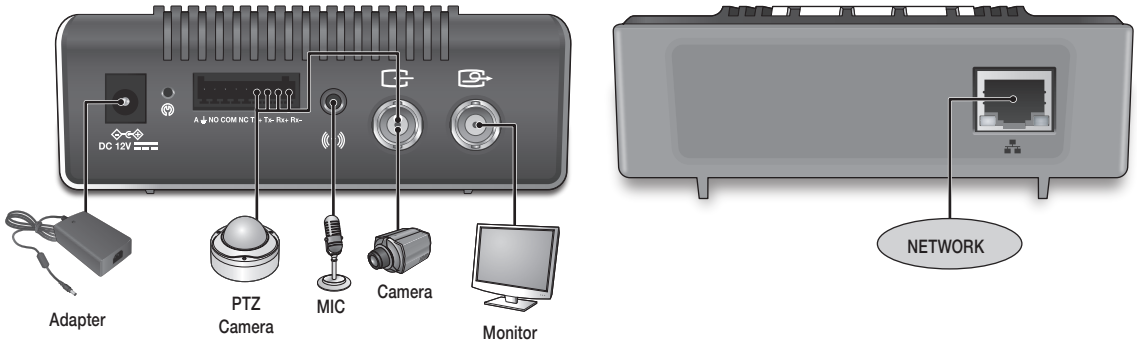




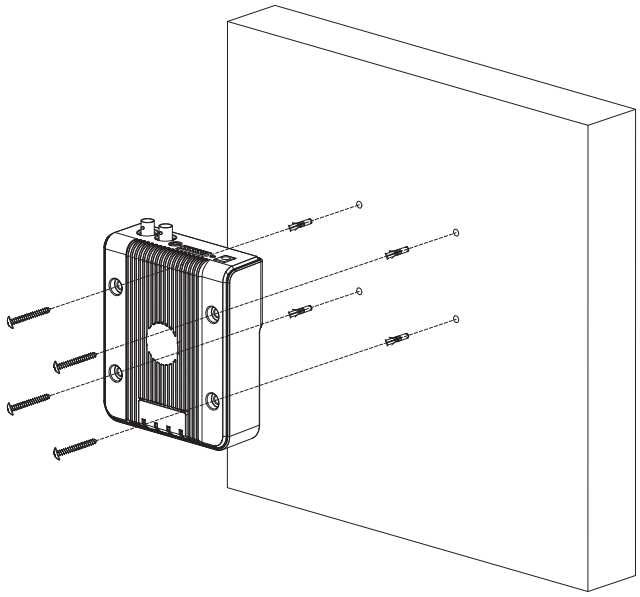
No.	Name	Description	
❶	Top Panel Indicators		Displays power On/Off status. It glows blue when the unit has power.
			Displays network status (connection and speed). **Off** : The unit is not connected to the network. **Solid amber** : The unit is connected to the network using the 100 Mbps standard. **Solid red** : The unit is connected to the network using the 10 Mbps standard. **Solid green** : The unit is connected to the network using the 1 Gbps standard. ✔ A blinking light indicates network activity corresponding to the speed based on the color.
			Displays camera connection status. **Not Lit** : A camera has not been connected yet. **Green** : Camera video is present at the video in connector. **Red** : Video is no longer present, the camera is not functioning properly.
			Displays unit status. **Green** : The unit is functioning normally. **Red** : The unit is in an error condition.
❷		LAN connection to a router or internal network.	

Installation

SYSTEM ORGANIZATION



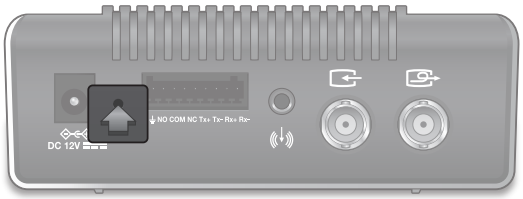
WALL MOUNTING



1. Use drill bit of 5 mm (0.20 in.) diameter and drill on the marked positions, drill to have 3 cm (1.18 in.) deep holes. Clean the holes after drilling.
2. Insert an anchor for each hole. Fully insert anchors by lightly hammering the anchor head with a hammer/rubber hammer.
3. Place the encoder on the desired wall and fasten screws through the 4 holes using a screwdriver.

   ! Use the provided screws when installing the bracket on the product. If you use any other screws, it may cause damage to the product.

FACTORY DEFAULT

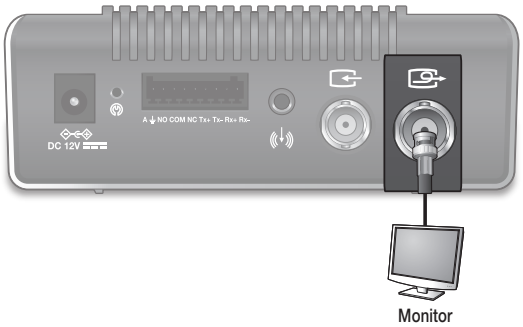


1. Press and hold the Reset switch with a pointed object such as a paper clip before powering on.
2. Power on.
3. Release the Reset switch when the power LED [ ] on the top panel is turned on. (about 8 seconds).
4. When the encoder reset is completed, the system will restart by the factory default.

CONNECTING TO AN EXTERNAL DEVICE

Connecting the Monitor

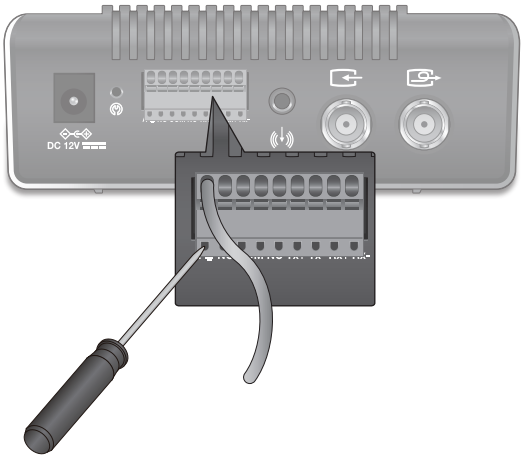
Connect the [ ] port of the encoder to the output port of the monitor. You can watch the video from the camera on the monitor.



Installation

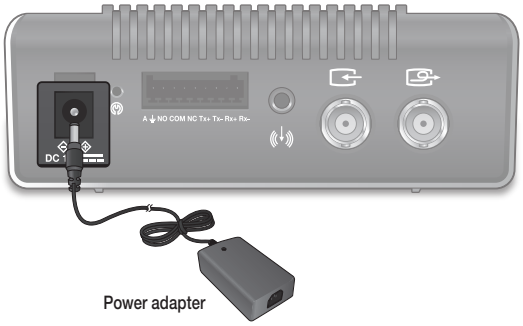
Connecting the terminal block

The terminal block has tension clamps instead of screw terminals. Use a small screwdriver to open the clamp for a particular lead.



Power Supply

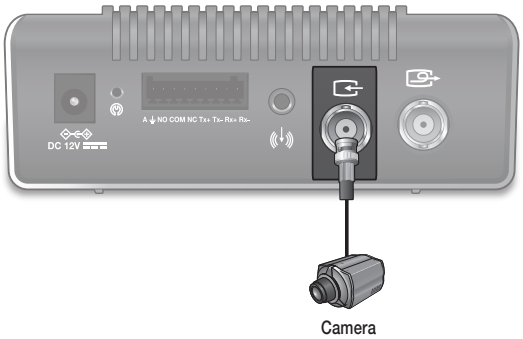
Connect the DC 12V power adapter to the encoder's power input terminal.



- For safety reasons, make the connection when the power is not applied yet.
- Arrange the cables and be careful not to peel off the cable coating.
- Do not put the power cable under a carpet or rug. The power cord is usually grounded. However, even if it's not grounded, never modify it on your own for grounding.
- Do not insert multiple devices in a single power socket. This may cause a power overload.

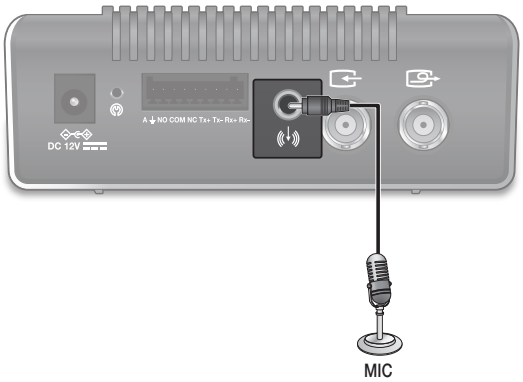
Connecting the Video

Connect the [ ] port of the encoder to the video output port of the camera.



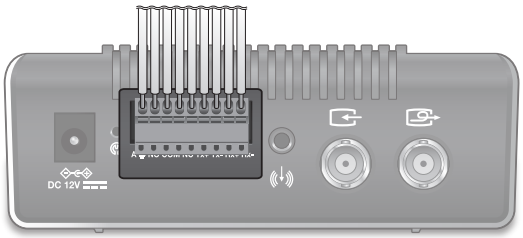
Connecting the Audio

Connect the audio input device such as microphone to the [ ] port.



Installation

Connecting the Relay Input/Output



Connecting the Relay Input

Connect the signal line of an relay input device such as sensor to the rear [**A**] port.

Connecting the Relay Output

Connect the signal line of an relay output device to the rear [**NO/COM/NC**] port.

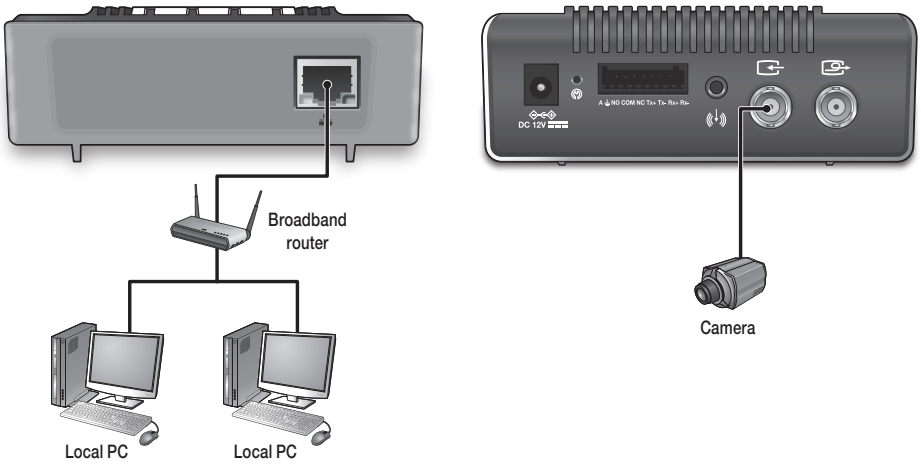
Connecting the RS-422/RS-485 Device

Connect the external device to the [**RS-422/RS-485 Data line**] ports.
You can connect and control PTZ camera that supports RS-422/RS-485 communication.

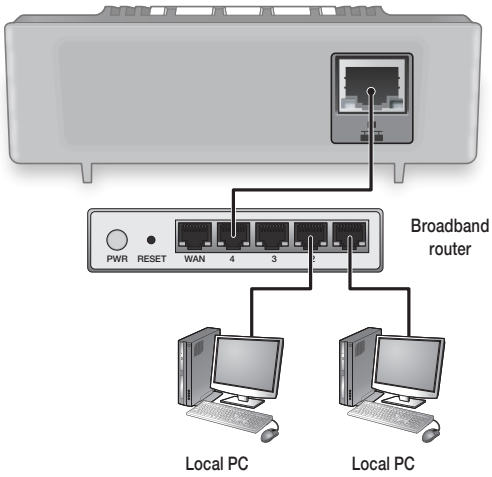
Network Connection

PC Connection in the Local Network

You can connect the encoder to a PC in the same network and control or manipulate it on the PC monitor.



1. Connect the network port in the rear panel to the router or hub.



2. Connect the local PC to the router or hub.

3. Enter the address in the address bar (web browser) of the local PC or of the dedicated software program in the format of "**http://IP address:web service port**".
(Ex : http://192.168.0.23:80) From the Network Setup screen, you can change the port number.

✔ If you do not know the camera's IP address, you can locate it using the Pelco Device Utility Software.

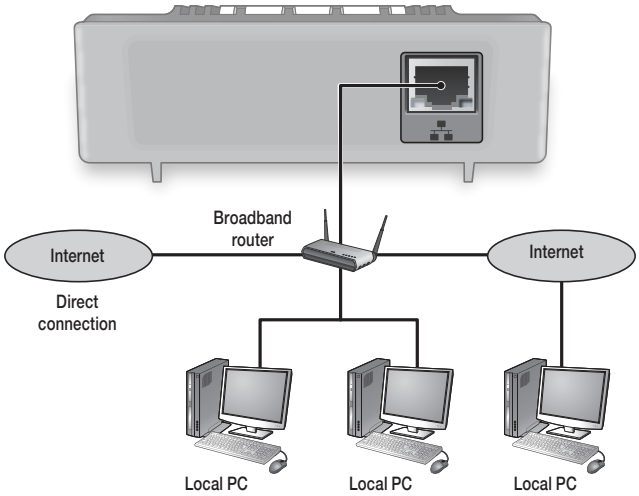
4. Provide the ID and password before logging in. Then, you can view the monitoring screen.
Access ID (factory default) : admin, P/W : admin.

! For security purposes, change the password right after you purchase the product.

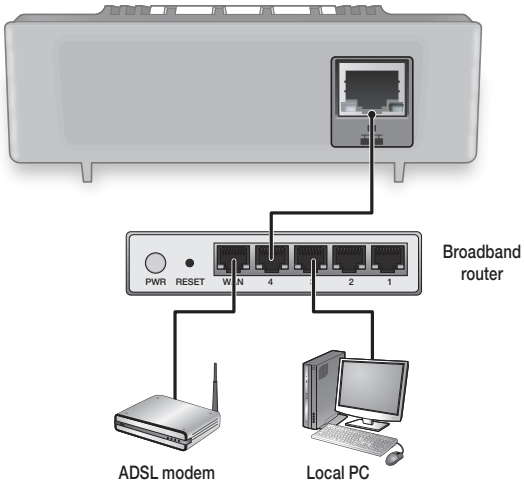
Installation

PC Connection From a Remote Network

You can connect the encoder to a PC or mobile device in the same remote network and control or manipulate it on the monitor of the PC or mobile device



1. Connect the network port in the rear panel to the router.



2. Connect the [**NETWORK**] port of the router directly to the fixed IP LAN cable, or connect it to the ADSL modem.

Web Viewer

WHAT IS THE WEB VIEWER?

Minimum PC Requirement

CPU	P4 3.0 or Higher
RAM	512MB or Higher
VGA	GeForce MS 400, Radeon 7500 or higher
	GeForce 8 series or higher
VGA MEMORY	64MB
MONITOR	1280 X 1024
BROWSER	Internet Explorer, Firefox, Chrome, Safari
IE VERSION	IE8.0 or higher
NETWORK	10/100 Bps

Accessing the Encoder and Attached Cameras

The first time you access the camera, the live video page appears. By default, you are viewing the video as a public user and only have access to the single stream live view.

If, for security purposes, users should not be allowed to view video without first logging on to the camera, change the permissions for public users.

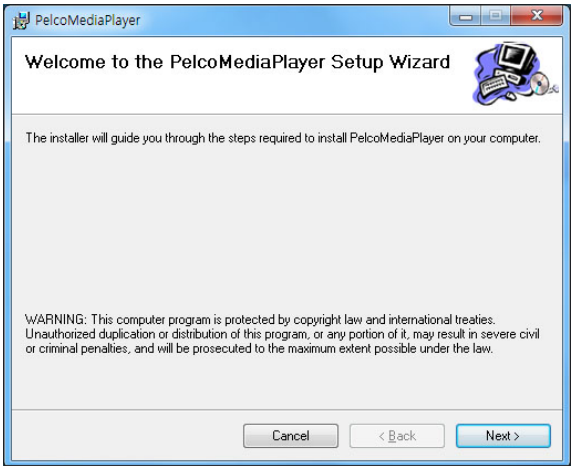
Web Viewer

Pelco Media Player Installation

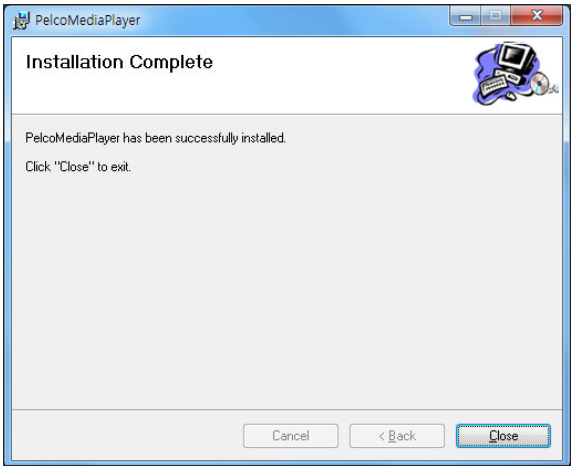
To view videos after accessing the Web viewer, the Pelco Media Player plug-in must be installed. Install Pelco Media Player from the CD included with the player.

✔ The Pelco Media Player 1.9.5 or higher is required for multiple channels.

1. Run InstallPelcoMediaPlayer.msi.
2. Click the [**Next>**] button to start installation.



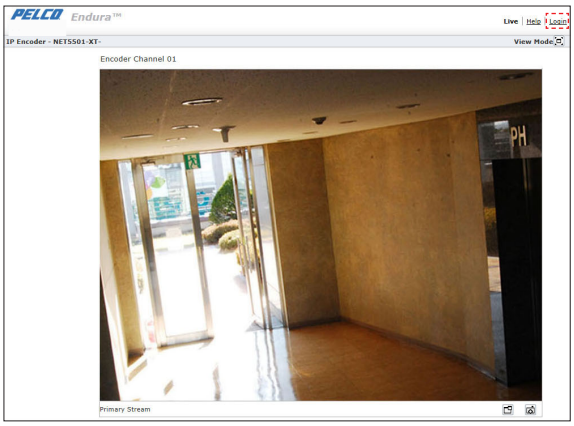
3. Click the [**Close**] button.
   Pelco Media Player Installation is complete.



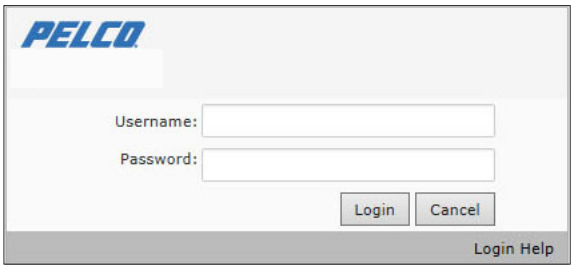
Logging In

Entering the IP address of the camera as a URL into the web browser will immediately bring up the Live Mode screen if the encoder is not setup to require authentication (Open Authentication option).
If the camera is setup to require authentication, then the user will be prompted for a Username and Password before being able to see the live video feed.

1. Click <**Login**> on the live screen.



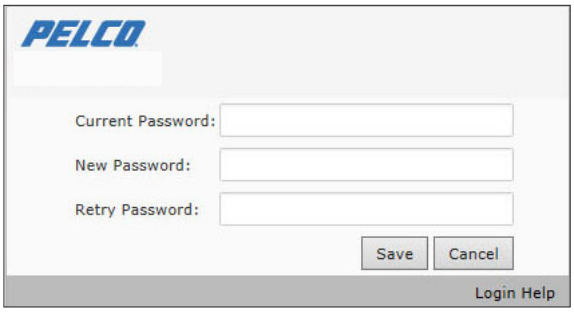
2. Enter your <**Username**> and <**Password**>.
   - ✔ Default username : admin, Password : admin
3. Click the <**Login**> button.
   - ✔ The Open Authentication option is configured on the Settings > Users > General Settings screen.



Change Your Password

Please change the password for your security.

1. Click <**admin**> from the live screen.
2. Enter your new password.
3. Click the <**Save**> button.



Web Viewer

LIVE

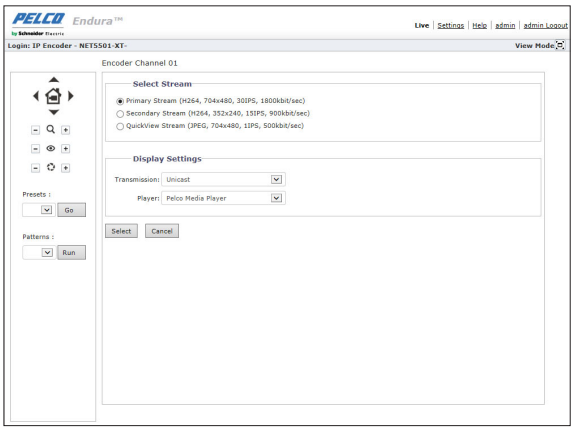
Live Screen Overview

Live Mode Screen Components

No.	Name	Description	
❶	Channel Name	Displays the name assigned to the channel selected.	
❷	Multi-Function Image Button	▲	Tilt Up
		▼	Tilt Down
		►	Pan Right
		◄	Pan Left
			Home Preset
❸	Control the Zoom	− 🔍 +	Activates Zoom in (-) / Zoom out (+) features.
❹	Control the Focus	− 👁 +	Activates Near (-) / Far (+) features.
❺	Control the Iris	− ◐ +	Adjusts the camera brightness.
❻	Move to Presets	Moves to the preset selected.	
❼	Pattern	Activates the pattern selected.	

No.	Name	Description
❽	Stream Selection	Selects the viewable video stream that displays in live view (Primary, Secondary, QuickView) and selects unicast or multicast and throttle settings. ✔ It will not be presented to users who are designated as Viewers.
❾	View the Selected Tab	Composed of Live, Settings, Help, and Logout settings menus.
❿	Maximize Viewing Area	Scales the image to the full size of the browser. To resize the video pane to normal view, click the Show Toolbar button in the upper-right corner of the window.
⓫	Take a Snapshot	Captures the image displayed in the video pane and saves it as a JPEG file.
⓬	Open Stream in New Window	Opens the video in a scalable, independent window. Opening the video in a separate window allows you to view the video while other applications are running. This window can be minimized, maximized, or closed using the title bar buttons of the active window. The window can also be resized by dragging a corner of the window.
⓭	Pan/Tilt/Zoom	Control the encoder and the pan (left/right) and tilt (up/down) of the connected camera by dragging the mouse. Also, zoom using the scroll wheel on the mouse. ✔ These icons are always available when using the Pelco Media Player. If you are using QuickTime®, PTZ overlay is only available with PMP player.

Selecting a Stream



1. Click < > from the live screen.
   Move to the Stream settings screen.

2. Select one of the following streams.
   - Primary STREAM : To select this stream, click the button next to Primary Stream.
   - Secondary STREAM : To select this stream, click the button next to Secondary Stream.
   - QuickView STREAM : To select this stream, click the button next to QuickView Stream.

     ✓ If the secondary stream has not been configured, only Primary Stream, and QuickView Stream are available.

3. Select the transmission.
   - Unicast : A unicast transmission sends a separate video stream to each user that is requesting data. Although multiple users might request the same data from the encoder at the same time, duplicate video streams are transmitted to each user. Every unicast user that connects to the encoder consumes additional processing power, which limits the number of simultaneous users who can access the camera.
   - Multicast : A multicast transmission sends data to multiple users at the same time using one transmission stream. Each multicast user that connects to the camera consumes no additional processing power; therefore, multicast video streams can be sent to an unlimited number of simultaneous users. The multicast transmission setting is available in the primary and secondary stream display settings.

4. Select the Player.

5. Click the <**Select**> button.

Web Viewer

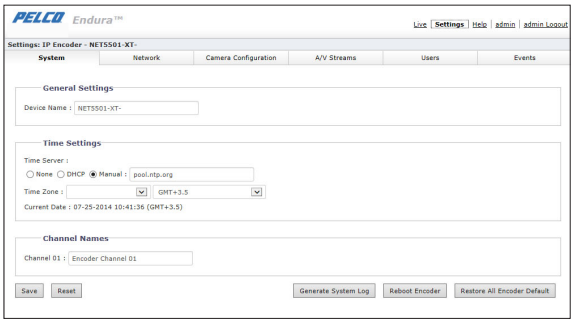
SYSTEM SETTING

General Settings

Modify the system default settings of the encoder.

General Settings

- Device Name : Set the name to use for the encoder.
  - ✓ The device name must be at least two (2) characters and no more than 63 characters.



Time Settings

- Time Server : Set the time to apply to the encoder.
  - None : Specify no time setting for the encoder.
  - DHCP : Specify the time from the DHCP server.
  - Manual : Select whether the encoder is to be set to the domain of the IP address or NTP server.
- Time Zone : Set the time zone relative to standard time (GMT).
- Current Date : Display the date and time set.

Channel Names

One input field for the channel on the encoder to allow specification of channel / camera name.

Generate System Log

It will create a system log file that can be used by Pelco Product Support for troubleshooting.
The System Log file will be automatically downloaded using the web browser.
The user will not be prompted for a file name. The downloaded file will be a tar compressed file with a file extension of .tgz.
The file name will be comprised of the characters "_log" appended to the encoder serial number.

Reboot Encoder

Restart the encoder.

Restore All Encoder Defaults

All settings will be restored to the factory default settings.

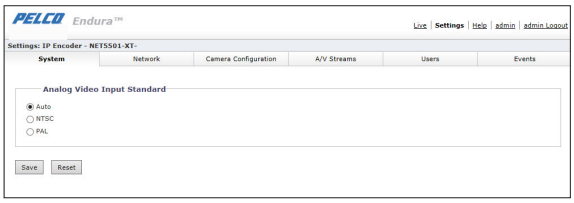
Analog Input

You can set the type of the encoder analog video output.

Analog Video Input Standard

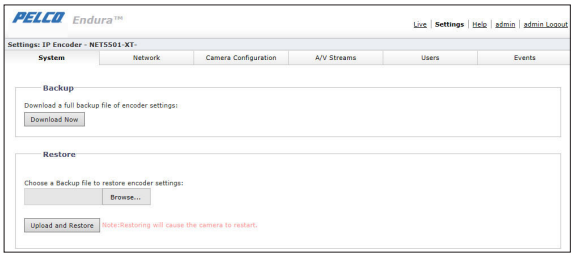
Set the video output type.

- Auto : Automatic conversion according to the video input type connected.
- NTSC : Select to force the video mode if the transfer method supports NTSC.
- PAL : Select to force the video mode if the transfer method supports PAL.



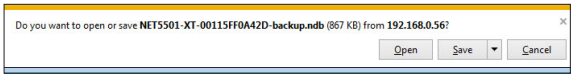
Backup & Restore

You can backup or restore settings. The system will restart automatically after backup or restoration.

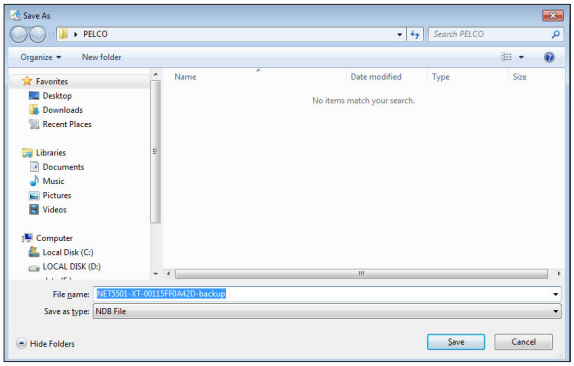


Backup Current Settings

1. Click the [**Download Now**] button.
   The File path setting window will appear.

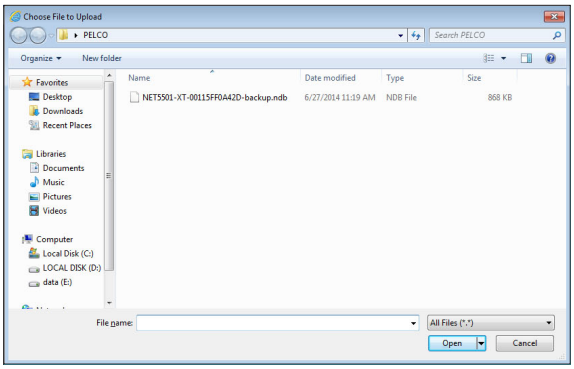


2. Select the backup path, enter a name, and then click the [**Save**] button.
   Information about the current settings will be saved in "**.ndb**" file format in the designated location.



Restore Backup Settings

1. Click the [**Browse...**] button to restore backup settings.
2. Select the desired backup file and click the [**Open**] button.
3. Click the [**Upload and Restore**] button.

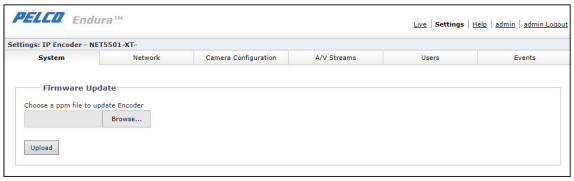


Information

Check the encoder's system information.

Firmware

You can upgrade the encoder's firmware.



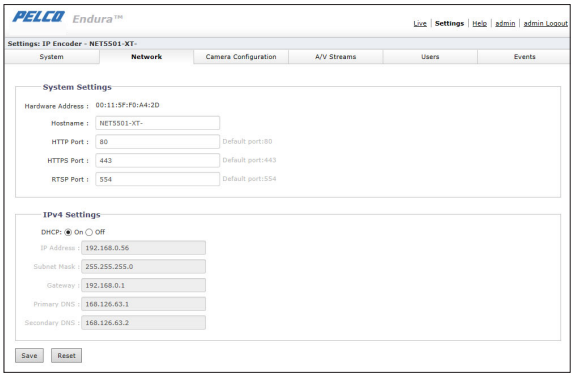
NETWORK SETTING

General

Modify the network default settings of the encoder.

System Settings

Set the system hostname and port.



- Hardware Address : Presents the MAC Address of the encoder device.
- Hostname : A user-friendly name into the Hostname box (1 to 21 characters) using alphanumeric characters should be specified.
  A user-friendly name makes it easier to recognize the device on the network. Numeric-only names are not allowed.
- HTTP Port : The HTTP port used to access the encoder from a web browser. Default value is 80 (TCP).
- HTTPS Port : Security enhanced version of the web communication protocol, HTTP.
  Used to set HTTPS mode in SSL; the default value is 443 (TCP).
- RTSP Port : Port number used to support remote connection to the encoder from the client software.

IPv4 Settings

Set the IPv4 of the encoder.

- IP Address : Displays the currently set IP address.
- Subnet Mask : Displays the IP address set for the <**Subnet Mask**>.
- Gateway : Displays the IP address set for the <**Gateway**>.
- Primary DNS/Secondary DNS : Sets a valid IP address for the DNS server.
  Settable when DHCP is not selected.

Web Viewer

SSL

You can either select the security access method for the encoder or install an accreditation certificate.

SSL Configuration

Select a security access method.

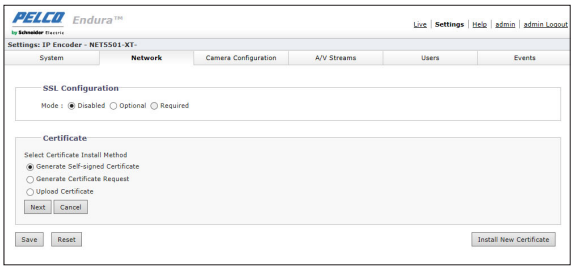
Certificate

Install an accreditation certificate.

To Install an Accreditation Certificate

1. Click <**Install New Certificate**>.
2. Select a certificate to install.
3. Click <**Next**>.
4. Select the accreditation certificate and key file to install.
5. Click the <**Generate Certificate**> button.

   ✔ To delete the accreditation certificate installed, select the certificate and click <**Delete Certificate**>.



SSH

The SSH settings page enables or disables SSH access to the camera. SSH is a user-enabled protocol that allows Pelco Product Support to log onto and service the camera for advanced troubleshooting purposes. From the SSH settings page, users with the appropriate permissions can enable or disable SSH access to the camera.

SSH Settings

Set SSH accessibility on the encoder.

- Username : This attribute has a fixed value of “root” and cannot be changed.
- Password : SSH Password must be between 4 and 64 characters.
- Re-type Password : Enter your password again.

802.1x

When connected to a network, select 802.1x protocol to install the certificate.

802.1x Port Security

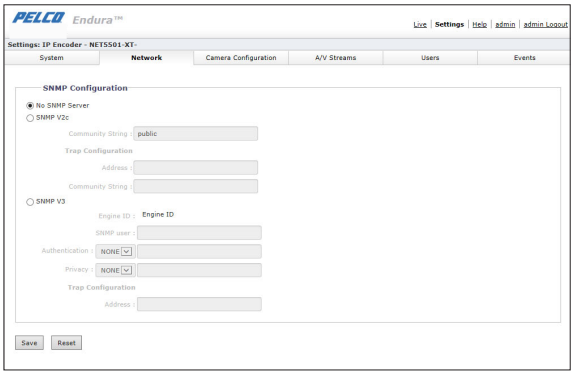
- Protocol : Specify the 802.1x protocol.
- Username : Enter the client certificate ID.
- Password : Enter the certificate key password. If the key file used is not encrypted, you don't need to enter it.

SNMP

The system or network manager can use the SNMP protocol to monitor network equipment or operate environment settings and other tasks remotely.

SNMP Configuration

- SNMP v2c : Use SNMP version 2.
- SNMP V3 : Use SNMP version 3.



Web Viewer

CAMERA CONFIGURATION

Choose number 1 to the number of channels on the encoder.

General

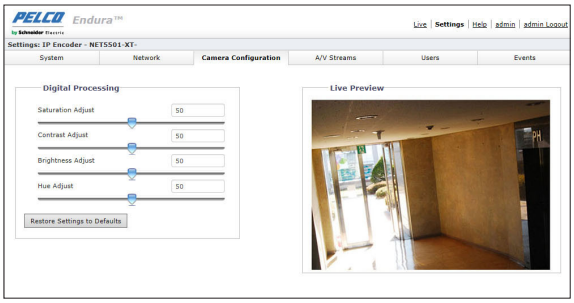
Setup the camera connected to the encoder.

Digital Processing

Adjust each camera channel video input.

- Saturation Adjust : Adjust video saturation.
- Contrast Adjust : Adjust video contrast.
- Brightness Adjust : Adjust video brightness.
- Hue Adjust : Adjust video tint.

  ✓ Click <**Restore Settings to Defaults**> to restore the factory settings.

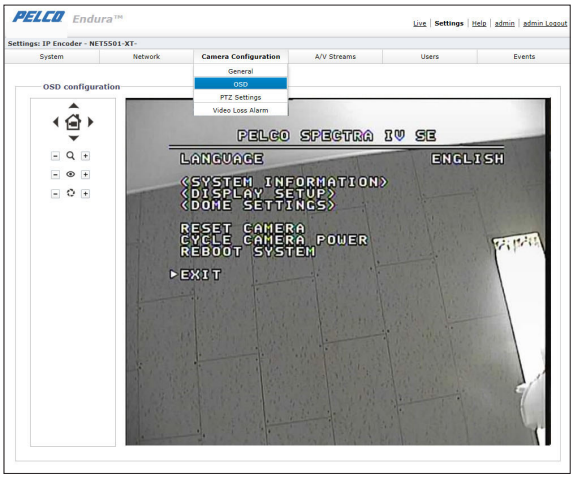


Live Preview

Check videos of the selected video channel.

OSD

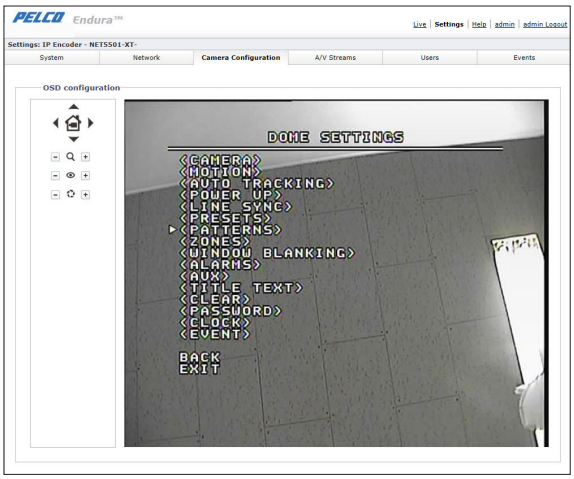
Use the arrow keys on your keyboard to navigate through the menus then press the Enter key to make your selection.



Configuration and operation for presets and patterns

Patterns and presets can be configured directly from the OSD for third-party cameras that support these features.

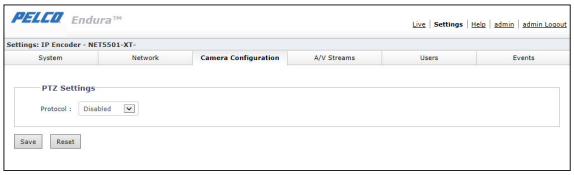
1. Access the OSD from the Settings page.
2. Using the arrow keys select Dome Settings, and then press the Enter key.
3. Using the arrow keys select Presets or Patterns, and then press the Enter key.
4. Proceed to program presets and patterns. Refer to the Installation/Operation manual for the appropriate Product from Camera Solutions.



PTZ Settings

Set up each camera's PTZ settings.

- Protocol : Select a supported PTZ protocol.
- Address : Enter the D or P protocol address of the connected PTZ.
- Baud Rate : Select the transfer speed of the connected PTZ.

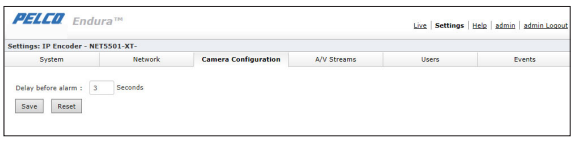


Video Loss Alarm

Set whether to activate the alarm if video is no longer present. The camera is not functioning properly.

Delay before alarm

Set the period of video loss, in seconds, that will trigger a video loss alarm.



Web Viewer

A/V STREAMS SETTING

Video Configuration

Set the video streaming of the channel connected to the encoder.

Select Preset

Select a preset for seamless streaming.

Primary Stream/Secondary Stream

Select <**Custom**> as preset to set up detailed settings

✔ Click <**Show All Configurations**> to check the current video streaming information.

Audio Configuration

Set the input value of the audio connected to the encoder.

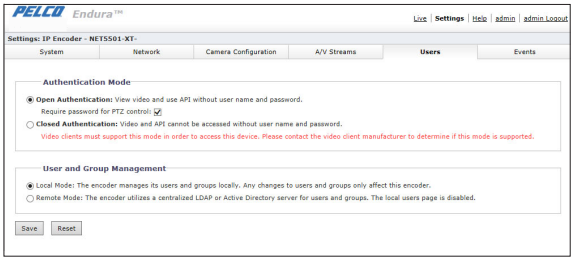
USER SETTING

General Settings

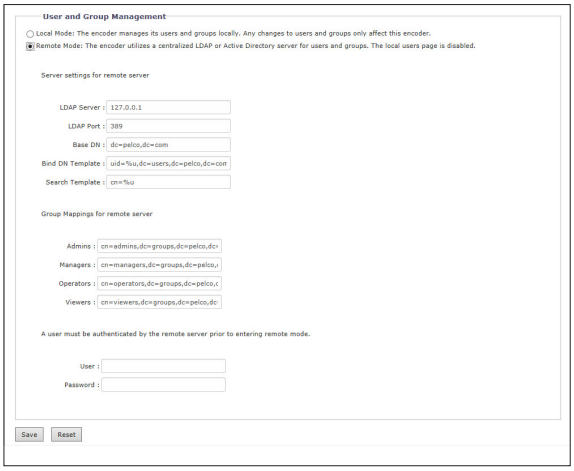
Set up user authentication mode and local/remote information.

Authentication Mode

Set public/private settings of the authentication mode.



User and Group Management



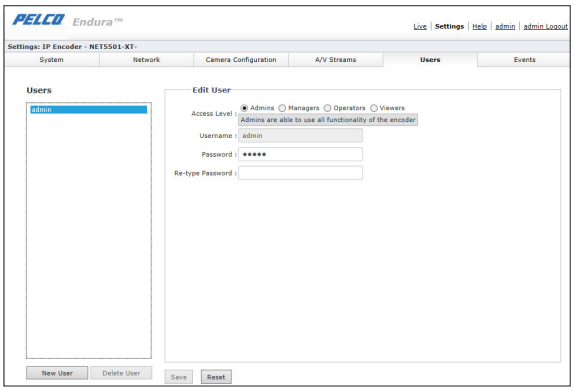
- Local Mode : The default setting is local mode. Any changes to users and groups affect only the camera that you are accessing.
- Remote Mode : Set remote mode for users connected through LDAP or the Active Directory server.
- LDAP Server : Specify the IP address or hostname of the LDAP server.
- LDAP Port : Specify the port over which the encoder will communicate with the LDAP server. The default port for LDAP Communications is 389.
- Base DN : Type the distinguished name (DN) that is the basis for LDAP searches.
- Bind DN Template : Provide the template to format the username (provided when the user logs on to the encoder) for searches in the LDAP .
- Search Template : Provide the LDAP search query for users found in the Base DN.
  The search must match an entry in the LDAP user record to the bind name (username).
- Admins : Remote server Group Mapping value to be used for Admin designated users.
- Managers : Remote server Group Mapping value to be used for Manager designated users.
- Operators : Remote server Group Mapping value to be used for Operator designated users.
- Viewers : Remote serer Group Mapping value to be used for Viewer designated users.
- User : Input the username credential of a user who can be authenticated through the LDAP server.
- Password : LDAP Server password.

Web Viewer

Users

Set up settings relating to user management and rights.

To Add a User Account



1. At the bottom left screen click the <**New User**> button.
2. Select <**New User**>.
   - Access Level : Set the rights for the account.
     - Admins : Permissions include access to all camera settings.
     - Managers : Permissions include access to all settings except this user cannot modify user permissions or restore factory default settings.
     - Operators : Permissions include view video, use PTZ functions, and use the API.
     - Viewers : Permissions include view video and use the API.
   - Username : Specify the user name.
   - Password : Specify the password.

To Change User Account Information

1. Select from the user list the username to be changed.
2. Modify the desired fields and click <**Save**>.

To Delete a User Account

1. Select from the user list the username to be deleted.
2. Click <**Delete User**>.

EVENTS SETTING

Alarm Source

Set the alarm input method, time of action and form of action.

Alarm Input Settings

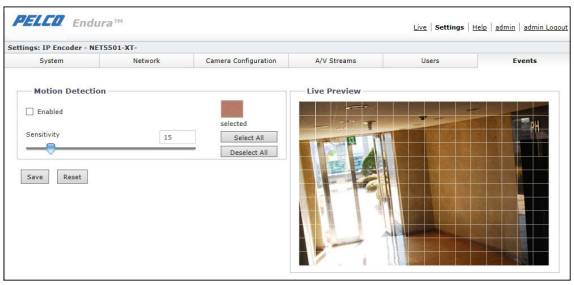
- Video Channel : Select the alarm, settings, and video channel.
- Polarity
  - Normal Open : The alarm sensor is in an open state by default and the alarm goes off when it becomes closed.
  - Normal Close : The alarm sensor is in a closed state by default and the alarm goes off when it becomes open.
- Supervised : Select either True or False from the Supervised drop-down menu.
- Dwell Time : Defines the amount of time that the alarm remains activated after having been triggered by a change of polarity.

Motion Detection

You can select the event signal to be given if a movement is detected.

To Set Motion Detection

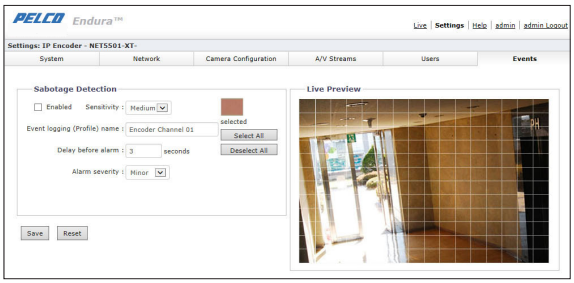
1. Select Video Channel and Sensitivity.
2. Drag the mouse over the Live Preview screen and set the motion detection area.
   - Select All : Select all areas.
   - Deselect All : Deselect all areas.



Web Viewer

Sabotage Detection

You can select the event signal to go off when tampering with a camera (covering the lens, change in camera position, etc.) is detected.



Relay Open/Close Handler

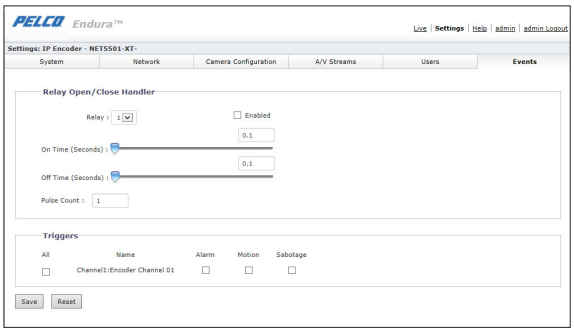
Set the relay alarm information.

Relay Open/Close Handler

Set the alarm output time.

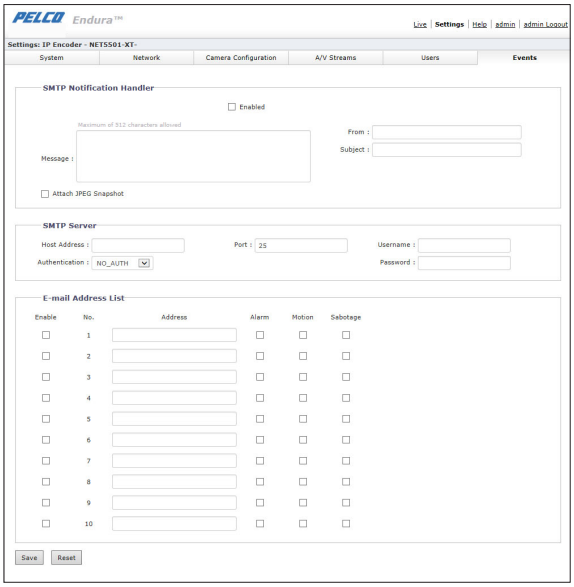
Triggers

Set alarm occurrence items for the channel.
Check the events that you want to set off the alarm.



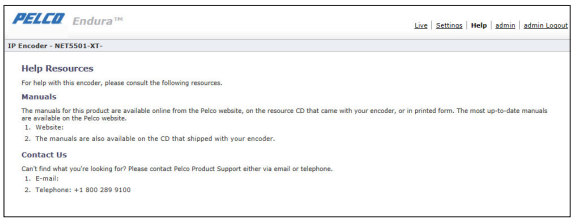
SMTP Notification Handler

A message will be sent to the e-mail address registered in the SMTP server when an alarm is set off.



HELP

Click the <**Help**> tab to check Web viewer information.



Appendix

PRODUCT SPECIFICATION

SUPPLIED ACCESSORIES		
Power Adapter	12V through auto-ranging DC(12V, 2.08A)	
Power Cord / AC PLUG	Based on country designation	
Terminal Block	9-pin terminal blocks x 1	
Rack Mount / Wall Mount		
Rubber Feet	-	
VIDEO / AUDIO		
Video Standards	NTSC / PAL	
Video Encoding	H.264, Main profile	
Video Resolutions		
Analog Cameras	NTSC	PAL
D1	720 x 480	720 x 576
4CIF	704 x 480	704 x 576
2CIF	704 x 240	704 x 288
CIF	352 x 240	352 x 288
Video Input	1 BNC video inputs	
Video Output	1 BNC looping video outputs	
Audio Input	1 channels	
Audio Format	Pulse code modulation (PCM)	
Sampling Resolution	8bit / u-Law	
Sampling Frequency	8kHz	
PTZ CONTROL		
Interface	Two RS-422/RS-485,video in	
Protocol	Pelco P and Pelco D	
ALARMS / RELAYS		
Alarms In	1	
Relays Out	1	
POWER		
Power Consumption		
Input Voltage	12 VDC	
Current	316 mA	
Power (Maximum ±5%)	3.792 W	

FRONT PANEL INDICATORS	
Video presence	**Not Lit** : A camera has not been connected yet **Green** : Camera video is present at the video in connector **Red** : Video is no longer present; the camera is not functioning properly
Network status	**Off** : The unit is not connected to the network **Solid amber** : The unit is connected to the network using the 100Mbps standard **Solid red** : The unit is connected to the network using the 10Mbps standard **Solid green** : The unit is connected to the network using the 1Gbps standard
Pelco badge(power)	The Pelco badge glows blue when the unit has power
Unit status	**Green** : The unit is functioning normally **Red** : The unit is in an error condition
ENVIRONMENTAL	
Operating Temperature	-20 to 74ºC
Operating Humidity	80% maximum relative humiduty, noncondensing
PHYSICAL	
Dimensions(mm)	122(W) x 139(D) x 44(H)
Unit Weight(Kg)	0.67

Appendix

TROUBLESHOOTING (FAQ)

Problem	Action
The product does not turn on in any way.	• Check the connection status of the power cable. • Check the power to the power socket.
No monitoring video is displayed at all.	• Check whether the video cable of the camera is connected properly. • Check the power of the camera. • Check the settings of the camera lens.
I failed to connect the PC to the Encoder.	• Check whether the LAN cable and the hub are connected properly to the Encoder. • If the network settings of the Encoder contain DHCP, check the change history of the DHCP server (router). • Use Device Utility or Endura Utilities to check if the network settings of the Encoder have changed in any way.
I cannot access the Encoder because I forgot the admin ID and the password.	• Reset the Encoder to the factory default as instructed on page 13 of the user manual. • When the reset is completed, the default access information is: ID:admin and Password:admin.
Access by the Web has failed.	• Check whether the network cable for Internet connection is properly connected to the LAN port of the product. • If the Encoder is connected to the router, use the IP address of the router.
I can access the Web but still no video image is displayed.	• This may happen when the communications provider or network administrator has blocked the service port of the Encoder. • Try to access the Web using the new port numbers.

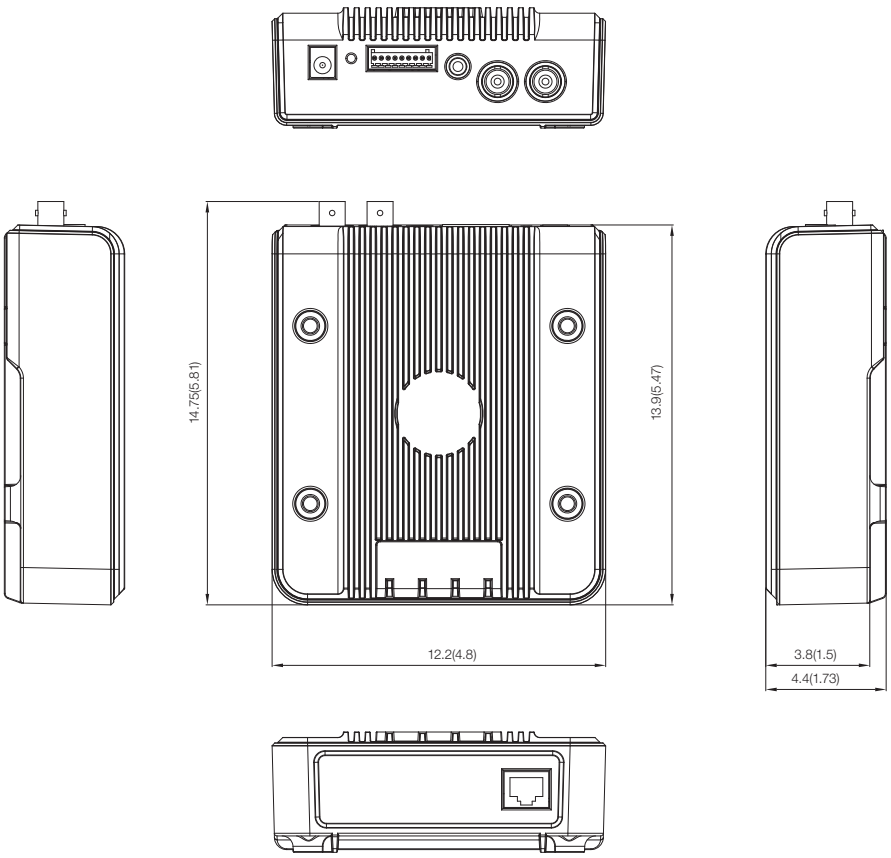
PELCO TROUBLESHOOTING CONTACT INFORMATION

If the instructions provided fail to solve your problem, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international) for assistance. Be sure to have the serial number available when calling.

Do not try to repair the unit yourself. Leave maintenance and repairs to qualified technical personnel only.

PRODUCT OVERVIEW

Unit : cm (inch)



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REVISION HISTORY

Manual #	Date	Comments
C5652M	07/14	Original version
C5652M-A	10/14	Changed power consumption values. Changed the model name(Network Video Encoders ➞ Video Encoder)
C5652M-B	05/15	Changed how to perform factory default.

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