



EN ENGLISH



GALEOW

Wiegand Illuminated Keypad

The installer's choice
cdvigroup.com

GALEOW

Illuminated keypad - Wiegand

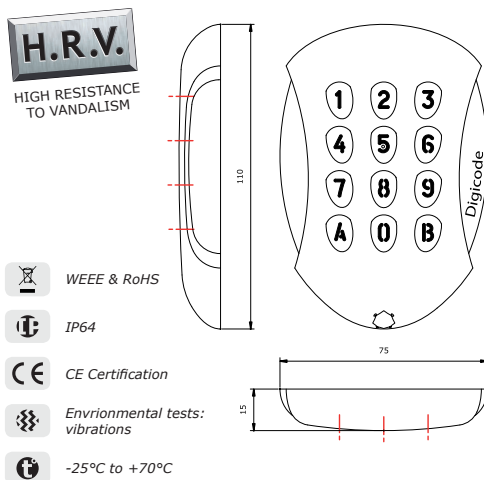
1] GENERAL INFORMATION

■ Output formats:

- Wiegand,
- Standard format,
- ISO Track 2 format.

■ Back-lighted.

- Rear switch on the GALEOW for entry to and exit from programming mode.
- Permanent E2PROM memory back-up.
- Number of digits: 4, 5 or 6.
- Operating voltage: 12 V DC.
- Consumption: 100 mA max.



2] NOTES AND RECOMMENDATIONS

Wiring reminder

- In the case of direct connection to the CTV900A (CENTAUR) central controller or AC22 (ATRIUM) door controllers, the GALEOW must be installed within a maximum distance of 50 m.
- In other cases, the distance between the GALEOW and the (INTBUSW) door controller must be within a maximum of 50 m and the distance between the central controller or panel and the last (INTBUSW) door controller may be up to 1200 m maximum.
- Take care not to pass your wires close to «High voltage» cables (e.g.: 230 V AC).

Recommended cables

2 pairs of cables (4 strand) SYT1 8/10ths (Shielded cables - AWG 20).

Fitting

To optimise the mounting of the GALEOW and to combat attempted tampering, it should be fitted on a flat surface.

Recommended power supplies

- A power supply independent of the central controller is necessary for the GALEOW.
- There are two suitable power supplies for this Digicode® keypad: ARD12 or BS60

Installation recommendations

To protect the installation, remember to:

- install the varistor in parallel on the locking system power supply side,
- install a 120 ohm resistor between A and B on the last BUS RS485 door controller.

3] MOUNTING KIT

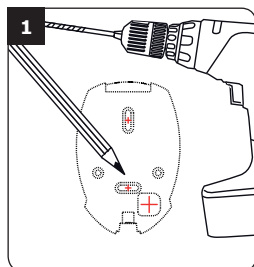
	Varistor	Torx® screw (M4x10)	T20 Torx® spanner	Cap	mounting screw (M4x30)	S5 plastic anchor
GALEOW	1	1	1	2	2	2

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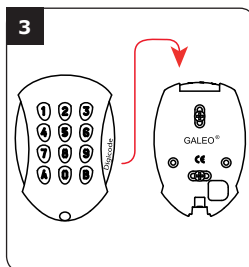
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4] MOUNTING

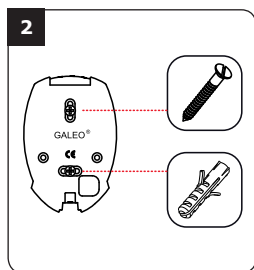
After having verified that the fitting kit is complete and having made the connection of the GALEOW coded keypad (with or without the door controller depending on whether you use a central controller or panel), you can proceed with the final installation of the product. Collect up the necessary tools (drill, screwdriver, measuring tape, etc) and follow the GALEOW fitting instructions:



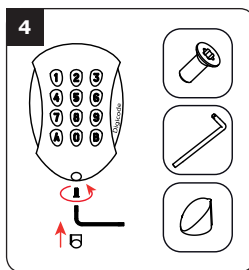
Confirm the distance between the GALEOW and central controller or door controller (see page 3 «Reminders and recommendations»). Mark out the locations and drill two mounting holes (Ø 5 mm drill bit and minimum depth = 35 mm) as well as the hole for the keypad's electric cable.



Insert the GALEOW electric cable through its cable hole and attach it to its support from above with the top hook.



Insert the 2 plastic anchors in the holes. Mount the back plate of the GALEOW on your chosen support using the supplied (M4x30) mounting screws.



Fix the GALEOW on its support using the TORX® screw and its special tool (elbow male screw spanner). Apply the screw cap to complete the installation of this product.

5] CONNECTIONS: DIRECT CONNECTION TO THE TERMINAL BLOCKS OF A CONTROLLER

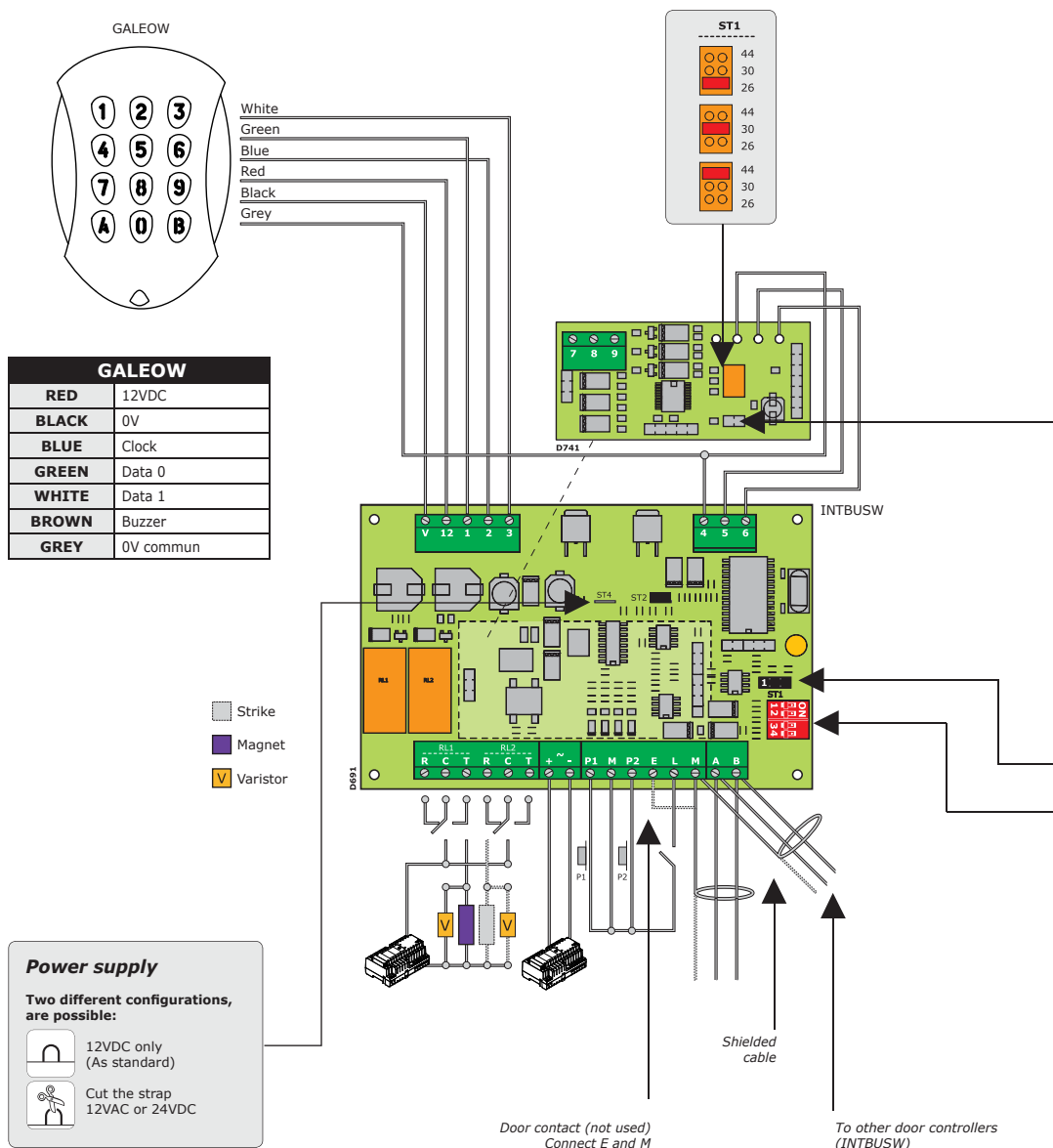
GALEOW	Outputs
RED	Input voltage 12VDC
BLACK	0V
BROWN	Buzzer command input
GREEN	DATA 0
WHITE	DATA 1
BLUE	CLOCK
GREY	0V COMMON

Controller terminal wirings						
CTV900A (CENTAUR)	AC22 (ATRIUM)	UCA3	PROMI1000 PROMI1000PC	PROMI500	DGPROX	DG502
+12V	+12V					
R2/0V	GND					
OUT5/6	BUZ					
R2/D0	D0					
R2/D1	D1					
		6 and 10	1	1	1	1 and 6
		5 and 9	M	M	M	4

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6] CONNECTIONS: CONNECTION WITH THE (INTBUSW) DOOR CONTROLLER



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INTBUSW (Door controller)

Terminal block : Motherboard

V	Input voltage -
12	Input voltage +
1	Data 0
2	Clock
3	Data 1

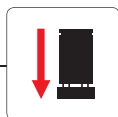
Terminal block : Motherboard

R	N/C contact eletromagnetic lock (+)
C	Common contact power supply (+)
T	N/O contact electric release
R	N/C contact alarm
C	Common
T	N/O contact alarm
+ ~ -	Input voltage DC or AC, 12V or 24V

P1	Request-to-enter input
M	Common (P1 et P2)
P2	Request-to-enter input
E	Door contact, N/C (Door closed) and N/O (Door open)
L	Reader activation input (N/O) reader enabled and (N/C) reader disabled
M	Common (E and M) or (E and L)
A	RS485 Bus (All the A must be connected together in daisy chain)
B	RS485 Bus (All the B must be connected together in daisy chain)

Terminal block - 3 points : Piggyback board

7	LED > Red color
8	LED > Green color
9	Buzzer



Without jumper : without clock
With jumper : with clock

STAND ALONE MODE

TELACCESS

- Dipswitch address set up
- Dip4 = ON



DIP SWITCH adresssing

1	2	3	4	Mode
ON	ON	ON	ON	Front plate
OFF	ON	ON	ON	Reader 1
ON	OFF	ON	ON	Reader 2
OFF	OFF	ON	ON	Reader 3
ON	ON	OFF	ON	Reader 4

ST1 (Programming jumper) : Normal



CENTRALIZED MODE

- TERENA

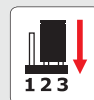
- Address programming during installation
- Dip4 = OFF



ST1 (Programming jumper)



Normal (As standard)

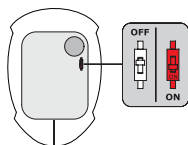


Installation

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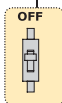
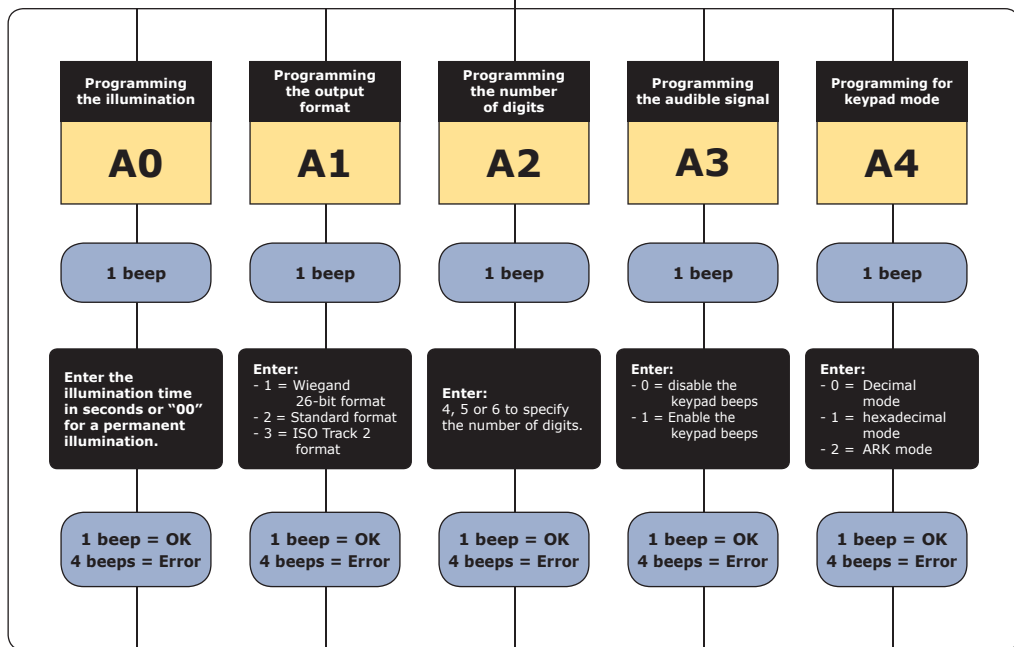
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8] PROGRAMMING



Turn the switch to ON to start programming

2 beeps are emitted



Turn the switch to OFF to finish programming

2 beeps

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Default values

- Illumination duration: 10 seconds,
- User code length: 5 digits,
- 26 bit wiegand output,
- Buzzer disabled,
- Decimal mode.

Audible Signal

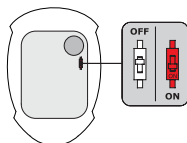
- 1 short beep > keypad powered and key presses,
- 1 long beep > data computing in programming,
- 2 short beeps > Entry or Exit from programming,
- 4 short beeps > data computing error.

Code Length

- In decimal mode, the user code must be in 4, 5 or 6 digits. The keypad key B is used to validate the programming.
- In hexadecimal mode, the "A" keypad key is forbidden.
- In ARK mode, all the selected keypad keys are sending to the controller.

A] ENTRY IN PROGRAMMING

1. Turn off the power.
Put the switch to ON.
Put back the power.



2. Two beeps are emitted to confirm entry in programming.

The command control of the buzzer is not possible in programming mode.

B] ILLUMINATION DURATION

1. Enter in programming*.
2. Enter A0 to program the illumination duration :
- One beep is emitted.
- Enter the time in seconds,
10 for 10 seconds to 99 for 99 seconds
or enter 00 for a permanent illumination.
- One beep is emitted to confirm the illumination duration.

A0

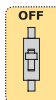
3. Remove the ST1 jumper :
- Two beeps are emitted to confirm exit from programming.



C] OUTPUT FORMAT

1. Enter in programming*.
2. Press A1 to enter in the output format menu :
- One beep is emitted.
- Press 1 to select 26-bit wiegand output format
- Press 2 to select Standard output format
- Press 3 to select ISO Track 2 output format
- One beep is emitted to confirm programming.
3. Remove the ST1 jumper:
- Two beeps are emitted to confirm exit from programming.

A1



D] CODE LENGTH

1. Enter in programming mode*.
2. Press A2 to enter in the code length setting menu:
- One beep is emitted.
- Press 4 for a 4-digit user code, press 5 for a 5-digit user code or press 6 for a 6-digit user code.
- One beep is emitted to confirm programming.
3. Remove the ST1 jumper:
- Two beeps are emitted to confirm exit from programming.
- 4 beeps indicate a data computing error.

A2



* Please refer to the procedure to start programming at the start of this section

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E] AUDIBLE SIGNAL

The audible signal is always enabled in programming mode.

In factory default, the buzzer is disabled when pressing a key. To enable the buzzer:

1. Enter in programming mode*.
2. Press A3:
 - One beep is emitted.
 - Press 0 to disable the audible signal.
 - Press 1 to enable the audible signal.
 - One beep is emitted to confirm programming.
3. Remove the ST1 jumper:
 - Two beeps are emitted to confirm exit from programming.

A3



2. Press A4 to enter in the mode setting menu:
 - One beep is emitted.
 - Press 0 for a decimal mode, press 1 for hexadecimal mode and 2 for ARK mode.
 - One beep is emitted to confirm programming

A4

3. Remove the ST1 jumper:
 - Two beeps are emitted to confirm exit from programming.
 - 4 beeps indicate a data computing error.

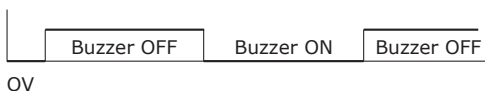


F] DECIMAL OR KEYPAD MODE

1. Enter in programming mode*.

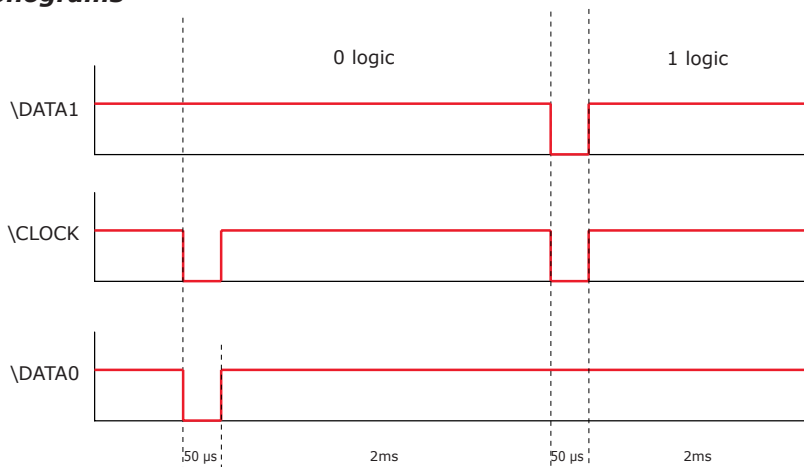
G] EXTERNAL CONTROL OF THE BUZZER

The buzzer can be activated from an external input. The control is done with a logic signal on the input.



9] OUTPUT FORMAT

Chronograms



* Please refer to the procedure to start programming at the start of this section

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10] WIEGAND 26 BITS OUTPUT FORMAT

Interface

- The output format is 26-bit Wiegand (Signals: DATA1, DATA0 and CLOCK),
- Output signal in open collectors (pull up of 2.2K in +5V) 26-bit hexadecimal output format.

The frame is made of 26-bit and built as follow:

- First parity: 1-bit – even parity for the first 12-bit,
- User Code: 3 half of a byte represent the code entered.
Each byte is transferred from bit 7 to bit 0,
- Second parity: 1-bit – odd parity for the last 12-bit.

Bit 1	Bit 2 ... bit 25	Bit 26
Even parity on bit 2...bit13	Data (24 bits)	Odd parity on bit 14...bit 25

		1	0000	0000	0001	0011	0111	0101	0
Decimal	4 Terms	Parity 1	0	0	1	3	7	5	Parity 2
	5 Terms		0	7	1	3	7	5	
	6 Terms		6	7	1	3	7	5	
Hexadecimal	4 Terms		0	0	0	5	5	F	
	5 Terms		0	1	1	6	C	F	
	6 Terms		0	A	3	E	8	F	

- **Parity 1:** «0» if the number of 1 in bit 2 to bit 13 is even, «1» if the number of 1 in bit 2 to bit 13 is odd.
- **Parity 2:** «0» if the number of 1 in bit 14 to bit 25 is odd, «1» if the number of 1 in bit 14 to bit 25 is even.

11] ARK 8 BITS OUTPUT FORMAT

Keypad input	Hexadecimal	Binary Datas
0	F0	11110000
1	E1	11100001
2	D2	11010010
3	C3	11000011
4	B4	10110100
5	A5	10100101
6	96	10010110
7	87	10000111
8	78	01111000
9	69	01101001
* ou A	5A	01011010
# ou B	4B	01001011

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11] STANDARD FORMAT

This format is owned by Standard. This format is compatible with other Standard products.
(Contact us)

12] ISO 7811 TRACK 2 FORMAT

SS	Characters	ES	LRC
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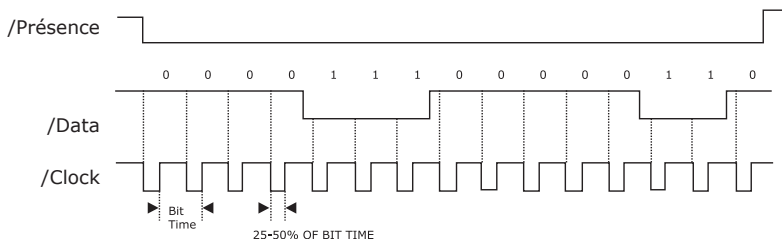
SS = start sentinel > Hex B

ES = end sentinel > Hex F

LRC = Ou Exclusif de tous les caractères de la trame (including SS and ES)

The code length is set at 8 digits:

- In 4 digits > 00001234
- In 5-digits > 00012345
- In 6-digits > 00123456



Each digit is made of 5 bits: 4 bits data + 1 bit parity

Characters	B4	B3	B2	B1	Parity
0	0	0	0	0	1
1	0	0	0	1	0
2	0	0	1	0	0
3	0	0	1	1	1
4	0	1	0	0	0
5	0	1	0	1	1
6	0	1	1	0	1
7	0	1	1	1	0
8	1	0	0	0	0
9	1	0	0	1	1
A	1	0	1	0	1
B = SS	1	0	1	1	0
C	1	1	0	0	1
D = FD	1	1	0	1	0
E	1	1	1	0	0
F = ES	1	1	1	1	1

12] NOTES



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