USER MANUAL

Outdoor PTZ camera

PTZ-660EF

CE

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

1. Camera connections

Camera has three cables outside:

1) RS-485 communication:
- violet (red): RS485 +

- gray (black): RS485 -

2) Video signal
- BNC socket: video composite signal

3) Power supply
- 2.1/5.5mm socket: DC12V / 700mA

2. RS-485 port configuration

The PTZ camera functions are controlled by RS-485 port. The port parameters can be set using DIP-Switches or via RS-485 interface.

To set the switches positions, you have to remove the camera dome cover (unscrew 4 screws), and next remove the plastic protection (4 screws).
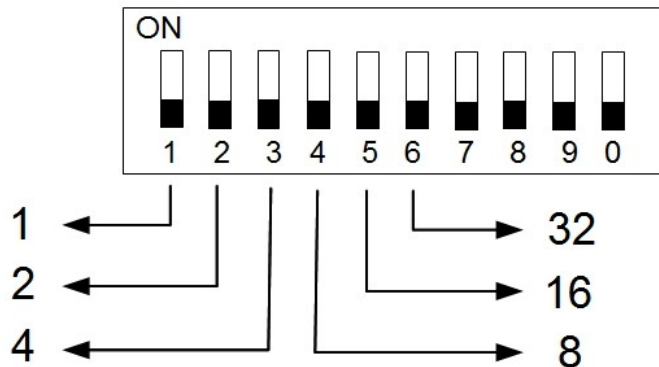
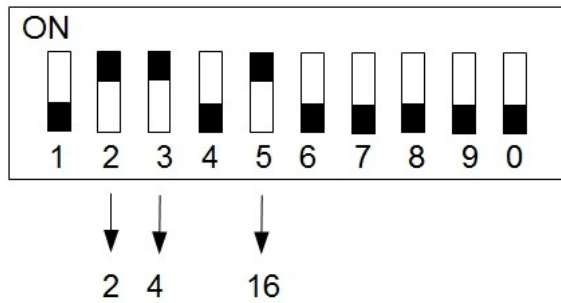
2.1 DIP-switches configuration

Device address setting:

The device address can be set in range: 1 – 63 (for PELCO-P: 0 – 63).
To enter the proper address you should use the **DIP1 – 6** switches and set the right combination according to below picture. The device address is the sum of the numbers from corresponding switches, which were set to ON position.

The ON/OFF switches and corresponding numbers:

Example: 2+4+16 = 22. Address is 22.

Transmision baudrate settings:

- 1200 b/s   DIP7 = ON, DIP8 = OFF
- 2400 b/s   DIP7 = OFF, DIP8 = OFF
- 4800 b/s   DIP7 = ON, DIP8 = ON
- 9600 b/s   DIP7 = OFF, DIP8 = ON

Protocol settings:

- PELCO-P   DIP9 = ON
- PELCO-D   DIP9 = OFF

3. PTZ functions

Camera functions can be called by **CLEAR / SET / GOTO** preset commands. Available functions are listed in the below table:

3.1 SET (set preset)

Preset No.:	Function
1 ... 32	Set preset point

3.2 CLEAR (clear preset)

Preset No.:	Function
1 ... 32	Clear preset point

3.3 GOTO (go to preset)

Preset No.:	Function
1 ... 32	Goto preset point

4. Camera menu functions

To enter to the camera menu press the **OPEN** or **CLOSE** key on the keyboard.

4.1 Main Menu

1.	SHUTTER/AGC	<< Shutter settings
2.	WHITE BAL	<< White Balance
3.	BACKLIGHT	<< BackLight Compensation (BLC, HLC)
4.	PICT ADJUST	<< Image adjustment
5.	ATR	<< Wide Dynamic Range
6.	MOTION DET	<< Motion Detection
7.	PRIVACY	<< **NOT ACTIVE OPTION!**
8.	DAY/NIGHT	<< Day / Night mode
9.	NR	<< Noise reduction
10.	CAMERA ID	<< Camera name
11.	SYNC	<< Synchronization
12.	LANGUAGE	<< OSD menu language (English, German, Chinese, French, Russian, Portuguese, Spanish)
13.	CAMERA RESET	<< Default settings
	SAVE	<< Save settings
	EXIT	<< Menu exit

5. Technical specification

Sensor	1/4" SONY ExView HAD CCD II
Digital Signal Processor (DSP)	SONY Effio
Resolution	Color: 650 TVL, B/W: 700 TVL
Lens	5 - 60 mm
View angle	Manufacturer data: 51° - 4.5°
Min. illumination	0.001 Lux
Video output	1 Vpp / 75 Ω
Electronic shutter	1/50 s - 1/100000 s
Camera functions	AGC – Auto Gain Control ATW – Auto White Balance BLC – Back Light Compensation (configurable) HLC – High Light Compensation ATR (WDR) – Wide Dynamic Range NR (DNR) – Digital Noise Reduction
Max. rotation speed	Vertical: 12 °/s Horizontal: 36 °/s
Rotation angles	Horizontal: 360° (continuous) Vertical: 0° - 90°
PTZ control	via RS-485 interface
Protocol	Pelco-D, Pelco-P Baudrates: 1200, 2400, 4800, 9600 kbit/s
Operation temperature	from -10°C to +50°C
Weight (with bracket)	1.28 kg
Dimensions (without bracket)	Ø123 x 142 mm
Power supply	DC 12V / 700mA
OSD languages supported	English, German, Chinese, French, Russian, Portuguese, Spanish
Camera connectors	Video: BNC socket, Power supply: 2.1/5.5mm socket, RS-485: pair of wires