CONV5-C version 1

Simple protocol converter from Pelco-D and Pelco-P to Sensormatic

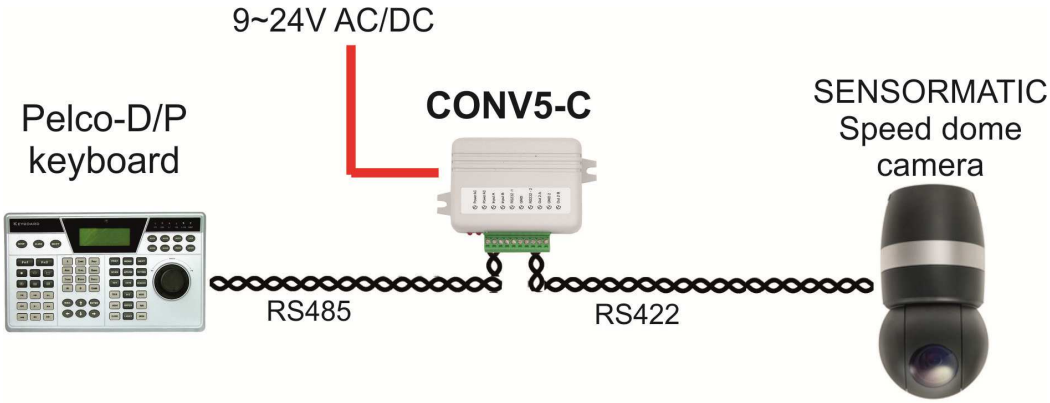
MANUAL INSTRUCTION

The protocol converter is microprocessor device designed to control the Sensormatic PTZ cameras by using keyboards (or DVRs), which work in Pelco-D or Pelco-P protocols. It allows for integration the cameras of Sensormatic company with other cameras system or digital recorders. The CONV-5C is economic device, which supports only motion control (without support of PRESET, PATTERN, TOUR, ect. Functions), but it allows to control multiple cameras.

To use all functions of Sensormatic cameras, you should use the CONV-5B, which have 2-way communication and it built-in memory to support PRESET, PATTERN i TOUR functions. The CONV5-B is designed only to one camera.

1. Connecting structure

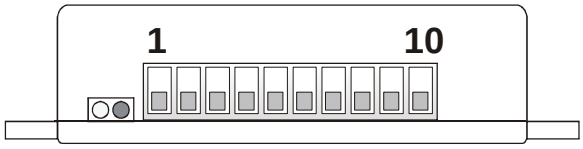
The protocol converter is connected between keyboard and PTZ cameras and need 9~24V DC or AC power supply.

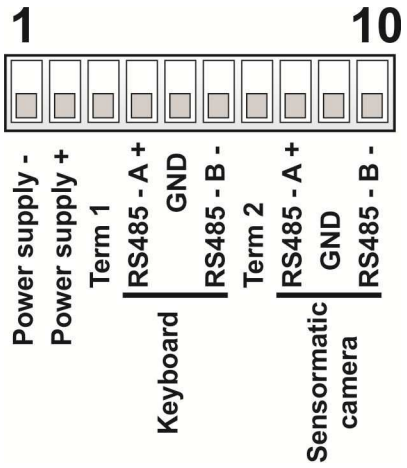


Connecting structure of CONV5-C converter

2. Description of connecting clamps

- **LED1** – signaling transmission of Sensormatic
- **LED2** – signaling transmission of Pelco-D



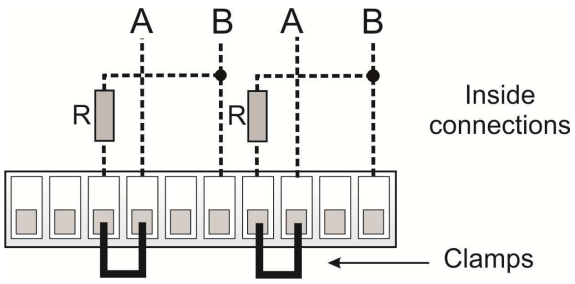


Power supply: Connect 9~24V DC / AC power supply

Keyboard
RS-485 A/B: Connect to keyboard with Pelco-D or Pelco-P protocol
Term1: The clamp to connect 120Ω internal resistor for RS-485 interface of keyboard.

Sensormatic camera
RS-485 A/B: Connect cable to RS-422 clamp in Sensormatic camera: RS485-A+ do RS-422 RX+, RS485-B- do RS-422 RX-
Term2: The clamp to connect 120Ω internal resistor for RS-485 interface of Sensormatic camera

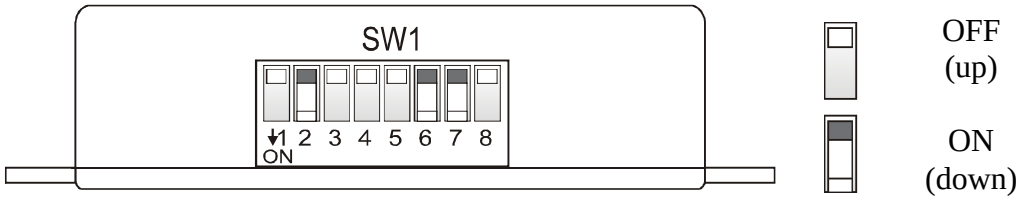
GND: It's clamps to connect shield of RS-485 cables.



For longer cables of bus, both RS-485 interface and Biphase, should be included to terminating resistor. This will prevent wave reflections in cables, which are cause of transmission errors. Terminating resistors should be connected only in devices, which are of ends of the bus. Larger number of resistors will cause an excessive burden of transmission.

Switching resistors in converter, consists in making wire connection terminal of TERM with A+ .

3. Description of connecting



All connections and configurations of switches should be performed at disconnect power supply of the converter.

Description of switches:

Transmission rate of keyboard	2400baud	4800baud	9600baud	19200baud
DIP 1	OFF	ON	OFF	ON
DIP 2	OFF	OFF	ON	ON

Recommended baud rate is 4800baud or less. Baud rate 9600 is accepted, but when keyboard send packets too often, control can be unstable.

Transmission rate of camera	2400baud	4800baud	9600baud	19200baud
DIP 3	OFF	ON	OFF	ON
DIP 4	OFF	OFF	ON	ON

Interface to camera provide independent setting of baud rate but Sensormatic camera usually accept rate 4800baud and this baud rate should be set.

Chose protocol of keyboard	Pelco-D	Pelco-P
DIP 5	OFF	ON

It's for chose protocol, which will be use in PTZ keyboard. For Pelco-P may be necessary to include function of increasing address, because in this protocol address start not 0 rather than 1.

Increase address	Disabled	Enabled
DIP 5	OFF	ON

It's to increasing address in Pelco-P protocol.

4. Start-up

Please pay attention to correct polarity of RS-485 interface.

Correct working of converter can be determined by LED observing. If device is correct configured and connected, at the time of trying to control from desktop, both LEDs should blink.