MOTOR UNIT DRIVER / RECEIVER SOT-5

The motor unit driver is designed for cooperation with motor units and motozoom lenses. The driver / receiver receives and executes the commands from RS-485 telemetry trnasmitter, e.g. control panels, DVRs, video capture cards, video servers. The device can be easily outdoor mounted.

The picture below shows the jumpers settings for ID number and protocol.

0 — PELCO-D/2400
1 — PELCO-P/4800
2 — PELCO-P/9600
3 — DELTA-M (work with PKSO-10 and Multicam)
4 — PELCO-D/9600
5 — -
6 — -
7 — -
8 — -
9 — -
10 — -
11 — -
12 — -
13 — -
14 — -
15 — TEST

The driver allows to control following functions:

a). The motor unit:

right
left
down
up
right down
right up
left down
left up
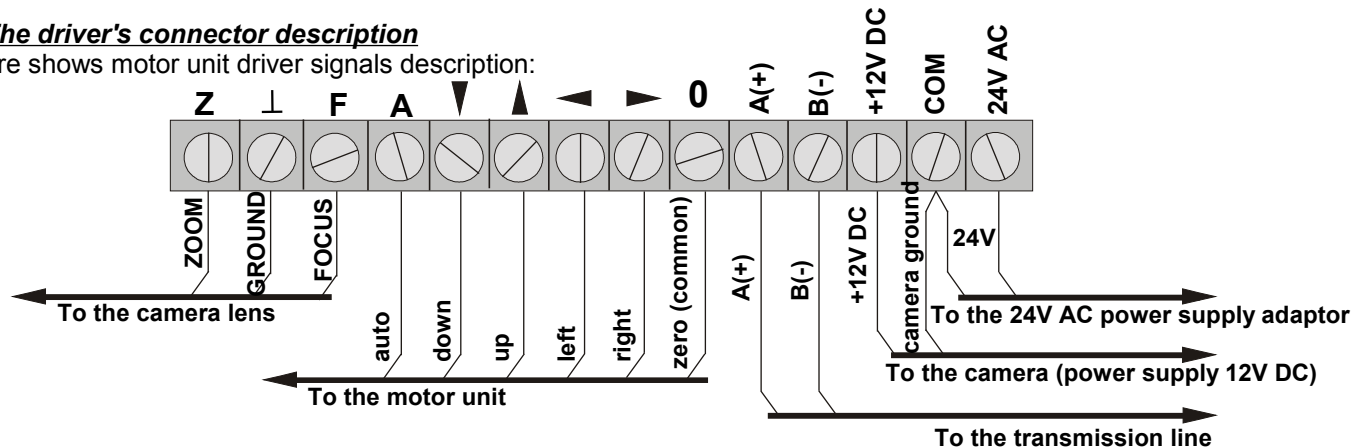autoscan

b). The camera:

zoom
focus

SPECIFICATIONS:

Power voltage	- 24V AC / 50Hz
Current consumption (waiting mode)	- 50mA
Camera powering output	- 12V DC / 400mA
Max. current consumption directions outputs	- 500mA
Max. current consumption ZOOM, FOCUS outputs	- 100mA
Max. RS-485 transmission line distance	- 1000m.
Short circuit outputs protect	- yes
Dimensions (L/W/H)	- 112x37x91mm
Weight	- 112g

The driver's connector description

The picture shows motor unit driver signals description:

ZOOM – lens zoom control (for 4-wires connections 2 wires have to be join together),

FOCUS – focus control,

Auto, arrows and „0" symbol – allow to motor unit control: „0" is the common wire, the arrows correspond with rotation directions,

A(+), B(-) RS-485 – control signals transmission from telemetry transmitter to the driver (via twisted-pair cable),

+12V – powering output to the camera,

COM – common ground for camera and driver powering,
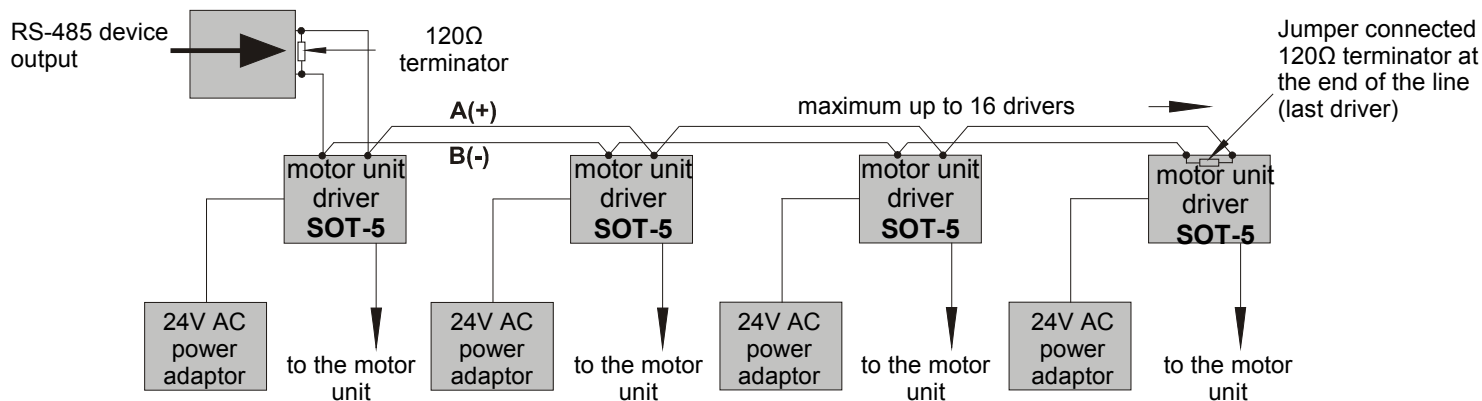
24V AC – driver and motor unit powering.

The driver connection

• The A(+), B(-) driver's inputs connect to the PTZ control outputs in the device (e.g. DVR). Please pay your attention to correct polarity (terminals [A(+)], [B(-)]).

• **At the beginning of the transmission line and at the end of the transmission line connect the 120Ω resistors.**

• ZOOM, GROUND and FOCUS outputs connect to the proper control inputs in the camera's lens. The GROUND is common for ZOOM and FOCUS.

• AUTO, DOWN, UP, LEFT, RIGHT outputs connect to the proper control inputs in the motor unit.

• The voltage from terminal [+12V, COM(camera's ground)] can be used for camera's powering.

• The 24V AC connect to the terminal [COM, 24VAC].

ATTENTION! Switch the power off during cables connecting.

Schematic diagrams

coaxial cable 75Ω
9 pins cable
max 1000m
twisted-pair
RS485/232 converter
motor unit driver **SOT-5**
2-wires cable
5-wires cable
camera
lens
motor unit
3-wires cable
computer
24V AC power adaptor

coaxial cable 75Ω
lens
max 1000m
twisted-pair
DVR
motor unit driver **SOT-5**
2-wires cable
5-wires cable
camera
motor unit
3-wires cable
24V AC power adaptor
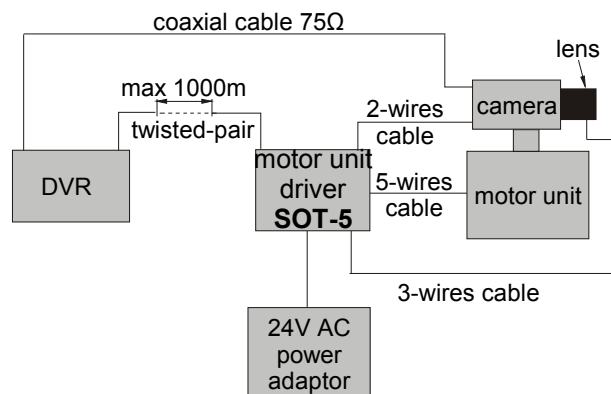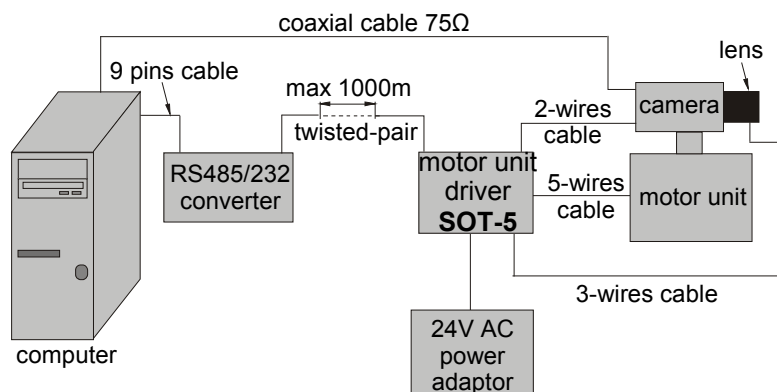
Schematic diagram for many drivers to the one system connection:

RS-485 device output
120Ω terminator
A(+)
B(-)
maximum up to 16 drivers
Jumper connected 120Ω terminator at the end of the line (last driver)

motor unit driver **SOT-5**
motor unit driver **SOT-5**
motor unit driver **SOT-5**
motor unit driver **SOT-5**

24V AC power adaptor — to the motor unit
24V AC power adaptor — to the motor unit
24V AC power adaptor — to the motor unit
24V AC power adaptor — to the motor unit

ID number assign, protocol change and 120Ω resistor connection – switchers and jumper configurations:

power LED indicator (blinking: transmission control)

ID NUMBER:

0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15

PROTOCOL SWITCH

SOT-5

Terminal

This jumper allows to connect to the transmission line 120Ω resistor. ATTENTION! The begin of the line and the last driver at the end of the line has to have 120Ω resistors connected.

- 120Ω resistor is connected

- 120Ω resistor is not connected