VIDEO TRANSFORMER - RECEIVER TRO-4G/400

TRO-4G/400 is designed for power with DC voltage and receive video signals from four TRN-1/400 transmitters via a twisted pair cable (UTP, FTP) over a distance up to 400 meters. The device is powered by 24V AC or 29V AC coming from an external AC power source.

Video signal from camera is sent to video input one of TRN-1/400 transmitters. Video signals from TRN-1/400 transmitters are sent to the TRO-4G/400 receiver via twisted-pair cable. Both the transmitter and receiver adjust their impedance of 75Ω coaxial cable to that of the outgoing twisted-pair cable, which allows the transmission of video signal up to 400 meters distance.

The TRO-4G/400 receiver delivers unstable voltage (max. 40V DC) to twisted-pair cable, and the TRN-1/400 transmitter converts it down to stable 12V DC. This allows simultaneous powering of four cameras with thermostat.

Assuming that the power consumption of the camera is 250mA, and 500mA for the thermostat (TT-12E), the power can be sent with a standard 0.5 mm twisted pair cable (24AWG) over the following distances:

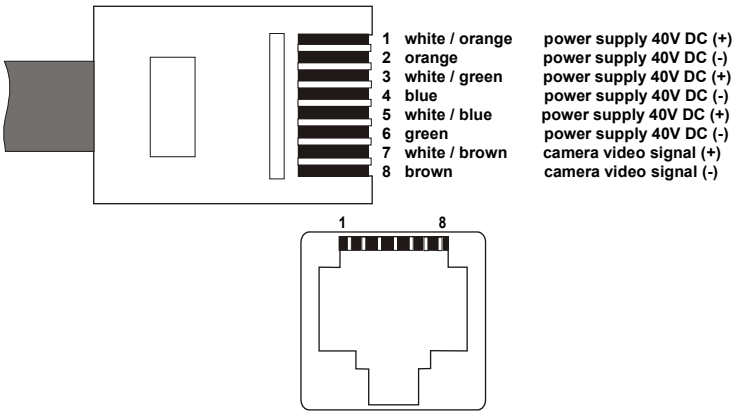
LOAD	MAXIMUM DISTANCE @ 24V AC	MAXIMUM DISTANCE @ 29V AC
4 cameras with thermostat		420 meters
3 cameras with thermostat 1 camera without thermostat		440 meters 1200 meters
2 cameras with thermostat 2 cameras without thermostat	55 meters 190 meters	480 meters 1400 meters
1 camera with thermostat 3 cameras without thermostat	130 meters 720 meters	480 meters 1500 meters
4 cameras without thermostat	720 meters	1700 meters

For distances greater than 400 meters we have to use the video signal amplifier.

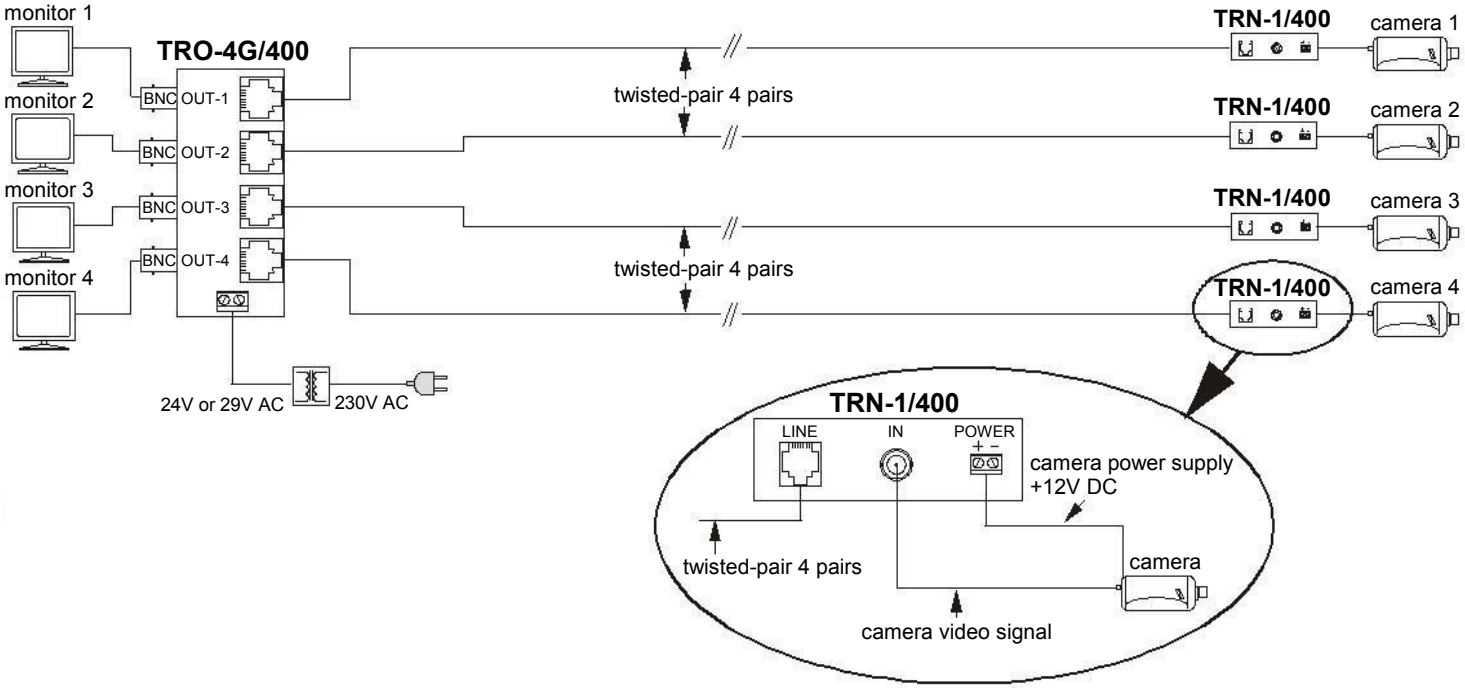
SPECIFICATIONS:

Video signal maximum distance	400 meters
In / out voltage range 75Ω (CVBS)	1Vpp
Video insertion loss	-0,5dB (@ f=5MHz)
Video bandwidth	0 – 50MHz (-3dB)
CMRR (dB @ 5MHz)	50dB
Coaxial cable outputs impedance	75Ω
Twisted-pair cable impedance	100Ω
Coaxial cable outputs socket type	4 x BNC female
Twisted-pair cable socket typej	4 x RJ-45 (8-pins, 4 pairs)
Camera power socket type	Terminals
Maximum power (voltage / current)	29V AC / 2A
Maximum output voltage	40V DC
Maximum output current @ 40V	2A
Fuse 5x20 (delayed)	4A / 250V
Working temperature / relative humidity	-50..+55°C / <95%
Dimensions (W x L x H) / weight	213 x 93 x 36mm / 250g

Wiring sequence inside the RJ-45 plug.
T568B norm.



Schematic diagram:



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