

## Warning!

Please read the user manual included in this work as it contains important information related with safety of installation and use of the device.

Only persons who read the user manual may use the device.

The user manual must be kept because it may be required in the future. The device is to be used exclusively for purposes specified in this user manual.

The device must be unpacked prior to starting-up. After removing the packaging make sure the device is in working order. If the product has defects, it should not be used until it is repaired.

The product is intended for use at home and commercial use and may not be used for other than intended use.

The manufacturer is not liable for damages resulting from not adhering to the rules contained in the user manual, therefore, we recommend to follow the aforementioned safety rules for operation and maintenance of the device. In this way you will ensure yourself safety and avoid causing damage to the device.

The manufacturer and the supplier are not liable for losses or damages arising out of the product, including financial or intangible losses, loss of profits, income, data, pleasure from use of the product or other products related with it - indirect, incidental or consequential loss or damage. The above provisions apply whether the loss or damage concerns:

1. Deterioration of quality or the lack of operation of the products or products related with it due to damage as well as the lack of access to the product when it is undergoing repair, which results in stoppage the loss of user's time or a break in business activity;
2. Improper results of operation of the product or products related with it;
3. It applies to losses and damages according to any legal category, including negligence and other losses, termination of a contract, expressed or implied guarantee and strict liability (even if the manufacturer or the supplier was notified about the possibility of occurrence of such damages).

### Safety measures:

Particular attention at designing was directed to quality standards of the device where ensuring safety of operation is the most important factor.

The device must be secured against contact with caustic, staining and viscous fluids.

The TR-1M/70 is designed to video signals transmission and power supplying via twisted-pair cable (UTP, FTP). The device adapts the impedance of coaxial cable 75Ω to the impedance of symmetrical line, ensuring transmission of video signal up to 400m (twisted-pair cable category 5) and eliminates asymmetric interferences. Video signal is sent over one pair of a twisted-pair cable, the remaining three pairs are used for supplying DC 12V power. This is not consistent with the PVD standard, but this solution allows to sending the power to devices for long distances.

If the power connectors are not used, they can be used to DATA transmission. It is important to pay attention to linking the adequate terminals: (+) and (-).



Standard:	<ul style="list-style-type: none"> <li>• AHD - 8 Mpx 4K UHD,</li> <li>• HD-CVI - 8 Mpx 4K UHD,</li> <li>• HD-TVI - 8 Mpx 4K UHD,</li> <li>• CVBS - PAL, NTSC</li> </ul>
Device type:	Passive



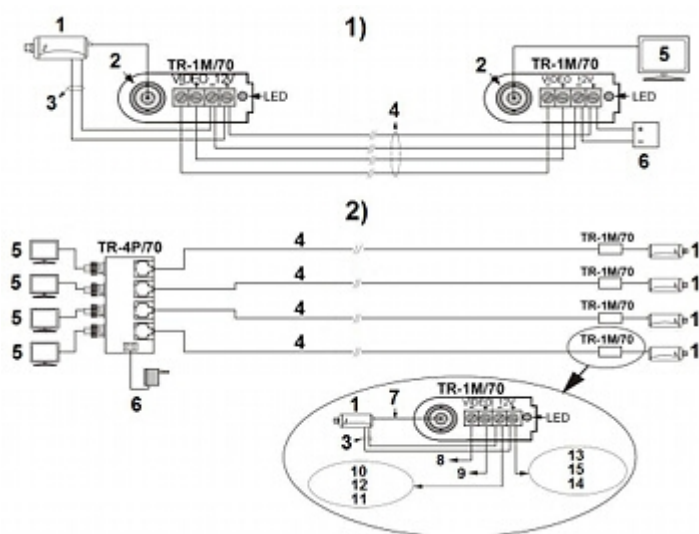
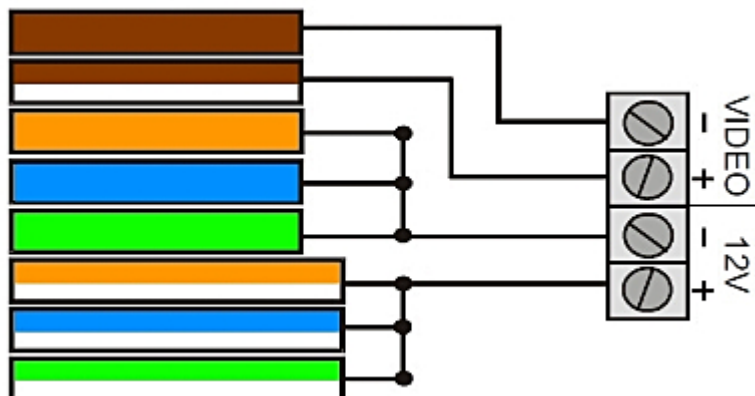
# User Manual

Code: TR-1M/70  
VIDEO BALUN **TR-1M/70**

Number of channels:	1 Video 1 DC
Coaxial socket voltage range 75Ω (CVBS):	1 Vpp
Video transmission range:	<ul style="list-style-type: none"><li>• 250 m @ 720p - UTP cat. 5e</li><li>• 150 m @ 1080p - UTP cat. 5e</li><li>• 400 m @ CVBS - PAL / NTSC - UTP cat. 5e</li></ul>
Attenuation:	<ul style="list-style-type: none"><li>• 4.43 MHz @ 0.62 dB</li><li>• 11 MHz @ 0.94 dB</li><li>• 21 MHz @ 1.3 dB</li><li>• 38 MHz @ 1.77 dB</li><li>• 42 MHz @ 1.9 dB</li><li>• 67.5 MHz @ 2.79 dB</li></ul>
Symmetrical socket impedance:	100 Ω
Connectors type:	BNC Angular plug Video Cable terminals DC
Symmetrical socket type:	Cable terminals
Power supply distance:	<ul style="list-style-type: none"><li>• Power supply 12V DC</li></ul> 353 m @ 50 mA 235 m @ 75 mA 176 m @ 100 mA 141 m @ 125 mA 117 m @ 150 mA 88 m @ 200 mA 70 m @ 250 mA 58 m @ 300 mA 50 m @ 350 mA 44 m @ 400 mA 39 m @ 450 mA 35 m @ 500 mA 29 m @ 600 mA 25 m @ 700 mA 22 m @ 800 mA 19 m @ 900 mA 17 m @ 1000 mA
Weight:	0.024 kg
Dimensions:	49 x 38 x 20 mm
Guarantee:	<b>3 years</b>
Manufacturer / Brand:	DELTA



Twisted-pair cable connection wiring sequence for TR-1M/70:



1) Schematic diagram for one camera

- 1 Camera
- 2 BNC plug (MALE)
- 3 Camera power cable
- 4 Twisted-pair cable
- 5 Monitor
- 6 DC 12V power adapter
- 7 Signal from camera
- 8 brown

2) Schematic diagram for four cameras

- 9 white/brown
- 10 orange
- 11 Blue
- 12 Green
- 13 white/orange
- 14 white/blue
- 15 white/green

## PACKAGE



# User Manual

Code: TR-1M/70  
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Dimensions (L x W x H): 0x0x0 mm	Gross Weight: 0 kg
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