RE-BNCRJ1
BNCRJ1E
RE-RE-RE-BNCRJ1A
BNCRJ2L

Converters for twisted cable

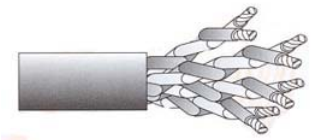
What have you bought - I for twisted cable converters allow to connect the analog cameras through the twisted pair cable instead of the traditional coaxial cable.

Video signal supported - The cable twisted DSE converters support all types of analog video signal CVBS is traditional in AHD high resolution.

What is the twisted cable - The twisted pair cable consists of two cables finely braided copper Between them.
It can be, depending on the type of cable, protected by a metal sheath (shielded cable) or not (unshielded). Both types can be used for video signal transport.

The video signal travels on this kind of cables better than it does on coaxial cables but the signal converters are required, also called BALUN, at the beginning and at the end of the line that permit the transmission of the signal in a balanced way, ie on two paired cables.

The cable to be used - The reference cable to be used is the computer cables type CAT-5 or CAT-6 UTP NOT SHIELDED, largely used in realization of LAN networks.
Each cable of this type contains 4 twisted pairs as in FIG.



Remember that the two wires that you will use for the video transport must belong to the same pair of wires so that are twisted between their.
You can not use straps or pairs of paired cables and not intertwined with each other, because the transmission does not work.

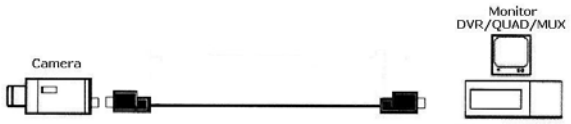
E 'can use other twisted cables, other than CAT5 but the flow performance may be degraded.

The advantages of the twisted cable - The twisted pair cable is more subtle kind of coaxial cable and therefore easier installation. E 'can use existing cables such as computer LAN networks, or telephone lines as the only prerogative that is sought to cable is that the conductors are wrapped with each other and not parallel. A single CAT5 cable can carry alone up to 4 video signals, performing the function of well-4 coaxial cables. The use of active converters can reach even 2 km transmission distance, while the coaxial cable does not allow more than a few hundred meters.

RE-BNCRJ1 Passive video converter

The RE-BNCRJ1 Converter is the easiest product family. It is a passive model that does not perform signal amplification.

Do you need 2 RE-BNCRJ1 modules one from each end of the twisted pair cable.



The same module is reversible and acts both as a receiver and a transmitter. To connect the module is sufficient to connect the BNC connector to the video device (Camera, monitor, VCR, etc.) and the twisted pair to the two terminals +/-. Power supply is not required. Be careful not to reverse the order of the cables on the two converters: + to + and - to -. **The maximum cable length twisted usable with this converter is 200 m both CVBS signal AHD**

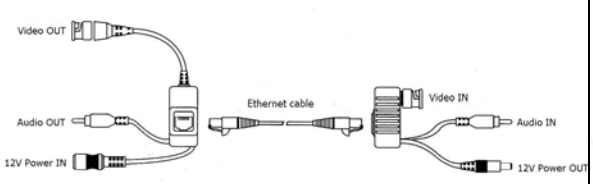
RE-BNCRJ1E Passive video converter

The RE-BNCRJ1E converter is the same as the previous model but with the addition of a video surge protection.

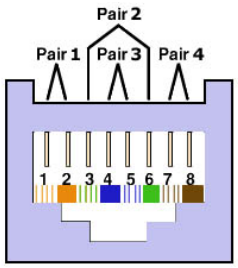
Furthermore, this model presents some installation advantages as the BNC connector is mounted on a cable and the terminal block is with quick coupling. The operation and installation are similar to the previous model, it is also possible to also use in coupling a RE-BNCRJ1 with a RE-BNCRJ1E to the two ends of the cable.

RE-BNCRJ1A Passive audio video converter 12VDC

The RE-BNCRJ1A converter is a passive balun as RE BNCRJ1 but allows in addition to the video transmission also to conduct the audio signal and 12VDC power supply for the camera. The RE-BNCRJ1A converter is sold in pairs. The transmitter module must be connected to video connector / audio / 12VDC camera, the receiver module connects to the audio video inputs of the display device (monitor, etc. DVR) and 12VDC power supply.



Between the two modules you connect a CAT5 cable to complete LAN networks RJ45 connectors. The crimping of the 4 pairs within the RJ-45 connector cables must be carried out as for the rights of a LAN network (see figure).



The maximum cable length twisted usable with this converter is 100 m due to the presence 12VDC power.

RE-BNCRJ2L Video Converter active

The RE-BNCRJ2L converter is, unlike the previous ones, an active converter, ie able to operate an amplification of the signal. With it is possible to reach the wiring distances up to 2400 m. The RE-BNCRJ2L converters are sold in pairs and require 12VDC power supply for both units.

Installation of the transmitter - The transmitter must be connected to the output of the video camera with its female BNC VIDEO IN connector using a BNC cable.

Next to this there is a connector with 5 places: VIDEO OUT

+ / -	Connect the twisted pair for video signal
DC 12V + / -	Connect the 12VDC power supply (not supplied)
LAND	Connect the central terminal to the ground with a cable of at least 1.5 mm² for the proper functioning of the surge protection.

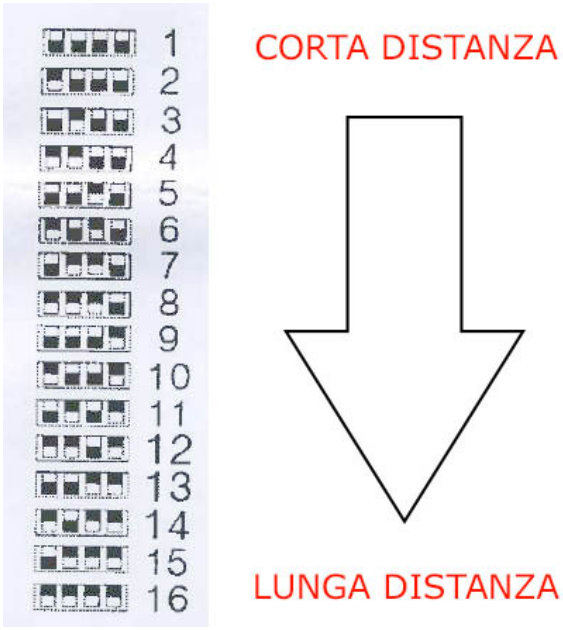
The transmitter also allows you to adjust the GAIN (LEVEL) depending on the wiring distance. 3 levels are available (1,2,3) selected with the selector lever.

As an indication, we recommend the following setting:
1: Wiring from 0 to 1300 m.
2: Wiring from 1300 to 1800 m.
3: wiring over 1800 m.
The transmitter module also has 2 LEDs that light up if power is connected (red) and connected to video signal (yellow).

Receiver Installation - The receiver must be connected to the video monitor or VCR with his female BNC connector using a BNC cable.

A side, as for the transmitter is a terminal block to 5 people to be connected as already described for the transmitter. In

receiver has 4 microswitches (BRIGHTNESS) to compensate for the signal loss introduced by the cable length. You can set 16 levels of compensation depending on the distance to be covered.



Adjust the COMPENSATION according to the table above to obtain the best image quality according to the actual wiring distance Once obtained the best possible result with the positioning of the microswitches,

it's possible further amend the quality of image acting on the brightness control screw (BRIGHTNESS). The receiver also features 2 LED module that light up in the presence of connected power (red) and connected to video signal (yellow).

Grounding - Both the receiver and the transmitter RE-BNCRJ2L have a ground connector. His connection is not essential for the operation, but it is essential to

the correct operation of the overvoltage protection.

CE

Main technical data

	RE-BNCRJ1	RE-BNCRJ1E	RE-BNCRJ1A	RE-BNCRJ2L
PACKAGING	Single	Single	Couple (TX + RX)	Couple (TX + RX)
SUPPLY	not required	not required	not required	12VDC
VIDEO CONNECTIONS	BNC male	BNC male	BNC male	BNC female
AUDIO CONNECTIONS	-	-	RCA male	-
12VDC CONNECTIONS	-	-	Jack 5.5 mm	Terminal
CONNECTING CABLE TWISTED	Terminal	Terminal	Jack RJ45	Terminal
FLOW [m.]	200	200	100	2400
WEIGHT [gr.]	16	22	34 (the pair)	82 (the pair)