

## Twisted-Pair Interfaces

Kramer Electronics has a full line of video/audio to twisted-pair wire interfaces. By using twisted-pair technology, simplification of studio and industrial wiring is easily achieved. The price of twisted-pair wire is far lower than that of coaxial cables, so it is an attractive alternative for many applications. Some of the twisted-pair machines are fed by a 12V DC source, making them suitable for fieldwork. The DC fed machines can power one another using a 4-wire setup. The twisted-pair interfaces are divided into three families:

### Twisted-Pair Transmitters.

The machines in this family are used to convert video and audio signals to a twisted-pair signal format (balanced line). Some of the machines convert video only, while others convert video and two channels of audio to one twisted-pair compatible signal. The video/audio twisted pair transmitters use one twisted-pair wire for the three signals, completely eliminating three coaxial cables. The twisted-pair transmitters have user-accessible trimmers for signal level and cable compensation.

### Twisted-Pair Receivers.

The machines in this family are used to convert a twisted-pair format signal to video and audio signals. The receivers have looping possibility, so several receivers may be chained together on one twisted-pair wire. Some have a polarity switch, allowing the user to connect the wire using any polarity.

### Twisted-Pair Line Amplifiers.

Machines in this category are used to extend the operating distance of the twisted-pair system, by adding amplification and cable compensation along the twisted-pair wire. The machine may be power-fed via a 4-wire system, hence eliminating the need to forward power to a remote location where the line amplifier is installed.

### **Applications:**

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- ❖ Video and Audio signal distribution over long distances, using a simple cable system.
- ❖ CCTV, large apartment house, hospitals and educational institutions, applications for distributing Video and Audio signals on existing intercom or other simple twisted-pair wires.
- ❖ Security and Military applications, for fast and easy setup for video monitoring.

**Twisted-Pair Interfaces:**

<b>Model</b>	<b>Inputs</b>	<b>Outputs</b>	<b>Function</b>	<b>Remarks</b>
<b>TP-1N</b>	1 x CV	Telephone Connector	Line Transmitter	Line transmitter with level and HF controls in a compact enclosure.
<b>TP-2N</b>	Telephone Connector	1 x CV	Line Receiver	Looping Line receiver with level and HF controls in a compact enclosure.
<b>TP-4N</b>	Telephone Connector	1 x CV	Line Receiver	Looping Line receiver in a mini enclosure, 12 VDC feed.
<b>TP-5N</b>	1 x CV	Telephone Connector	Line Transmitter	Line transmitter in a mini enclosure, 12 VDC feed for field and studio use.
<b>TP-6</b>	Telephone Connector	Telephone Connector	Line Amplifier	Line amplifier with level and HF controls in a mini enclosure, 12 VDC.
<b>TP-11</b>	1 x CV 2 x Audio	Telephone Connector	Line Transmitter	Line transmitter for Video and Audio Stereo in a compact enclosure.
<b>TP-12</b>	Telephone Connector	1 x CV 2 x Audio	Line Receiver	Line receiver for Video and Audio Stereo in a compact enclosure.