

**SAFETY**

Only use your ZT-TP.. in a clean, dry, dust-free environment unless it is protected by an appropriate protective housing. For external use, a rating of IP65 is required or an IP rating that is appropriate to the installation.

**⚠ WARNING**

**Your ZT-TP must not be used in intrinsically safe environments. Installation is only to be carried out by competent, qualified and experienced personnel. Wire in accordance with your national wiring regulations. Only use the class 2 isolated power supply supplied for the +12V DC and do not use it to power ancillary equipment.**

**ELECTROMAGNETIC COMPATIBILITY (EMC)**

**⚠ CAUTION**

**This is a Class A product. In a domestic environment this product may cause radio interference. The user may be required to take adequate measures.**

This product is intended for use in general purpose CCTV applications in a residential, commercial or light industrial EMC environment and has no other purpose. Refer to Baxall Limited before using the product in an intrinsically safe application, a medical application or an industrial EMC environment.

The product must be installed in accordance with good EMC-installation practice to enable the product to function as intended and to prevent EMC problems.

**MANUFACTURER'S DECLARATION OF CONFORMANCE**

The manufacturer declares that the product supplied with this document is compliant with the essential protection requirements of the EMC directive 89/336 and the Low Voltage Directive LVD 73/23 EEC. Conforming to the requirements of standards EN 55022 for emissions, IEC801 parts 2, 3 and 4 for immunity and BS415 superseded by EN60950 for Electrical Equipment safety.

**UNPACKING**

Keep your packaging. A ZT-TP1 is a single ZT-TP and a power supply. A ZT-TP4 is a pack of four ZT-TPs and a single power supply. A ZT-TP8 is a pack of eight ZT-TPs and a single power supply. The packaging should contain:

- one or more ZT-TPs
- a 12V DC class 2 isolated power supply
- These Instructions

Check the product code on the serial number label. If you have an incorrect item or it is damaged then inform the suppliers and carriers immediately. If this is the case then do not attempt to use your ZT-TP.

**DESCRIPTION**

Your ZT-TP connects between your transmitter and receiver in your coaxial line. It converts Baxall coaxial telemetry into 20mA current loop twisted-pair telemetry. It requires a +12V DC class 2 isolated power supply.

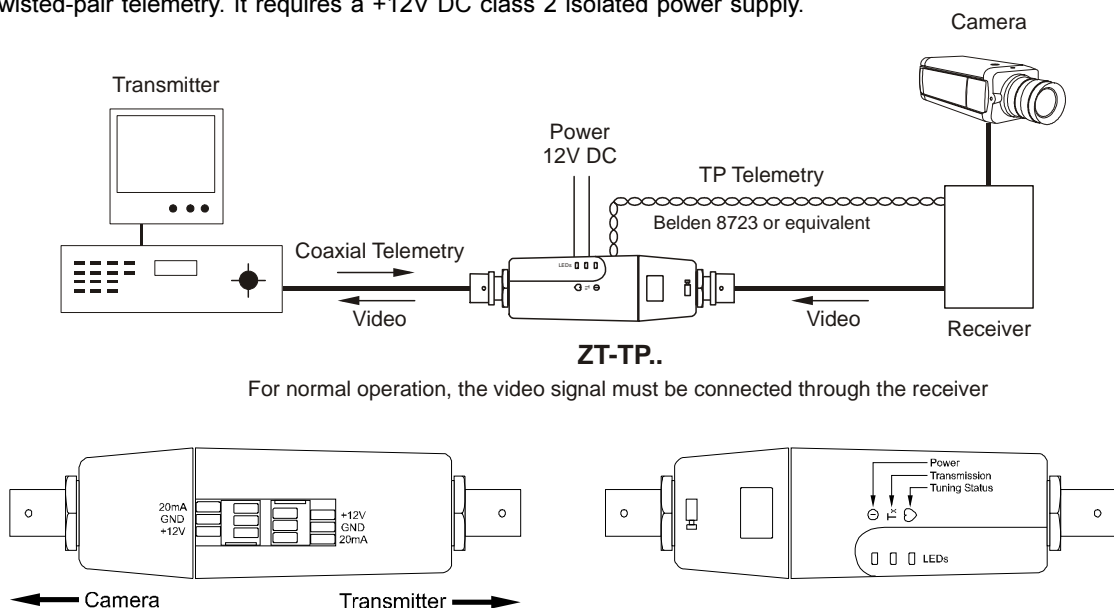


Fig. 1

**INSTALLATION**

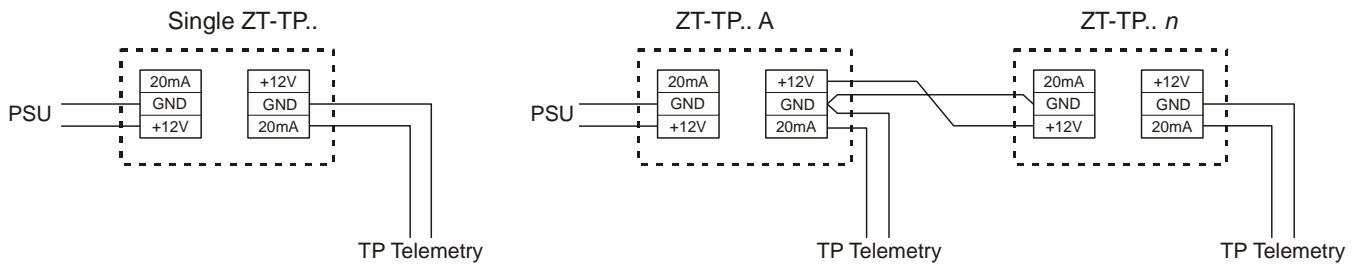



Fig. 2

All video signals are 1V pk-pk composite via 75 ohm video coaxial cable and BNC connectors.

Two sets of spring loaded contacts are provided on the ZT-TP which allow you to make the power and twisted-pair telemetry connections. Each pair are commoned together i.e. GND connects to GND, etc. This enables the connections to be made more easily. In addition, the power supply connections may be commoned together when more than one ZT-TP is being used (see figure 2).

- Connect the +12V DC and 20mA twisted pair to the 3 way connectors on the side of your ZT-TP as shown in Figure 2.
- Connect the BNC of your ZT-TP engraved with a camera symbol  to your receiver and the other BNC to your transmitter.

Your ZT-TP has three LED indicators showing the following:

**Power**

Illuminates when the power is connected

**Transmission**

This led indicates the transmission status using the following codes

- regular flash for good video and data transmission
- short OFF, long ON for no data
- short ON and long OFF for no video
- random flash for data errors

**Tuning Status**

Flashes at approx 0.6s intervals when the unit is correctly tuned.

**AUTOTUNING**

The ZT-TP features an autotuning system to facilitate setup. No manual adjustment is provided. The feature operates as follows.

1. The phase locked loop is tuned by the control program immediately after power is connected and the calculated values are used to maintain the tuning voltage.
2. If the autotuning function is unsuccessful then four more attempts are made to establish the correct tuning voltage.
3. If, after a total of five attempts, autotuning is still unsuccessful then a default value is used. This default value should be adequate in most cases.

To assist in the correct operation of the autotuning function, it is recommended that a telemetry signal is present shortly after the ZT-TP is powered up.

**SPECIFICATION**

<b>Inputs</b>	Baxall-coaxial-telemetry as defined by the Baxall-coaxial-telemetry specification +12V DC class 2 isolated, 40mA max.
<b>Output</b>	Baxall 20mA-current-loop telemetry as defined by the Baxall 20mA-current-loop telemetry specification.
<b>Power</b>	Nominal +12V DC (min. 8.0V DC; max. 24V DC) class 2 isolated, 40mA max.
<b>Power Supply</b>	230V AC to +12V DC class 2. Max 200mA (ZT-TP1 and ZT-TP4) or 500mA (ZT-TP8)
<b>Dimensions</b>	ZT-TP : 110 x 30 x 28 mm
<b>Temperature limits</b>	Only use this product between the temperatures of 0° and 40° C
<b>Relative Humidity</b>	Operating 20% to 80% non-condensing, storage 10% to 90% non-condensing.
<b>Twisted Pair</b>	Belden 8723 or equivalent, loop-resistance less than 500 ohms.