



TX/MK2/TPO BBV 20mA loop output card



Installation Guide



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IMPORTANT

Please read the following points before servicing or installing.

Pre-installation checks - It is recommended that the unit be bench tested prior to installation on the site.

Safety during installation or servicing - Particular care should be taken to isolate the pan/tilt head in order to prevent operation while engineering work is being carried out. In addition any ladder or other means of working on the receiver **MUST NOT** rest on the pan/tilt head as it is possible for the head to move when not expected.

Safety check - Upon completion of any service or repairs to the unit, safety checks should be performed to ensure that the unit is in proper operating condition.

Coax grounding - If an outside cable system is connected to the unit, be sure the cable system is grounded.

Adhere to Safety Standards - All normal safety precautions as laid down by British Standards and the Health and Safety at Work Act should be observed.

WARNING - TO PREVENT DANGER OF FIRE OR SHOCK, DO NOT EXPOSE THE INTERNAL COMPONENTS OF THIS EQUIPMENT TO RAIN OR MOISTURE.

Damage requiring service - Servicing by qualified personnel should be carried out under the following conditions:

- (a) When the power supply cord or plug is damaged;
- (b) If liquid has been spilled, or objects have fallen into the unit;
- (c) If the unit does not operate normally by following the operating instructions.
- (d) If the unit has been dropped or the enclosure is damaged;

Replacement parts - If replacement parts are required, ensure that only replacement parts recommended by the product manufacturer are used.

Introduction

The TX/MK2/TPO has been designed to provide a simple and cost effective way of producing 16 x 20mA telemetry outputs from a single source of BBV RS422.

The normal reason for using a twisted pair option is to connect to a non-cable transmission system, fibre, microwave etc. or when the electrical conditions are too noisy to use up-the-coax telemetry. The format is 1200 baud, 8 data bits, 1 stop bit, even parity.

It is compatible with the TX1000/MK2, TX1500 and FBM Matrices and other manufacturer's systems that can drive BBV RS422. It can be retro fitted to existing TX1000/MK2 main units.

A video cable connection is still required for picture information.

Unpacking

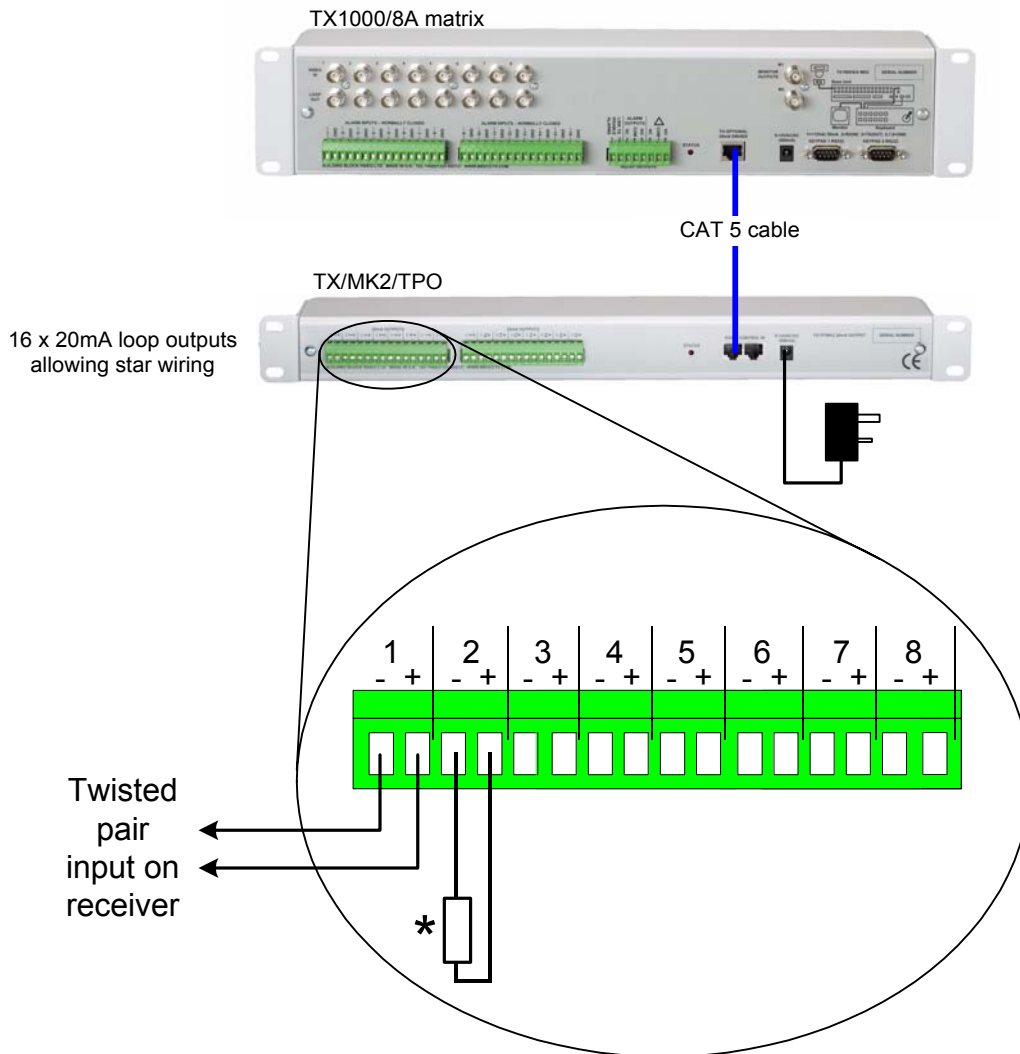
The TX/MK2/TPO is shipped with:

- 1 x TX/MK2/TPO
- 1 x 9V dc 500mA PSU
- 2 x Mounting brackets
- 1 x Blue patch cable
- 1 x Breakout box
- 1 x Manual
- 1 x Extended warranty card

Technical Specification

Power requirements	9V dc 500mA
Features	LED as a power indicator
Format	1200 baud, 8 data bits, 1 stop bit, even parity
Inputs	BBV RS422 via RJ45 socket
Outputs	16 x 20mA loop via screw terminal connectors. Line impedance must not exceed 300Ω. (Tested in office conditions up to 1200m of standard CAT5 cable)
Installation	Supplied in 1U 19" rack mountable metalwork or wall mounted vis fixing brackets supplied
Dimensions	427mm (w) x 73mm (d) x 45 mm (h)
Weight	2.1kg

Installation – Installing with a TX1000 Matrix



*Fit a 470Ω resistor to suppress coax telemetry if required. (Camera 2 suppressed telemetry)

Use the output on the TX/MK2/TPO that corresponds to the camera number.

Mixed Coax and Twisted pair systems

The TX1000 series of transmitters copes automatically with a mixture of coax and twisted pair connected receivers, directing the telemetry signal to the relevant interface. The only requirement is that the installer connects the twisted pair cable to the telemetry output corresponding to the video input.

To suppress Coax signal

When it is required to remove the coax telemetry signal from a static camera, i.e. no telemetry required at all, install a 470Ω resistor across the relevant twisted pair output contacts.

Note: Occasionally some equipment dislikes having a telemetry signal on its output.

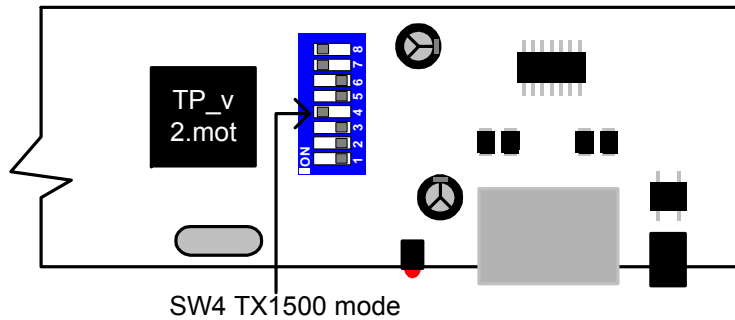
Dipswitch functionality:

Dipswitch	Function
SW1 - 3	Addressing
SW4	TX1500 mode
SW5	Test
SW6	Progam
SW7 & 8	Termination

TX/MK2/TPO in TX1500 mode

When the TX/MK2/TPO is in TX1500 mode it can be controlled by either a TX1500 Matrix or another system that drives BBV422. BBV RS422 protocol can be downloaded from the BBV Support website: <http://www.support.bbvctv.com>

Inside the TX/MK2/TPO there is an 8 way dill switch, change SW4 to 'on':

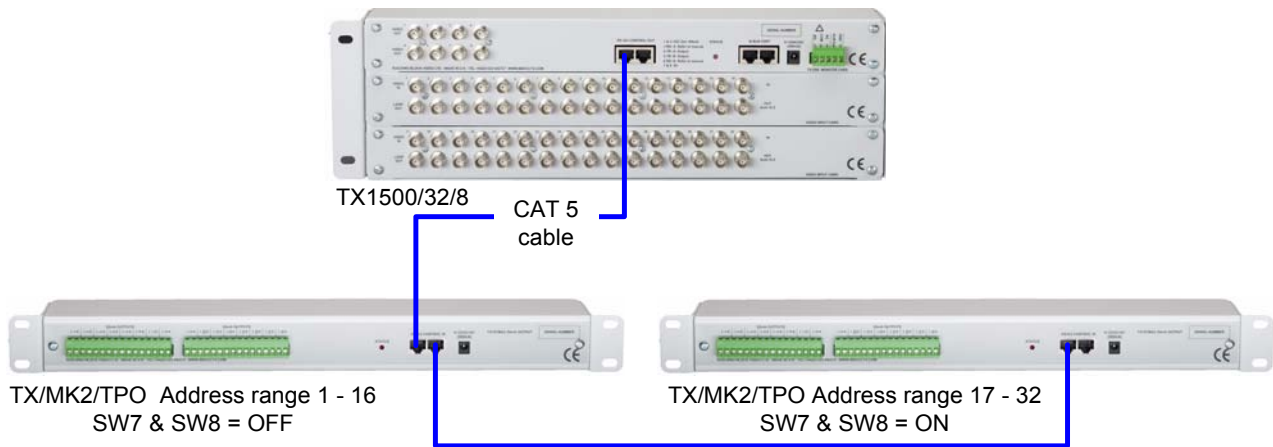


In the table below you will be able to find the correct BBV422 input command to generate the required output command:

BBV422 INPUT	SAVE PRESET 95 OR GOTO PRESET 61	GOTO PRESET 33 OR GOTO PRESET 62	GOTO PRESET 94 OR GOTO PRESET 63	GOTO PRESET 64	GOTO PRESET 66	GOTO PRESET 67	GOTO PRESET 68	GOTO PRESET 69
BBV 20mA OUTPUT	1#	2#	3#	4#	START 1 PATROL	START 2 PATROL	START AUTOPAN	SELF TEST

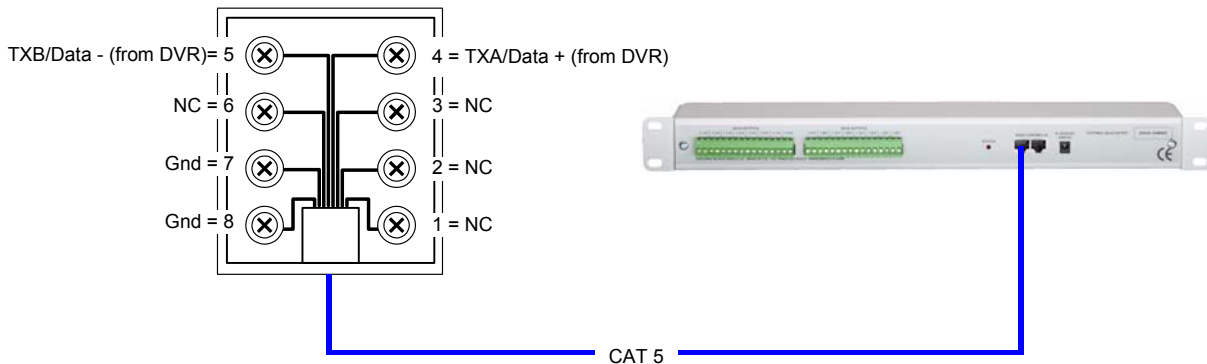
End of line Termination

Up to 8 x TX/MK2/TPOs can be daisy chained together allowing up to 128 addresses. The last TX/MK2/TPO should be terminated; to do this change SW7 & SW8 to 'on'.



Connecting the TX/MK2/TPO to a DVR

If you are connecting the TX/MK2/TPO to a DVR you will need to use the RJ45 Breakout box.



Addressing the TX/MK2/TPO

To set the address range in the TX/MK2/TPO adjust the dipswitches as per the table below:

Address	SW1	SW2	SW3
1 – 16	OFF	OFF	OFF
17 – 32	ON	OFF	OFF
33 – 48	OFF	ON	OFF
49 – 64	ON	ON	OFF
65 – 80	OFF	OFF	ON
81 – 96	ON	OFF	ON
97 – 112	OFF	ON	ON
113 - 128	ON	ON	ON

Extend your BBV Warranty from 12 months to 3 years

As of the 1st September 2008 BBV have offered our customers the opportunity to extend the standard 12 month warranty to 3 years.


You must register for the extended warranty within 12 months of the date of manufacture.

How to register for the 3 year warranty

Registering for the new, longer 3 year warranty term is quick and easy.

Either:

Complete the warranty application card that comes in the box with your BBV product, and return it FREEPOST to BBV:





BBV 3 Year Warranty

If this card is returned with the serial number of the product and the Installation company details BBV will extend the warranty period from 12 Months to 36 Months.

Number of Units, Start Serial No. Final Serial No.

Contact Name _____
Company Name _____
Phone Number _____
Site Name _____
Address 1 _____
Address 2 _____
Address 3 _____
Post Code _____
e-mail address _____

Please could you send me information especially on:
 Rx100s
 Rx45x & Rx55x
 FBM Video Matrices
 Tx1500 Video Matrices
 Starcard & Starcard Converters
 BBV Quad
 Pick A Point

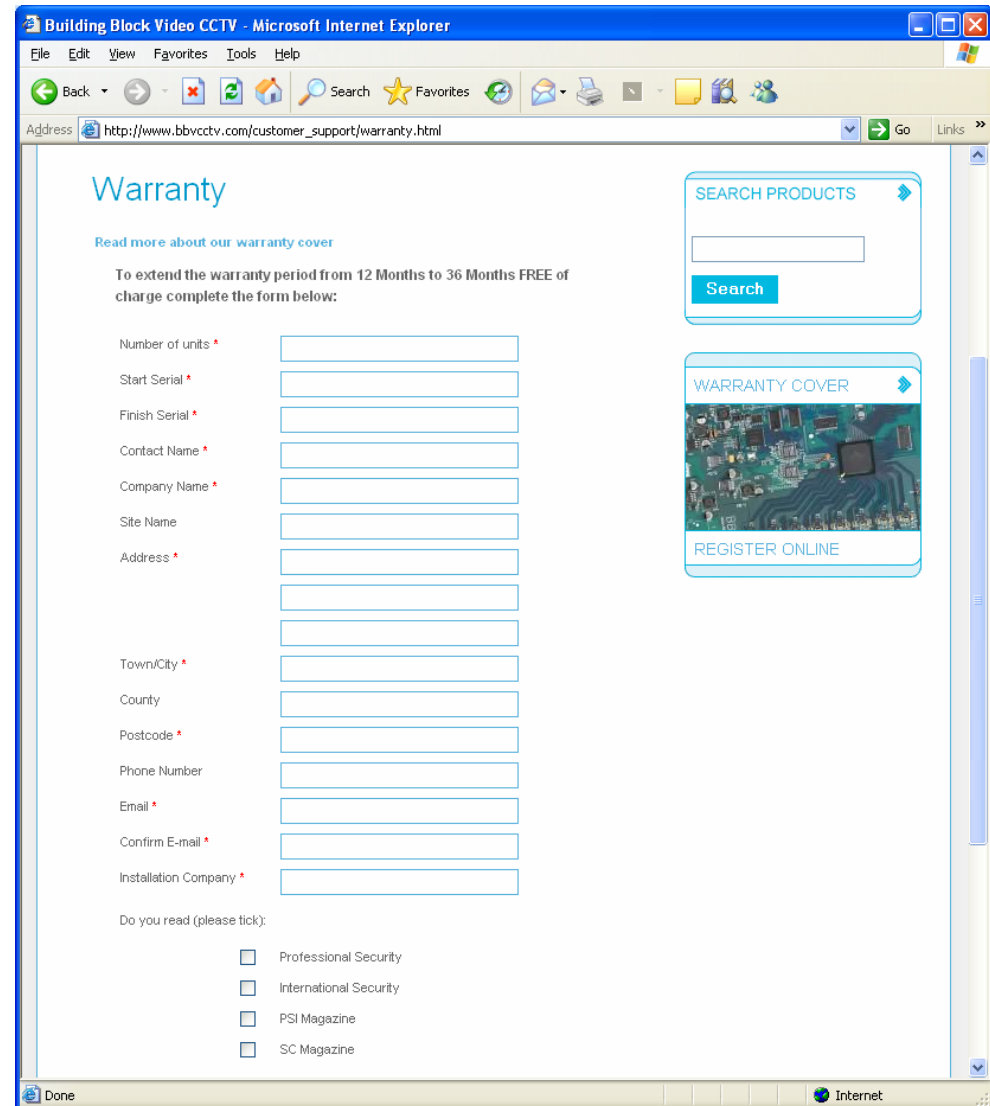
Do you read:  
 I do not require any other further product information.
Please refer to WWW.BBVCCTV.COM for terms, conditions & exclusions

VAT Reg. No. 621758439 Registered in England No. 2852921 Registered office: 17 Apex Park Diplocks Way Hailsham East Sussex UK BN27 3JU

Or alternatively:

Register online at: www.bbvctv.com

Simply enter your details on the 'Warranty Cover' page.



The screenshot shows a web browser window titled "Building Block Video CCTV - Microsoft Internet Explorer". The address bar shows "http://www.bbvctv.com/customer_support/warranty.html". The page content includes a "Warranty" heading, a "SEARCH PRODUCTS" box, and a "WARRANTY COVER" box with a "REGISTER ONLINE" button. The main form area contains the following fields and options:

- Number of units *
- Start Serial *
- Finish Serial *
- Contact Name *
- Company Name *
- Site Name
- Address *
- Town/City *
- County
- Postcode *
- Phone Number
- Email *
- Confirm E-mail *
- Installation Company *

Do you read (please tick):

- Professional Security
- International Security
- PSI Magazine
- SC Magazine



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