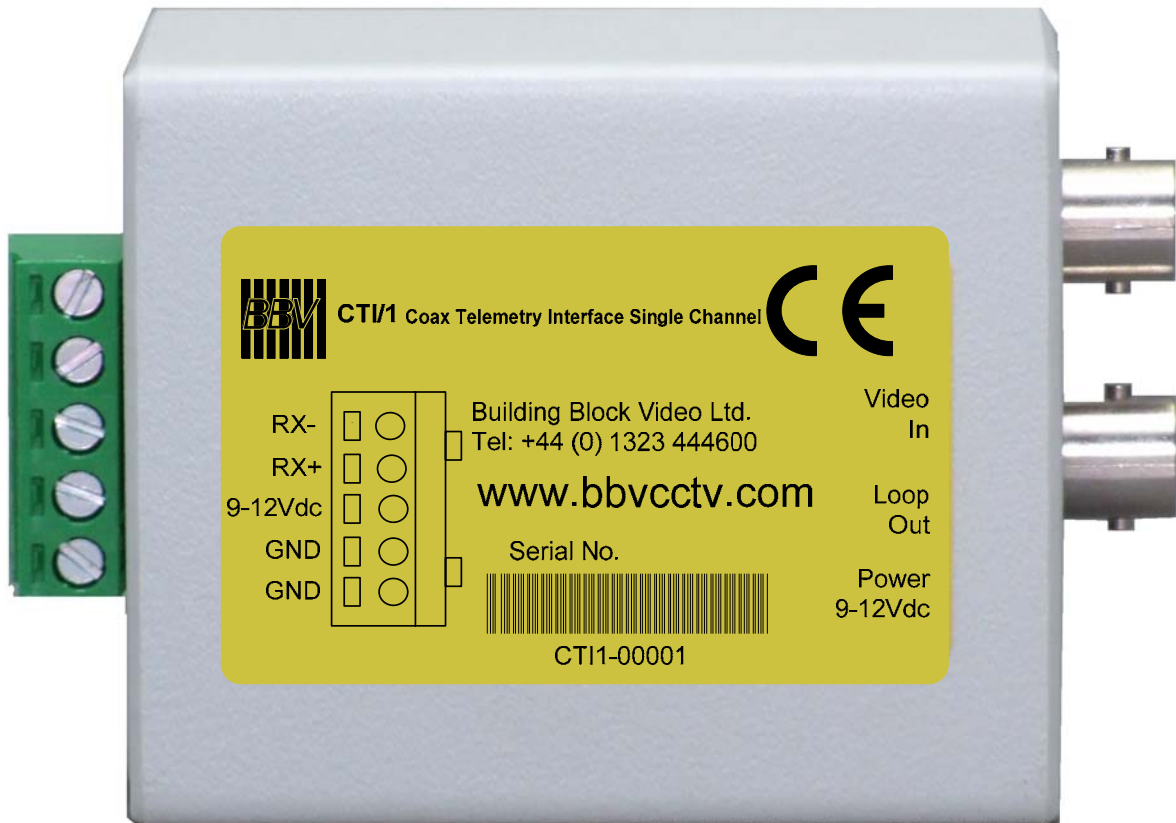




# Installation Guide





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## **INTRODUCTION**

### **GENERAL**

The CTI/1 is designed to provide conversion from RS422/485 serial telemetry to BBV Coax Telemetry based systems.

Up the Coax telemetry allows upgrading of static cameras to PTZ without the need for additional cabling.

The RS422/485 input is auto detecting. The CTI/1 will understand BBV RS422 & Pelco P @ 9600, N, 8, 1.

1 x BNC output provides Coax Telemetry, connecting to a single receiver.  
1 x BNC output provides Video Loop Through.

Each unit is supplied with a 12Vdc Power Supply, Manual & Adhesive Fixings.

**Please Note: The CTI/1 supports eight addresses only**

Protocols supported are: BBV & Pelco P

The CTI/1 has been tested with the BBV FBM Matrix, BBV TX1500 Matrix, BBV TX400DC/RS485 and a number of products that transmit Pelco P 9600 N81,

**BBV ALWAYS RECOMMENDS THAT ALL SYSTEMS  
ARE BENCH TESTED BEFORE INSTALLATION**

## **PRE-INSTALLATION CHECKS AND SAFETY PROCEDURES**

**Unpacking** - Inspect the packaging for signs of damage. If damage has occurred, advise the carrier and/or the suppliers immediately. Unpack the receiver carefully and check that all the items are present and correct (see checklist on box). If any item is missing contact the supplier.

Part number	Description	9-12Vdc PSU	1 x 5 Way Green IMO (5.08 mm pitch)	Jumper Link on pin 5 only /J3	Manual	2 x Sticky Pads	Warranty card
CTI/1	RS422/BBV Coax Telemetry Interface single channel	X	X	X	X	X	X

**Retain Packaging** - The shipping carton is the safest container in which to transport the unit. Retain undamaged packaging for possible future use.

### **IMPORTANT SAFETY PRECAUTIONS**

**Read & Retain Instructions** - All relevant safety, installation and operating instructions should be read & retained before attempting to install, connect or operate the unit.

**Water and Moisture** - Do not expose the internal electronics of this unit to water or dampness.

**Power Sources** - This unit should be operated only from the supplied power supply.

**Servicing** - Servicing of the unit should only be undertaken by qualified service personnel.

**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 internal electronics of the unit have been exposed to rain or water;
- (d) If the unit does not operate normally by following the operating instructions.
- (e) 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.

**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.

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

**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.**

## Technical Specification

**Power Requirements** 9-12Vdc 500mA

**Inputs** **BBV RS422 or Pelco P** 2 Wire RS485 or 2 Wire RS422 Simplex via  
5 pin Green Screw Terminal Connector  
Maximum Cable Distance Belden 8723 = 1200mtrs

**Outputs** 1 x **BBV Coax Telemetry** via BNC Connectors  
Minimum Cable distance = 5mtrs  
Maximum Cable Distance RG59 = 250mtrs  
CT125 = 500mtrs

**Facilities** Supports 8 addresses  
LED as power & address valid data  
LED Coax telemetry active  
TEST SWITCH sends a command to the camera or receiver.

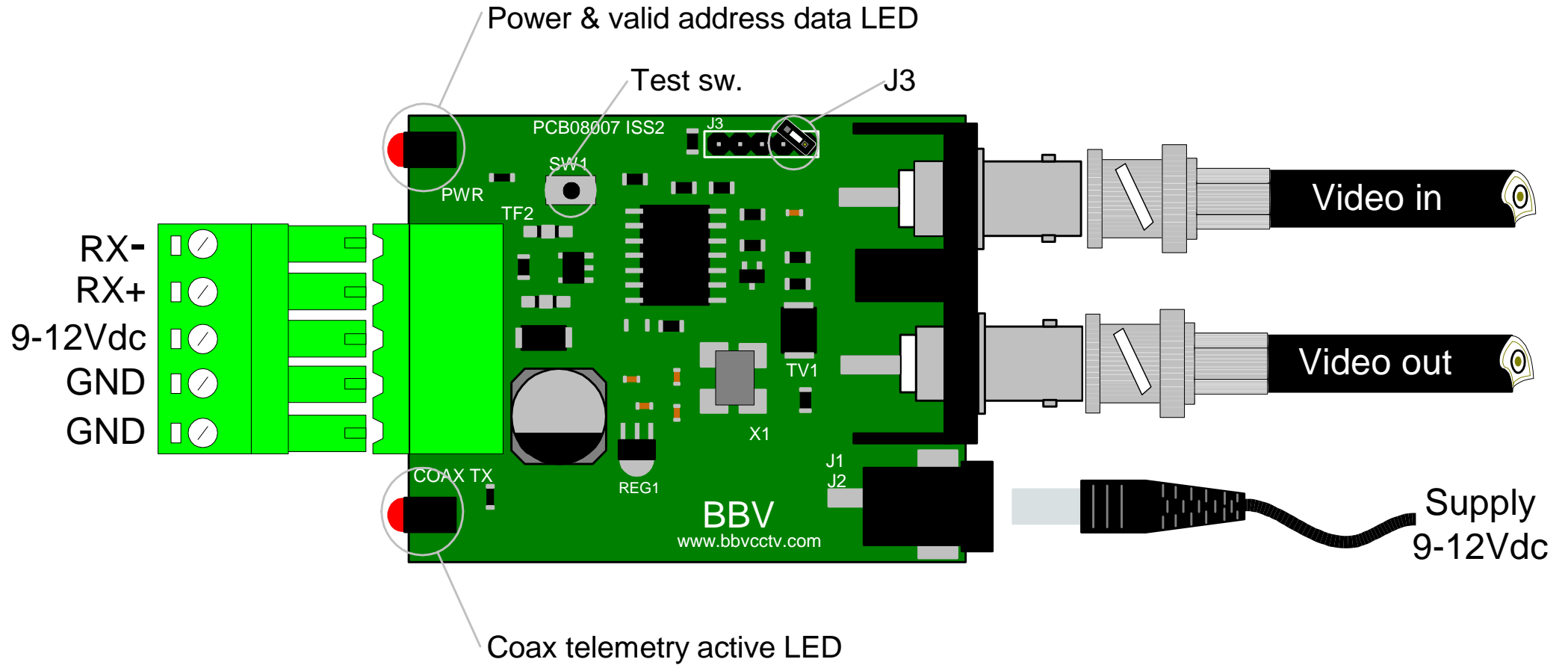
**Boxed Dimensions.** Length 69mm  
Width 57mm  
Height 36mm

**Weight** 64 grams

## CTI/1 Software Version History

Version 1	December 2008	1. CTI/1 Released Support of BBV, Pelco P RS485 input protocols converting to BBV Coax output protocol
Version 5	August 2011	1. Added test button function. When the push button is pressed the CTI1 outputs pan right speed 7 command and stop on release.

## CTI/1 Connection Diagram



In normal operation the Power LED is ON, when receiving valid serial telemetry the LED flashes OFF & the telemetry active LED will flash ON.

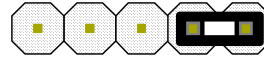
## Address Setting Procedure

The CTI/1 is defaulted to address 1, to set a new address follow the steps below:

Step Action

1 Remove Power and Plastic Cover

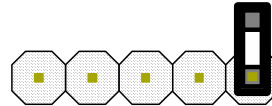
2 Fit Jumper Link to J3 Pins 4 & 5



3 Apply Power

4 Press & Hold SW1 Address Button until the Power LED flashes the required number of times to match the address. (1 – 8 Flashes followed by longer pause)

5 Remove Jumper on J3Link



6 Remove Power

7 Refit Plastic Cover & Re-apply Power

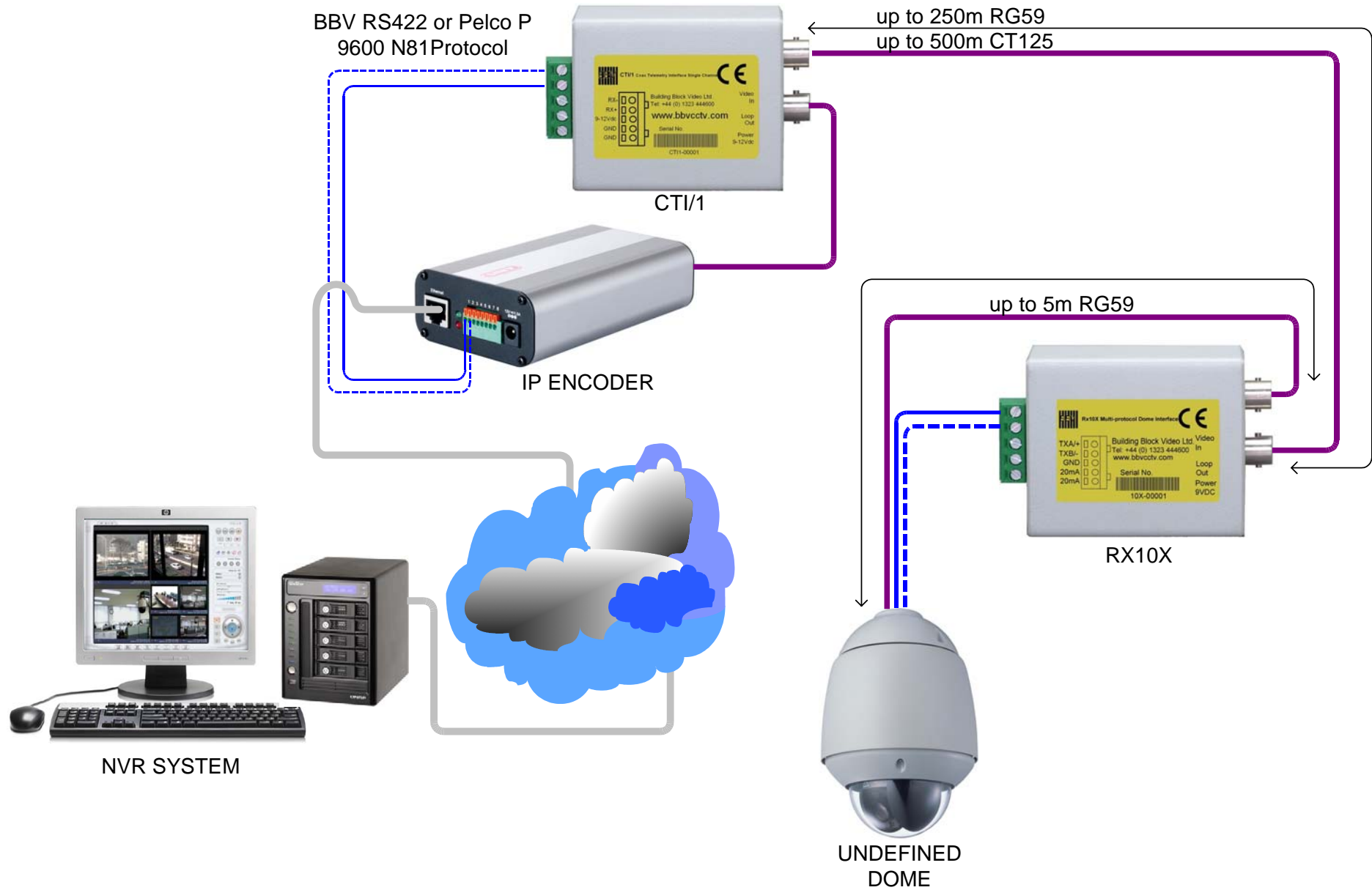
## Function Command Table

BBV support a number of commands that are referred to as # commands these are used to enter the menu of the camera or receiver. In addition BBV coax telemetry also supports 2 preset patrols & an Autopan command, all of the fore-mentioned commands can be called from preset commands these are all listed below.

BBV Coax Output	BBV RS422	Pelco P 9600 N 8 1
1#	1#	Save Preset 95 or Goto Preset 61
2#	2#	Goto Preset 33 or Goto Preset 62
3#	3#	Goto Preset 94 or Goto Preset 63
4#	4#	Goto Preset 34 or Goto Preset 64
Start Patrol 1	Start Patrol 1	Goto Preset 97 or Goto Preset 66
Start Patrol 2	Start Patrol 2	Goto Preset 98 or Goto Preset 67
Autopan	Autopan	Goto Preset 99 or Goto Preset 68

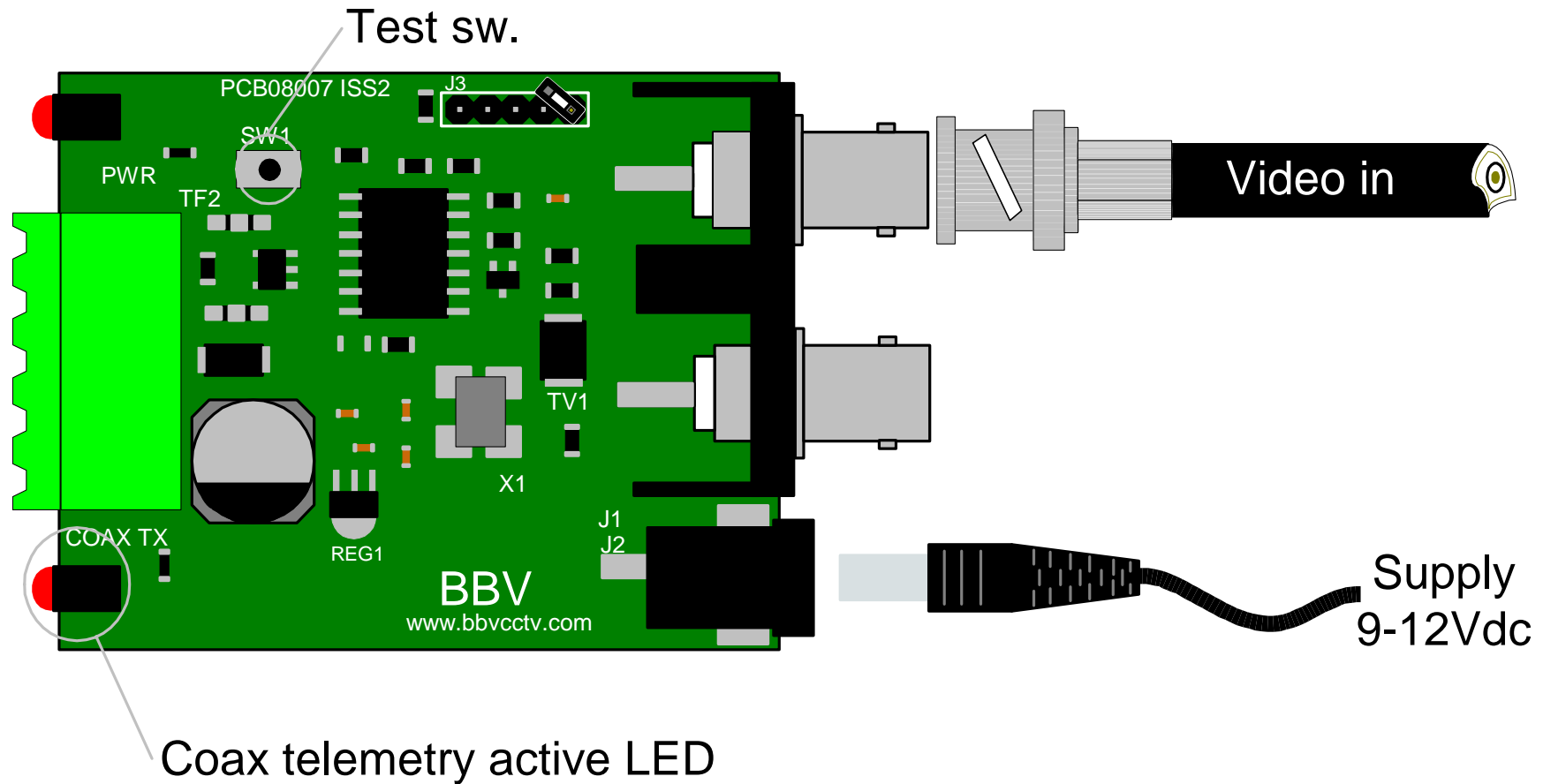


# Example System Drawing



## Test Mode

There will be occasions where it will be necessary to test if the CTI/1 is sending coax telemetry to the camera or receiver connected to the remote end of the coax. As you will see from the drawing below only one coax is needed to be connected. This is the coax from the camera or receiver. The test can be done by simply pressing the push switch marked as SW1 on the PCB. When the switch is pressed the camera or receiver will receive a pan right a half speed, on release of the switch a stop will be sent. It is important to remember that if the camera or receiver is fully zoomed it may reduce the overall pan speed.





## Extend your BBV Warranty from 12 months to 3 years

As of the 1<sup>st</sup> 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 \_\_\_\_\_

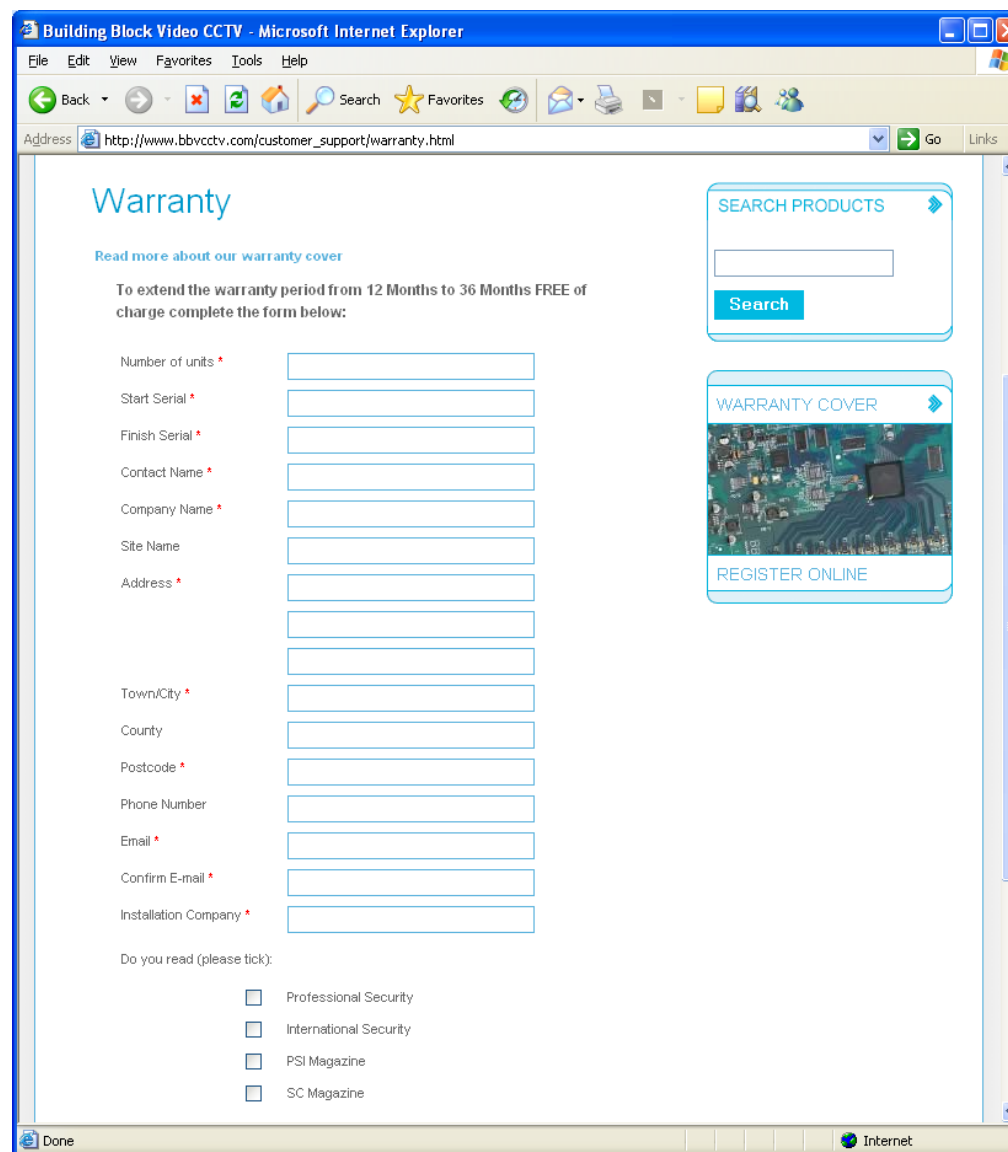
Please could you send me information especially on:  
 Rx100s  
 Rx45x & Rx55x  
 FBM Video Matrices  
 Tx1500 Video Matrices  
 Starcard & Starcard Converters  
 BBV Quad  
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## Warranty

Read more about our warranty cover

To extend the warranty period from 12 Months to 36 Months FREE of charge complete the form below:

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):

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