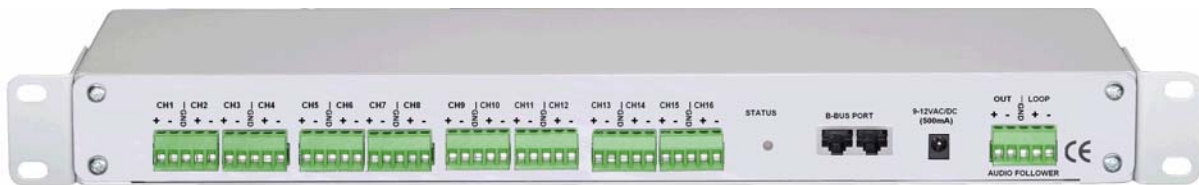




AUDIO FOLLOWER



Installation Guide



Building Block Video Ltd
17 Apex Park
Diplocks Industrial Estate
Hailsham, East Sussex, BN27 3JU, UK
Tel: + 44 (0) 1323 842727
Fax: + 44 (0) 1323 842728
Support: + 44 (0) 1323 444600
www.bbvctv.com

Contents

Important	4
Unpacking	4
Introduction	6
Connections	6
Dip Switches	6
Notes on Wiring	7
Line Drawing of PCB	8
Monitor number Range switch settings	9
Camera Address Range switch settings	10
FBM System drawing	11
Tx1500 System drawing	12
Loop Back Test	13

IMPORTANT

1. PRE-INSTALLATION CHECKS AND SAFETY PROCEDURES

Check Contents - Upon taking delivery of the unit, unpack the unit carefully and check that all the items are present and correct. If any items are missing or damaged, contact your equipment dealer.

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

Retain Instructions - All safety, installation and operating instructions should be retained for future reference.

Heed Warnings - All warnings on the unit and in any relevant safety, installation or operating instructions should be adhered to.

Cleaning - Unplug the unit from the power outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

Water and Moisture - Do not expose the internal electronics of this unit to water or dampness; for example, in an unprotected outdoor installation, or in any area classified as a wet location.

Accessories - Do not attach this unit to an unstable stand, bracket or mount. The unit may fall, causing serious injury to a person and serious damage to the unit.

Power Sources - This unit should be operated only from the Plug Top PSU Supplied. Refer to operating instructions.

Power Connector - This unit is equipped with coaxial power connector mounted at the edge of the PCB for low voltage power input. Do not attempt to alter this connector in any way.

Power Cord Protection - Power supply cords should be routed so that they are not likely to be trapped, pinched or otherwise damaged by items in close proximity to them, Particular attention should be paid to cords at plugs at the rear of the unit.

Overloading - Do not overload outlets and extension cords, as this can result in fire or electric shock.

Object and Liquid Entry - Never push objects of any kind into the unit, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill liquid of any kind on or inside the unit.

Servicing - Servicing of the unit should only be undertaken by qualified service personnel, as opening or removing covers may expose you to dangerous voltages or other hazards.

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. Adjust only those controls that are covered by the operating instructions, as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to normal operation.
- (e) If the unit has been dropped or the enclosure is damaged.
- (f) If the unit exhibits a distinct change in performance. This indicates a need for service.

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.

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 Matrix in order to prevent operation while engineering work is being carried out on the Audio Follower.

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.

BBV Audio Follower 16 by 2

Introduction

The BBV audio follower is a 16 by 2 channel routing switcher designed to allow the switching of either balanced or unbalanced Audio signals to a single balanced or unbalanced input or output. Without loss or degradation of the signal. It is designed to complement and track the video switching of the BBV Tx1500 & FBM matrixes. The unit can easily be banked or commoned up to provide audio following for almost any size matrix from the Tx1500/16/8 to the FBM 1024 by 64 monitor.

Unpacking

Inspect the packaging for signs of damage. If damage has occurred, advise the carriers and/or the suppliers immediately. Unpack the Audio follower carefully and check that all the items are included:

Part number	Description	Blue Cat5 patch cable	2 x mounting brackets	9 Green plugs	4 x M4 screws	PSU	Manual	Warranty card
Tx1500/AF	TX1500 16 Channel audio follower	X	X	X	X	X	X	X

Fig 1

Connections

The unit can be powered via a 2.1mm front panel connector from a 9VDC 500mA supply.

The unit provides relay contact switching of an input to a common bus

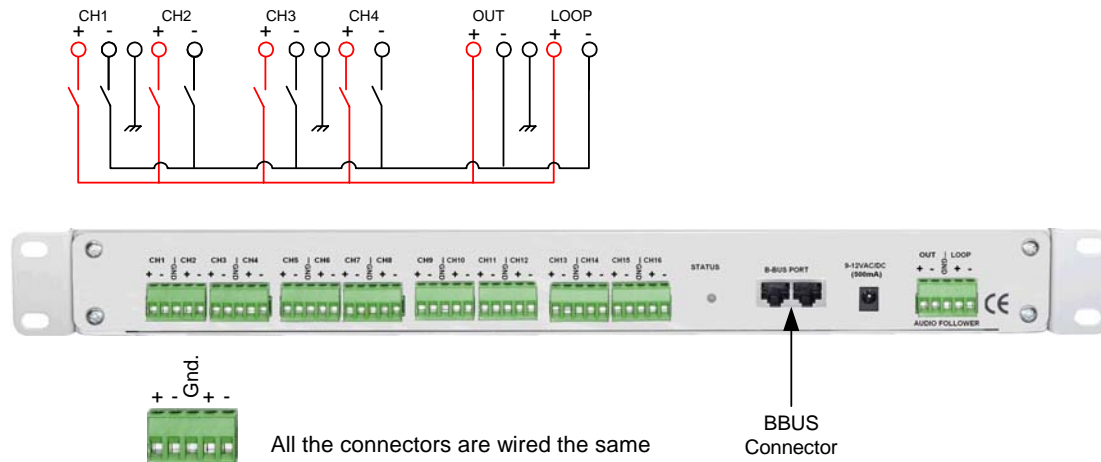


Fig 2

Dip switch settings

SW1 switches 1 to 6 Monitor selection see table on Page 9.
 SW1 switches 7 and 8 BBUS selection termination see table on Page 9.

SW2 switches 1 to 6 Camera selection see table on Page 10.
 SW2 switch 7 loop back test see table on Page 10.
 SW2 switch 8 FBM Mode see table on Page 10.

Notes on Wiring

Low impedance “professional” microphones have a balanced output these can be successfully switched via the audio follower. To reduce the possibility of hum the unit should be wired as follows:-

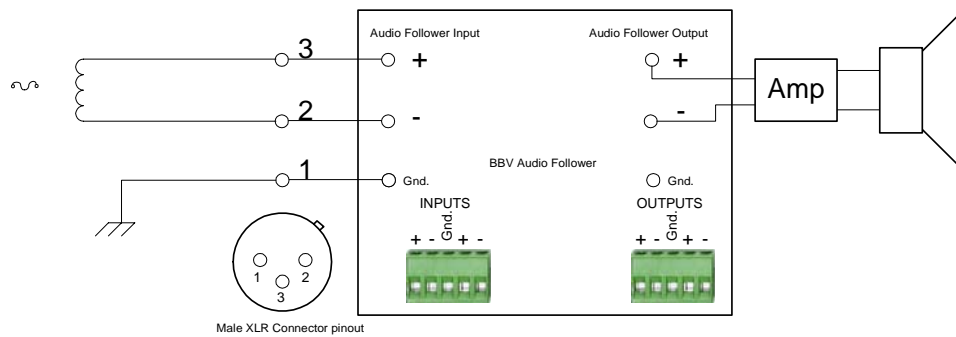


Fig 3

Phantom power can be supplied through the audio follower, however some microphones emit a click on power up, to remove this click phantom power can be supplied from the audio follower as a special build.

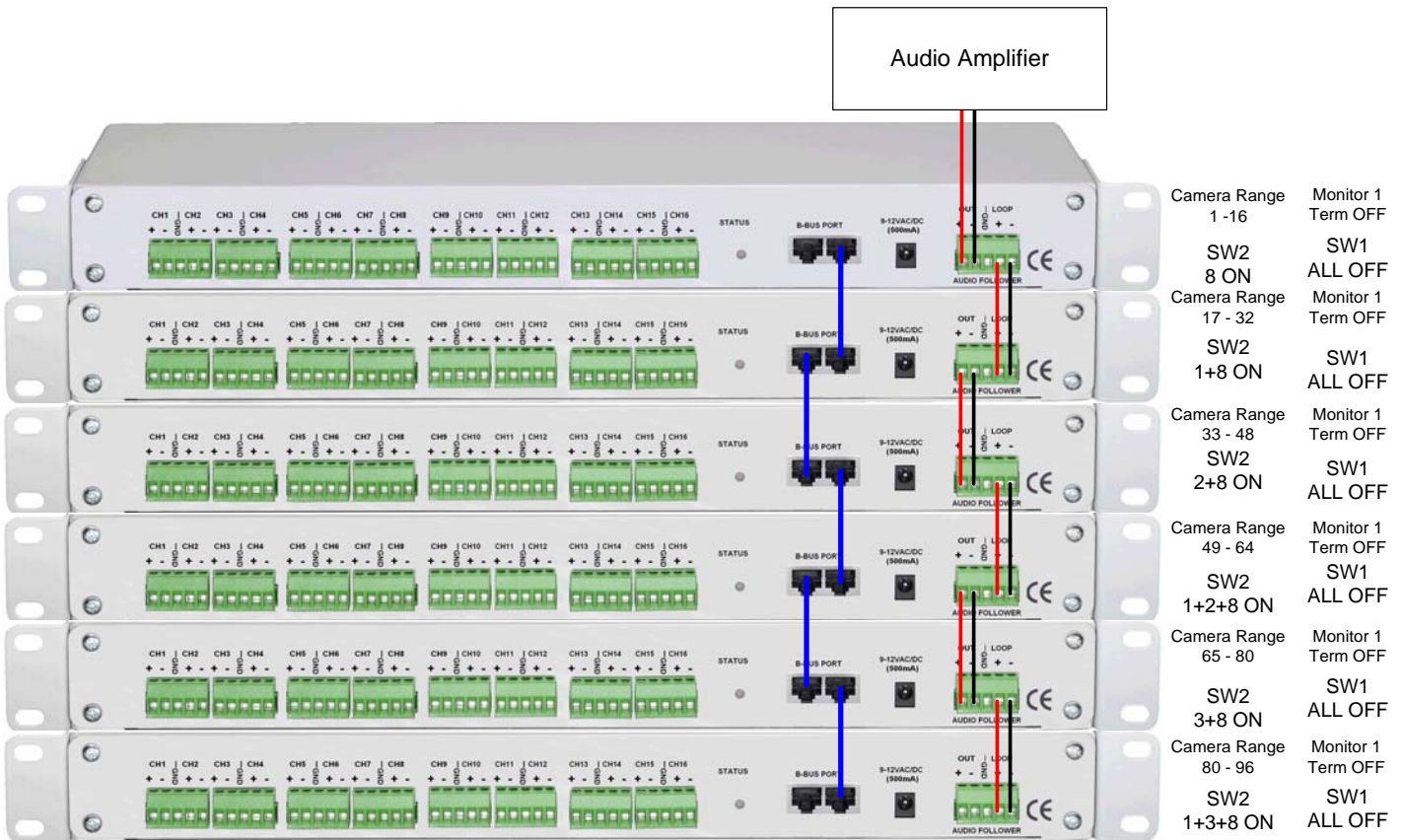


Fig 4

To enable large switching matrices to be created the audio follower has Loop and Out connectors these are commoned together in side the Audio Follower.

Line Drawing of PCB

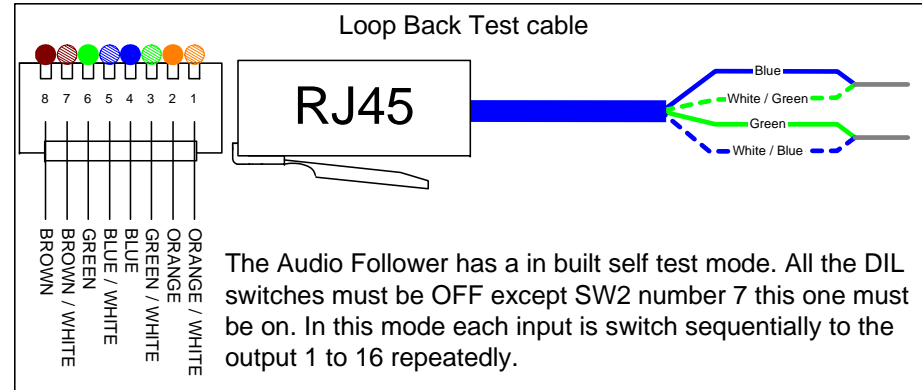
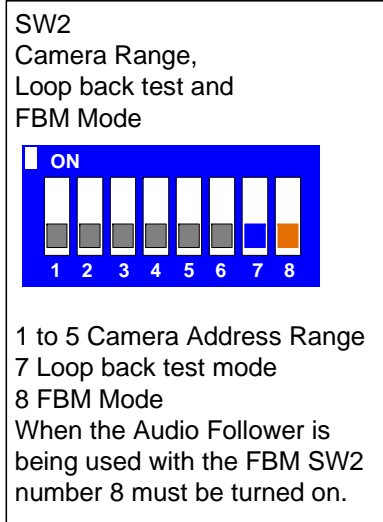
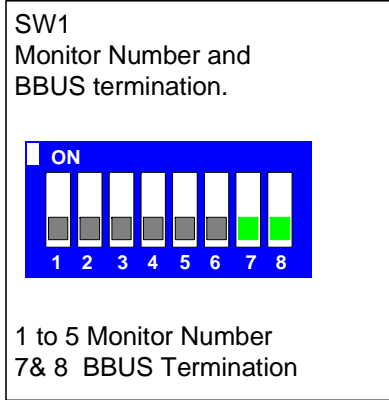


Fig 5

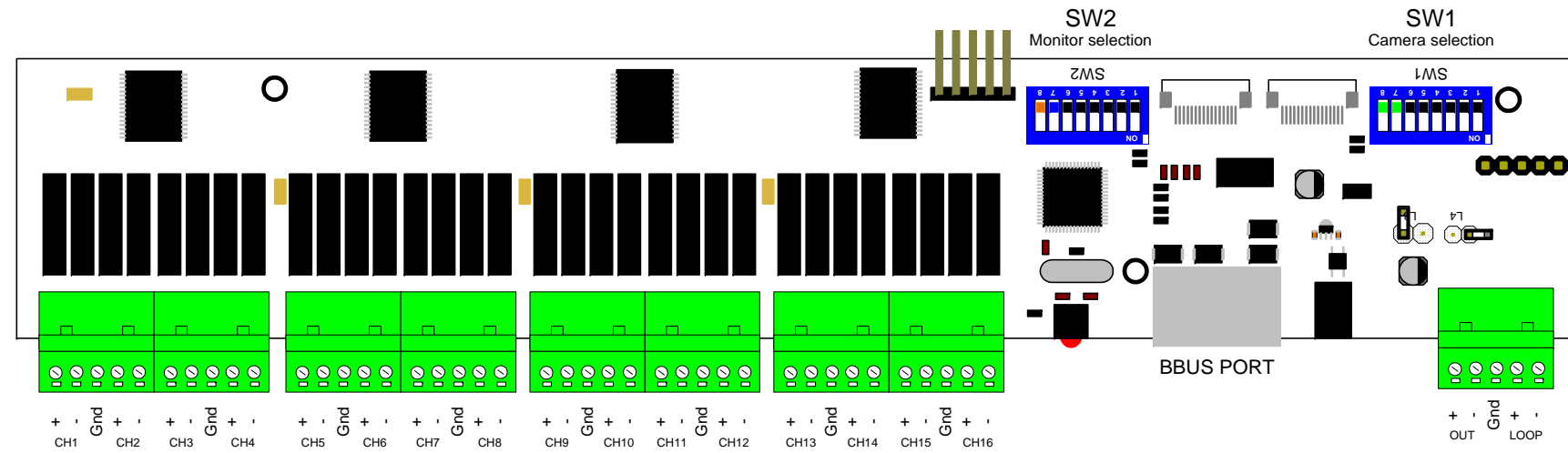


Fig 6

Monitor number Range switch settings

BBUS Termination		Monitor number selection SW1						Monitor
SW8	SW7	SW6	SW5	SW4	SW3	SW2	SW1	
ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	1.
ON	ON	OFF	OFF	OFF	OFF	OFF	ON	2.
ON	ON	OFF	OFF	OFF	OFF	ON	OFF	3.
ON	ON	OFF	OFF	OFF	OFF	ON	ON	4.
ON	ON	OFF	OFF	OFF	ON	OFF	OFF	5.
ON	ON	OFF	OFF	OFF	ON	OFF	ON	6.
ON	ON	OFF	OFF	OFF	ON	ON	OFF	7.
ON	ON	OFF	OFF	OFF	ON	ON	ON	8.
ON	ON	OFF	OFF	ON	OFF	OFF	OFF	9.
ON	ON	OFF	OFF	ON	OFF	OFF	ON	10.
ON	ON	OFF	OFF	ON	OFF	ON	OFF	11.
ON	ON	OFF	OFF	ON	OFF	ON	ON	12.
ON	ON	OFF	OFF	ON	ON	OFF	OFF	13.
ON	ON	OFF	OFF	ON	ON	OFF	ON	14.
ON	ON	OFF	OFF	ON	ON	ON	OFF	15.
ON	ON	OFF	OFF	ON	ON	ON	ON	16.
ON	ON	OFF	ON	OFF	OFF	OFF	OFF	17.
ON	ON	OFF	ON	OFF	OFF	OFF	ON	18.
ON	ON	OFF	ON	OFF	OFF	ON	OFF	19.
ON	ON	OFF	ON	OFF	OFF	ON	ON	20.
ON	ON	OFF	ON	OFF	ON	OFF	OFF	21.
ON	ON	OFF	ON	OFF	ON	OFF	ON	22.
ON	ON	OFF	ON	OFF	ON	ON	OFF	23.
ON	ON	OFF	ON	OFF	ON	ON	ON	24.
ON	ON	OFF	ON	ON	OFF	OFF	OFF	25.
ON	ON	OFF	ON	ON	OFF	OFF	ON	26.
ON	ON	OFF	ON	ON	OFF	ON	OFF	27.
ON	ON	OFF	ON	ON	OFF	ON	ON	28.
ON	ON	OFF	ON	ON	ON	OFF	OFF	29.
ON	ON	OFF	ON	ON	ON	OFF	ON	30.
ON	ON	OFF	ON	ON	ON	ON	OFF	31.
ON	ON	OFF	ON	ON	ON	ON	ON	32.
ON	ON	ON	OFF	OFF	OFF	OFF	OFF	33.
ON	ON	ON	OFF	OFF	OFF	OFF	ON	34.
ON	ON	ON	OFF	OFF	OFF	ON	OFF	35.
ON	ON	ON	OFF	OFF	ON	OFF	ON	36.
ON	ON	ON	OFF	OFF	ON	OFF	OFF	37.
ON	ON	ON	OFF	OFF	ON	OFF	ON	38.
ON	ON	ON	OFF	OFF	ON	ON	OFF	39.
ON	ON	ON	OFF	OFF	ON	ON	ON	40.
ON	ON	ON	OFF	ON	OFF	OFF	OFF	41.
ON	ON	ON	OFF	ON	OFF	OFF	ON	42.
ON	ON	ON	OFF	ON	OFF	ON	OFF	43.
ON	ON	ON	OFF	ON	OFF	ON	ON	44.
ON	ON	ON	OFF	ON	ON	OFF	OFF	45.
ON	ON	ON	OFF	ON	ON	OFF	ON	46.
ON	ON	ON	OFF	ON	ON	ON	OFF	47.
ON	ON	ON	OFF	ON	ON	ON	ON	48.
ON	ON	ON	ON	OFF	OFF	OFF	OFF	49.
ON	ON	ON	ON	OFF	OFF	OFF	ON	50.
ON	ON	ON	ON	OFF	OFF	ON	OFF	51.
ON	ON	ON	ON	OFF	OFF	ON	ON	52.
ON	ON	ON	ON	OFF	ON	OFF	OFF	53.
ON	ON	ON	ON	OFF	ON	OFF	ON	54.
ON	ON	ON	ON	OFF	ON	ON	OFF	55.
ON	ON	ON	ON	OFF	ON	ON	ON	56.
ON	ON	ON	ON	ON	OFF	OFF	OFF	57.
ON	ON	ON	ON	ON	OFF	OFF	ON	58.
ON	ON	ON	ON	ON	OFF	ON	OFF	59.
ON	ON	ON	ON	ON	OFF	ON	ON	60.
ON	ON	ON	ON	ON	ON	OFF	OFF	61.
ON	ON	ON	ON	ON	ON	OFF	ON	62.
ON	ON	ON	ON	ON	ON	ON	OFF	63.
ON	ON	ON	ON	ON	ON	ON	ON	64.

Camera Address Range switch settings

FBM Mode	Loop back test mode	Camera Range selection SW2						Camera Range
SW8	SW7	SW6	SW5	SW4	SW3	SW2	SW1	
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	1-16
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	17-32
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	33 - 48
OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	49 - 64
OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	65 - 80
OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	81 - 96
OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	97 - 112
OFF	OFF	OFF	OFF	OFF	ON	ON	ON	113 - 128
OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	129 - 144
OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	145 - 160
OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	161 - 176
OFF	OFF	OFF	OFF	ON	OFF	ON	ON	178 - 192
OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	193 - 208
OFF	OFF	OFF	OFF	ON	ON	OFF	ON	209 - 224
OFF	OFF	OFF	OFF	ON	ON	ON	OFF	225 - 240
OFF	OFF	OFF	OFF	ON	ON	ON	ON	241 - 256
OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	257 - 272
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	273 - 288
OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	289 - 304
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	305 - 320
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	321 - 336
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	337 - 352
OFF	OFF	OFF	ON	OFF	ON	ON	OFF	353 - 368
OFF	OFF	OFF	ON	OFF	ON	ON	ON	369 - 384
OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	385 - 400
OFF	OFF	OFF	ON	ON	OFF	OFF	ON	400 - 416
OFF	OFF	OFF	ON	ON	OFF	ON	OFF	417 - 432
OFF	OFF	OFF	ON	ON	OFF	ON	ON	433 - 448
OFF	OFF	OFF	ON	ON	ON	OFF	OFF	449 - 464
OFF	OFF	OFF	ON	ON	ON	OFF	ON	465 - 480
OFF	OFF	OFF	ON	ON	ON	ON	OFF	481 - 496
OFF	OFF	OFF	ON	ON	ON	ON	ON	497 - 512
OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	513 - 528
OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	529 - 544
OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	545 - 560
OFF	OFF	ON	OFF	OFF	OFF	ON	ON	561 - 576
OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	577 - 592
OFF	OFF	ON	OFF	OFF	ON	OFF	ON	593 - 608
OFF	OFF	ON	OFF	OFF	ON	ON	OFF	609 - 624
OFF	OFF	ON	OFF	OFF	ON	ON	ON	625 - 640
OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	641 - 656
OFF	OFF	ON	OFF	ON	OFF	OFF	ON	657 - 672
OFF	OFF	ON	OFF	ON	OFF	ON	OFF	673 - 688
OFF	OFF	ON	OFF	ON	OFF	ON	ON	689 - 704
OFF	OFF	ON	OFF	ON	ON	OFF	OFF	705 - 720
OFF	OFF	ON	OFF	ON	ON	OFF	ON	721 - 736
OFF	OFF	ON	OFF	ON	ON	ON	OFF	737 - 752
OFF	OFF	ON	OFF	ON	ON	ON	ON	753 - 768
OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	769 - 784
OFF	OFF	ON	ON	OFF	OFF	OFF	ON	785 - 800
OFF	OFF	ON	ON	OFF	OFF	ON	OFF	801 - 816
OFF	OFF	ON	ON	OFF	OFF	ON	ON	817 - 832
OFF	OFF	ON	ON	OFF	ON	OFF	OFF	833 - 848
OFF	OFF	ON	ON	OFF	ON	OFF	ON	849 - 864
OFF	OFF	ON	ON	OFF	ON	ON	OFF	865 - 880
OFF	OFF	ON	ON	OFF	ON	ON	ON	881 - 896
OFF	OFF	ON	ON	ON	OFF	OFF	OFF	897 - 912
OFF	OFF	ON	ON	ON	OFF	OFF	ON	913 - 928
OFF	OFF	ON	ON	ON	OFF	ON	OFF	929 - 944
OFF	OFF	ON	ON	ON	OFF	ON	ON	945 - 960
OFF	OFF	ON	ON	ON	ON	OFF	OFF	961 - 976
OFF	OFF	ON	ON	ON	ON	OFF	ON	977 - 992
OFF	OFF	ON	ON	ON	ON	ON	OFF	993 - 1008
OFF	OFF	ON	ON	ON	ON	ON	ON	1009 - 1024

FBM System drawing

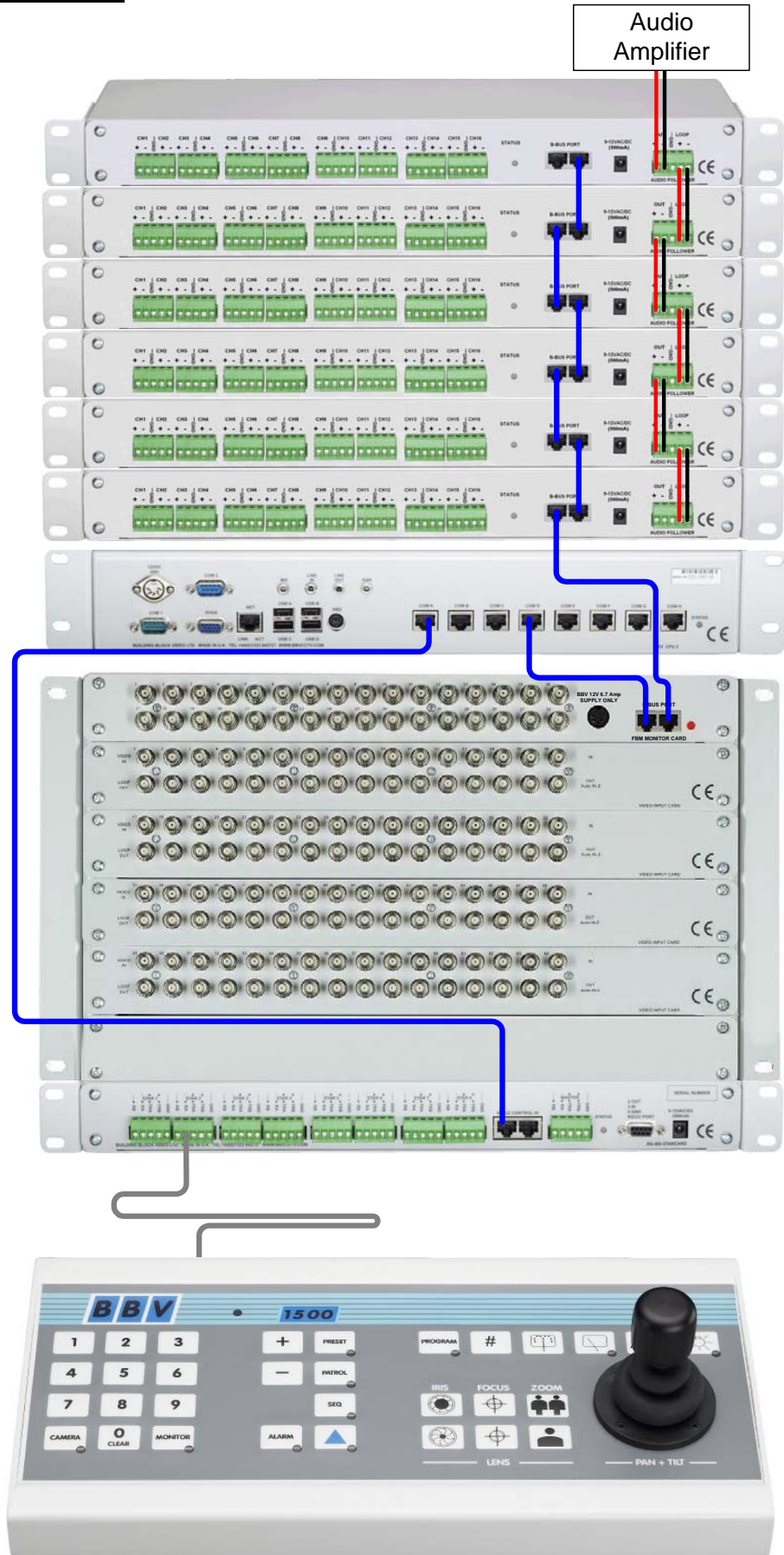


Fig 7

Tx1500 System drawing

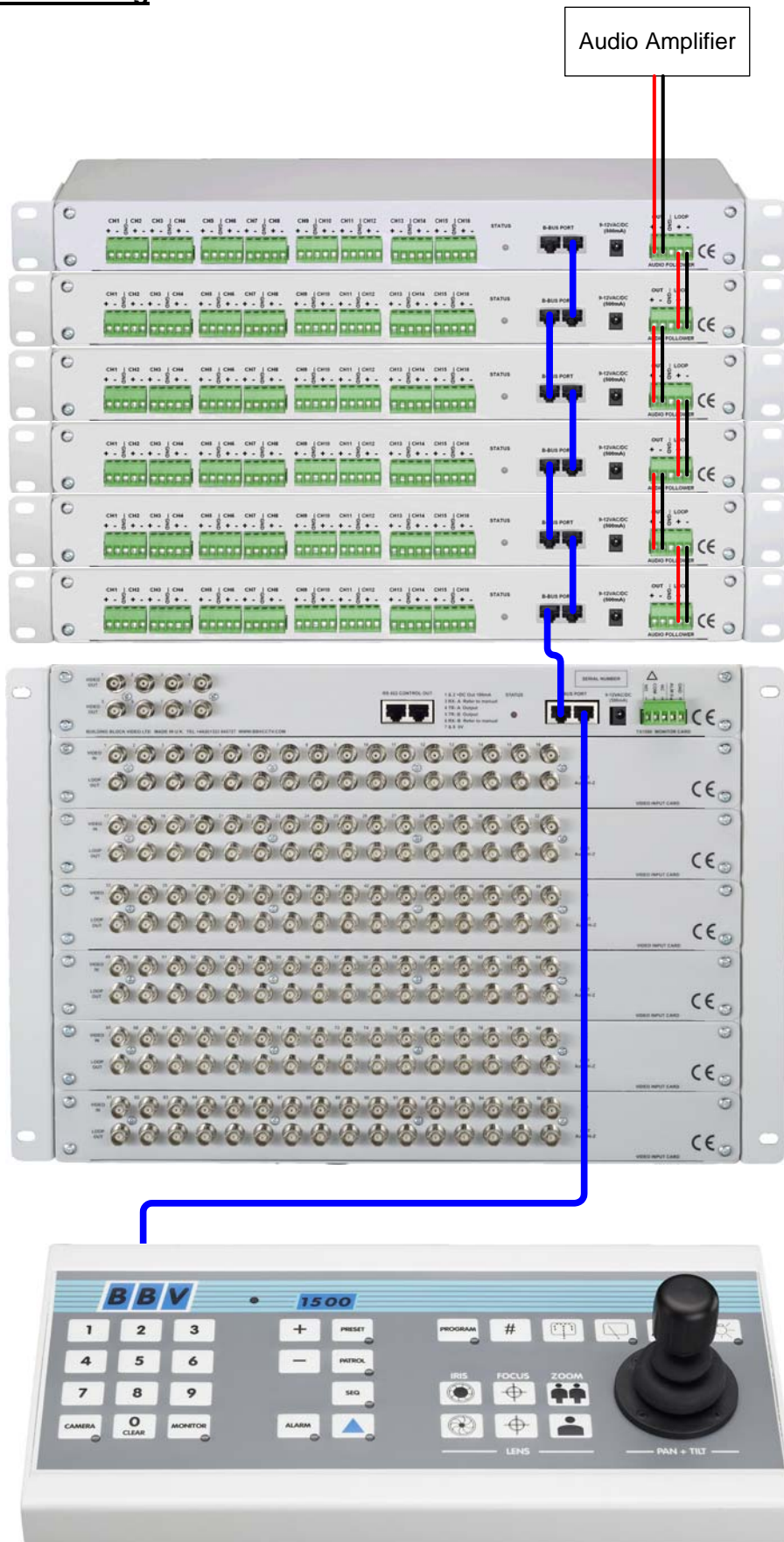


Fig 8


Loop Back Test

The Loop Back Test is a Hardware test. When using a loop back cable (see Fig 5 on page 8) and setting all the DIL switches to the off position except SW2 number 7 this one must be on. In this mode each input is switch sequentially to the output 1 to 16 repeatedly until SW2 number 7 is turned off. The use of the loop back cable ensures testing of the RS422 Port.

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 _____

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. 2852251 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.



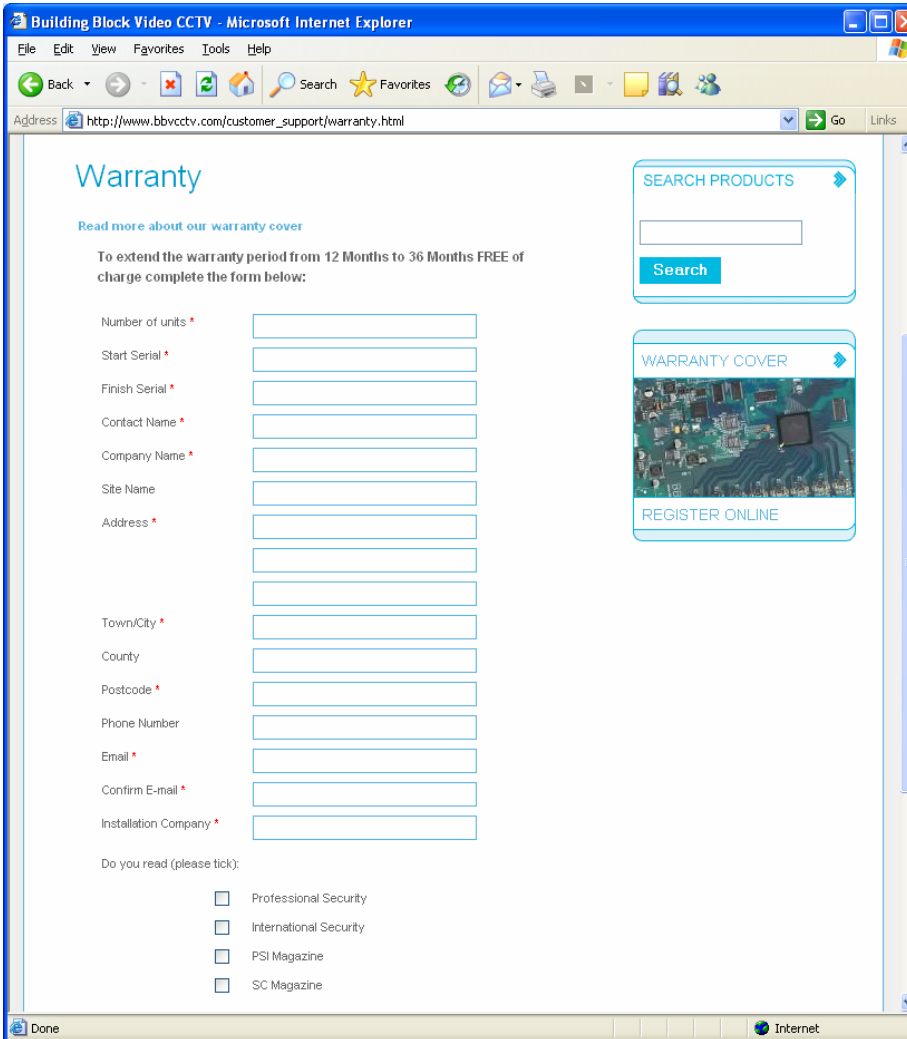
Building Block Video Ltd

Tel: + 44 (0) 1323 842727

Fax: + 44 (0) 1323 842728

Support: + 44 (0) 1323 444600

www.bbvctv.com



The screenshot shows a web browser window titled "Building Block Video CCTV - Microsoft Internet Explorer". The address bar shows the URL "http://www.bbvctv.com/customer_support/warranty.html". The page content includes a "Warranty" heading, a search box for products, and a "WARRANTY COVER" section 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