

TYPE BH184
VIDEO LAUNCH AMPLIFIER / VDA UNIT
Installation Guide



CAUTION

- ◆ Protect unit and power supply from rain / excessive moisture.
- ◆ Do not use the 12V power supply if its casing has been damaged.

APPLICATION

The BH184 unit combines a Video Launch Amplifier and Video Distribution Amplifier in one unit. Installed at the camera it will function as a Launch Amplifier to improve picture quality and increase transmission distances. Used at the control room end of the cable run it will function as a Distribution Amplifier, splitting the video signal into two identical outputs with no loss of signal strength or quality.

PACKAGE CONTENTS

When you open the packaging you should find the following:

- 1 x BH184 unit
- 1 x Type BH98 12V DC Regulated Power Supply
- 1 x Installation Guide

CARE AND MAINTENANCE

Following installation the BH184 unit should require little or no maintenance.

If required clean unit using damp cloth with a little mild detergent (having first disconnected the power supply). The coax signal cables may be fitted or removed without disconnecting the power supply.

END OF LIFE DISPOSAL

When this product eventually reaches the end of its working life it needs to be disposed of correctly to prevent damage to the environment. It should not be disposed of with general household type waste.

[If you phone WeeeCare plc on 0844 800 2004 and quote our Account Number **135027** they will arrange collection of this product from you. They will then correctly dispose of the unit and recover any materials that may be recycled and reused. There will be no charge to you for this service.](#)

PART 1: USING THE BH184 AS A VIDEO LAUNCH AMPLIFIER

INSTALLATION

Note 1: A Launch Amplifier is usually used in conjunction with a second video amplifier unit installed at the monitor end of the cable run. For short cable runs up to about 300m the BH184 unit may be used on its own.

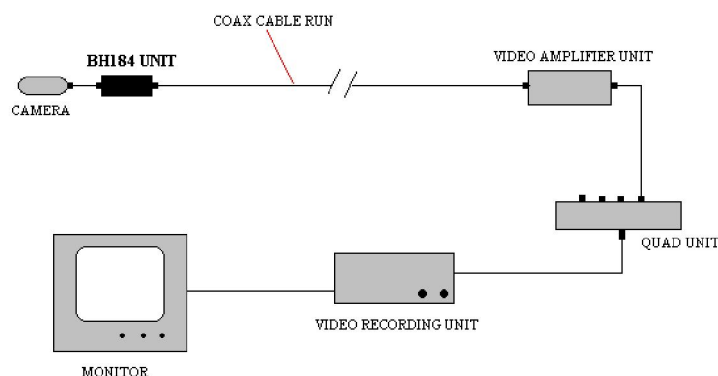
Note 2: The BH184 unit will block telemetry signals – for video only.

The unit should be installed as close to the camera as is practical. The output cable of the 12V DC supply is connected to the spring-loaded connector labelled '12V DC'. Ensure the positive wire is connected to the connector slot labelled '+'. The positive wire from the power supply is marked with a light grey stripe. An LED in the top panel shows when power is connected.

The video cable from the camera is connected to the BNC coax connector labelled 'VIDEO IN 75R'. The outgoing coax cable is connected to one of the two output coax connectors labelled 'VIDEO OUT 75R'. The unused output connector does not have to be terminated.

DIAGRAM 1 SHOWING A BASIC CCTV INSTALLATION INCORPORATING A BH184 UNIT

(For clarity only one camera run is shown)



ADJUSTMENT

The BH184 unit is adjusted in the factory for Unity output so that an input signal of 1.0 Volt peak to peak @75R will give an output signal of 1.0 Volt peak to peak @75R. For medium / long cable runs it will be necessary to increase the output signal level. The BH184 unit has two controls: one for signal amplitude (GAIN) and one for high frequency lift (HFL).

To increase the signal levels rotate the pots clockwise. If you are using the BH184 in conjunction with a second amplifier unit, adjust the BH184 unit first.

The GAIN control will adjust the peak to peak amplitude of the video signal – this will affect the brightness of the picture on the monitor.

The high frequency component of the video signal carries information on fine detail and colour. For long cable runs the High Frequency Lift control may be set to maximum if required.

OPERATION

Once the BH184 unit has been correctly set up it should not normally require further adjustment during the lifetime of the installation unless there is some change to the cable run or associated equipment.

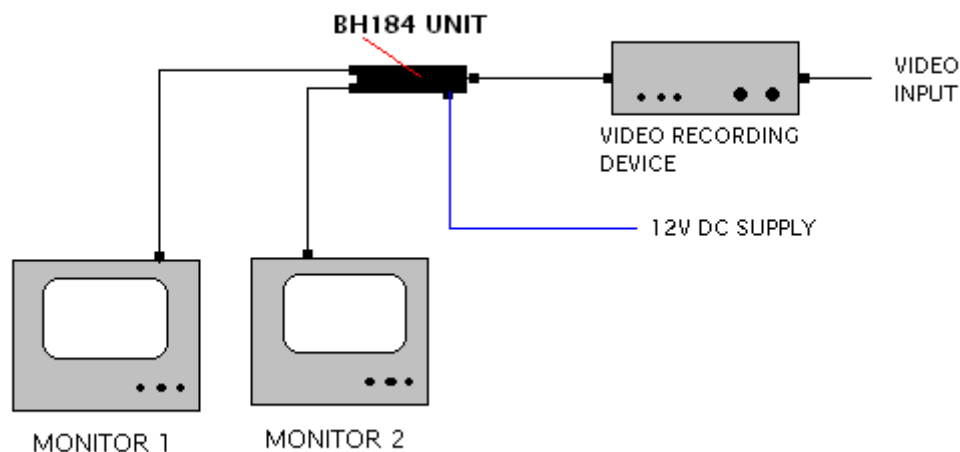
PART 2: USING THE BH184 UNIT AS A DISTRIBUTION AMPLIFIER

INSTALLATION

The BH184 unit may be installed at any convenient point in the video feed. The 12V DC power supply is connected to the spring-loaded connector labelled '12V DC'. If you are not using the BH98 power supply included with the unit then any 12V DC supply used must be regulated. An LED next to the signal input connector shows when power is connected.

The video input is connected to the BNC coax connector labelled 'VIDEO IN 75R'. The two video outputs are connected to the BNC coax connectors labelled 'VIDEO OUT 75R'. The outputs from the two BNC connectors will be identical.

DIAGRAM 3 SHOWING AN EXAMPLE OF THE BH184 UNIT BEING USED TO DRIVE TWO MONITORS



ADJUSTMENT

The BH184 unit is adjusted in the factory for Unity. An input signal of 1.0V peak to peak @ 75R will give an output signal of 1.0V peak to peak @ 75R.

If the monitors or other items of signal receiving equipment are some distance from the BH184 unit it will probably help to increase the signal output of the BH184 unit. Please refer to [PART 1 / ADJUSTMENT](#) for details.

OPERATION

Once the BH184 unit has been adjusted it is not normally necessary to make any further adjustments for the life of the installation provided there are no significant changes to the cable run or associated equipment.

TECHNICAL INFORMATION

INPUT SIGNAL	Nominal 1.0V Pk-Pk composite video signal. Suitable for either colour or monochrome video
INPUT IMPEDANCE	75 Ohm
OUTPUT SIGNAL	Nominal 1.0V Pk-Pk @ 75 Ohm (with unit set to Unity Gain)
AT UNITY GAIN	Differential Phase <2°. Differential Gain <2%
GAIN CONTROL	Variable from -2.0dB to +6.0dB
HF LIFT CONTROL	Variable from -0.3dB to +6.0dB
INPUT CONNECTOR	BNC type coax connector
OUTPUT CONNECTORS	Two BNC type coax connectors
SURGE PROTECTION	Transorbs fitted as standard (gas tubes optional for extra protection)
POWER REQUIREMENTS	12V DC for BH184 unit. 230V AC for type BH98 power supply
POWER CONSUMPTION	The BH184 unit requires 0.2W
OPERATING TEMP. RANGE	-30 to +45 degrees Celsius
DIMENSIONS	132mm L x 45mm W x 23mm H (excluding BNC connectors)
MOUNTING	Via 2 x 3.5mm holes for convenient screw fixing

If you have any problems or require further information concerning this product please contact us.

ADDLESTONE ELECTRONICS LTD
SPRINGFIELDS
CHURCH LANE
BISLEY
WOKING
SURREY
GU24 9EA

Tel.: 01483 480969
Fax: 01483 797268

E-mail: support@addlestone-electronics.co.uk
Web Site: www.addlestone-electronics.co.uk

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