



*www.vac-brick.com*

## *ProSeries Products*

### **1X4 Composite Video Distribution Amplifiers, Differential Input**

<b>Part Numbers</b>	<b>Brief Description</b>
11-121-104 Rev B	Unity Gain, BNC Connectors, 12V AC with P5 Power Connector
11-121-204 Rev A	Unity Gain, RCA Connectors, 12V AC with P5 Power Connector
11-123-104 Rev B	Global Variable Gain, BNC Connectors, 12V AC with P5 Power Connector
11-123-204 Rev A	Global Variable Gain, RCA Connectors, 12V AC with P5 Power Connector
11-124-104 Rev C	Individual Variable Gain, BNC Connectors, 12V AC with P5 Power Connector
11-124-204 Rev A	Individual Variable Gain, RCA Connectors, 12V AC with P5 Power Connector
11-521-104 Rev J	Unity Gain, BNC Connectors, FlexPwr
11-521-204 Rev A	Unity Gain, RCA Connectors, FlexPwr
11-523-104 Rev B	Global Variable Gain, BNC Connectors, FlexPwr
11-523-204 Rev A	Global Variable Gain, RCA Connectors, FlexPwr
11-524-104 Rev B	Individual Variable Gain, BNC Connectors, FlexPwr
11-524-204 Rev A	Individual Variable Gain, RCA Connectors, FlexPwr

#### **Includes:**

1 (one) 55560 - 12V AC power supply **-OR-** 1 (one) 55564 - FlexPwr Supply

*All VAC products are assembled in Boulder, CO, USA*

### **Video Accessory Corporation**

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Boulder, Colorado 80301

(800) 821-0426

(303) 443-1319

fax (303) 440-8878

#### ***Two Year Limited Warranty***

All Video Accessory Corporation (VAC) products have a full two year limited warranty. Exclusions to the warranty include but are not limited to damage to external components, power LED failure where the product continues to function, and electrical damage due to lightning. The warranty shall be void if any alteration or repair of a VAC product is attempted by anyone not authorized by VAC. This warranty is expressly in lieu of all other warranties express or implied, including warranties of merchantability and fitness for use, and of all other obligations or liabilities on the part of VAC, and it neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of this product. This warranty shall not apply to the product or any part thereof subjected to accident, negligence, alteration, abuse, or misuse. No warranty whatsoever is made with respect to accessories or parts supplied by anyone other than VAC, and this warranty shall extend only to the original purchaser of this product. The warranty provided in this article is exclusive and in lieu of, and buyer hereby waives, all other remedies, express or implied, arising by law or otherwise, including consequential damages, whether or not occasioned by negligence of VAC. This warranty shall not be extended, altered or varied except by written instrument signed by VAC and buyer, and shall only apply within the boundaries of the continental United States. Liability of VAC is limited to repair or replacement at the option of VAC. Warranty work is to be sent to VAC. Freight charges will be the responsibility of the purchaser. 70-1725-B

## **Power:**

**12V AC** - The 12V AC Brick™ is designed to function properly with an input power of 11-13V AC. The Brick will not operate from a DC voltage. A 2.1mm P5 style connector is used for the power input. If the input voltage is a grounded system, the center pin of the P5 is the power connection and the barrel is the ground side. All ProSeries units are shipped with a 12V AC, 600mA floating power supply that eliminates any ground loops through the power supply connection.

**FlewPwr** - The FlexPwr Brick™ is designed to function properly with an input power of 10-28V AC (ungrounded) or 12-32V DC (grounded or ungrounded). A 2-pin header (Phoenix Contact #1881448) style connector is used for the power input. The 12V AC, 600mA wall transformer provided with the product provides a floating power source that has been designed to eliminate any ground loops through the power supply connection.

## **Input:**

The differential input for these products consists of a 75 Ohm BNC or RCA connector. A video signal with excessive DC component (or offset) such as those generated by many computer video boards will cause the VAC Brick to malfunction. The 1Vpp video signal needs to be within -1V to +1V. Ideally, the video signal's blanking level should be clamped to 0 volts, although an AC coupled signal is also acceptable.

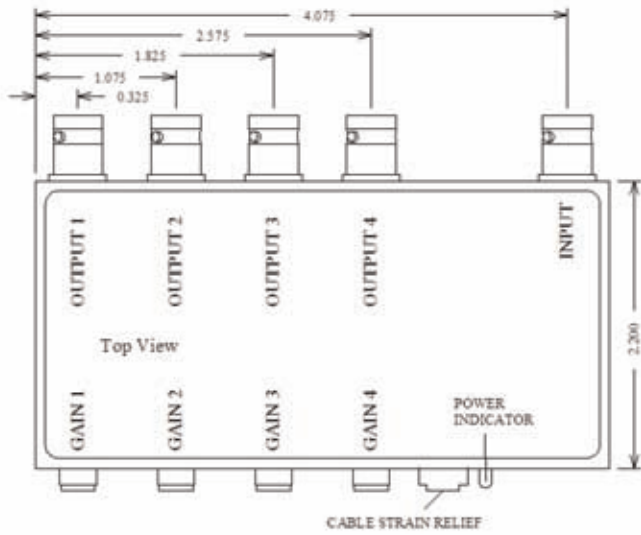
## **Outputs:**

The VAC Brick has four video outputs consisting of 75 Ohm BNC or RCA connectors. Each output has a series impedance of 75 Ohms. Unused outputs do not need to be terminated for proper operation of the Brick. Using terminators on unused outputs provides additional protection for the Brick from ESD (static electricity) events.

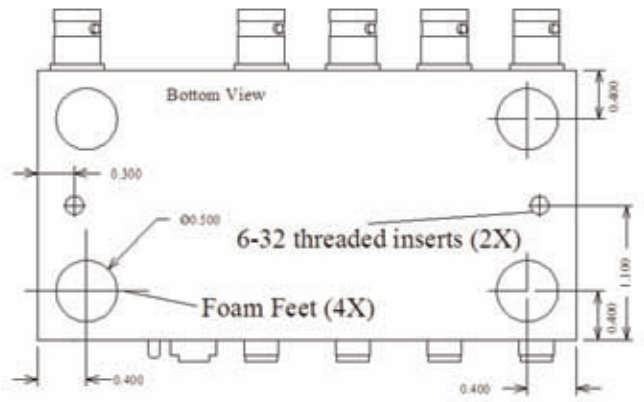
## Specifications:

<b>Frequency Response:</b>	DC - 200 MHz @ -3dB, fully loaded over full voltage range (1Vpp input signal, 0V DC offset)
<b>Input Signal Level:</b>	0.1 - 2.0Vpp (within -1V to +1V range from ground)
<b>Input Impedance:</b>	75 Ohms
<b>Input Coupling:</b>	DC
<b>Input Connector(s):</b>	75 Ohm BNC or RCA (total of 1)
<b>Output Connectors:</b>	75 Ohm BNC or RCA (total of 4)
<b>Configuration:</b>	Differential input, four active outputs
<b>Gain:</b>	<i>Unity</i> - Unity <i>Global Variable</i> - 0.75X - 1.75X <i>Individual</i> - 0.75X - 1.75X
<b>Output Series Impedance:</b>	75 Ohms
<b>Package:</b>	Solid epoxy block 2.2" x 4.4" x 0.65" (not including connectors)
<b>Mounting:</b>	Two threaded 6-32 inserts
<b>Power:</b>	<i>I2V AC</i> - 11-13V AC (grounded or ungrounded) (2.1mm P5 connector) <175mA input current <i>FlexPwr</i> - 10-28V AC (ungrounded) or 12-32V DC (grounded or ungrounded) 2-pin header (Mating connector Phoenix Contact #1881325) <115mA input current @ 12V DC <135mA input current @ 10V AC (All currents measured with 2Vpp 1kHz sine wave fully loaded)
<b>Operating Temperature:</b>	<i>I2V AC</i> -40C to + 50C <i>FlexPwr</i> -40C to + 80 C
<b>Operating Humidity:</b>	0% - 95%
<b>Shipping Weight:</b>	2 lbs

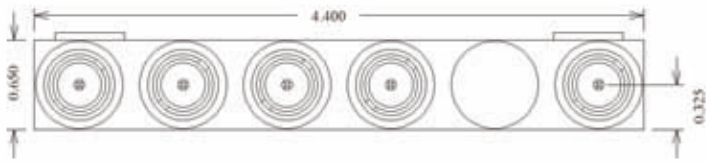
# Mechanical Drawing of Bricks



top view



bottom view / mounting inserts



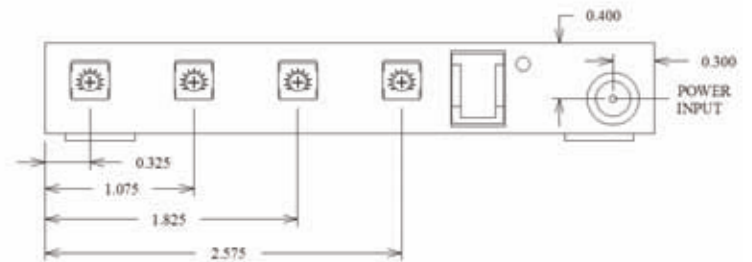
input / output connectors



Unity Gain



Global Variable Gain



Individual Gain