



*www.vac-brick.com*

## *ProSeries Products*

### **1X8 Balanced Mono Audio Distribution Amplifiers, Loop-thru Input**

<b>Part Numbers</b>	<b>Brief Description</b>
16-161-308 Rev A	Unity Gain, Terminal Block Connectors, 12V AC w/P5 Power Connector
16-162-308 Rev A	Unity Gain, Individual Drivers, Terminal Block Connectors, 12V AC w/P5 Power Connector
16-163-308 Rev A	Global Variable Gain, Terminal Block Connectors, 12V AC w/P5 Power Connector
16-164-308 Rev A	Individual Variable Gain, Terminal Block Connectors, 12V AC w/P5 Power Connector
16-561-308 Rev A	Unity Gain, Terminal Block Connectors, FlexPwr
16-562-308 Rev A	Unity Gain, Individual Drivers, Terminal Block Connectors, FlexPwr
16-563-308 Rev A	Global Variable Gain, Terminal Block Connectors, FlexPwr
16-564-308 Rev A	Individual Variable Gain, Terminal Block Connectors, FlexPwr

#### **Includes:**

1 (one) 55560 - 12V AC power supply **-OR-** 1 (one) 55564 - FlexPwr Supply  
 10 (ten) 78366 - 3-pin Terminal Block Plugs

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

#### **Video Accessory Corporation**

2450 Central Avenue Suite G  
 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. 70-1785-A

## 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 input for this product consists of a loop-thru input with two Terminal Block connectors. An audio signal with excessive DC component (or offset) will cause the VAC Brick to malfunction. The audio signal needs to be within -4V to +4V.

## Outputs:

The VAC Brick has eight audio outputs consisting of Terminal Block connectors. Unused outputs do not need to be terminated for proper operation of the Brick.

## Gain:

**Unity Gain, Global Driver** - The signal amplitude at each output is identical to the input signal, with a single driver.

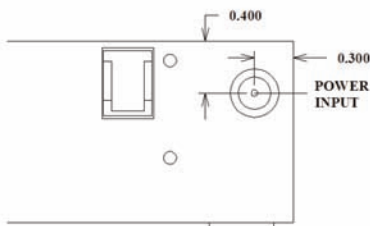
**Unity Gain, Individual Drivers** - The signal amplitude at each output is identical to the input signal, with individual drivers.

**Global Variable Gain** - The signal amplitude at each output is variable, and all output signal amplitudes are adjusted together with one control (for a total of 4 outputs per gain control).

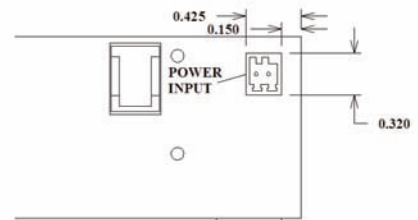
**Individual Variable Gain** - The signal amplitude at each output is variable, and is independent of all other outputs. A separate gain control is provided for each output.

# Specifications:

<b>Frequency Response:</b>	DC - 100kHz (-3.0 dB) fully loaded over full voltage range (1Vpp input signal, 0V DC offset)
<b>Input Signal Level:</b>	0 - 8.0Vpp (within -4V to +4V range from ground)
<b>Input Impedance:</b>	>5K Ohms
<b>Input Coupling:</b>	DC
<b>Input Connector(s):</b>	3-pin Terminal Block (total of 2)
<b>Output Connectors:</b>	3-pin Terminal Block (total of 8)
<b>Configuration:</b>	Loop-thru input, eight active outputs
<b>Gain:</b>	<i>Unity, Global Driver</i> - Unity <i>Unity, Individual Drivers</i> - Unity <i>Global Variable</i> - 0.5X - 4.0X <i>Individual</i> - 0.5X - 4.0X
<b>Output Series Impedance:</b>	50 Ohms (per side)
<b>Package:</b>	Solid epoxy block 2.2" x 4.4" x 1.4" (not including connectors)
<b>Mounting:</b>	Two threaded 6-32 inserts
<b>Power:</b>	<i>12V AC</i> - 11-13V AC (2.1mm P5 connector) <150mA input current <i>FlexPwr</i> - 10-28V AC (ungrounded) or 12-32V DC (grounded or ungrounded) 2-pin header (Mating connector Phoenix Contact #1881325) <150mA input current @ 12V DC <175mA input current @ 10V AC
<b>Operating Temperature:</b>	<i>12V AC</i> -40C to + 50C <i>FlexPwr</i> -40C to + 80C
<b>Operating Humidity:</b>	0% - 95%
<b>Shipping Weight:</b>	3 lbs

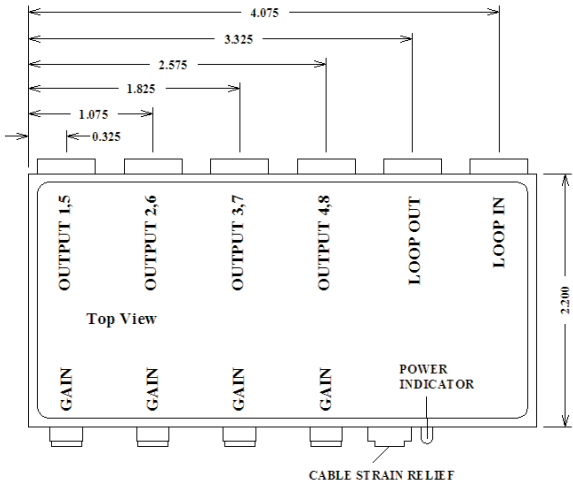


*12V AC with 2.1mm P5 Connector*

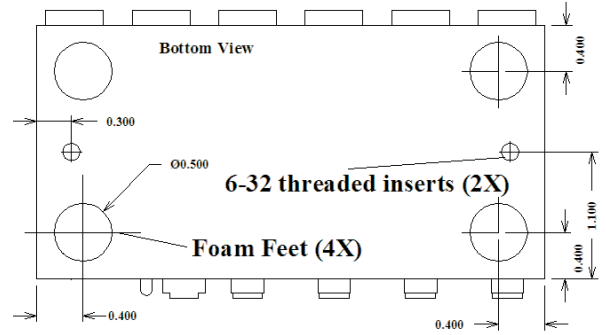


*FlexPwr with Terminal Block Connector*

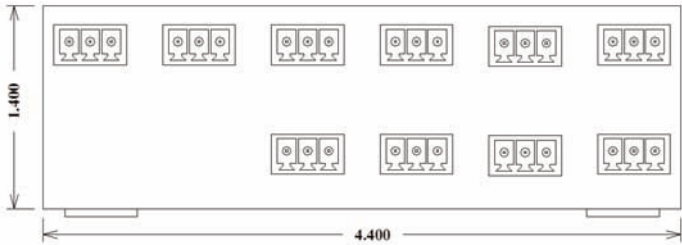
# Mechanical Drawing of Bricks



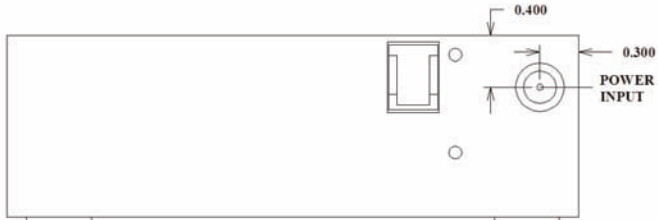
*top view*



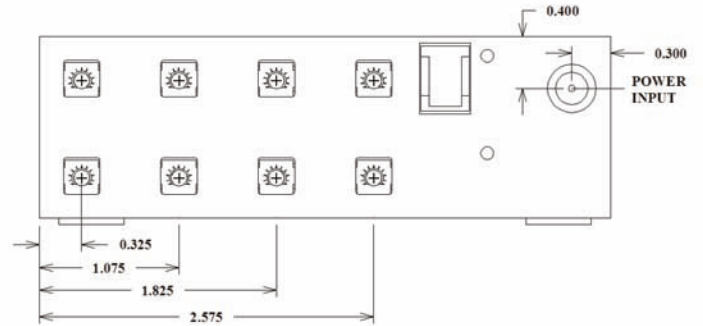
*bottom view / mounting inserts*



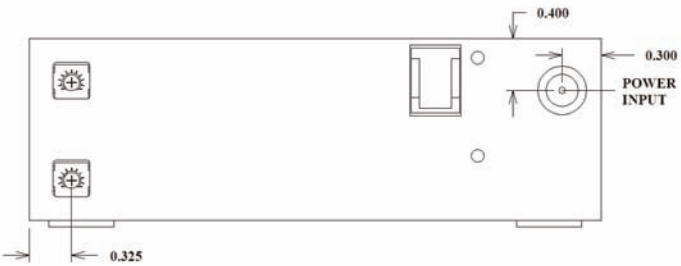
*input / output connectors - Terminal Block*



*Unity Global Gain, Unity Individual Gain*



*Individual Gain*



*Global Variable Gain*