

ProSeries™ High Performance

2x1 Unbalanced Mono Audio Switch

With Local & Remote Control

Rev C

<u>FlexPwr</u>	<u>P5 Pwr</u>	<u>Description</u>
17-571-332	17-171-332	High-Z, Power Fail Bypass, Terminal Block
17-571-342	17-171-342	10K Ohm, Power Fail Bypass, Terminal Block
17-571-352	17-171-352	600 Ohm, Power Fail Bypass, Terminal Block
17-571-362	17-171-362	High-Z, Terminal Block
17-571-372	17-171-372	10K Ohm, Terminal Block
17-571-382	17-171-382	600 Ohm, Terminal Block
17-571-232	17-171-232	High-Z, Power Fail Bypass, RCA
17-571-242	17-171-242	10K Ohm, Power Fail Bypass, RCA
17-571-252	17-171-252	600 Ohm, Power Fail Bypass, RCA
17-571-262	17-171-262	High-Z, RCA
17-571-272	17-171-272	10K Ohm, RCA
17-571-282	17-171-282	600 Ohm, RCA

Video Accessory Corporation
1243 Sherman Drive, Suite 8
Longmont, Colorado 80501
303-443-1319
www.vac-brick.com

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Document History

<u>REV</u>	<u>Date</u>	<u>Action</u>
C	Oct 17, 2014	Document conversion from old format.

1 Overview

The Pro 17 Series 2x1 Switch is used to select one of two unbalanced mono audio inputs to the output. Input selection may be controlled either locally with the 2-position switch or remotely through a 6-pin Mini-DIN style connector. Output status is provided on the second 6-pin Mini-Din style connector which may also be used to control additional switches with remote capability, or trigger other down-stream equipment. Each of the control input port control signals are optically isolated. This helps in control of ground loop interference/prevention. Isolation also allows for reference potential differences between the controller and the audio switch. Remote control signaling is designed to operate using a variety of control methods, including contact closure and TTL type control signals.

Dependent on the model number, each input offers High-Z, 10K Ω , or 600 Ω input impedance termination. In the event of a loss of power to the unit, with Power Fail Bypass option, input 1 is automatically selected to the output. Selected input to output path is passive or non-buffered. Input and Output connectors may be either Terminal Block (TB) or RCA connectors. Unused inputs are not required to be terminated; nor will a short or open circuit condition on any input affect any other input.

2 Power Requirements

Two power formats are available supporting 12-13VAC (P5) or 10-28VAC/12-32VDC (FlexPwr). All ProSeries™ units are shipped with a 120VAC to 12VAC@600mA (P5 or Flex) power wall transformer adapter. The wall transformer provides a floating power supply and ground-loop isolation through the power supply connection. Be sure to specify the power configuration (P5 or FlexPwr) when ordering.

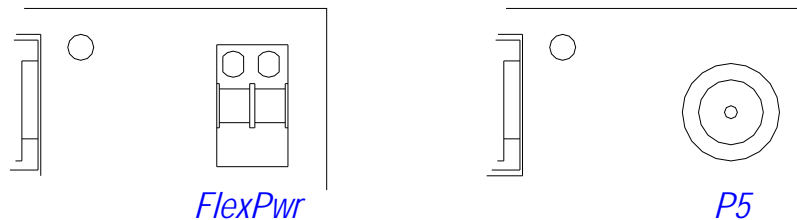


Figure 1: Power Configuration

12V AC “P5” – The 12VAC “P5” powered Brick™ is designed to function properly with an input power source of 11-13Volts AC. It’s important to note that P5 bricks will not operate from a DC voltage. A 2.1mm round barrel/P5 style connector is used for the power input. If the input voltage is a grounded system, the center pin of the P5 connector is the power connection and the barrel is referenced to the common/ground.

FlexPwr – The FlexPwr powered Brick™ is designed to function properly with an input power of 10-28Volts AC (ungrounded) or 12-32Volts DC (grounded or ungrounded). Phoenix Contact #1881325 connector is used for the power input.

3 Control Port

These units may be operated in either Local or Remote modes. In Local mode the DIP switch controls the selected input to output routing. In Remote mode two control port signals select which input is routed to the output. The Control Port is a 6-pin Mini-DIN. Each control signal is optically-isolated with a +4V to +12V control voltage. Externally supplied voltage or the internal voltage source may be used. Each signal requires a positive voltage. The return path is common to all input signals (typically connected to ground)

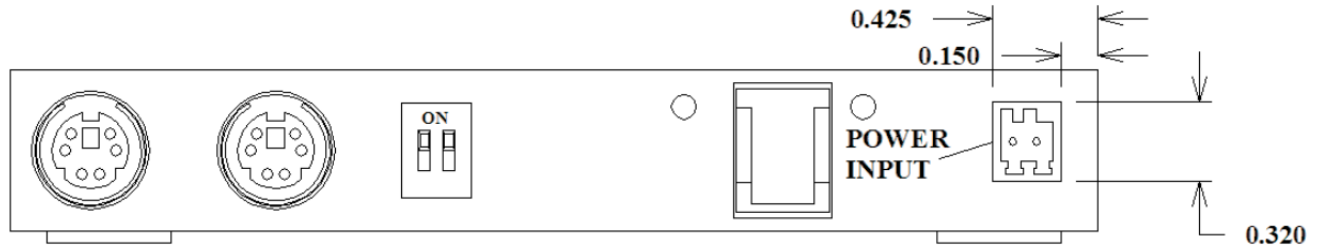


Figure 2: Control/Status/DIP-Switch/LED's and Power (FlexPwr Shown)

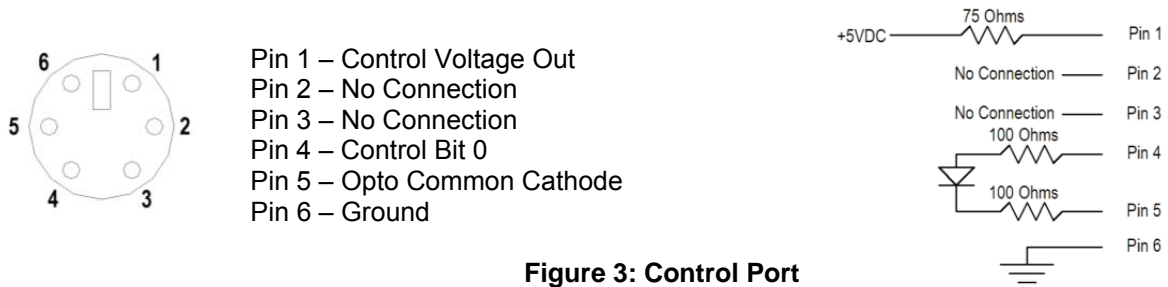


Figure 3: Control Port

A control signal/bit logic zero is no current/voltage into the opto-isolator. A control signal/bit logic one is current into the control bit (+4-12V DC).

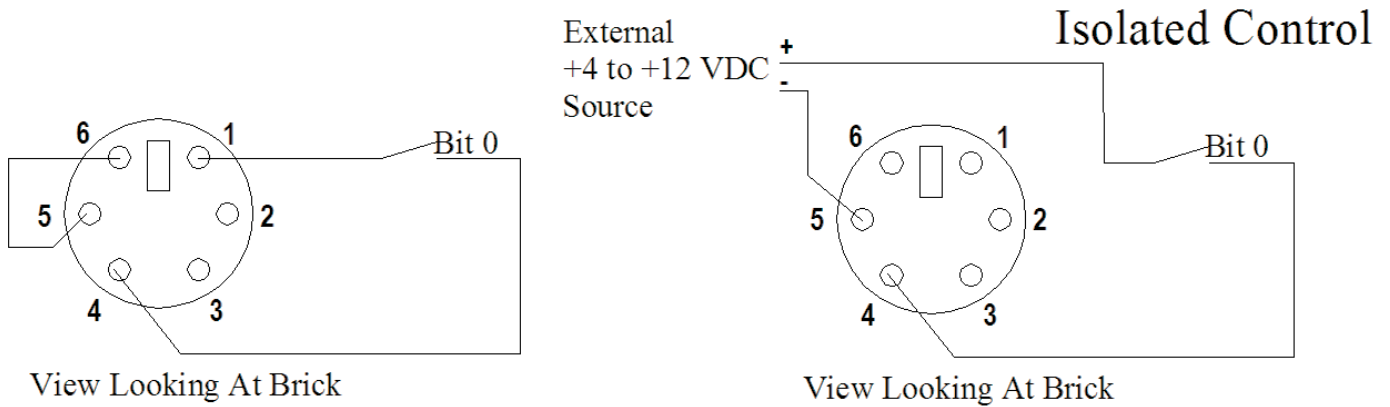
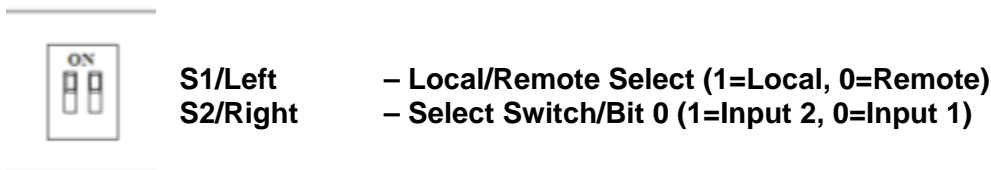


Figure 4: Connecting to Control Port

The two position dips switch is used to select Local or Remote control selection and operation.



4 Status Port and LED's

Each unit has a bi-color LED to indicate which audio input is selected. The Select Status LED functions in both Local and Remote modes of operation.

- **Green – Input 2 Selected**
- **Yellow – Input 1 Selected**

The Status port connector is a 6-pin Mini-DIN. Status output bits can be used to control additional audio and video Pro-Series devices (for audio-follow-video applications). Output signal levels are +5V TTL with 50Ω series termination.

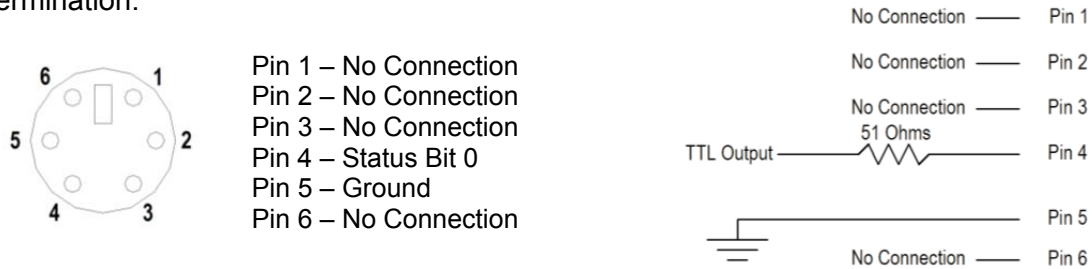


Figure 5: Connecting to Control Port

5 Signal Input/Output's

Dependent on the model number, each input offers High-Z, 10KΩ, or 600Ω input impedance termination. Selected input to output path is passive or non-buffered. Input and Output connectors may be either Terminal Block (TB) or RCA connectors. Unused inputs are not required to be terminated; nor will a short or open circuit condition on any input affect any other input.

Power Fail Bypass Option

For units ordered with the Power Fail Bypass option. In the event of a loss of power the unit input 1 is automatically selected to the output.

6 Specifications:

Audio: Z_{in} High-Z, 10K Ω , or 600 Ω - DC coupled
 V_{in} 0-24Vpp
Bandwidth DC to 100KHz
I/O 2-pin Terminal Block(TB) or RCA

Control: V_{on} +4 to +12V DC
I/O 6-pin Mini-DIN

Status Port:
 V_{out} +5V DC
I/O 6-pin Mini-DIN

Status LED: Green/Yellow

Operating Temperature:
12V AC/P5 -40°C to +50°C
FlexPwr -40°C to +85°C

Status Port:
 V_{out} Operating Temperature: -40°C to +85°C

Power: P5: 11-13V AC
Flex_{AC}: 10-28V AC
Flex_{DC}: 12-32V DC

Supply Current:

Part Number:	Pwr	12VAC	12VDC	28VDC
11-171-xx2	2.1W	<175mA		
11-571-xx2	1.4W	<135mA	<115mA	

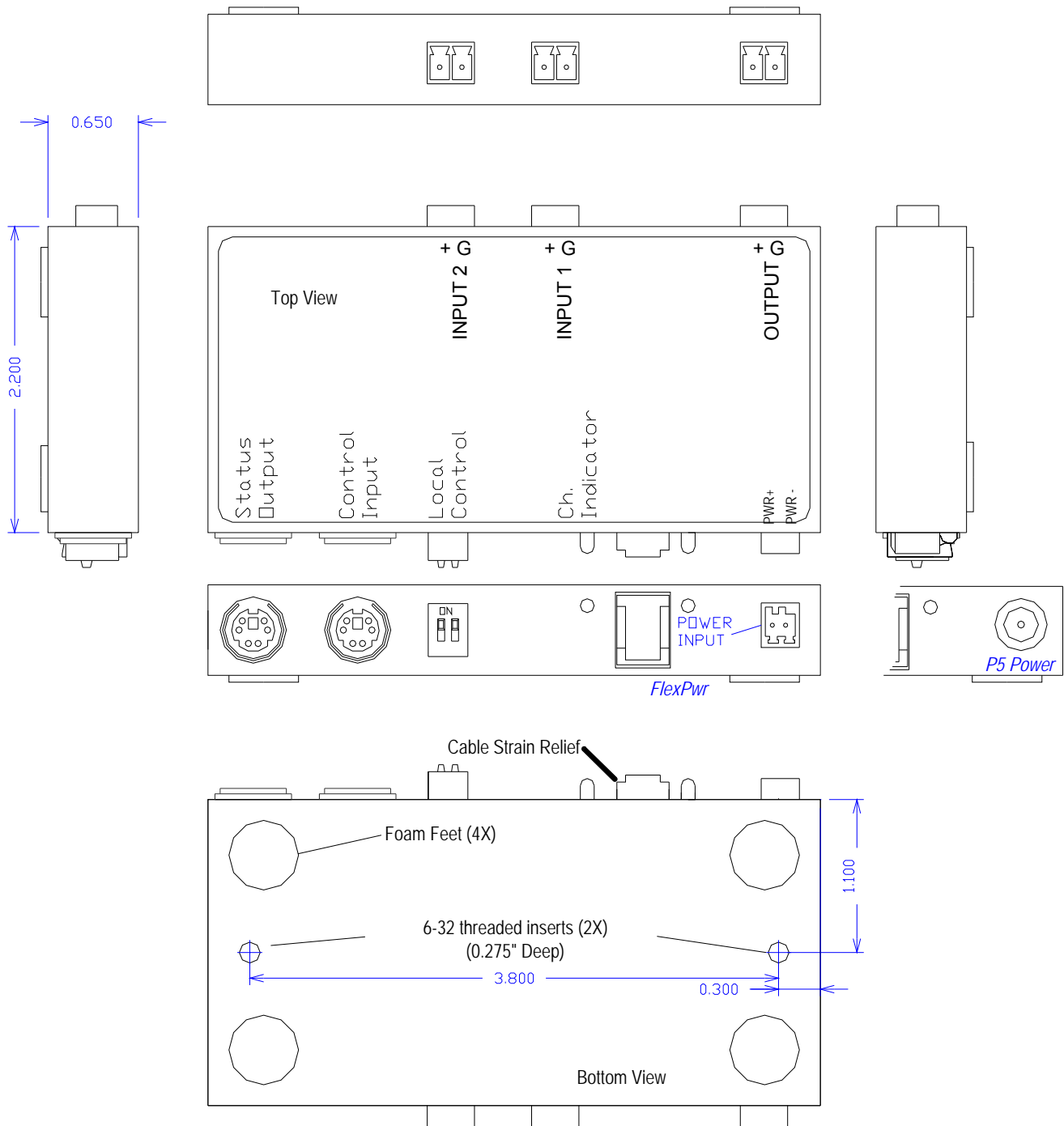
Power Connector: 3.2mm 2 pin Mating plug (Phoenix Contact #1881325)

Package Dimensions:

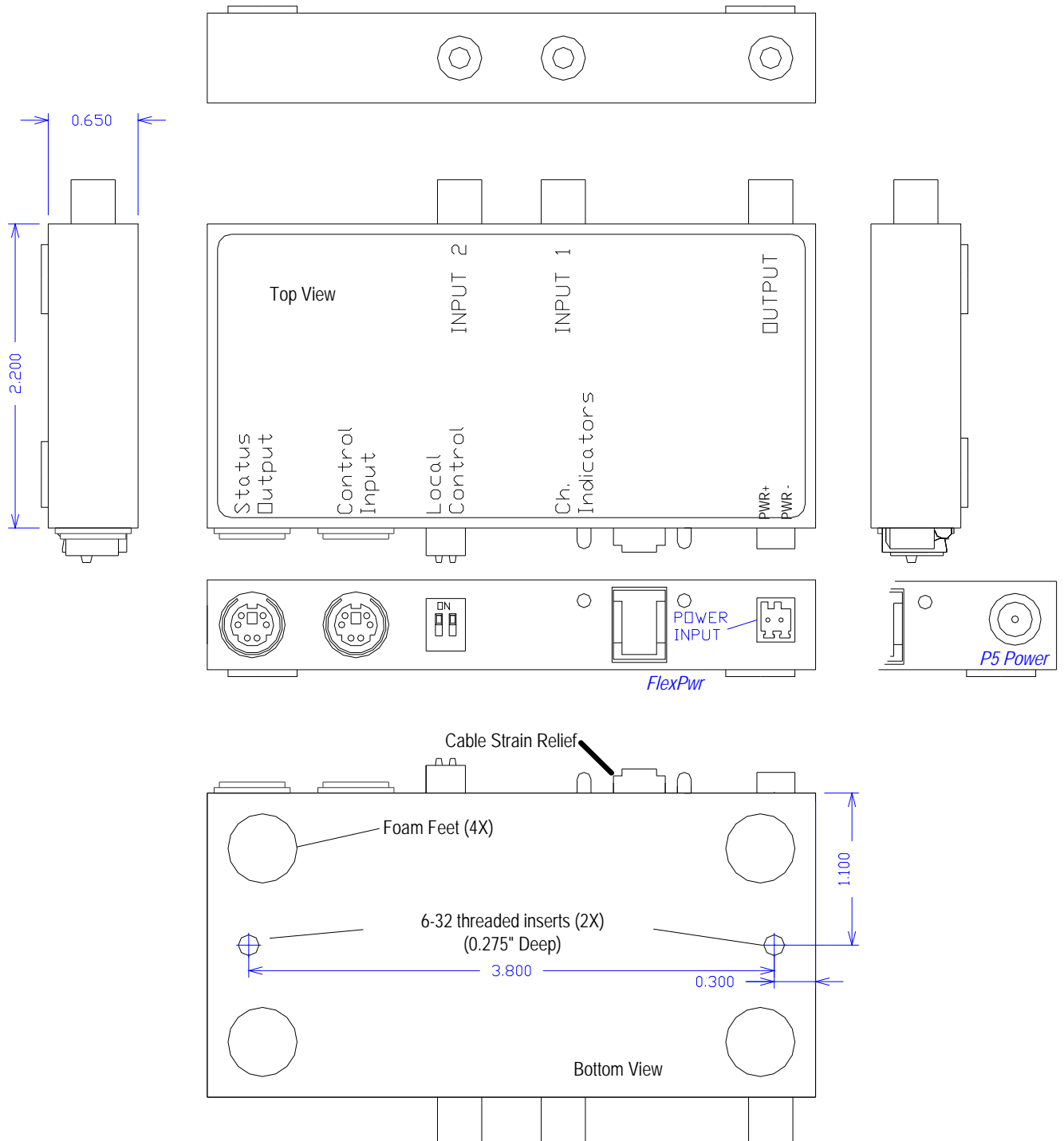
Part Number:	Dimensions	Weight
17-x71-xx2	4.4" x 2.2" x 0.650"	8oz

Mounting: 6-32 threaded inserts (2)

7 Mechanical



**Figure 6: 17-571-3x2
(Unbalanced Mono 2x1 SW, Flex/P5 Pwr, & TB)**



**Figure 7: 17-571-2x2
(Unbalanced Mono 2x1 SW, Flex/P5 Pwr, & RCA)**