

PAS-200 Passive Audio Switcher

Programmable A/B Switcher for Sixteen (16) Input Pairs



PAS-200 Programmable Passive Audio Switcher Front Panel



PAS-200 Programmable Passive Audio Switcher Rear Panel

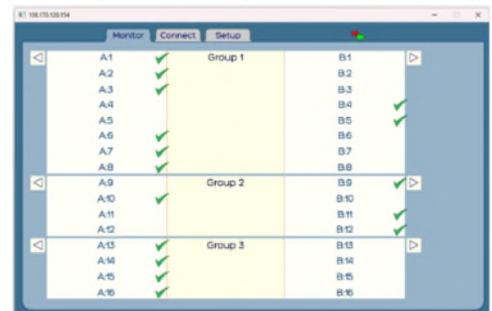
Features

- Sixteen (16) individual A/B inputs switchable as user programmable configurations from two to sixteen (16) pair groups.
- Passive audio switcher employs relay switch sets to pass analog and AES3 digital audio signals or control signals without modification.
- Customizable channel naming and setup configuration done with the free downloaded companion PAS-200 Series Windows application software.
- Steel chassis construction for superior hum rejection.
- Remote control interfaces for GPIO, RS485, and LAN SNMP v2.
- Audio inputs and outputs via TASCAM DSUB25F connectors. Breakout interface panels to XLR and BNC connections are optionally available from BDI.
- Dual power supplies with separate power cords for exceptional reliability.
- Most popular applications include:
 - Transmitter Site Emergency and Standby Program Source Switching
 - Dynamic Source Switching for Public Safety Communications and PA Systems
 - Theater Sound System Input Switching
 - Switching to backup consoles or amplifiers for Live Event Sound Systems
 - Satellite and Automation Switching
 - Emergency Alert System Switching
 - Pre-configurations of inputs for recording, live sound, and remote truck use

Product Description

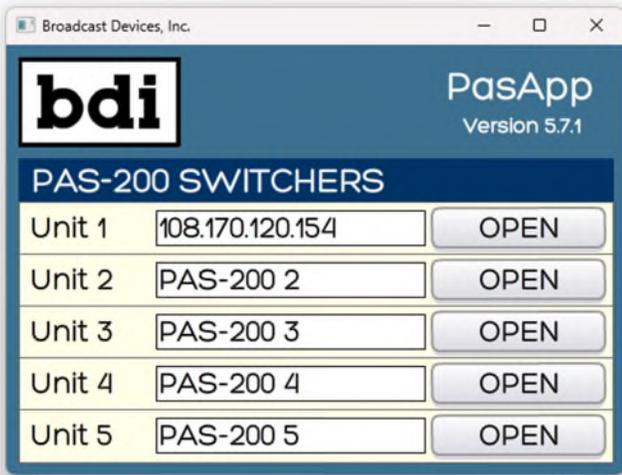
The PAS-200 Passive Multi-Pair Audio Switcher from BDI is designed to accept up to two sets of 16 balanced pairs of A/B inputs, switch between them, and provide sixteen (16) outputs. The unit can be configured to switch each channel individually or in any grouping of two or more channel groups as desired. The PAS-200 can be configured for individual pair switching to up to sixteen (16) preset groups. Standard groupings are provided, and the user can perform custom group programming. In its basic form, the user can control any one of the sixteen (16) channels individually, stereo pairs, or multiple pairs of greater than two. The signal path is passive via relay sets, allowing analog and digital audio signals and low-voltage DC control signals to pass through the switcher. The signal path is passive, with no active circuitry, using sets of relays that allow analog and digital audio signals, as well as control signals, to pass through the switcher.

Control and monitoring can be accomplished in various ways to accommodate nearly every interface situation. RS485 serial and standard GPIO control and status indications are available, along with an SNMP v2-capable LAN interface, and an optional remote-control panel is available from BDI. The remote-control panel is a serial interface connected with a single CAT5 shielded cable and can accommodate cable runs of up to 1000 feet (305 meters). BDI also provides free Windows Graphical User Interface software for configuration, direct control, and status of the PAS-200. Regardless of the application — switching sources, network feeds, or switching satellite receivers — the PAS-200 provides an easy-to-use interface. Browse the following pages to view standard configurations and examples of custom configurations you can create, as the PAS-200 is web-enabled and SNMP-compatible.

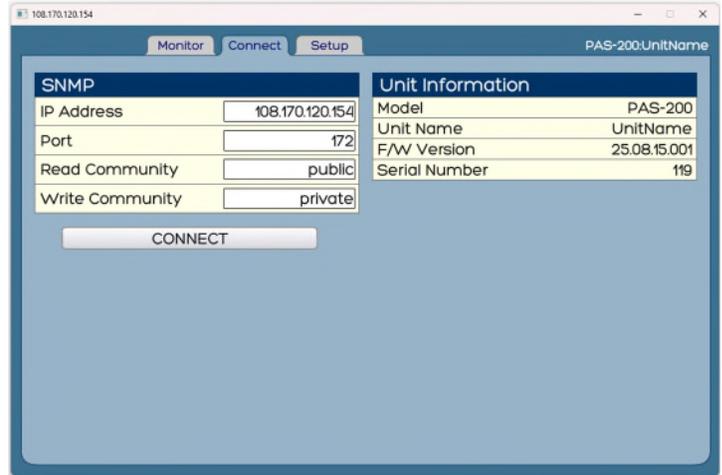


The Windows-based PAS-200 App is included free of charge allows for easy setup and configuration, as well as for direct selection of defined groups or individual channels.

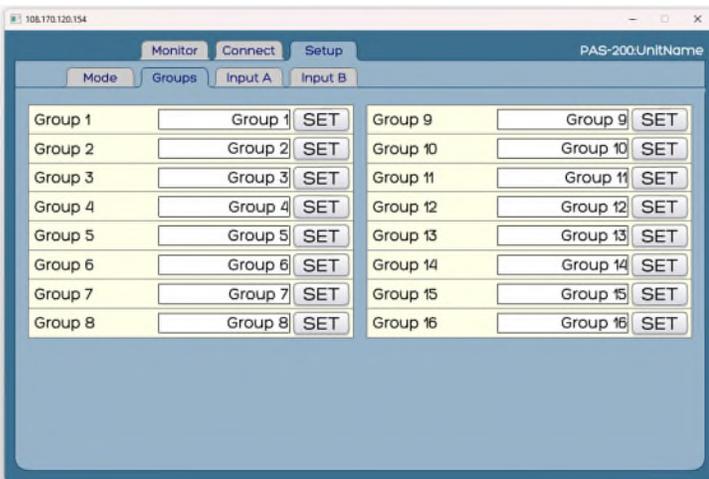
PAS-200 Passive Audio Switchers



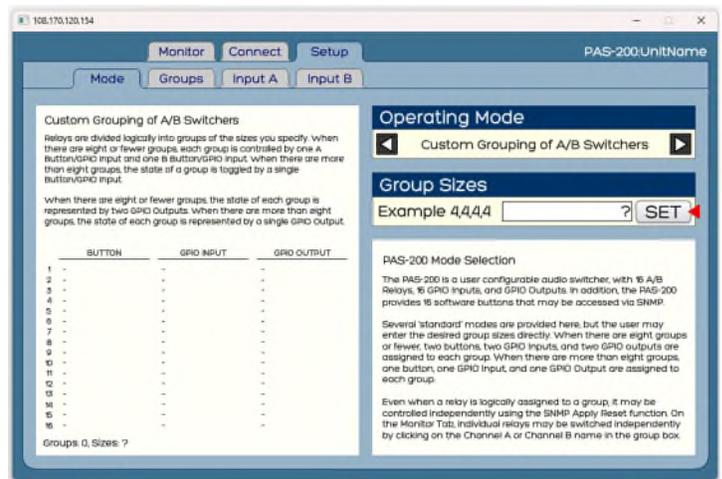
PAS-200 Software Opening Screen provides direct access and selection for up to five (5) individual PAS-200 Audio Switchers.



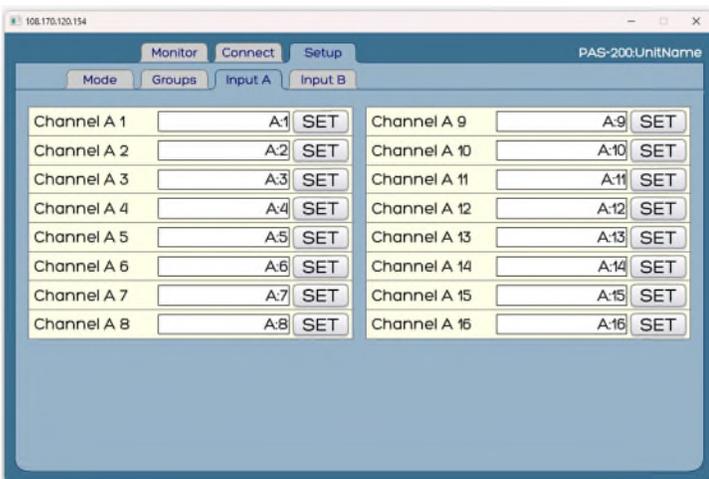
PAS-200 Connect Screen provides network configuration and switcher model and firmware information.



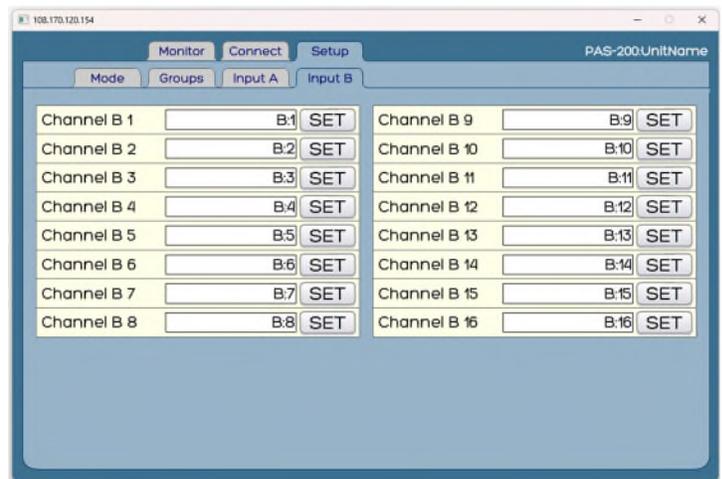
PAS-200 Software Group Setup Screen. From this screen, the user can create custom name labels for each Channel Group configured for their PAS-200 switcher installation.



PAS-200 Software Operating Mode Selection Screen. From this screen, the user can select either a standard channel grouping or create a group configuration tailored to unique requirements.

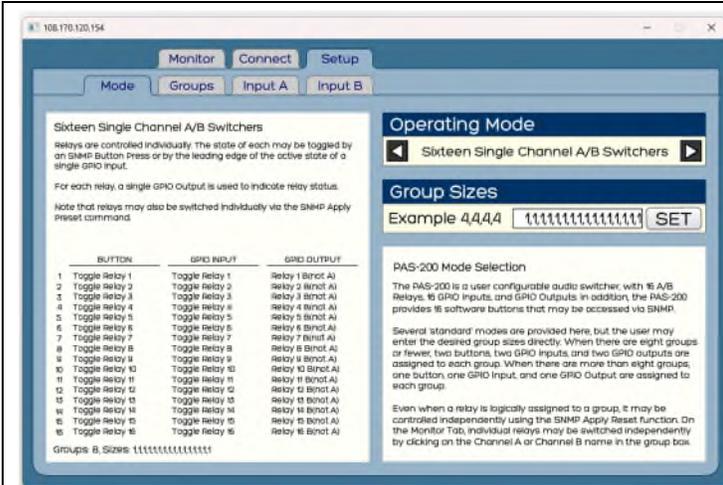


PAS-200 Software Input "A" Setup Screen. From this screen, the user can create custom name labels for each "A" input

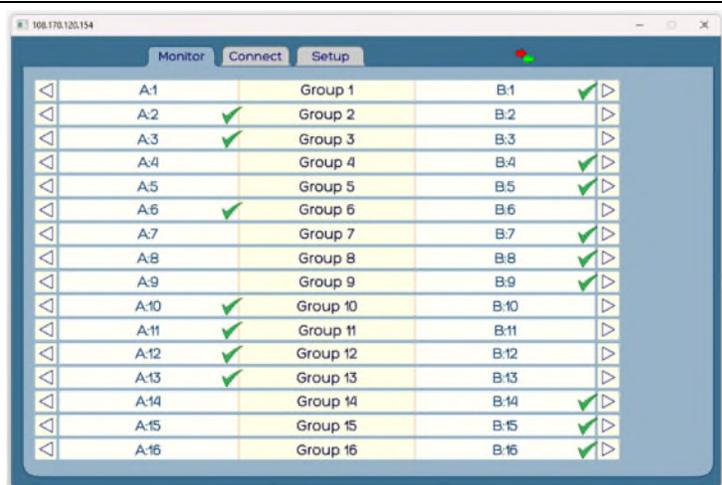


PAS-200 Software Input "B" Setup Screen. From this screen, the user can create custom name labels for each "B" input

PAS-200 Passive Audio Switchers

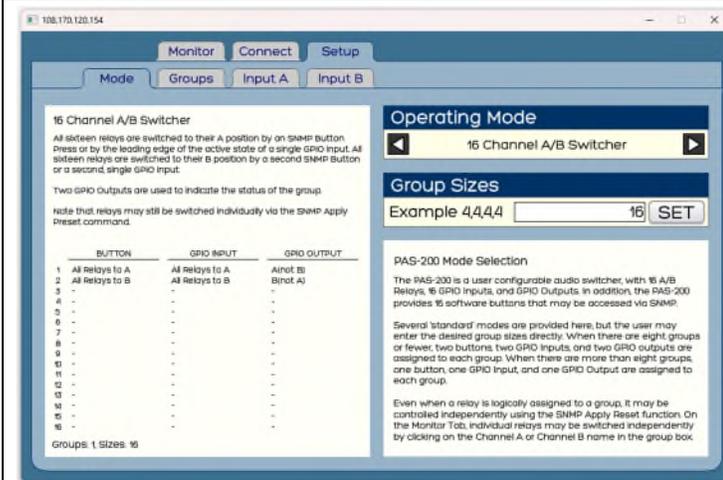


Operating Mode Configuration Page

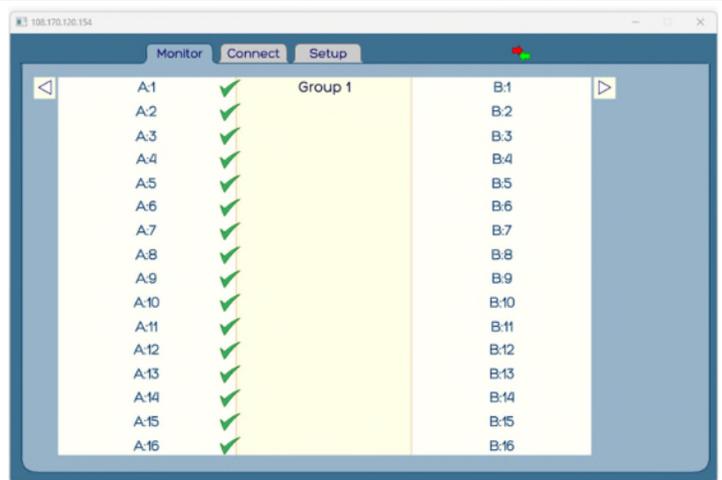


Monitor and Control Page

PAS-200 Standard Group Configuration of 16 Individual A/B Channels.

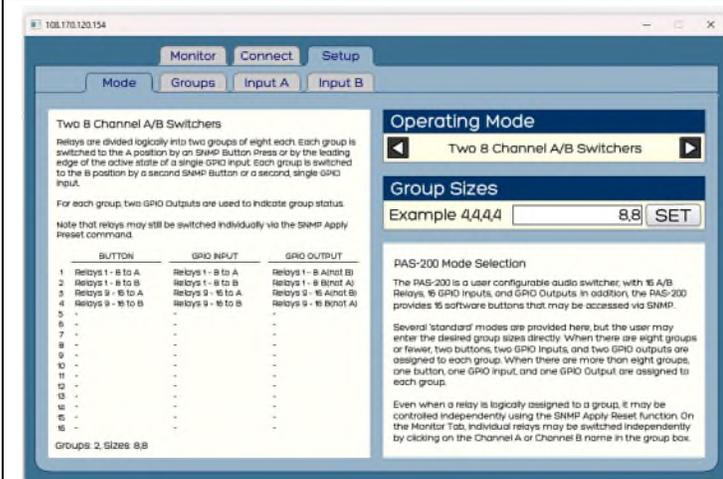


Operating Mode Configuration Page

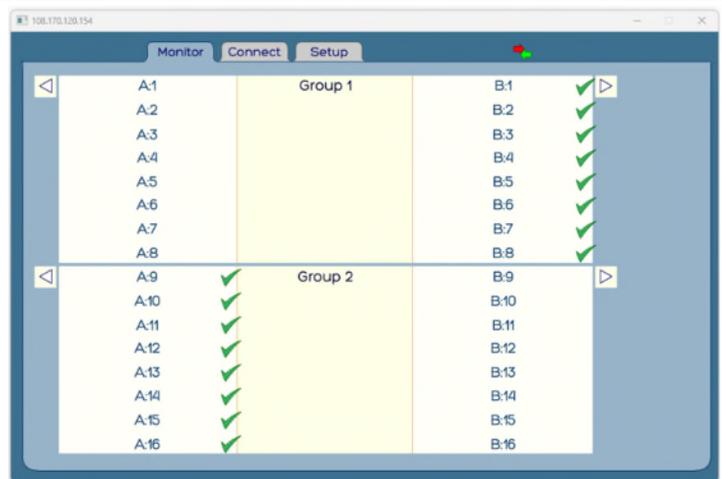


Monitor and Control Page

PAS-200 Standard Group Configuration of One Group of all 16 A/B Channels to allow switching of all inputs simultaneously.



Operating Mode Configuration Page



Monitor and Control Page

PAS-200 Standard Group Configuration of Two Groups of 8 Channels.

PAS-200 Passive Audio Switchers

Operating Mode Configuration Page

Mode: Groups Input A Input B

Eight 2 Channel A/B Switchers

Relays are divided logically into eight groups of two each, each group is switched to the A position by an SNMP Button Press or by the leading edge of the active state of a single GPIO input. Each group is switched to the B position by a second SNMP Button or a second, single GPIO input.

For each group, two GPIO Outputs are used to indicate group status.

Note that relays may still be switched individually via the SNMP Apply Preset command.

BUTTON	GPIO INPUT	GPIO OUTPUT
1	Relays 1 - 2 to A	Relays 1 - 2 A/NOT B
2	Relays 1 - 2 to B	Relays 1 - 2 B/NOT A
3	Relays 3 - 4 to A	Relays 3 - 4 A/NOT B
4	Relays 3 - 4 to B	Relays 3 - 4 B/NOT A
5	Relays 5 - 6 to A	Relays 5 - 6 A/NOT B
6	Relays 5 - 6 to B	Relays 5 - 6 B/NOT A
7	Relays 7 - 8 to A	Relays 7 - 8 A/NOT B
8	Relays 7 - 8 to B	Relays 7 - 8 B/NOT A
9	Relays 9 - 10 to A	Relays 9 - 10 A/NOT B
10	Relays 9 - 10 to B	Relays 9 - 10 B/NOT A
11	Relays 11 - 12 to A	Relays 11 - 12 A/NOT B
12	Relays 11 - 12 to B	Relays 11 - 12 B/NOT A
13	Relays 13 - 14 to A	Relays 13 - 14 A/NOT B
14	Relays 13 - 14 to B	Relays 13 - 14 B/NOT A
15	Relays 15 - 16 to A	Relays 15 - 16 A/NOT B
16	Relays 15 - 16 to B	Relays 15 - 16 B/NOT A

Group Sizes: 2,2,2,2,2,2,2,2

Operating Mode

Eight 2 Channel A/B Switchers

Group Sizes

Example 4,4,4,4 2,2,2,2,2,2,2,2 SET

PAS-200 Mode Selection

The PAS-200 is a user configurable audio switcher, with 16 A/B Relays, 16 GPIO inputs, and GPIO Outputs. In addition, the PAS-200 provides 16 software buttons that may be accessed via SNMP.

Several 'standard' modes are provided here, but the user may enter the desired group sizes directly. When there are eight groups or fewer, two buttons, two GPIO inputs and two GPIO outputs are assigned to each group. When there are more than eight groups, one button, one GPIO input, and one GPIO Output are assigned to each group.

Even when a relay is logically assigned to a group, it may be controlled independently using the SNMP Apply Reset function. On the Monitor Tab, individual relays may be switched independently by clicking on the Channel A or Channel B name in the group box.

Operating Mode Configuration Page

Monitor and Control Page

Mode: Groups Input A Input B

Channel	Group	Channel
A:1	Group 1	B:1
A:2		B:2
A:3	Group 2	B:3
A:4		B:4
A:5	Group 3	B:5
A:6		B:6
A:7	Group 4	B:7
A:8		B:8
A:9	Group 5	B:9
A:10		B:10
A:11	Group 6	B:11
A:12		B:12
A:13	Group 7	B:13
A:14		B:14
A:15	Group 8	B:15
A:16		B:16

Monitor and Control Page

PAS-200 Standard Group Configuration of Eight Groups of 2 Channels.

Operating Mode Configuration Page

Mode: Groups Input A Input B

Four 4 Channel A/B Switchers

Relays are divided logically into four groups of four each. Each group is switched to the A position by an SNMP Button Press or by the leading edge of the active state of a single GPIO input. Each group is switched to the B position by a second SNMP Button or a second, single GPIO input.

For each group, two GPIO Outputs are used to indicate group status.

Note that relays may still be switched individually via the SNMP Apply Preset command.

BUTTON	GPIO INPUT	GPIO OUTPUT
1	Relays 1 - 4 to A	Relays 1 - 4 A/NOT B
2	Relays 1 - 4 to B	Relays 1 - 4 B/NOT A
3	Relays 5 - 8 to A	Relays 5 - 8 A/NOT B
4	Relays 5 - 8 to B	Relays 5 - 8 B/NOT A
5	Relays 9 - 12 to A	Relays 9 - 12 A/NOT B
6	Relays 9 - 12 to B	Relays 9 - 12 B/NOT A
7	Relays 13 - 16 to A	Relays 13 - 16 A/NOT B
8	Relays 13 - 16 to B	Relays 13 - 16 B/NOT A
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-

Group Sizes: 4,4,4,4

Operating Mode

Four 4 Channel A/B Switchers

Group Sizes

Example 4,4,4,4 4,4,4,4 SET

PAS-200 Mode Selection

The PAS-200 is a user configurable audio switcher, with 16 A/B Relays, 16 GPIO inputs, and GPIO Outputs. In addition, the PAS-200 provides 16 software buttons that may be accessed via SNMP.

Several 'standard' modes are provided here, but the user may enter the desired group sizes directly. When there are eight groups or fewer, two buttons, two GPIO inputs, and two GPIO outputs are assigned to each group. When there are more than eight groups, one button, one GPIO input, and one GPIO Output are assigned to each group.

Even when a relay is logically assigned to a group, it may be controlled independently using the SNMP Apply Reset function. On the Monitor Tab, individual relays may be switched independently by clicking on the Channel A or Channel B name in the group box.

Operating Mode Configuration Page

Monitor and Control Page

Mode: Groups Input A Input B

Channel	Group	Channel
A:1	Group 1	B:1
A:2		B:2
A:3		B:3
A:4		B:4
A:5	Group 2	B:5
A:6		B:6
A:7		B:7
A:8		B:8
A:9	Group 3	B:9
A:10		B:10
A:11		B:11
A:12		B:12
A:13	Group 4	B:13
A:14		B:14
A:15		B:15
A:16		B:16

Monitor and Control Page

PAS-200 Standard Group Configuration of Four Groups of 4 Channels.

Operating Mode Configuration Page

Mode: Groups Input A Input B

One 8 and two 4 Channel A/B Switchers

Relays are divided logically into one group of eight and two groups of four each, each group is switched to the A position by an SNMP Button Press or by the leading edge of the active state of a single GPIO input. Each group is switched to the B position by a second SNMP Button or a second, single GPIO input.

For each group, two GPIO Outputs are used to indicate group status.

Note that relays may still be switched individually via the SNMP Apply Preset command.

BUTTON	GPIO INPUT	GPIO OUTPUT
1	Relays 1 - 8 to A	Relays 1 - 8 A/NOT B
2	Relays 1 - 8 to B	Relays 1 - 8 B/NOT A
3	Relays 9 - 12 to A	Relays 9 - 12 A/NOT B
4	Relays 9 - 12 to B	Relays 9 - 12 B/NOT A
5	Relays 13 - 16 to A	Relays 13 - 16 A/NOT B
6	Relays 13 - 16 to B	Relays 13 - 16 B/NOT A
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-

Group Sizes: 8,4,4

Operating Mode

One 8 and two 4 Channel A/B Switchers

Group Sizes

Example 4,4,4,4 8,4,4 SET

PAS-200 Mode Selection

The PAS-200 is a user configurable audio switcher, with 16 A/B Relays, 16 GPIO inputs, and GPIO Outputs. In addition, the PAS-200 provides 16 software buttons that may be accessed via SNMP.

Several 'standard' modes are provided here, but the user may enter the desired group sizes directly. When there are eight groups or fewer, two buttons, two GPIO inputs, and two GPIO outputs are assigned to each group. When there are more than eight groups, one button, one GPIO input, and one GPIO Output are assigned to each group.

Even when a relay is logically assigned to a group, it may be controlled independently using the SNMP Apply Reset function. On the Monitor Tab, individual relays may be switched independently by clicking on the Channel A or Channel B name in the group box.

Operating Mode Configuration Page

Monitor and Control Page

Mode: Groups Input A Input B

Channel	Group	Channel
A:1	Group 1	B:1
A:2		B:2
A:3		B:3
A:4		B:4
A:5		B:5
A:6		B:6
A:7		B:7
A:8		B:8
A:9	Group 2	B:9
A:10		B:10
A:11		B:11
A:12		B:12
A:13	Group 3	B:13
A:14		B:14
A:15		B:15
A:16		B:16

Monitor and Control Page

PAS-200 Standard Group Configuration of One Group of 8 Channels and Two Groups of 4 Channels.

PAS-200 Passive Audio Switchers

Operating Mode Configuration Page

Operating Mode
 Sk 2 and Four 1 Channel A/B Switchers

Group Sizes
 Example 4444 2,2,2,2,1,1,1,1 SET

PAS-200 Mode Selection

The PAS-200 is a user configurable audio switcher, with 16 A/B Relays, 16 GPIO Inputs, and 16 GPIO Outputs. In addition, the PAS-200 provides 16 software buttons that may be accessed via SNMP.

Several 'standard' modes are provided here, but the user may enter the desired group sizes directly. When there are eight groups or fewer, two buttons, two GPIO Inputs, and two GPIO outputs are assigned to each group. When there are more than eight groups, one button, one GPIO Input, and one GPIO Output are assigned to each group.

Even when a relay is logically assigned to a group, it may be controlled independently using the SNMP Apply Reset function. On the Monitor Tab, individual relays may be switched independently by clicking on the Channel A or Channel B name in the group box.

BUTTON	GPIO INPUT	GPIO OUTPUT
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-

Groups: 0, Sizes: 2,2,2,2,1,1,1,1

Monitor and Control Page

Channel A	Group	Channel B
A:1	Group 1	B:1
A:2		B:2
A:3	Group 2	B:3
A:4		B:4
A:5	Group 3	B:5
A:6		B:6
A:7	Group 4	B:7
A:8		B:8
A:9	Group 5	B:9
A:10		B:10
A:11	Group 6	B:11
A:12		B:12
A:13	Group 7	B:13
A:14		B:14
A:15	Group 8	B:15
A:16		B:16

Operating Mode Configuration Page

Monitor and Control Page

PAS-200 Standard Group Configuration of Six Groups of 2 Channels and Four Groups of 1 Channel.

Operating Mode Configuration Page

Operating Mode
 Custom Grouping of A/B Switchers

Group Sizes
 Example 4444 3,3,1,4,4 SET

PAS-200 Mode Selection

The PAS-200 is a user configurable audio switcher, with 16 A/B Relays, 16 GPIO Inputs, and 16 GPIO Outputs. In addition, the PAS-200 provides 16 software buttons that may be accessed via SNMP.

Several 'standard' modes are provided here, but the user may enter the desired group sizes directly. When there are eight groups or fewer, two buttons, two GPIO Inputs, and two GPIO outputs are assigned to each group. When there are more than eight groups, one button, one GPIO Input, and one GPIO Output are assigned to each group.

Even when a relay is logically assigned to a group, it may be controlled independently using the SNMP Apply Reset function. On the Monitor Tab, individual relays may be switched independently by clicking on the Channel A or Channel B name in the group box.

BUTTON	GPIO INPUT	GPIO OUTPUT
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-

Groups: 0, Sizes: ?

Monitor and Control Page

Channel A	Group	Channel B
A:1	Group 1	B:1
A:2		B:2
A:3		B:3
A:4	Group 2	B:4
A:5		B:5
A:6		B:6
A:7	Group 3	B:7
A:8		B:8
A:9	Group 4	B:9
A:10		B:10
A:11	Group 5	B:11
A:12		B:12
A:13	Group 6	B:13
A:14		B:14
A:15	B:15	
A:16	B:16	

Operating Mode Configuration Page

Monitor and Control Page

PAS-200 Custom Group Configuration of Two Groups of 3 Channels, Two Groups of 1 Channel, and Two Groups of 4 Channels.

Operating Mode Configuration Page

Operating Mode
 Custom Grouping of A/B Switchers

Group Sizes
 Example 4444 2,2,4,4,2 SET

PAS-200 Mode Selection

The PAS-200 is a user configurable audio switcher, with 16 A/B Relays, 16 GPIO Inputs, and 16 GPIO Outputs. In addition, the PAS-200 provides 16 software buttons that may be accessed via SNMP.

Several 'standard' modes are provided here, but the user may enter the desired group sizes directly. When there are eight groups or fewer, two buttons, two GPIO Inputs, and two GPIO outputs are assigned to each group. When there are more than eight groups, one button, one GPIO Input, and one GPIO Output are assigned to each group.

Even when a relay is logically assigned to a group, it may be controlled independently using the SNMP Apply Reset function. On the Monitor Tab, individual relays may be switched independently by clicking on the Channel A or Channel B name in the group box.

BUTTON	GPIO INPUT	GPIO OUTPUT
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-

Groups: 0, Sizes: ?

Monitor and Control Page

Channel A	Group	Channel B
A:1	Group 1	B:1
A:2		B:2
A:3	Group 2	B:3
A:4		B:4
A:5	Group 3	B:5
A:6		B:6
A:7		B:7
A:8		B:8
A:9	Group 4	B:9
A:10		B:10
A:11	Group 5	B:11
A:12		B:12
A:13	Group 6	B:13
A:14		B:14
A:15	B:15	
A:16	B:16	

Operating Mode Configuration Page

Monitor and Control Page

PAS-200 Custom Group Configuration of Four Groups of 2 Channels and Two Groups of 4 Channels.

PAS-200 Passive Audio Switchers

Technical Specifications	PAS-200
Inputs:	Sixteen (16) A/B Balanced Audio Pairs
Outputs:	Sixteen (16) A/B Balanced Audio Pairs. User Programmable Switching of A/B Inputs in Groups from One (1) to Sixteen (16)
Input Connector:	DSUB25F – TASCAM Standard
Output Connector:	DSUB25F – TASCAM Standard
Switching Type:	Relays—Passive signal path
Signal Types Supported:	Analog T/R/S, AES3 (non-synchronous), low-voltage DC control signals
Remote Control:	Up to eight (8) Parallel GPIO, RS485 Serial, Ethernet, SNMP v2, and a free Windows-based BDI Graphical User Interface supplied
GPIO Remote Connector:	DSUB25F
Remote Control Local Command:	Momentary to Common
Status Local:	Open Collector +5 VDC pull-up available on the connector
Serial LAN Connector:	RJ45
Power Requirements:	100 to 240 VAC, 50/60 Hz, 0.5 amps
Operating Ambient Temperature:	32 to 122 degrees, F (0 to 50 degrees, C)
Humidity:	95%, Non-condensing
Mechanical Dimensions:	19 in W x 10 in D x 1.75 in H (483 mm W x 254 mm D x 44 mm H) Standard One EIA Rack Unit Enclosure
Shipping Dimensions:	22 in W x 14 in D x 7 in H (559 mm W x 356 mm D x 178 mm H)
Shipping Weight:	15 lbs (7 kg)

Ordering Information

Part Number	Description
PAS-200	SNMP Controlled Passive Relay Switcher is designed to accept up to sixteen (16) A and B balanced pairs and select between them in user-defined groups from one (1) to 16 outputs. Dual power supplies with separate power cords.

Accessories



Optional Audio Interface Panels are available for the PAS-200 Series Audio switchers. The AIP (AIP-100 pictured), ADP, and DAP Series interface panels include gold XLR and DB25 connectors and individually shielded cables mounted to rugged one-rack-unit steel mounting panels. The panels are supplied with a 3-foot (1-meter) standard TASCAM DSUB25F connection cable. For more information, refer to the Audio Interface Panels product brochure, available on the BDI website.

Part Number	Description
PAS-REM	Sixteen (16) Button Remote Control Panel. Provides 16 dedicated individual pushbuttons for input and group selection. Connection is via a single CAT5 shielded cable, up to 1000 feet (305 meters) in length (one (1) 25 foot (8 meter) cable supplied). The remote control panel is an EIA rack-mounted one-rack-unit steel chassis. Connect up to six (6) RAS-REM panels to a single switcher. Perfect for intra-facility audio routing management in a compact, low-cost package.

	Broadcast Devices Inc. Westchester Industrial Complex 3199 Albany Post Road, Suite 122 Buchanan, NY 10511 USA	+1 (914) 737-5032 sales@broadcast-devices.com https://broadcast-devices.com	Specifications subject to change without notice PAS-200 Passive Audio Switcher Datasheet Rev C 20260307 © 2026 Broadcast Devices Inc. All rights reserved
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