Tech Manual

Audio Authority®

Model 1821
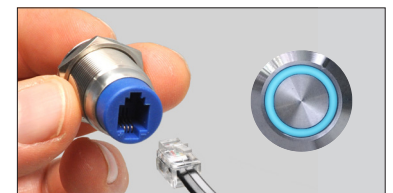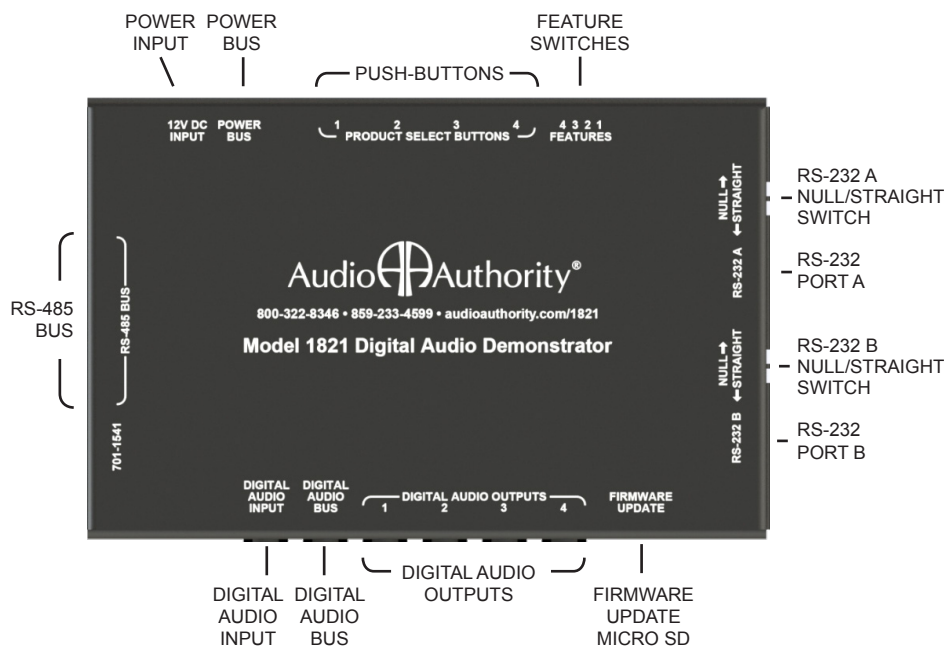### Digital Audio Demonstrator

Introduction

The Audio Authority® 1821 delivers digital audio to four devices such as A-V receivers or sound bars. It provides digital Toslink® connections for input, bus output (for expansion capabilities), and four product outputs. In distribution mode, all outputs are active. In switching mode, outputs may be selected via push-buttons, TouchSelect panels, or compatible RS-232 control device.
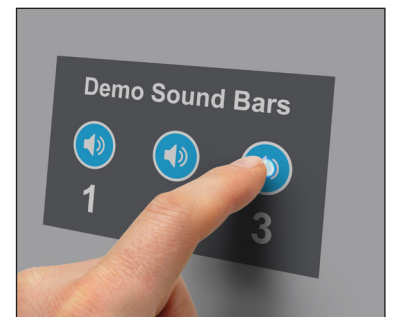
Features

- Digital audio switching for four output positions
- Distribution mode: one in, four out, all positions active
- Digital audio bus output, always active
- RS-485 control (compatible touch panels sold seperately)
- RS-232 control

Push-Buttons

To use push-buttons for product selection, connect RJ9 style Easy Plug switches to each position. Push-buttons and cables in several colors and lengths are available from Audio Authority.

Easy Plug blue push-button with RJ9 connector (PN 013-100).

Example of a custom overlay for a touch panel (sold seperately).

Switch Settings

Choose the desired features and select using the Feature Switches as shown. If a switch is shown with a dash, it can be ON or OFF while using the feature. After making changes to the Feature Switches, cycle power to the 1821.

Timeout Mode

The timeout interval is the length of time after the last button press until the demo ends and all outputs are off. Adjust the timeout interval using the switch settings below. The demo never stops playing when switches 1, 2, and 3 are all OFF, or in distribution mode (1, 2, and 3 = ON).

TIMEOUT   SWITCH SETTINGS:

SECONDS	1	2	3	4
No Timeout	OFF	OFF	OFF	-
15	OFF	OFF	ON	-
30	OFF	ON	OFF	-
45	OFF	ON	ON	-
60	ON	OFF	OFF	-
75	ON	OFF	ON	-
90	ON	ON	OFF	-
DISTRIBUTION MODE (No Timeout)	ON	ON	ON	-

Distribution Mode

When Switches 1, 2, and 3 are ON the 1821 is in Distribution Mode. All audio positions are active, and timeout is not active.

DISTRIBUTION MODE   SWITCH SETTINGS:

	1	2	3	4
DISTRIBUTION MODE	ON	ON	ON	-

RS-232 Ports

RS-232 ports A & B may be set for Null or Straight using the switch located beside the port. By default Port A is set to null modem, and Port B is set to straight modem. The ports are modular RJ-45 jacks; adapter cables are available for connection to 3.5mm or DB-9 serial ports. Select the Baud rate using Feature Switch 4 as shown.

BAUD RATE   SWITCH SETTINGS:

	1	2	3	4
57600	-	-	-	OFF
115200	-	-	-	ON

RS-485 Bus and TouchSelect Panels

TouchSelect panels may be used to select product positions. TouchSelect panels transmit the touch location and panel address over the bus to the 1821. By default, button commands match up with the TouchSelect touch positions, therefore TouchSelect position 1 triggers the command for output 1.

Digital Audio Input / Outputs

Connect an optical cable from the audio source to the Digital Audio Input of the 1821. An optical cable can be routed from the Digital Audio Bus connector to an additional 1821 or other device. Connect an optical cable from each of the Digital Audio Outputs to each sound bar or AVR.
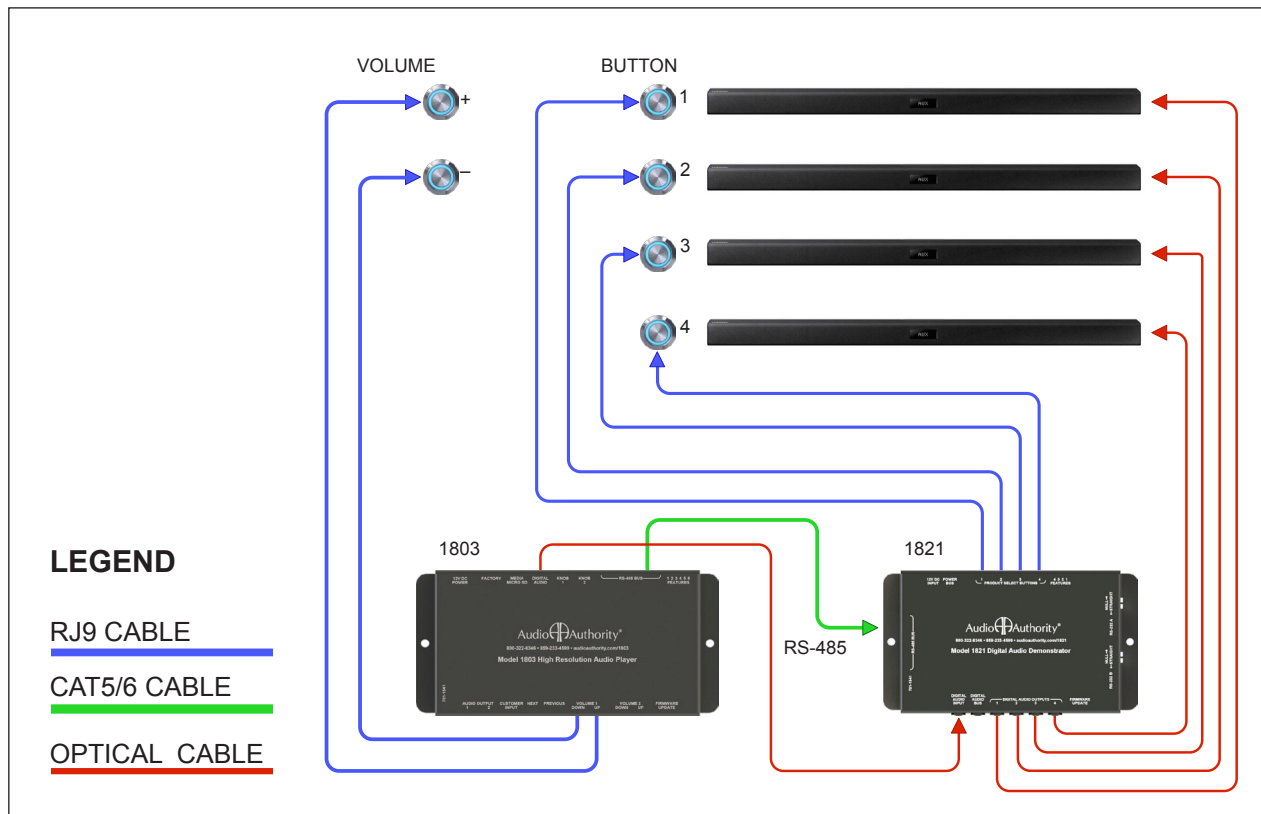
12V DC Power

Connect 12V power adapter to Power Input. The Power Bus port may be connected to the 1803, or other device sharing the power adapter provided the power supply is adequate.

Installation

- Attach the 1821 to a flat surface with the screws provided.
- Connect push-buttons, if used.
- Connect RS-485 cable from the 1821 to touch panel, if used.
- Connect RS-232 cable from the 1821 to the control device if applicable.
- Connect a digital audio source to the 1821.
- Connect digital audio output cables from the 1821 to product inputs.
- Connect power adapter to AC power, then to the 1821 power port.

Example

Demo four sound bars with push-buttons. Each button triggers a specific audio track for each product via the RS-485 communication between the 1821 and the media player.