User Manual

Model 1820 Serial Switch Controller



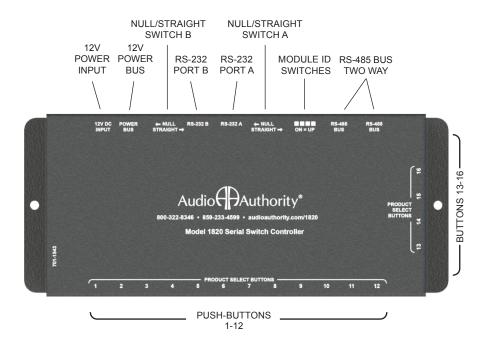


Model 1820 Serial Switch Controller

The Audio Authority® 1820 Serial Switch Controller provides a flexible way to control a compatible media player, such as a BrightSign® Model XD1033, with up to 16 push-buttons. The 1820 also interfaces with Audio Authority TouchSelect panels. Each 1820 controls sixteen push buttons and may be expanded to 256 positions. Push buttons may be used for product selection or other commands (see page 4).



COMPATIBLE WITH BRIGHTSIGN MEDIA PLAYERS





The Easy Plug RJ9 connector push-button shown is the 013-100 with blue LED ring; other colors are available upon request.

Button Control Functions

Demonstration is controlled by push-buttons with RJ9 connectors, such as the model 013-100 (see page 2). Push-button behavior such as LED blink, LED lit solid etc. are assigned by serial commands to each button press (see page 4).

RS-232 Port A and Port B

The RS-232 Baud rate is 9600 and each port may be set for Null or Straight using the switch located beside each RS-232 port (A & B). 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 3.5mm or DB-9 serial ports.

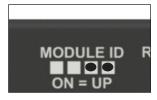
RS-485 Communication Bus

The RS-485 communication pathway links multiple 1820 modules (see Module ID Switches below).

Module ID Switches

The Module ID switches 1-4 are off by default (UNIT 1). To set the Module ID for more than one 1820 follow the chart below.

Switch	1	2	3	4
UNIT 1	OFF	OFF	OFF	OFF
UNIT 2	OFF	OFF	OFF	ON
UNIT 3	OFF	OFF	ON	OFF
UNIT 4	OFF	OFF	ON	ON
UNIT 5	OFF	ON	OFF	OFF
UNIT 6	OFF	ON	OFF	ON
UNIT 7	OFF	ON	ON	OFF
UNIT 8	OFF	ON	ON	ON
UNIT 9	ON	OFF	OFF	OFF
UNIT 10	ON	OFF	OFF	ON
UNIT 11	ON	OFF	ON	OFF
UNIT 12	ON	OFF	ON	ON
UNIT 13	ON	ON	OFF	OFF
UNIT 14	ON	ON	OFF	ON
UNIT 15	ON	ON	ON	OFF
UNIT 16	ON	ON	ON	ON



Address for unit 4 marked on case.

Serial Commands

STRUCTURE	COMMAND	RESULT	
[PRESS#_#]	[PRESS1_1]	Notify Main Controller PSB 1 pressed on unit1.	
[RELEASE#]	[RELEASE1]	Notify Main Controller PSB 1 released on unit 1.	
[BLINK#_#]	[BLINK10_3,5,6]	Blinks selected PSB position(s) on unit 10.	
[LEDON#_#]	[LEDON2_1,3,7]	Activates selected LED(s) on unit 2.	
[LEDOFF#_#] [LEDOFF2_1,3,7]		Deactivates selected LED(s) on unit 2.	
[LEDALLOFF] [LEDALLOFF]		Turn off all LEDs on all units.	

Power

Connect the 12V power adapter (included) to the jack marked 12V DC Input. The Power Bus port may be connected to an 1803, or other device sharing the power adapter, provided the power supply is adequate.

Installation

- Attach the player and the 1820 modules to a flat surface with the screws provided.
- Connect push-buttons. Push-buttons should be RJ9 momentary switches.
- Set the Module ID switches and mark the case for identity.
- Connect multiple 1820 modules via Cat 5/6 using the RS-485 ports.
- Connect the RS-232 cable from port A or B on the 1820 to a compatible media player. Set that port's Null/Straight switch to the desired setting for the connected device.
- Connect the power adapter to AC power, then to the 1820 power port.
- · Call Audio Authority with questions that are not addressed in this manual.

