User Manual

Model 1770
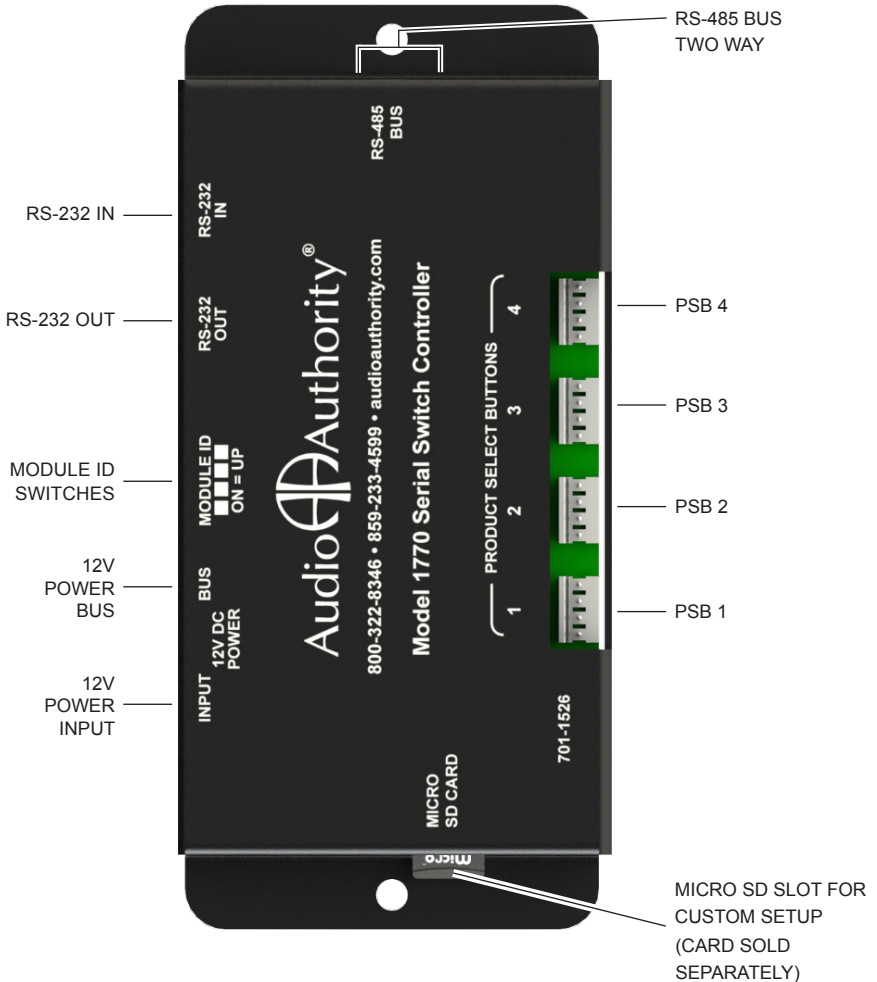### Serial Switch Controller

Audio Authority®

Model 1770 Serial Switch Controller

The Audio Authority® 1770 Serial Switch Controller provides a flexible way to control a compatible media player, such as a Brightsign® Model XD1033, with RS-232 serial commands. Each 1770 controls four push buttons and may be expanded to 64 positions. Push buttons may be used for product selection or other commands (*see page 3*).

COMPATIBLE WITH
BRIGHTSIGN® MEDIA
PLAYERS

RS-485 BUS
TWO WAY

RS-232 IN

RS-232 OUT

MODULE ID
SWITCHES

12V
POWER
BUS

12V
POWER
INPUT

PSB 4

PSB 3

PSB 2

PSB 1

MICRO SD SLOT FOR
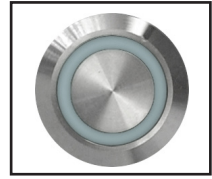CUSTOM SETUP
(CARD SOLD
SEPARATELY)

Package Contents

Before installing this product, please check the packaging and make certain the following items are contained in the shipping carton:

- 1770 Serial Switch Controller
- DC Power Adapter
- User Manual

Button Control Functions

Demonstration is controlled by push-buttons. The 1770 allows custom button setup via the microSD card. Stored in "AUTO.txt", each button can be assigned a command to output on the RS232 OUT port. If a microSD card isn't present, default commands will be used for each button press. Command protocol depends on the device.

Buttons are lit solid when idle. Push the button to start demo; if no demo is playing, the demo starts and the button blinks.

Buttons are available in several styles and colors.

RS-232 Ports
The RS-232 port connects via modular RS-232 to any compatible device at a 9600 Baud rate. RX is located on pin 3, TX on pin 6, and GND on pin 7. A special RJ-45 to DB-9 cable is available from Audio Authority, PN: 801-252.
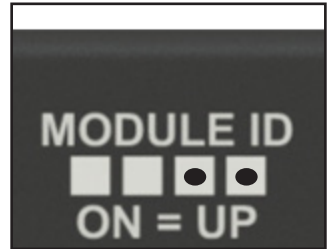
RS-485 COM Bus
The RS-485 communication pathway is for use with multiple 1770s. See Module ID below.

Module ID Switches

The Module ID switches 1-4 are off by default (UNIT 1). To set the Module ID for more than one 1770 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.

Power

Connect the 12V power supply (included) to the jack marked Power Input. The Power Bus port may be connected to the 1704, or other device sharing the power supply.
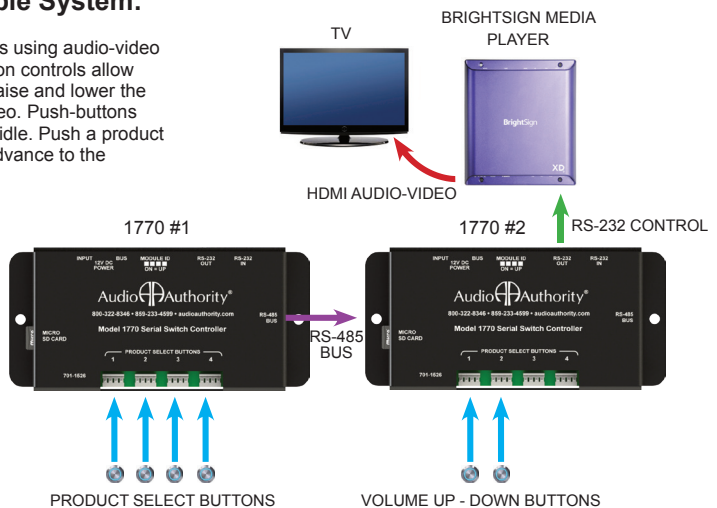
Installation

- Attach the player and the 1770 modules to a flat surface with the screws provided.
- Connect push-buttons. Push-buttons should be four-wire momentary switches, and can be illuminated (2-5 volt LED).
- Set the Module ID switches and mark the case for identity.
- Connect multiple 1770 modules via Cat 5/6 using the RS-485 ports.
- Connect the RS-232 cable from the 1770 to a compatible media player.
- Connect the HDMI cable from a compatible media player to the TV.
- Connect the power supply to AC power, then to the 1770 power port.
- Call Audio Authority with questions that are not addressed in this manual.

Operation

On power up, the demo push-buttons are lit solid. When the demonstration is active, the current demonstration push-button blinks, all others are dark.

1770 Example System:

Compare products using audio-video tracks. Push-button controls allow the customer to raise and lower the volume of the video. Push-buttons are lit solid when idle. Push a product button again to advance to the next track.

TV

BRIGHTSIGN MEDIA PLAYER

HDMI AUDIO-VIDEO

1770 #1

1770 #2   RS-232 CONTROL

RS-485 BUS

PRODUCT SELECT BUTTONS

VOLUME UP - DOWN BUTTONS