User Manual

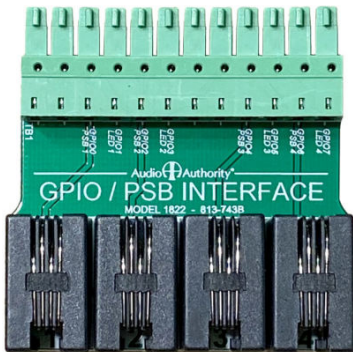## Model 1822 & HX-055
GPIO Controllers

Audio⊕Authority®

Introduction

The Audio Authority Model 1822 and HX-055 GPIO Adapters provide a compact, cost-effective design that allows for the use of up to 4 RJ9 connection push-button or touch sensor inputs on comaptible BrightSign Media players.

COMPATIBLE WITH BRIGHTSIGN MEDIA PLAYERS

Model 1822 GPIO Controller

The Audio Authority® 1822 GPIO Controller provides a flexible way to control a compatible media player, such as a BrightSign® Model XD1033, with up to 4 modular *RJ9* push-buttons.

Model 1822

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

Model HX-055 GPIO Controller

Audio Authority's® HX-055 GPIO Controller, similarly, allows for the connection of 4 proximity sensors, such as our proprietary PX-100 AirSelect sensor to a BrightSign® display. These sensors are a drop in replacement for standard 19mm switches, utilizing RJ9 connectors.

Model HX-055

The PX-100 AirSelect sensor provides customer input without physical touch, keeping the display free of pathogens.

Button Control Functions (Model 1822)

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*).

Touchless Sensor Control Functions (Model HX-055)

Demonstration is controlled by touchless sensors with RJ9 connectors, such as the model PX-100 (see page 2). Behaviors of these sensors can be assigned by serial commands for each interaction with the sensor (see page 4).

Model 1822 shown here connected to a compatible BrightSign player as well as 4 RJ9 connected push-buttons.

Serial Commands

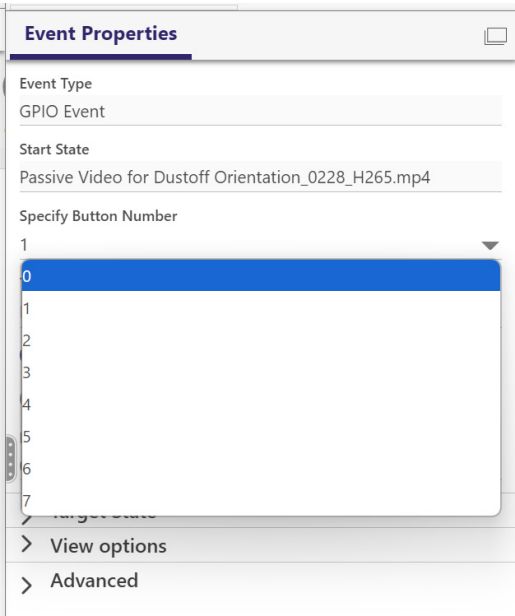| STRUCTURE	COMMAND	RESULT
[PRESS#_#]	[PRESS1_1]	Notify Main Controller PSB 1 pressed on unit1.
[RELEASE#]	[RELEASE1]	Notify Main Controller PSB 1 released on unit 1.
[BLINK#_#]	[BLINK10_3,5,6]	Blinks selected PSB position(s) on unit 10.
[LEDON#_#]	[LEDON2_1,3,7]	Activates selected LED(s) on unit 2.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

BrightAuthor Programming Tips for Model 1822

The GPIO mapping is also printed on the circuit board of the 1822. The Brightsign presentation must be set up to have GPIO inputs and outputs. If buttons do not work, they may be in the default "INPUT" only state.

Below is the correct setup under presentation properties, interactive, GPIO configuration:

GPIO configuration

GPIO 0	● Input	○ Output
GPIO 1	○ Input	● Output
GPIO 2	● Input	○ Output
GPIO 3	○ Input	● Output
GPIO 4	● Input	○ Output
GPIO 5	○ Input	● Output
GPIO 6	● Input	○ Output
GPIO 7	○ Input	● Output

Also, check that you are mapping the button press GPIO correctly. You must monitor GPIO 0, not GPIO 1 (see below).

Event Properties

Event Type
GPIO Event

Start State
Passive Video for Dustoff Orientation_0228_H265.mp4

Specify Button Number
1 ▼

0
1
2
3
4
5
6
7

> View options
> Advanced

The following shows how to set the LED output "ON" in the "home" state of the presentation:

State Properties

∨ Video State

Name

Passive Video for Dustoff Orientation_0228_H265.mp4

☑ Initial State

◉ Loop media if no media end transition is specified

○ Hold last video frame if no media end transition is specified

Select different file

\...assive Video for Dustoff Orientation_0228_H265.mp4

❯ Notes

∨ Advanced

Entry Commands(1) Expand All | Collapse All   ➕ **Add Command**

Command	Command Parameters
GPIO ▾	On ▾
	1 ▾

Exit Commands(0) Expand All | Collapse All   ➕ **Add Command**

Command	Command Parameters

Installation

- Attach the Model 1822 or HX-055 to the GPIO connector on a compatible BrightSign player
- Connect push-buttons or touchless sensors. These should be RJ9 momentary switches.
- Call Audio Authority with questions that are not addressed in this manual.