

User Manual

MediaHub

With Audio Switching and Distribution



Model MH6-4K



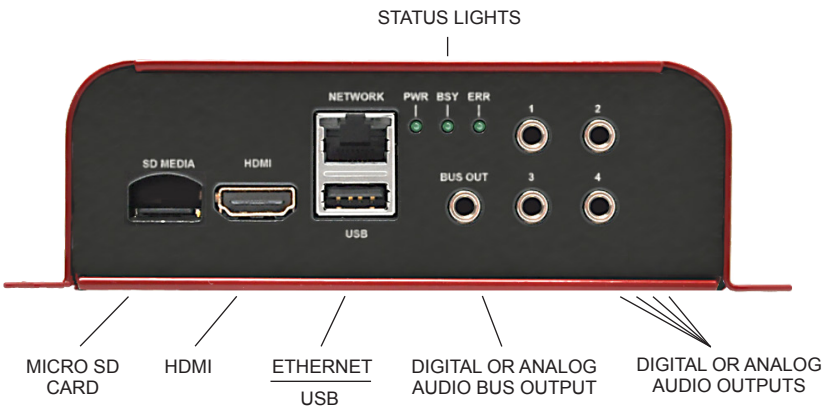
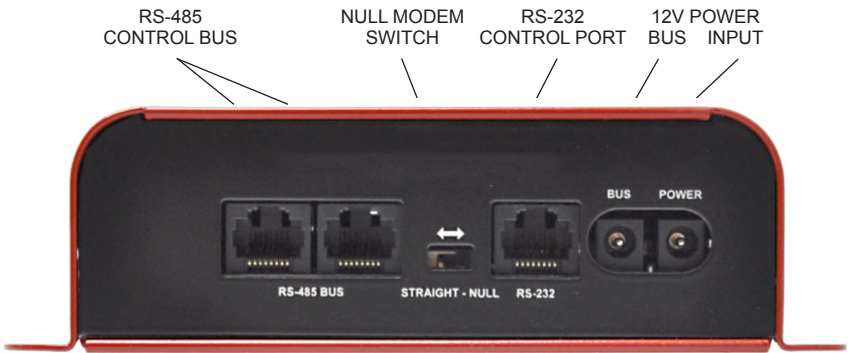
Introduction

The MH6-4K MediaHub combines interactivity with audio switching and distribution. In addition to 4K video, this audio-oriented player offers digital or analog signals on each of its four audio outputs. An audio bus output can be used to add other peripherals. Multiple ports on the MH6-4K link interactive peripherals like push-buttons and serial control devices including touch screens and touch panels to serve a variety of demonstration designs. Update media content and BrightAuthor programming via Ethernet, or update the SD card locally.



Features

- BrightSign® Digital Signage Module
- HDMI® output (4096x2160@60Hz)
- Digital & analog audio (dual-purpose 3.5mm jacks x4)
- Customizable push-button ports (RJ9 x8)
- Control ports for peripherals (RJ45 x3)
- USB port for touchscreen or other peripherals
- Ethernet port for remote updates



HDMI Output

The MH6-4K HDMI output delivers 4K@60 video via an HDMI cable to HDMI display screens, AVRs or sound bars. CEC commands can be used to control the sync device.

Video File Information

MPEG-4 encoded videos are supported with maximum video resolution up to 4K@60. Test all files before deployment. See BrightSign specifications for details: www.brightsign.biz/application/files/7715/5111/4033/HS4-02252019.pdf

Four Digital or Analog Audio Outputs

The MH6-4K connects to any device via digital (Toslink®) and/or low-level analog audio via its 3.5mm dual-purpose audio outputs. The outputs are individually selectable, or can output audio simultaneously in digital and/or analog formats. The audio signals on the HDMI output may also be turned off and on via software.

Audio Bus Output

The MH6-4K audio bus output delivers optical digital (Toslink), or low-level analog audio via its 3.5mm dual-purpose audio jack, as directed by BrightAuthor settings. The Audio Bus may also be activated or deactivated on command using BrightAuthor.

Push-Buttons

To control media using push-buttons, connect Easy Plug push-buttons to each position. Compatible push-buttons are available in several colors; shown below is the button illuminated with blue LED ring.



The Easy Plug push-button has an RJ9 connector for easy installation and long term reliability.

MicroSD Card Slot

A microSD card contains BrightAuthor programming, plus the video and audio files. Media files placed on the root will autoplay on power up. If the SD card is updated to add new video files, make sure any custom programming remains on the card.

Serial Communication

Control Port (RS-232)

The MH6-4K can send and receive serial commands via RS-232 at any Baud rate selected via BrightAuthor. The the port may be set for Null or Straight using the switch located beside the RS-232 port. The port is a modular RJ-45 jack; adapter cables are available for 3.5mm or DB-9 serial ports.

Control Bus (RS-485)

The RS-485 control bus allows the MH6-4K to interact with devices such as the Audio Authority TouchSelect panels or the 1895 Visual Volume knob. The MH6-4K can also control switch modules or amplifiers that are linked via the Control Bus.

The MH6-4K is unit ID 0, all on-board push-button positions respond to commands addressed to ID 0. All commands are echoed on the RS-232 control port and RS-485 control bus, regardless of ID.

External Settings (RS-232)

Baud rate may be changed via BrightAuthor.

Default Baud Rate	115200
Data Bits	8
Parity	None
Stop Bits	1

Internal Settings

Port	0
Baud Rate	115200
Data Bits	8
Parity	None
Stop Bits	1
Protocol	ASCII
Send EOL	CR
Receive EOL	CR

Control Bus Settings (RS-485)

Baud Rate	57600
Protocol	Control Bus (RS-485)

Changing the Baud Rate (RS-232)

In BrightAuthor, select the proper Baud rate to communicate to external serial devices. The MH6-4K is always ID 0.

STRUCTURE	EXAMPLE	RESULT
[BAUD#_#]	[BAUD0_9600]	MH6-4K ID 0 BAUD RATE SET TO 9600
[BAUD#_#]	[BAUD0_115200]	MH6-4K ID 0 BAUD RATE SET TO 115200
[BAUD#_#]	[BAUD0_19200]	MH6-4K ID 0 BAUD RATE SET TO 19200
[BAUD#_#]	[BAUD0_57600]	MH6-4K ID 0 BAUD RATE SET TO 57600
[BAUD#_#]	[BAUD0_38400]	MH6-4K ID 0 BAUD RATE SET TO 38400

Sample Button Commands

STRUCTURE	EXAMPLE	RESULT
[PRESS#=#]	[PRESS0_2]	MH6-4K PSB 2 PRESS SENT
[RELEASE#]	[RELEASE0_2]	MH6-4K PSB 2 RELEASE SENT
[BLINK#_#]	[BLINK0_4]	MH6-4K PSB 4 LED BLINKS
[BLINK#_#,#,#,#]	[BLINK0_1,2,3,4]	MH6-4K PSB 1,2,3,4 LEDS BLINK
[LEDON#_#]	[LEDON0_6]	MH6-4K PSB 6 LED ACTIVATES
[LEDON#_#,#,#,#]	[LEDON0_3,4,5,6]	MH6-4K PSB 3,4,5,6 LEDS ACTIVATE
[LEDOFF#_#]	[LEDOFF0_6]	MH6-4K PSB 6 LED DEACTIVATES
[LEDALLOFF]	[LEDALLOFF]	DEACTIVATES ALL LEDS ON ALL DEVICES
[ANALOG_ON#]	[ANALOG_ON0]	MH6-4K ID 0 ANALOG OUTPUTS ACTIVATE
[ANALOG_OFF#]	[ANALOG_OFF0]	MH6-4K ID 0 ANALOG OUTPUTS DEACTIVATE
[ANALOG_ON#_#]	[ANALOG_ON0_2]	MH6-4K ID 0 ANALOG OUTPUT 2 ACTIVATES
[ANALOG_OFF#_#]	[ANALOG_OFF0_2]	MH6-4K ID 0 ANALOG OUTPUT 2 DEACTIVATES
[OPTICAL_ON#]	[OPTICAL_ON0]	MH6-4K ID 0 OPTICAL OUTPUTS ACTIVATE
[OPTICAL_OFF#]	[OPTICAL_OFF0]	MH6-4K ID 0 OPTICAL OUTPUTS DEACTIVATE
[OPTICAL_ON#_#]	[OPTICAL_ON0_4]	MH6-4K ID 0 OPTICAL OUTPUT 4 ACTIVATES
[OPTICAL_OFF#_#]	[OPTICAL_OFF0_4]	MH6-4K ID 0 OPTICAL OUTPUT 4 DEACTIVATES

Firmware Update

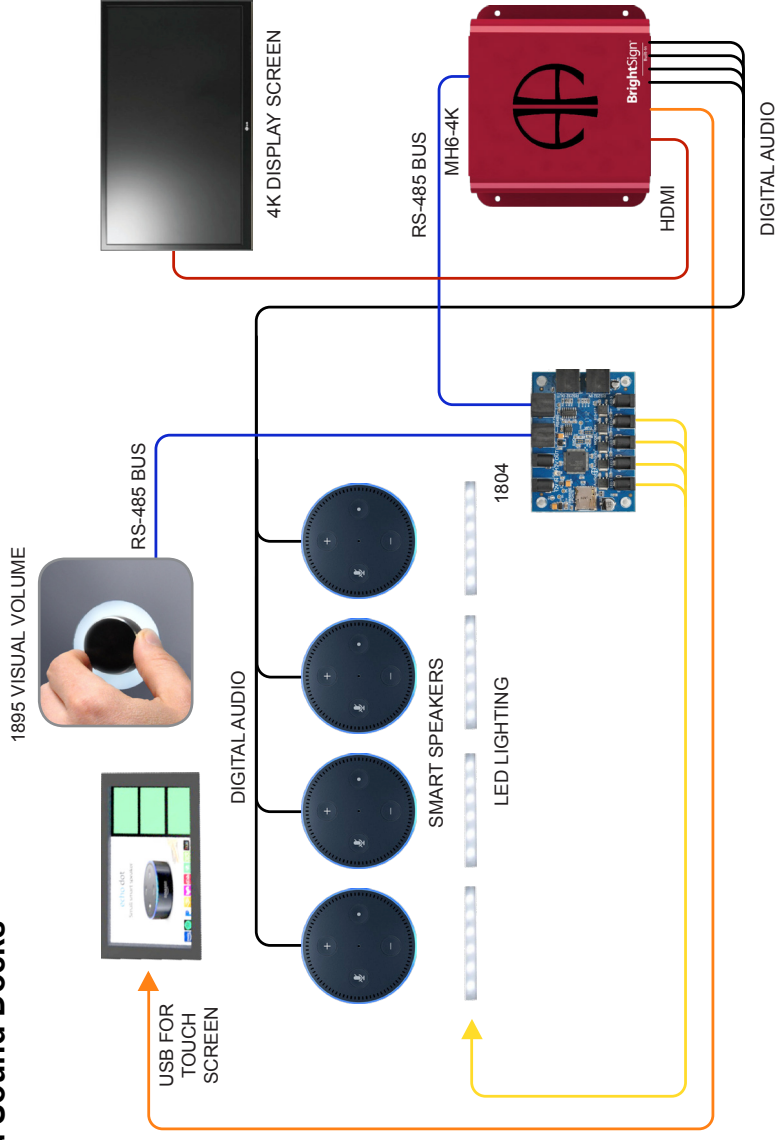
Visit www.audioauthority.com/MH6-4K for firmware update instructions.

Installation

- Attach the player to a flat surface with the screws provided.
- Load programming and media files onto a compatible and properly formatted microSD card.
- Connect Easy Plug push-buttons, touch panels or touch screen.
- Connect power adapter to AC power, then to the MH6-4K power port.
- Connect audio output(s) to amplifiers, sound bars, or smart docks if desired.
- Connect HDMI cable from display device to MH6-4K HDMI port.
- For more information check our website: audioauthority.com/MH6-4K.

Example System: Smart Speakers and Sound Docks

This display uses light to attract and communicate, and leverages the MH6-4K and the MH6-4K Media Hub's multiple audio output options to demonstrate a variety of audio output options to products. Each of the four audio output jacks can play either digital or analog audio, depending on the requirements of the device. The HDMI output and USB jack interface with a touch screen LCD that informs the customer about each product. The 1895 Visual Volume knob is an intuitive and inviting way to present volume control. It connects directly to an RS-485 bus. Each product is visually highlighted by a lit platform, managed serially by a light controller.





2048 Mercer Road, Lexington, KY 40511-1071 USA
800-322-8346 • 859-233-4599 • Fax: 859-233-4510
support@audioauthority.com • www.audioauthority.com

E-187
Rev.20190625