4K Ultra High-Definition 7.1 Surround Sound AV Receiver

The Crestron® <u>HD-XSPA</u> and <u>HDI-XSPA</u> provide a professional-grade 7.1 surround sound processor, high-efficiency eight-channel power amplifier, 4K video switcher, 4K DigitalMedia[™] receiver, and Crestron control interface in a compact 2-space package.

The HD-XSPA and HDI-XSPA are functionally identical. For simplicity within this guide, the term "HD-XSPA" is used except where noted.

1

In the Box

1 HD(I)-XSPA, 4K Ultra High-Definition 7.1 Surround Sound AV Receiver

Additional Items

- 2 Bracket, Rack Ear, 2U (P/N 2034434)
- 8 Connector, 2-Pin (P/N 2012361)
- 1 Connector, 4-Pin (P/N 2003576)
- 3 Connector, 5-Pin (P/N 2003577)
- 1 Connector, 8-Pin (P/N 2003580)

HD-XSPA Only

- 1 Power Cord, 6 ft 7 in. (2 m) (P/N 4512528)
- 1 Fuse, 10.0 A, Time Lag, 1.25 in. x 0.25 in., Ceramic Cartridge, 250 V (P/N 2017577)

HDI-XSPA Only

- 1 Power Cord (P/N Varies by country)
- 1 Fuse, 5.0 A, Time Lag, 5 x 20 mm, Ceramic Cartridge, 250 V (P/N 2017578)



Refer to the <u>Safety Instructions</u> (Doc. 6607) prior to installation. The HD-XSPA can be installed in a rack or placed on a table.

Rack Installation

NOTE: Four feet are preinstalled for tabletop mounting or stacking. If the unit is to be rack mounted, the feet are not required and can be removed with a #1 Phillips screwdriver.

The HD-XSPA occupies 2U of rack space. Use the three screws from the front part of each side panel, and a # 1 Phillips screwdriver to attach the two included rack ears to the device, as shown in the following illustration. Then mount the device into the rack using four rack mounting screws (not included).





4K Ultra High-Definition 7.1 Surround Sound AV Receiver

Rack Mounting Safety Precautions

Elevated Operating Ambient Temperature: If installed in a closed or multiunit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

Reduced Airflow: Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

Mechanical Loading: Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Circuit Overloading: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Earthing: Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

Place on a Table

Four feet are preinstalled for placing the device on a flat surface or stacking on top of another device.

Connect

Connect the device as called out in the following illustrations. Connect power last.

CAUTION:

- Keep the device unplugged until all of the input, network, and speaker wiring is complete.
- Check the speaker wires for shorts and frayed wiring around the SPEAKER OUTPUTS connectors.

NOTES:

- The DM® and LAN ports are for intra-building use only and should not be connected to lines that run outside of the building in which the unit is located.
- If the DM port is connected to a DM switch, the LAN port should not be connected to the local area network.

Additionally, the DM switch can be used to configure the network settings. Refer to the DigitalMedia[™] Design Guide (Doc. 4546)

• Ensure the unit is properly grounded by connecting the chassis ground lug to an earth ground (building steel).



4K Ultra High-Definition 7.1 Surround Sound AV Receiver

HD-XSPA, rear panel





4K Ultra High-Definition 7.1 Surround Sound AV Receiver

HD-XSPA, front panel





4K Ultra High-Definition 7.1 Surround Sound AV Receiver

Connect Audio Sources

The HD-XSPA can receive audio from up to 11 sources.

DigitalMedia Input

Audio from a DigitialMedia source is sent to the HD-XSPA over the DM1 port.

HDMI Inputs

The HD-XSPA breaks out the audio from HDMI inputs 2-5.

Digital Audio Inputs

The HD-XSPA receives digital S/PDIF audio from inputs 6 through 8.

Input 6 uses a JIS F05 female (TOSLINK) optical fiber connector while inputs 7 and 8 use a coaxial RCA connector.

Analog Audio Inputs

The HD-XSPA receives unbalanced analog audio through RCA connectors on inputs 9 and 10. The HD-XSPA can also receive balanced or unbalanced audio through a 5-pin terminal block connector on input 11.



Unbalanced Input





Connect Devices

The HD-XSPA can connect to a Crestron control system over Ethernet. The HD-XSPA also has several device control ports to allow for programmable control of local AV components and other room devices.

LAN Port

Connect the LAN port to a LAN to communicate with a Crestron control system over Ethernet.

Device Control Ports

RS-232 (COM), infrared (IR), and low-voltage relay (RELAY) ports provide for control of the display device and AV sources, and may also be used to control a motorized screen or lift, window treatments, lighting, and other equipment in the room. Four sensor inputs (SENS) accommodate power sensors, motion detectors, and other contact closure devices.

Connect Outputs

The HD-XSPA has output connections for a display and speakers, as well as preamp outputs for a subwoofer and a stereo or mono downmix of the selected input signal.

HDMI Output

The HD-XSPA has an HDMI output for connection to a display.

Speaker Outputs

The SPEAKER OUTPUTS support a variety of speaker configurations up to 7.1 surround audio.



4K Ultra High-Definition 7.1 Surround Sound AV Receiver

Subwoofer Output

The HD-XSPA has speaker level and line-level subwoofer outputs. The speaker level output (SPEAKER OUTPUTS) can be used with a passive subwoofer while the line-level output (PREAMP OUT SUB) can be used with an active subwoofer or a separate subwoofer amplifier.

Preamp Out Downmix

The PREAMP OUT DOWNMIX output can be configured to provide an unbalanced stereo or mono downmix of the selected input signal to feed a second listening zone or headphone amp through the left and right preamp outputs.

When configured for stereo operation, the input signal is downmixed to a stereo signal with left and right channel separation that is available on the left and right preamp outputs.

When configured for mono operation, the input signal is downmixed to a mono signal that is available on both the left and right preamp outputs.



While the HD(I)-XSPA can be used right out of the box, the device can be further customized with <u>Crestron Toolbox software</u> or the front panel controls. For details on using Crestron Toolbox software, refer to the Crestron Toolbox help file. For details on using the front panel controls, refer to the <u>HD(I)-XSPA Supplemental Guide</u> (Doc. 7448).



4K Ultra High-Definition 7.1 Surround Sound AV Receiver



Controls

The HD-XSPA can be controlled from the front panel.

The front panel has a Navigation pad and menu buttons to view and select the content shown on the display. VOL \blacktriangle , VOL \blacktriangledown , and MUTE buttons control the speaker outputs.

Power Switch

The **POWER** switch controls power to the speaker outputs.

- Move the **POWER** switch to | to turn on the speaker outputs.
- Move the **POWER** switch to O to turn off the speaker outputs.

NOTE: When the **POWER** switch is set to O, the speaker outputs turn off and the HD-XSPA reboots. The front panel controls remain on to control the device. Output signals are still sent to the HDMI and PREAMP OUT outputs.

Navigation Pad

The Navigation Pad is used to view and select options shown on the display.



• Press up on the Navigation Pad to scroll up through the available selections.

- Press down on the Navigation Pad to scroll down through the available selections.
- Press right on the Navigation Pad to move the cursor right.
- Press left on the Navigation Pad to move the cursor left.
- Press the center of the Navigation Pad to select a highlighted item.

Menu Buttons

The **HOME** and **BACK** buttons are used to navigate through the screens shown on the display.

HOME Button

Press HOME to display the home screen.



BACK Button

Press **BACK** to return to the previous screen.

Volume and Mute

• Press VOL ▲ or VOL ▼ to adjust the level of the speaker outputs.

NOTE: The DOWNMIX output's volume level is not controlled by the **VOL** \blacktriangle or **VOL** \blacktriangledown buttons. It is adjusted independently via control system programming.



4K Ultra High-Definition 7.1 Surround Sound AV Receiver

• Press **MUTE** to mute the speaker outputs.

NOTE: The DOWNMIX output's mute function is not controlled by the MUTE button. It is controlled from **Downmix** menu. For details, refer to the <u>HD(I)-XSPA Supplemental Guide</u> (Doc. 7448).

Select a Source or Decoding Mode

1. Press **HOME** to display the home screen.



2. Press the center of the Navigation Pad.



3. Press up or down on the Navigation Pad to highlight **Source** and press the center of the Navigation Pad.



- 4. Select a source or a decoding mode.
 - Select a source:
 - a. Press up or down on the Navigation Pad to highlight **Source Select**.





4K Ultra High-Definition 7.1 Surround Sound AV Receiver

b. Press the center of the Navigation Pad.

Source Select
HDMI
Optical
Coaxial 1
Coaxial 2

c. Press up or down on the Navigation Pad to highlight the desired source and press the center of the Navigation Pad.

- Select a decoding mode:
 - a. Press up or down on the Navigation Pad to highlight **Decoding Mode**.

Current Source Source Select
Decoding Mode
None

b. Press the center of the Navigation Pad.

Decoding Mode
None
Auto
Dolby PLIIx Movie
Dolby PLIIx Music

c. Press up or down on the Navigation Pad to highlight the desired decoding mode and press the center of the Navigation Pad.

Other Functions

Other functions are available using the front panel controls. For details, refer to the <u>HD(I)-XSPA Supplemental Guide</u> (Doc. 7448).



4K Ultra High-Definition 7.1 Surround Sound AV Receiver



Visit the Product Page

Scan the QR code to visit the product page.





www.crestron.com/model/6505883



www.crestron.com/model/6506418

Additional Information

Original Instructions

The U.S. English version of this document is the original instructions. All other languages are a translation of the original instructions.

Crestron product development software is licensed to Crestron dealers and Crestron Service Providers (CSPs) under a limited nonexclusive, nontransferable Software Development Tools License Agreement. Crestron product operating system software is licensed to Crestron dealers, CSPs, and end-users under a separate End-User License Agreement. Both of these Agreements can be found on the Crestron website at www.crestron.com/legal/software_license_agreement.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, visit www.crestron.com/opensource.

Crestron, the Crestron logo, Crestron Toolbox, DigitalMedia, and DM are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Dolby, Dolby Digital, and the double-D symbol are either trademarks or registered trademarks of Dolby Laboratories in the United States and/or other countries. DTS, DTS HD, and the DTS logo are either trademarks or registered trademarks of DTS, Inc. in the United States and/or other countries. The HDBaseT Alliance logo is either a trademark or registered trademark of the HDBaseT Alliance in the United States and/or other countries. HDMI and the HDMI Logo are either trademarks or registered trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

нэті

©2020 Crestron Electronics, Inc. Doc. 7730C 06/02/20

