### USB Converter with HDMI® and Analog Audio Input

The Crestron <u>HD-CONV-USB-300</u> converts 4K60 4:4:4 HDMI® and analog audio input signals to USB 3.0. The device automatically downscales 4K sources to 1080p. An HDMI output port is also provided for local viewing or loop-through functionality. The device is compliant with USB Audio Class (UAC) and USB Video Class (UVC) standards.

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# In the Box

1 HD-CONV-USB-300 USB Converter with HDMI® and Analog Audio Input

#### Additional Item

1 Cable, USB 3.0 A - B, 1 ft (0.30 m) (2058403)



# Install the Device

The HD-CONV-USB-300 can be mounted onto a flat surface or onto a rack rail.

### Mounting onto a Flat Surface

Using four mounting screws (not included), mount the device onto a flat surface such as a wall or the underside of a table. Be sure to use the mounting hardware that is appropriate for the surface to which the device is being mounted. The screw diameter should not exceed 0.24 in. (6 mm). It is recommended that 3-24 x 3/4 in. Phillips flat head screws be used.

Wall Mounting





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### Mounting onto a Rack Rail

Using two rack mounting screws (not included), mount the left or right mounting flange of the device onto the front or rear rail of a rack.

#### Rack Rail Mounting Example



# Connect the Device

Connect the rear panel of the device as required for the application. Rear Panel Connections



\*The USB 3.0 port of the HD-CONV-USB-300 enables AV streaming, configuration management, and firmware loading. The USB 3.0 port also provides power to the HD-CONV-USB-300.

If the USB 3.0 port is connected via USB 2.0, use of a Y-cable connected to two USB 2.0 ports is required in order to properly power the HD-CONV-USB-300.



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## Configure the Device

To configure the device, use the HD-CONV-USB-300 configuration tool by performing the following steps:

- Using the included USB 3.0 cable, connect the USB 3.0 Type-A port on your computer to the USB 3.0 Type-B port on the HD-CONV-USB-300.
- 2. Click <u>HD-CONV-USB-300 firmware</u> to download the latest firmware file (.zip) to your computer. The HD-CONV-USB-300 configuration tool is packaged with the firmware.
- 3. Extract the contents of the .zip file to a folder on your computer.
- 4. Double-click **HD-CONV-USB-300 Tool.exe** to open the configuration tool. The configuration screen opens as shown in the example to the right.
- 5. Ensure that the latest firmware is running on the device:
  - a. Do either of the following:
    - Observe the current and new firmware versions that are displayed at the bottom of the screen. If the new firmware version is later than the current firmware version, update the firmware by clicking Update.
      By default, the new firmware version will be read from the .bin file packaged with the configuration tool.
    - Browse for the desired firmware file by clicking the browse button (...), selecting the desired .bin file, and then clicking **Update**.

A prompt appears asking whether you wish to update the firmware.

- b. Click **Yes** to update the firmware. When the firmware update process is complete, the **Update Successful** message appears.
- c. Click OK.

HD-CONV-USB-300 Tool			$\times$	
	Audio	Source		
• HDMI	C L	ine-In		
	H			
C Enable		Disable		
Brightness:	•		F	128
Contrast:	•		•	128
Hue:	•		•	128
Saturation:	•		•	128
Sharpness:	•		•	154
Volume:	•		•	0.0dB
Mute Audio	Fact	ory Reset	_	
Source Video R	esolution:	1920×1080	p@59	
Capture Video	Resolution:	1600x1200	p@60	
HDCP Status:		None		
DDC Voltage Level:		4421 mV		
HPD Voltage Level:		5040 mV		
Audio Format I	ype:	LPCM 44.1k		
Firmware Versi	on:	2.15.17		
New Firmware	Version:	2, 15, 17		
Firmware File :				
firmware.bin				
	Upda	ate		V1.04



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6. Configure video and audio settings when video content is active:

**NOTE:** Changes to the settings do not affect the HDMI output signal.

- Audio Source: Select HDMI for the HDMI input or Line In for the analog audio input. The default setting is HDMI.
- HDCP: Enable or disable HDCP (High-bandwidth Digital Content Protection) on the HDMI input. The default setting is Disable.

**NOTE:** HDCP encrypted sources cannot be converted to USB and can only be displayed on the HDMI output. Disabling HDCP may enable the recording of the output of some sources devices that enable HDCP encryption even when it is not required by the current video content. When HDCP is disabled on the HD-CONV-USB-300, the connected device should automatically switch to non-HDCP mode as long as the playing content allows it.

- Brightness: Using the slider, adjust the brightness of the video as desired. Values ranges from **O** to **255**. The default setting is **128**.
- **Contrast:** Using the slider, adjust the contrast of the video as desired. Values ranges from **0** to **255**. The default setting is **128**.
- **Hue:** Using the slider, adjust the hue of the video as desired. Values ranges from **0** to **255**. The default setting is **128**.
- **Saturation:** Using the slider, adjust the color saturation level of the video as desired. Values ranges from **O** to **255**. The default setting is **128**.
- **Sharpness:** Using the slider, adjust the sharpness of the video as desired. Values ranges from **O** to **255**. The default setting is **154**.

- Volume: Using the slider, adjust the volume of the audio as desired. Values range from -109.5 dB to +18 dB. The default setting is 0.0 dB.
- Mute Audio: Select the checkbox to mute audio, or deselect the checkbox to unmute audio. By default, audio is unmuted.

If you wish to reset the device to factory-default settings, click **Factory Reset**.

The configuration screen also provides information about the current source and capture video resolutions, HDCP status, DDC (Display Data Channel) and HPD (Hot-Plug Detect) voltage levels, audio format type, and audio sample rate.



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### Observe the LED Indicators

Observe the LED indicators on the front panel of the HD-CONV-USB-300.

#### Front Panel LED Indicators

PWR	HDCP	нэті
CRESTRON	HD-COM	V-USB-300

Refer to the following table for information about the LED indicators.

LED Indicator	Color	Meaning
POWER	Green	Power is being applied to the device, and an HDMI source is detected.
	Red	Power is being applied to the device, but an HDMI source is not detected.
ACTIVE	Green	The connected computer is actively receiving video from the HD-CONV-USB-300 via USB.
HDCP	Blue	The HDMI source is using HDCP 2.2.
	Red	The HDMI source is using HDCP 1.x.
	Off	The HDMI source is not using HDCP.



### Visit the Product Page

Scan the QR code to visit the product page.

#### HD-CONV-USB-300



www.crestron.com/model/6512272



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# Important Instructions

#### Important Safety Instructions

**WARNING:** When using this product, basic precautions should always be followed, including the following:

- 1. Read these instructions carefully.
- 2. All cautions and warnings should be followed.
- 3. The equipment should only be used at maximum 40°C (104°F) ambient temperature.
- 4. Opening the equipment could result in electrical shock and should only be done by qualified service personnel.
- 5. Protect equipment from humidity.
- 6. Do not insert foreign objects or liquids into the openings, this could cause a fire or electrical shock.
- 7. Do not use chemical detergents to clean your device, use a soft dry cloth.
- 8. To avoid damage from electrical peaks unplug the device when it is not in use.
- 9. If one of the following situations arise, equipment has to be checked by qualified service personnel:
  - Liquid has penetrated into the equipment.
  - Equipment has been exposed to humidity.
  - Equipment has been dropped and/or is damaged.
  - Equipment has obvious sign of breakage.
  - Equipment does not work well or you cannot get it working according to user's manual.
- 10. Do not expose the equipment to water or place objects filled with water on top of it.



### Instructions Importantes

#### Instructions de sécurité importantes

**Les avertissements**: concernant l'utilisation de ce produit doivent toujours être fondés sur les précautions fondamentales, notamment:

- 1. Lisez attentivement ces notes.
- 2. Tous les avertissements et avertissements doivent être respectés.
- 3. L'équipement ne peut être utilisé qu' à une température ambiante maximale de 40 °C (104 °F).
- 4. L'ouverture de l'appareil peut provoquer un choc électrique qui ne peut être assuré que par un personnel d'entretien qualifié.
- 5. Empêcher l'humidité du dispositif.
- 6. Il est interdit d'introduire des objets étrangers ou liquides dans l'ouverture, faute de quoi cela pourrait provoquer un incendie ou un choc électrique.
- 7. Ne pas utiliser d'appareil de nettoyage chimique et utiliser un tissu sec souple.
- 8. Pour éviter les dommages de crête électrique, retirez la fiche d'alimentation lorsque le dispositif n'est pas utilisé.
- 9. Dans l'un des cas enoncés ci dessous, le matériel doit être vérifié par un service qualifié:
  - Dispositif d'infiltration de liquide.
  - L'équipement est exposé à l'humidité.
  - Matériel tombé et / ou endommagé.
  - L'équipement a été endommagé.
  - Le matériel ne fonctionne pas correctement ou ne peut pas être utilisé conformément au Manuel de l'utilisateur.
- 10. L'équipement ne doit pas être exposé à l'eau ni être placé sur des objets remplis d'eau.



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#### 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.

#### Regulatory Model: M202118001

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Doc. 9047B	
12/02/21	

