DVC RGB-HD A • Setup Guide

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The Extron DVC RGB-HD A is a one VGA input, one HDMI output converter that digitizes analog RGBHV video to HDMI, with analog stereo audio embedding. It accepts resolutions from 640x480 up to 1080p @ 60 Hz and 1920x1200 @ 60 Hz with reduced blanking. A USB port allows for system configuration and firmware updates using Extron Simple Instruction Set (SIS) commands or PCS Product Configuration Software. The DVC RGB-HD A allows the adaptation or integration of legacy VGA products into an all-digital audio-video system. It features a dual-purpose signal presence and power LED for troubleshooting, as well as field upgradable firmware.

Installation

ATTENTION:

- Installation and service must be performed by authorized personnel only.
- L'installation et l'entretien doivent être effectués par le personnel autorisé uniquement.

NOTE: For full installation, configuration, connector wiring, and SIS commands, see the *DVC RGB-HD 4K A User Guide*, available at **www.extron.com**.

Front Panel



Figure 1. DVC RGB-HD A Front Panel

Rear Panel



Figure 2. DVC RGB-HD A Rear Panel

Mounting the DVC RGB-HD under Furniture



- Power and signal status LED This bi-color LED lights as follows:
 - **Amber** while the unit is powered by a 12 VDC external power supply
 - Green when the DVC detects horizontal sync on the input
- **VGA input** Connect an RGBHV input, such as a computer, to this 15-pin VGA connector (a male-to-male, 15-pin mini VGA cable is provided for this connection). The DVC digitizes and converts the RGB input signal to DVI or HDMI format.
- Audio input Connect an analog audio input to this 3.5 mm TRS jack. The analog audio input can be embedded onto the TMDS output. TMDS output with embedded analog audio (HDMI RGB Full 4:4:4) is default.
- Power connector Connect a 12 VDC power supply (not included) between this 2-pole, 3.5 mm captive screw connector and a 100 to 240 VAC, 50 Hz or 60 Hz power source.
- **B** HDMI output connector Connect an HDMI sink to this female HDMI connector.
 - No input signal When there is no input signal present, this connector does not output TMDS data or clock activity.
 - Output 5 V mode This mode is configurable via SIS commands (see the DVC RGB-HD A User Guide for information on these commands). Select either of the following for the 5 V mode:
 - Always enabled (default) The 5 V pin is always active, regardless of the input status. This enables the unit to detect hot-plug assertion and read the EDID from a connected sink.
 - Auto 5 V output is active only when a source is connected to the input. If no source is connected the 5 V output is disabled.
- **Config port** Use a USB A-to-mini B cable to connect this port to a USB port on the computer.

Installation Overview

- 1. **Disconnect power** Turn off or disconnect all equipment power sources.
- (Optional) Mount the unit Mount the DVC RGB-HD A either in a rack using a shelf mounting bracket kit (see the instructions provided with the kit) or under furniture using a furniture mounting kit (see Mounting the DVC RGB-HD under Furniture on page 1). Extron mounting kits are available at www.extron.com.
- 3. Connect the input Connect an RGBHV source to the front panel VGA input connector (see figure 1, B, on the previous page).
- 4. (Optional) Connect the audio input Connect analog audio to the 3.5 mm TRS jack on the front panel (ⓒ).
- 5. Connect the digital output Connect a digital sink to the rear panel HDMI output connector (see figure 2, B), on the previous page).
- 6. Connect a PC Connect a computer to the rear panel USB Config port (C) to configure the converter via SIS commands or the PCS Configuration Software, available at www.extron.com (see the DVC RGB-HD A User Guide, also available on the Extron website, to download the PCS software). If the product firmware needs an update, connect the PC to the USB config port and use the Extron Firmware Loader software, available at www.extron.com, to update the firmware.
- Connect power to the DVC Connect a 12 VDC power supply (not included) to the rear panel 2-pole captive screw power connector (A). The DVC can also share power with another Extron product that has an external 12V power supply.
- Configure the unit Configure the DVC RGB-HD A as needed, using SIS commands (see the DVC RGB-HD A User Guide) or the PCS software (see the program help file).

Using the LockIt Cable Lacing Bracket

After connecting an input or output device to an HDMI connector, secure the connector in place with the provided LockIt bracket as follows (see the illustration at right):

- 1. Plug the HDMI cable into the panel connection (1).
- Loosen the HDMI connection mounting screw from the panel enough to allow the LockIt lacing bracket to be placed over it (2).
- **3.** Place the LockIt lacing bracket onto the screw and slide it up against the HDMI connector. Tighten the screw to secure the bracket (③).
- Loosely place the included tie wrap around the HDMI connector and LockIt lacing bracket (4).
- 5. While holding the connector securely against the lacing bracket, tighten the tie wrap, then remove any excess length.



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Application Diagram



Extron Headquarters		Extron Europe	Extron Asia	Extron Japan	Extron China	Extron Middle East	Extron Australia	Extron India
+800.633.9876 Inside USA/Canada Only		+800.3987.6673	+65.6383.4400	+81.3.3511.7655	+86.21.3760.1568	+971.4.299.1800	+61.8.8351.2188	1800.3070.3777
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Extron USA - West	Extron USA - East							
+1.714.491.1500	+1.919.850.1000	+31.33.453.4040						+91.80.3055.3777
+1.714.491.1517 FAX	+1.919.850.1001 FAX	+31.33.453.4050 FAX						+91.80.3055.3737 FAX

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