Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

IMPORTANT: Refer to www.extron.com for the complete user guide and installation instructions before connecting the product to the power source.
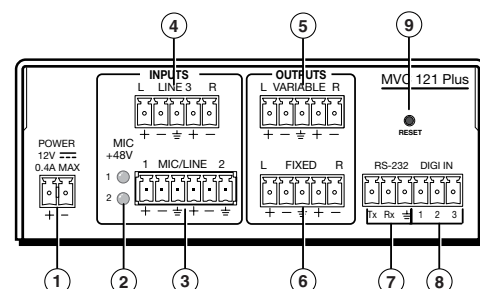
MVC 121 Plus • Setup Guide

The Extron MVC 121 Plus is an audio mixer and volume controller that will mix up to two mono mic/line inputs (balanced/unbalanced) with one stereo line level input (balanced/unbalanced). All audio input signals are converted from analog to digital prior to processing or routing. Each mic/line input and the line level input have their own gain control adjustment screws. The mixed variable output also features a volume control knob on the front panel.

> **NOTE:** For full installation, configuration, and operation details, see the *MVC 121 Plus User Guide*, available at **www.extron.com**.
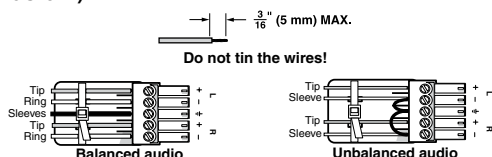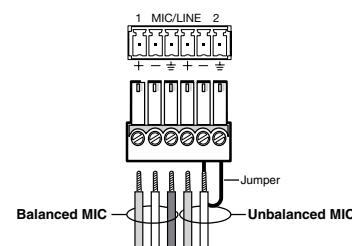
Rear Panel Features and Connections

① 12 VDC power connector
② Mic 1 and 2 Phantom power LED
③ Mic/Line input connectors (1 – 2)
④ Line input connector (3)
⑤ Variable output connector

⑥ Fixed output connector
⑦ RS-232 connector
⑧ Digital input connector
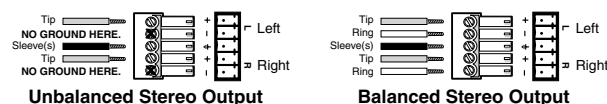⑨ Reset button

Installing the MVC 121 Plus

1. **Disconnect power** from all equipment.

2. (Optional) **Mount the unit to a rack or furniture.**

3. **Connect the audio inputs.**

   - Connect up to two balanced or unbalanced mono mic/line level input devices to connector ③ above (see the 6-pole wiring diagram on the right). Alternatively, two 3-pole connectors may be used.

   - A balanced or unbalanced stereo line level input may be connected to ④ above (see the 5-pole wiring diagram below).

$\frac{3}{16}$" (5 mm) MAX.
Do not tin the wires!

Balanced audio   **Unbalanced audio**

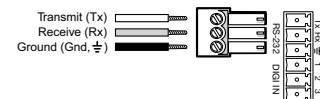4. **Connect the audio output.**

   - For variable balanced or unbalanced stereo output controlled by the front panel knob of the MVC 121 Plus, connect an amplifier to connector ⑤ above (see the wiring diagram on the right).

   - For fixed stereo output, connect an output device to connector ⑥ (see the wiring diagram above).

$\frac{3}{16}$" (5 mm) MAX.
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Unbalanced Stereo Output   **Balanced Stereo Output**

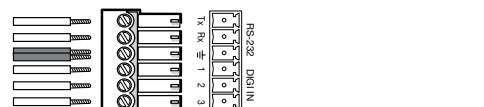5. **Connect a control device.** Connect a host device, such as a computer, to one of the following MVC ports to configure and control the MVC 121 plus via Simple Instruction Set (SIS™) commands.

   - **RS-232 port (rear panel)** — Connect a host device to the Tx, Rx, and ⏚ (ground) pins of this 6-pole captive screw connector (⑦). The default baud rate for this port is 38400 baud, 1 stop bit, no parity, 8 data bits, and no flow control (see the wiring diagram on the right).

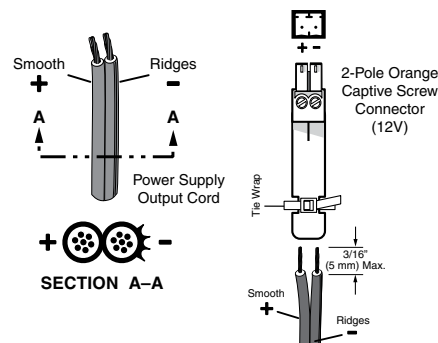   - **Config port (front panel)** — See "Front Panel Features" on the following page.

6. **Digital input connector.** Up to three configurable input ports (see ⑧ on the rear panel diagram above) allow connection to various devices including motion detectors, alarms, buttons, photo (light) sensors, and temperature sensors. This connector shares a common ground with the RS-232 connector (see the wiring diagram on the right).
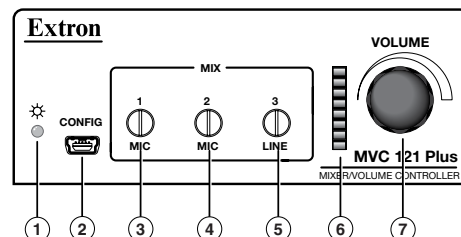
   Both the RS-232 and digital input connectors may be used simultaneously by using a 6-pin captive screw connector with two wires sharing the ground connector (see the diagram on the right).

Transmit (Tx)
Receive (Rx)
Ground (Gnd, ⏚)

$\frac{3}{16}$" (5 mm) MAX.
Do not tin the wires!

7. **Reset button.** The recessed reset button (see ⑨ on the rear panel diagram) is used to access various modes of resets. The green power LED on the front panel indicates the reset mode that was used.

8. **Connect power** to the MVC by connecting the included 12 VDC external power supply to the rear panel power connector (see ① on the rear panel diagram). The wiring diagram is shown on the right.

9. **Install the software.** Configuration and control is done via both hardware encoders and software. The control software, DSP Configurator, is available on the included DVD or from the Extron website at **www.extron.com** (see the "Software and Manual Download from the DVD" section below). The control software help file contains operation descriptions.

Front Panel Features (see the front panel diagram at right)

① **Power/Reset LED** — This power indicator lights green when the MVC 121 Plus is operational. The LED also blinks per mode reset.

② **Configuration (Config) port** — Connect a PC to the USB Mini-B connector for configuring the MVC using the DSP Configurator Software. The MVC 121 Plus USB driver must be installed prior to using this port.

③ **Mic 1 input gain control** — Rotating the encoder screw clockwise increases the gain setting. Rotating the encoder screw counterclockwise decreases the gain. This adjustment controls the single gain point in the mix matrix that mixes mono mic 1 levels to the stereo output bus.

④ **Mic 2 input gain control** — Rotating the encoder screw clockwise increases the gain setting. Rotating the encoder screw counterclockwise decreases the gain setting. This adjustment controls the single gain point in the mix matrix that mixes mono mic 2 levels to the stereo output bus.

⑤ **Line level input 3 gain control** — Rotating the encoder screw clockwise increases the gain setting. Rotating the encoder screw counterclockwise decreases the gain setting. This adjustment controls the single gain point in the mix matrix that mixes line level input 3 to the stereo output bus.

⑥ **LED ladder indicator bar** — As the mix-point gain or output volume increases or decreases, the LED indicator bar lights from the bottom to the top to indicate the current mix-point or volume level. As the volume is increased or decreased within a volume range, the top lit LED flashes once. If the knob is turned past maximum volume, all 8 LEDs flash for as long as the knob continues to be turned. After 3 seconds of inactivity, the knob controls the variable volume output.

⑦ **Volume level adjust knob** — Rotating the adjustment knob clockwise increases the output volume. Rotating the knob counterclockwise decreases the volume.

Software and Manual Download from the DVD

1. Insert the disk provided into the DVD ROM drive of the computer. If the setup program does not start automatically, run **Launch.exe** from the DVD ROM directory using Windows "My Computer." The opening screen (shown on the right) will appear with the following tabs:

2. For the User Guide, select the **Manuals** tab, then select the *MVC 121 Plus User's Manual* from the list of available documentation. The manual, in PDF format, will open in the browser window or can be downloaded to the hard drive for future reference.

3. To download the DSP Configurator program, select the **Software** tab.

4. From the Downloads page, on the DSP Configurator row, (downloads are listed in alphabetical order), select **Install**.

5. Choose **Run** and the DSP Configurator will install. In most cases it is best to accept the default installation suggestions.

6. When the DSP Configuration program completes installation, the USB driver must be installed. Whether planning to use the USB configuration port or not, it is recommended to install it. Click **Next** on the USB Driver Installer and follow the on-screen instructions.

7. When the USB driver installation completes, remove the DVD from the drive and reboot the computer.

8. Launch the DSP Configurator program from the Extron Electronics group in the Start menu. Select **MVC 121 Plus**. The DSP Configurator help file contains details about using the software.

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