Extron

XPA U 3502 • Setup Guide

The Extron XPA U 3502 is a 2-channel audio power amplifier for use in low-impedance speaker systems.

The XPA U 3502 is 1U high, half rack width, and rack mountable. The amplifier has mounting holes for 9" and deeper rack shelves, and is plenum-rated with an optional flex conduit adaptor. The unit is convection cooled.

This guide provides instructions for an experienced installer to set up and operate the XPA U 3502 power amplifier. For full installation, configuration, and operation details, see the *XPA U 3502 User Guide* available at **www.extron.com**.
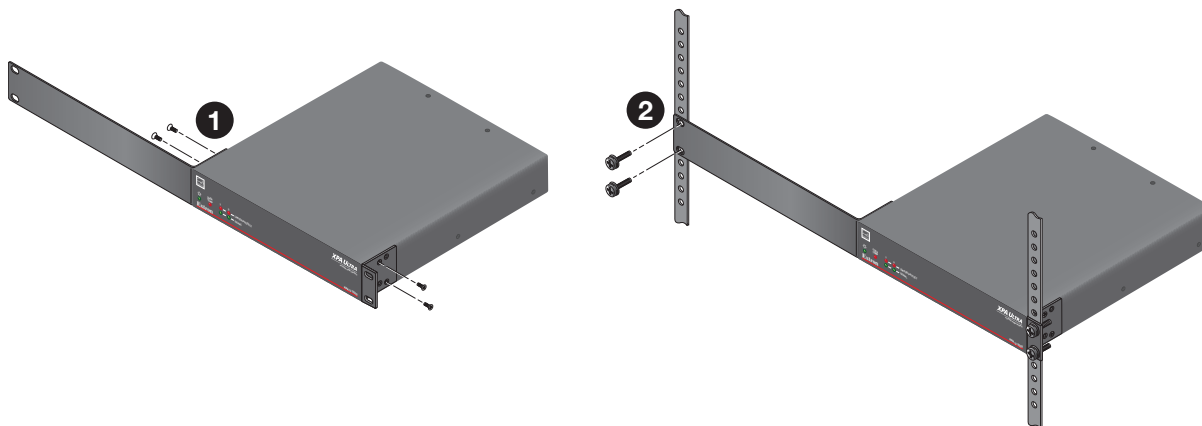
Installation Steps

Step 1 — Mounting

Turn off all of the equipment and disconnect it from the power source. Mount the amplifier as required; the unit can be securely mounted in a variety of locations using optional Extron Mounting Brackets and accessories (see the **Extron website** for compatible optional mounting accessories) or using the included 3-piece bracket system. The brackets do not come attached to the amplifier.

Below are two methods of rack mounting the amplifiers.

Rack Ear Mounting (Single Unit)

The XPA U 3502 ships with a set of rack ears, allowing the amplifier to be installed in a full rack-width space. Mount the amplifier with rack ears as follows:

1. If the amplifier has its flat bottom rubber feet installed, remove them.
2. Attach the rack ears to the sides with the four provided #6 machine screws (❶).
3. Insert the amplifier into the rack and align the holes in the rack ears with the holes on the rack.
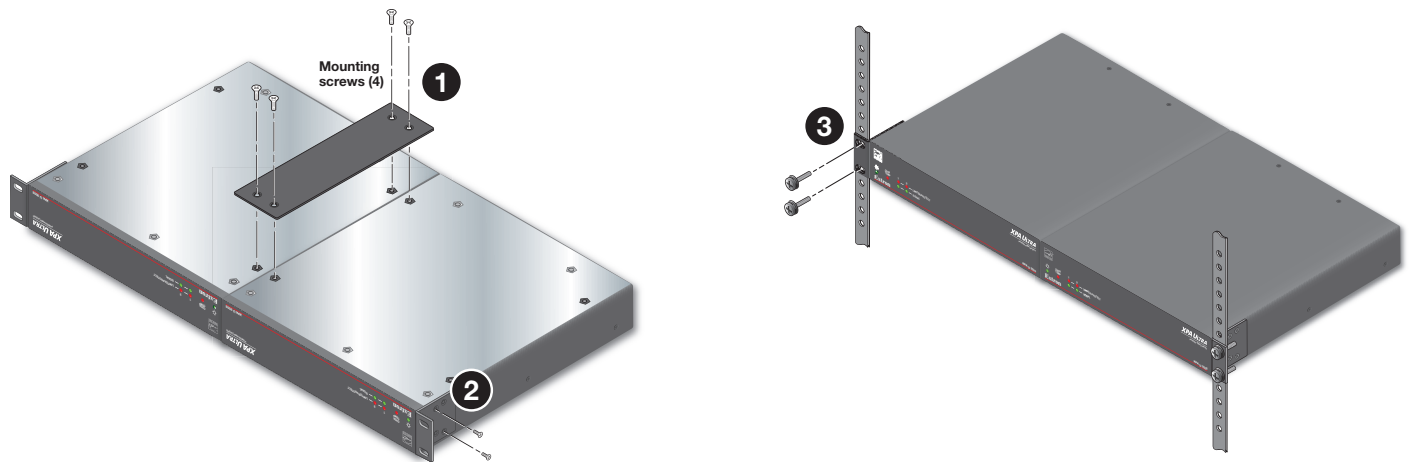4. Secure the amplifier to the rack using the four provided 10-32 x 3/4" screws (❷).

Figure 1. XPA U 3502 Rack Ear Mounting

Bridge Plate Rack Mounting (Side-by-Side)

The XPA U 3502 ships with a bridge plate connector to connect two amplifiers together and form a full rack-width unit. Mount and connect two amplifiers as follows:

1. If the amplifier has its flat bottom rubber feet installed, remove them.
2. Position two amplifiers upside down and next to each other as shown below.
3. Use the bridge plate connector and the four provided #4 machine screws to connect the two units together (❶).
4. Attach the two short rack ears to the units with the four provided #6 machine screws (❷).
5. Insert the amplifier into the rack and align the holes in the rack ears with the holes on the rack.
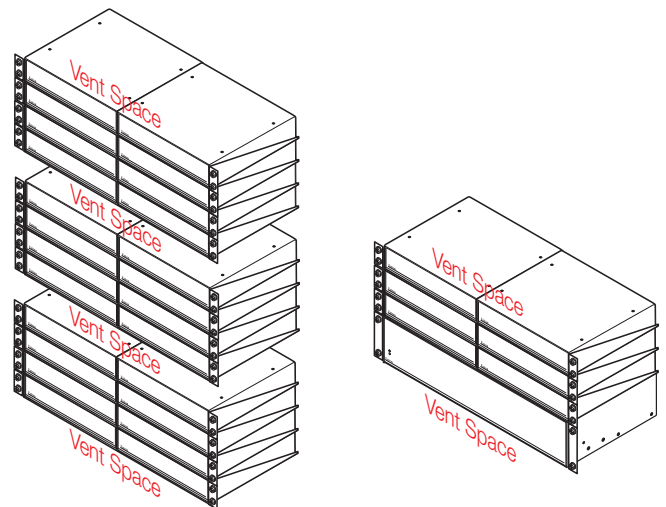6. Secure the amplifier to the rack using the four provided 10-32 x 3/4" screws (❸).

Figure 2. XPA U 3502 Bridge Plate Rack Mounting

Ventilation Recommendation

Excessive heat can decrease a power amplifier's lifetime. An Over Temp LED indicator on the front panel lights red when the maximum recommended operating temperature of +122 °F (+50 °C) has been surpassed.

To minimize the chances of overheating, the amplifier should be arranged in a rack so that the evironment does not reach or surpass +122 °F (+50 °C). See the image to the right for the optimal way to arrange the XPA U 3502. No more than four stacks of amplifiers in a one-on-top-of-the-other arrangement should occur without an open between the stacks.

The XPA U 3502 can also be arranged directly above or below a non-XPA Ultra device, but in any case, the environment should still not reach or exceed +122 °F (+50 °C).

Set Amplifier Output Mode

Step 2 — Rear Panel Configuration

Follow the instructions below to learn how to configure the rear panel for the XPA U 3502.

- Wire the source output to the Line Input 3.5mm captive screw port as shown below. Figure 3 shows both balanced and unbalanced inputs.

ATTENTIONS:

- Do not tie channel output pins to each other or to ground. Doing so will short out the outputs, damage the amplifier, or both.

- Ne pas lier les sorties 1 et 2 des canaux entre elles ou à la terre. Les sorties pourraient être court-circuitées et/ou l'amplificateur pourrait être endommagé.

- To avoid risk of damage to the amplifier or the speakers, only connect low-impedance speaker loads (8Ω/4Ω) to the appropriately marked output connectors on the amplifier.

- Pour éviter tout risque de détérioration de l'amplificateur ou des enceintes, connectez toujours les charges de l'enceinte faible impédance (8Ω/4Ω) aux connecteurs de sortie correctement identifiés sur l'amplificateur.

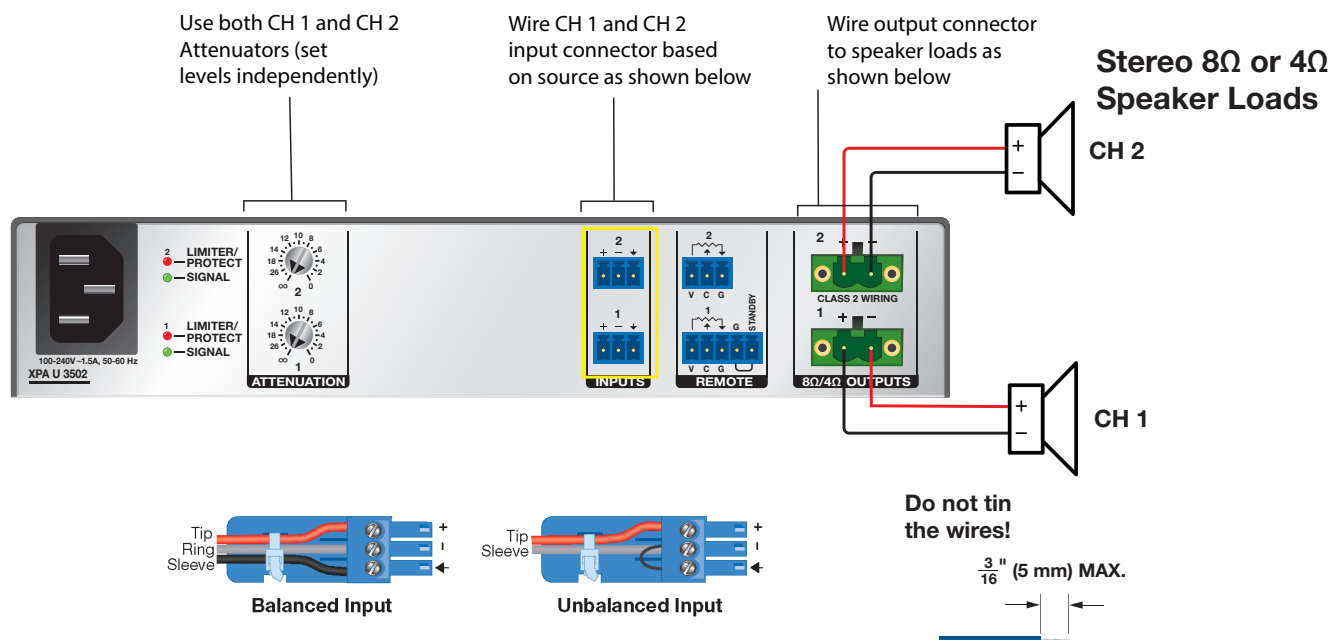**NOTE:** You must use Class 2 wiring for the amplified outputs to comply with UL requirements.

Figure 3. XPA 3502 Output Configuration
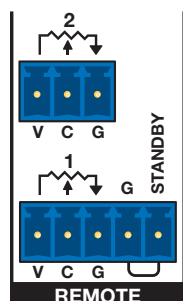
Step 3 — Remote Ports

Figure 4. Remote Volume Control and Standby Ports

The 3.5 mm 5-pin captive screw remote control ports (shown above) are used to control volume on channel 1 on pins 1, 2, and 3, and standby mode through contact closure on the pins 4 and 5. The upper, 3-pin captive screw remote control port is used to control volume on channel 2.

The volume control ports can be wired to Extron remote volume controllers such as an Extron VCM 200 series and MLC 64 RS VC D controllers, or Extron Control products with the digital Remote Volume Control Port, such as the MLC 100 Plus and IPCP Pro 255. For more details on wiring the volume control ports see the *XPA U 3502 User Guide*.

When the STANDBY pin (pin 5) is shorted to ground (Pin 4), the amplifier goes into standby mode. Standby mode turns off all the outputs, although the amplifier still receives power. The power LED on the front panel lights amber when the amplifier is in Standby mode.

> **NOTE:** A 10k ohm resistor is included with the amplifier. If the resistor is connected between the **STANDBY** and **Ground** pin, the auto-standby timer is suppressed. The **STANDBY** pin can still be shorted to the **Ground** pin to put the amplifier in standby.

Step 4 — Powering on Equipment

> **ATTENTION:**
> - The amplifier must be powered on last.
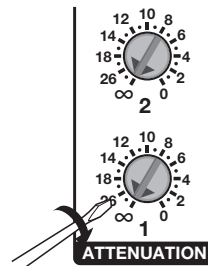> - L'amplificateur doit être mis sous tension en dernier.

Reconnect all the power cables and switch on all of the other equipment before attaching the IEC power cable and powering on the unit. The power LED will light green.

Step 5 — Adjusting Attenuation

> **NOTE:** Set the volume control on the connected control device(s) to maximum and ensure that the amplifier is not currently forced into standby mode via the standby pin prior to making adjustments.

Adjust audio attenuation using the rear panel adjustment attenuators as seen to the right.

See Rear Panel Features in the *XPA U 3502 User Guide* for more information.

> **ATTENTION:**
> - The default position of all potentiometers when shipped is turned fully counter-clockwise (fully attenuated).
> - La position par défaut de tous les potentiomètres lors de leur expédition est orientée vers le sens antihoraire (atténuation complète).
> - Do not use a screwdriver to adjust the potentiometers. The potentiometers should only be adjusted as needed using the included tweeker (small screwdriver).
> - Ne pas utiliser de tournevis pour ajuster les potentiomètres. Les potentiomètres doivent uniquement être ajustés selon les besoins avec le petit tournevis fourni.
> - While potentiometer tuning knobs may look like screws, they do not function in the same manner. Use a light touch when adjusting to avoid applying excessive torque to the potentiometers.
> - Bien que les boutons de réglage du potentiomètre ressemblent à des vis, ils n'ont pas la même fonction. Exercez une pression légère lors du réglage afin d'éviter un serrage excessif des potentiomètres.
> - Applying excessive torque can mechanically damage the potentiometer, rendering it inoperable and voiding the product warranty.
> - Un serrage excessif peut endommager le potentiomètre, le rendant inutilisable et annulant la garantie du produit.

Step 6 — Checking LEDs

Check the Limiter/Protect and Signal LEDs on the front and rear panels to see if any problems are encountered (see Front Panel Features and Troubleshooting in the *XPA U 3502 User Guide* for more information).

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the **Extron Safety and Regulatory Compliance Guide** on the Extron website.