Extron

Flexible Conduit Adapter Kit Installation Guide

The Flexible Conduit Adapter Kit provides a convenient means to replace the IEC power cord with the conduit of the Extron PS 124 12 VDC, 4A power supply, the XPA half-rack series power amplifiers, and the XPA Ultra series power amplifiers where required by local codes.

The Flexible Conduit Adapter Kit includes the following parts:

- One conduit adapter plate (pre-attached), for PS 124 and XPA 1002/2001 amplifiers
- One conduit adapter plate for XPA Ultra Series amplifiers (not attached)
- One 6 feet long electrical conduit
- Three 7.5 feet 18-gauge power wires with spade connectors
- One UL rated zip tie wrap
- Three auxiliary crimp style spade connectors designed for 14- to 16-gauge wires

WARNING:

ATTENTION:

- The circuit breaker used for this connection should be rated no lower than 20 amps and no greater than 30 amps.
- Le disjoncteur utilisé pour cette connexion devrait avoir une cote comprise entre 20 et 30 amps.

- This unit must be installed in accordanc with the National Electrical Code and with all local codes.
- Cet appareil doit être installé conformément au National Electrical Code et à tous les codes locaux.

- An ALL-POLE MAINS SWITCH with a contact separation of at least 3 mm in each pole shall be incorporated in the electrical installation of the building, The installation shall be carried out in accordance with all applicable installation rules.
- Un interrupteur omnipolaire avec une séparation contact d'au moins 3 mm dans chaque pôle, devra être incorporée dans l'installation électrique du bâtiment. L'installation doit être réalisée conformément à toutes les règles d'installation applicables.

- Installation and service must be performed by a qualified electrician only.
- L'installation et l'entretien doivent être effectués uniquement par un électricien qualifié.

- Make sure the source device and the XPA are turned off and disconnected from the power source before you begin.
- Vérifiez que l'appareil source et le périphérique source sont éteints et déconnectés de la source d'alimentation avant de commencer.

- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- Afin de réduire les risques d'incendie ou de choc électrique, protégez cet appareil de la pluie ou de l'humidité.

- The product is a Class I product, which must be connected only to a mains socket outlet with a protective earthing (grounding) connection.
- Ce produit est un produit de Classe I, qui doit être connecté seulement à une prise femelle secteur équipée d'une connexion de mise à la terre.

- The mains plug/appliance coupler is used as the disconnect device and shall remain readily operable.
- La fiche secteur / le coupleur d'appareil est utilisé comme dispositif de déconnexion et doit rester facilement utilisable.

CAUTION:

- A UL-Listed electrical distribution box is recommended for the termination of the conduit opposite the PS 124 power supply or the XPA amplifier. See **UL Requirements** on page 2.
- Un boîtier de distribution électrique certifié UL est recommandé pour la terminaison du conduit à l'opposé de l'alimentation PS 124 ou de l'amplificateur XPA. Voir **UL Requirements** à la page 2

NOTE: If needed, Extron recommends using a UL-Listed crimp tool to terminate the spade connectors. One recommended choice is Molex crimp tool.

NOTE: The UL-Listed electrical distribution box is not included with the XPA amplifier, the PS 124 power supply or the Flexible Conduit Adapter Kit. The installer is responsible for obtaining and installing the distribution box.

UL Requirements

The Underwriters Laboratories (UL) requirements listed below pertain to the installation of the flexible conduit onto an XPA Ultra series power amplifier, PS 124 power supply, or an XPA 1002, or a XPA 2001 power amplifier.

- This unit must not be used beyond its rated voltage range.
- This unit must be wired to a UL-Listed distribution box.

Installing the Flexible Conduit Adapter Kit on a XPA Ultra Series Amplifier

ATTENTION: Electrostatic discharge (ESD) can damage IC chips even though you cannot feel it. You must be electrically grounded before touching anything inside the XPA. A grounding wrist strap is recommended.

Les décharges électrostatiques peuvent endommager les puces de circuit même si vous ne pouvez pas les sentir. Vous devez être électriquement relié à la terre avant de toucher un élément à l'intérieur du XPA. Un braceletde mise à la terreest recommandé.

1. Unplug the IEC power cord from the amplifier.
2. Remove the 8 screws from the top, sides, and bottom of the unit and lift off the cover (see figure 1, below).

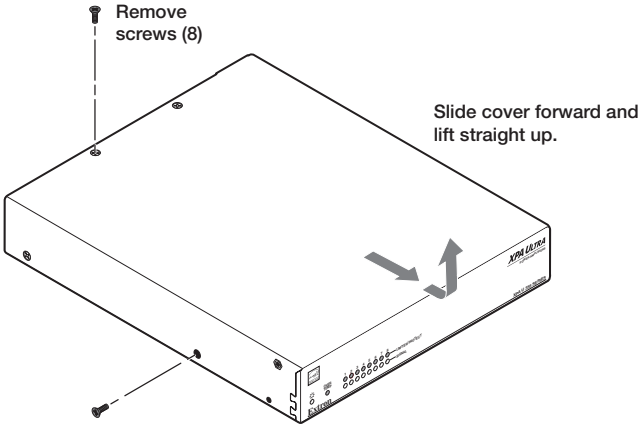

Figure 1 **Removing the Cover**

3. Remove the two screws holding the blue hot (line) and brown neutral wires from the terminal block on the PCB (see figure 2, below). Place the screws aside to be used later
4. Remove the ground wire nut from the grounding stud on the bottom of the enclosure. Place the wire nut with the other screws to be used later.
5. Remove the wires attached to the IEC connector from the body of the unit and slide the IEC connector and attached wires up and out of the XPA enclosure (see figure 2, below).

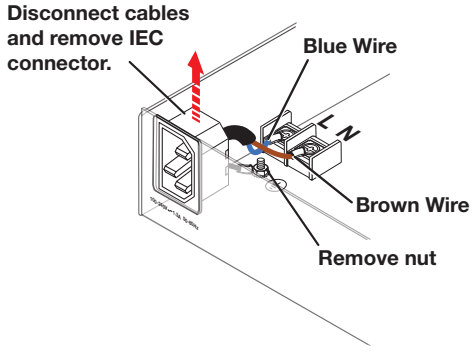

Figure 2 **Removing the IEC Connector from an XPA Ultra Series Amplifiers**

ATTENTION: Rough handling of the top cover can disconnect or damage the wiring connecting the front panel LED.

Une manipulation brusque du couvercle supérieur peut entraîner la déconnexion ou la détérioration du câblage reliant le voyant LED du panneau avant.

6. Remove the washer at the end of the conduit and remove the conduit adapter plate that ships with the kit. (see **figure 3**).

7. Place the XPA Ultra Series conduit adapter onto the conduit with the flat side of the plate facing the hexagonal nut and secure the new adapter plate to the conduit with the washer removed in step 6 (see figure 4, below)

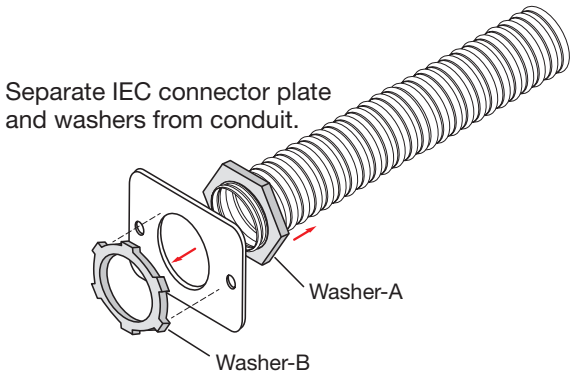

Figure 3 **Removing the Old Adapter Plate**

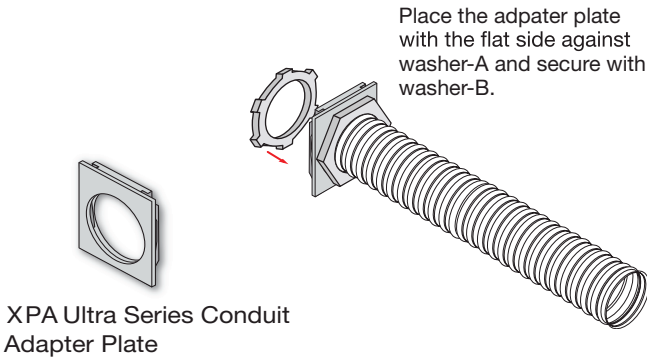

Figure 4 **Secure XPA Ultra Series Adapter Plate to Conduit**

8 Thread the blue, brown, and green 18-gauge power wires included with the flexible conduit adapter kit through the length of the electrical conduit.

9. Install the conduit with the new conduit plate attached onto the opening from which the IEC connector was removed in step 5 (see figure 5, below)

10. Connect the blue hot (line) and brown neutral wires to the terminal block on the PCB using the two screws removed in step 3. Use the included zip tie wrap to seecure the two wires together close to the terminals (see figure 5, below)

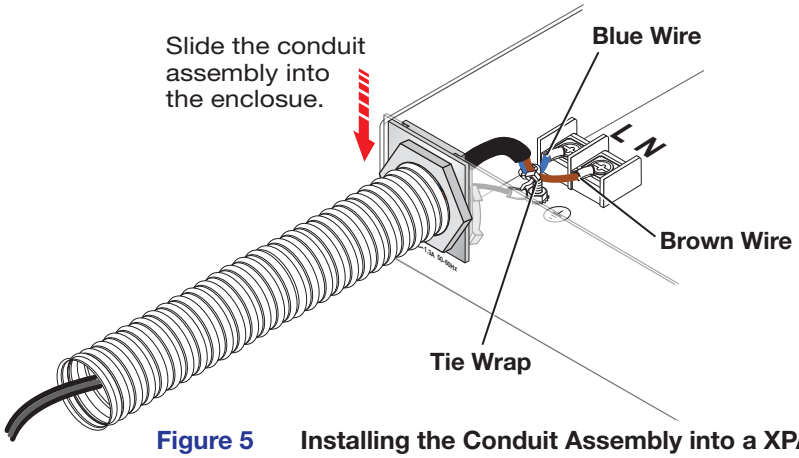

Figure 5 **Installing the Conduit Assembly into a XPA Ultra Series Amplifier**

11. Connect the ground wire, as shown above, to the grounding stud on the bottom of the enclosure using the nut removed in step 4.

12. Replace the cover of the unit by attaching the eight screws removed in step 2.

ATTENTION: Ensure you observe correct wire polarity. Figure 5 shows the location of the hot (line) and neutral terminals.

Veillez à respecter la polarité correcte du fil. Figure 5 montre l'emplacement des bornes de ligne et de neutre.

Installing the Flexible Conduit Adapter Kit on an XPA 1002/XPA 2001

1. Unplug the IEC power cord from the unit.

2. Remove the eight screws from the unit and lift off the cover (see **figure 6** on page 4).

ATTENTION: Electrostatic discharge (ESD) can damage equipment even though you cannot feel it. You must be electrically grounded before touching anything inside the XPA. A grounding wrist strap is recommended.

Les décharges électrostatiques (ESD) peuvent endommager l'équipement, même si vous ne pouvez pas le sentir, le voir ou l'entendre. Vous devez être électriquement relié à la terre avant de toucher un élément à l'intérieur du XPA. Un bracelet de mise à la terre est recommandé.

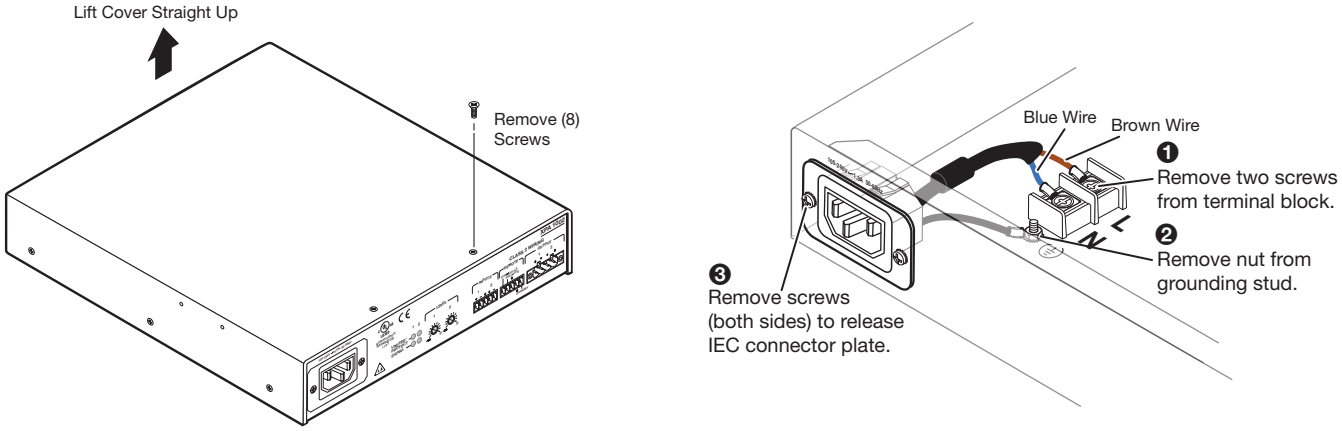

Figure 6 **Removing Top Cover, Wires, and Connector Plate from XPA 1002/2001**

3. Remove the two screws holding the hot (brown) wire and the neutral (blue) wire from the terminal block on the PCB (see figure 6, ❶)
4. Remove the ground wire nut from the grounding stud on the bottom of the enclosure (❷).
5. Remove the two screws from the IEC plate and remove the IEC connector plate and the attached wires through the rear panel of the XPA (❸).
6. Thread the 12- or 14-gauge power wires through the length of the electrical conduit tube.
7. Install the conduit adapter plate with conduit attached into the opening where the IEC connector was removed.
8. Slide the conduit nut over the bundle of wires exiting the conduit, and onto the conduit itself (see figure 7, below). Hand tighten the conduit nut to the conduit.

ATTENTION: Ensure you observe correct wire polarity. Figure 6 shows the location of the hot (line) and neutral terminals.

Veillez à respecter la polarité correcte du fil. Figure 6 montre l'emplacement des bornes de ligne et de neutre.

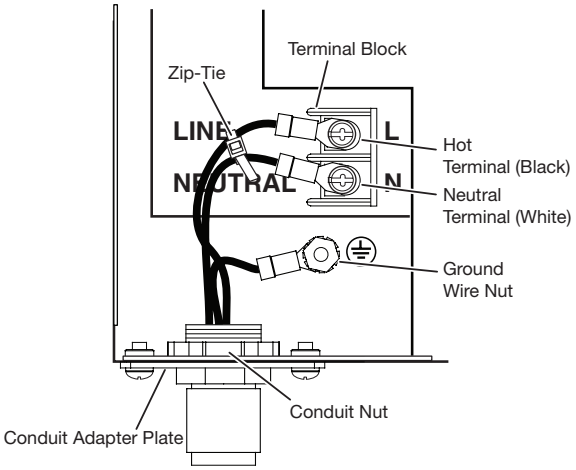

Figure 7 **Attaching the Conduit Adapter Plate Assembly to an XPA 1002/2001**

9. Attach the conduit adapter plate assembly to the unit using the two screws removed in step **5**.
10. Connect the black hot (line) and white neutral wires to the terminal block on the PCB using the two screws removed in step 3. Use the included zip tie wrap to secure the two wires together close to the terminals (see figure 7).
11. Connect the ground wire to the grounding stud on the bottom of the enclosure using the nut removed in step 4 (see figure 6, ❷).
12. Replace the cover of the unit by attaching the eight screws removed in **step 2**.

Installing the Flexible Conduit Adapter Kit on a PS 124

ATTENTION: Electrostatic discharge (ESD) can damage equipment even though you cannot feel it. You must be electrically grounded before touching anything inside the XPA. A grounding wrist strap is recommended.

Les décharges électrostatiques (ESD) peuvent endommager l'équipement, même si vous ne pouvez pas le sentir, le voir ou l'entendre. Vous devez être électriquement relié à la terre avant de toucher un élément à l'intérieur du XPA. Un bracelet de mise à la terre est recommandé.

Install the flexible conduit cable assembly to the PS 124 as follows:

1. Unplug the IEC power cord from the PS 124.
2. Remove and retain the two Phillips head screws that secure the IEC plate to the PS 124 rear panel.

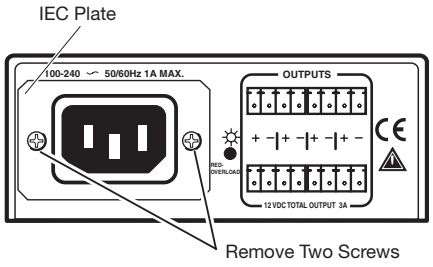

Figure 8 Removing the IEC Plate from a PS 124

3. Remove and retain the six screws connecting the top cover of the PS 124 to its bottom board.

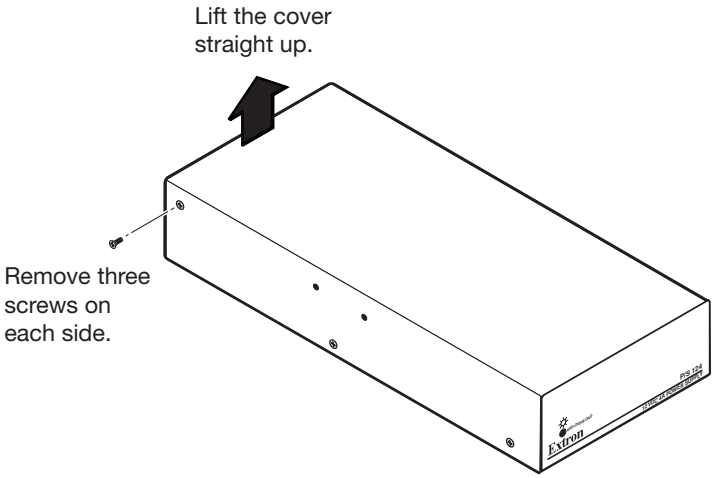

Figure 9 Removing the PS 124 Top Cover

4. Carefully lift the top cover up, taking care not to remove it completely.

ATTENTION: Rough handling of the top cover can disconnect or damage the wiring connecting the front panel LED.

Une manipulation brusque du couvercle supérieur peut entraîner la déconnexion ou la détérioration du câblage reliant le voyant LED du panneau avant.

5. Use a standard head screwdriver to loosen the screws holding the hot and neutral wires on the side of the terminal block nearest the IEC plate (see **figure 10**).
6. Unscrew the IEC connector ground wire from the ground wire nut on the bare metal bottom of the PS 124 enclosure.

7. From the rear panel end, pull the IEC connector out of the enclosure.

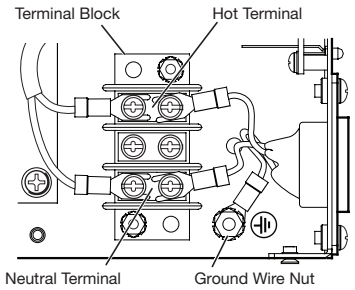

Figure 10 **Terminal Block and IEC Wiring**

8. Thread the 12- or 14-gauge power wires through the length of the electrical conduit tube.
9. Install the EMT adapter plate (with the conduit attached) into the opening left when the IEC connector was removed (step 7). Use the Philips head screwsthat you removed in **step 2** to attach the EMT adapter plate.
10. Slide the conduit nut over the bundle of wires exiting the conduit and onto the conduit itself inside the PS 124. Hand tighten the nut (see figure 11, below).

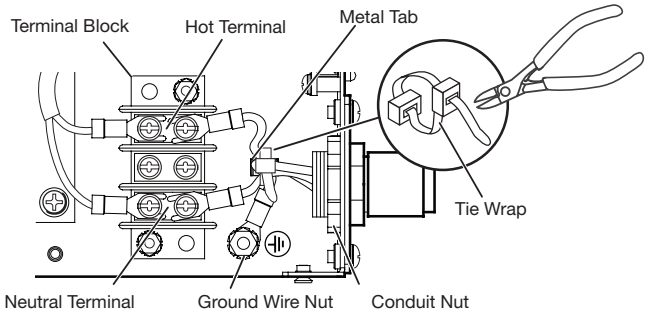

Figure 11 **Terminal Block and Conduit Wiring in a PS 124**

11. Attach and screw down the hot (line) wire and the neutral wire (indicated by a tag marked “N”) exiting from the conduit to their corresponding screws on the terminal block.

ATTENTION: Ensure you observe wire polarity. Figure 11, above, shows the location of the neutral and hot poles on the motherboard connector. The neutral wire of the conduit wiring harness is identified with a tag marked “N” (neutral)

Assurez-vous de respecter la polarité du câblage. La figure 11, ci-dessus, indique l’emplacement des pôles de phase et de neutre sur le connecteur de la carte mère. Le fil de neutre du faisceau électrique dans le fourreau est indiqué par la présence de la lettre N (neutre).

12. Attach the ground wire from the conduit to the bare metal plate bottom of the PS 124; secure it by reattaching the ground wire nut.
13. Thread a tie wrap through the metal tab on the bare metal bottom of the PS 124, place all the wires within its cradle, and zip the tie wrap over the bundle of wires.
14. Ensure the conduit nut used in step 10 (see figure 11, above) firmly secures the conduit EMT adapter plate to the power sup ply.
15. Use the six screws removed in step 3 to secure the top cover of the PS 124 back onto its bottom board (see **figure 9**)

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.

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