

PS 128

Multiple Output 12 Volt DC Power Supply



Extron Electronics
INTERFACING, SWITCHING AND CONTROL

Safety Instructions

Safety Instructions • English

WARNING: This symbol, ⚠, when used on the product, is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

ATTENTION: This symbol, ⚠, when used on the product, is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the Extron Safety and Regulatory Compliance Guide, part number 68-290-01, on the Extron website, www.extron.com.

Sicherheitsanweisungen • Deutsch

WARNUNG: Dieses Symbol ⚠ auf dem Produkt soll den Benutzer darauf aufmerksam machen, dass im Inneren des Gehäuses dieses Produktes gefährliche Spannungen herrschen, die nicht isoliert sind und die einen elektrischen Schlag verursachen können.

VORSICHT: Dieses Symbol ⚠ auf dem Produkt soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.

Weitere Informationen über die Sicherheitsrichtlinien, Produkthandhabung, EMI/EMF-Kompatibilität, Zugänglichkeit und verwandte Themen finden Sie in den Extron-Richtlinien für Sicherheit und Handhabung (Artikelnummer 68-290-01) auf der Extron-Website, www.extron.com.

Instrucciones de seguridad • Español

ADVERTENCIA: Este símbolo, ⚠, cuando se utiliza en el producto, avisa al usuario de la presencia de voltaje peligroso sin aislar dentro del producto, lo que puede representar un riesgo de descarga eléctrica.

ATENCIÓN: Este símbolo, ⚠, cuando se utiliza en el producto, avisa al usuario de la presencia de importantes instrucciones de uso y mantenimiento recogidas en la documentación proporcionada con el equipo.

Para obtener información sobre directrices de seguridad, cumplimiento de normativas, compatibilidad electromagnética, accesibilidad y temas relacionados, consulte la Guía de cumplimiento de normativas y seguridad de Extron, referencia 68-290-01, en el sitio Web de Extron, www.extron.com.

Instructions de sécurité • Français

AVERTISSEMENT : Ce pictogramme, ⚠, lorsqu'il est utilisé sur le produit, signale à l'utilisateur la présence à l'intérieur du boîtier du produit d'une tension électrique dangereuse susceptible de provoquer un choc électrique.

ATTENTION : Ce pictogramme, ⚠, lorsqu'il est utilisé sur le produit, signale à l'utilisateur des instructions d'utilisation ou de maintenance importantes qui se trouvent dans la documentation fournie avec le matériel.

Pour en savoir plus sur les règles de sécurité, la conformité à la réglementation, la compatibilité EMI/EMF, l'accessibilité, et autres sujets connexes, lisez les informations de sécurité et de conformité Extron, réf. 68-290-01, sur le site Extron, www.extron.com.

Istruzioni di sicurezza • Italiano

AVVISO: Il simbolo, ⚠, se usato sul prodotto, serve ad avvertire l'utente della presenza di tensione non isolata pericolosa all'interno del contenitore del prodotto che può costituire un rischio di scosse elettriche.

ATTENZIONE: Il simbolo, ⚠, se usato sul prodotto, serve ad avvertire l'utente della presenza di importanti istruzioni di funzionamento e manutenzione nella documentazione fornita con l'apparecchio.

Per informazioni sulle linee guida di sicurezza, adempimenti normativi, compatibilità EMI/EMF, accessibilità e argomenti correlati, vedere la sicurezza di Extron e Regulatory Compliance Guide, parte numero 68-290-01, sul sito Web Extron, www.extron.com.

Instrukcje bezpieczeństwa • Polska

OSTRZEŻENIE: Ten symbol, ⚠, gdy używany na produkt, ma na celu poinformować użytkownika o obecności izolowanego i niebezpiecznego napięcia wewnątrz obudowy produktu, który może stanowić zagrożenie porażenia prądem elektrycznym.

UWAGI: Ten symbol, ⚠, gdy używany na produkt, jest przeznaczony do ostrzegania użytkownika ważne operacyjne oraz instrukcje konserwacji (obsługi) w literaturze, wyposażone w sprzęt.

Informacji na temat wytycznych w sprawie bezpieczeństwa, regulacji wzajemnej zgodności, zgodność EMI/EMF, dostępności i Tematy pokrewne, zobacz Extron bezpieczeństwa i regulacyjnego zgodności przewodnik, część numer 68-290-01, na stronie internetowej Extron, www.extron.com.

Инструкция по технике безопасности • Русский

ПРЕДУПРЕЖДЕНИЕ: Данный символ, ⚠, если указан на продукте, предупреждает пользователя о наличии неизолированного опасного напряжения внутри корпуса продукта, которое может привести к поражению электрическим током.

ВНИМАНИЕ: Данный символ, ⚠, если указан на продукте, предупреждает пользователя о наличии важных инструкций по эксплуатации и обслуживанию в руководстве, прилагаемом к данному оборудованию.

Для получения информации о правилах техники безопасности, соблюдении нормативных требований, электромагнитной совместимости (ЭМП/ЭДС), возможности доступа и других вопросах см. руководство по безопасности и соблюдению нормативных требований Extron на сайте Extron: www.extron.com, номер по каталогу - 68-290-01.

安全说明 • 简体中文

警告: ⚠ 产品上的这个标志意在警告用户该产品机壳内有暴露的危险电压, 有触电危险。

注意: ⚠ 产品上的这个标志意在提示用户设备随附的用户手册中有重要的操作和维护(维修)说明。

关于我们产品的安全指南、遵循的规范、EMI/EMF 的兼容性、无障碍使用的特性等相关内容, 敬请访问 Extron 网站 www.extron.com, 参见 Extron 安全规范指南, 产品编号 68-290-01。

安全記事 • 繁體中文

警告: ⚠ 若產品上使用此符號, 是為了提醒使用者, 產品機殼內存在著可能會導致觸電之風險的未絕緣危險電壓。

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有關安全性指導方針、法規遵守、EMI/EMF 相容性、存取範圍和相關主題的詳細資訊, 請瀏覽 Extron 網站: www.extron.com, 然後參閱《Extron 安全性與法規遵守手冊》, 準則編號 68-290-01。

安全上のご注意 • 日本語

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안전 지침 • 한국어

경고: 이 기호 ⚠ 가 제품에 사용될 경우, 제품의 인클로저 내에 있는 접지되지 않은 위험한 전류로 인해 사용자가 감전될 위험이 있음을 경고합니다.

주의: 이 기호 ⚠ 가 제품에 사용될 경우, 장비와 함께 제공된 책자에 나와 있는 주요 운영 및 유지보수(정비) 지침을 경고합니다.

안전 가이드라인, 규제 준수, EMI/EMF 호환성, 접근성, 그리고 관련 항목에 대한 자세한 내용은 Extron 웹 사이트(www.extron.com)의 Extron 안전 및 규제 준수 안내서, 68-290-01 조항을 참조하십시오..

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FCC Class B Notice

NOTE: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of the manufacturer could void the user's authority to operate this equipment.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

ATTENTION:

- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm (7.9 inches) between the radiator and your body.
- Cet équipement est conforme aux limites de radiation de la FCC établies pour un environnement non géré. Il doit être installé et contrôlé à une distance minimale de 20 cm (7,87 inches) entre le radiateur et votre corps.

NOTE: For more 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.

VCCI-B Notice

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取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

Conventions Used in this Guide

Notifications

The following notifications are used in this guide:

WARNING: Potential risk of severe injury or death.

AVERTISSEMENT : Risque potentiel de blessure grave ou de mort.

ATTENTION:

- Risk of property damage.
- Risque de dommages matériels.

NOTE: A note draws attention to important information.

TIP: A tip provides a suggestion to make working with the application easier.

Specifications Availability

Product specifications are available on the Extron website, www.extron.com.

Extron Glossary of Terms

A glossary of terms is available at <http://www.extron.com/technology/glossary.aspx>.



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Introduction

This section provides general information about the this guide, the PS 128 Power Supply, and features. Topics in this section include the following:

- [Guide Overview](#)
- [Product Description](#)
- [Features](#)

Guide Overview

This guide contains information about installing and operating the PS 128 Power Supply. In this guide, the terms “PS 128” and “power supply” refer to the PS 128 Power Supply.

Product Description

The PS 128 is a rack-mountable, multiple output 12 volt DC power supply. It delivers a total of 8.0 amps across all outputs with no per-port current limitations, allowing connected devices to receive current based on load requirements. The PS 128 reduces the number of desktop power supplies by providing power for up to twelve devices, resulting in power consolidation and centralized power management (see [figure 1](#) on the next page for an example of a typical application).

The following diagram shows a PS 128 powering two devices.

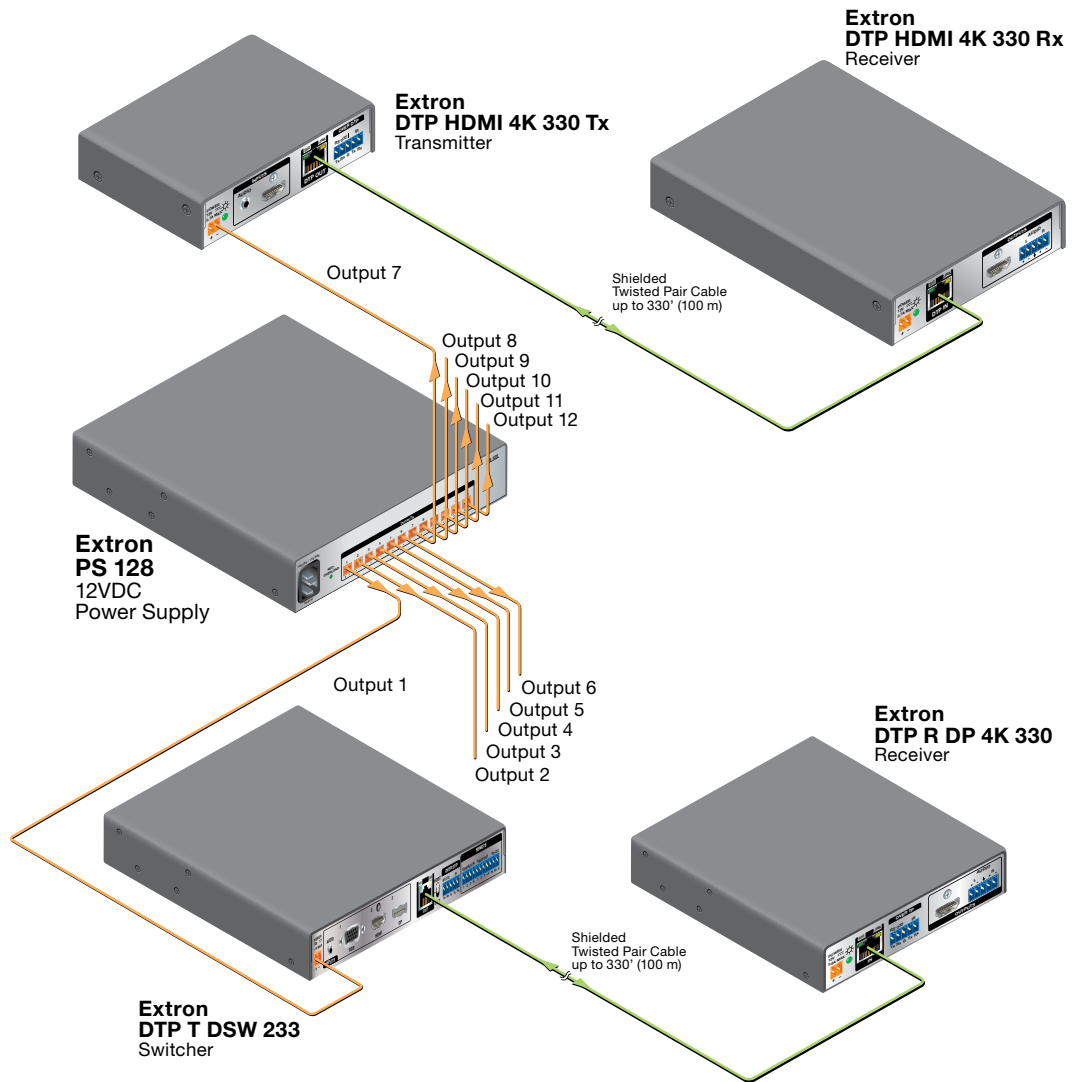


Figure 1. Typical Application Diagram

Features

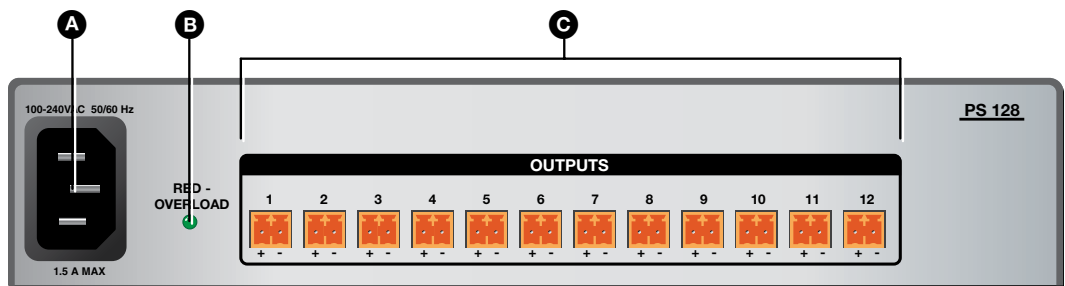
- **Outputs** — Provides twelve 12 volt DC outputs, 8.0 amps total, using twelve 2-pin captive screw connectors.
- **No per-port amperage limitation**
- **Up to 96 watts of power**
- **Dual-color status LED for normal operating and overload conditions**
- **Rack-mountable 1U, one-half rack width, metal enclosure**

Installation and Operation

This section contains installation instructions and indicator information. Topics in this section include the following:

- [Rear Panel Features](#)
- [Front Panel Features](#)

Rear Panel Features



- A** AC power input connector (see below)
- B** Overload LED indicator (see below)
- C** DC power output connectors (see page 4)

Figure 2. Rear Panel Features

- A AC power input connector** — Connect a 100-240 VAC, 50-60 Hz power source to the AC power connector on the rear panel.
- B Overload LED indicator** — Lights green or red to indicate the power current status.
 - **Green** — Power is applied and the collective current draw is normal (8 amps or less).
 - **Red** — The PS 128 is in a current overload condition (more than 8 amps).

ATTENTION:

- Continued operation in an overload condition may cause premature power supply failure.
- Un fonctionnement ininterrompu dans un état de surcharge est susceptible de provoquer une défaillance prématurée de l'alimentation électrique.

NOTE: To identify a shorted output, unplug the outputs one at a time until the LED lights green.

- DC power output connectors** — Connect up to 12 devices to these 2-pole, 3.5 mm captive screw connectors (see **figure 2, C** on the previous page). Wire the connectors as shown in figure 3. Each output provides 12 VDC. Do not exceed 8 amps of combined current draw for the connected devices.

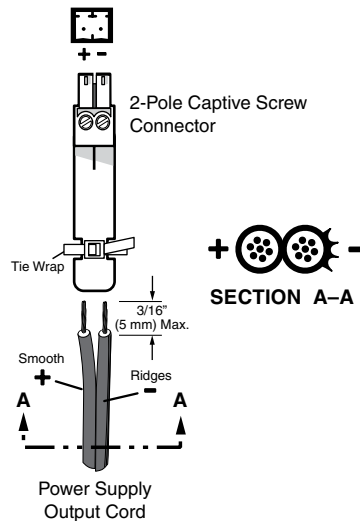


Figure 3. DC Power Output Wiring

WARNING: Electric shock hazard. The two power cord wires must be kept separate while the power supply is plugged in. Remove power before wiring.

AVERTISSEMENT : Risque de choc électrique grave. Les deux cordons d'alimentation doivent être tenus à l'écart l'un de l'autre quand l'alimentation est branchée. Couper l'alimentation avant de faire l'installation électrique.

ATTENTION:

- Power supply voltage polarity is critical. Incorrect voltage polarity can damage the power supply and the unit. The ridges on the side of the cord identify the power cord negative lead.
- La polarité de la source d'alimentation est primordiale. Une polarité incorrecte pourrait endommager la source d'alimentation et l'unité. Les stries sur le côté du cordon permettent de repérer le pôle négatif du cordon d'alimentation.
- The length of the exposed (stripped) copper wires is important. The ideal length is 3/16 inch (5 mm).
- La longueur des câbles exposés est primordiale lorsque l'on entreprend de les dénuder. La longueur idéale est de 5 mm (3/16 inch).

NOTES:

- To verify proper polarity before connection to a device, plug in the power supply with no load and check the output polarity with a voltmeter. Remove power before continuing.
- Do not tin the stripped power supply leads. Tinned wires are not as secure in the captive screw connectors and could be pulled out.

Front Panel Features



Figure 4. Front Panel Features

- A Overload LED indicator** — Lights green or red to indicate the power current status. This is the same indicator as on the rear panel (see [figure 2, B](#) on page 3).
- **Green** — Power is applied and the collective current draw is normal (8 amps or less).
 - **Red** — The PS 128 is in a current overload condition (more than 8 amps or 96 watts).

ATTENTION:

- Continued operation in an overload condition may cause premature power supply failure.
- Un fonctionnement ininterrompu dans un état de surcharge est susceptible de provoquer une défaillance prématurée de l'alimentation électrique.

NOTE: To identify a shorted output, unplug the outputs one at a time until the LED lights green.

Mounting

This section contains basic mounting information. Topics in this section include the following:

- **Tabletop**
- **Rack**
- **Furniture**
- **Projector in a PoleVault System**

Tabletop

To place the PS 128 on a flat surface like a tabletop or desk, attach the provided rubber feet to the bottom four corners of the enclosure.

Rack

For mounting options in rack environments, go to www.extron.com for a list of compatible rack mounting kits. Follow the mounting kit instructions and see the UL guidelines for rack-mounted devices below.

UL Guidelines for Rack-Mounted Devices

The following Underwriters Laboratories (UL) guidelines pertain to the safe installation of the PS 128 in a rack.

- 1. Elevated operating ambient temperature** — If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, install the PS 128 in an environment compatible with the maximum ambient temperature ($T_{ma} = +104\text{ }^{\circ}\text{F}$, $+40\text{ }^{\circ}\text{C}$) specified by Extron.
- 2. Reduced air flow** — Install the equipment in a rack so that the amount of air flow required for safe operation of the equipment is not compromised.
- 3. Mechanical loading** — Mount the equipment in the rack so that a hazardous condition is not achieved due to uneven mechanical loading.
- 4. Circuit overloading** — Connect the equipment to the supply circuit and consider the effect that circuit overloading might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- 5. Reliable earthing (grounding)** — Maintain reliable grounding of rack-mounted equipment. Pay particular attention to supply connections other than direct connections to the branch circuit (for example, the use of power strips).

Rack-Mounting

The PS 128 is 1U high and half rack wide for rack-mounting. See the PS 128 specifications on www.extron.com for the device dimensions.

NOTE: If required, remove previously installed rubber feet on the bottom of the PS 128.

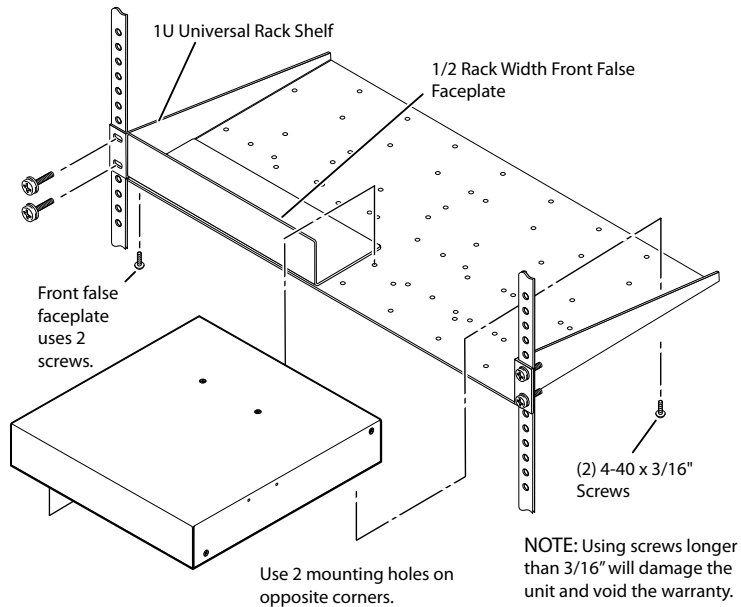


Figure 5. Mounting in a Rack Example

Furniture

For mounting options under a table or desk, go to www.extron.com for a list of compatible furniture mounting kits. Follow the instructions provided with the kit.

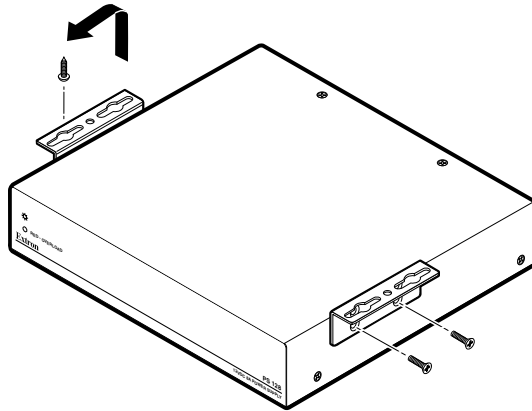


Figure 6. Mounting under a Desk Example

Projector in a PoleVault System

For mounting options in an Extron PoleVault system, go to www.extron.com for a list of compatible PoleVault mounting kits. Follow the instructions provided with the kit.

Extron Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

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and Central America:**

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1230 South Lewis Street
Anaheim, CA 92805
U.S.A.

Japan:

Extron Electronics, Japan
Kyodo Building, 16 Ichibancho
Chiyoda-ku, Tokyo 102-0082
Japan

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Hanzeboulevard 10
3825 PH Amersfoort
The Netherlands

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686 Ronghua Road
Songjiang District
Shanghai 201611
China

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135 Joo Seng Road, #04-01
PM Industrial Bldg.
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United Arab Emirates, Dubai

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions, or if modifications were made to the product that were not authorized by Extron.

NOTE: If a product is defective, please call Extron and ask for an Application Engineer to receive an RA (Return Authorization) number. This will begin the repair process.

USA: 714.491.1500 or 800.633.9876

Europe: 31.33.453.4040

Asia: 65.6383.4400

Japan: 81.3.3511.7655

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.

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