

User's Guide



VersaTools™ MDA 5V, 5SV, 5A RCA

Mini Distribution Amplifiers

Precautions

Safety Instructions • English



This symbol is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.



This symbol 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.

Caution

Read Instructions • Read and understand all safety and operating instructions before using the equipment.

Retain Instructions • The safety instructions should be kept for future reference.

Follow Warnings • Follow all warnings and instructions marked on the equipment or in the user information.

Avoid Attachments • Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

Consignes de Sécurité • Français



Ce symbole sert à avertir l'utilisateur que la documentation fournie avec le matériel contient des instructions importantes concernant l'exploitation et la maintenance (réparation).



Ce symbole sert à avertir l'utilisateur de la présence dans le boîtier de l'appareil de tensions dangereuses non isolées posant des risques d'électrocution.

Attention

Lire les instructions • Prendre connaissance de toutes les consignes de sécurité et d'exploitation avant d'utiliser le matériel.

Conservier les instructions • Ranger les consignes de sécurité afin de pouvoir les consulter à l'avenir.

Respecter les avertissements • Observer tous les avertissements et consignes marqués sur le matériel ou présents dans la documentation utilisateur.

Éviter les pièces de fixation • Ne pas utiliser de pièces de fixation ni d'outils non recommandés par le fabricant du matériel car cela risquerait de poser certains dangers.

Sicherheitsanleitungen • Deutsch



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



Dieses Symbol soll den Benutzer darauf aufmerksam machen, daß im Inneren des Gehäuses dieses Produktes gefährliche Spannungen, die nicht isoliert sind und die einen elektrischen Schock verursachen können, herrschen.

Achtung

Lesen der Anleitungen • Bevor Sie das Gerät zum ersten Mal verwenden, sollten Sie alle Sicherheits- und Bedienungsanleitungen genau durchlesen und verstehen.

Aufbewahren der Anleitungen • Die Hinweise zur elektrischen Sicherheit des Produktes sollten Sie aufbewahren, damit Sie im Bedarfsfall darauf zurückgreifen können.

Befolgen der Warnhinweise • Befolgen Sie alle Warnhinweise und Anleitungen auf dem Gerät oder in der Benutzerdokumentation.

Keine Zusatzgeräte • Verwenden Sie keine Werkzeuge oder Zusatzgeräte, die nicht ausdrücklich vom Hersteller empfohlen wurden, da diese eine Gefahrenquelle darstellen können.

Instrucciones de seguridad • Español



Este símbolo se utiliza para advertir al usuario sobre instrucciones importantes de operación y mantenimiento (o cambio de partes) que se desean destacar en el contenido de la documentación suministrada con los equipos.



Este símbolo se utiliza para advertir al usuario sobre la presencia de elementos con voltaje peligroso sin protección aislante, que puedan encontrarse dentro de la caja o alojamiento del producto, y que puedan representar riesgo de electrocución.

Precaución

Leer las instrucciones • Leer y analizar todas las instrucciones de operación y seguridad, antes de usar el equipo.

Conservar las instrucciones • Conservar las instrucciones de seguridad para futura consulta.

Obedecer las advertencias • Todas las advertencias e instrucciones maradas en el equipo o en la documentación del usuario, deben ser obedecidas.

Evitar el uso de accesorios • No usar herramientas o accesorios que no sean específicamente recomendados por el fabricante, ya que podrían implicar riesgos.

Warning

Power sources • This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with a main power system with a grounded (neutral) conductor. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.

Power disconnection • To remove power from the equipment safely, remove all power cords from the rear of the equipment, or the desktop power module (if detachable), or from the power source receptacle (wall plug).

Power cord protection • Power cords should be routed so that they are not likely to be stepped on or pinched by items placed upon or against them.

Servicing • Refer all servicing to qualified service personnel. There are no user-serviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.

Slots and openings • If the equipment has slots or holes in the enclosure, these are provided to prevent overheating of sensitive components inside. These openings must never be blocked by other objects.

Lithium battery • There is a danger of explosion if battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Avvertimento

Alimentazione • Non fare funzionare ce matériel qu'avec la source d'alimentation indiquées sur l'appareil. Ce matériel doit être utilisé avec une alimentation principale comportant un fil de terre (neutre). Le troisième contact (de mise à la terre) constitue un dispositif de sécurité: n'essayez pas de la contourner ni de la désactiver.

Déconnexion de l'alimentation • Pour mettre le matériel hors tension sans danger, déconnectez tous les cordons d'alimentation de l'arrière de l'appareil ou du module d'alimentation de bureau (s'il est amovible) ou encore de la prise secteur.

Protection du cordon d'alimentation • Achémener les cordons d'alimentation de manière à ce que personne ne risque de marcher dessus et à ce qu'ils ne soient pas écrasés ou pincés par des objets.

Réparation-maintenance • Faire exécuter toutes les interventions de réparation-maintenance par un technicien qualifié. Aucun des éléments internes ne peut être réparé par l'utilisateur. Afin d'éviter tout danger d'électrocution, l'utilisateur ne doit pas essayer de procéder lui-même à ces opérations car l'ouverture ou le retrait des couvercles risquent de l'exposer à de hautes tensions et autres dangers.

Fentes et orifices • Si le boîtier de l'appareil comporte des fentes ou des orifices, ceux-ci servent à empêcher les composants internes sensibles de surchauffer. Ces ouvertures ne doivent jamais être bloquées par des objets.

Lithium Batterie • Il a danger d'explosion s'il y a un remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

Vorsicht

Stromquellen • Dieses Gerät sollte nur über die auf dem Produkt angegebene Stromquelle betrieben werden. Dieses Gerät wurde für eine Verwendung mit einer Hauptstromleitung mit einem geerdeten (neutralen) Leiter konzipiert. Der dritte Kontakt ist für einen Erdschluß, und stellt eine Sicherheitsfunktion dar. Diese sollte nicht umgangen oder außer Betrieb gesetzt werden.

Stromunterbrechung • Um das Gerät auf sichere Weise vom Netz zu trennen, sollten Sie alle Netzkabel aus der Rückseite des Gerätes, aus der externen Stromversorgung (falls dies möglich ist) oder aus der Wandsteckdose ziehen.

Schutz des Netzkabels • Netzkabel sollten stets so verlegt werden, daß sie nicht im Weg liegen und niemand darauf treten kann oder Objekte darauf- oder unmittelbar dagegen gestellt werden können.

Wartung • Alle Wartungsmaßnahmen sollten nur von qualifiziertem Servicepersonal durchgeführt werden. Die internen Komponenten des Gerätes sind wartungsfrei. Zur Vermeidung eines elektrischen Schocks versuchen Sie in keinem Fall, dieses Gerät selbst öffnen, da beim Entfernen der Abdeckungen die Gefahr eines elektrischen Schlags und/oder anderer Gefahren bestehen.

Schlitze und Öffnungen • Wenn das Gerät Schlitze oder Löcher im Gehäuse aufweist, dienen diese zur Vermeidung einer Überhitzung der empfindlichen Teile im Inneren. Diese Öffnungen dürfen niemals von anderen Objekten blockiert werden.

Lithium-Batterie • Explosionsgefahr, falls die Batterie nicht richtig ersetzt wird. Ersetzen Sie verbrauchte Batterien nur durch den gleichen oder einen vergleichbaren Batterietyp, der auch vom Hersteller empfohlen wird. Entsorgen Sie verbrauchte Batterien bitte gemäß den Herstelleranweisungen.

Advertencia

Alimentación eléctrica • Este equipo debe conectarse únicamente a la fuente/tipo de alimentación eléctrica indicada en el mismo. La alimentación eléctrica de este equipo debe provenir de un sistema de distribución general con conductor neutro a tierra. La tercera pata (puesta a tierra) es una medida de seguridad, no puentearla ni eliminarla.

Desconexión de alimentación eléctrica • Para desconectar con seguridad la conectada de alimentación eléctrica al equipo, desenchufar todos los cables de alimentación en el panel trasero del equipo, o desenchufar el módulo de alimentación (si fuera independiente), o desenchufar el cable del receptáculo de la pared.

Protección del cables de alimentación • Los cables de alimentación eléctrica se deben instalar en lugares donde no sean pisados ni apretados por objetos que se puedan apoyar sobre ellos.

Reparaciones/mantenimiento • Solicitar siempre los servicios técnicos de personal calificado. En el interior no hay partes a las que el usuario debe acceder. Para evitar riesgo de electrocución, no intentar personalmente la reparación/mantenimiento de este equipo, ya que al abrir o extraer las tapas puede quedar expuesto a voltajes peligrosos u otros riesgos.

Ranuras y aberturas • Si el equipo posee ranuras o orificios en su caja/alojamiento, es para evitar el sobrecalentamiento de componentes internos sensibles. Estas aberturas nunca se deben obstruir con otros objetos.

Batería de litio • Existe riesgo de explosión si esta batería se coloca en la posición incorrecta. Cambiar esta batería únicamente con el mismo tipo (o su equivalente) recomendado por el fabricante. Desachar las baterías usadas siguiendo las instrucciones del fabricante.

安全须知 • 中文



这个符号提示用户该设备用户手册中有重要的操作和维护说明。



这个符号警告用户该设备机壳内有暴露的危险电压，有触电危险。

注意

阅读说明书 • 用户使用该设备前必须阅读并理解所有安全和使用说明。

保存说明书 • 用户应保存安全说明书以备将来使用。

遵守警告 • 用户应遵守产品和用户指南上的所有安全和操作说明。

避免追加 • 不要使用该产品厂商没有推荐的工具或追加设备，以避免危险。

警告

电源 • 该设备只能使用产品上标明的电源。设备必须使用有地线的供电系统供电。第三条线（地线）是安全设施，不能不用或跳过。

拔掉电源 • 为安全地从设备拔掉电源，请拔掉所有设备后或桌面电源的电源线，或任何接到市电系统的电源线。

电源线保护 • 妥善布线，避免被踩踏，或重物挤压。

维护 • 所有维修必须由认证的维修人员进行。设备内部没有用户可以更换的零件。为避免出现触电危险不要自己试图打开设备盖子维修该设备。

通风孔 • 有些设备机壳上有通风槽或孔，它们是用来防止机内敏感元件过热。不要用任何东西挡住通风孔。

锂电池 • 不正确的更换电池会有爆炸的危险。必须使用与厂家推荐的相同或相近型号的电池。按照生产厂的建议处理废弃电池。

声明

所使用电源为 A 级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对干扰采取切实可行的措施。

FCC Class A Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to 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. The Class A limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

NOTE

This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance with FCC emissions limits.

Introduction

Introduction

The Extron MDA 5 Series of Mini Distribution Amplifiers (MDAs) are a family of three video and audio distribution amplifiers. The MDA are members of the Extron VersaTools™ line of basic distribution amplifiers, switchers, and associated video accessories.

The MDA 5V distributes buffered composite video, the MDA 5SV distributes buffered S-video (luminance [Y] and chrominance [C]), and the MDA 5A RCA distributes amplified stereo audio, on RCA outputs.

The MDAs ship with external, desktop 12V power supplies, which accept 100-240VAC input.

Installation

The MDA 5V, 5SV, and 5A RCA can be mounted on a rack shelf, under a desk or tabletop, or on a projector bracket.

Rack mounting

UL considerations for rack mounting

The following Underwriters Laboratories (UL) considerations are relevant to the safe installation of these distribution amplifiers in a rack:

1. **Elevated operating ambient temperature** — If the unit is 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 equipment in an environment compatible with the maximum ambient temperature (T_{ma}: +122 °F, +50 °C) specified by Extron.
2. **Reduced air flow** — Install the equipment in the rack so that the equipment gets adequate air flow for safe operation.
3. **Mechanical loading** — Mount the equipment in the rack so that uneven mechanical loading does not create a hazardous condition.
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. Give appropriate consideration to the equipment nameplate ratings 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 (such as the use of power strips).

Rack mounting procedures

For optional rack mounting, mount the MDA on a VersaTools 3.5" deep 1U Rack Shelf (Extron part #60-190-20) (figure 1) or a standard Universal 1U 9.5" deep Rack Shelf (Extron part #60-190-01) (figure 2). On the standard rack shelf, the MDA mounts in one of four locations to the rear of the rack or in one of four locations to the front of the rack.

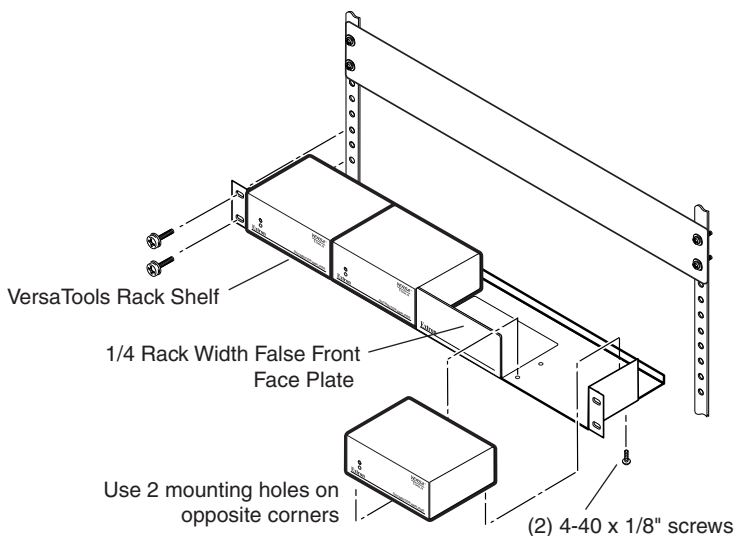


Figure 1 — Rack mounting the MDA 5V, 55V, or 5A RCA on the VersaTools shelf

1. If feet were previously installed on the bottom of the MDA, remove them.
2. Mount the MDA on the rack shelf, using two 4-40 x 3/16" screws in opposite (diagonal) corners to secure the MDA to the shelf.
3. Install blank panel(s) or other unit(s) to the rack shelf.
4. Insert the shelf into the rack, aligning the holes in the shelf with those of the rack.
5. Secure the shelf to the rack using the supplied machine screws. This shelf can be mounted in the front or in the rear of the rack.

Installation

NOTE Only products in the VersaTools line can be mounted to a VersaTools shelf. Any 1U rack-mountable Extron product can be mounted on the standard shelf.

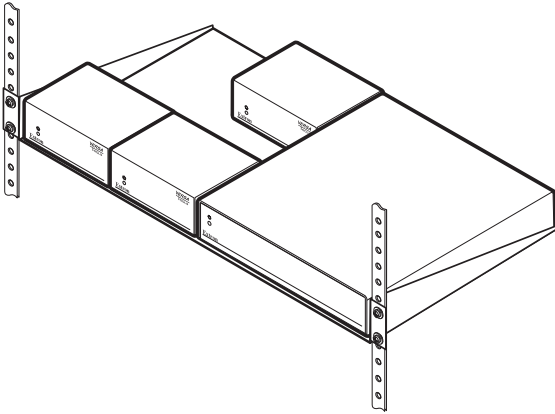


Figure 2 — Mounting the MDA on the standard shelf

Furniture or projector mounting

Furniture mount or projector mount the MDA using the optional mounting kit (Part #70-212-01, furniture, or 70-217-01, projector) as follows:

1. Attach the mounting brackets to the MDA with the machine screws provided (figure 3).

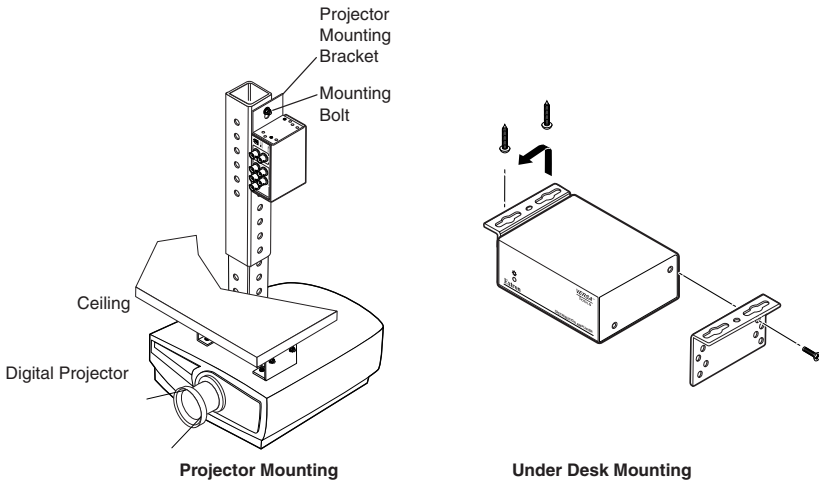


Figure 3 — Desk and projector mounting the MDA 5V, 5SV, or 5A RCA

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2. If feet were previously installed on the bottom of the MDA, remove them.
 3. **For furniture mounting**, hold the MDA with the attached brackets against the underside of the table or other furniture. Mark the location of the screw holes of the bracket on the mounting surface.
 4. **For furniture mounting**, drill 3/32" (2 mm) diameter pilot holes, 1/4" (6.3 mm) deep in the mounting surface at the marked screw locations.
 5. **For furniture mounting**, insert #8 wood screws into the four pilot holes. Tighten each screw into the mounting surface until just less than 1/4" of the screw head protrudes.
 6. **For furniture mounting**, align the mounting screws with the slots in the brackets and place the MDA against the surface, with the screws through the bracket slots.
 7. **For furniture mounting**, slide the receiver slightly forward or back, then tighten all four screws to secure the MDA in place.
 8. **For projector mounting**, secure the MDA to a projector mount or other surface by inserting the mounting bolt through the bracket's slotted hole.

Connections and Indicator

Refer to *figure 5*.

- ① Video Input connector — (MDA 5V - composite video and MDA 5SV - S-video) Connect an input source to this connector.
- ② Video Outputs (1 through 5) connectors — Connect up to five video devices to these connectors. (MDA 5V - composite video and MDA 5SV - S-video).
- ③ Power connector— Plug the external 12V power supply into this 2-pole captive screw connector. The power supply is included with the unit. Figure 4 shows how to wire the connector.

To verify the polarity before connection, plug in the power supply with no load and check the output with a voltmeter.

Connections

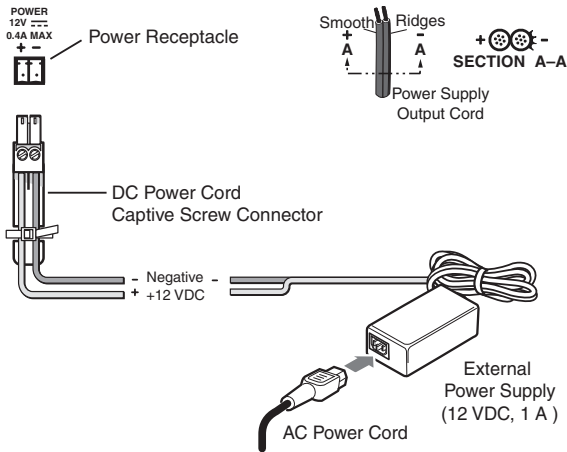


Figure 4 — Power connector wiring

CAUTION

When connecting the power supply, voltage polarity is extremely important. Applying power with incorrect voltage polarity could damage the power supply and the MDA. Identify the power cord negative lead by the ridges on the side of the cord.

NOTE

Do not tin the stripped power supply leads before installing the captive screw connector. Tinned wires are not as secure in the captive screw connectors and could pull out.

WARNING

The two power cord wires must be kept separate while the power supply is plugged in. Remove power before continuing.

- ④ **Power LED** — Indicates power is applied.
- ⑤ **Loop connector** — Provides passive loop-through for signal
- ⑥ **High Z / 75 Ohm switch** — Select 75-ohm termination on or off.

High Z — Select this position (up) if you are connecting a terminated device to the Loop connector.

75 Ohm — This position (down) terminates the Input connector with 75 ohms of impedance. Select this position if you are not using the Loop connector, or if you are connecting an unterminated device to the Loop connector.

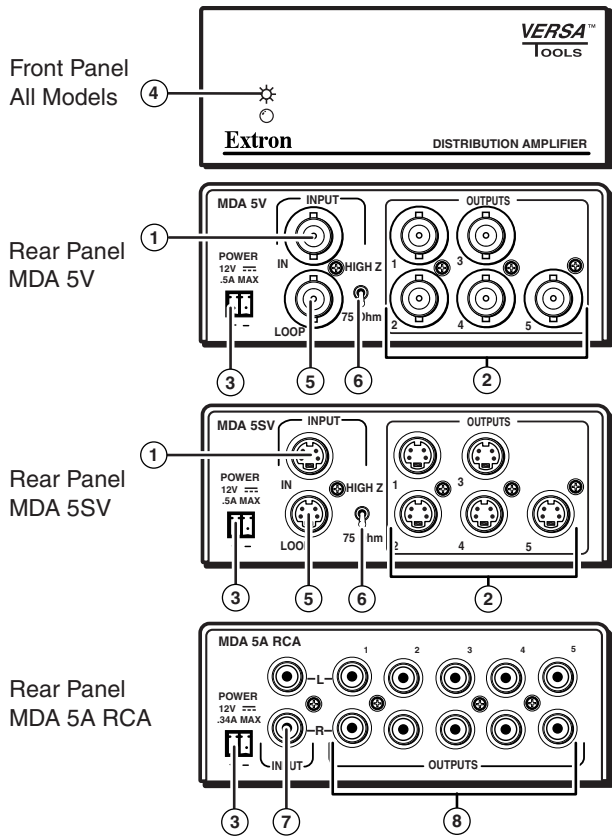


Figure 5 — MDA 5 Series front and rear panels

- (7) Audio input (left and right) connectors — Connect unbalanced stereo to this RCA connector
- (8) Audio output (1 through 5, left and right) connectors — Connect up to five audio (stereo) devices to these RCA connectors.

Specifications

Specifications

Video

Gain	Unity
Bandwidth	
Composite video	400 MHz (-3dB)
S-video	270 MHz (-3dB)

Video input

Number/signal type	
MDA 5SV	1 S-video
MDA 5V	1 composite video
Connectors	
MDA 5SV	1 4-pin mini DIN female
MDA 5V	1 BNC female
Nominal level	1 V _{p-p} for Y of S-video and for composite video 0.3 V _{p-p} for C of S-video
Minimum/maximum level(s)	0.4 V to 2.0 V _{p-p} for composite video or Y of S-video with no offset
Impedance	75 ohms
Return loss	
MDA 5SV	<-25dB @ 0 to 10 MHz
MDA 5V	<-27dB @ 5 MHz
DC offset (max. allowable).....	5.0V
Input coupling.....	AC

Video output

Number/signal type	
MDA 5SV	6 S-video: 5 buffered for distribution, 1 passive loop-through
MDA 5V	6 composite video: 5 buffered for distribution, 1 passive loop-through
Connectors	
MDA 5SV	(6) 4-pin mini-DIN
MDA 5V	6 BNC female
Nominal level	1 V _{p-p} for Y of S-video and for composite video 0.3 V _{p-p} for C of S-video
Minimum/maximum level(s)	0.4V to 2.0V p-p, follows input
Impedance	75 ohms
Return loss	<-30dB @ 5 MHz

DC offset ± 50 mV with input at 0 offset

Sync

Standards..... NTSC 3.58, NTSC 4.43, PAL, SECAM

Audio — MDA 5A RCA

Gain

DIP switch set to match output type Unity (0dB)

DIP switch not matched to output type

Dip Switch Setting	Output Wiring	
	Unbalanced	Balanced
Balanced	0 dB	-6 dB
Unbalanced	+6 dB	0 dB

Frequency response 20 Hz to 20 kHz, ± 0.05 dB

THD + Noise 0.03% @ 1 kHz at nominal level

S/N >90 dB, unbalanced, at maximum output

Stereo channel separation >80 dB @ 1 kHz; >60 dB @ 20 kHz

CMRR >75 dB @ 20 Hz to 20 kHz

Audio input — MDA 5A RCA

Number/signal type..... 1 stereo unbalanced

Connectors 2 RCA connectors

Impedance..... >10 kohms unbalanced, DC coupled

Nominal levels..... +4 dBu (1.23V), 0 dBu (0.775V),
-10 dBV (316mV), -20 dBV (100mV)
compatible

Maximum level +17 dBu (unbalanced) at 1%THD+N

NOTE $0 \text{ dBu} = 0.775 \text{ Vrms}$, $0 \text{ dBV} = 1 \text{ Vrms}$, $0 \text{ dBV} \approx 2 \text{ dBu}$

Audio output — MDA 5A RCA

Number/signal type..... 5 stereo, unbalanced

Connectors 10 RCA connectors

Impedance..... 50 ohms unbalanced

Gain error ± 0.1 dB channel to channel

Maximum level (Hi-Z) +15 dBu, unbalanced at 1%THD+N

Maximum level (600 ohm)..... >+14 dBm, unbalanced, at 1%THD+N

General

External power supply 100VAC to 240VAC, 50/60 Hz, 5 watts,
external; to 12 VDC, 1 A (max.), regulated

Specifications

Power input requirements

MDA 5V/5SV 12 VDC, 0.1 A (max.)

MDA 5A RCA 12 VDC, 0.2 A (max.)

Temperature/humidity Storage -40° to +158°F (-40° to +70°C) /
10% to 90%, non-condensing
Operating +32° to +122°F (0° to +50°C) /
10% to 90%, non-condensing

Cooling Convection, no vents

Rack mount Yes, with optional 1U, 9.5" deep rack shelf,
part #60-190-01 (RSU 129), or 60-604-02
(RSB 129); 1U, 6" deep rack shelf,
part #60-190-10 (RSU 126), or 60-604-11
(RSB 126); or the VersaTools® 1U, 3.5" deep
rack shelf, part #60-190-20 (RSF 123), or
60-604-21 (RSB 123)

Furniture mount Yes, with optional VersaTools mini under
desk mount kit, part #70-212-01 (MBU 123)
Attachable to a projector mount with
optional projector mount kit
part # 70-217-01 (PMK 100)

Enclosure type Metal

Enclosure dimensions 1.7" H x 4.3" W x 3.0" D (1U high, quarter
rack wide)
4.2 cm H x 11.0 cm W x 7.6 cm D
(Depth excludes connectors and knobs.)

Product weight

MDA 5V/5SV 0.5 lbs (0.2 kg)

MDA 5A RCA 0.4 lbs (0.2 kg)

Shipping weight

MDA 5V 3 lbs (2 kg)

MDA 5 SV/5A RCA 2 lbs (1 kg)

Vibration ISTA/NSTA 1A in carton (International
Safe Transit Association)

Regulatory compliance

Safety CE, C-tick, CUL, UL

EMI/EMC CE, C-tick, FCC Class A, ICES, VCCI

MTBF 30,000 hours

Warranty 3 years parts and labor

NOTE All nominal levels are at $\pm 10\%$

NOTE Specifications are subject to change without notice.



Specifications

Extron's 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:

**USA, Canada, South America,
and Central America:**

Extron Electronics
1001 East Ball Road
Anaheim, CA 92805, USA

Asia:

Extron Electronics, Asia
135 Joo Seng Road, #04-01
PM Industrial Bldg.
Singapore 368363

Europe, Africa, and the Middle East:

Extron Electronics, Europe
Beeldschermweg 6C
3821 AH Amersfoort
The Netherlands

Japan:

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

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 non-Extron authorized modification to the product.

If it has been determined that the product is defective, please call Extron and ask for an Applications Engineer at (714) 491-1500 (USA), 31.33.453.4040 (Europe), 65.6383.4400 (Asia), or 81.3.3511.7655 (Japan) to receive an RA# (Return Authorization number). This will begin the repair process as quickly as possible.

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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