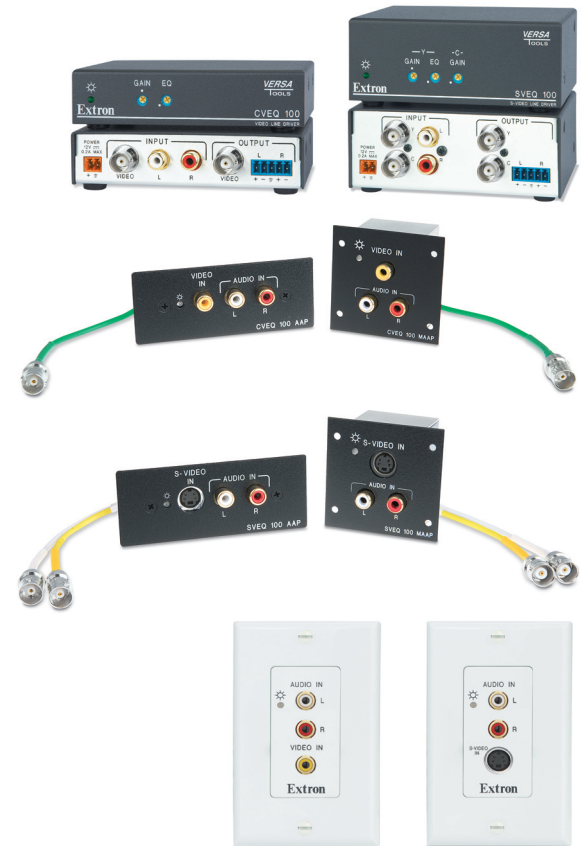


User's Manual



CVEQ 100 Series and SVEQ 100 Series

**Composite Video or S-Video and Audio Line Drivers
with Gain and Equalization**

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.

Conservr 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 présentés 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 marcadas 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.

Avertissement

Alimentations • Ne faire fonctionner ce matériel qu'avec la source d'alimentation indiquée 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 • Acheminer 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/ou des orifices.

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 remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du meme type ou d'un type equivalent recommande par le constructeur. Mettre au reut 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 Erdsanschluß, 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 andere 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 acometida 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 deba 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.

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

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.

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。

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.

Quick Start Guide — CVEQ/SVEQ 100 Series

CAUTION *Installation and service must be performed by authorized personnel only. These line drivers must be used with UL approved, grounded electrical boxes.*

To install and set up the line driver, follow these steps and see the appropriate sections of this manual for details.

Step 1

Turn the **input and output devices off** and unplug their power cords.

Verify that the line driver is disconnected from the power source before proceeding.

Step 2

Attach **output cables** to the rear panel of the line driver and to the output devices. See "Rear Panel Features and Operation" in chapter 3 for details.

Step 3

Attach **input cables** from the input devices to the line driver's front panel input connectors. See "Front Panel Features and Operation" in chapter 3.

Step 4

Connect **power cords** (see page 3-11) and turn on the output devices (projector/monitor, speakers) and input devices.

Step 5

The picture should appear and sound should be audible. If not, ensure that all devices are plugged in and receiving power. Check the cabling, make adjustments as needed. For further details, see "Testing and troubleshooting" in chapter 2.

Step 6

While watching the display, adjust the **video gain and equalization** by using the rotary gain and equalization (EQ) control potentiometers. An oscilloscope can be used to achieve a more precise adjustment. See "Gain adjustment control" and "Equalization (EQ) adjustment control" in chapter 3 for details.

Make all adjustments using an Extron Tweaker or small screwdriver. If using very short output cables, set all potentiometers to the default setting (the arrow on the control pointing to the dot beside it).



CVEQ 100 Series



SVEQ 100 Series

Quick Start — CVEQ/SVEQ 100 Series, cont'd

When using long cables, follow these steps:

- a. Supply the color bars test signal to the input. (Recommendation: use an Extron VTG 300 Video Test Generator to generate the test signal.)
- b. Adjust the Gain control(s) for the output until the signal level at the far end is the same as the input (or the display shows the correct brightness and contrast).
- c. Adjust the EQ control for the output so that no overshoot or round front corner appears at the far end on the oscilloscope or you see a sharp picture with no smearing.

Step 7

See "Installation Instructions" in chapter 2 for further installation details.

Table of Contents

Chapter One • Introduction	1-1
About this Manual	1-2
Features	1-2
Chapter Two • Installation	2-1
Application Examples	2-2
Installation Instructions	2-4
Installing the CVEQ 100/SVEQ 100	2-4
Mounting the CVEQ 100 and SVEQ 100	2-4
Tabletop use	2-4
UL rack mounting guidelines	2-4
Rack mounting	2-5
Furniture mounting — under-desk	2-7
Furniture mounting — through-desk (CVEQ 100 only)	2-7
Back of the rack mounting (SVEQ 100 only)	2-9
Installing the CVEQ 100 AAP/SVEQ 100 AAP	2-11
Installing the CVEQ 100 MAAP/SVEQ 100 MAAP	2-12
Mounting in an external wall box	2-12
Mounting in a European cable channel	2-13
Installing the CVEQ 100 D/SVEQ 100 D	2-14
Preparing the site and installing the wall box	2-14
Mounting the line driver	2-15
Testing and troubleshooting	2-16
If the image does not appear or there is no sound	2-16
If the image is not displayed correctly	2-17
Chapter Three • Operation	3-1
Front Panel Features and Operation	3-2
Rear Panel Features and Operation	3-6
Power supply wiring	3-11
Gain adjustment control	3-12
Equalization (EQ) adjustment control	3-12
Replacing the Decora Faceplate (CVEQ 100 D and SVEQ 100 D)	3-13
Appendix A • Specifications, Part Numbers, and Accessories	A-1
Specifications	A-2
Included Parts	A-7
Optional Accessories	A-9

Table of Contents, cont'd


Appendix B • Dimensions and Template B-1
 Decora Models Dimensions..... B-2
 Cut-out Template B-3

All trademarks mentioned in this manual are the properties of their respective owners.

68-1442-01 Rev. C
07 08



CVEQ 100 and SVEQ 100 Series



Chapter One

Introduction

About this Manual

Features

About this Manual

This manual contains information about the Extron composite video CVEQ 100 Series, and the S-video SVEQ 100 Series of high performance 1-input, 1-output video line drivers. Both series of line drivers support stereo or dual mono audio (balanced or unbalanced). These line drivers can drive video signals up to 1000 feet using Extron MHR cable.

The composite video CVEQ 100 Series is comprised of the rack or furniture-mounted VersaTools® CVEQ 100, the wall-mounted CVEQ 100 D featuring Decora® wall plates and faceplates, the architectural adapter plate CVEQ 100 AAP, and the triple space mini architectural adapter plate CVEQ 100 MAAP.

The S-video SVEQ 100 Series is comprised of the rack or furniture-mounted VersaTools® SVEQ 100, the wall-mounted SVEQ 100 D featuring Decora® wall plates and faceplates, the architectural adapter plate SVEQ 100 AAP, and the triple space mini architectural adapter plate SVEQ 100 MAAP.

Features

Long distance line driving — Drives composite video or S-video signals up to 1000 feet (300 meters) using Extron's MHR cable.

Balanced or unbalanced stereo or dual mono output — Unbalanced stereo audio input can be output as balanced or unbalanced stereo audio or as dual mono.

Gain adjustment — All models offer a video gain adjustment for composite video and Y of S-video with a range of -1 dB to +3 dB, and C of S-video with a range of 0 dB to +10 dB.

Equalization adjustment — Each model features an equalization adjustment range of 0 dB to +7 dB at 5 MHz that changes the level and peaking of the output signal to compensate for use of long cables.

Stereo or dual mono output selector switch — A rear panel switch selects between stereo and dual mono output formats (D, AAP, and MAAP models only).

Front panel LED indicator — Indicates when the line driver is receiving power (all models) or a video signal (D, AAP, and MAAP models only).



CVEQ 100 and SVEQ 100 Series

Chapter Two

Installation

Application Examples

Installation Instructions

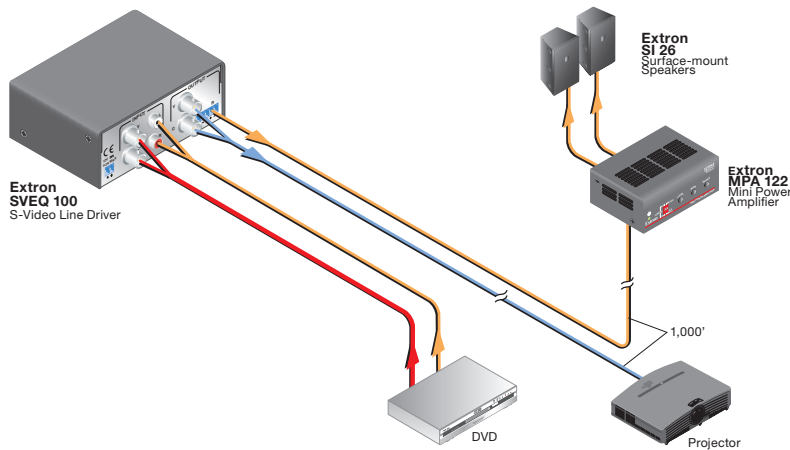
Installation

Application Examples

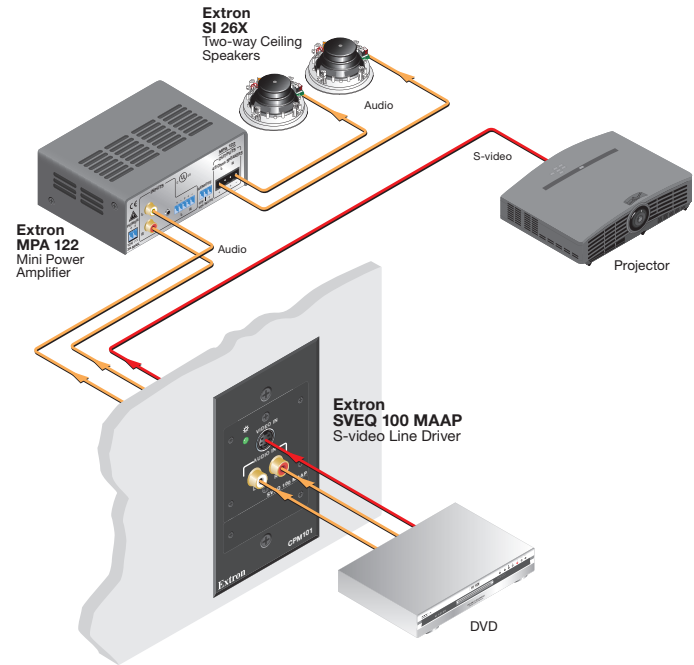
To get started, refer to the "Quick Start Guide" at the beginning of this manual.

CAUTION

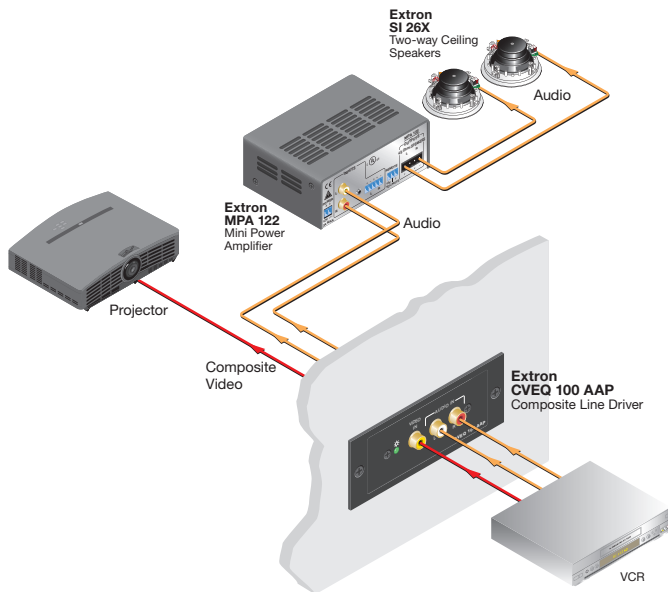
Installation and service must be performed by authorized personnel only.



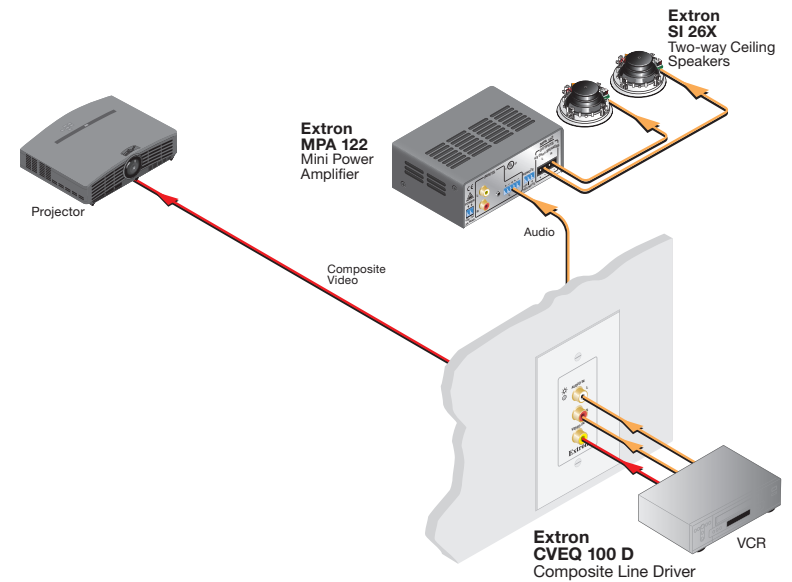
SVEQ 100 application example



SVEQ 100 MAAP application example



CVEQ 100 AAP application example



CVEQ 100 D application example

Installation

Installation Instructions

The following sections explain the installation of the CVEQ 100 and SVEQ 100 series of line drivers.

Installing the CVEQ 100/SVEQ 100

Mounting the CVEQ 100 and SVEQ 100

The CVEQ 100 composite video line driver and the SVEQ 100 S-video line driver can be set on a table, mounted on a rack shelf, mounted under a desk or table, mounted through furniture (CVEQ 100 only), or mounted on the back of a rack (SVEQ 100 only).

Tabletop use

Four self-adhesive rubber feet are included with the line driver.

For tabletop use, attach one foot at each corner of the bottom side of the unit and place the unit in the desired location. See chapter 3 for details on wiring and switch settings.

UL rack mounting guidelines

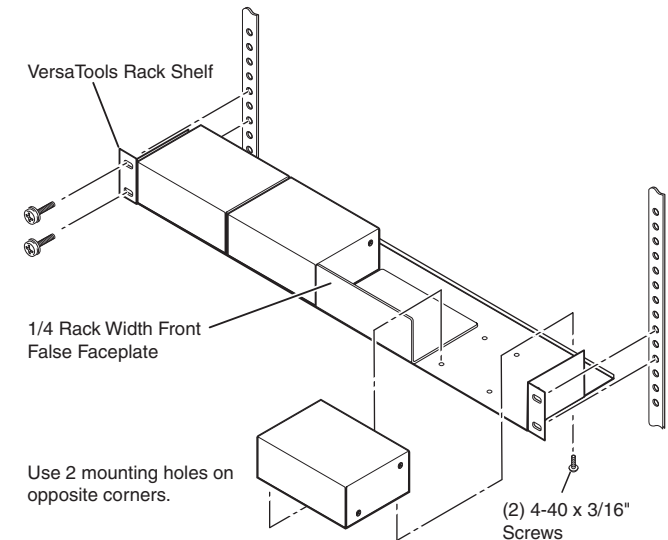
The following Underwriters Laboratories (UL) guidelines pertain to the safe installation of the line drivers in a rack.

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 line driver in an environment compatible with the maximum ambient temperature ($T_{ma} = +122\text{ }^{\circ}\text{F}$, $+50\text{ }^{\circ}\text{C}$) 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 (e.g. use of power strips).

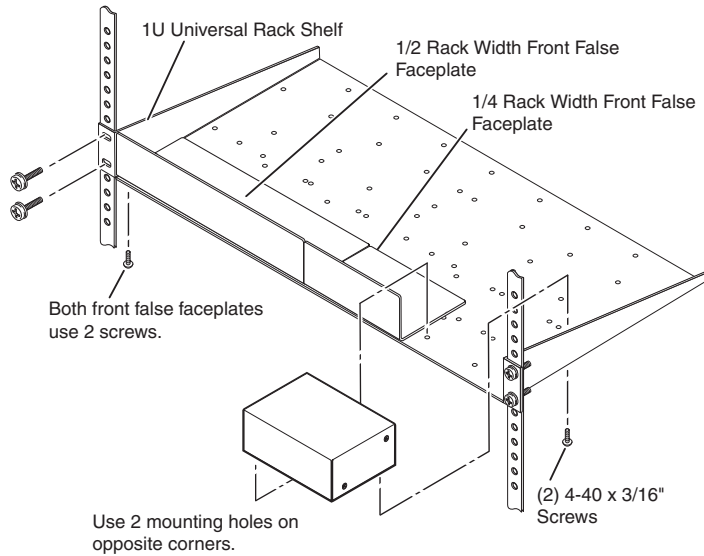
Rack mounting

For rack mounting, do not install the rubber feet. Mount the distribution amplifier on a 19" wide 1U VersaTools® rack shelf (Extron RSF 123, part #60-190-20; Extron RSB 123, part #60-604-21), a standard 1U Universal or Basic rack shelf (Extron RSU 129, part #60-190-01; Extron RSB 129, part #60-604-02), or a Universal or Basic 1U 6-inch deep rack shelf (Extron RSU 126, part #60-190-10; Extron RSB 126, part #60-604-11).

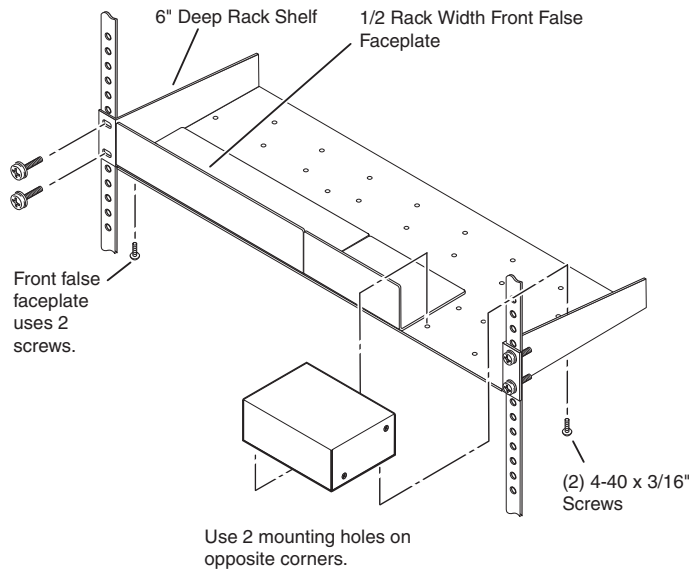
1. If feet were previously installed on the bottom of the line driver, remove them.
2. Mount the line driver on the rack shelf, using two 4-40 x 3/16" screws in opposite (diagonal) corners to secure the unit to the shelf.
3. Install blank panel(s) or other unit(s) on the rack shelf.



Mounting the line driver on a VersaTools rack shelf



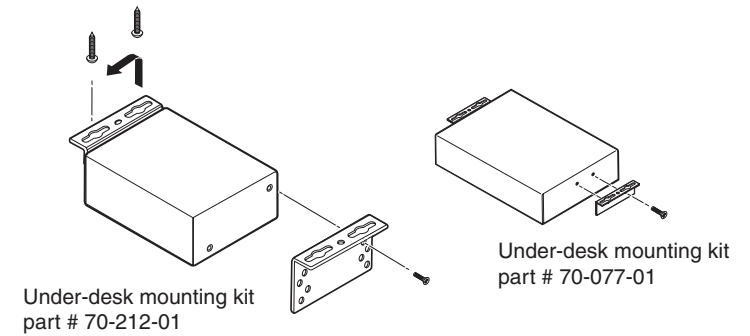
Mounting the line driver on a standard rack shelf



Mounting the line driver on a 6-inch rack shelf

Furniture mounting — under-desk

To mount the line driver under furniture, use the optional VersaTools under-desk mounting kit for the SVEQ 100 (Extron MBU 123, part #70-212-01) or the optional under-desk kit for the CVEQ 100 (Extron MBU 125, part #70-077-01).

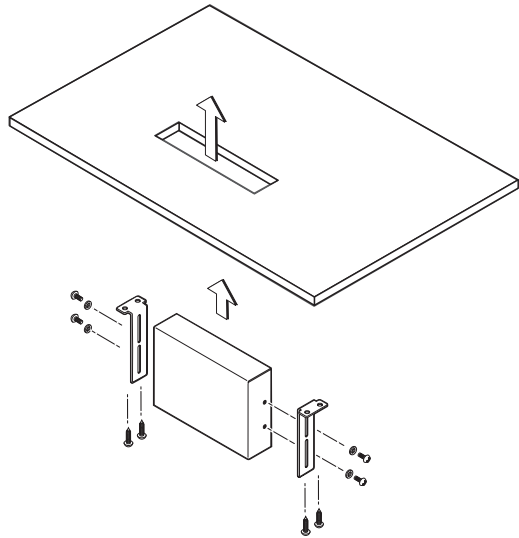


Preparing the line driver for under-desk mounting

1. If rubber feet were previously attached to the bottom of the unit, remove them.
2. Attach the mounting brackets to the line driver with the provided machine screws as shown in the previous figure.
3. Hold the unit with the attached brackets against the underside of the table or other furniture. On the mounting surface, mark the location of the bracket's screw holes.
4. Drill $\frac{3}{32}$ " (2 mm) diameter pilot holes, $\frac{1}{4}$ " (6.3 mm) deep in the mounting surface at the marked screw locations.
5. Insert #8 wood screws into the four pilot holes. Tighten each screw into the mounting surface until slightly less than $\frac{1}{4}$ " of the screw head protrudes.
6. Align the mounting screws with the slots in the brackets and place the unit against the surface, with the screws through the bracket slots.
7. Slide the unit slightly forward or back, then tighten all four screws to secure it in place.
8. Attach input and output cables. See chapter 3.

Furniture mounting — through-desk (CVEQ 100 only)

To mount the CVEQ 100 through furniture, use the optional VersaTools through-desk mounting kit (Extron MBD 129, part #70-077-02), as follows.



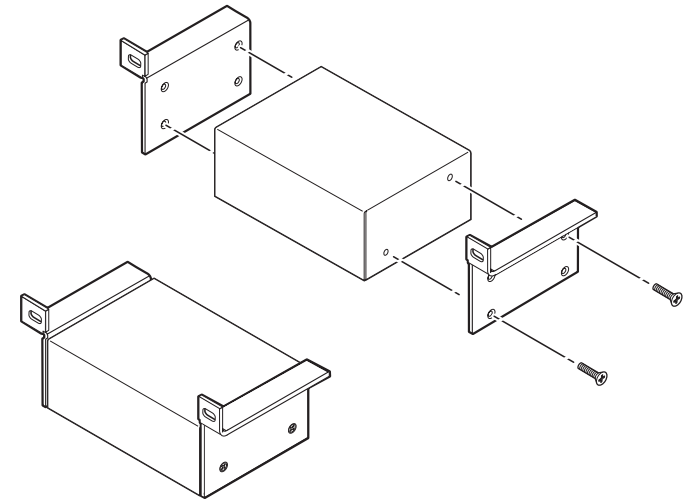
Preparing the CVEQ 100 for through-desk mounting

1. If rubber feet were previously attached to the bottom of the unit, remove them.
2. Attach the mounting brackets to the CVEQ 100 with the provided machine screws as shown in the previous figure.
3. Hold the unit with the attached brackets against the underside of the table or other furniture. On the mounting surface, mark the location of the bracket's screw holes.
4. Mark the opening on the desk using a soft pencil. The opening should be slightly larger than the dimensions of the unit.
Use an appropriate saw to cut the opening. If needed, enlarge the hole with a file or sandpaper.
5. Drill $\frac{3}{32}$ " (2 mm) diameter pilot holes, $\frac{1}{4}$ " (6.3 mm) deep in the mounting surface at the marked screw locations.
6. Insert #8 wood screws into the four pilot holes. Tighten each screw into the mounting surface until slightly less than $\frac{1}{4}$ " of the screw head protrudes.
7. Align the mounting screws with the slots in the brackets and place the unit against the surface, with the screws through the bracket slots.
8. Slide the unit slightly forward or back, then tighten all four screws to secure it in place.

9. Attach input and output cables. See chapter 3.

Back of the rack mounting (SVEQ 100 only)

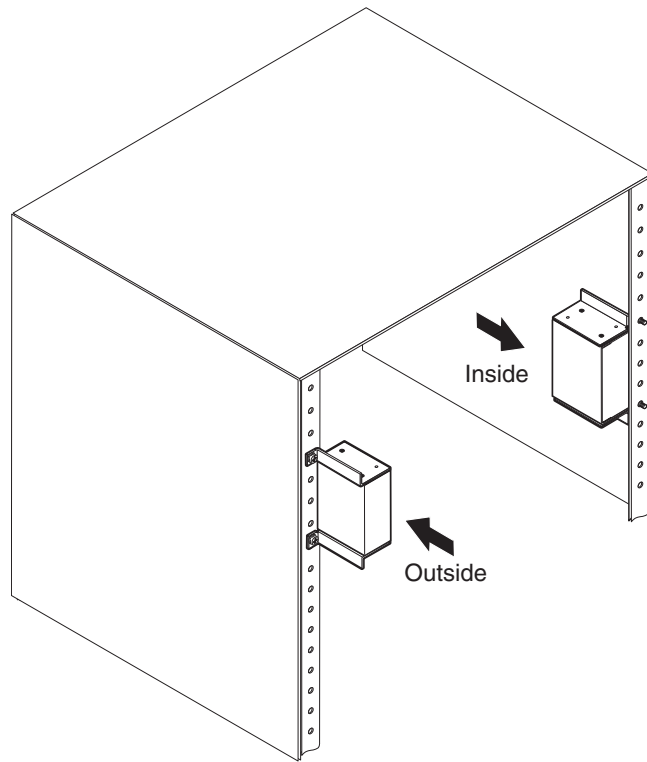
The SVEQ 100 can be mounted to the rear of a rack using the Extron VersaTools MBB 100 back of the rack mounting kit (part #70-367-01). The kit allows the product to be vertically mounted to the front or rear rack supports and facing either towards the front or the rear of the rack.



Using the MBB 100 back of the rack kit

1. If necessary, remove the feet from the bottom of the line driver.
2. Remove two screws from one side of the unit. Retain the screws for possible later reassembly without the bracket.
3. Attach one bracket to the side of the unit using the longer screws included in the kit.
4. Repeat steps 2 and 3 on the other side of the unit.
5. Mount the unit to the rack using the two included rack screws (see the following illustration). The SVEQ 100 can be vertically mounted facing in either direction. See the following diagram.
7. Attach input and output cables. See chapter 3 for details on wiring.

NOTE Only VersaTools products and most IP Link products can be mounted using the back of the rack mounting kit.

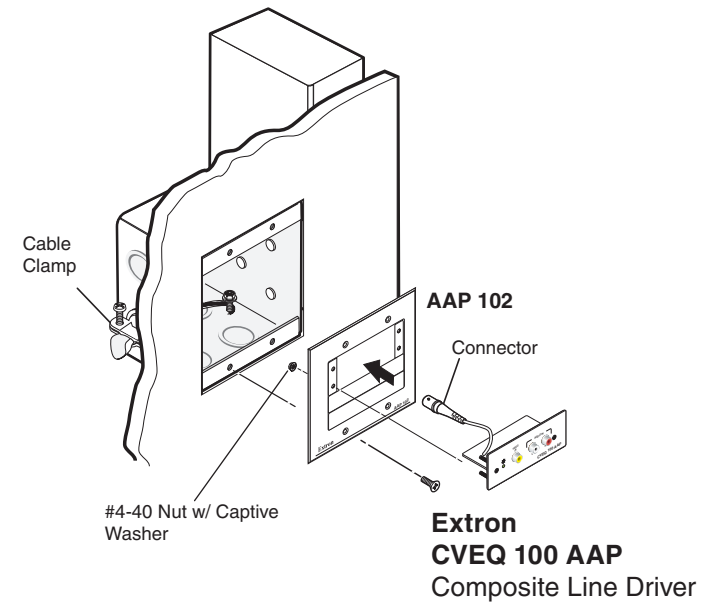


SVEQ 100 back of the rack installation example

Installing the CVEQ 100 AAP/SVEQ 100 AAP

The CVEQ 100 AAP and SVEQ 100 AAP are double space high architectural adapter plate products that mount in a wall or furniture using an optional mounting frame.

1. Remove power from the line driver by disconnecting the power supply.
2. Attach the mounting frame to wall box.
3. Route output cables through the wall box and frame and connect them to the line driver.
4. Mount the line driver to the mounting frame with machine screws, as shown in the following illustration. Take care not to damage the output cable(s), which fit through the mounting frame and into the wall box.



Mounting the line driver to a wall box

5. Reconnect the power supply, cable all products (see chapter 3), and restore power to the equipment.

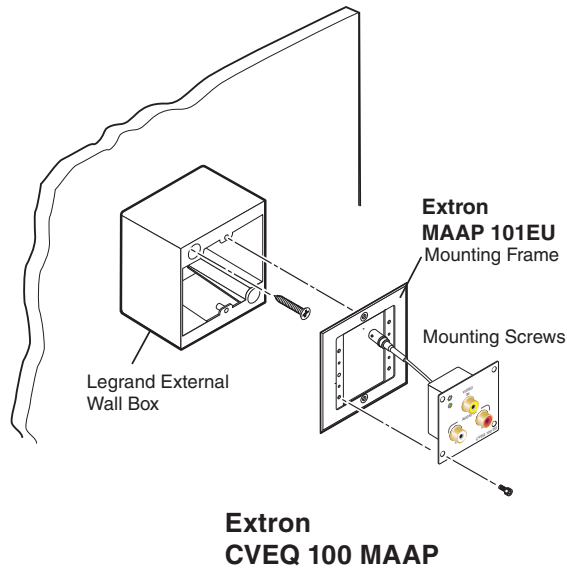
Installation, cont'd

Installing the CVEQ 100 MAAP/SVEQ 100 MAAP

The CVEQ 100 MAAP and SVEQ 100 MAAP are three space high mini architectural adapter plate products that mount in a wall or furniture using an optional mounting frame or European cable channel system.

Mounting in an external wall box

1. Remove power from the line driver by disconnecting the power supply.
2. Attach the mounting frame to the wall box.
3. Route output cables through the wall box and frame, and connect them to the line driver.
4. Mount the line driver to the mounting frame with machine screws, as shown in the following illustration. Take care not to damage the output cable(s), which fit through the mounting frame and into the wall box.

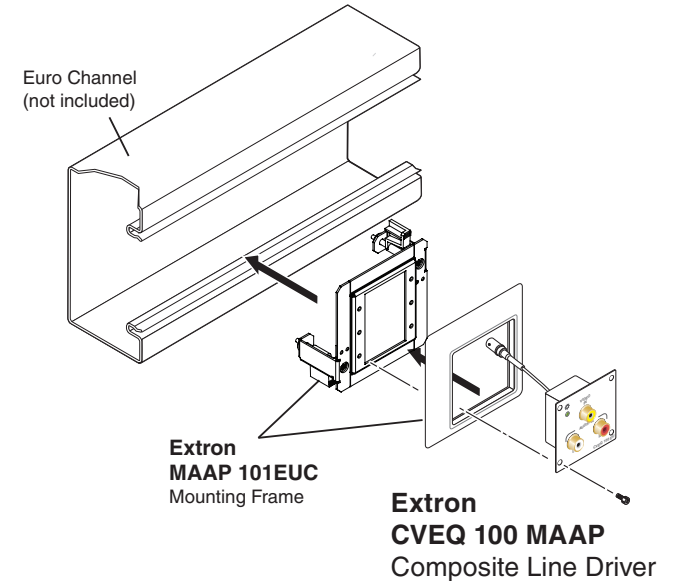


Mounting the line driver in a wall box

5. Reconnect the power supply, cable all equipment (see chapter 3), and restore power to the equipment.

Mounting in a European cable channel

1. Remove power from the line driver by disconnecting the power supply.
2. Attach the MAAP adapter plate to the junction box.
3. Place the cover frame between the adapter plate and the line driver, route the output cables through the frame, and connect them to the line driver.
4. Fasten the line driver to the adapter plate, as shown below.



Mounting the line driver in a Euro channel

5. Reconnect the power supply, cable all equipment (see chapter 3), and restore power to the equipment.

Installing the CVEQ 100 D/SVEQ 100 D

The CVEQ 100 D and SVEQ 100 D are wall-mounted products and can be mounted into an electrical wall box. This section includes site preparation, wall box installation, and the mounting of the line driver in the wall box.

NOTE *The line driver must be installed into an Underwriters Laboratories (UL) approved electrical wall box. The box is not included with the line driver; the installer is responsible for obtaining and installing the box.*

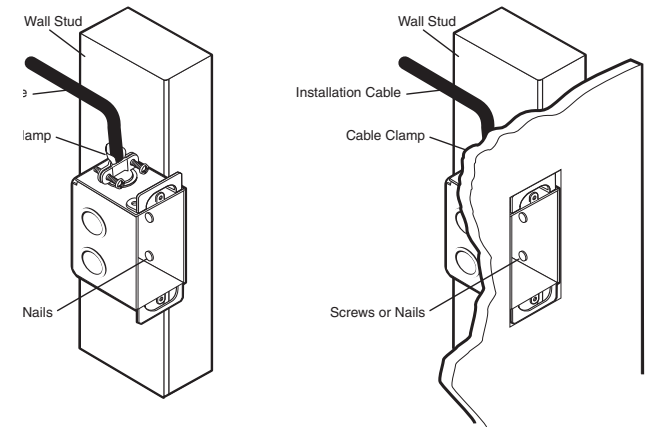
Preparing the site and installing the wall box

Choose a location that allows cable runs without interference. Allow enough depth for both the wall box and the cables. You may need to install the cables into the wall or conduits before installing the line driver.

The line driver can be installed in a standard one-gang electrical wall box. The installation must conform to national and local electrical codes. A dimensional drawing and a cutout template of the line driver are provided in appendix B of this manual.

NOTE *The cutout template shown in appendix B is not full size. Pay attention to the measurements shown on the template.*

1. Mark the guidelines for the opening on the wall.
 - If the line driver will be installed in a wall box, place the box against the installation surface and draw a line on it around the outside of the box.
 - If the line driver will be installed without a wall box (fastening it directly to the wall), measure and mark the surface for the cutout area indicated in the cutout template.
2. Cut out the material from the marked area.
3. Check the opening size by inserting the wall box (if used) or the line driver (if no box is used) into the opening. The box and line driver should fit easily into the opening. Enlarge or smooth the edges of the opening if needed.
4. Feed cables through the wall box punch-out holes, and secure them with cable clamps to provide strain relief.
5. Insert the wall box into the opening, and attach it to the wall or stud using nails or screws. The front edge should be flush with the outer wall surface. See the following illustration.



Attaching the wall box to a wall stud

If attaching the wall box to wood, use four #8 or #10 screws or 10-penny nails. A minimum of ½" (1.3 cm) of screw threads must penetrate the wood.

If attaching the wall box to metal studs, use four #8 or #10 self-tapping sheet metal screws or machine bolts with matching nuts.

Mounting the line driver

Before mounting the line driver and if has not already been tested, test the system to make sure that the connections and settings are correct. See "Testing and troubleshooting" in this chapter.

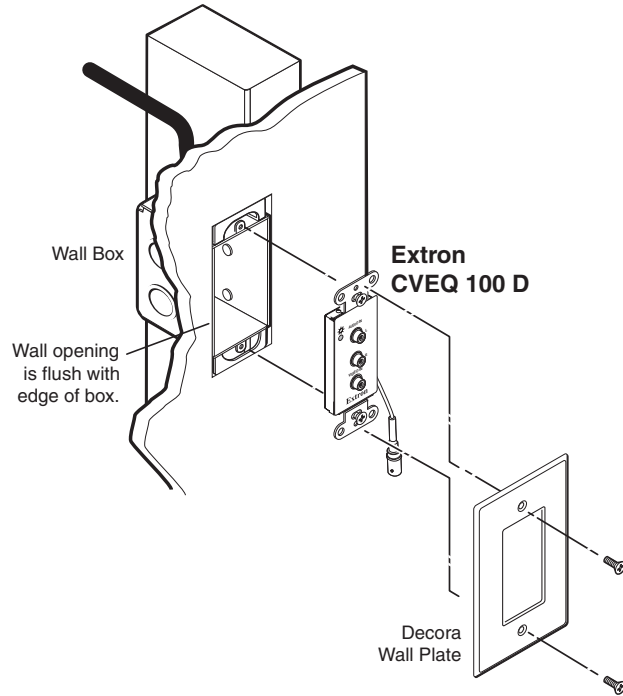
If the system is operating correctly, the line driver can be installed in the wall. Adjust the gain and equalization, and set the Audio Out switch to Stereo or Dual Mono before fastening the line driver into the wall box. The controls and cables will be inaccessible after installation. See "Rear Panel Features and Operation" in chapter 3 for details about settings and adjustments.

Continue mounting the line driver by following the steps below.

1. Remove power from the line driver by disconnecting the power supply from the AC source.
2. Connect the output cables to the rear of the device.
3. Place the line driver through the opening in the wall and into the wall box. Take care not to damage the output cable(s), which fit behind the line driver at the back of the wall box.

Installation, cont'd

4. Mount the line driver to the wall box with machine screws as shown in the following illustration.



Mounting the line driver to a wall box

5. Attach the Decora® wall plate to the line driver as shown in the illustration above.
6. Reconnect the power supply, connect input cables to the line driver, and restore power to the equipment.

Testing and troubleshooting

1. Apply power to the line driver. The power/signal LED on the line driver lights amber (power) or green (video input).
2. If the LED does not light, check the wiring at both the line driver and the power supply, and make sure the power supply is connected to a power source.

If the image does not appear or there is no sound

1. Make sure that all the devices are powered on.
2. Ensure that the connectors are wired correctly at both ends of the cables. Audio cables must be wired for an unbalanced stereo input signal and for the appropriate (unbalanced or balanced) output signal.

3. Check the video source's user's guide or contact Extron to determine if there are special requirements to output video to the external video port.
4. Call the Extron S3 Sales and Technical Support Hotline if the image still does not appear or there is no sound.

If the image is not displayed correctly

1. If the picture is too bright or too dark, or if the edges of the image seem to exceed their boundaries, or if thin lines and sharp edges look thick and fuzzy, change the gain setting.

If the picture appears and is stable, but it has ghosting or blooming, verify that the video input is properly terminated. If the problem is not resolved by changing the termination, try using a different input cable. Poor quality or damaged cable can cause ghosting and blooming.

2. If the picture still is not displayed correctly, call the Extron S3 Sales and Technical Support Hotline.



3

Chapter Three

Operation

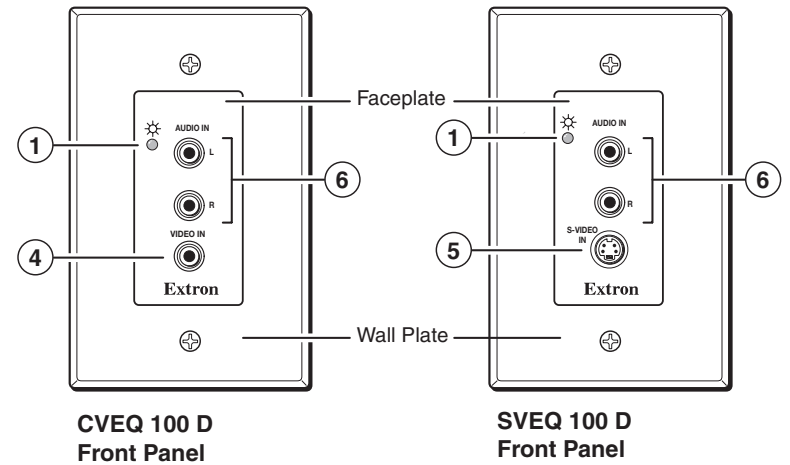
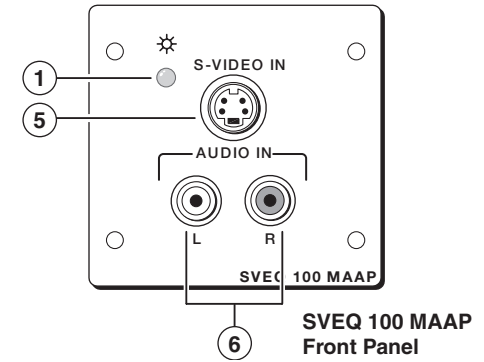
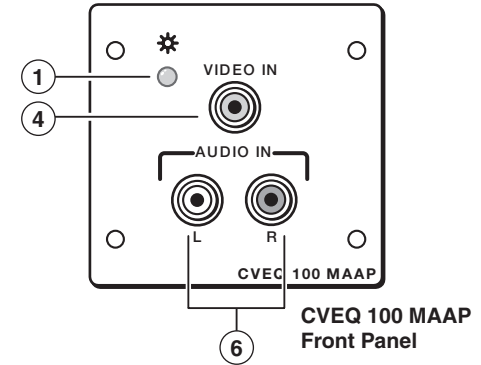
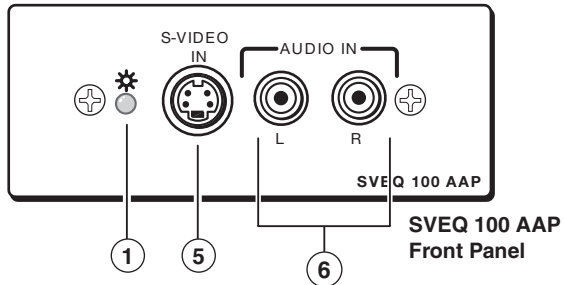
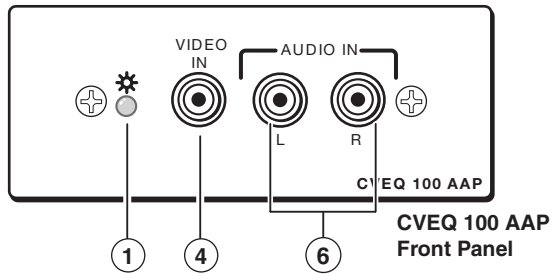
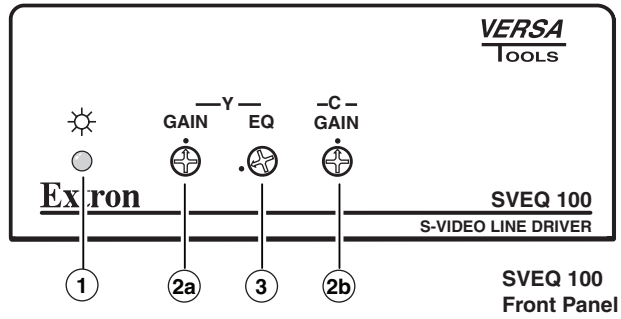
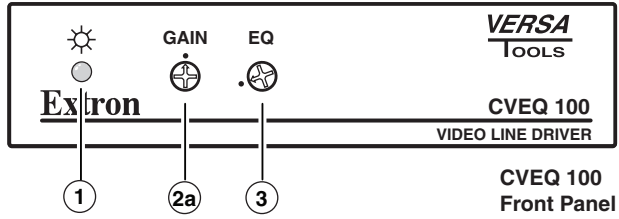
Front Panel Features and Operation

Rear Panel Features and Operation

Replacing the Decora Faceplate
(CVEQ 100 D and SVEQ 100 D)

Operation

Front Panel Features and Operation



Operation

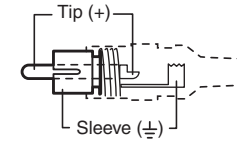
- ① **Power indicator LED** — This LED lights:
 - Amber when the line driver is receiving full power (this applies to all models except the CVEQ 100 and SVEQ 100, which light green instead).
 - Green when the line driver is receiving a video signal (this only applies to the D, AAP, and MAAP models).
- ②a **Gain potentiometer (CVEQ 100 and luma of SVEQ 100)** — Use a small screwdriver to rotate this potentiometer to adjust the CVEQ 100's gain and the SVEQ 100's luminance gain when the line driver is connected to long output cables. The adjustment range is -1 dB to +3 dB. The default is unity (the dot position). See "Gain adjustment control" in this chapter.
- ②b **Gain potentiometer (chroma of SVEQ 100)** — Use a small screwdriver to rotate this potentiometer to adjust the chroma gain when the SVEQ 100 is connected to long output cables. The adjustment range is 0 dB to +10 dB. The default is unity (the dot position). See "Gain adjustment control" in this chapter.
- ③ **Equalization (EQ) potentiometer** — Use a small screwdriver to rotate this potentiometer to adjust equalization when the line driver is connected to long output cables. The adjustment range is 0 dB to +7 dB. The default is set to 0 dB (the dot position). See "Equalization (EQ) adjustment control" in this chapter.
- ④ **Video input connector** — Connect a composite video input source to this RCA connector.
- ⑤ **S-video input connector** — Connect an S-video input source to this 4-pin mini DIN connector. See the following pinout table.



S-video Pinout Table

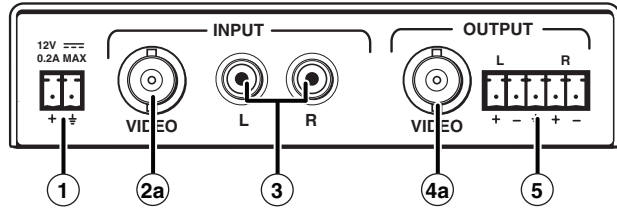
PIN	NAME	DESCRIPTION
1	GND	Ground (Y)
2	GND	Ground (C)
3	Y	Luminance
4	C	Chrominance

- ⑥ **Audio input connectors** — Connect an unbalanced stereo audio source to these left (L) and right (R) RCA connectors. Wire the male connector as shown in the following illustration.

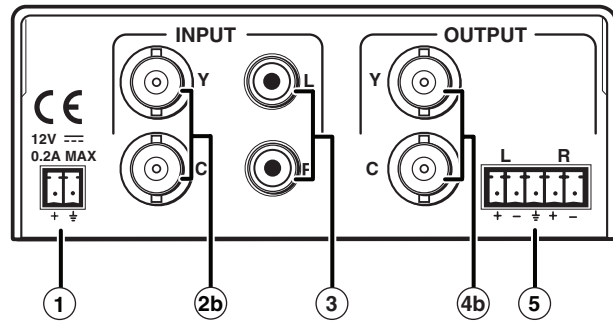


Operation

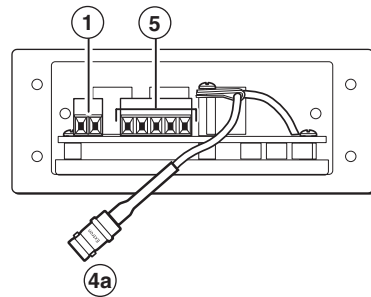
Rear Panel Features and Operation



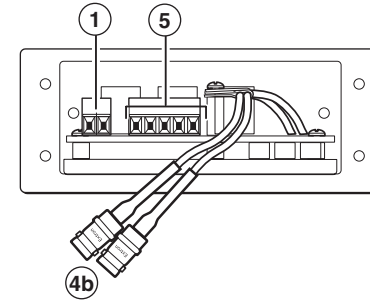
CVEQ 100 Rear Panel



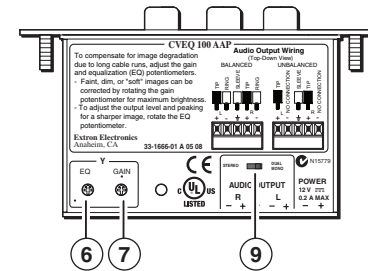
SVEQ 100 Rear Panel



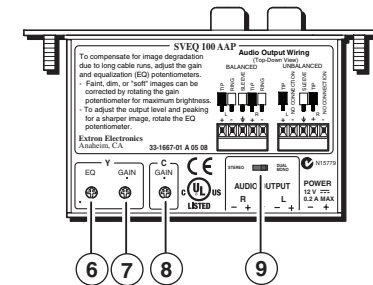
CVEQ 100 AAP Rear Connectors



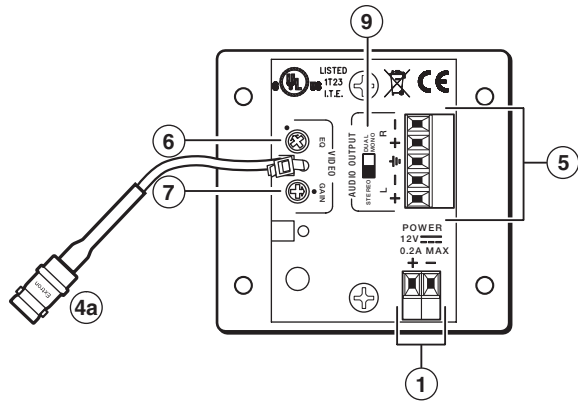
SVEQ 100 AAP Rear Connectors



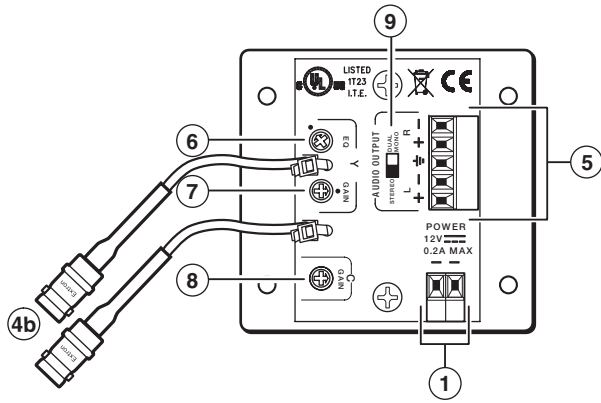
CVEQ 100 AAP Rear Controls



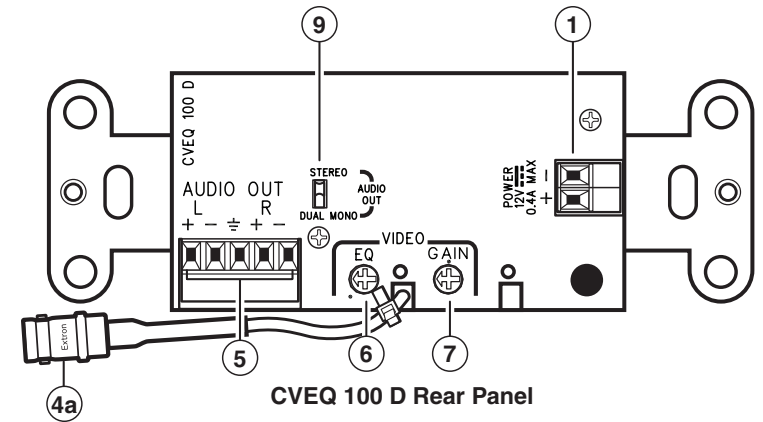
SVEQ 100 AAP Bottom Controls



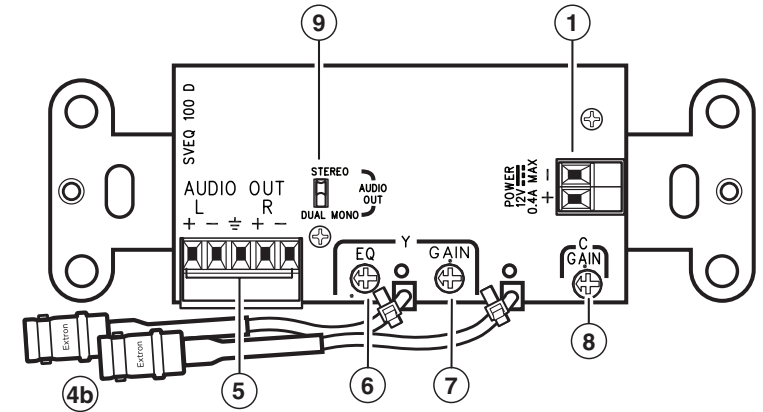
CVEQ 100 MAAP Rear Panel



SVEQ 100 MAAP Rear Panel

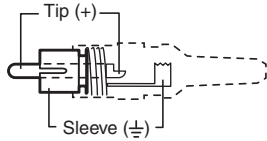


CVEQ 100 D Rear Panel



SVEQ 100 D Rear Panel

- ① **Power connector** — Connect the external 12 VDC power supply into this 2-pin, 3.5 mm direct insertion connector. The power supply is included with the unit. The "Power supply wiring" section in this chapter explains how to wire the connector.
- ②a **Video input connector** — Connect a composite video input source to this BNC connector.
- ②b **S-video input connectors** — Connect an S-video input source to these BNC connectors.
- ③ **Audio input connectors** — Connect an unbalanced stereo audio source to these left (L) and right (R) RCA connectors. Wire the male connector as shown in the following illustration.

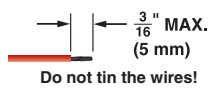
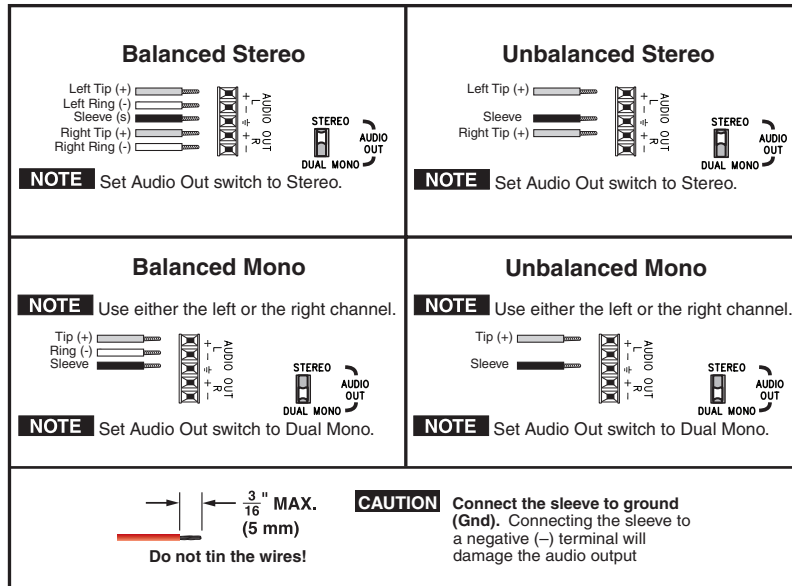


- 4a **Video output connector** — Connect a composite video output device to this female BNC connector.
- 4b **S-video Y connector (luma, white cable)** — Connect the luma of an S-video output device to this female BNC connector.

S-video C connector (chroma, yellow cable) — Connect the chroma of an S-video output device to this female BNC connector.

- 5 **Audio output connector** — Wire a balanced/unbalanced audio output device to this 3.5 mm, 5-pole, direct insertion captive screw connector. See the following wiring diagrams.

NOTE *Balanced audio is more resistant to noise and can be driven for longer distances than unbalanced audio. For best results, wire the output for balanced audio.*

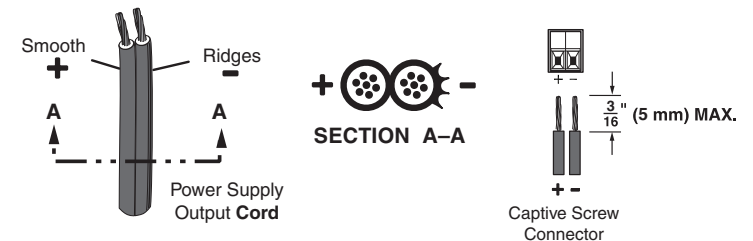


- 6 **Output equalization (EQ) potentiometer** — Use an Extron Tweaker (a small screwdriver) to rotate this control to adjust equalization when the line driver is connected to long output cables. The adjustment range is 0 dB to +7 dB. The default is set to 0 dB (the dot position). See "Equalization (EQ) adjustment control" in this chapter.
- 7 **Output gain potentiometer (luma)** — Use an Extron Tweaker (a small screwdriver) to rotate this control to adjust the CVEQ's gain or the SVEQ's luminance gain when the line driver is connected to long output cables. The adjustment range is -1 dB to +3 dB. The default is unity (the dot position). See "Gain adjustment control" in this chapter.
- 8 **Output gain potentiometer (chroma)** — Use an Extron Tweaker (a small screwdriver) to rotate this control to adjust the SVEQ's chrominance gain when the line driver is connected to long output cables. The adjustment range is 0 dB to +10 dB. The default is unity (the dot position). See "Gain adjustment control" in this chapter.
- 9 **Audio output select switch** — Use this switch to select either stereo (up) or dual mono (down) output. When set for dual mono, the left and right channels output the same signal (either channel or both channels can be used). The audio output can be wired for balanced/unbalanced mono or stereo output. The wiring and the switch setting must match.

Power supply wiring

Wire the line driver's power connector as shown below.

NOTE *The CVEQ 100 and SVEQ 100 use a pre-wired captive screw power connector. The D, AAP, and MAAP models use direct insertion connectors.*



Power connector wiring

CAUTION Power supply voltage polarity is critical. Incorrect voltage polarity can damage the power supply and the line driver. Identify the power cord negative lead by the ridges on the side of the cord.

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

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

NOTE Do not tin the power supply leads before installing in the direct insertion connector. Tinned wires are not as secure in the connectors and could be pulled out.

Gain adjustment control

The gain control adjusts picture brightness by compensating for signal amplitude loss caused by cable resistance. To adjust the output gain, view the display while using a small, flat-blade screwdriver to rotate the potentiometer. This control produces a gain adjustment ranging from -1 dB to +3 dB (CVEQ) and luma of SVEQ) and from 0 dB to +10 dB (chroma of SVEQ). Select the setting that gives the best picture brightness.



CVEQ 100 Series



SVEQ 100 Series

NOTE The gain control is a potentiometer with a mechanical stop at the high and the low end. After you have reached the high or low end of the adjustment, no change is apparent on the display. The default is unity (the dot position)

You can judge the adjustment visually by viewing the display. For a more precise setting use an oscilloscope or a waveform monitor connected to the far end of the output cable, and adjust the gain so that the level at the waveform monitor is 100 IRE.

Equalization (EQ) adjustment control

The equalization control adjusts the output level and peaking to get a sharp picture. This adjustment changes the level and peaking of the output signal to compensate for capacitance caused by up to 1000 feet (300 meters) of Extron MHR cable.

This control produces an equalization adjustment ranging from 0 dB to +7 dB (CVEQ and luma of SVEQ).



CVEQ 100 Series



SVEQ 100 Series

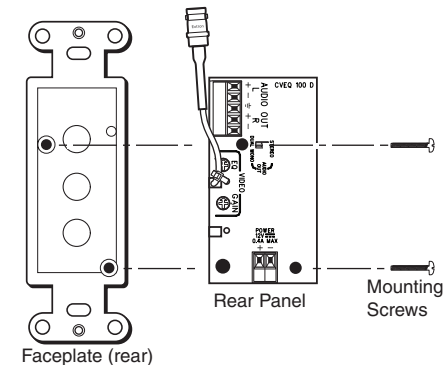
Use a small, flat-blade screwdriver to rotate this control. View the display and select the setting that gives the sharpest picture. For a more precise setting, you can use an oscilloscope or a waveform monitor connected to the far end of the output cable, and adjust the equalization so that the color burst ranges between -20 IRE and +20 IRE.

NOTE The EQ control is a potentiometer with a mechanical stop at the high and the low end. After you have reached the high or low end of the adjustment, no change is apparent on the display. The default is set to 0 dB (the dot position).

Replacing the Decora Faceplate (CVEQ 100 D and SVEQ 100 D)

The front faceplate is replaced by removing the two rear panel mounting screws, replacing the faceplate, then reattaching the two screws, as shown in the CVEQ 100 D example below.

NOTE The faceplate for the SVEQ 100 D is replaced in similar fashion.



Removing the CVEQ 100 D faceplate



A

Appendix A

Specifications, Part Numbers, and Accessories

Specifications

Included Parts

Optional Accessories

Specifications, Part Numbers, and Accessories

Specifications

Video

Gain	Composite video and Y of S-video: -1 dB to +3 dB (x0.9 to x1.4), adjustable C of S-video: 0 dB to +10 dB (x1 to x3), adjustable
Equalization	0 dB to +7 dB (x1 to x2) at 5 MHz, adjustable
Bandwidth (Y of S-video).....	185 MHz (-3 dB)
Output cable driving distance.....	Up to 1000' (300 m) with Extron MHR cable

Video input

Number/signal type	
CVEQ 100 Series.....	1 composite video
SVEQ 100 Series.....	1 S-video
Connectors	
CVEQ 100	1 female BNC
CVEQ 100 D, CVEQ 100 AAP, CVEQ 100 MAAP	1 female RCA
SVEQ 100	2 female BNC
SVEQ 100 D, SVEQ 100 AAP, SVEQ 100 MAAP	1 female 4-pin mini DIN
Nominal level	1 Vp-p for Y of S-video, and for composite video (including sync) 0.3 Vp-p for C of S-video
Minimum/maximum levels	
CVEQ 100 Series.....	0.4 to 2.0 Vp-p with no offset at unity gain
SVEQ 100 Series.....	For Y: 0.4 to 2.0 Vp-p with no offset at unity gain
Impedance.....	75 ohms
Return loss.....	<-25 dB @ 0 to 5 MHz
DC offset (max. allowable).....	4.0 V
Input coupling	AC

Video output

Number/signal type	
CVEQ 100 Series.....	1 composite video
SVEQ 100 Series.....	1 S-video

Connectors

CVEQ 100	1 female BNC
CVEQ 100 D, CVEQ 100 AAP, CVEQ 100 MAAP	1 female BNC attached via 4" pigtail
SVEQ 100	2 female BNC
SVEQ 100 D, SVEQ 100 AAP, SVEQ 100 MAAP	2 female BNC attached via 4" pigtails
Nominal level	1 Vp-p for Y of S-video, and for composite video (including sync) 0.3 Vp-p for C of S-video
Minimum/maximum levels.....	0.4 to 2.0 Vp-p (follows input)
Impedance.....	75 ohms
Return loss.....	-30 dB @ 5 MHz
DC offset.....	±5 mV with no input signal Floating: +0.1 to -0.6 V, depending on input signal content

Sync

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

Audio

Gain	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ±0.5 dB
THD + Noise	0.015% @ 1 kHz at nominal level
S/N.....	>100 dB at maximum output (unweighted)
Stereo channel separation	>80 dB @ 1 kHz
Output cable driving distance.....	Up to 1000' (300 m) with Extron SHR cable

Audio input

Number/signal type.....	1 stereo unbalanced
Connectors	2 RCA female
Impedance.....	20k ohms unbalanced, DC coupled
Nominal level	-10 dBV (316 mVrms)
Maximum level.....	+8 dBu (2.5 V), unbalanced at 1% THD+N

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

Specifications, Part Numbers, Accessories, cont'd

Audio output

Number/signal type	
CVEQ 100, SVEQ 100.....	1 stereo, balanced/unbalanced
All other models.....	1 stereo or dual mono (switch-selectable), balanced/unbalanced
Connectors	(1) 3.5 mm captive screw connector, 5 pole
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Nominal level	-10 dBV (316 mVrms), unbalanced; -2 dBu (632 mV), balanced output
Maximum level.....	+9 dBV (2.8 V) unbalanced, +17 dBu (5.6 V) balanced at 1% THD+N with a 10k ohm load

General

External power supply	100 VAC to 240 VAC, 50/60 Hz, external; to 12 VDC, 2 A, regulated
Power input requirements.....	12 VDC, 0.2 A
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, no vents
Mounting	
Rack mount	
CVEQ 100, SVEQ 100	Yes, with optional 1U, 9.5" deep rack shelf (RSU 129 or 60-190-03; RSB 129, 60-604-01); or 1U, 6" deep rack shelf (RSU 126, #60-190-10; RSB 126, 60-604-10); or VersaTools® 3.5" deep rack shelf (RSF 123, #60-190-20; RSB 129, 60-604-20).
All other models.....	No, but wall or furniture mountable
Furniture mount	
CVEQ 100, SVEQ 100	Yes, with optional mounting kits
CVEQ 100 D, SVEQ 100 D	Yes, directly, or with a standard electrical wall box or mud ring
All other models.....	Yes, with optional AAP or MAAP mounting faceplates

Enclosure type

CVEQ 100, SVEQ 100.....	Metal
CVEQ 100 D, SVEQ 100 D.	Metal rear enclosure, plastic faceplate
CVEQ 100 AAP, SVEQ 100 AAP	Metal faceplate, open at rear
CVEQ 100 MAAP, SVEQ 100 MAAP	Metal faceplate, metal rear enclosure

Enclosure dimensions

CVEQ 100	1.0" H x 4.3" W x 3.0" D (<1U high, quarter rack wide) (2.5 cm H x 11.0 cm W x 7.6 cm D) (Depth excludes connectors.)
SVEQ 100.....	1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide) (4.3 cm H x 11.0 cm W x 7.6 cm D) (Depth excludes connectors.)
CVEQ 100 D, SVEQ 100 D	
Faceplate.....	2.6" H x 1.3" W x 0.1" D (6.6 cm H* x 3.3 cm W x 0.3 cm D) (Fits the opening in a 1 gang Decora faceplate. *Height is 3.8" [9.5 cm], including mounting tabs.) (Depth excludes connectors.)
Device	2.7" H x 1.8" W x 0.75" D (6.9 cm H x 4.6 cm W x 1.9 cm D) (Depth excludes connectors; height excludes mounting tabs.)
CVEQ 100 AAP, SVEQ 100 AAP	
Faceplate.....	1.4" H x 3.5" W x 0.1" D (3.6 cm H x 7.1 cm W x 0.3 cm D) (double space high AAP plate)
Device	1.1" H x 2.8" W x 1.2" D (2.8 cm H x 7.0 cm W x 3.0 cm D) (Depth excludes connectors.)
CVEQ 100 MAAP, SVEQ 100 MAAP	
Faceplate.....	2.1" H x 2.2" W x .1" D (5.3 cm H x 5.7 cm W x 0.3 cm D) (three space MAAP plate)
Device	2.0" H x 1.4" W x 1.2: D (5 cm H x 3.6 cm W x 3.0 cm D) (Depth excludes connectors.)

Product weight

CVEQ 100, SVEQ 100.....	0.7 lbs (0.3 kg)
All other models.....	0.2 lbs (0.1 kg)

Specifications, Part Numbers, Accessories, cont'd

Shipping weight

CVEQ 100, SVEQ 100..... 3 lbs (2 kg)

All other models..... 2 lbs (1 kg)

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

Listings..... UL, CUL

Compliances..... CE, FCC Class A, VCCI, AS/NZS, ICES

MTBF..... 30,000 hours

Warranty..... 3 years parts and labor

Included Parts

These items are included in each order of the CVEQ 100 or SVEQ 100.

Included parts	Replacement part number
CVEQ 100 <i>or</i> SVEQ 100	60-812-01 60-813-01
User's manual	
12 VDC, 2 A external power supply	70-055-01
Rubber feet (not attached)	
IEC power cord	

These items are included in each order of the CVEQ 100 AAP or SVEQ 100 AAP.

Included parts	Replacement part number
CVEQ 100 AAP (black) <i>or</i> SVEQ 100 AAP (black) <i>or</i> CVEQ 100 AAP (white) <i>or</i> SVEQ 100 AAP (white)	70-663-02 70-664-02 70-663-03 70-664-03
User's manual	
12 VDC, 2 A external power supply	70-055-01
IEC power cord	

Specifications, Part Numbers, Accessories, cont'd

These items are included in each order of the CVEQ 100 MAAP or SVEQ 100 MAAP.

Included parts	Replacement part number
CVEQ 100 MAAP (black) <i>or</i>	70-667-02
SVEQ 100 MAAP (black) <i>or</i>	70-668-02
CVEQ 100 MAAP (white) <i>or</i>	70-667-03
SVEQ 100 MAAP (white) <i>or</i>	70-668-03
CVEQ 100 MAAP (RAL9010) <i>or</i>	70-667-05
SVEQ 100 MAAP (RAL9010)	70-668-05
User's manual	
12 VDC, 2 A external power supply	70-055-01
IEC power cord	

These items are included in each order of the CVEQ 100 D or SVEQ 100 D.

Included parts	Replacement part number
CVEQ 100 D composite video audio line driver <i>or</i>	60-867-01
SVEQ 100 D S-video audio line driver	60-868-01
Faceplate, black	
Faceplate, white	
Decora [®] wall plate, black	
Decora [®] wall plate, white	
12 VDC, 2 A external power supply	70-055-01
IEC power cord	
Tweaker (small screwdriver)	
User's manual	

Optional Accessories

These items are optional mounting accessories for the CVEQ 100 or SVEQ 100.

Description	Part number
RSF 123 VersaTools [®] rack shelf kit	60-190-20
RSB 123 VersaTools rack shelf	60-604-21
RSU 126 6" deep universal rack shelf kit	60-190-10
RSB 126 6" deep basic rack shelf	60-604-11
RSU 129 1U universal rack shelf kit	60-190-03
RSB 129 1U basic rack shelf	60-604-01
MBU 123 under-desk mount kit	70-212-01
MBU 125 under-desk mount kit	70-077-01
MBD 125 through-desk mount kit	70-077-02
MBB 100 back of the rack mount kit	70-367-01

These items are optional cables and adapters for the CVEQ 100 or SVEQ 100.

Description	Part number
MHR-2P Plenum S-video cable	22-129-0X
MHR-2 Non-Plenum S-video cable	22-123-0X
SVHSF-BNCM adapter (S-video female to 2 male BNCs)	26-541-0X
RCAF-BNCM/10 adapter (RCA female to BNC male, Qty. 10)	100-229-01
AV RCA/6 cable (RCA male to male 6')	IN8906

Specifications, Part Numbers, Accessories, cont'd

These items are optional accessories for the CVEQ 100 D or SVEQ 100 D.

Accessory	Part number
MHR-2 mini high resolution non-plenum cable, bulk	22-123-xx
MHR-2P mini high resolution plenum cable, bulk	22-129-xx
RG59 high resolution non-plenum cable, bulk	22-145-xx
RG59P high resolution plenum cable, bulk	22-146-xx
RG6 super high resolution non-plenum cable, bulk	22-098-xx
RG6P super high resolution plenum cable, bulk	22-164-xx
MHR-2 SV mini high resolution S-video cables	26-316-xx
AV RCA cable	IN8906, IN8920
STP cable	Various



Appendix B

Dimensions and Template

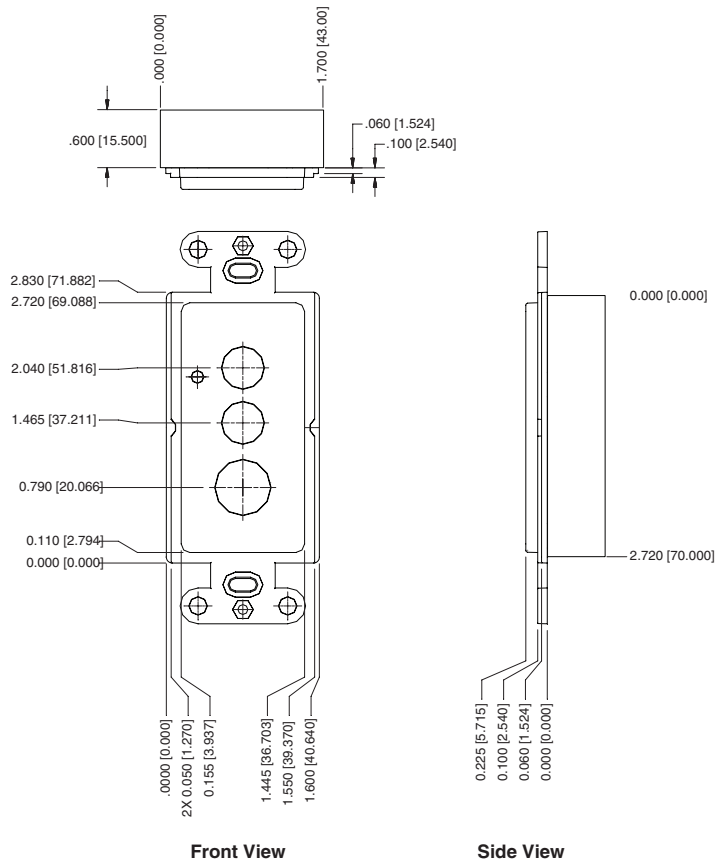
Decora Models Dimensions

Cut-out Template

Dimensions and Template

Decora Models Dimensions

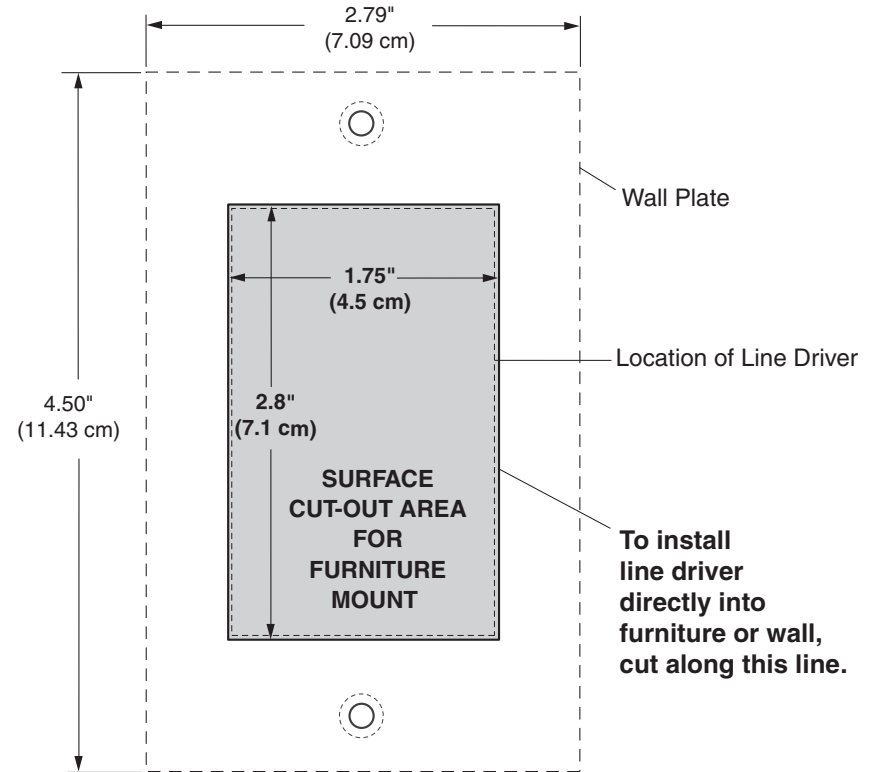
Dimensions are shown in inches [mm].



Cut-out Template

NOTE Always check and go by the dimensions given in this appendix. The template is **not** full size.

Cut-Out Template for the Extron CVEQ 100 D & SVEQ 100 D



TEMPLATE IS NOT FULL SIZE

Dimensions and Template
