

HSA 200 and HSA 222 Series

Hideaway Surface Access Products



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.

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Instrucciones de seguridad • Español

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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

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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.

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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(경비) 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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Conventions Used in this Guide

Notifications

WARNING: Potential risk of severe injury or death.

ATTENTION: Risk of property damage.

NOTE: A note draws attention to important information.

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

Topics covered in this section are:

- **About the Hideaway Surface Access Products**
- **Features**

About the Hideaway Surface Access Products

The Extron Hideaway HSA 200 series and HSA 222 series are furniture-mounted, architectural solutions for inconspicuous computer video or network access and control.

The HSA 200C (see figure 1) and HSA 200S (see [figure 2](#) on the next page) provide:

- One standard grounded AC receptacle
 - The US versions have US power receptacles
 - The international versions have several different types of power receptacles available, including Multi-region, UK, French, Israeli, Australian, Indian, European, and Swiss receptacles.

NOTE: The multi-regional AC outlet is fully compatible with Europlug, British, Indian, Danish, and Italian plug types. See the Multi-regional AC outlet guide on the Extron website, www.extron.com, for compatibility details on all plug types.

- Two RJ-45 Category (CAT) 6 connectors (terminated in accordance with the **TIA/EIA T568B** standard).
- One 15-pin female HD computer video connector
- One 3.5 mm stereo female jack.

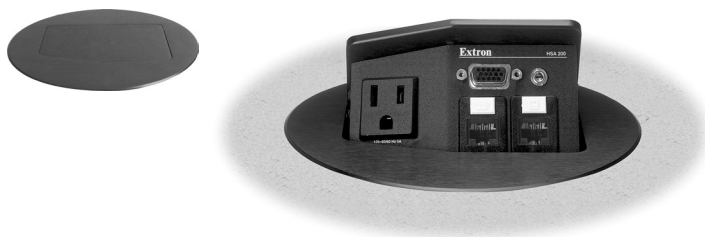


Figure 1. HSA 200C Hideaway Enclosure

The HSA 200CE and HSA 200SE provide all of the HSA 200C or HSA 200S features plus:

- An Extender board, which sends the input signal a greater distance and converts the audio input to a balanced signal (see [About the Extender Board Line Driver](#) on the next page for more details).



Figure 2. HSA 200S Hideaway Enclosure

The HSA 222S (see figure 3) and HSA 222C (US model only) provide:

- Two standard grounded AC receptacles
 - The US versions have US power receptacles
 - The international version has several different types of power receptacles available, including UK, French, Israeli, Australian, Indian, European, and Swiss receptacles.
- Two RJ-45 CAT 6 connectors



Figure 3. HSA 222S Hideaway Enclosure

NOTE: The International HSA 222 is only available with a square top plate.

For all models, cabling inside the enclosure runs the AC power line and RJ-45 signal lines from the HSA panel connectors to connectors on the bottom of the enclosure. For the HSA 200 model, the computer video signal is routed to 5 BNC connectors on pigtailed. On HSA 200S and HSA 200C units, the audio signal is sent to a 3-pole, 3.5 mm captive screw connector on a pigtail.

On HSA 200SE and HSA 200CE units, the audio signal is sent to a 5-pole, 3.5 mm captive screw connector on the back of the unit.

The installed enclosures fit nearly flush within a table or podium top (see figure 4), storing the connectors out of the way and out of sight. To access the connectors, the user presses down on the top of the enclosure, releasing a mechanical latch. A gas lift tips the connectors into view.

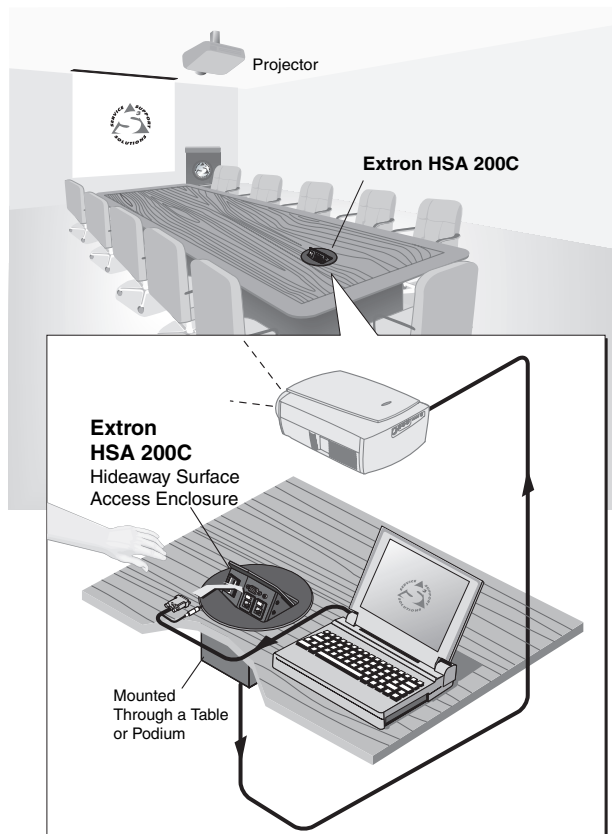


Figure 4. HSA 200C Application

About the Extender Board Line Driver

The Extron Extender board in the HSA 200CE and 200SE is a one-input VGA – UXGA/VESA line driver with audio. It boosts the video signal between a laptop or desktop computer and a monitor or projector. It has a 300 MHz (-3 dB) video bandwidth.

The Extender accepts one computer-video input and one stereo audio input, and features one buffered VGA-type RGB output and one stereo audio output. With an optional Mac/VGA adapter, the Extender board can also buffer Macintosh signals.

Features

All Models

- UL/c-UL listing
- CSA certification
- Easy access to connectors
- Durable mechanical movement and latching mechanism
- Available in a variety of surface finishes
- Includes a variety of RJ-45 connector bezel colors:
 - black • red • blue • gray • orange
 - white • ivory • yellow • green
- Compact size
- Computer video and audio connections (HSA 200 models only)
- RJ-45 (CAT 6) network, data, or communications connections (terminated in accordance with the **TIA/EIA T568B** standard)
- Grounded AC receptacles

HSA 200CE and HSA 200SE Models Only

HSA 200CE and 200SE models include an Extender line driver board, which provides several features not available on the standard models.

- **Signal boosting ability** — The gain/peaking adjustment increases video signal voltages to compensate for signal degradation caused by long cables. The Extender board can send a high resolution signal up to 250 feet (76.2 m) through the Extron BNC-5 Mini HR cable.
- **Sync restoration** — Each Extender board restores low level sync voltages found on many laptops (as low as two volts) to normal TTL levels.

Installation

Topics covered in this section are:

- **Installation Overview**
- **Preparing the Routing Template**
- **Preparing the Table and Mounting the Enclosure**
- **Preparing the Table with a Hole Saw (HSA 200C, HSA 200CE, or HSA 222C — US Version only)**
- **Underside Features and Cabling Connections**
- **Front Panel Connectors**
- **Pre-installation Testing and Troubleshooting (HSA 200CE and HSA 200SE Models Only)**

Installation Overview

Install and set up the HSA surface access enclosures as follows:

1. If you have an unprepared mounting template, prepare the template (see **Preparing the Routing Template** on the next page).
2. If desired, install the optional RJ-45 to RJ-11 conversion kits to replace one or more RJ-45 connectors with RJ-11 connectors. See the appropriate *RJ-45 to RJ-11 Conversion Kit* manual, for either the HSA 200 models or the HSA 222 models.
3. If desired, install the optional flexible conduit kit to replace the removable AC power cord. See the *Flexible Conduit Kit* manual.
4. Cut a hole in the surface where the enclosure will be installed and install the enclosure. The screw clamps secure the enclosure to the tabletop (see **Preparing the Table and Mounting the Enclosure** on page 7).
5. Run all cables necessary to support the AC power, RJ-45, and (for HSA 200 model only) video and audio connectors. Leave enough slack in the cables to connect them to the underside of the enclosure.
6. Turn off all of the equipment to be connected. Ensure that the equipment connected to the RJ-45, video, and audio connectors are all turned off and disconnected from the power source.
7. Connect the power, video, audio, and RJ-45 cables to the underside of the enclosure (see **Underside Features and Cabling Connections** on page 11).
8. **On HSA 200SE and HSA 200CE models**, set the gain switch.

9. Connect and turn on the input and output devices.
10. **For HSA 200SE and HSA 200CE model installations**, the picture should now appear and sound should be audible. If not, ensure that all devices are plugged in and receiving power. Check the cabling and gain setting, and make adjustments as needed.
11. Peel the protective coating from the top surface.

Preparing the Routing Template

Extron offers a metal routing template for each HSA model (see www.extron.com). Extron recommends using this template as a guide to cut the hole in the table where the HSA will be installed.

NOTE: The metal routing template is reusable. Do not discard this template when the installation is complete. Save it for installing future HSA enclosures of the same size.

1. Cut 1/2 inch x 4 inches strips of soft, finished lumber long enough to span the distance between the desired installation location on the mounting surface and the edges of the mounting surface (see figure 5).

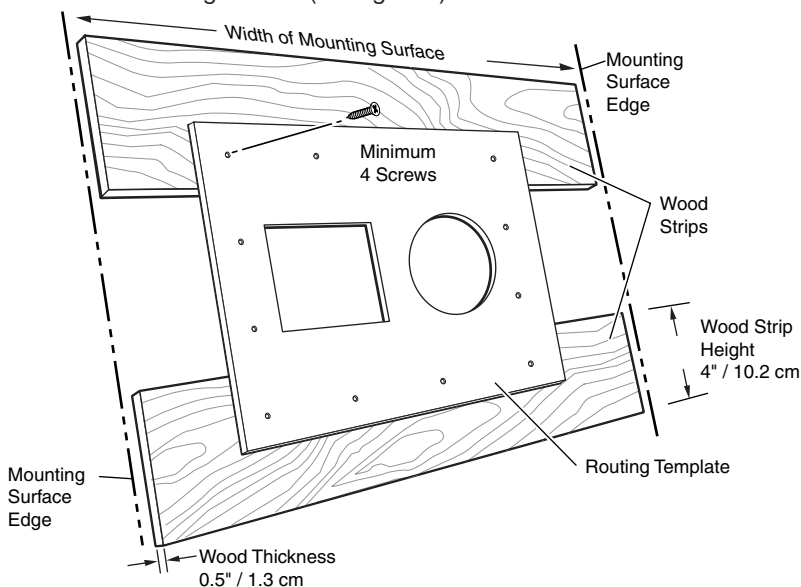


Figure 5. Prepared Mounting Template Assembly

1. These strips raise the routing template above the mounting surface to provide room for the router's collar, protect the mounting surface, and extend the reach of the routing template so that it can be clamped to the edge of the surface.
2. Using four or more short wood screws, secure the mounting template to the lumber strips.

ATTENTION: Do not allow the wood screws to protrude through the bottom of the wooden strips. Protruding screws will mar the table when the template is used.

Preparing the Table and Mounting the Enclosure

The preferred and **recommended** method for preparing the table is to use the appropriate Extron routing template and a router (see **Routing Templates** on page 29).

For an HSA 200C, HSA 200CE, or HSA 222C unit (**US version only**), another **preferred** method is to use a 6" hole saw.

Alternatively, for any model, you can use a paper cut-out template (see **Routing Templates** on page 29) and a sabre saw or keyhole saw, but this method is **not recommended**.

ATTENTION:

- The opening in the table for the HSA enclosure should be cut only by licensed and bonded craftspeople. Exercise care to prevent scarring or damaging the furniture.
- The routing templates for the various HSA models are not interchangeable. If you use the wrong template, you will cut an improperly-sized hole. If you use a larger template than required, the cut will result in gaps in the table surface on either side of the enclosure.
- The surfaces of the HSA enclosure have screws and other protruding hardware that could damage fine furniture. Do not rest the enclosure on unprotected furniture.

Preparing the Table With a Router

1. Locate the desired mounting location on the tabletop or other installation surface. Mark the location.
2. Place the mounting template assembly on the table, centered on the mounting location. Angle the template for the optimum positioning. If necessary, use a square to ensure that the template is properly positioned. Extron is not responsible for improperly-positioned HSA products.

ATTENTION: Ensure that only the wooden strips contact the furniture. Failure to do so may mar the furniture.

3. Once the template assembly is positioned properly, secure the assembly to the table with clamps (see **figure 6** on the next page).

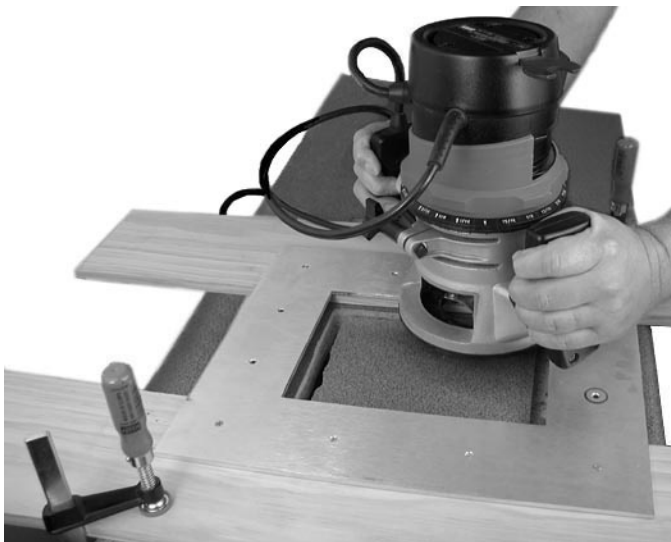


Figure 6. Cutting the Opening with a Router (Example)

4. Using a router with a 5/8 inch (or 16 mm) outside diameter guide bushing and a 1/2 inch (or 12 mm or 12.7 mm) diameter straight router bit, carefully cut the opening in the table surface (see figure 6).

CAUTION: Wear safety glasses when operating the router. Failure to comply can result in eye injury.

5. Remove the clamps and the routing template.

NOTE: The routing template is reusable. Do not discard the template when the installation is complete. Save it to install other HSA products of the same size.

Preparing the Table with a Hole Saw (HSA 200C, HSA 200CE, or HSA 222C — US Version only)

1. Locate the desired mounting location on the tabletop or other installation surface. Mark the 6 inches circle, then find the center and mark it as well.

CAUTION: Wear safety glasses when operating the router. Failure to comply can result in eye injury.

2. Using a 6 hole saw on a portable drill, cut the mounting hole at the desired location (see [figure 7](#) on the next page). Extron is not responsible for improperly positioned HSA products.

ATTENTION: Use a portable drill with sufficient power for the 6" hole saw. Exercise caution when handling the drill and hole saw. Care should be taken to protect the surface of the tabletop, podium, or other mounting surface from damage.

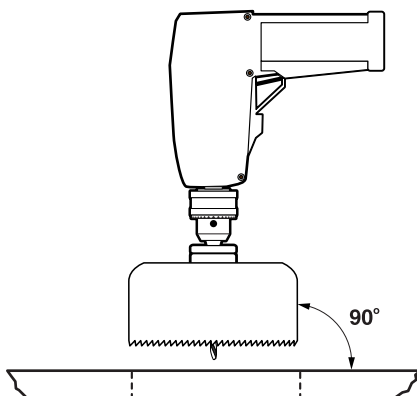


Figure 7. Cutting the Opening with a Hole Saw

Installing the HSA Enclosure (All)

1. Remove the screw clamps (2) on the sides of the enclosure.

CAUTION: The flanged edges of the top of the surface enclosure are bevelled to an ultra-fine thickness of less than 0.04 (4/100) inch (approximately 1 mm), and are therefore very sharp. These edges are also soft and may be easily nicked or bent. Exercise caution when handling and mounting the enclosure. Mishandling may result in injury to the installer or damage the appearance of the enclosure.

2. Remove the plastic strips that protect the corners of the enclosure. If a sticky residue remains, remove it with an appropriate metal cleaning product.

ATTENTION: Do not use isopropyl alcohol or other solvents to clean the HSA. Strong solvents will ruin some finishes.

3. Carefully lower the HSA enclosure into the hole to test the fit. If necessary, remove the enclosure and use a file or rasp to enlarge or smooth the edges of the opening.
4. From the underside of the table, reinstall the screw clamps on the enclosure at a height at which the clamp will reach the underside of the tabletop (see [figure 8](#) on the next page).

NOTE: Figure 8 shows an HSA 200 installation. Except for the video and audio connectors, the HSA 222 installation is identical.

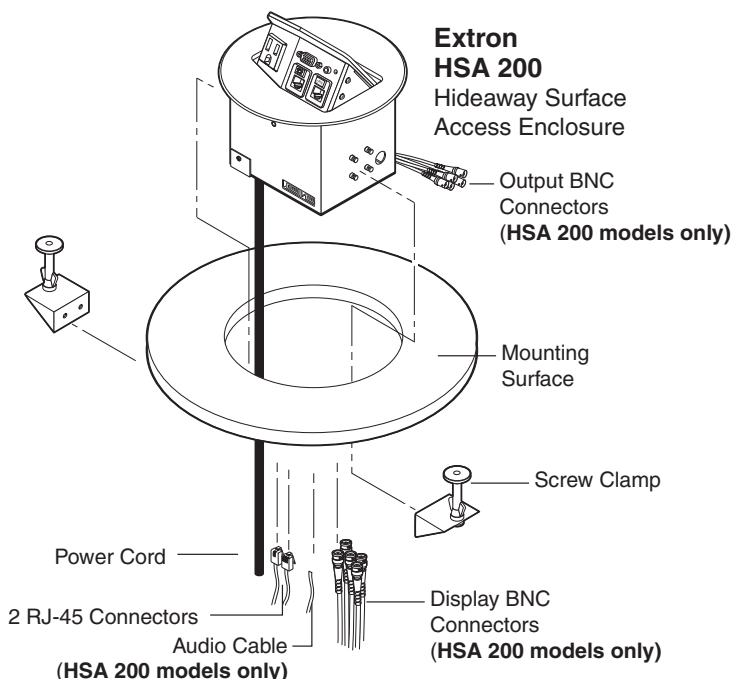


Figure 8. Mounting the HSA 200 or HSA 222 Enclosure

5. Snugly tighten the Phillips head screws on the screw clamps to secure the enclosure to the surface.

ATTENTION: Overtightening the Phillips head screws on the screw clamps can bend the clamp's horizontal flange.

7. Tighten the locking thumbscrews on the screw clamps to lock the clamp in position.
8. Peel any remaining protective coating from the enclosure.

Underside Features and Cabling Connections

Figure 9 on the next page shows the under-table connectors and other features that present on HSA 200CE models. Other HSA 200 and HSA 222 models have a subset of the same or similar features.

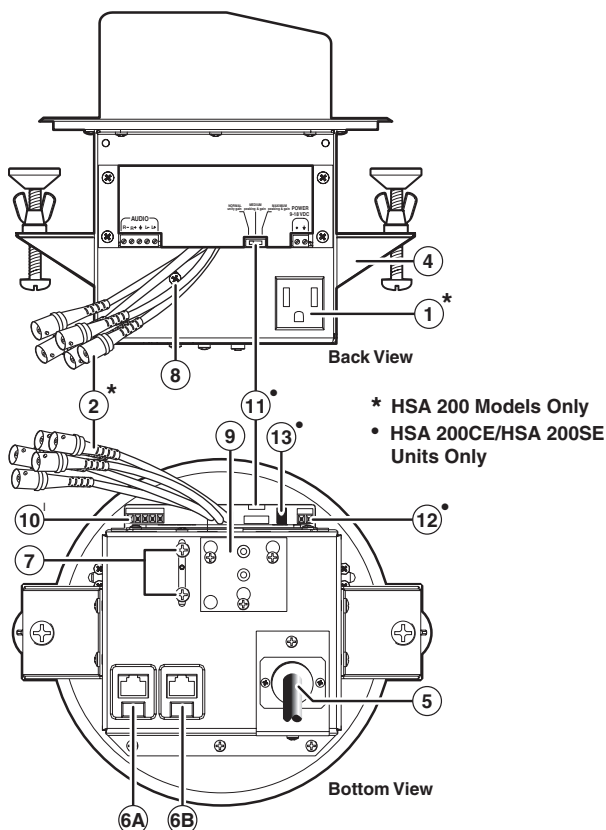


Figure 9. HSA 200CE Under-table Features

All HSA 200 Models Only

1 AC power outlet — Use this AC connector to:

- Plug in an external power supply to power the Extender board on the HSA 200CE or HSA 200SE.
- Provide AC power (5 amps max.) for loop through to one additional HSA 200 unit.
- Plug in a projector or other display device.

NOTE: This outlet is a US-style power outlet on both the US/domestic and international HSA 200 models. The power output is the same voltage and frequency as the power input.

- ② **RGBHV video output** — Connect the BNC cable from the projector, plasma screen, or other display device to these female BNC connectors.

HSA 200C and HSA 200S (no Extender board) — The output from these connectors is an unbuffered pass-through from the front panel VGA input.

HSA 200CE and HSA 200SE (Extender board) — The output on these connectors is buffered by the Extender board.

HSA 200C and HSA 200S (No Extender Board) Only

On HSA 200 models with no Extender board, the audio connection is part of the pigtail (see figure 10).

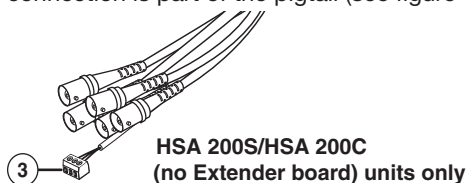


Figure 10. HSA 200S and HSA 200C Audio Connector

- ③ **Audio output connection** — This 3-pole direct insertion terminal outputs unbuffered, unbalanced audio, passed through from the front panel. The image on the right shows how to wire the connector.



All HSA 200 and HSA 222 Models

- ④ **Screw clamp bracket/screw clamp** — These two brackets/clamps hold the enclosure firmly in place in the mounting hole.
- ⑤ **AC power input connection** — Connect this cord to the power

NOTE: For US domestic versions, this power power cord is permanently connected to the HSA. Connect the power cord to a 125VAC, 60 Hz, 5A power source.

For international versions, this power cord is a removable IEC power cord. Connect the cord to a 220-240V, 50-60 Hz, 5A power source.



You can replace this connector with an optional Extron HSA 200/ HSA 222 Flexible Conduit Adapter kit.

- ⑥ **RJ-45 connectors** — Plug one end of a CAT 5 or CAT 6 twisted pair (TP) cable into each of these RJ-45 female connectors. Connect the other end to an appropriate telecommunications or data network or to an Extron TP product.

NOTES:

- All RJ-45 connectors are terminated in accordance with the **TIA/EIA T568B** standard.
- An RJ-11 (telephone) jack can be plugged directly into the RJ-45 jack.

Ensure that the bottom RJ-45 connections match up with the front panel RJ-45 connector locations (see figure 12). For example, match the front panel RJ-45 (CAT 6) network, data, or communications connection **5a** with the underside RJ-45 connector **6a**, match **5b** with **6b** and so forth.

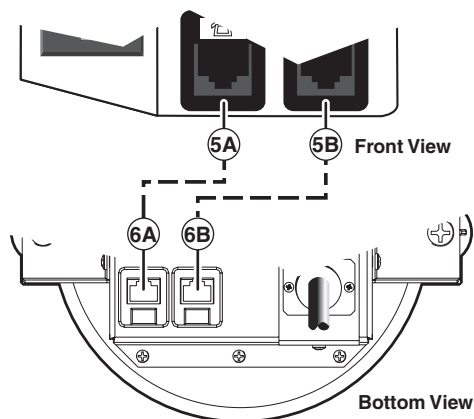


Figure 11. Configuration of RJ-45 connectors

- Latch locking screws** — These screws secure the latching mechanism to the enclosure. They must be loosened in order to adjust the top surface (see [Adjusting the Top Panel](#) on page 27) with the top surface adjustment screw **8**.
- Top surface adjustment screw** — After loosening the latch locking screws **7**, adjust the top surface of the tilt up panel with this screw. Tighten the latch locking screws after adjustment.
- Gas lift mounting plate** — The lower end of the gas lift is attached to this plate. The plate must be detached from the enclosure in order to remove the gas lift.

HSA 200CE and HSA 200SE (Extender Board) Only

- Audio output connection** — This 5-pole direct insertion terminal outputs unbalanced or balanced audio. See figure 12 to see how to wire the connector.



Figure 12. Extender Board Audio Connector Wiring

ATTENTION: Connect the sleeve to ground (Gnd).
Connecting the sleeve to a negative (-) terminal will damage the audio output circuits.

- 11 Gain switch** — To compensate for cable resistance and capacitance, use a Tweezer to slide this switch to select the level of video gain that yields the sharpest, smear-free picture.
- **Normal** — unity gain (no signal boost)
 - **Medium** — mid-level peaking and gain
 - **Maximum** — maximum amount of peaking and gain. Select this setting for use with longer cables.

NOTE: Adjust the gain before installing the HSA unit, as the gain switch may be inaccessible after installation.

- 12 Power supply connection** Plug the external power supply (included) output wires into this 2-pole direct insertion terminal (see Power connector wiring (below) to wire the connector).
- 13 Power LED** — Indicates when the Extender board is receiving power.

Power connector wiring

1. See figure 14. Plug the input connector of the included 100-240 VAC, 50/60Hz, 12 VDC power supply into the AC power outlet on the underside of the enclosure (see [figure 9](#), 1 on page 11).

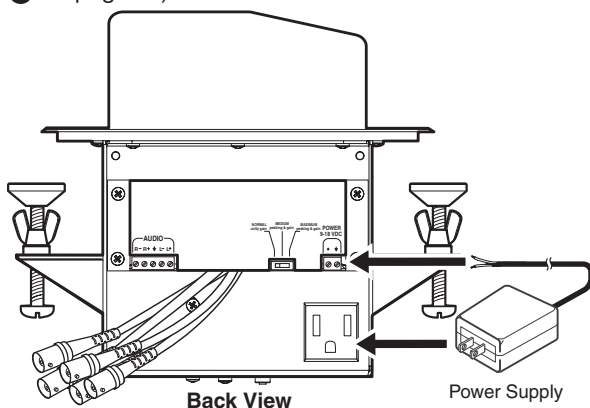


Figure 13. Powering the Extender Board

NOTE: This outlet is a US-style power outlet on both the US/domestic and international HSA 200 models. The power output is the same voltage and frequency as the power input and is an acceptable power input to the power supply included with the HSA.

2. Insert the external power supply (included) output wires into the 2-pole direct insertion captive screw terminal on the Extender board (see figure 14) and secure the wires.

ATTENTION: When connecting the power supply wires, voltage polarity is extremely important. Applying power with incorrect voltage polarity could damage the power supply and the Extender board in the HSA.

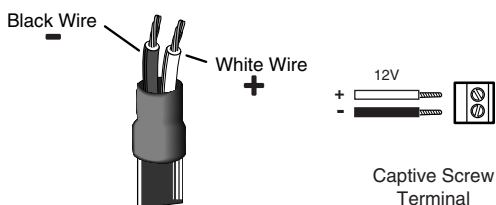


Figure 14. Power Connector Wiring

NOTES:

- Do not tin the stripped power supply leads. Tinned wires are not as secure in the captive screw terminals and could pull out.
- The two power cord wires must be kept separate while the power supply is plugged in. Remove power before continuing.
- To verify the polarity before connection, plug in the power supply with no load and check the output with a voltmeter.

Front Panel Connectors

Figure 15 shows the front panel of the HSA 200 models. Figure 15 shows the front panel of the HSA 222.

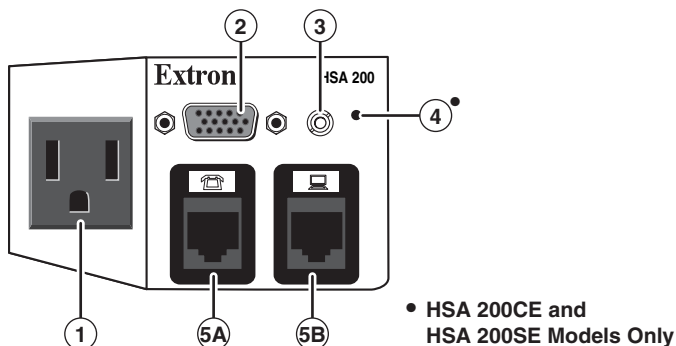


Figure 15. HSA 200 Front Panel Connectors

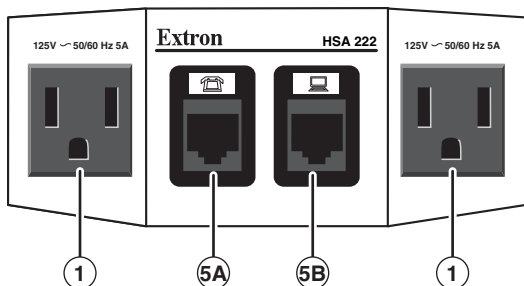


Figure 16. HSA 222 HSA 200 Front Panel Connectors

- ❶ **AC power outlets** — Plug a standard power cord into this connector to provide AC power (5 amps max.) for a laptop or other device. The power output will be the same voltage and frequency as power input. The power outlets will be appropriate to the model.

NOTE: The Multi-regional AC outlet is fully compatible with Europlug, British, Indian, Danish, and Italian plug types. See the Multi-regional AC outlet guide on the Extron website, www.extron.com, for compatibility details on all plug types.

- ❷ **Computer video input (HSA 200 models only)** — Plug the VGA-UXGA output from a computer into this 15-pin HD female connector.
- ❸ **Audio input connector (HSA 200 models only)** — Plug a 3.5 mm stereo plug into this jack for unbalanced audio input. Figure 17 shows how to wire the male plug.

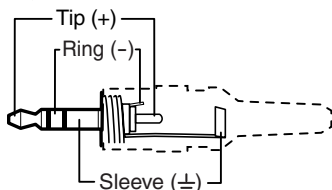


Figure 17. Audio Input Connector Plug

- ❹ **Power/Signal LED (HSA 200SE and HSA 200CE only)** — This LED lights green when power and an input signal are present. The LED lights amber when power is present but no input signal is present.
- ❺ **RJ-45 connectors** — Plug a CAT 5 or CAT 6 twisted pair (TP) cable into each of these RJ-45 female connectors for network, data, or communication connections.

When cabling the front panel and the underside of the enclosure (see [figure 18](#) on the next page), ensure that the bottom RJ-45 connections match up with the front panel RJ-45 connector locations. For example, match the front panel RJ-45

(CAT 6) network, data, or communications connection **5a** with the underside RJ-45 connector **6a** and match **5b** with **6b**.

If necessary, on the front panel, have a qualified service person replace the connector icon by prying the old icon off of the connector plug-in with a Tweezer (see figure 19) and snapping a new icon in place.

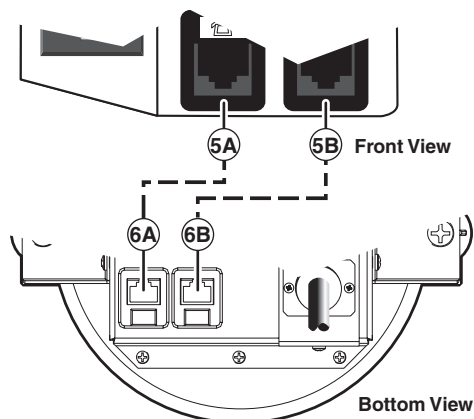


Figure 18. Configuration of RJ-45 Connectors

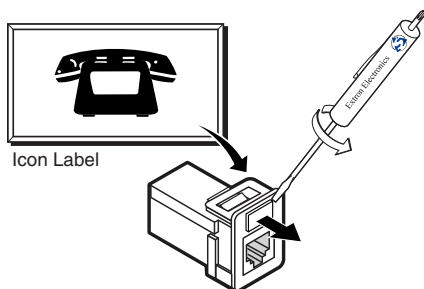


Figure 19. Changing the Connectors Icon

Pre-installation Testing and Troubleshooting (HSA 200CE and HSA 200SE Models Only)

Before installing an HSA 200 with an Extender line driver into furniture, test the system to make sure that the connections and settings are correct.

1. Apply power to the line driver. The power/signal LED on the line driver will light to indicate that the line driver is receiving power.

If the LED does not light, check the wiring at both the line driver and the power supply, and ensure that 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.** If the input is from a laptop computer and no picture appears, use a laptop breakout cable for the input connection. Check the computer's user's guide or contact xtron to determine if special commands are required to output video to the external video port. Also, many laptops' screens shut off after the external video port is activated.
- 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.
- 2.** 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.
- 3.** If the picture still is not displayed correctly, call the Extron S³ Sales and Technical Support Hotline.

Maintenance and Modifications

- **Removing and Replacing the Enclosure**
- **Replacing the Bezels**
- **Replacing the Gas Lift**
- **Adjusting the Top Panel**

The most probable corrective maintenance procedures for your HSA 200 or HSA 222 are leveling the top surface and replacing the gas lifts. Most of the maintenance procedures require removing the surface mount enclosure from the table.

Removing and Replacing the Enclosure

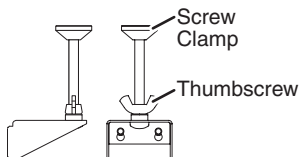
- The procedure for replacing the bezel in an **HSA 222 only** requires removing the HSA from the table.
- The procedure for replacing the gas lift requires removing the HSA 200 or HSA 222.
- The procedure for levelling the top surface **may** require removing the HSA.

Remove and replace the surface mount enclosure for maintenance as follows:

CAUTION: Ensure that AC power is disconnected before servicing the HSA unit.

1. Disconnect:
 - The IEC power cord
 - The RJ-45 connectors from the underside of the surface mount enclosure
 - **(HSA 200 models only)** Any device plugged into the AC power outlet
 - **(HSA 200 models only)** The BNC (video) connectors
 - **(HSA 200 models only)** The audio connector
 - **(HSA 200CE and HSA 200SE only)** The power supply connector

2. Loosen the locking thumbscrews on the screw clamps to unlock the clamp.
3. Loosen the screw clamps.
4. Remove the screw clamps on both sides of the enclosure. Lift the enclosure from the table.



CAUTION: The flanged edges of the top of the surface enclosure are bevelled to an ultra-fine thickness of less than 0.04 (4/100) inch (approximately 1 mm), and are therefore very sharp. These edges are also soft and may be easily nicked or bent.

Exercise caution when handling and mounting the enclosure. Mishandling may result in injury to the installer or damage the appearance of the enclosure.

NOTE: The surfaces of the HSA enclosure have screws and other protrusions that could damage fine furniture. Do not rest the enclosure on unprotected furniture.

5. Perform the desired maintenance procedure.
6. If the surface is not level, adjust the top surface (see [Adjusting the Top Panel](#) on page 27).
7. Carefully lower the HSA enclosure into the table opening.
8. From the underside of the table, reinstall the screw clamps on the enclosure at a height at which the clamp will reach the underside of the tabletop.
9. Snugly tighten the Phillips head screws on the screw clamps to secure the enclosure to the surface.

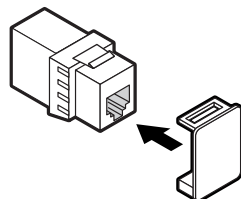
ATTENTION: Overtightening the Phillips head screws on the screw clamps can bend the clamp's horizontal flange.

11. Tighten the locking thumbscrews on the screw clamps to lock the clamp in position.
12. Reconnect all of the connectors removed in [step 1](#) on the previous page

Replacing the Bezels

The HSA ships with RJ-45/RJ-11 connector bezel plug-ins in a variety of colors and a black, blank bezel.

To change to a different color connector bezel or if a connector is not needed, replace the connector bezel plug-in on the front panel with a bezel of a different color or a blank bezel.



If no connector is desired, snap the interior RJ-45 connector onto the rear of the blank bezel plug-in to hold it conveniently out of the way. Retain the removed connector bezel plug-in for later use.

Replace a bezel as follows:

1. **(HSA 222 models only)** Remove the surface mount enclosure from the table (see **Removing and Replacing the Enclosure, steps 1** through **4** .
2. **(HSA 222 models only)** Remove the four Phillips head screws from the front access panel (see figure 20). Retain the screws. Lift the panel away from the enclosure.

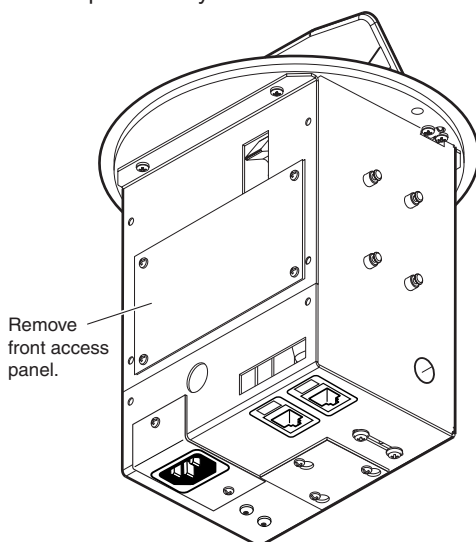


Figure 20. Removing the Front Access Panel (HSA 222 Models)

3. **(HSA 222 models only)** Disconnect both RJ-45 connectors from the underside of the enclosure by **simultaneously** performing steps **3a** and **3b**:
 - a. With a Tweezer in one hand, reach through the small access hole in the front of the enclosure (see **figure 21** on the next page) and gently pry outward on the front of the RJ-45 connector detent on the bezel plug-in,
— while you —
 - b. Reach your other hand through the front panel access hole and tilt the connector back.

This disconnects the connector from the interior of the lower enclosure without damaging the bezel plug-in.

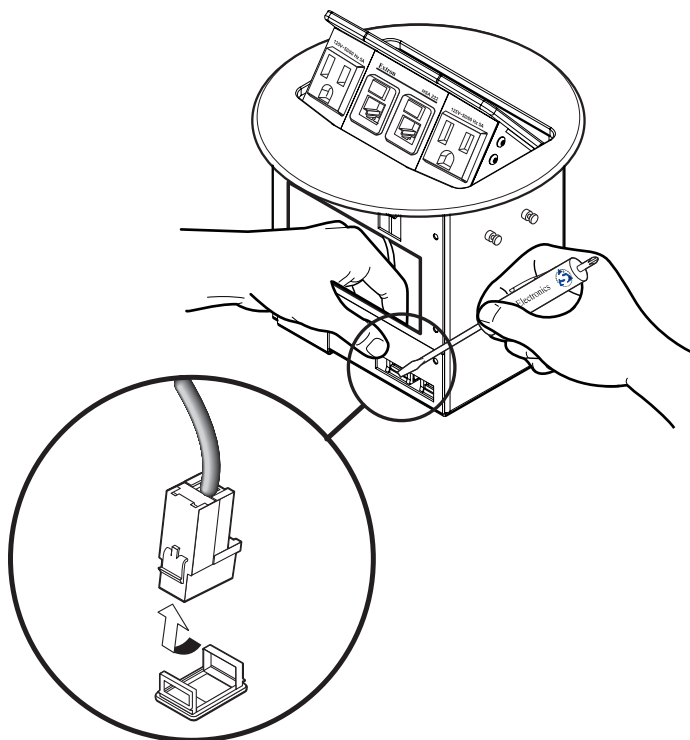


Figure 21. Releasing the Bezel Plug-in Detent (HSA 222 Models)

4. Remove the four 1/16" hex head screws on the right and left sides of the front panel (see figure 22). Retain the screws. Lift the panel away from the enclosure.

NOTE: Figure 23 shows an HSA 200 model. Removing the front panel from an HSA 222 is an identical procedure.

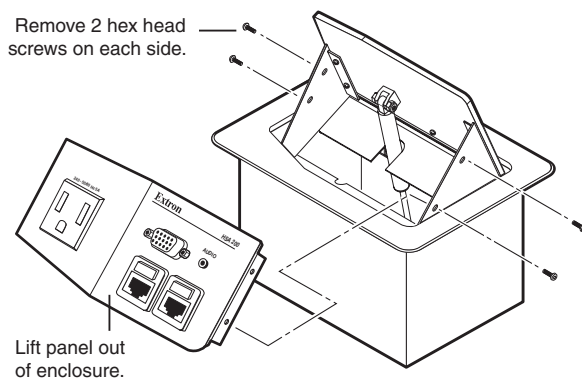


Figure 22. Removing the Front Panel

5. With a Tweezer, push down on and gently twist on the front of each RJ-45 connector detent to disconnect the connector from the rear of the front panel plug-in.
6. Pinch the top and bottom bezel detents together and push the bezel through the front panel.
7. Snap a replacement bezel in place. If necessary, replace the connector icon by prying the old icon off of the connector plug-in with a Tweezer (see figure 23) and snapping a new icon in place.

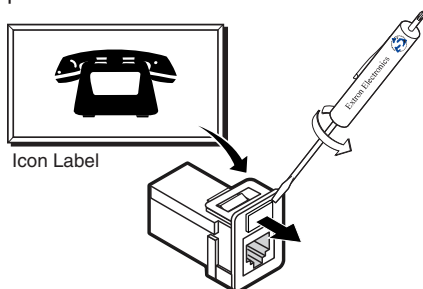


Figure 23. Changing the Connector Icon

8. Snap the internal RJ-45 connector onto the back of the front panel enclosure bezel plug-in.
9. **(HSA 222 models only)** Reach your hand through the front panel access hole and snap the lower internal RJ-45 connectors onto the back of the lower enclosure bezel plug-ins.
10. Replace the front panel in the surface mount enclosure and secure it in place with the hex head screws removed in step 4.
11. **(HSA 222 models only)** Replace the front access panel in the surface mount enclosure and secure it in place with the Phillips head screws removed in step 2.
12. **(HSA 222 models only)** Reinstall the surface mount enclosure (see [Removing and Replacing the Enclosure steps 6 through 11 on page 20](#)).

Replacing the Gas Lift

The gas lift that raises the HSA surface is rated for 100,000 opening and closing cycles. Contact the Extron S³ Sales & Technical Support Hotline at the nearest phone number listed on the rear cover of this manual to obtain a replacement gas lift. Replace the gas lift as follows:

CAUTION: Ensure that AC power is disconnected before servicing the HSA unit.

ATTENTION: When the HSA 200 is upside-down, the latch may be ineffective. If the latch releases in this position, the enclosure will tip and could damage the flanged edges. Keep a free hand on the enclosure to keep it from tipping.

1. Remove the surface mount enclosure from the table (see **Removing and Replacing the Enclosure** on page 19, steps 1 through 4). Place the enclosure upside-down on a horizontal surface. To protect the finish, place the enclosure on a soft cloth.
2. Loosen the three Phillips head screws that secure the gas lift mounting plate in place (see figure 24).

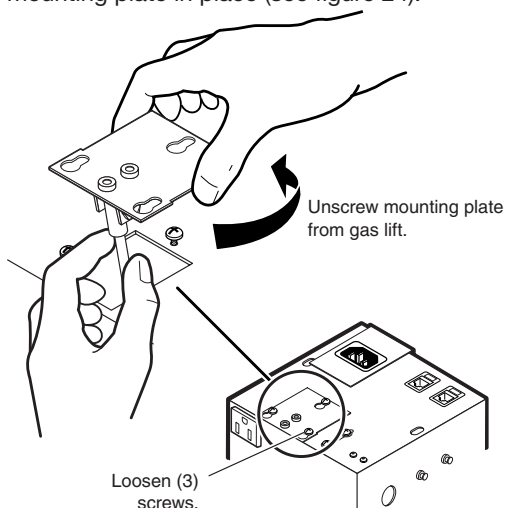


Figure 24. Removing the Gas Lift Mounting Plate

NOTE: Figure 24 shows an HSA 200 model. Removing the gas lift mounting plate from an HSA 222 is an identical procedure.

3. Slide the gas lift mounting plate toward the center of the enclosure, releasing the mounting plate (see figure 25).
4. Turn the gas lift mounting plate counterclockwise until the plate comes free from the shaft of the gas lift (see figure 25).
5. Turn the surface mount enclosure onto its back side and open the top panel.

NOTE: With the gas lift removed, the top panel must be manually lifted.

6. **(HSA 200 models only)** Remove the four 1/16" hex head screws on the right and left sides of the front panel (see **figure 25** on the next page). Retain the screws. Lift the panel away from the enclosure.

NOTE: Figure 25 shows an HSA 200 model. Removing the front panel from an HSA 222 is an identical procedure.

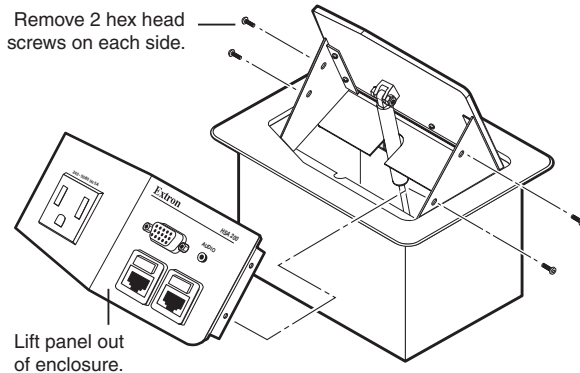


Figure 25. Front Panel Removal (HSA 200 Models)

7. **(HSA 222 models only)** Remove the four Phillips head screws from the front access panel (see figure 26). Retain the screws. Lift the panel away from the enclosure.

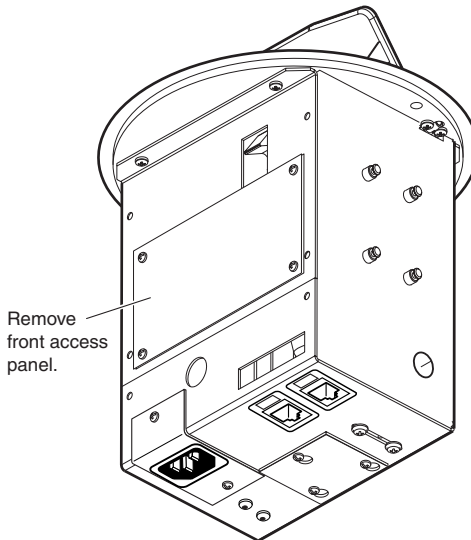


Figure 26. Front Access Panel Removal (HSA 222 Models)

8. Remove the pivot nut from the upper pivot bolt, then remove the bolt, releasing the upper end of the gas lift from the top panel. Pull the gas lift from the bottom of the enclosure.
 - **HSA 200 models** — Reach through the front panel opening (see [figure 27](#) on the next page).
 - **HSA 222 models** — Reach through the front access panel (see [figure 28](#) on the next page).

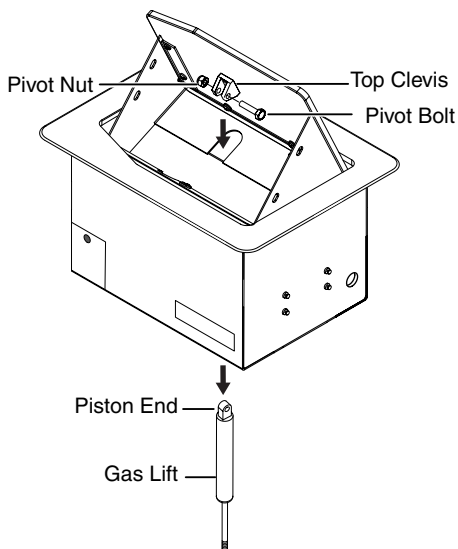


Figure 27. Replacing the Gas Lift, HSA 200 Model

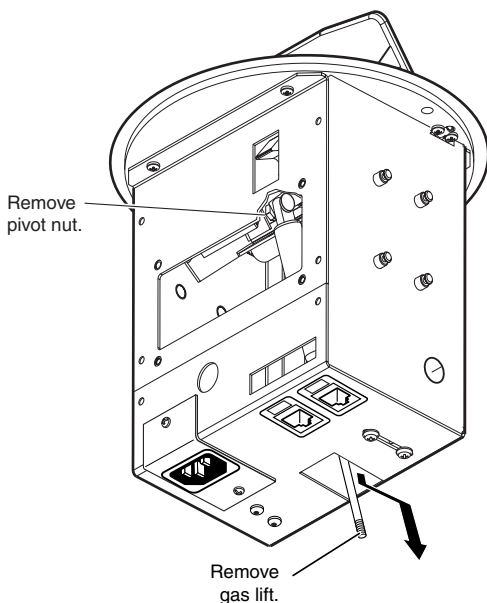


Figure 28. Replacing the Gas Lift, HSA 222 Model

9. Insert the piston end of the replacement gas lift through the hole in the bottom of the enclosure adjacent to the latch and secure the lift in the clevis on the top panel with the nut and bolt that were removed in step 8.
10. **(HSA 200 models only)** Replace the front panel in the surface mount enclosure and secure it in place with the hex head screws removed in step 6.

- 11. (HSA 222 models only)** Replace the front access panel in the surface mount enclosure and secure it in place with the Phillips head screws removed in step 7.
- 12.** Thread the pivot nut on the gas lift mounting plate onto the shaft of the gas lift and tighten it several turns.
- 13.** Firmly push the gas lift mounting plate into position on the underside of the surface mount enclosure, engaging the three mounting screws that were loosened in step 2. Holding the plate in position with one hand, secure it to the enclosure with the three screws.
- 14.** Reinstall the surface mount enclosure (see [Removing and Replacing the Enclosure, steps 7 through 11 on page 20](#)).

Adjusting the Top Panel

Level the top panel of the HSA 200 or HSA 222 as follows:

- 1.** If necessary to view the top and the underside of the enclosure simultaneously, remove the surface mount enclosure from the table (see [Removing and Replacing the Enclosure, steps 1 through 4 on page 19](#)).
- 2.** Close and latch the top panel.
- 3.** Slightly loosen the two latch locking screws (see figure 30) on the underside of the surface mount enclosure. These screws lock the latch in place once it is adjusted.

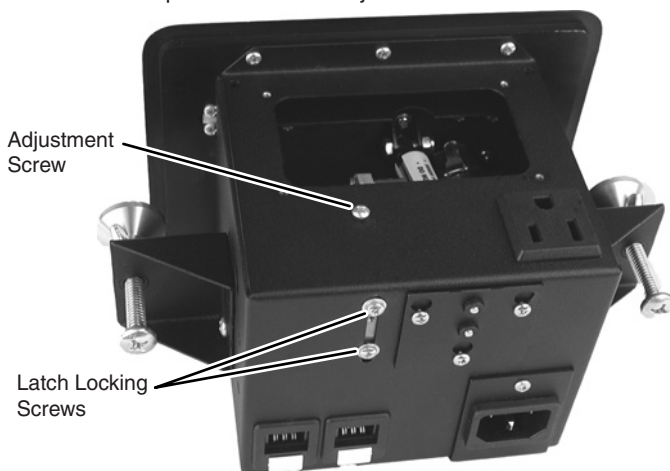


Figure 29. Adjusting the Top Panel

- 4.** Gently turn the adjustment screw on the rear of the surface mount enclosure to raise or lower the top panel to level it with the flange. Turning the screw counterclockwise raises the panel and clockwise lowers the panel.

5. Once the top panel is level, tighten the two latch locking screws on the underside of the surface mount enclosure.
6. If the surface mount enclosure was removed, reinstall it (see [Removing and Replacing the Enclosure](#), [steps 7](#) through 11 on [page 20](#)).

Reference Information

- [Top Plate Dimensions](#)
- [Routing Templates](#)
- [Packaging for Shipment](#)

Top Plate Dimensions

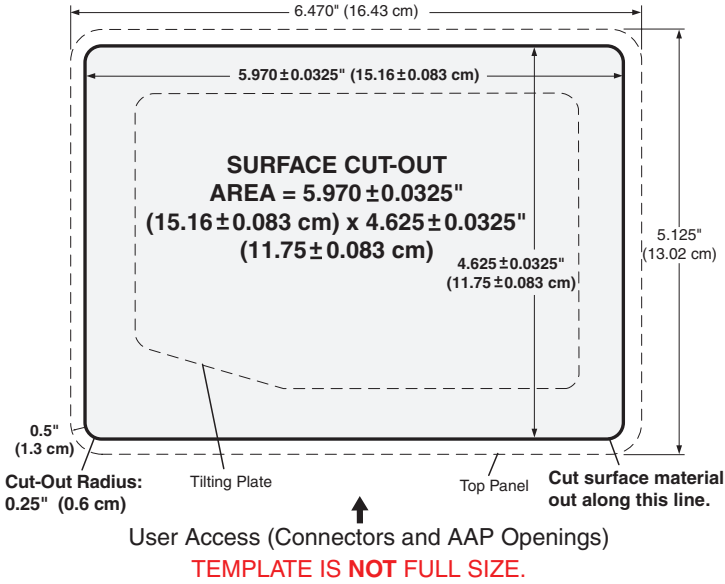
The cutout dimension illustrations are not to scale and are for reference only (see [figure 30](#) and [figure 31](#) starting on the next page). If you choose not to use the Extron metal routing template (see [Installation](#) on page 5), the dimensions on the illustrations will help you properly prepare the mounting surface. The surface cutout area is the shaded area on the diagrams. The cutout dimensions are provided.

For full size paper templates, go to www.extron.com or call the Extron S3 Sales & Technical Support Hotline.

Routing Templates

For full size paper templates, go to www.extron.com or call the Extron S3 Sales & Technical Support Hotline.

HSA 200S/HSA 200SE/HSA 222S US Models



HSA 200S/HSA 200SE International Models

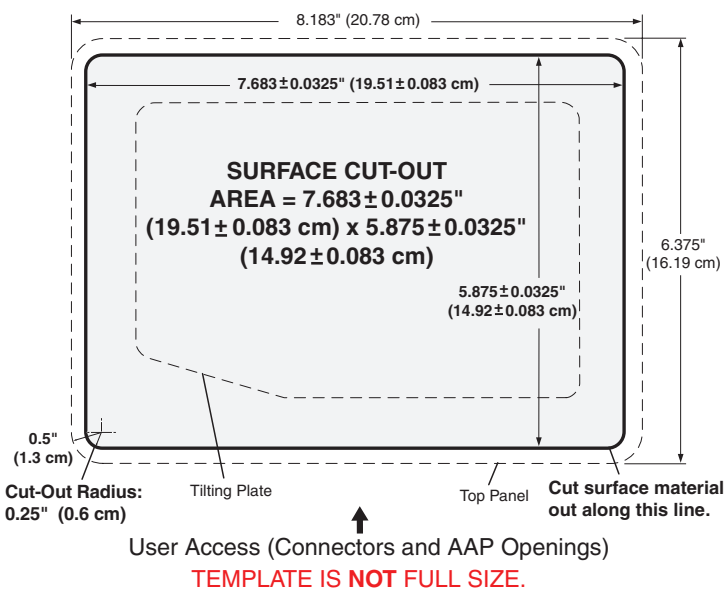
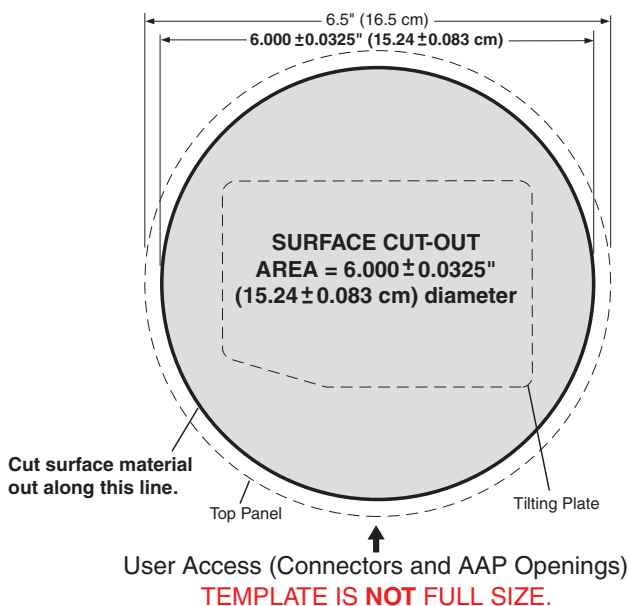


Figure 30. HSA 200S/HSA 200SE/ HSA 222S Cutout Dimensions

HSA 200C/HSA200CE/HSA222C US Models



HSA 200C/HSA 200CE International Models

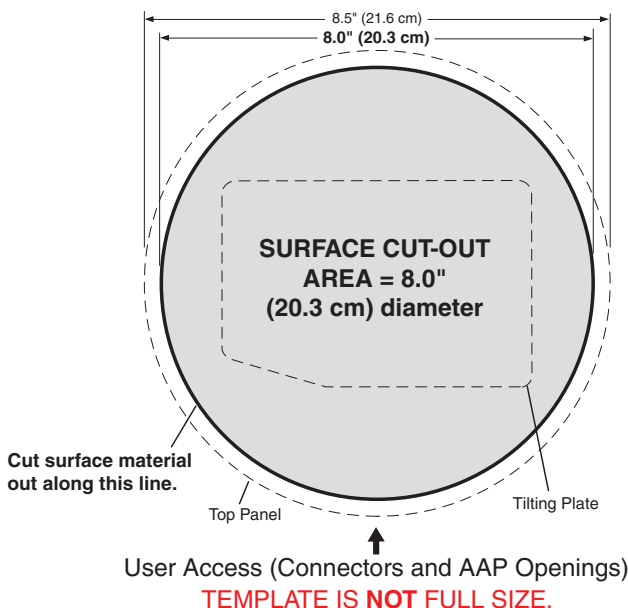


Figure 31. HSA 200C/HSA 200CE/HSA 222C Cutout Dimensions

Packaging for Shipment

The HSA 200's and HSA 222's ultra-fine machined surfaces and moving parts make them vulnerable to damage caused by mishandling during shipment, if they are improperly packaged. If, for any reason, you need to return an HSA to Extron, first contact Extron to obtain a return kit. The return kit, which reduces the chances of damage during shipment, includes a sturdy shipping carton and foam shells custom cut to fit the HSA (see figure 32).

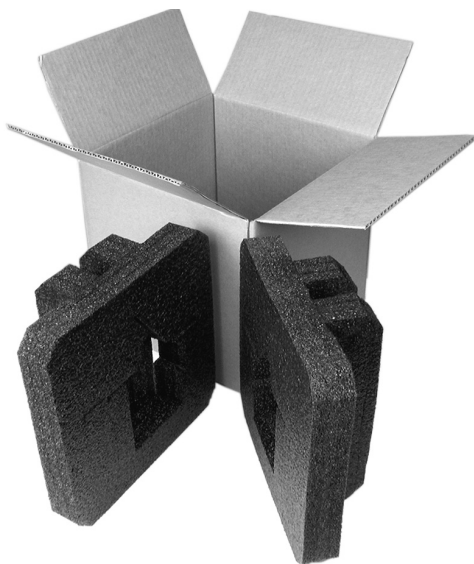


Figure 32. HSA 200/HSA 222 Return Kit

Package an HSA for shipment as follows:

1. Contact the Extron S³ Sales & Technical Support Hotline to obtain a return kit. Extron will send the return kit to the location you specify.

CAUTION:

- The flanged edges of the top of the surface enclosure are sharp when the HSA is removed from the table. Exercise caution when handling to prevent personal injury.
- The flanged edges of the top of the surface enclosure are bevelled to an ultra-fine thickness of less than 0.04 (4/100) inch (approximately 1 mm), and are therefore very sharp. These edges are also soft and may be easily nicked or bent.
- Exercise caution when handling and mounting the enclosure. Mishandling may result in injury to the installer or damage the appearance of the enclosure.

2. Disconnect all cables and remove the HSA 200 or HSA 222 from the table or desk (see [Removing and Replacing the Enclosure](#), steps 1 through 4, starting on page 19).
3. Place the enclosure on a flat, horizontal surface. To protect the finish, place it on a soft cloth or rubber mat.
4. Install the plastic strip (part of the return kit) to protect the flanged edges of the top of the enclosure (see figure 33).



Figure 33. Installing Protective Strips

5. Open the top panel and insert the HSA 200 or HSA 222 into the custom cutout portion of one of the foam shells (see figure 34).

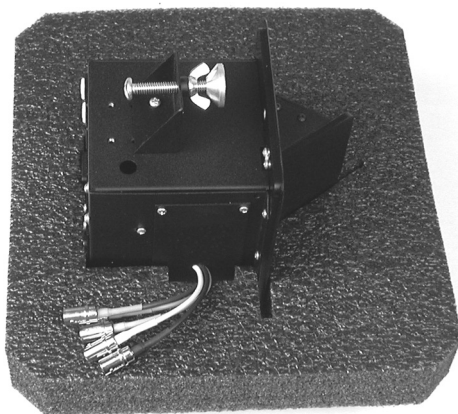


Figure 34. Installing the HSA into the Foam Shell

6. Place the remaining foam shell on the other side of the HSA (see figure 35). Firmly push the foam shells together as far as they will go to completely suspend the HSA unit.



Figure 35. HSA Unit Suspended in the Foam

- 7.** Place the foam-protected HSA 200 or HSA 222 into the shipping carton (see figure 36).

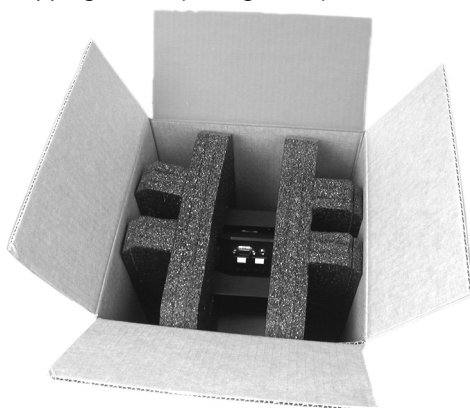


Figure 36. HSA in the Shipping Carton

- 8.** Close the shipping carton and seal it with high quality shipping tape.
- 9.** Ship the HSA to Extron using a reputable shipping company.

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:

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

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

Europe and Africa:

Extron Europe
Hanzeboulevard 10
3825 PH Amersfoort
The Netherlands

Asia:

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

Japan:

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China:

Extron China
686 Ronghua Road
Songjiang District
Shanghai 201611
China

Middle East:

Extron Middle East
Dubai Airport Free Zone
F13, PO Box 293666
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

Asia: 65.6383.4400

Europe: 31.33.453.4040

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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