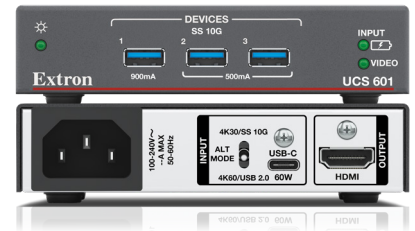


## UCS 601 • User Guide



### IMPORTANT NOTE:

Go to [www.extron.com](http://www.extron.com) for the complete UCS 601 specifications before connecting the product to the power source.



The UCS 601 is a pro AV dock that connects a USB-C equipped laptop to an HDMI display and USB devices for use in Unified Communications spaces. This dock supports HDMI 2.0, DisplayPort 1.2, USB 3.2 (SuperSpeed 10 Gbps), and HDCP 2.3 specifications, with resolutions up to 4K @ 60 Hz, and a built-in USB hub for USB peripherals such as cameras, touch displays, and microphones.

The rack mountable UCS 601 has a 1 inch high, quarter rack wide, 6 inch deep metal enclosure, allowing the UCS 601 to take advantage of a variety of mounting options (see [Mounting](#) on page 4).

## 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. The Class A limits 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 interference. This interference must be corrected at the expense of the user.

## Features

**NOTE:** For more information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the [Extron Safety and Regulatory Compliance Guide](#) on the Extron website.

- **Provides an interface between USB-C® equipped sources that support DisplayPort Alt Mode and HDMI displays and peripherals.**
- **Power delivery** — Provides up to 60 watts of charging power to the USB-C source.
- **Supports computer and video resolutions up to 4K/60 @ 4:4:4 with data rates up to 18 Gbps.**
- **HDCP compliant** — HDCP 2.3 and HDCP 1.4 pass through.
- **Extron Everlast™ Power Supply** — Comes equipped with an energy efficient, 100-240 VAC, 50 to 60 Hz, internal, universal power supply.
- **Passes EDID information from HDMI display to the source.**
- **Provides LED indicators for power, power delivery, and signal presence** — Provides visual indication of system status for real-time feedback and monitoring of key performance parameters.
- **1/4 rack wide, 1 inch high, and 6 inch deep rack-mountable enclosure.**
- **Includes ZipClip 200® mounting accessory.**
- **Includes LockIt® HDMI cable lacing brackets.**

# UCS 601 • User Guide (Continued)

## Application Diagram

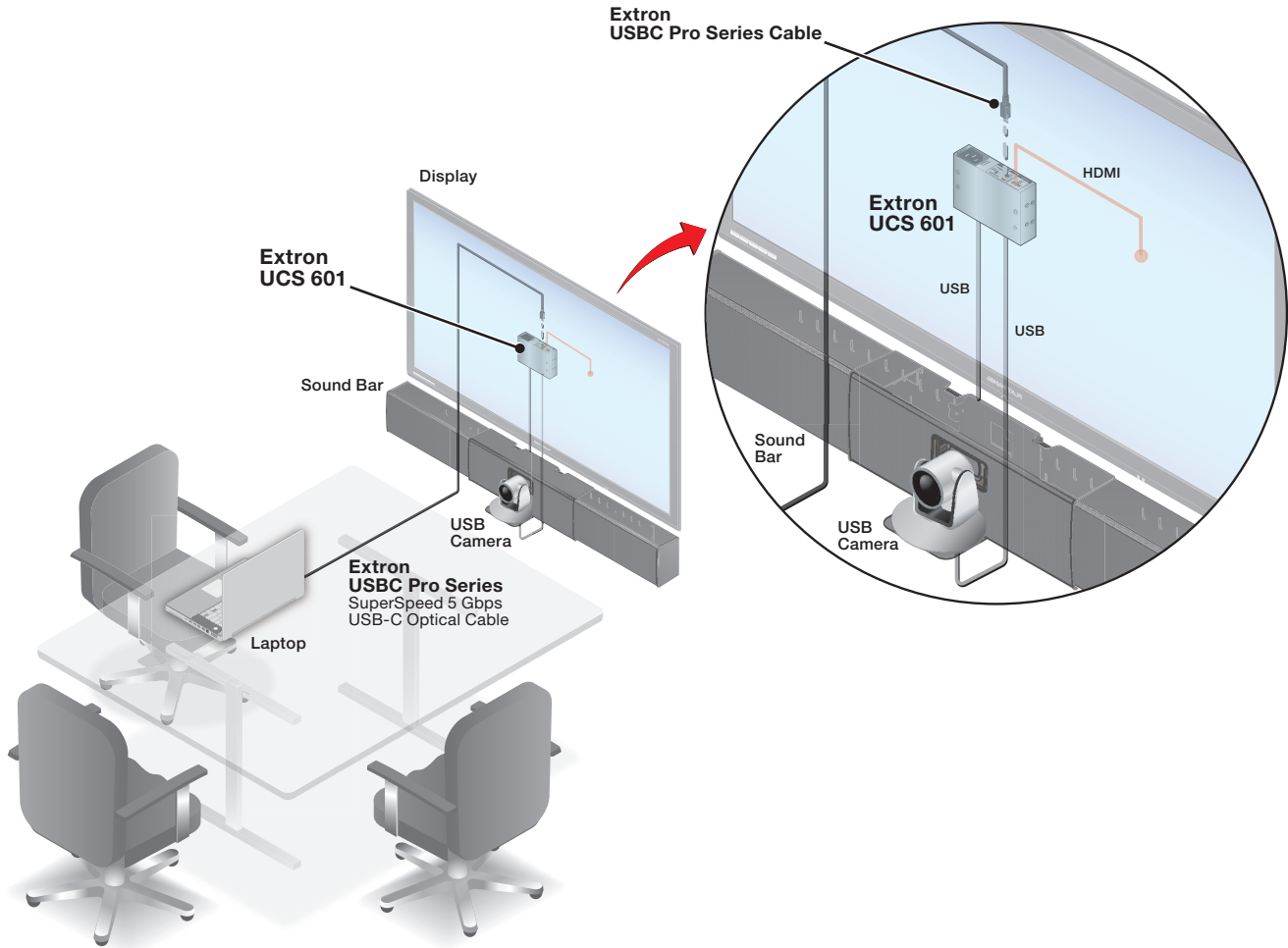


Figure 1. UCS 601 Application Diagram

## Front Panel Features

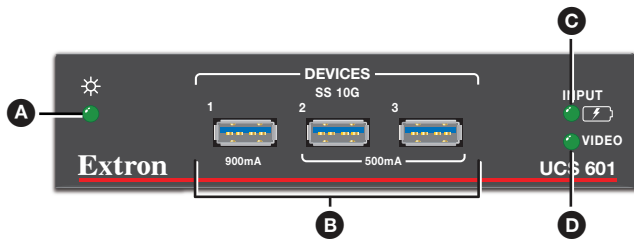


Figure 2. UCS 601 Front Panel

## Rear Panel Features

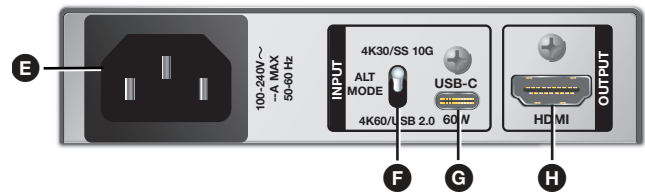


Figure 3. UCS 601 Rear Panel

- A Power LED** — Lights green to indicate unit power.
- B USB 3.2 Type-A device ports (3)** — Connect up to three USB peripheral devices (such as cameras, touch displays, and microphones).
- C Power delivery LED** — Lights green to indicate power delivery from USB-C (see figure 3, **G**) to the host PC.
- D Video signal LED** — Lights green to indicate the input video signal.
- E IEC power connector** — Connect the AC power cord to the AC power input.
- F DisplayPort Alt Mode function switch** — Toggle up to support 4K @ 30 Hz and USB 3.2. Toggle down to support 4K @ 60 Hz and USB 2.0.

### ATTENTION:

- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities. The power supply is to be located within the same vicinity as the Extron AV processing equipment in an ordinary location, Pollution Degree 2, secured to the equipment rack within the dedicated closet, podium, or desk.
- Sauf mention contraire, les adaptateurs AC/DC ne sont pas appropriés pour une utilisation dans les espaces d'aération ou dans les cavités murales. La source d'alimentation doit être située à proximité de l'équipement de traitement audiovisuel dans un endroit ordinaire, avec un degré 2 de pollution, fixé à un équipement de rack à l'intérieur d'un placard, d'une estrade, ou d'un bureau.
- The installation must always be in accordance with the applicable provisions of National Electrical Code ANSI/NFPA 70, article 725 and the Canadian Electrical Code part 1, section 16. The power supply shall not be permanently fixed to building structure or similar structure.
- Cette installation doit toujours être en accord avec les mesures qui s'applique au National Electrical Code ANSI/NFPA 70, article 725, et au Canadian Electrical Code, partie 1, section 16. La source d'alimentation ne devra pas être fixée de façon permanente à une structure de bâtiment ou à une structure similaire.

**NOTE:** Before toggling the DisplayPort Alt Mode switch (see [figure 3](#), **F** on page 2), disconnect the AC power cord (from **E**) and USB-C cable (from **G**), and cycle power. After 45 seconds, reconnect the power cable, followed by the USB-C cable.

**G** **USB-C input** (see [figure 3](#) on page 2) — Connect a USB-C source device to the USB-C input.

### NOTES:

- The USB-C port provides up to 60 watts of power to a connected source device. If the source requires greater than 60 watts of power, the source is still powered, or may charge slowly.
- When the USB device connected draws more than 150 mA of power, the power delivery available drops to 50 watts.

**H** **HDMI Output** — Connect an HDMI output device to the HDMI output.

**NOTE:** Extron recommends using HDMI Pro Series cables for 4K/UHD signals.

## Cabling and Setup

Figure 4 shows connections for the UCS 601.

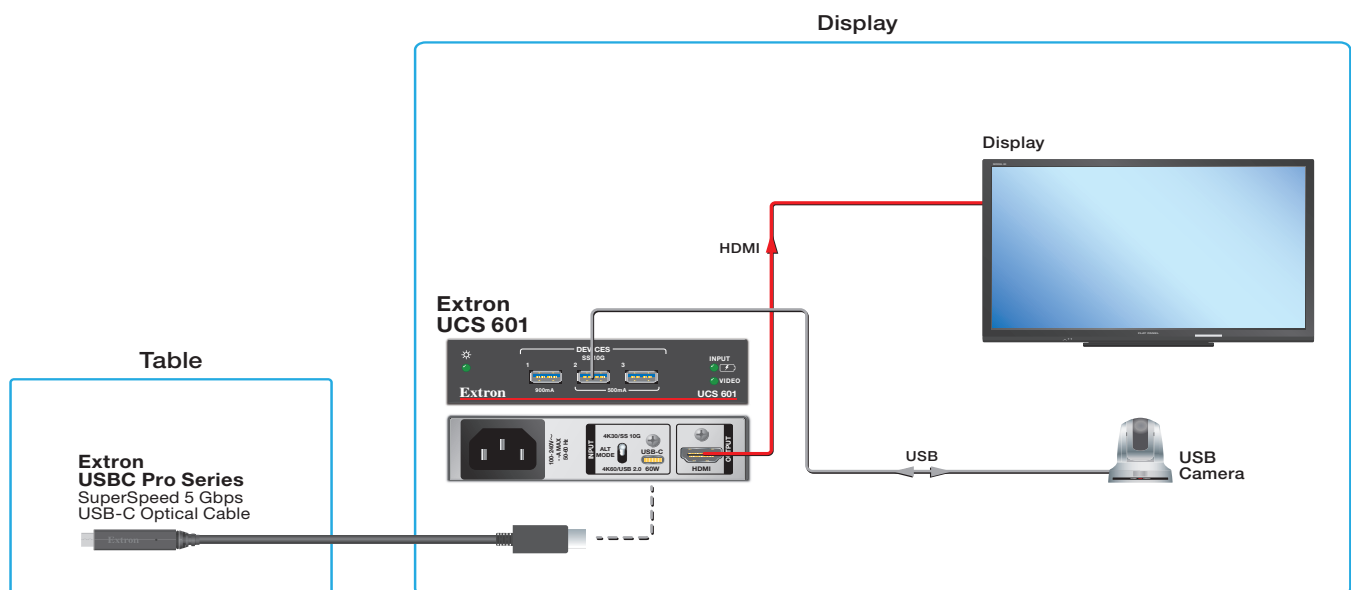


Figure 4. Front and Rear Connections

# UCS 601 • User Guide (Continued)

## LockIt Lacing Brackets

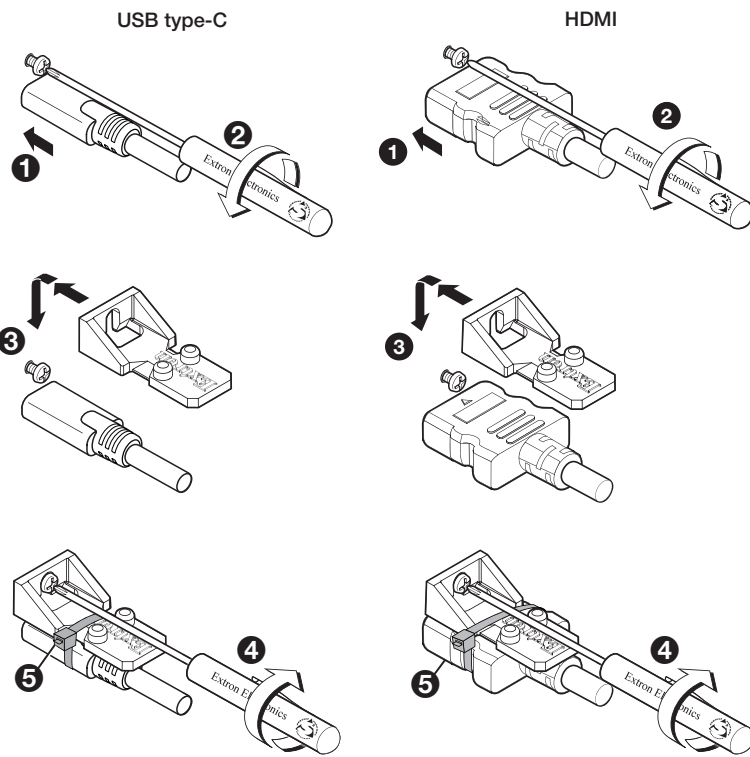
Use LockIt Lacing Brackets to securely fasten USB-C and HDMI cables to the device as follows (see figure below):

1. Plug the cable into the port (1).
2. Loosen the connection mounting screw from the panel, (2) enough to allow the LockIt lacing bracket to be placed over it. The screw does not need to be removed.
3. Place the LockIt lacing bracket on the screw and against the connector (3).
4. Tighten the screw to secure the bracket (4).

### ATTENTION:

- Do not overtighten the connector mounting screw. The shield it fastens to is very thin and can easily be stripped.
- Ne serrez pas trop la vis de montage du connecteur. Le blindage auquel elle est attachée est très fin et peut facilement être dénudé.

5. Loosely tie the included tie wrap around the connector and the LockIt lacing bracket.
6. While holding the connector securely against the lacing bracket, use pliers or similar tool to tighten the tie wrap (5).
7. Remove any excess length.



## Mounting

There are several optional accessories for mounting the UCS 601 (see the mounting options at [www.extron.com](http://www.extron.com)). Read the instructions that are included with the rack shelf or mounting kit for installation procedures and see the UL rack mounting guidelines below for safe installation.

## UL Rack Mounting Guidelines

The following Underwriters Laboratories (UL) guidelines pertain to the safe installation of UCS 601 in a rack.

### CAUTION: Risk of minor personal injury:

- **Elevated operating ambient temperature** — If the equipment is installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consider installing the equipment in an environment compatible with the maximum ambient temperature ( $T_{ma} = +122^{\circ}\text{F}$ ,  $+50^{\circ}\text{C}$ ) specified by Extron.
- **Reduced air flow** — Install the equipment in the rack so that the amount of air flow required for safe operation of the equipment is not compromised.
- **Mechanical loading** — Mount the equipment in the rack so that uneven mechanical loading does not create a hazardous condition.
- **Circuit overloading** — When connecting the equipment to the supply circuit, consider the connection of the equipment to the supply circuit and the effect that circuit overloading might have on overcurrent protection and supply wiring. Consider equipment nameplate ratings when addressing this concern.
- **Reliable earthing (grounding)** — Maintain reliable grounding of rack-mounted equipment. Pay particular attention to supply connections other than direct connections to the branch circuit (such as the use of power strips).

## Consignes UL pour le montage en rack

Les consignes UL (« Underwriters Laboratories ») suivantes concernent l'installation en rack d'un boîtier UCS 601 :

### ATTENTION : Risque de blessure mineure :

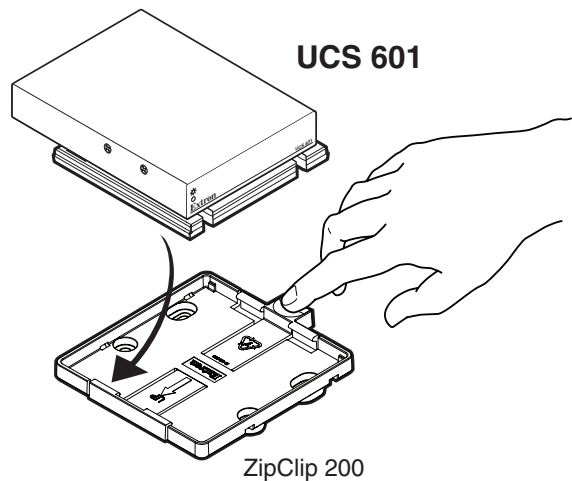
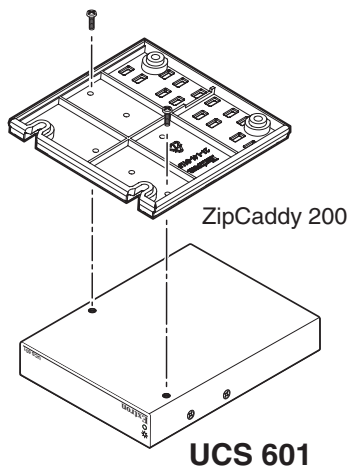
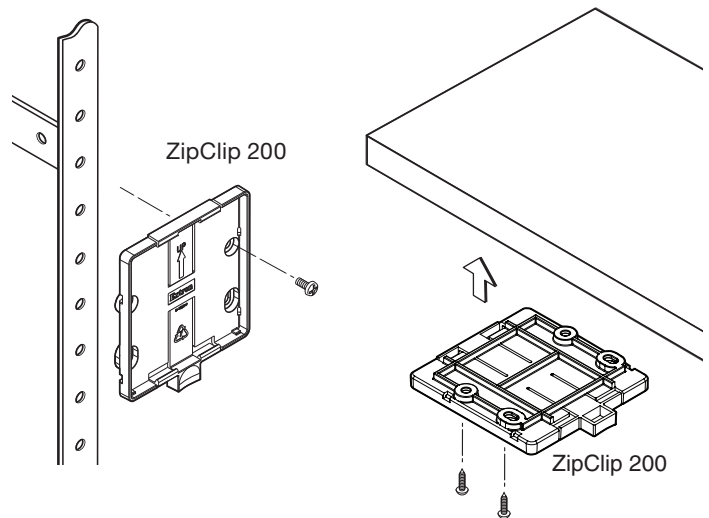
- **Température ambiante élevée** — En cas d'installation de l'équipement dans un rack fermé ou composé de plusieurs unités, la température du rack peut être supérieure à la température ambiante. Par conséquent, il est préférable d'installer l'équipement dans un environnement qui respecte la température ambiante maximale ( $T_{ma} = +122^{\circ}\text{F}$ ,  $+50^{\circ}\text{C}$ ) spécifiée par Extron.
- **Réduction du flux d'air** — Si l'équipement est installé dans un rack, veillez à ce que le flux d'air nécessaire pour un fonctionnement sécurisé de l'équipement soit respecté.
- **Charge mécanique** — Installez l'équipement en rack de manière à éviter toute situation dangereuse causée par le déséquilibre de la charge mécanique.
- **Surcharge électrique** — Lorsque vous connectez l'équipement au circuit d'alimentation, observez la connexion de l'équipement et étudiez les effets possibles d'une surcharge du circuit sur les protections contre les surintensités et les conducteurs d'alimentation. Consultez à cet égard les indications de la plaque d'identification de l'équipement.
- **Mise à la terre** — Assurez-vous que l'équipement est correctement mis à la terre. Accordez une attention particulière aux connexions électriques autres que les connexions directes au circuit de dérivation (ex. : les multiprises).

## ZipClip 200 Installation and Mounting

The UCS 601 can be mounted under a desk, or onto a wall or other furniture using the ZipClip 200 (included). See ZipClip mounting options at [www.extron.com](http://www.extron.com).

To mount the UCS to a ZipClip 200:

1. Mount the ZipClip 200 onto a rack rail or an under-desk mounting surface, using the four included mounting screws (see the figures on the right).
2. Mount the UCS 601 to the ZipCaddy 200:
  - a. Align the mounting holes on the bottom of the UCS unit with the mounting holes on the ZipCaddy (see the figure below, left).
  - b. Insert and fasten the screws.
3. Insert the ZipCaddy into the ZipClip:
  - a. First slide in the front end (see the figure below, right), then press down the rear end, until the ZipCaddy snaps into place.
4. To remove the UCS and ZipClip from a ZipClip 200:
  - a. Detach the UCS 601 from the ZipClip 200 mounting location by using the quick-release tab (see the figure below, right).



## System Operation

No drivers are required for a host PC to function with the UCS 601 unit. The unit is detected by the operating system, and appropriate USB drivers are loaded. Certain USB peripherals, such as gaming keyboards, USB interactive white boards, scanners, printers, and similar devices, require specific drivers installed on the PC. To obtain drivers, see the USB device installation instructions or the peripheral device manufacturer website.

The system is fully operational when the unit, PC or USB host, and peripherals are connected and powered. If problems are encountered, ensure that all cables are routed and connected properly, and that the latest drivers for each peripheral are installed.

## Troubleshooting

USB signals are generally reliable, but are susceptible to bad connections or signal loss from cables that are too long. To avoid loss of data and communication, follow these guidelines:

- The USB cables that connect the transmitter to the host, or the receiver to peripheral devices, should not exceed 6 feet (1.8 meters).
- When connecting the host or peripherals, use only cables designed for USB signals.
- Avoid or limit the use of adapters.

The UCS 601 works as described in point-to-point applications. Do not use additional adapters, patch panels, or couplers with USB cables or fiber optic cables. Additional links in the signal chain can result in reduction of signal integrity and overall system performance.

When properly connected and operating, the Power LED, Devices LEDs, Input Power LED and Video Signal LED are lit. Front panel LEDs are also useful for troubleshooting. The following table outlines the status indicated by each LED:

LED Indicator	On	Off
Power	AC power supply is connected and operating properly.	AC power supply is <b>NOT</b> connected or is defective.
Power Delivery	Unit is providing power to the connected source equipped with USB-C.	If the Input Power LED is off, see the Troubleshooting instructions above. If the unit is powered, then the USB-C source might not be connected to the unit.
Video Signal	When Input Power LED is on, the Video Signal LED lights when communication with host PC is established.	If the Power and Video Signal LEDs are on, an HDMI cable is not connected.

## Specifications

Product specifications are available on the Extron website, [www.extron.com](http://www.extron.com).

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the [Extron Safety and Regulatory Compliance Guide](#) on the Extron website.