USB Product Guide

Complete Solutions for Professional Environments

Extron

USB

Originally serving as a simple way to connect peripheral devices such as a mouse, keyboard, or printer to a computer, Universal Serial Bus (USB) has evolved into a versatile interface standard capable of transmitting video, audio, data, and power through a single cable. USB interfaces are now found on AV equipment such as projectors, soundbars, video conferencing systems, and media players, where they simplify connectivity and reduce cable clutter by consolidating multiple functions into one port. For example, an individual can bring their laptop to a meeting and deliver audio and video to a display plus receive power - all over a single USB-C cable. The proliferation of USB interfaces on AV sources and displays has created a demand for other elements in the system, including switchers, signal extenders and cables, to support USB signal distribution and management. Extron offers a wide variety of products perfectly suited for integrating USB into Pro AV systems. These include:

- Collaboration Switchers
- AV to USB Bridges
- USB Switching
- Extension

- Cables
- AV Connectivity
- AVoIP
- Docking Solutions

AV Connectivity
Easily integrate BYOD devices into your AV system with attractive table- or wall-mounted interfaces. Select from a variety of connectivity options, including USB-A, USB-B, and USB-C.

USB Cables
Extron USB cables provide reliable, high-performance transmission of audio, video, USB data, and power for a variety of Pro AV applications. The lineup includes USB-C and USB-A cables engineered to support high data rates and deliver power over long distances.

USB Extension
Go beyond the reach of point-to-point cables with USB extension products. Send AV and data across twisted pair or fiber cabling with Extron DTP3 and UCS 900 Series transmitters and receivers.

Collaboration Switchers
Extron USB Collaboration Switchers combine traditional AV display switching with USB peripheral switching in one unit. These switchers facilitate use of AV sources and USB cameras and microphones in BYOM spaces such as meeting and collaboration spaces.

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Collaboration Switchers

Extron USB Collaboration Switchers combine traditional AV display switching with USB peripheral device switching in one unit, taking collaboration between local and remote users to a new level. These switchers facilitate use of AV sources and USB devices such as cameras and microphones for Teams® and Zoom™ meetings. They turn Bring Your Own Meeting (BYOM) spaces such as meeting and collaboration rooms into engaging events with multi-participant sharing.

UCS 504

The UCS 504 is a 4K collaboration switcher and receiver kit that combines AV and USB switching with twisted pair signal extension. The transmitter supports USB-C and dual HDMI with USB inputs for BYOM laptops. The scaling receiver provides an additional HDMI with USB input for a dedicated UC computer and an HDMI output to the room display. Six USB device connections support cameras or mics up to USB 10Gbps and HDMI outputs enable resolutions up to 4K/60. The system supports auto-switching and automation capabilities including CEC, RS-232, or IR control to a display.

UCS SW 313

The UCS SW 313 is a three-input, one-output, 4K collaboration and presentation switcher with USB device connections for Unified Communications spaces. The inputs support USB-C and HDMI with USB. The USB-C input provides video/audio, USB data, and 60W of power from an internal power supply. Five USB peripheral connections support USB cameras or mics. The HDMI output enables resolutions up to 4K/60 and USB devices connect at rates up to USB 10Gbps. Auto input switching makes it easy to operate collaboration spaces with or without a full control system.
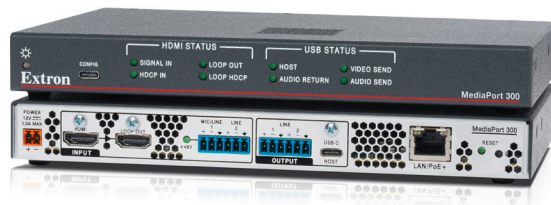
AV to USB Bridges

If you need to integrate content from external sources like an AV switcher, document camera, or a PC into your conference calls or collaboration system, a USB bridge is the answer. They convert traditional AV sources such as computers, cameras, document cameras, AV switchers and other audio and video sources to USB for connection to a computer. The USB connection is used by the computer to connect devices for soft codec applications and Unified Communications systems such as Microsoft Teams® and Zoom™. These systems make it easy to integrate Pro AV systems into spaces where UC is a common method for remote collaboration and meetings.
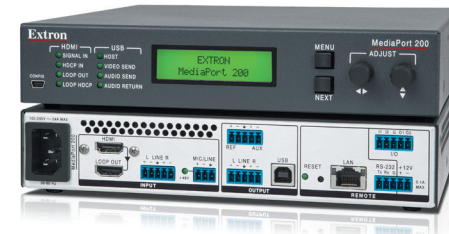
MediaPort 300

The Extron MediaPort 300 is a 4K HDMI to USB bridge for integrating Pro AV systems with software codec conferencing applications. It works seamlessly with a computer using generic USB video and audio drivers. The MediaPort 300 features an HDMI input with HDCP-compliant loop through, accepts signals up to 4K/60, and scales video at output rates up to USB 5Gbps. Audio features include program and mic inputs, HDMI audio de-embedding, USB bidirectional audio, and line-level outputs. The MediaPort 300 also features audio mixing as well as level and mute controls. This enables it to serve as a soft codec interface, giving it the flexibility to integrate into larger hardware codec or DSP systems.

MediaPort 200

The Extron MediaPort 200 is an HDMI to USB bridge for integrating pro AV sources or systems with software codec conferencing applications. It works seamlessly with a computer using generic USB video and audio drivers. The MediaPort® features an HDMI input with HDCP-compliant loop through, accepts signals up to 1920x1200, and scales video to a High Speed (USB 2) output. Audio features include program and mic inputs, HDMI audio de-embedding, and USB bidirectional audio, plus AEC reference and line level outputs. The MediaPort 200 also includes DSP with EQ, filters, mixing, dynamics, and ducking. This allows the MediaPort 200 to serve as a complete soft codec interface, with the added flexibility of integrating into larger hardware codec or DSP systems.

USB Switching

Need a way to control multiple PCs or USB devices from a single user station? Our two- and four-input USB switchers are perfect for applications that require a single operator to control multiple remote USB devices. They support USB 5Gbps and USB 10Gbps data rates and are backward compatible with all previous USB data rate specifications. For environments with more endpoints and a need for expandability, the Extron USB Extender Plus Series with a USB Plus Matrix Controller provides an IP-based distributed USB switching and extension solution that can be easily expanded as necessary. An Extron Control System or third party control platform can interface with either type of switching system via Ethernet or RS-232 for easy operation.

SW USB Pro Series
Extron SW USB Pro switchers facilitate switching between multiple host devices and multiple USB peripherals. They provide integrator-friendly solutions for USB-C hosts and peripherals with data rates up to USB 10Gbps. HID peripheral ports support hotkey input switching via a connected keyboard. SW USB Pro switchers also support auto and manual host and peripheral switching and control via RS-232 or Ethernet. They feature Host and Peripheral Emulation Mode, which provides "keep alive" functionality by continuously mimicking host and keyboard/mouse communications within the switcher.

USB Extender Plus Series with Matrix Controller
The USB Extender Plus Series extends and switches USB signals from peripheral devices to a host computer at distances up to 1,980 feet (600m) through a Gigabit Ethernet network or up to 330 feet (100m) point-to-point over one CATx cable. It supports data rates up to High Speed (USB 2). The transmitter includes USB peripheral emulation to enable trouble-free booting of a host computer that is not connected to a keyboard or mouse. The receiver features a built-in, active four-port hub. The controller provides simple setup and control for creating a distributed USB matrix switching system over an Ethernet network.

USB Extension

Extron USB Extenders enable USB peripheral devices to be remotely located away from the host computer. Transmissions can be sent up to 1980 feet (600 meters) over twisted pair cable or up to 30 km (18.75 miles) over fiber optic cabling, allowing an operator to be located nearly anywhere in relation to the system. Extenders consist of transmitter and receiver sets that are linked together using either a CATx cable or fiber optic cabling. These extenders support data rates up to USB 5Gbps, and provide power for connected USB peripherals.

UCS 900 Series
The UCS 900 Series are Fiber Optic USB 5Gbps Extenders that extend USB data signals from peripheral devices to a host computer over fiber optic cable. It includes a transmitter, receiver, 10 meter (32.8 foot) plenum-rated multimode fiber optic cable, power supplies, and ZipClip® mounting brackets. Reach can be extended to 150 m (492 ft.) using a readily available OM4 cable. The transmitter features a USB-C host connection and can be powered by the host computer. The receiver features a two-port USB hub for connecting remote peripherals. The UCS 900 Series easily extends USB cameras, conference systems, and peripherals such as mass storage devices, keyboards, and mice in Pro AV environments.

DTP3 T 211
The Extron DTP3 T 211 is a long-distance, digital twisted pair transmitter for sending USB-C video and bidirectional RS-232 signals up to 330 feet (100 meters) over a shielded CAT 6A cable. It provides one USB-C input and a loop-out for local monitoring. Up to 100 watts USB-C charging is available when deployed with the Extron UPI 100 Power Inserter. The transmitter supports video resolutions up to 4K/60 at 4:4:4 color sampling, EDID Minder®, and HDCP 2.3. The DTP3 T 211 is compatible with DTP receivers, and its compact enclosure size and remote power capability make it ideal for discreet placement in lecterns, beneath tables, or wherever needed to meet application requirements.

Pro AV over IP

Do you have an application that requires distribution and switching of lossless video, audio, and USB signals over a wide geographic area? Extron NAV® is a Pro AV over IP solution that delivers high quality video, audio, USB, and Ethernet signals over an IP network at low bitrates. It delivers groundbreaking performance with real-time, lossless video at resolutions up to 4K/60 with 4:4:4 chroma sampling and ultra-low latency. NAV can be deployed as a high-performance IP-based video audio and data matrix, combining the flexibility of an IP-based system with the features and convenience of conventional matrix switchers.

Docking and Expansion

Extron Pro AV Docks support USB-C inputs for Video/Audio, USB data, and power making it easy to connect USB-C laptop sources in racks, furniture or other fixed applications. We also offer USB hubs in rack mount and architectural form factors for ease of integration into floor, wall, and furniture mount applications for connecting USB peripherals where they are needed in a professional, reliable manner.

NAV E 500 Series
NAV 500 series Pro AV over IP encoders and decoders deliver ultra-low latency, high quality video, audio, Ethernet, and USB signals over 1 Gbps and 10 Gbps Ethernet networks. Using Extron's patented PURE3® codec, they deliver groundbreaking performance at resolutions up to 4K/60 with 4:4:4 chroma sampling and ultra-low latency. Built-in USB 2 extension facilitates connection to peripheral USB devices over the same cable as video and audio making them ideal for KVM applications or remote connectivity for USB 2 devices such as webcams. Support for analog, embedded, and AES67 audio over IP facilitates integration with DMP Plus DSPs or other IP-enabled audio components.

UCS 601
The UCS 601 is a Pro 4K USB-C dock that connects a USB-C laptop to an HDMI display and USB devices for use in Unified Communications spaces. The USB-C input provides video/audio, USB data, and 60 watts of power from an internal power supply. The HDMI output supports resolutions up to 4K and USB devices connect at rates up to USB 10Gbps.

USB-C HD 101
The Extron USB-C HD 101 converts USB-C® signals to HDMI while providing up to 60 watts of power to the USB-C source device. It supports USB-C Alt Mode video resolutions up to 4K/60 for use by any AV device or system with an HDMI input. It provides an easy way to add a USB-C device to an existing AV system.

Architectural Connectivity

Extron USB architectural connectivity and power products enable convenient, flexible USB integration into common AV environments. They are designed to fit into frames that accept Flex55, AAP™ AV Connectivity Modules and MAAP™ Mini AV Connectivity Modules for installation in lecterns, Cable Cubby® Series furniture-mountable access enclosures, HSA - Hideaway® Surface Access enclosures, and floor boxes.

Cables

Extron USB cables provide reliable, high-performance transmission of audio, video, USB data, and power for a variety of Pro AV applications. We offer USB-C and USB-A cables engineered to support high data rates and deliver power over long distances. Adapter cables are also available for seamless integration of USB-C sources with HDMI or DisplayPort AV systems.

USB Power Modules
Extron offers a variety of USB power and charging options for use in Cable Cubby® and Flex55 enclosures. AC+USB 300 Series Power Modules are available with up to two unswitched AC power outlets plus USB-C® and USB-A outlets for powering laptops, smartphones, and tablets.

Extron Flex55 Series Power Modules are available with USB-C® and/or USB-A outlets and are used with Flex55™ mounting systems.

WPD 100 AV Series
The Extron WPD 100 AV Series wallplates are single-gang decorator-style modules for USB-A, USB-B, and USB-C connectivity. The USB-A 3.2 pigtail is reversible, allowing either a USB-A or USB-B connector to appear at the front of the plate. WPD 100 AV Series wallplates include a black and white single-gang decorator-style wallplate and fit into a standard US one-gang size junction box.

USBA-C ProMax Plenum
The Extron USBA-C ProMax Plenum Series of active, hybrid optical-copper cables transmit USB 10Gbps and power over distances up to 65 feet (19.8 meters). The cable exclusively supports USB 10Gbps and USB 5Gbps data rates while providing up to 4.5 watts of power to the peripheral device. These unidirectional USB-A to USB-C active cables draw power from either connected USB device.
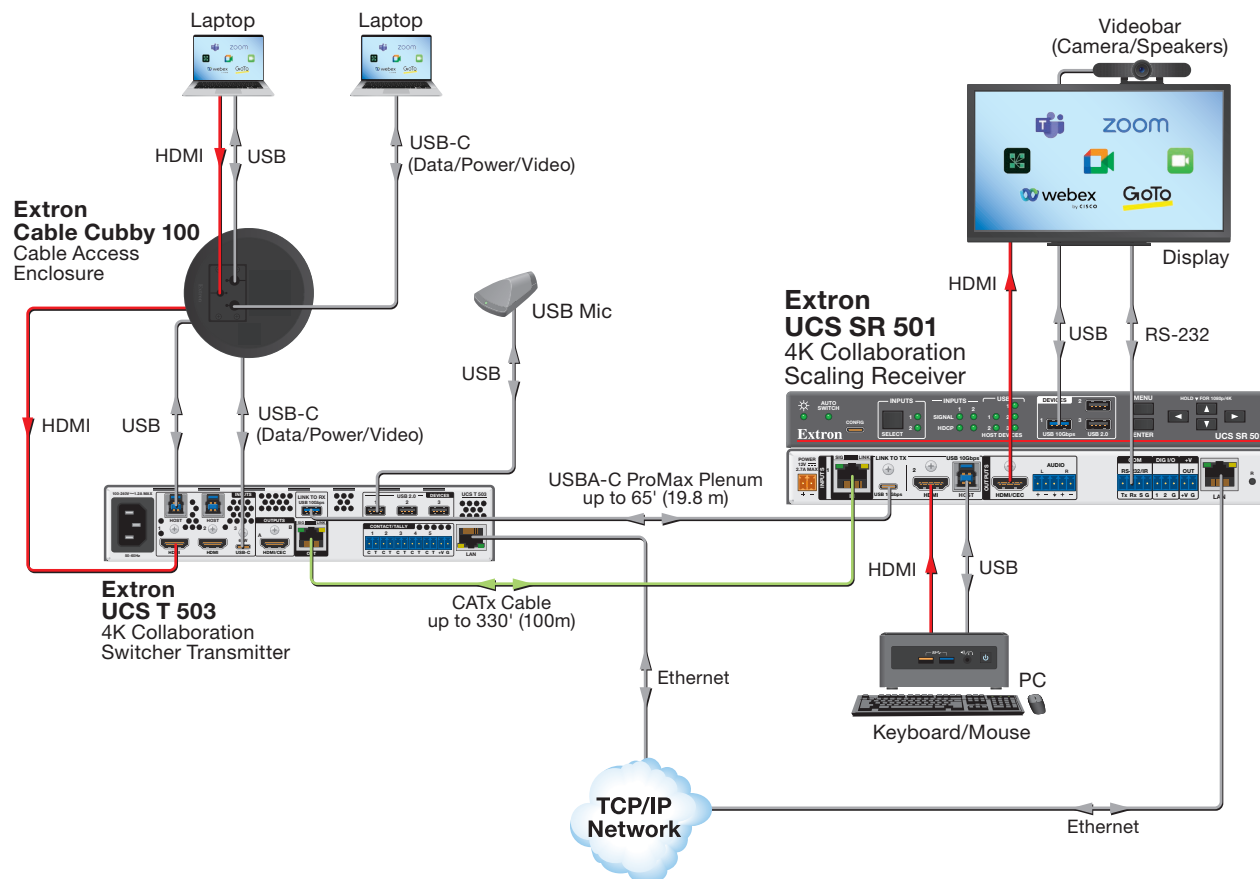
USBC Pro 8K Series
The Extron USBC Pro 8K Series of active, hybrid optical-copper USB-C® cables simultaneously transmit DisplayPort audio and video, High-Speed (USB 2) data rates, and power over distances up to 30 feet (9.1 meters). These feature-rich cables support 8K/30 video and audio on four DisplayPort lanes. The USBC Pro 8K cables support bidirectional USB Power Delivery of up to 60 watts. These active cables are unidirectional and can draw power from either connected USB device.

UC Meeting Room with BYOM

In this Unified Communications meeting space, a room PC is the primary interface for presentations, meetings, and conference calls. A USB videobar at the display houses the room camera and speakers, and a USB mic on the table handles audio. Attendees have an option to present directly to the display from their laptop and to use the videobar and table mic for a BYOM (Bring Your Own Meeting) call. Connecting a laptop automatically switches the display and USB peripherals to it.
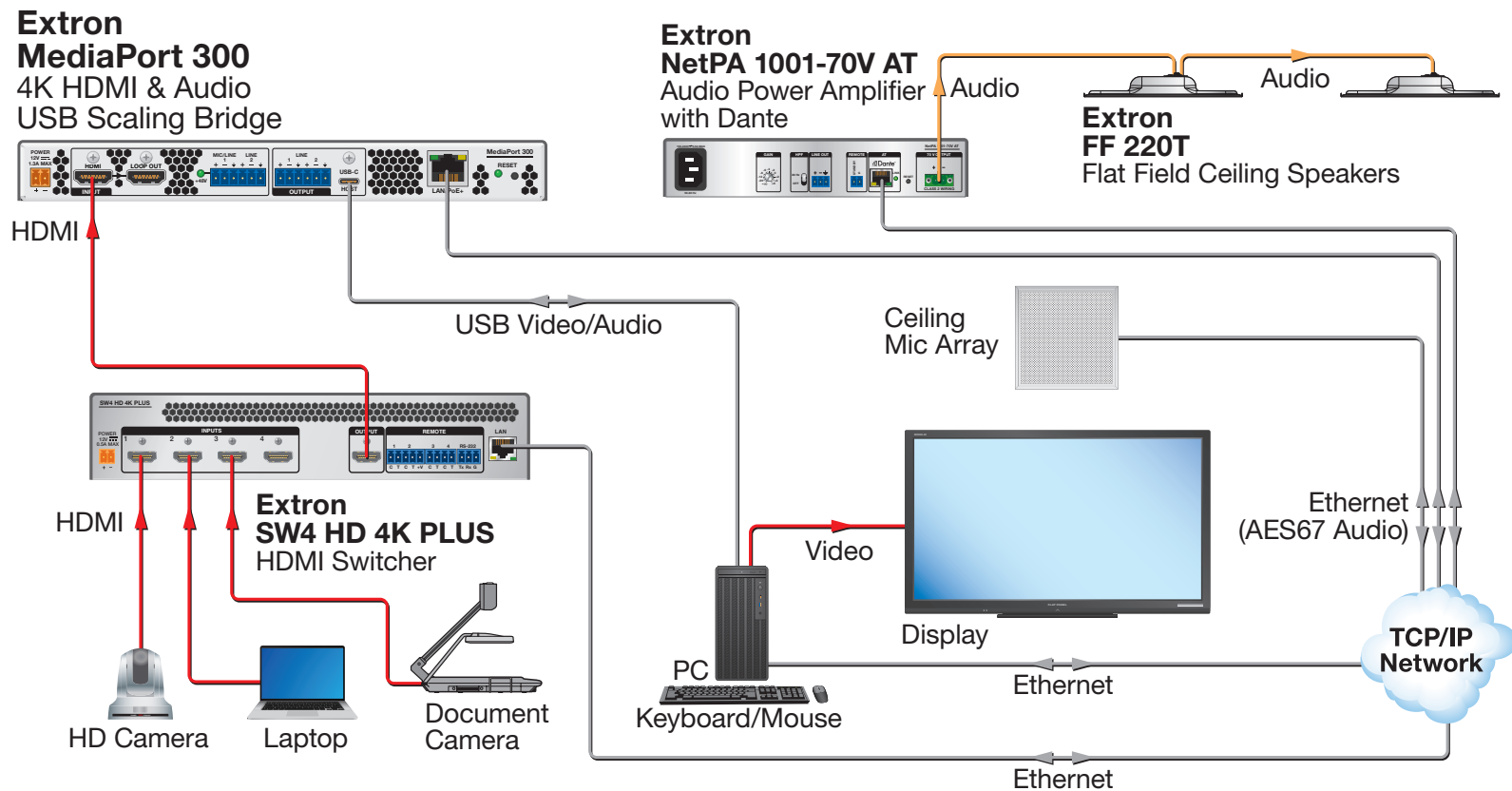
The UCS 504 Collaboration kit is an ideal solution for this space, supporting USB-C laptops by providing up to 60W of power video/audio, and data rates up to USB 10Gbps. It also supports the HDMI + USB laptop and PC for the USB videobar and room mic connections. A CATx cable up to 330 ft (100 m) extends video, audio and High Speed (USB 2) data from the transmitter, at the meeting table, to the receiver located behind the display. An optional USBA-C cable between the transmitter and receiver provides USB 10Gbps connections between the USB Videobar and the laptops.

Hybrid Teaching Space

Hybrid Classrooms and Lecture Theatres create several challenges, necessitating purpose-built solutions. In this space, an SW4 HD 4K PLUS switcher enables easy selection of a variety of presentation sources or the room camera. For wide audio coverage, a ceiling mic array covers room participants while the Extron NetPA amplifier and FF220T ceiling speakers enable the instructor and remote participants to be heard throughout the space.

The Extron MediaPort 300 sends all video and audio to the UC software application running on the room PC. Video from the switcher is scaled and converted to USB video for transmission to the remote participants. Audio between the MediaPort, amplifier and microphone is sent over Ethernet using AES67 which in turn is sent or received over USB to the PC running the UC software.

Extron MediaPort 300
4K HDMI & Audio
USB Scaling Bridge

HDMI

Extron NetPA 1001-70V AT
Audio Power Amplifier with Dante

Audio

Audio

Extron FF 220T
Flat Field Ceiling Speakers

USB Video/Audio

Ceiling Mic Array

Extron SW4 HD 4K PLUS
HDMI Switcher

HDMI

Video

Display

Ethernet (AES67 Audio)

HD Camera   Laptop   Document Camera

PC
Keyboard/Mouse

Ethernet

Ethernet

TCP/IP Network

Extron

www.extron.com/usb