The Extron DTP T USW 333 switcher provides signal extension for up to three sources, sending HDMI or analog video, audio, and control up to 330 feet (100 meters) over a shielded CATx cable to Extron DTP™ 330-enabled products. The HDCP-compliant switcher includes several integrator-friendly features in a low profile enclosure that enables discreet installation in a wide variety of applications.
The Extron DTP T USW 333 is a three input switcher for sending HDMI or analog video, audio, and control up to 330 feet (100 meters) over a shielded CATx cable to Extron DTP 330-enabled products. It is HDCP compliant and provides two HDMI inputs, one VGA input, and one DTP twisted pair output. The DTP T USW 333 supports video signals at resolutions up to 1920x1200, including 1080p/60 and 2K. Analog video signals are digitized to ensure a high quality digital video signal is transmitted to the DTP 330 receiver. The switcher offers many integrator-friendly features, such as EDID Minder, auto-switching between inputs, audio input assignment, and remote powering. These features, plus the low profile enclosure, make the DTP T USW 333 ideal for discreet placement in lecterns, beneath tables, or wherever needed to meet application requirements.

The DTP T USW 333 provides reliable switching and long distance transmission of HDMI and analog video signals. The DTP T USW 333 can automatically switch between the digital and analog sources, plus it supports RS-232 and contact closure remote control with tally output for easy operation in unmanaged locations. In addition, the analog audio input can be assigned to any of the three video inputs, or it can be set to follow the input switch.

To enhance and simplify integration, the DTP T USW 333 features EDID Minder, an Extron-exclusive technology that manages EDID communication between the display device and input sources to ensure that the correct video formats are displayed reliably.

The switcher supports simultaneous transmission of bidirectional RS-232 and IR signals from a control system for AV device control. For added installation flexibility, the DTP T USW 333 transmitter can be remotely powered over the shielded twisted pair cable by a DTP 330-enabled product. This simplifies installation and allows both devices to share one power supply. The DTP T USW 333 can be integrated with an Extron DTP CrossPoint® 84 Presentation Matrix Switcher to support sources at remote locations.

- Transmits HDMI or analog video, control, and analog audio up to 330 feet (100 meters) over a shielded CATx cable
- Two HDMI inputs and one VGA input
- Auto-switching between inputs – Auto-switching allows for simple, unmanaged installation in locations such as in a podium or under a conference table. When multiple inputs are active, the switching priority is configurable.
- Supports computer and video resolutions up to 1920x1200, including 1080p/60 and 2K
- Compatible with CATx shielded twisted pair cable
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- Audio input assignment – The analog audio input can be assigned to any video input, or it can be set to follow the input switch.
- Supports multiple embedded audio formats
- Bidirectional RS-232 and IR pass-through for AV device control
- Remote power capability
- Digital conversion of analog input signals
- HDCP compliant
- Supported HDMI specification features include data rates up to 6.75 Gbps, 3D, and HD lossless audio formats
- EDID Minder automatically manages EDID communication between connected devices
- RS-232 control port
- Contact closure remote control with tally output – Allows for remote selection of an input channel, while a tally output provides +5 VDC to light an LED to indicate the currently selected input.
- Compatible with all DTP 330 Series receivers and DTP 330-enabled products
DTP CrossPoint 84 IPCP
8x4 Scaling Presentation Matrix Switchers with DTP Extension and Control
The Extron DTP CrossPoint® 84 is a 4K, 8x4 matrix switcher with HDMI and DTP twisted pair inputs and outputs, scaling, an integrated audio power amplifier, comprehensive audio DSP, and a built-in IPCP Pro 350 control processor. The DTP CrossPoint 84 provides complete system integration in a 2U enclosure, for applications with multiple displays, sound reinforcement, and AV system control. It supports local and remote sources and displays with six HDMI inputs and two DTP inputs, plus two HDMI outputs and two DTP outputs. DTP extension allows connection to DTP endpoints, plus XTP® matrix switchers. Each DTP output also includes independent scaling up to 1080p and 2K. Full audio optimization is available with an integrated Extron ProDSP™ digital matrix processor, which can be linked to an additional Extron DSP for AEC and I/O expansion.

Features
- All-in-one 8x4 4K matrix switcher, scaler, audio DSP, audio power amplifier, and control processor
- Two DTP inputs and six HDMI inputs
- Two HDMI outputs and two independently scaled DTP outputs
- Supports 4K signals at all inputs and on both HDMI outputs
- Integrated DTP inputs and outputs support transmission of video, control, and audio up to 330 feet (100 meters) over a shielded CATx cable
- Compatible with DTP 230 Series and DTP 330 Series, plus XTP CrossPoint matrix switchers
- Remote powering of DTP transmitters and receivers
- HDMI audio embedding and de-embedding
- Integrated digital audio matrix processor with ProDSP 32/64-bit signal processing
- Digital audio expansion port provides interfacing to an Extron DMP 128 processor for AEC and audio system scalability
- Four mic/line inputs with 48 volt phantom power
- Energy efficient Class D stereo or mono amplifier
- Rack-mountable 2U, full rack width metal enclosure

<table>
<thead>
<tr>
<th>Model</th>
<th>Version Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTP CrossPoint 84 IPCP</td>
<td>Pinamp Output, w/o Amplifier and Control Processor</td>
<td>60-1366-01</td>
</tr>
<tr>
<td>DTP CrossPoint 84 IPCP SA</td>
<td>2 x 50 Watt Stereo Amp</td>
<td>60-1366-12</td>
</tr>
<tr>
<td>DTP CrossPoint 84 IPCP MA</td>
<td>100 Watt 70 Volt Mono Amp</td>
<td>60-1366-13</td>
</tr>
</tbody>
</table>

IN1608 IPCP
Eight Input HDCP-Compliant Scaling Presentation Switcher with DTP Extension and Control
The Extron IN1608 is an HDCP-compliant scaling presentation switcher with four HDMI inputs, two universal analog video inputs, and two Extron DTP inputs. It provides dual HDMI outputs and one DTP output. The DTP inputs and output work with DTP endpoints to extend HDMI, audio, and bidirectional control signals up to 330 feet (100 meters) over a shielded CATx cable. The IN1608 provides the convenience of supporting local and remote sources and displays, with fast and reliable source switching, and a high performance scaling engine for HDMI and analog sources. The IN1608 also includes a host of audio switching and processing features. The IN1608 IPCP includes a built-in Class D audio power amplifier, and an IPCP Pro 350 control processor for complete AV system control.

Features
- Integrates HDMI, analog video, and audio sources into presentation systems
- Two DTP inputs, four HDMI inputs, and two universal analog video inputs
- Three simultaneous video outputs
- Integrated DTP inputs and output support transmission of HDMI, control, and audio up to 330 feet (100 meters) over a shielded CATx cable
- Remote powering of DTP transmitters and receiver
- Compatible with all DTP Series models, and DTP-enabled products
- Integrated IPCP Pro 350 control processor
- Two mic/line inputs with 48 volt phantom power
- Mic ducking
- HDMI audio embedding and de-embedding
- Energy efficient Class D stereo or mono amplifier

<table>
<thead>
<tr>
<th>Model</th>
<th>Version Description</th>
<th>Part Number</th>
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</thead>
<tbody>
<tr>
<td>IN1608 IPCP SA</td>
<td>Control Processor and Stereo Power Amp</td>
<td>60-1238-12</td>
</tr>
<tr>
<td>IN1608 IPCP MA</td>
<td>Control Processor and 70 V Mono Amp</td>
<td>60-1238-13</td>
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</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Version Description</th>
<th>Part Number</th>
</tr>
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<tbody>
<tr>
<td>IN1608 IPCP SA</td>
<td>Control Proc, Stereo Amp, Link License</td>
<td>60-1238-12A</td>
</tr>
<tr>
<td>IN1608 IPCP MA</td>
<td>Control Proc, 70 V Mono Amp, Link License</td>
<td>60-1238-13A</td>
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</table>
### SPECIFICATIONS

#### AUDIO OUTPUT

<table>
<thead>
<tr>
<th>Number/signal type</th>
<th>1 analog audio over DTP signal, or 1 embedded digital audio over DTP signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectors</td>
<td>1 RJ-45 jack</td>
</tr>
</tbody>
</table>

#### COMMUNICATIONS — SWITCHER

<table>
<thead>
<tr>
<th>Serial control port</th>
<th>RS-232 via (1) 3.5 mm, 3 pole captive screw connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tally port</td>
<td>(1) 3.5 mm, 4 pole captive screw connector</td>
</tr>
<tr>
<td>Contact closure remote control</td>
<td>(1) 3.5 mm, 4 pole captive screw connector</td>
</tr>
<tr>
<td>USB control port</td>
<td>1 front panel female mini USB, type B</td>
</tr>
<tr>
<td>USB standards</td>
<td>USB 2.0, high speed</td>
</tr>
<tr>
<td>Program control</td>
<td>Extron Simple Instruction Set (SIS™)</td>
</tr>
</tbody>
</table>

#### COMMUNICATIONS — RS-232/IR OVER DTP

**NOTE:** Protocol is mirrored between the connected DTP 330 Rx and the Over DTP output port. Signals from a control device pass into the Over DTP port, are embedded with the DTP signal, and sent to the DTP 330 Rx endpoint for control of remote sink and source devices. The Over DTP port is a pass-through connection to the DTP endpoint. There is no RS-232 or IR insertion from the DTP T USW 333 control port to the Over DTP port.

#### SERIAL control pass-through port

- 1 RS-232 and IR via (1) 3.5 mm, 5-pole captive screw connector
- Baud rates: 300 to 38400 baud
- IR pass-through control port: TTL level (0 to 5 V) modulated infrared control from 30 kHz up to 60 Hz

#### GENERAL

<table>
<thead>
<tr>
<th>Power supply</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device</td>
<td>5.5 watts</td>
</tr>
<tr>
<td>Device and power supply</td>
<td>7.2 watts</td>
</tr>
</tbody>
</table>

**NOTE:** The DTP T USW 333 can be powered either locally by the external power supply or remotely by a receiver on the other end of the twisted pair cable.

#### COOLING

- Convection, vents on top and sides

#### MOUNTING

- Rack mount: Yes, with optional 1U high rack shelf
- Furniture mount: Yes, with optional under-desk mounting kit

#### ENCLOSURE TYPE

- Metal

#### ENCLOSURE DIMENSIONS

- 1.0” H x 8.75” W x 6.0” D (half rack wide)
- (2.5 cm H x 22.2 cm W x 15.2 cm D) (Depth excludes connectors.)

#### PRODUCT WEIGHT

- 0.6 lbs (0.3 kg)

#### VIBRATION

- ISTA 1A in carton (International Safe Transit Association)

#### REGULATORY COMPLIANCE

- CE, c-UL, UL
- ENEC, EN55022, EN55024, EN61000-3-2, EN61000-3-3
- CE, C-tick, FCC Class A**, ICES, VCCI
- WEEE

**NOTE:** CE and FCC testing is conducted with STP (shielded twisted pair) I/O cable.

#### MODEL

<table>
<thead>
<tr>
<th>Model</th>
<th>Version Description</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTP T USW 333</td>
<td>Three Input Switcher w/ DTP Tx - 330 feet (100 m)</td>
<td>60-1329-52</td>
</tr>
</tbody>
</table>

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For complete specifications, please go to www.extron.com

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