Q: What does the RTK-USB3 do?

A: The **RTK-USB3** is a conference room table extension solution with for BYOD/BYOM laptops. It includes three USB-C inputs and one HDMI input at the table and supports USB 3.2 data to the receiver.

Q: How do the video inputs work?

A: The three USB-C inputs support DisplayPort Alternate Mode (DP Alt Mode) video, so along with the single HDMI input the **RTK-USB3-TX** is a 4x1 video switch.

Q: Why is there an HDMI output on the Transmitter?

A: The extension link of the **RTK-USB3** only supports USB data, not HDMI video. The output of the 4x1 video switch is on the transmitter so it can be sent on a different extension path to the front of the room. Typically this will be an SCT Remote Table Kit with HDMI such as the RTK-MINI, RTK-PLUS, RTK-PRO, RTK-X57, or RTK-AM1.

Q: What is supported on the RTK-USB3-TX USB-C ports?

A: The three USB-C ports on the transmitter support USB 3.2 data, Power Delivery (PD), and USB DisplayPort Alternate Mode (DP Alt Mode) video when connected to a Full Function USB-C device port.

Q: What is a Full Function USB-C port?

A: A full function USB-C port is one that supports traditional USB data, power delivery for charging, and DP Alt Mode video.

Q: How can I tell if my device has a Full Function USB-C port?

A: Not all USB-C ports are full function ports. If it's a Windows device it will typically have a lightning bolt symbol (⚡) at the connector signifying that is Thunderbolt capable and therefore a full function USB-C port. MacBooks don't normally have printed symbols at the connector, but typically MacBooks 2018 and newer include full function USB-C ports. Check the specifications to be certain.

**Q: What kind of device charging is available from the RTK-USB3-TX USB-C ports?**

A: The USB-C ports support different Power Delivery (PD) modes based on DIP switch settings. In fixed charging mode all three ports have up to 60W available. In dynamic mode up to 100W is available for the first connected device while 60W, 40W, or 20W are available for additional devices. Total power will not exceed 180W.

Q: How does USB data work between the TX and RX?

A: The TX USB-C connectors must connect to USB hosts and the RX must connect to a USB device. The TX USB-A ports are designed for additional optional devices. All ports support USB 3.2 speeds.

Q: How many USB tiers does the RTK-USB3 use?

A: A linked **RTK-USB3** kit will use up three tiers (hubs) in the USB hierarchy. Be aware that some computers will use up two tiers internally, and the attached 3rd party device will use another tier. Seven total tiers is the maximum allowed per the USB specification, so take care to design your systems appropriately. Software programs such as UsbTreeView (freeware by Uwe Sieber) can be a useful tool in verifying tier structure. Below is a typical example of a USB camera connected through the **RTK-AM1™** into a host PC:
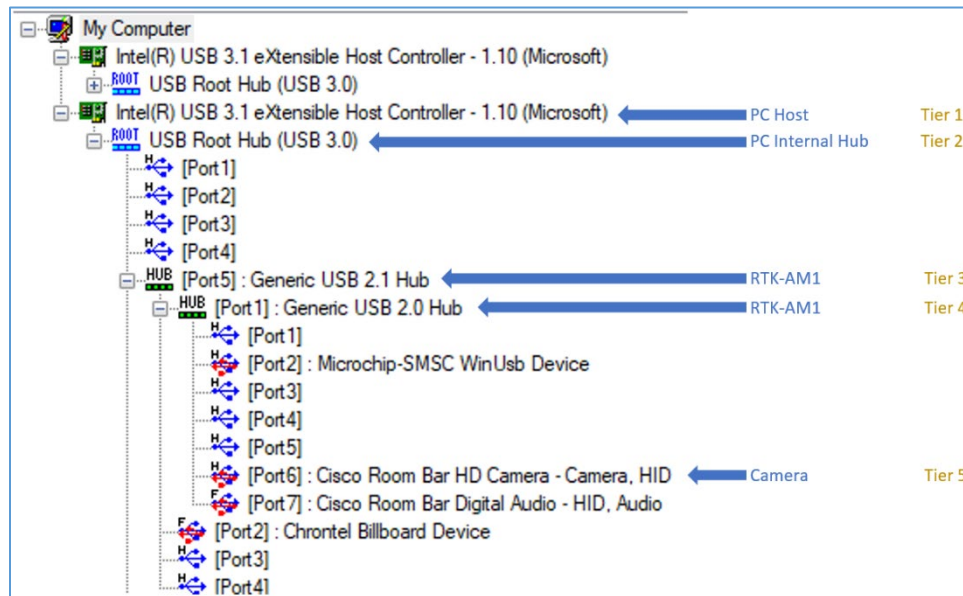
HDMI

Q: What resolutions does the video section support?

A: The video section supports up to 4K60 4:4:4 resolution on all four video inputs (1 HDMI and 3 x DP Alt Mode). HDMI audio and HDCP up to v2.2 (if present) are also supported.

Control

Q: Can the RTK-USB3 be controlled from a 3rd party RS-232 control system?

A: Yes, the RS-232 port on the receiver serves a dual role based on a DIP switch setting. In 3rd Party Control Mode the port can receive commands for switching inputs and status. Please refer to the SCT Programming Guide which can be downloaded from the Tech Tips Support page at www.soundcontrol.net.

Q: How does Auto-Switching work?

A: There are two auto-switching modes: Last Source Detect Mode and Priority Mode. In Last Source Detect Mode the video switches to the last active device attached to the Transmitter.

In Priority Mode the video switches to the last active device attached, however when all other devices are removed the video falls back to the priority port (defined by TX DIP switch 4).

reversible.