

# USB-C 40M Receiver

## NexusC-R



## DESCRIPTION

Taska NexusC-R is a USB-C 40M Receiver designed as a high-performance signal extension solution for modern commercial A/V applications and collaborative workspaces. Operating over a single CAT6a cable, it enables the long-distance extension of full USB-C signals—including ultra-high-definition video and high-speed USB 3.2 data—up to 40m (130ft).

The transmitter features a comprehensive full-featured USB-C input interface that fully complies with DisplayPort Alt Mode (v1.4a) standards and USB Power Delivery 3.0, delivering up to 100W of charging power to connected host laptops. Complete with dedicated audio de-embedding, bidirectional 24V PoC (Power over Cable), and RS-232 serial pass-through, the NexusC-R provides a streamlined, highly efficient single-cable architecture for system integration."

## PRODUCT FEATURES

- | 5K full USB-C and USB 3.2 extender with USB-C input and output
- | Extended distance is up to 40m/130ft for 4K signal, 35m/115ft for 5K signal via a single CAT6a cable
- | Compliant with VESA DisplayPort 1.4a
- | HDCP 2.3 compliant, creating a secure connection between the source and display
- | Supports USB 3.2 Gen 1 with data transfer rate up to 2.5 Gbps.
- | Features one full USB-C input, supporting DP Alt mode standards (v1.4a) A/V, USB 3.2 Gen 1 data
- | Supports audio de-embedding
- | RS-232 pass-through
- | HDR, HDR10+, Dolby Vision LLM and HLG pass-through
- | Bi-directional 24V PoC (power over cable), when TX or RX gets power, the other end does not need an external power supply

## SPECIFICATION

|                                   | Technical                                                                                                                     |                                                               |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| HDMI Compliance                   | DisplayPort 1.4a                                                                                                              |                                                               |
| HDCP Compliance                   | HDCP 2.3                                                                                                                      |                                                               |
| USB Compliance                    | USB 3.2 Gen1                                                                                                                  |                                                               |
| USB Transmission Rate             | Up to 2.5Gbps                                                                                                                 |                                                               |
| Video Bandwidth                   | 18Gbps                                                                                                                        |                                                               |
| Video Resolution                  | 5120x2160p60Hz, 5120x2160p50Hz, 5120x1440p60Hz, 5120x1440p50Hz,                                                               |                                                               |
|                                   | 4096x2160p60Hz, 4096x2160p59.94Hz, 4096x2160p50Hz, 4096x2160p30Hz,                                                            |                                                               |
|                                   | 4096x2160p29.97Hz, 4096x2160p25Hz, 4096x2160p24Hz, 4096x2160p23.98Hz,                                                         |                                                               |
|                                   | 3840x2160p60Hz, 3840x2160p59.94Hz, 3840x2160p50Hz, 3840x2160p30Hz,                                                            |                                                               |
|                                   | 3840x2160p29.97Hz, 3840x2160p25Hz, 3840x2160p24Hz, 3840x2160p23.98Hz,                                                         |                                                               |
|                                   | 1920x1080p60Hz, 1920x1080p59.94Hz, 1920x1080p50Hz, 1920x1080p30Hz,                                                            |                                                               |
|                                   | 1920x1080p29.97Hz, 1920x1080p25Hz, 1920x1080p24Hz, 1920x1080p23.98Hz,                                                         |                                                               |
|                                   | 1280x720p60Hz, 1280x720p59.94Hz, 1280x720p50Hz,                                                                               |                                                               |
|                                   | 720x576p50Hz, 720x576i50Hz, 720x480p59.94Hz, 720x480i59.94Hz,                                                                 |                                                               |
|                                   | 1600x1200p60Hz, 1440x900p60Hz, 1440x1050p60Hz, 1360x768p60Hz,                                                                 |                                                               |
|                                   | 1280x1024p60Hz, 1024x768p60Hz, 800x600p60Hz, 640x480p60Hz                                                                     |                                                               |
| Color Space                       | RGB, YCbCr4:4:4, YCbCr4:2:2, YCbCr4:2:0                                                                                       |                                                               |
| Color Depth                       | 8/10/12-bit                                                                                                                   |                                                               |
| HDR                               | HDR, HDR10, HDR10+, Dolby Vision, HLG                                                                                         |                                                               |
| Audio Formats                     | USB-C Out                                                                                                                     | LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, |
|                                   |                                                                                                                               | DTS-EX, DTS-96/24, DTS High Res, DTSHD Master Audio, DSD      |
|                                   | Analog Audio De-embedding                                                                                                     | LPCM 2CH (sample rate 32~192kHz)                              |
| Analog Output<br>Audio Parameters | Output Level (Maximum)                                                                                                        | Max 2.2dBu (1Vrms) unbalanced audio                           |
|                                   | Frequency Response                                                                                                            | 20Hz to 20kHz (-/+0.5dB)                                      |
|                                   | Audio S/N Ratio                                                                                                               | >90dB@0dBu, 1kHz A-weighted                                   |
|                                   | Audio THD+N                                                                                                                   | < 0.006%@+4dBu, 1KHz                                          |
|                                   | Audio Output Delay                                                                                                            | <2ms                                                          |
| Transmission Distance             | CAT6a (F/FTP) Cable: 40m/130ft for 4K; 35m/115ft for 5K; USB 3.2 Passive Cable: 1.5m/4.9ft;<br>USB2.0 Passive Cable: 2m/6.6ft |                                                               |
|                                   | Connection                                                                                                                    |                                                               |
| Input                             | 1× U-Link IN [RJ45 connector, 24V PoC]                                                                                        |                                                               |
| Output                            | 2× USB-A [Downstream, 9-pin female, 5V1.5A], 1× USB-C [Downstream, 24-pin female, 5V1.5A]                                     |                                                               |
|                                   | 1× USB-C OUT [USB-C, 24-pin female], 1× AUDIO OUT [3.5mm audio jack]                                                          |                                                               |
| Control                           | 1× RS-232 [3-pin 3.5mm phoenix connector], 1× SERVICE [USB-C, FW update port]                                                 |                                                               |
|                                   | Mechanical                                                                                                                    |                                                               |
| Color                             | Black                                                                                                                         |                                                               |
| Dimensions                        | 118mm [W] × 111mm [D] × 25.5mm [H]                                                                                            |                                                               |
| Weight                            | 365g                                                                                                                          |                                                               |
|                                   | Electrical                                                                                                                    |                                                               |
| Power Consumption                 | 33W (Max)                                                                                                                     |                                                               |
| Power Supply                      | DIN 4-pin: DC 24V/7.5A                                                                                                        |                                                               |
|                                   | Environment                                                                                                                   |                                                               |
| Operating Temperature             | 0°C ~ 40°C / 32°F ~ 104°F                                                                                                     |                                                               |
| Storage Temperature               | -20°C ~ 60°C / -4°F ~ 140°F                                                                                                   |                                                               |
| Operating Humidity                | 20~80% RH (Non-condensing)                                                                                                    |                                                               |
| Storage Humidity                  | 10~90% RH (Non-condensing)                                                                                                    |                                                               |