



HDMI UHD Seamless Multiviewer Video Switcher Receiver

TRI-AVC-H51PS4K-6010



Product Overview

The TRI-AVC-H51PS4K-6010 5x1 seamless presentation switch features 3 HDMI inputs, 2 USB-C inputs (DP Alt mode, USB 2.0, 100M Ethernet and 60W charging), 1 HDMI output and 1 HDBT mirrored output. HDBT supports standard PoE power supply, and can extend uncompressed signal up to a distance of 230ft/70m (4K@30Hz 4:4:4) or 131ft/40m (4K@60Hz 4:4:4) via a single CAT6A (F/FTP) cable. This 5x1 seamless presentation switch output supports single full screen or various multiview display modes (Single/PIP/PBP/Triple/Quad). This product supports USB 2.0 local KVM switching and local Hub/HDBT USB pass-through function (from TX to RX). It also supports bi-directional RS-232 and IR control signal pass-through function.

4K

4K@60Hz
4:4:4



Multiview
mode



CEC Control



Manual
Switching
Mode

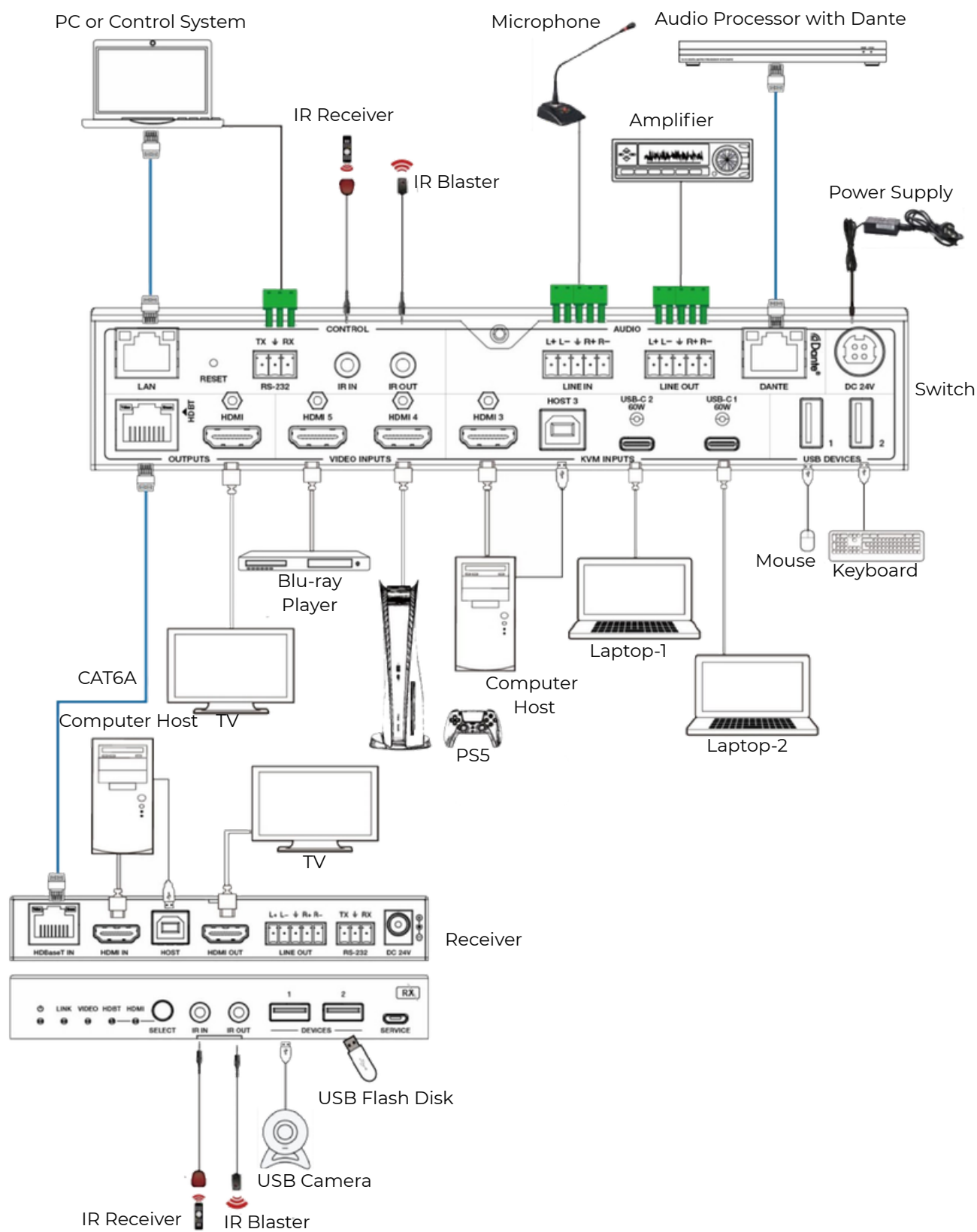


Auto
Switching
Mode

Key Features

- HDMI 2.0b, HDCP 2.2 and DP 1.2 compliant
- Support 18Gbps video bandwidth
- Support video resolution up to 4K@60Hz 4:4:4
- Uncompressed 4K60 over HDBT 3.0 up to 132ft/40m via single CAT6A (F/FTP) cable
- Uncompressed 1080P&4K30 over HDBT 3.0 up to 230ft/70m via single CAT6A (F/FTP) cable
- Up to 5 categories of multiview display modes: Single/PIP/PBP/Triple/Quad
- Multiple multiview display modes: Auto/Single/PIP/PBP/Triple/Quad/Custom
- Support 5x1 seamless switching (single screen) and fast switching (multiview) function
- Input: 2x USB-C, 3x HDMI, 1x Analog audio, 1x Dante 2ch
- Output: 1x HDMI and 1x HDBT mirrored, 1x Analog audio, 1x Dante 2ch
- HDMI and HDBaseT (PoE) outputs (Mirrored)
- Dante 2x2 audio input and output
- USB-C supports DisplayPort Alt mode for A/V, USB 2.0, 100M Ethernet and 60W charging
- Local USB 2.0 KVM switching and extending USB 2.0 over HDBT 3.0
- Signal input supports manual switching and automatic switching modes
- Support analog/Dante audio embedding, analog/Dante audio de-embedding output
- Dante 2x2 audio input and output
- CEC/RS-232 control external devices ON/OFF
- Advanced EDID management
- Support standard PoE power supply from TX to RX (TX_PSE, RX_PD)
- Flexible control via front panel buttons, IR remote, RS-232, TCP/IP or Web GUI

Connection Diagram



Product specification

HDMI Compliance

HDMI 2.0b

HDCP Compliance

HDCP 2.2

DP Version

DP 1.2

Video Bandwidth

18 Gbps

USB Bandwidth

TX USB DEVICES to TX HOST/USB-C:
480Mbps

RX USB DEVICES to TX HOST/USB-C:
350Mbps

RX USB DEVICES to RX HOST: 480Mbps

Network Bandwidth (LAN and USB-C Connection)

100Mbps

Video Resolution

Input Video Resolution

480i ~ 1080p50/60Hz, 4K×2K@24/30Hz,
4K×2K@50Hz/60Hz 4:4:4

Output Video Resolution

AUTO, 1024P60Hz ~ 3840×2160P60@60

IR Level

12Vp-p

IR Frequency

Wideband 20K–60KHz

Color Depth

Input: 8/10/12-bit, 8-bit (4K60Hz 4:4:4)

Output: 8-bit

Color Space

RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0

Audio Formats and Sample Rate

LPCM 2.0, 48kHz

HDR

Input supports HDR, output does not support HDR

Transmission Distance

1080P@4K30 – 230ft / 70m

4K60 – 131ft / 40m

ESD Protection

Human-body Model: ±8kV (air-gap discharge), ±4kV (contact discharge)

TX Analog Audio

Input Impedance: 10K Ohms

Output Impedance: 330 Ohms

Line Input Level (Maximum): 8.2dBu (2Vrms) @ balanced or unbalanced audio

Line Output Level (Maximum): 8.2dBu (2Vrms) @ balanced audio, 2.2dBu (1Vrms) @ unbalanced audio

Frequency Response: (+0.5 dB, -1 dB) 20 Hz to 20 kHz

Audio Output Sync Delay: 0 to 50 ms

Audio S/N Ratio: 93dB @ 2Vrms, 1kHz A-weighted

Audio THD+N: <0.1% @ 0dBV, 1kHz

Interface

Input:

2 × HDMI IN (HDMI Type A, 19-pin female)

2 × USB-C IN (Type C, 24-pin female)

1 × LINE IN (5-pin 3.5mm phoenix connector)

1 × DANTE IN (RJ45)

Output:

1 × HDMI OUTPUT (Type-A, 19-pin female)

1 × HDBT OUTPUT (RJ45)

1 × LINE OUT (5-pin 3.5mm Phoenix connector)

Control:

1 × RS-232 (3-pin 3.5mm Phoenix connector)

1 × LAN (RJ45)

1 × USB HOST (USB Type-B)

2 × USB DEVICES (USB Type-A)

1 × IR IN (3.5mm stereo mini-jack)

1 × IR OUT (3.5mm stereo mini-jack)

Product specification

Housing

Front panel: Aluminum

Rear case: Metal enclosure

Weight

Transmitter: 1.21 kg

Dimensions & Weight

220 mm (W) × 150 mm (D) × 44 mm (H)

Power Supply & Power Consumption

Input: AC100–240V, 50/60Hz

Output: DC 24V / 8A (US/EU standard,
CE/FCC/UL certified)

Power Consumption: 150W (Max)

Temperature

Operating Temperature: 0°C ~ 40°C / 32°F ~ 104°F

Storage Temperature: -20°C ~ 60°C / -4°F ~ 140°F

Relative Humidity

20% ~ 90% RH (non-condensing)