Cinetreak CT-4: 4-Channel HDMI Capture Card Manual

I. Introduction:

Cinetreak 4-Channel HDMI Capture Card CT-4 integrates four HDMI-to-USB capture channels via a USB hub. It connects to a computer's Type-C port using the provided Type-C cable. Compliant with standard UVC protocol (plug-and-play, no drivers required), it works with software like OBS, vMix, and Zoom on computers, as well as the "V Director Recording" app on mobile devices and iPads. Add four distinct "Video Capture Device" sources in your software to display all four audio/video signals simultaneously and enable broadcast switching.

For optimal high-resolution capture, ensure your computer supports USB 3.2 Gen 2 (10Gbps bandwidth) and use a Thunderbolt™ 3/4 cable.

Supports:

- **Input:** 4x HDMI 4K@60Hz
- **Output:** 4x HDMI 4K@60Hz, 1x Stereo Line Audio Input
- **UVC Output:** 4096x2160@60Hz (MJPEG) / 3840x2160@30Hz (YUV420) Ultra HD signals.

II. Product:



III. Interface:



1. HDMI IN -4 HDMI input signals, supporting 4K60 input.

2. HDMI OUT -4-channel HDMI output, which is an input loop and can be connected to a monitor.

3. UVC OUT -1 UVC lightning output port, including 4 UVC audio and video signals.

4. Line Audio IN - Stereo line audio input, can be connected to mixing consoles, etc.

5. POWER - PD fast charging protocol 100W, powered by mobile phones or computers, can be used for a short period of time without power supply.

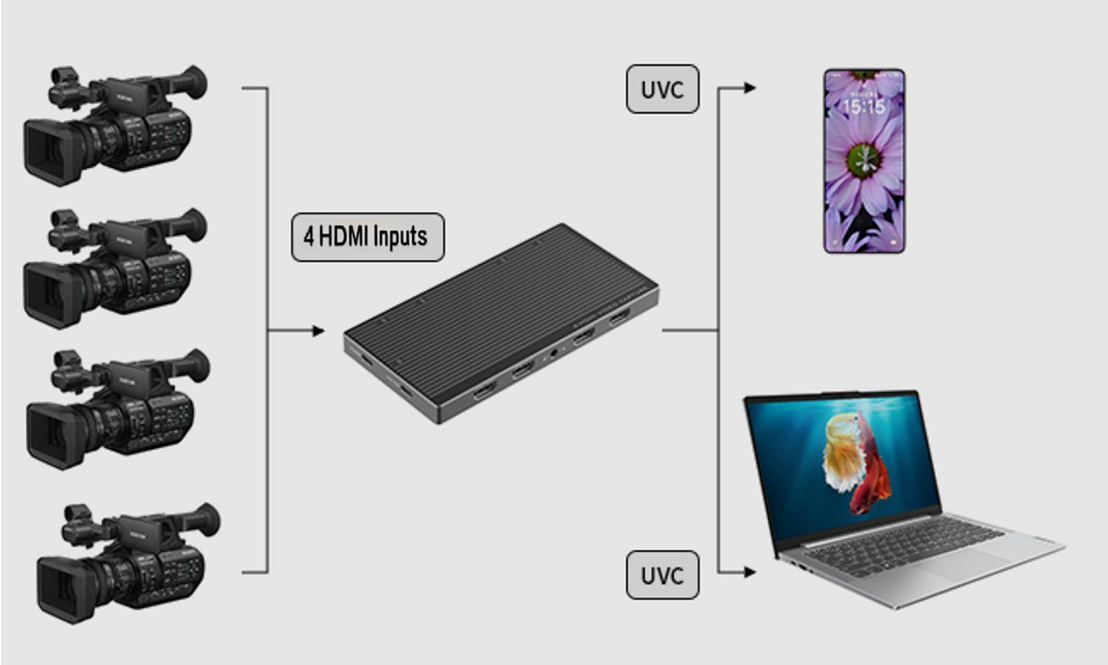
6. DC-5V OUT - Provides 5V/2A power supply for external converters, such as SDI to HDMI converters.

7. 4 indicator lights - After inserting the HDMI input, the red indicator light is on, and after UVC is read, the blue indicator light is on.

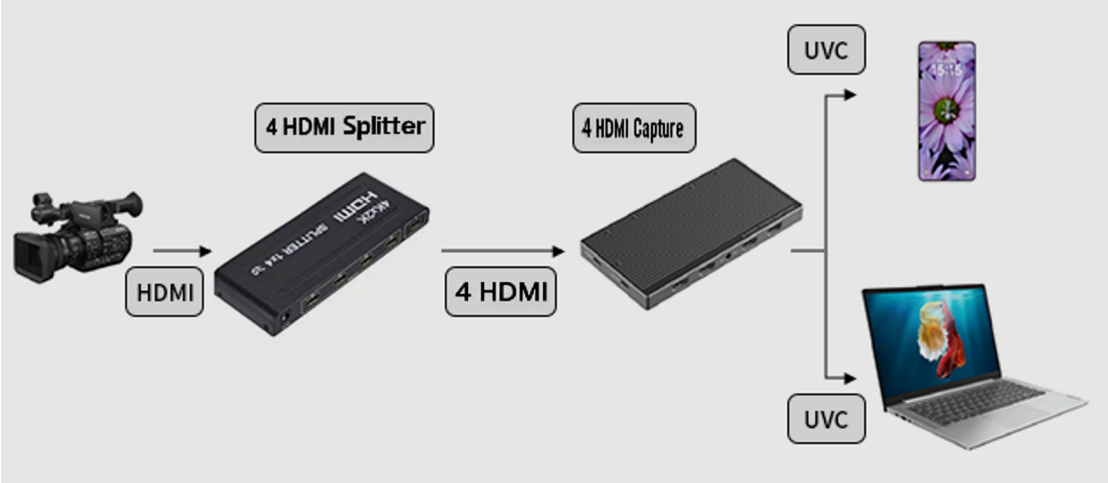
8. Indicator light - power indicator light, when connected to a power source or UVC computer, the blue light will turn on.

IV. Block Diagram:

1. CT-4 4-Channel Capture



2. Multi-Platform Broadcasting



V. Specifications:

Interface	Parameters
HDMI IN	4096x2160@60Hz YUV420 4096x2160@30Hz YUV444
HDMI OUT	4096x2160@60Hz YUV420 4096x2160@30Hz YUV444
Line Audio IN	Analog Stereo to I2S Input (Connected to Channel 1)
UVC OUT	4 Channels, USB Audio/Video compliant with UVC 1.0 protocol. Audio: Default 48KHz/24bit Stereo, 5.1CH support. Type-C USB 3.2 Gen 2x1 (10Gbps)
UVC OUT Video Formats	YUV422, MJPEG, RGB24, NV12
UVC OUT Resolutions	4096x2160@60Hz (MJPEG) 3840x2160@30Hz (YUV420)
POWER	PD Fast-Charging Protocol (Max 100W)

DC-5V OUT	5V/2A
OS Support	Windows XP/7/8/10/11, Android 5.0+, macOS
Dimensions	165mm x 82mm x 13mm (Includes mounting holes with hot-shoe design)
Weight	220g
Operating Temp	-20° C ~ 50° C (Operating), -20° C ~ 80° C (Storage)
Model	CT-4

Data Bandwidth Requirements (Per UVC Stream, x4 for 4 Channels):

Output Resolution	Format	Approx. Data Rate
1920x1080@60Hz	YUV422	3 Gb/s
	RGB24	4 Gb/s
	NV12	2 Gb/s
	MJPEG	150-200 Mb/s
4096x2160@25Hz	YUV422	5 Gb/s
3840x2160@30Hz	NV12	4 Gb/s
4096x2160@60Hz	MJPEG	600-800 Mb/s

Supported Output Resolutions & Formats:

Interface	Format	Supported Resolutions & Frame Rates
USB 3.0	YUV422	800x600@60Hz/50Hz/30Hz/20Hz/10Hz
	RGB24	800x600@60Hz/50Hz/30Hz/20Hz/10Hz
	MJPEG	1920x1080@120Hz/60Hz/50Hz/30Hz/20Hz/10Hz 1600x1200@60Hz/50Hz/30Hz/20Hz/10Hz 1360x768@60Hz/50Hz/30Hz/20Hz/10Hz 1280x1024@60Hz/50Hz/30Hz/20Hz/10Hz 1280x960@60Hz/50Hz/30Hz/20Hz/10Hz/6Hz 1280x720@60Hz/50Hz/30Hz/20Hz/10Hz 1024x768@60Hz/50Hz/30Hz/20Hz/10Hz 800x600@60Hz/50Hz/30Hz/20Hz/10Hz
	NV12	3840x2160@30Hz/20Hz/10Hz 2560x1440@60Hz/50Hz/30Hz/20Hz/10Hz 1920x1080@60Hz/30Hz/20Hz/10Hz/6Hz 1280x720@60Hz/50Hz/30Hz/20Hz/10Hz
USB 2.0	YUV422	1920x1080@10Hz/5Hz 1600x1200@10Hz/5Hz 1360x768@15Hz/8Hz 1280x1024@15Hz/8Hz 1280x960@15Hz/8Hz 1280x720@25Hz/10Hz 1024x768@25Hz/10Hz

Interface	Format	Supported Resolutions & Frame Rates
		800x600@30Hz/20Hz/10Hz 720x576@50Hz/25Hz/20Hz/10Hz 720x480@60Hz/30Hz/20Hz/10Hz 640x480@60Hz/30Hz/20Hz/10Hz
	MJPEG	1920x1080@60Hz/50Hz/30Hz/20Hz/10Hz 1600x1200@60Hz/50Hz/30Hz/20Hz/10Hz 1360x768@60Hz/50Hz/30Hz/20Hz/10Hz 1280x1024@60Hz/50Hz/30Hz/20Hz/10Hz 1280x960@60Hz/50Hz/30Hz/20Hz/10Hz 1280x720@60Hz/50Hz/30Hz/20Hz/10Hz 1024x768@60Hz/50Hz/30Hz/20Hz/10Hz 800x600@60Hz/50Hz/30Hz/20Hz/10Hz 720x576@60Hz/50Hz/30Hz/20Hz/10Hz 720x480@60Hz/50Hz/30Hz/20Hz/10Hz 640x480@60Hz/30Hz/20Hz/10Hz
	NV12	1920x1080@15Hz/10Hz/5Hz 1280x720@30Hz/25Hz/20Hz/10Hz 800x600@60Hz/50Hz/30Hz/20Hz/10Hz

VI. Package Contents:

- 1 x CT-4 Capture Card
- 1 x USB 3.2 Gen 2 Data Cable (Type-C to Type-C)
- 1 x User Manual & Warranty Card