

USB Capture SDI 4K Pro

One-channel 4Kp60 capture device

SKU: 321600000

Model ID: IO0216A



Product Overview

USB Capture SDI 4K Pro is a plug-and-play device which enables computers including laptops to capture SDI signals up to 4096x2160 (including 3840x2160 Ultra HD) at 60fps with 4:2:2 chroma fidelity via the USB 3.2 Gen 2x2 interface, with no additional power source required. It provides seamless video capture with minimal CPU usage, making it an ideal solution for applications such as streaming, video conferencing, live production, immersive presentations and more.

Key Features

- Max input & loop through signal at 12G 4096x2160 60fps 10Bit YUV4:2:2
- Capture videos up to 4096x2160, frame rates up to 240fps (Dependent on host computer; 20Gbps USB 3.2 Gen 2x2 connectivity required for maximum performance)
- Capture 2-channel embedded audio or analog audio via 3.5mm unbalanced Line In interface
- Extract SDI embedded audio and output via the 3.5mm Line Out interface
- Plug-and-play compatibility with Windows, Linux, macOS and Chrome OS
- USB 3.2 with data transfer capability up to 20Gbps, with no additional power source required
- FPGA-based, zero-CPU-usage video processing

Packing List

- 1x USB Capture SDI 4K Pro
- 1x USB 3.2 Type-C to Type-C cable (80 cm)
- 1x USB 3.2 Type-C to Type-A cable (80 cm)
- 1x Quick Start Guide

Technical Specifications

Revised on 24/03/2025

Input Features

- Max input & loop through signal at 12G 4096x2160 60fps 10Bit YUV4:2:2
- Video format supports RGB/YUV 4:4:4 8/10/12-bit, YUV 4:2:2 12-bit, YUV 4:2:0 8/10/12-bit
- Up to 8 channels, 24-bit SDI embedded audio, with a sample rate of 192kHz
- Audio input through via 3.5mm line in supports 2-channel IEC60958 standard audio stream

Process and Capture Features

- Video processing pipelines with ~700Mpixels/s processing bandwidth
- Capture videos up to 4096x2160, frame rates up to 240fps. Outputs include (actual capture frame rate can be limited by the USB bandwidth and internal working frequency.):
 - 4096x2160p/3840x2160p 23.98/24/25/29.97/30/50/60
 - 2560x1440p60
 - 1920x1080p/1280x720p 23.98/24/25/29.97/30/50/59.94/60

- 720x576p25
- 720x480p30
- Output NV12/I420/YUY2/UYVY/RGB24/RGB32 videos
- Output audio of SDI signal via 3.5 mm line out
- Supports 2-channel IEC60958 standard audio stream

Included Software

- USB Capture Utility enables users to easily check and set the capture-related parameters, upgrade firmware of the capture device and export info needed for troubleshooting

SDK & APIs

- The MWCapture SDK provides functions including signal status extraction, capture configuration and real-time audio & video capture, etc
- Windows DirectShow/Wave API/DirectSound/WASAPI
- Linux V4L2/ALSA
- macOS AVCaptureSession/AudioUnit

Output Interface

- USB 3.2 (20 Gbps) Type-C

Compatible Software

- Zoom Rooms
- Microsoft Teams
- Skype for Business
- Google Hangouts
- GoToMeeting
- Gstreamer
- VLC
- OBS Studio
- XSplit
- QuickTime Player
- Any other DirectShow/V4L2/AVCaptureSession based encoding or streaming software

Recommended OS

- Windows 10/11/Server 2016/Server 2019/Server 2022 (x86 & x64) and above
- Linux x86, x64 & ARM architecture, with 2.6.35 and above
- Mac OS X 10.9 and above
- macOS 10.12 and above
- Chrome OS

LED Indicator

- Status LEDs indicate the working state of the device:
 - Pulsing slowly: input signal unlocked
 - On: input signal locked
 - Double blinks: memory abnormal or FPGA configuration failed
 - Off: firmware or power supply abnormal

Form Factor

- 4.35 inches (L) x 2.24 inches (W) x 0.71 inches (H) (110.6mm x 56.8mm x18mm)

Power Consumption

- 5V max current: ~1.439A
- max power consumption: ~7.194W

Working Environment

- Operating temperature: 0 to 60 deg C
- Storage temperature: -20 to 70 deg C
- Relative Humidity: 5% to 90% non-condensing

Notice

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