

USB Capture HDMI 4K Pro

One-channel 4Kp60 capture device

SKU: 321500000

Model ID: IO0215A



Product Overview

USB Capture HDMI 4K Pro is a plug-and-play device which enables computers including laptops to capture HDMI signals up to 4096x2160 (including 3840x2160 Ultra HD) at 60fps with 4:4:4 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 4096x2160 60fps 4:4:4
- 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 microphone interface
- Extract the audio of HDMI signal or the computer and output via 3.5 mm headphone jack
- 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 HDMI 4K Pro
- 1 x HDMI cable
- 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 09/04/2025

Input Features

- 600MHz HDMI receiver, max input & loop through video: 4096x2160 60fps 4:4:4
- Custom EDID
- Support for RGB/YUV 4:4:4 8/10/12-bit, YUV 4:2:0 8/10/12-bit, YUV 4:2:2 12-bit
- Up to 8-channel 24-bit HDMI-embedded audio at 192kHz
- 2-channel IEC60958 audio streams via 3.5mm microphone interface
- HDMI interfaces: HDMI 2.0, DVI-D

Process and Capture Features

- Video processing pipelines with ~700Mpixels/s processing bandwidth
- Supported color depth for video capture is up to 10-bit
- Capture videos up to 4096x2160, frame rates up to 240fps. Outputs include (Actual capture format will vary based on the host system USB interface and operating system. *):

- 4096x2160p/3840x2160p 23.98/24/25/29.97/30/50/60
- 2560x1440p60
- 2560x1080p/1920x1080p/1280x720p 23.98/24/25/29.97/30/50/59.94/60
- 720x576p25
- 720x480p30
- Output P010/Y210/NV12/I420/YUYV/YUVY/RGB24/RGB32 videos
- Support video cropping, up/down scaling, de-interlacing, aspect ratio conversion, color format conversion, frame rate conversion, flip and mirror
- Output audio of HDMI signal or hosting machine (the computer) via 3.5 mm headphone jack
- Up to 2-channel IEC60958 audio streams

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 Gen 2x2

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

- 3.86 in (L) x 2.24 in (W) x 0.71 in (H) (98.1 mm x 56.8 mm x 18 mm)

Accessories

- 1 x USB 3.2 Type C to Type C cable (80 cm) (up to 20Gbps, PN: ELE00053)
- 1 x USB 3.2 Type C to Type A cable (80 cm) (up to 10Gbps, PN: ELE00054)
- 1 x HDMI cable (PN: ACC00090)

Power Consumption

- 5V max current: ~1.474A
- Max power consumption: ~7.369W

Working Environment

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

* USB Capture HDMI 4K Pro supported resolutions and frame rates see [for Windows/Linux OS](#) and [for macOS](#).

Copyright (c) 2011–2025 [Nanjing Magewell Electronics Co., Ltd.](#) All rights reserved.

Specifications are based on current hardware, firmware and software revisions, and are subject to change without notice.

HDMI, the HDMI logo and High-Definition Multimedia interface are trademarks or registered trademarks of HDMI Licensing LLC. Windows, DirectShow and DirectSound are trademarks or registered trademarks of Microsoft Corporation. OS X and macOS are trademarks or registered trademarks of Apple Inc.