MAGEWELL

USB Capture HDMI 4K Pro Technical Specifications

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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
- 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 23.98/24/25/29.97/30/60
  - 2560x1440p60
  - 2560x1080p/1920x1080p/1280x720p 23.98/24/25/29.97/30/50/59.94/60
  - 720x576p25
  - 720x480p30
- Output NV12/I420/YUYV/UYVY/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 × USB 3.2 Type C to Type C cable (80 cm) (up to 20Gbps, PN: ELE00053)
- 1 × USB 3.2 Type C to Type A cable (80 cm) (up to 20Gbps, PN: ELE00053)

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.