

# MAGEWELL

## USB Capture HDMI Plus Technical Specifications

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### Supported OS

- Windows 7/8/8.1/10/2008/2008 R2/2012 (x86 & x64)
- Linux (Ubuntu 12.04–16.10, CentOS 7)
- OS X 10.9–10.11
- macOS 10.12

### Supported APIs

- Windows
  - DirectShow
  - Wave API/DirectSound/WASAPI
- Linux
  - V4L2
  - ALSA
- OS X/macOS
  - QuickTime
  - AV Foundation

### Supported Software

- VLC
- VirtualDub
- OBS
- XSplit
- vMix
- VidBlaster
- Wirecast
- Microsoft Media Encoder
- Adobe Flash Media Encoder
- Any other DirectShow, V4L2, QuickTime, AV Foundation based encoding or streaming software

### Input Interfaces

- HDMI
  - DVI-D 1.0
  - HDMI 1.4
- 3.5mm audio jack
  - Microphone interface

### Output interface

- USB 3.0
  - compatible with USB 2.0
  - compatible with USB 3.1 Gen 1
- 3.5mm audio jack
  - headphones interface
- HDMI
  - HDMI loop-through interface

### Input features

- Support for input video resolutions up to 4096x2160

### HDMI Specific Features

- 297MHz HDMI receiver
- Adaptive HDMI equalizer support for cables lengths up to 30M
- Support for customized EDID
- Support for extraction of AVI/Audio/SPD/MS/VS/ACP/ISRC1/ISRC2/Gamut InfoFrames
- Full colorimetry support
- Support for up to 4096x2160 4:4:4/4:2:2 30fps or 4096x2160 4:2:0 60fps input signals
- For 4:2:0 input signals, the horizontal and vertical resolution will be reduced to 1/2 for capturing
- For 4:4:4/4:2:2 input signal at more than 170MHz, the horizontal resolution will be reduced to 1/2 for capturing
- Support for 2 channel IEC60958/IEC61937 audio streams
- Support for extraction of audio formation information & channel status data

- Support for extraction of video timing information
- Support for extraction of 3D format information
- Support for extraction of Sony/Canon DSLR time code
- Support for Side-by-Side Half, Top-and-Bottom, Frame Packing 3D mode.

## Analog Audio Features

- Extraction of stereo embedded HDMI audio for recording and output via 3.5mm stereo mini-jack Line Out
- Capture of analog audio via 3.5 mm microphone interface
- Integrate the functions of a USB audio card. Playback audio via 3.5 mm headphones interface. Support for recording the playback audio of the computer.

## Video Capture format

- Support for capture resolutions up to 2048x1080 or 1920x1200
- Support for output frame rates up to 60fps. (Actual output frame rate can be limited by the USB bandwidth.)
- Support for YUY2 4:2:2 8-bit
- More capture formats can be set using the USB Capture Utility

## Video Processing Features

- Video processing pipelines with 160 Mpixels/s processing bandwidth
- Video cropping
- Video scaling
- Video de-interlacing
  - Wave
  - Blend top & bottom field
  - Top field only
  - Bottom field only
- Video aspect ratio conversion
  - Auto or manual selection of input aspect ratio
  - Auto or manual selection of output aspect ratio
  - Three aspect ratio conversion modes: Ignore (Anamorphic), Cropping or Padding (Letterbox or Pillarbox)
- Video color format conversion
  - Auto or manual selection of input color format & quantization range
  - Auto or manual selection of output color format, quantization range & saturation range
  - Support for RGB, YCbCr 601, YCbCr 709, YCbCr 2020 color formats
  - Support for Limited or Full quantization range
  - Support for Limited, Full & 'Extended gamut' saturation range
- Video frame rate conversion

## Multiple devices on one computer

- Support for connecting multiple USB devices to one system
- Support for setting the device serial number as the device name shown in the system using USB Capture Utility

## SDK

- The USB Capture SDK provide functions including signal status extraction, capture configuration, etc.

## Firmware Upgrade

- Multiple devices in one system can be upgraded simultaneously

## LED Indicator

- Status LEDs indicate the working state of each channel: idle, input signal locked, memory failed or FPGA configuration failed.

## Form Factor

- 98.1mm (L) x 56.8mm (W) x 17mm (H)

## Power Consumption

- 5V max current: 900mA
- max power consumption: ~4.5W

## Working Environment

- Operating temperature: 0 to 50 deg C
- Storage temperature: -20 to 70 deg C
- Relative Humidity: 5% to 90% non-condensing