

MAGEWELL

USB Capture DVI 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

- DVIH
 - DVI 1.0
 - HDMI 1.4a (via breakout cable)
 - VGA (via DVI-to-VGA convertor)
 - Component (via breakout cable)
- 3.5mm audio jack
 - unbalanced Line In interface

Output Interface

- USB 3.0
 - compatible with USB 2.0
 - compatible with USB 3.1 Gen 1
- 3.5mm audio jack
 - unbalanced Line Out interface

Input features

- Auto scan of video input sources when there is no signal input to the currently selected input source
- Manual selection of video input source
- Auto selection of linked (embedded) audio input source when the video input source changes
- Manual selection of audio input source
- Support for input video resolutions up to 2048x2160

VGA & Component Specific Features

- 12-bit ADC
- Support for RGB & YCbCr (YUV) color formats
- Support for 'Separated sync', 'Composite sync', 'Sync-on-green' (SOG), 'Sync-on-luminance' (SOY)
- Support for DMT, CEA, CVT, GTF video timings
- Input signals up to 165MHz pixel rate are digitized with 1:1 sampling
- Input signals over 165MHz pixel rate can be digitized with horizontal sub-sampling (resulting in some image quality loss - NOT recommended)

- Auto detection of RGB & YCbCr color formats
- Auto or manual sampling phase adjustment
- Auto horizontal alignment
- Support for customized video timings
- Support for customized video resolutions for CVT/GTF timings

HDMI Specific Features

- 225MHz 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 8/10/12-bit color depths
- Support for RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 color sampling
- Support for up to 8-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 stereo analog audio from Line In (3.5 mm stereo mini-jack socket)

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

- 101.5mm (L) x 56.8mm (W) x 17mm (H)

Power Consumption

- 5V max current: 600mA

- max power consumption: ~3W

Working Environment

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