

# MAGEWELL

## USB Fusion Technical Specifications

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### Scene Input

- HDMI
  - Port: 2x HDMI 1.4 Type-A port (HDMI 1 / HDMI 2)
  - Resolution/frame rate: up to 1920x1080p, 60fps
  - Color depth: 8-bit, 10-bit, 12-bit
  - Color sampling: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2
- USB
  - Port: 1x USB 3.0 Type-A port (WEB CAMERA 3)
  - Resolution/frame rate: up to 2040x1080p, 60fps
  - Codec: YUYV, H.264, MJPG, UYUV, NV12, etc.
- Imported files
  - Video file: MOV, MP4, MKV
  - Image file: JPEG, PNG, BMP
  - PDF file
  - Resolution: up to 4K, 8-bit
  - Codec: H.264, HEVC (H.265)
- Web page
  - Transfer protocol: HTTP, HTTPS

### Audio Input

- 1x 3.5mm jack: line in port
  - Format: 2-channel, 48 KHz, 16-bit
- 1x 3.5mm jack: headset port
  - Format: 2-channel, 48 KHz, 16-bit
  - Standard: CTIA
- Up to 8-channel 24-bit HDMI-embedded audio at 192KHz
- Audio from WEB CAMERA 3 port: 2-channel (The audio is disabled by default, and can be enabled on Web UI.)
- Audio embedded in video files
- Audio file: MP3, M4A, WAV
- Audio of web pages

### Video Output

- USB OUT
  - Port: 1x USB 3.0 Type-C port
  - Resolution: 1920x1080, 1280x720, 640x480
  - Frame rate: 60fps, 30fps, 15fps
  - Color sampling: YUYV, NV12, ARGB
- HDMI OUT
  - Port: 1x HDMI 1.4 Type-A port
  - Output image: HDMI 1, HDMI 2, or PROGRAM image
  - Output resolution: configurable, up to 2048x2048 (Actual resolution options can be limited by the negotiation result between the device and monitor.)

## Audio Output

- 1x 3.5mm jack: headset port
  - Format: 2-channel, 48 KHz, 16-bit
  - Standard: CTIA
- Audio output via WEB CAMERA 3 port: 2-channel (The audio is disabled by default, and can be enabled on Web UI.)
- Audio output via USB OUT port: 2-channel, 48 KHz, 16-bit
- Audio output via HDMI OUT port: 2-channel, 48 KHz, 16-bit

## Video Processing & Production

- HDMI source
  - Video/audio signal data: auto extracted
  - Color space/quantization range: calibration supported
  - De-interlacing: Bob, motion adaptive, motion compensated
  - EDID: self-definition supported
- USB source
  - Format: selects according to the source
  - Resolution/frame rate: selects according to the source
- PDF source
  - Supports turning pages, visiting hyperlinks, zooming in and out, etc.
- Web page source
  - Supports browsing web pages, visiting hyperlinks, zooming in and out, etc.
  - Supports inputting information through the remote keyboard
- Auto conversion of frame rate/color space
- Source switching: auto, manual
- Scene compositing: picture in picture, side by side
- Scene editing: crop, mirror, scale, rotate, and more
- Annotation: pens, shapes, text, and more, generated as notes for exporting
- Presentation: supports creating, importing, exporting, managing presentations, etc.
- Watermark: supports adding and applying text or picture (JPG, JPEG and PNG) as a watermark into the presentation

## Audio Processing & Production

- Auto resampling
- Auto audio de-embedding and embedding
- Controlling volume of audio output and each audio input
- Supporting microphone gain

## Recording and Screenshot

- Supports configuring recording parameters. The default recording format is 1080p60, H.264, MP4.
  - Source: supports selecting the source to record, and selecting whether to only record the image
  - Encoder: supports setting resolution (up to 1080p60), bitrate mode (CBR or VBR), audio (up to 48Khz, aac, 256kbps), etc.
  - Storage: supports local storing as MP4 or MOV files, splitting files by time or size
- Screenshot format: JPEG, 1920x1080
- Storage space: 128 GB

## Network

- Ethernet: 1x RJ45 port, 10/100/1000 Mbps Base-T
- Wi-Fi network: IEEE 802.11 a/b/g/n/ac/ax, Station mode and AP mode supported
- USB network
  - Port: USB OUT

## Provided Software

- USB Fusion App: create, edit and control presentations
  - OS version: iOS 12 and later, Android 7.0 and later
- Web UI: configure and manage the device and presentations, and support to register Magewell Cloud for centralized management

## Compatible Software

- Skype, Zoom, Microsoft Teams
- Other UVC/UAC compliant, DirectShow/V4L2/AVFoundation compatible software

## Compatible OS

- Windows: Windows 7 and later, Server 2008 and later (x86 & x64)
- Linux: Linux system with kernel 2.6.35 or later (x86, x64 & ARM)
- Mac: OS X 10.9 and later, macOS 10.12 and later

## Buttons

- Switch and composite sources

## LED Indicators

- Power / Wi-Fi / HDMI 1 / HDMI 2 / WEB CAMERA 3 indicators
  - On: connected/signal locked
  - Off: not connected/signal not locked
- Line-in / headset indicators
  - On: connected
  - Pulsing: not connected

## Power

- Power port: 2.1mm x 5.5mm jack
- Power input: 12V/3A
- Maximum power usage: 21.3W

## Dimensions

- 186mm x 101.2mm x 30mm

## Accessories

- 1x Power adapter
  - Output: 12.0V/3.33A
- 1x USB 3.0 cable

## Working Environment

- Operating temperature: 0 to 40 deg C
- Storage temperature: -20 to 70 deg C
- Relative humidity: 5% to 90% non-condensing