MAGEWELL

USB Fusion Technical Specifications

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Scene Input

- HDMI
 - Port: 2x HDMI 1.4a Type-A port (HDMI 1 / HDMI 2)
 - Resolution/frame rate: up to 2048x1080p, 60fps
 - o Color depth: 8-bit, 10-bit, 12-bit
 - Video 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, MKVImage file: JPEG, PNG, BMP
 - PDF file
 - Resolution: up to 4K, 8-bit
 - o Codec: H.264, HEVC (H.265)
- Web page
 - Transfer protocol: HTTP, HTTPS

Audio Input

- Line in port: 1x 3.5mm jack, 2-channel, 48 KHz, 16-bit
- Headset port: 1x 3.5mm jack (CTIA standard), 2-channel, 48 KHz, 16-bit
- 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
 - o Resolution: 1920x1080, 1280x720, 640x480
 - Frame rate: 60fps, 30fps, 15fps
 - Video sampling: YUYV, NV12, ARGB
- HDMI OUT
 - Port: 1x HDMI 1.4a Type-A port
 - o 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
 - o 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
 - o Video/audio signal data: auto extracted
 - Color space/quantization range: calibration supported
 - o 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.
- GFX: supports adding and applying text or picture (JPG, JPEG and PNG) as GFX into the presentation

Audio Processing & Production

- Auto resampling
- · Auto audio de-embedding and embedding
- · Controls volume of audio output and each audio input
- · Supports microphone gain

Recording and Screenshot

- Supports manual and schedule recording to local storage, with default format of 1080p60, H.264, MP4 (Recording parameters and schedule can be configured on Web UI)
- Screenshot format: JPEG, 1920x1080
- Storage space: 128 GB
- Cloud backup: supports automatically or manually uploading recorded video and screenshots to Google Drive

Provided Software

- USB Fusion App
 - Creates, edits and controls presentations
 - Supports HD, SD, Auto and customized preview quality
 - Provides USB Clicker to control the PowerPoint on the computer connected to the USB OUT port.
 - Takes and manages recordings and screenshots
 - o OS version: iOS 12 and later, Android 7.0 and later
- Web UI
 - Configures and manages the device
 - Creates, controls and manages presentations and media files
 - Configures recording parameters and sets schedule recording
 - Source: supports ISO recording by selecting the source to record, and selecting whether to only record the image
 - Encoder: sets 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, and splitting files by time or size
 - Schedule: sets recording schedule to implement recording automatically during the specified time period
 - · Manages recordings and screenshots, and supports auto or manual backup to Google Drive
 - Sets the login mode of the App to the device, including free login, password to login and pairing to login
 - Customizes preview quality for the App
 - Sets sleep
 - Supports registering Magewell Cloud for centralized management

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: 1x USB OUT port

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

- Switches and composites sources
- Starts or stops pairing for "Pairing to login" mode
- · Wakes up the device when it is sleeping

LED Indicators

- Power
 - o On: power on
 - o Off: power off
- Wi-Fi / HDMI 1 / HDMI 2 / WEB CAMERA 3
 - o On: connected
 - o Off: not connected
- Line-in / Headset
 - On: connected
 - · Pulsing: not connected

Power

- Power port: 2.1mm x 5.5mm jack
- Power input: 12V/3A

Power Consumption

- Static working status: 10W
- Full-load working status: 17.5W
- Static sleeping status: 9.8-10w
- Full-load sleeping status: 14.5–14.8W

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