MAGEWELL

Director Mini Technical Specifications

Specifications are based on current hardware, firmware and software revisions, and are subject to change without notice.

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Video Input

- HDMI
  - Port: 2x HDMI 1.4 Type-A port
  - Typical resolution/frame rate:
    - 4096x2160p/3840x2160p 23.98/24/25/29.97/30/59.94/60
    - 1920x1080p 23.98/24/25/29.97/30/50/59.94/60
    - 1920x1080i 25/29.97/30
    - 1280x720p 23.98/24/25/29.97/30/50/59.94/60
    - 720x576p 50/100
    - 720x576i 25/50
    - 720x480p 59.94/60
    - 720x480i 29.97/30
  - Color depth: 8/10/12-bit
  - Color sampling: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2
- USB
  - Port: 2x USB 3.0 Type-A port
  - Resolution/frame rate: Up to 1920x1080p, 60fps
  - Format: YUYV, MJPG, NV12
- Phone Camera
  - Connection mode: LAN
  - Resolution/frame rate: Up to 1080p, 60fps
- SRT stream
  - Resolution/frame rate: Up to 1080p, 60fps
- RTMP stream
  - Resolution/frame rate: Up to 1080p, 60fps
- NDI stream
  - NDI$^®$ HX2 or NDI$^®$ HX3
  - Resolution/frame rate: Up to 1080p, 60fps
- Video
  - Resolution: Up to 4K
  - Codec: H.264
  - Format: MOV/MP4
- Picture
  - Format: JPEG/PNG/BMP

Audio Input

- Mic/line in: 1x 3.5mm jack, 2-channel, 48 KHz, 16-bit
- Audio input from HDMI port: 2-channel, 48 KHz, 16-bit
- Audio input from USB port: 2-channel (only microphone supported)
- Audio input from phone microphone
- Audio from SRT stream
- Audio from RTMP stream
- Audio from NDI stream
- Audio embedded in video files
- Background music (BGM): MP3, M4A, WAV files

Video Output

- Streaming and recording
  - Resolution: 1080p, 720p, 540p, 360p (only for NDI)
  - Frame rate: 60/59.94/50/30/29.97/25/24/23.98/15 fps (Encoding options change along with the frame rate of the show.)
  - Bitrate:
    - NDI® HX3: up to 62.0Mbps, down to 1.5Mbps
    - Others: up to 30.0Mbps, down to 256kpbs
  - Key frame interval: customizable
  - Profile: High profile, Main profile, Baseline profile
  - Bitrate mode: VBR, CBR
- USB-C DP-OUT
  - Port: 1* USB 3.0 Type-C port
  - Resolution: 1920x1080
  - Frame rate: 60fps, 50fps
  - Sampling format: RGB 4:4:4

Audio Output

- Streaming and recording: 2-channel, 16-bit, 48 KHz, aac, 64kbps/96kbps/128kbps
- Headphone output: 1x 3.5mm jack, 2-channel, 48 KHz, 16-bit
- Audio output via Bluetooth device: 2-channel, 48 KHz, 16-bit
- Audio output via USB-C OUT port: 2-channel, 48 KHz, 16-bit
- Audio output via USB-A port: 2-channel, 48 KHz, 16-bit

Features of USB-A Port

- Connect to a USB A/V device, such as webcam, USB microphone, USB speaker, etc.
- Connect to a USB flash drive
  - To transfer video, picture, audio and other media files, firmware update files, log files, etc.
  - Supported system format: FAT32, exFAT and NTFS

Features of USB-C OUT Port

- Connect to an external screen
  - Connection mode: Connect the device to a monitor with a USB-C to HDMI/VGA/DP adapter
  - A/V display mode options: Clean Program, Duplicate Screen, Loop HDMI 1, Loop HDMI 2
  - Image rotation: Rotate 90° to left, or rotate 90° to right
  - Supports using an external touchscreen to control the device in the Duplicate Screen mode
- Connect to a computer
  - Transfer video, picture, audio and other media files, firmware update files, log files, etc.

Network

- Supports Ethernet and WiFi
  - Ethernet: 1x RJ45 port, 10/100/1000 Mbps Base-T
  - WiFi: 2.4G/5G, Station and AP modes supported
- Supports Bluetooth for audio monitoring with Bluetooth devices
  - Bluetooth: BT 5.0

Features

- Show
  - Supports creating multiple shows in landscape (16:9) or portrait (9:16) mode, and manage them
  - Supports creating a shows at 60/59.94/50/30/29.97/25/24/23.98 fps
- Scenes
  - Supports creating multiple scenes in a show, and managing them
  - Supports adding various sources, including HDMI, WEBCAM, video, picture, RTMP stream, SRT stream, phone camera, NDI stream, text and color
  - Supports multi-view composition in one scene
  - Provides lots of editing tools, including keyer, crop, transition, etc.
  - Supports switch scenes directly or preview at first and then switch
  - Supports switching scenes with an instant cut or fade effect.
- Audio

- - Supports displaying level and peak through audio meter
    - Supports adjusting the level of each input audio, output and monitor audio
    - Supports global or scene-based settings for audio input sources
    - Supports AFV (Audio-follow-video)
    - Supports solo monitor
    - Supports switching microphone device
    - Supports switching monitor device
- GFX
    - Supports multiple GFX types, including title, lower third, animated text, digital clock, analog clock, bullet list, social media, logo, scoreboard, timer, stopwatch, custom picture and text
    - Supports displaying multiple GFXs, and managing them
    - Supports controlling scoreboard, timer and stopwatch in real time
- BGM
    - Supports adding BGM for each scene and controlling in real time
- Pen
    - Annotates on the screen in real time
- PTZ control
    - Supports controlling PTZ camera via the network, supporting Visca UDP, supported sources including HDMI, WEBCAM (UVC camera), SRT stream, RTMP stream, and NDI stream
- Live stream
    - Natively supports streaming to YouTube, Twitch and Facebook Live
    - Supports streaming with SRT and RTMP protocols
    - Supports two NDI$^®$ HX3 outputs, supporting NDI Tally lights
    - Supports customizing encoding parameters and selecting the encoding source for ISO streaming
    - Supports streaming to two destinations simultaneously
    - Supports showing live comments when streaming to social media
- Record
    - Supports customizing encoding parameters and selecting the encoding source
    - Supports ISO recording, to record two of different sources simultaneously, or record two-channel images with different quality for one source
    - Supports saving recording files in MP4 or MOV format to local storage or SD card
    - Supports saving screenshot files in PNG format to local or SD card
    - Supports splitting recording files by time or size, up to 1 hour or 4G
    - Supports exporting or downloading files through computer, SD card, USB flash drive, App, or Web UI

Director Utility App

- OS version: iOS 11 and later, Android 7.0 and later
- **Phone Camera**: Use a phone as a camera
    - Stream images taken by the phone to Director device
    - Stream images taken by the phone to a destination via SRT
- **Remote Assistant**: Control Director device remotely
    - Switch and manage scenes, set switch mode and effect, implement FTB, free scene, and control PTZ camera
    - Switch and manage GFX, edit GFX text and picture in real time, and control scoreboard, timer and stopwatch
    - Control audio, including adjusting audio level, switch microphone and monitor device, mute audio and monitor audio exclusively
    - Start/stop recording, take screenshots, and manage album files
    - Set streaming servers, start/stop streaming, view streaming status, and view live comments
    - Control and manage BGM
    - View real-time device status
    - Power off the device remotely

Web UI

- Set and manage device
- Switch and manage scenes, set switch mode and effect, implement FTB, freeze scene, and control PTZ camera
- Switch and manage GFX, edit GFX text and picture in real time, and control scoreboard, timer and stopwatch
- Control audio, including adjusting audio level, switch microphone and monitor device, mute audio and monitor audio exclusively
- Start/stop recording, take screenshots and manage album files
- Set streaming servers, start/stop streaming, view streaming status, and view live comments
- Control and manage BGM
- Manage media files
- View real-time device status
- Supports registering Magewell Control Hub (V2.1.20 and later) for centralized management

API

- Provides basic APIs for 3rd party control system

Screen

- Size: 5.44"
- Type: AMOLED
- Aspect ratio: 16:9
- Resolution: 1920x1080
- Brightness: 350 nits
- Color depth: 8-bit
- Contrast ratio: 6000:1
- Color gamut: 105% NTSC
- Refresh rate: 60Hz
- Viewing direction: All
- PPI: 405
- Touchscreen: Capacitive
- Screen coating: Anti-fingerprint coating

Storage

- Local storage: 64 GB
- SD card (not supplied): FAT32 (Under 128G), NTFS, exFAT

Dimensions

- 147.2 mm x 90 mm x 28.5 mm

Power

- AC power
    - Power input: 12V/1.5A
    - Maximum power consumption: 15W
- Battery pack
    - 2x DC 7.4V (NP-F battery packs, not supplied)
    - Hot swappable

LED Lights

The two back LED lights can be set as battery indicators or NDI tally lights.

- Battery indicators (default)
    - Green: 50% - 100%
    - Orange: 25% - 50%
    - Red: <25%
    - Off: depleted
- NDI tally lights
    - Red: the NDI streaming signal is in PGM view.
    - Green: the NDI streaming signal is in PVW view.

Working Environment

- Operating temperature: 0 to 60 deg C (AC power)
- Storage temperature: –20 to 70 deg C
- Relative Humidity: 5% to 90% non-condensing