

Director Mini Technical Specifications

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Revised on $\%$ {month_rev}/ $\%$ {day_rev}/ $\%$ {year_rev}

Video Input

- HDMI
 - Port: 2x HDMI 2.0 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, 1x USB 3.0 Type-C port
 - Format: YUYV, MJPG, NV12, UYUV
 - Resolution/frame rate:
 - Single USB-A input: Up to 1920x1080p, 60fps
 - Single USB-C input: Up to 1920x1080p, 60fps
 - Dual USB-A input: Up to 1920x1080p, 50fps + 1920x1080p, 30fps
 - One USB-A input + one USB-C input: Up to 1920x1080p, 60fps + 1920x1080p, 60fps
- Phone Camera
 - Connection mode: LAN, Wi-Fi
 - Codec: H.264, H.265
 - Resolution/frame rate: Up to 1080p, 60fps
- SRT Caller/Listener
 - Codec: H.264, H.265
 - Resolution/frame rate: Up to 1080p, 60fps
- RTMP Pull/Push
 - Codec: H.264
 - Resolution/frame rate: Up to 1080p, 60fps
- RTSP stream
 - Codec: H.264, H.265
 - Resolution/frame rate: Up to 1080p, 60fps
- NDI® stream
 - NDI HX2, NDI HX3, NDI High Bandwidth
 - Codec: H.264, H.265
 - Resolution/frame rate: Up to 1080p, 60fps
- Video
 - Resolution: Up to 4K
 - Codec: H.264, H.265
 - Format: MOV/MP4/WebM
- Picture
 - Format: JPEG/PNG/BMP
- Webpage
 - Supports adding up to 3 webpages as scenes and 7 webpages as GFXs

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, 48 KHz, 16-bit
- Audio input from Bluetooth device: 2-channel, 48 KHz, 16-bit
- Audio input from phone
- Audio from SRT stream
- Audio from RTMP stream
- Audio from RTSP stream
- Audio from NDI stream
- Audio embedded in video files
- Audio from webpages
- Background music (BGM): MP3, M4A, WAV files
- Audio from GFX: webpage, NDI, video

Video Output

- Streaming and recording
 - Codec: H.264, H.265
 - 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
 - Port: 1* USB 3.0 Type-C port
 - Output mode: DP-OUT, UVC 1.1/UAC 1.0
 - Resolution: 1920x1080, 1280x720, 1080x1920, 720x1280
 - Frame rate: 60fps, 50fps
 - Sampling format: RGB24, YUYV, NV12

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 port: 2-channel, 48 KHz, 16-bit
- Audio output via USB-A port: 2-channel, 48 KHz, 16-bit/24-bit/32-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 modem
- 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
- Connect to a USB keyboard for shortcuts

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: Program, Preview, Multi-view, 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
 - MTP mode: Transfer video, picture, audio and other media files, firmware update files, log files, etc.
 - UVC/UAC mode*: Output audio and video to streaming software

* To transfer video at full frame rate, please use a USB 3.0 cable to connect the USB 3.0 port of your computer.

- Connect to other USB devices, such as USB A/V devices, USB keyboard

Network

- Supports network bonding (not available in China's Mainland)
- Supports Ethernet, WiFi and Cellular
 - Ethernet: 1x RJ45 port, 10/100/1000 Mbps Base-T
 - WiFi: 2.4G/5G, Station and Hotspot modes supported
 - Cellular: USB modem supported (not supplied)
- Supports Bluetooth for audio input or output with Bluetooth devices, and also supports Bluetooth keyboard, etc.
 - Bluetooth: BT 5.0
- Supports USB tethering to share the Internet data connection of a mobile smartphone by connecting the phone with the device through a USB cable.

Features

- Show
 - Supports creating multiple shows in landscape (16:9) or portrait (9:16) mode, and manage them
 - Supports creating 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/ SRT/RTSP/NDI stream*, phone camera, webpage, text and color
 - * It supports adding up to 3 stream sources in one show.
 - Supports browsing webpage sources
 - Supports multi-view composition in one scene, providing prebuilt layouts for easy creation
 - Provides lots of editing tools, including chromakey, crop, transition, etc.
 - Supports switch scenes directly or preview at first and then switch
 - Supports switching scenes with an instant cut or various effects, such as Fade, DIP, DVE, etc.
- 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 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, etc.
 - Supports custom GFX with HDMI source, Webcam source, video, picture, text or PAG (Portable Animated Graphics) file
 - Supports webpage source as GFX
 - Supports NDI stream as GFX
 - 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
 - Supports adding global BGM via Web UI 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, RTSP stream and NDI stream
- Phone Camera control
 - Control the phone camera to zoom or focus, and supports more advanced settings
- Replay
 - Capture some of greatest moments, slow down the action and save highlights.
- Live stream
 - Natively supports streaming to YouTube, Twitch and Facebook Live
 - Supports selecting RTMP or HLS protocol for streaming to YouTube
 - Supports starting a stream scheduled later for YouTube
 - Supports streaming via SRT, RTMP, RTMPS and RTSP protocols

- Supports NDI HX3 output, supporting NDI Tally lights
- Supports customizing encoding parameters and selecting video source (Program, HDMI, WEBCAM, Multi-view) and audio source for ISO streaming
- Supports streaming to four destinations simultaneously
- Supports sending live comment as an overlay into the video feed when streaming to social media
- Record
 - Supports customizing encoding parameters
 - Supports ISO recording, to record two of different video sources simultaneously, or record two-channel images with different quality for one source, combining different audio sources, and supported video sources include Program, HDMI, WEBCAM, Multi-view as well as NDI HX2 and NDI HX3 stream
 - 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 4 hours or 16G
 - Supports exporting or downloading files through computer, SD card, USB flash drive, App, or Web UI
- Shortcut
 - Supports connecting USB or Bluetooth keyboards and creating shortcuts for easy control

Director Utility App

- **OS version:** iOS 13 and later, Android 7.0 and later
- **Phone Camera:** Use a mobile device (phone or tablet) as a camera
 - Stream images taken by the mobile device to Director device
 - Record images taken by the mobile device to its local storage
 - Stream images taken by the mobile device to a destination via SRT
 - Supports Pro Mode to customize white balance, ISO, exposure, focus, etc.
 - Supports selecting the USB camera connected to the iPad with a USB-C port (iPadOS 17 and above).
- **Remote Assistant:** Control Director device remotely
 - View live program image
 - Switch and manage scenes, set switch mode and effect, implement FTB, freeze scene, and control PTZ camera and phone 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 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 send live comment as overlay
 - Control replay and share event files to other apps
 - Control and manage BGM
 - Create, manage and execute shortcuts functions
 - View input information
 - View real-time device status
 - Power off the device remotely
- **External Screen:** Suitable for tablets equipped with a USB-C interface (USB 3.0 and above). For iPads, iPadOS17 and above are required.
 - Display different images including program, preview, multi-view, duplicate screen, loop HDMI 1, and loop HDMI 2.
 - Record or take screenshots of the displayed content and save them to the tablet
 - Control the device via the tablet using the “Duplicate Screen” function

Web UI

- Set and manage device, view input information, configure networks, update firmware, etc.
- Preview and monitor the show, switch and manage shows, scenes and GFXs, control audio, set shortcuts, send live comment as overlay, control replay, etc.
- Set encoding parameters
- Set streaming servers, start/stop streaming, view streaming status
- Start/stop recording, take screenshots and manage album files
- Control and manage global BGM and scene's private BGM
- Manage media files
- Supports registering Magewell Control Hub (V2.1.20 and later) for centralized management
- System requirement: Windows 10 19H1 and above, macOS 10.12 and above, Linux

Magewell Director Plugin for Stream Deck

- Control Director device effortlessly at fingertips to enable efficient creative production.

API

- Provides basic APIs for 3rd party control system

OSC

- Supports OSC for 3rd party Apps to control the device

Screen

- Size: 5.44"
- Type: AMOLED
- Aspect ratio: 16:9
- Resolution: 1920x1080
- Brightness: 350nit
- 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

Physical Specifications

- Form factor: 147.2 mm x 90 mm x 28.5 mm
- Weight: ≈404g

Power

- AC power
 - Power supply: 12V/3.5A
 - * The power adapter has been changed to 12V/3.5A from 12V/1.5A since August 2024.
 - 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: -10 to 50 deg C (AC power)
- Storage temperature: -20 to 70 deg C
- Relative humidity: 5% to 90% non-condensing