

MagicStream

DIBSYS

Portable 4K HD Video interaction device

4K
ULTRA HD

H.264
MPEG-4/AVC

H.265
HEVC

4K Video transmission so easy!



MagicStream is a portable 4K HD encoding/decoding/transcoding Video interaction device. It can realize bidirectional interactive transmission of multi-channel audio and video signals, up to 8 channels 1080p IP signal in, H.264/H.265 decoding output, HD-MI output support up to UHD/4K. Furthermore, with 2 channels 4K@30FPS HD-MI to IP, H.264/H.265 encoding with HD-MI loop out.

It supports web management and also you can install an APP on your Android phone to manage the device which can help you manage more easily. Support RTSP/HTTP/UDP/RTMP/RTMPS/HLS/RTP/SRT protocols. Also the encoding and decoding can work simultaneously, support PIP, Multi-image video, director function.

With its powerful functions can be widely used in **health care, IPTV, conference, remote education, news interview, video interactive conference, banking, transportation** and other industries.

Key Features

- Small size, compact design
- Running in HD-MI To IPTV encoding and IPTV to HD-MI Decoding simultaneously
- Embedded hardware encoding/decoding Integrate in One Device
- Support HD-MI looping, different resolution output
- both HEVC and H.264 video encoding
- WINDOWS, LINUX operating systems supported
- Support HTTP/HLS/RTSP/RTP/RTMP/RTMPS/SRT, HTTP/UDP unicast, multicast, ONVIF and other protocols
- RTMP protocol supports adding user and password functions
- Synchronous acquisition of multiple video signals, support simultaneous two HD-MI encoding and multi-channel IP signal decoding and split screen output
- simultaneously support one channel up to 1920x1080p Full HD and one channel 1280x720 HD output
- PIP function supported in Encode+decode mode
- **Video director function supported**
- Video packaging mode: mode A: FFMPEG; Mode B: VLC
- English/Chinese OSD insert, and OSD rolling
- Support QR function, Livexapp remote management
- support resolution customizable
- Support DHCP automatically get IP, One-key recovery, version upgrade and remote maintenance
- Support No Video Signal Coding
- come into effect as soon as it is set up, no need to restart
- Support USB3.0 storage, SATA storage interface
- MP4/TS format recording
- HD-to-SD downscale conversion
- WEB Management

TECHNICAL SPECIFICATIONS

Encoding Mode

Video Inputs

HD-MI (support HD-CP) 2 channels

OUTPUTS

IP Output type RJ45 providing 100/1000Base-T Ethernet with Static or DHCP addressing;
 Protocol RTMP, RTMPS, RTSP, HTTP, UDP, HLS, SRT, ONVIF
 Multi-Screen Up to 2 channels High def. and any resolution of streams simultaneously out per
 Frame rate @30/60 fps

H.264/HEVC Video Encoding

Format H.264;
 H.265/HEVC: MPEG-H HEVC (ISO/IEC 23008-2)
 Main Profile Level 4.1 (4:2:0 8-bits)
 VBR, CBR
 5-200 support
 3840*2160, 2048*1152, 1920*1080, 1280*720, 1024*576, 850*480, 720*576, 704*576, 640*480, 640*360, auto
 1280*720, 800*450, 720*576, 720*408, 704*576, 640*480, 640*360, 352*288, 320*240, 320*180, auto
 100kbps to 12Mbps
 Encode Frame Rates Encode frame rates representing 1:1, 1/2 and 1/4 of the input frames rates are Supported

Audio Encoding

Audio encoding AAC, MP3, LC AAC, HE AAC, G711(Only RTSP)
 Bit Rates Range from 48 kbps to 256 kbps
 Resample Rate 32Khz, 44.1Khz
 Audio Channel L+R, L, R

Decoding Mode

Video Inputs

Inputs 8*IP
 IP streaming support RTSP/HTTP/UDP/RTMP/HLS/RTP/SRT protocol
 Decoding source URL, P2P, SDK
 Progressive 1920x1080 @ 60/30/25/24 Frames per second
 1280x720 @ 60/50 Frames per second

OUTPUTS

Resolution HD-MI+CVBS output
 3840*2160/2048*1152/1920x1080p/1280x720p/720*576P/640*480
 NOTE below 720P resolution, support CVBS decoding

H.264/HEVC Video decoding

Bitrate mode VBR, CBR
 Resolution 1920*1080, 1280*720, 1024*576, 850*480, 720*576, 704*576, 640*480, 640*360, auto
 Decode Frame Rates Decode frame rates representing 1:1, 1/2 and 1/4 of the input frames rates
 max decoded frame rate is 60fps when input resolution is 1920x1080
 Decoding Profiles H.264 BASELINE PROFILE / H.265 BASELINE PROFILE
 H.264 MAIN PROFILE / H.265 MAIN PROFILE
 H.264 HIGH PROFILE / H.265 HIGH PROFILE
 Video Bitrate 5-20Mbps
 Decoding Controls 2.0, 3.0, 3.1, 4.0, 4.1 Level
 Variable bit rate
 Average max/min data rate controls
 Deblocking Filter
 Key Interval 5-200

Audio decoding

Interface 1 HD-MI audio and video interface (support audio gain)
 Audio decoding AAC/MP3/MP2/G.711
 Bit Rates Range from 48 kbps to 256 kbps
 Resample Rate 32Khz, 44.1Khz, 48Khz
 Audio Channel L+R, L, R

Transcoding Mode

Inputs/Outputs

Inputs 4*IP per module
 Connector Type One RJ45 100/1000M Ports for IP streaming and Control GUI
 IP Protocol MPEG-TS(SPTS) Over IP input
 TS Over RTP/RTSP/HTTP
 UDP/IP (Unicast and Multicast)
 RTMP(Flash)
 HTTP Live streaming Apple HLS (m3u8)
 SRT
 2 profiles out per Transcoding Channel

Video Transcoding

Input:
 MPEG-4 AVC HP@L4.0, HP@L4.2 (HD)
 MPEG-4 AVC MP@L3.0 (SD)
 MPEG-4 AVC HP@L4.0, HP@L4.2 (HD)
 MPEG-4 AVC MP@L3.0 (SD)
MPEG-H HEVC (ISO/IEC 23008-2)

Output:
 MPEG-4 AVC HP@L4.0, HP@L4.2 (HD)
 MPEG-4 AVC MP@L3.0 (SD)
 MPEG-4(HIGH/MAIN /Baseline)
MPEG-H HEVC (ISO/IEC 23008-2)

Video Format

Input:
 1920x1080P@60FPS/50FPS/30FPS/25FPS/24FPS,
 1080x720P@60FPS/50FPS,
 720x576P@50FPS, 720x480P@60FPS, PAL, NTSC

Output:
 30~60fps @ 1920x1080P, 1680x1200P, 1600x900P, 1440x1050P, 1440x900P, 1360x768P, 1280x720P, 1280x800P, 1280x768P, 1024x768P, 1024x576P, 960x540P, 584x480P, 800x600P, 720x576P, 720x540P, 720x480P, 720x404P, 720x400P, 704x576P, 640x480P, 640x360P, 480x270P, 416x240P, auto

General

Audio Inputs

Processes first two channels of audio embedded in HD-MI input signal
 Unbalanced analog stereo input via 1/8" (3.5mm) jack(option)

Pre-processing

Frame rate from 5fps to 60fps
 Image insertion OSD insertion, text OSD, Custom Location

5 different Modes

Encoding Mode
 Decoding Mode
 Transcoding Mode
 Encoding + Decoding
 Encoding + Loop
 HD-MI input with another HD-MI resolution out or CVBS out
 720*576i60Hz-- PAL
 720*480i-50Hz---NTSC

Control

1000M Base T Ethernet, RJ45, auto-negotiation
 Management via Web
 English/Chinese
 Cloud Platform Control

Environment

Power Supply 12V~2A
 Power consumption 8W
 Operation temperature 0 -50°C (32 -122°F)
 Storage temperature -40-70°C (-40-158°F)
 Dimensions 215mm x142mm x 25mm
 Weight 1.0kg

Main Application

- Low Bitrate Video and audio compression transmit
- H.264/HEVC digital TV Broadcast decoding/encoding/transcoding
- Remote meeting connection, education, Video interactive conference
- Backhaul/Monitoring for Broadcasters



