

# Magicbox-X

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## Single Channel HD H.265 H.264 Encoder



Magicbox-X support single channel input, it is the world's New Generation HEVC H.265/H.264 hardware encoder in a professional grade, compact streaming appliance. Its advanced HEVC compression enables users to stream broadcast quality 1080p video with up to 50% bandwidth savings compared to today's H.264 standards.

With HDMI loop out and TF card/USB recording function, the Magicbox-X encoder content in real time via HEVC H.265, today's most advanced compression standard, it can deliver H.265/H.264 encoding video streams to various servers, such as Adobe Flash Server, Wowza Server, Windows Media Server and some other servers based on UDP /RTSP /RTMP /RTMPS /HTTP /HLS /SRT/ONVIF protocols.

### Features

- 1 channel HDMI Input
- HDMI loop out
- Supports WINDOWS ,LINUX,MAC OS
- **Four Protocol, Bitrate, Resolution, Profile per HDMI source Inputs**
- **Support H.264 Baseline Profile/Main Profile/High Profile/**

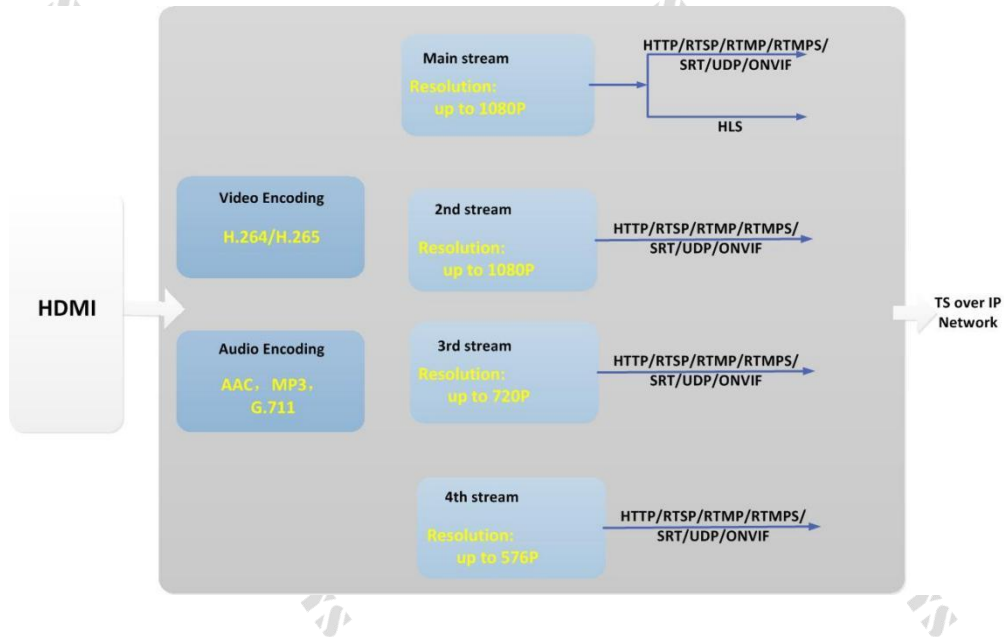
### Main Application

- HEVC digital TV Broadcast
- Low Bitrate Video and audio compression transmit
- IPTV, conference, remote education
- Back haul/Monitoring for Broadcasters

### H.265 Main Profile

- H.265, H.264 video encoding; AAC, G.711 audio encoding
- Encoding level: 1, 2, 3, 4 and 5 (the higher the level, the larger of the code flow fluctuation ratio)
- Support build-in or external audio input, support left and right sound channel, support audio gain, turn volume individually.
- Support accurate PCR adjusting optional
- support push stream to RTSP server
- **Support multi protocol SRT/HTTP/RTSP /RTMP/ RTMPS/ONVIF/HLS/UDP Unicast and Multicast protocols**
- Compatible with streaming servers such as Wowza/ FMS/RED5, pushing living streaming
- **Support keystroke recording, TF card/USB recording function (maximum 128G)**
- **Supports built-in POE module (Optional)**
- Support simultaneous display of one computer and multiple devices
- Support Text/ image OSD, images superimposing
- **Support encoding without video signal**
- Take effect immediately when applied the settings, don't need to restart.
- Support one-key recovery to default setting.
- Low power consumption design
- Support CBR and VBR mode
- WEB Management
- Easy-to-Use System Management

Principle Chart



## TECHNICAL SPECIFICATIONS

### Video Inputs

Resolution 1\* HDMI input ; 1920x1080p/1280x720p/720\*576P/640\*480  
 frame rate 30~60 Frames per second

### Audio Inputs

1\*audio embedded in HDMI, 1\*3.5 independent audio (supports audio gain)

### OUTPUTS

HDMI HDMI LOOP out  
 IP Output type RJ45 providing 100/1000Base-T Ethernet  
 Protocol RTMP/RTMPS/RTSP/HTTP/RTP/UDP/HLS /SRT, Unicast, Multicast, Onvif  
 Multi-Screen Up to 4 channels High def. and any resolution of streams simultaneously out  
 USB/TF card 128G (maximum)

### Users Interface

Computer Based control HTTP via standard PC or web browser using Command Center. The simple Control API and SDK is also available to programmers to create their own application

### Pre-processing

Image setting Video adjustments (Brightness, contrast, Saturation, Hue) from 5fps to 60fps  
 Frame rate OSD insertion  
 Image insertion Deinterlacing; Noise reduction;  
 Enhancement filter Sharpening; Visual Optimizing; Filtering

### Video Encoding

Bitrate mode VBR, CBR  
 Key interval 5-200  
 Encoding MPEG-H HEVC (ISO/IEC 23008-2) H.264/MPEG-4 Part 10 (AVC)

First stream 1920\*1080,1280\*720,1024\*576,850\*480, 720\*576, 704\*576,640\*480, 640\*360, auto  
 Second Stream 1920\*1080,1280\*720,1024\*576, 850\*480, 720\*576, 704\*576, 640\*480, 640\*360, auto  
 Third stream 1280\*720, 800\*450, 720\*576, 720\*408, 704\*576, 640\*480, 640\*360, 352\*288, 320\*240, 320\*180, auto  
 Fourth Stream 720\*576, 720\*408, 704\*576, 640\*480, 640\*360, 352\*288, 320\*240, 320\*180, auto  
 Video Bitrate 16KBIT/S~12MBIT/S  
 Encode Frame Rates Encode frame rates representing 1:1, 1/2 and 1/4 of the input frames rates are Supported  
 Encoding Controls 1, 2, 3, 4 and 5 Level Support Variable bit rate Support Average max/min data rate controls Deblocking Filter

### Audio Encoding

Audio encoding AAC, MP3, G711  
 Bit Rates Range from 64 kbps to 384 kbps  
 Sampling rate 32000, 44100, 48000 etc  
 Audio Channel L+R, L, R

### Control

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

### Environment

Power Supply 12V~2A  
 Power consumption <5W  
 Operation temperature -20℃+ 60℃  
 Working humidity <90%, Non-condensing  
 Size 150mm \* 102mm \* 28mm(L\*W\*H)  
 Weight 0.8kg