

### FEATURES

- ▷ 4K Ultra HD
- ▷ HDR
- ▷ SRT
- ▷ Zixi

### APPLICATIONS

- ▷ Broadcast
- ▷ Pro-cast (Pro AV)
- ▷ ITS
- ▷ Security

Amazing Performance and Reliable Stream Decoding of 4K HDR, Ultra HD HEVC, 1080P AVC or 1080i MPEG 2 Compressed Media.



The MD9201-DEC-4K-HDR is MultiDyne's ultra-small form factor 4K HDR Ultra HD Decoder for OTT streaming media applications. The MD9201-DEC-4K-HDR provides unmatched size, weight and power (SWaP) performance leading the industry in return on investment. With the ability to decode high bit-rate Ultra High Definition (UHD) 2160P HEVC, 1080P AVC, 1080i MPEG2, the versatile MD9201-DEC-4K-HDR maintains the ability to work with a variety of bit streams from various software and hardware encoders.

Network security is an utmost priority to MultiDyne, and MultiDyne ensures that all devices include the latest network security patches, HTTPS web server and user options to disable SSH, SAMBA and PING. The MD9201-DEC-4K-HDR has two independent Gigabit Ethernet ports, one for management and one for high bandwidth streaming. The MD9201-DEC-4K-HDR's integrated openVPN ensures secure connections without supplemental hardware. MultiDyne offers ongoing patches that include network security updates with new firmware features included for a modestly priced SLA<sup>1</sup>.

<sup>1</sup> Service Level Agreement available per device per year after year one. Year one SLA is included.

The MD9201-DEC-4K-HDR supports an unmatched number of IP streaming protocols, including source specific UDP/RTP with IGMP v3, SRT, Zixi, RTMP, RTSP, HLS, DASH, and TCP with file playback and capture. Network Protocol Translation provides input to output translation from one protocol to the other, further solidifying the MD9201-DEC-4K-HDR's adaptability.

Optimally designed for video and audio support for broadcast monitoring and professional decoding, the MD9201-DEC-4K-HDR includes one HDMI 2.0b baseband output. Ancillary data support for closed captions with OSD open caption overlay is supported. Audio decode and pass-through for one audio service with user PID selection supporting secondary audio programming (SAP). Audio CODEC support includes MPEG Layer 1/2/3, AAC-LC/HE and optional Dolby Digital decode with pass-through to HDMI for multi-channel digital bitstream processing.



Rear View

Easy and accessible management and monitoring of the MD9201-DEC-4K-HDR is facilitated via the Web Server, SNMP and REST APIs.

### TECHNICAL SPECIFICATIONS

#### Input Source Stream Protocols

UDP/RTP Unicast/Multicast	UDP/RTP unicast or multicast support with DVB or MPEG service section.
IGMP 3.0	IGMP 3 Source Specific Multicast with included and exclude support
RTMP, RTSP, TCP	RTMP client/server, RTSP client and TCP client/server
HLS/DASH	Support for HLS and MPEG DASH URL decoding
SRT	SRT Caller, Listener and Rendezvous support for public internet links
Zixi	Zixi public internet transport protocol for use with Zixi Broadcaster/Zen cloud services. Zixi link point to point is not supported on MultiDyne devices.
File/SATA Drive	TS, PES, ES, MOV, BMFF, MKV file playback. (mSATA hard drive not included)

#### CODEC Video Decode

H.265 HEVC (H.265)	
8/10 bit SD HEVC 4:2:0	Single decode via HDMI
8/10 bit 3G HEVC 4:2:0	Single decode via HDMI
8/10 bit 4K (Ultra HD)	Single decode via HDMI
AVC (H.264)	
SD AVC 4:2:0 High	Single decode via HDMI
HD AVC 4:2:0 High	Single decode via HDMI
3G AVC 4:2:0 High	Single decode via HDMI
MPEG 2 (H.262)	
SD MPEG 2 4:2:0	Single decode via HDMI
HD MPEG 2 4:2:0	Single decode via HDMI

#### CODEC Audio Decode

MPEG 1 Layer 2 Audio	1	Decoded PCM via HDMI Embedded
AAC-LC Stereo (2.0)	1	Decoded PCM via HDMI Embedded
HE AAC V1.0 Stereo (2.0)	1	Decoded PCM via HDMI Embedded
HE AAC V2.0 Stereo (2.0)	1	Decoded PCM via HDMI Embedded
AAC 5.1 Audio Decoding	1	Decoded PCM via HDMI Embedded
Dolby Digital Decode	1	Decoded PCM via HDMI Embedded
Dolby Digital Pass-through	1	Digital Bitstream via HDMI Embedded

#### Ancillary/Data

Closed Captions	SMPTE 334 carriage of 608 and 708 Captions. On Screen Display with Open Captions) OSD support.
SCTE 35	Detection and logging of SCTE 35 cue messages with logging option.

#### AV Output

HDMI	1	HDMI 2.0b	HDMI Rear	2160P 10-bit color over HDMI.
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#### System, Standard

Gigabit 1	802.03	RJ-45/Rear	Copper CAT 5/5e/6/6A (Management only)
Gigabit 2	802.03	RJ-45/Rear	Copper CAT 5/5e/6/6A (Streaming and Management)
Terminal	VT100	mini USB Type B Rear	Serial Terminal at 115,200, 8, 1, N.
USB2	USB2	USB 2 Standard-A receptacle Rear	USB 2 compliant. Data mount and Firmware load.
Power In	12 VDC	Standard 3.5 mm jack	
Power Use	7 Watts maximum while decoding HEVC UHD		
Dimensions	5 Inches (127 mm) Wide, 4 Inches (101 mm) Deep, 1.02 inches (26 mm) Tall		

### ORDERING INFORMATION

Part #	Details
MD9201-DEC-4K-HDR	4K HDR Ultra HD Decoder with Power Supply