

FEATURES

- Real-time digital transmission of broadcast quality video
- H.264 Baseline Profile (ISO/IEC 14496-10)
- Video, audio, and data multiplexing
- NTSC/PAL
- Data rates from 64k to 6Mbps
- Low latency modes
- Multiple resolution modes
- Stereo audio
- User data
- FEC
- Compact, flight-worthy package

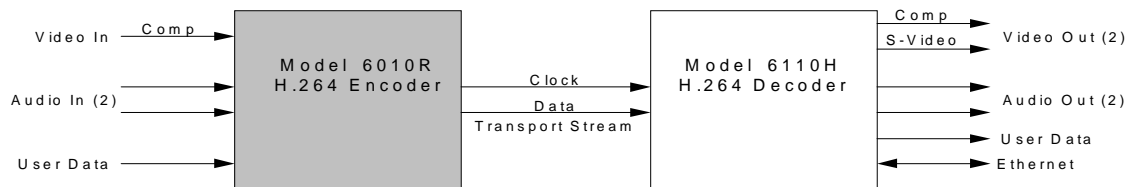


MODEL 6010R AIRBORNE ENCODER

Delta's Model 6010R is an airborne encoder that compresses video and audio signals, multiplexing them with data and other system information for transmission to a remote decoder unit. The 6010R uses the H.264 (MPEG-4 Part 10) video compression algorithm to provide high-quality video even with large compression ratios. The H.264 standard is the latest compression algorithm and is designed to facilitate the transmission of full resolution, full frame rate, motion imagery in less bandwidth than its predecessors (Wavelet/MJPEG/MPEG-2).

The 6010R is easily integrated into most airborne telemetry systems. The standards-compliant transport stream is output on a synchronous serial interface (RS-422) for direct connection to the data link or recorder. The transport stream can be applied to one of Delta's H.264 decoders or played through an H.264-compliant software decoder.

Control of video, audio, and system parameters permit the user to optimize video performance for any given bandwidth. Control is provided through a Windows application via an RS-232 port.



VIDEO INPUT

Ports	One
Format	NTSC/PAL Composite
Levels	Comp:1.0Vp-p
Impedance	75 ohms/Hi-Z (Selectable)
Connector	TNC

VIDEO COMPRESSION

Algorithm	ISO/IEC 14496-10 H.264 Baseline Profile
Modes	I-only/IP
Resolution	D1/2CIF/CIF
Frame Rate	1-30 (25 for PAL)

MULTIPLEX

Protocol	ISO/IEC 13818-1 MPEG-2 Transport Stream Video/Audio/Data
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TRANSPORT STREAM

Ports	One
Levels	RS-422
Data Rate	64Kb to 6Mbps
Signals	SD, RD, TT, ST
Connectors	Circular MIL

AUDIO INPUT

Ports	One
Channels	None, Left, Left and Right*
Format	Balanced (Line Level)
Levels	2.8V p-p (1 Vrms)
Impedance	10K ohms
Gain	0 to 64 db*
Connector	LEMO (6-pin)

AUDIO COMPRESSION

Algorithm	ADPCM MPEG-2 Audio, Level 1 and 2
Sample Rates	8K/16Ksps
Synchronization	Lip synchronized with video

FORWARD ERROR CORRECTION

Protocol	Reed-solomon
Format	16 parity symbols per 204 Byte TS packet

CONTROL

Protocol	Windows Application
Levels	RS-232C
Signals	RD, SD, GND
Format	9600, 8, 2, None
Connector	Circular MIL

ENVIRONMENTAL

Temperature	-40°C To +85°C
Vibration	MIL-STD-810F, Method 514.5
Shock	40g, Half-sine, 11msec, 3 Axis
Static Load	13.5g w/o permanent deformation 27g w/ no structural failure

POWER

Voltage	+28VDC IAW MIL-STD-704/641
Power	12 Watts
Connector	Circular MIL

SIZE

1.6"H x 4.5"W x 7"D
Weighs less than 4 lbs.

