

### FEATURES

- Real-time digital transmission of high quality video
- H.264 and MPEG-2
- Video, audio, and data multiplexing
- NTSC/PAL
- Data rates from 64k to 10Mbps
- Low latency modes
- Multiple resolutions
- Stereo audio
- Synchronized Metadata
- Compact, flight-worthy package

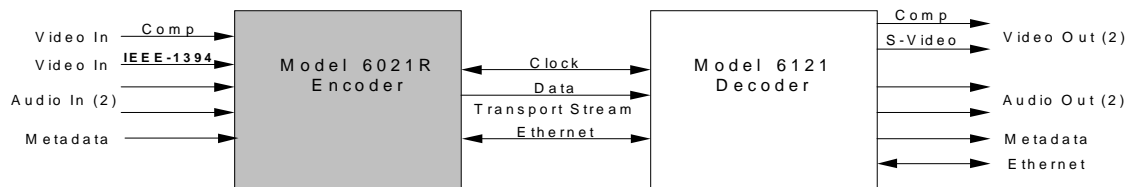


### MODEL 6021R AIRBORNE ENCODER

Delta's Model 6021R is an airborne encoder that compresses video and audio signals, multiplexing them with metadata and other system information for transmission to a remote decoder unit. The 6021R uses the H.264 (MPEG-4 Part 10) or MPEG-2 (MP@ML) video compression algorithms to provide high-quality video in airborne applications. 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). MPEG-2 is a proven algorithm used on many airborne platforms.

The 6021R is easily integrated into most airborne telemetry systems. The standards-compliant transport stream is output on a synchronous serial interface (RS-422) or ethernet port (10/100 Base-T) for direct connection to the data link or recorder. The transport stream can be applied to one of Delta's companion decoders or played through a 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 or the embedded Web server.



### VIDEO INPUT

<b>Ports</b>	Two
<b>Input 1</b>	
<b>Format</b>	NTSC/PAL Composite
<b>Levels</b>	Comp:1.0Vp-p/75 Ohms
<b>Connector</b>	TNC
<b>Input 2</b>	
<b>Format</b>	IAW 1394-based Camera Specification , Version 1.3
<b>Connector</b>	Circular MIL

### VIDEO COMPRESSION

<b>Algorithm (2)</b>	ISO/IEC 14496-10 H.264 Baseline/Main Profile
	ISO/IEC 13818-2 MPEG-2 MP@ML
<b>Modes</b>	H.264: I-Only/IP MPEG-2: I-Only/IP/IPB
<b>Resolution</b>	D1/2CIF/CIF
<b>Frame Rate</b>	1-30 (25 for PAL)

### MULTIPLEX

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

<b>Ports</b>	Two
<b>Interface 1</b>	Synchronous Serial (RS-530)
<b>Levels</b>	RS-422
<b>Data Rate</b>	64Kb to 6Mbps
<b>Connectors</b>	Circular MIL
<b>Interface 2</b>	10/100 Ethernet IP
<b>Format</b>	UDP/IP
<b>Data Rate</b>	64Kb to 6Mbps
<b>Configuration</b>	DHCP or Static Address Selectable Ports Unicast/Multicast
<b>Connector</b>	Circular MIL

### METADATA (USER DATA)

<b>Levels</b>	RS-232
<b>Connector</b>	Circular MIL

### AUDIO INPUT

<b>Ports</b>	One
<b>Channels</b>	None, Left, Left and Right*
<b>Format</b>	Balanced (Line Level)
<b>Levels</b>	2.8V p-p (1 Vrms)
<b>Impedance</b>	10K ohms
<b>Gain</b>	0 to 64 db*
<b>Connector</b>	Circular MIL

### AUDIO COMPRESSION

<b>Algorithm</b>	ADPCM
<b>Sample Rates</b>	8K/16K/32Ksps
<b>Synchronization</b>	Lip synchronized with video

### CONTROL

<b>Ports</b>	Two
<b>Port 1</b>	
<b>Protocol</b>	Windows Application
<b>Levels</b>	RS-232C
<b>Connector</b>	Circular MIL
<b>Port 2</b>	
<b>Protocol</b>	TCP/IP
<b>Platform</b>	Windows
<b>Connector</b>	Circular MIL

### ENVIRONMENTAL

<b>Temperature</b>	-40°C To +85°C
<b>Vibration</b>	MIL-STD-810F, Method 514.5
<b>Shock</b>	MIL-STD-810F, Method 516.5
<b>Humidity</b>	MIL-STD-810F, Method 507.4
<b>EMI/EMC</b>	MIL-STD-461

### POWER

<b>Voltage</b>	+28VDC (IAW MIL-STD-704/641)
<b>Power</b>	7 Watts
<b>Connector</b>	Circular MIL

### SIZE

<b>Dimensions:</b>	1.6"H x 4.5"W x 7"D
<b>Weights:</b>	2.1 lbs.

