

MODEL 6021R

H.264/MPEG-2 VIDEO / AUDIO ENCODER, AIRBORNE

CHNICAL SPECIFICATIONS

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
- Metadata Support in compliance (optional KLV Encoding)
- MISB/STANAG Compliant
- JITC Certified

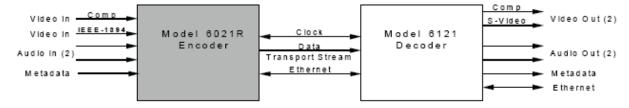


MODEL 6021R ENCODER

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, and 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.



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H.264/MPEG-2 VIDEO / AUDIO ENCODER, AIRBORNE

VIDEO INPUT

Ports Two

Input 1

Format NTSC/PAL Composite Levels Comp: 1.0Vp-p/75 Ohms

Connector TNC

Input 2

Format IAW 1394-based Camera

Specification, Version 1.3

Connector Circular MIL

VIDEO COMPRESSION

Algorithm (2) ISO/IEC 14496-10

H.264 Baseline/Main Profile

ISO/IEC 13818-2 MPEG-2 MP@ML

Modes H.264: I-Only/IP

MPEG-2: I-Only/IP/IPB

Resolution D1/2CIF/CIF **Frame Rate** 1-30 (25 for PAL)

MULTIPLEX

Protocol ISO/IEC 13818-1

MPEG-2 Transport Stream

Video/Audio/Data

TRANSPORT STREAM

Ports Two

Interface 1 Synchronous Serial(RS-530)

Levels RS-422

Data Rate 64Kb to 10Mbps
Connectors Circular MIL
Interface 2 10/100 Ethernet IP

Format UDP/IP

Data Rate 64Kb to 10Mbps

Configuration DHCP or Static Address

Selectable Ports Unicast/Multicast

Connector Circular MIL

METADATA (USER DATA)

Levels RS-232 Connector Circular MIL **AUDIO INPUT**

Ports One

Channels None, Left, Left and Right*
Format Balanced (Line Level)
Levels 2.8Vp-p (1Vrms)

Impedance 10K Ohms
Gain 0 to 64 db*
Connector Circular MIL

AUDIO COMPRESSION

Algorithm ADPCM

Sample Rates 8K/16K/32Ksps

Synchronization Lip synchronized with video

CONTROL

Ports Two

Port 1

Protocol Windows Application

Levels RS-232C Connector Circular MIL

Port 2

Protocol TCP/IP
Platform Windows
Connector Circular MIL

ENVIRONMENTAL

Temperature -40°C To +85°C

Vibration MIL-STD-810F, Method 514.5 Shock MIL-STD-810F, Method 516.5 Humidity MIL-STD-810F, Method 507.4

EMI/EMC MIL-STD-461

POWER

Voltage +28VDC (IAWMIL-STD-

704/641)

Power 7 Watts
Connector Circular MIL

SIZE

Dimensions: 1.6"H x 4.5"W x 7"D

Weight: 2.1 lbs.



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