A Multi-Format Digital Satellite Receiver for Cable Programmers and Operators

**Highlights Include:**

- Stackable 1RU chassis design
- 2 RF Inputs (L-Band)
- ASI input
- Multi-format MPEG-2/4 HD/SD processing
- Advanced Modulation support with DVB-S QPSK, and DVB-S2 QPSK/8PSK
- DigiCipher II conditional access control
- Dolby® Digital audio processing
- VBI reinsertion for closed caption
- Quick disconnect terminals for easy installation
- DTMF cue tones for local ad insertion
- Dual ASI and Gig-E transport outputs
- Composite video and dedicated video diagnostics outputs
- 10/100 BaseT Ethernet port for SNMP and web browser monitoring and control

The DSR-4440 Integrated Receiver/Decoder from Motorola brings revolutionary technology advances from a recognized leader in satellite program delivery. The DSR-4440 decodes MPEG-2 or MPEG-4 services and delivers outstanding video and audio performance. Its sleek packaging design fits in a standard 19” relay rack and requires only a single rack unit of space.

The Motorola DSR-4440 comes equipped with industry standard output interfaces such as Gig-E and dual ASI outputs that enable seamless connections to headend equipment. With advanced modulation support, the DSR-4440 supports both DVB-S QPSK and DVB-S2 QPSK/8PSK.
## TECHNICAL SPECIFICATIONS

### L-Band Input
- **Input Frequency:** 950 - 2150 MHz
- **Input Impedance:** 75 Ω
- **Input Connectors:** Two (2) F-type
- **F-Connector:** 16V DC min/450 mA
- **Port-to-Port Isolation:** 40 db (minimum)

### Digital Processing
- **Modulation Modes:** DVB-S QPSK, DVB-S2 QPSK/8PSK
- **Symbol Rates:** 1 to 31.25 Msps
- **QPSK FEC Rates:** 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 7/8
- **DVB-S2 FEC Rates:** 3/5, 2/3, 3/4, 5/6, 8/9, 9/10

### Composite Video
- **Frequency Response (NTSC):** ±0.9 dB, 1kHz - 4.2 MHz
- **Frequency Response (PAL):** ±0.9 dB, 1kHz - 4.8 MHz
- **Signal/Noise Ratio:** 57 dB (min)
- **Differential Gain:** 4.0% p-p (max) (10% to 90% APL)
- **Difference Phase:** 1.5 deg. (max)

### Audio
- **Output:** 2 stereo pair or 4 mono
- **Output Level:** ±18.0 dBu, ±1.0 dB into 600 Ω balanced load, adjustable (0 to -18 dB)
- **Frequency Response:** ±1.0 dB, 20 Hz to 20 kHz
- **Total Harmonic Distortion:** 0.4% or better at 1kHz
- **Signal/Noise Ratio:** 85 dB or better at 1 kHz RE: +18 dBu, measured at 20 Hz to 20 kHz
- **Isolation, L/R:** 80 dB at 1 kHz
- **Impedance:** 50 Ω

### Composite Video (PAL): ±0.9 dB, 1kHz - 4.8 MHz

### Contact Closures
- **Number of Closures:** 4 (1 alarm)
- **Type:** Form C

### Ethernet
- **Connectors:** Two (2) RJ-45
- **Formats:** 10/100BaseT and 1000BaseT

### ASI Output (2) / Input (1)
- **Format:** Asynchronous serial interface
- **Transmission:** Data byte and packet
- **Standard:** CENELEC EN 50083-9
- **Connector:** BNC

### Cue Tones
- **Signal Type:** Differential output
- **Signal Level:** 0 dBm, ± 3 dB (600 Ω)/tone
- **Connector:** Quick disconnect terminal

### Physical
- **Width:** 18.9” (48cm)
- **Depth:** 20.5” (52.1cm)
- **Height:** 1.65” (4.2cm)
- **Weight:** 12 lb (5.5kg) approx
- **Power Input:** 95-240 VAC, 50-60Hz, 60 W max
- **Operating Temperature:** 0 to 50C
- **Humidity:** 95%, relative maximum
- **Display:** 2 line, 40 character LCD

### Other
- **Limited Warranty:** One year
- **Compliance:** UL/CE listed/approved, FCC part 15

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**TV Pass Card**

**L-Band RF Input Ports**

**Audio1 Out**

**Audio2 Out**

**Relay1**

**Alarm**

**Power Connector**

**Ethernet Port**

**GigE Port**

**ASI In**

**ASI Out**

**Video Out**

**OSD Video Out**

**Cue Tones**

**Relay2**

**Relay3**

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