

Professional Satellite Receiver

MODEL

DSR-4402X



MOTOROLA

The new DSR-4402X IRD from Motorola brings the latest technology advances from the recognized leader in satellite program delivery. Building on the DigiCipher® II platform, the DSR-4402X IRD is affordable and easy to use. Start with the new packaging design that fits in a standard 19" relay rack and requires only a single rack unit of space. The DSR-4402X is designed to deliver outstanding video and audio performance in either DigiCipher II or DVB modes. This receiver can output either NTSC or PAL video formats, automatically matching the programmer's video format.

With a variable front-end and bypass capabilities, the DSR-4402X is ideally suited for network conversion from analog to digital. Full VBI reinsertion on lines 10 - 22 for SID/AMOL I & II and NABTS is standard on the DSR-4402X. Now equipped with DVBASI, the DSR-4402X is ready to connect to the rest of your head-end equipment.

Features

- MPEG-2 Main Level@Main Profile
- DigiCipher II and DVB modes of operation
- DigiCipher II MegaPipe Support
- Variable tuning from 4 MHz to 36 MHz
- Dolby® Digital and MPEG layer II audio processing
- VBI reinsertion SID/AMOL-II, NABTS and closed caption
- Stackable 1RU chassis design
- DigiCipher® II conditional access control
- Quick disconnect screw terminals for easy installation
- Bypass video and audio inputs
- DTMF cue tones for local ad insertion
- ASI output for easy connection to digital cable headend products

DSR-4402X Professional Satellite Receiver Specifications

L-Band Output	
Input Frequency	950 to 2150 MHz
Input Impedance	75Ω
Input Connectors	Two F-type
LNB Power Out F-Connector	16V DC min/450 mA
Port to Port Isolation	40 db (minimum)
DigiCipher II Processing	
Modulation Modes	OQPSK and QPSK
Symbol Rates	3.25, 4.88, 7.32, 9.76, 11.71, 14.63, 19.51, 29.27 Msps
Forward Error Correction	@ 3.25 to 14.63 Msps = 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 7/8 @ 19.51 (split/combined) and 29.27 (split) Msps = 5/11, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 7/8 @ 29.27 (combined) Msps = 5/11, 1/2, 3/5, 2/3, 3/4
Eb/No	4.0 db @ 19.5 Msps (FEC=3/4)

DVB Processing	
Modulation Modes	QPSK
Symbol Rate Range	3.25 to 30 Msps
Forward Error Correction	1/2, 2/3, 3/4, 4/5, 7/8

Video	
Frequency Response (NTSC)	± 1.0 dB, 1 kHz - 4.2 MHz
Frequency Response (PAL)	± 1.0 dB, 1 kHz - 5.5 MHz
Signal/Noise Ratio	57 dB min
Differential Gain	5% max
Differential Phase	5 deg. max
Output Impedance	75 Ω
Output Level	1.0 V p-p

Audio	
Outputs	2 stereo pairs or 4 mono
Output Level	± 16.0 dBm, ± 1.0 dB into 600 Ω balanced attenuator, adjustable (0 to -15 dB)
Frequency Response	± 1.3 dB, 20 Hz to 20 kHz
Total Harmonic Distortion	0.3% or better at 1 kHz
Signal/Noise Ratio	85 dB or better at 1 kHz
Isolation, L/R	80 dB at 1 kHz
Impedance	600 Ω
Connector	Quick disconnect screw terminals

Data	
Isochronous Data	19.2 kbps - 2.048 Mbps, 3.0, 4.5 and 9.0 Mbps

ASI Output	
Format	Asynchronous Serial Interface
Transmission	Data Burst
Standard	CENELEC EN 50083-9
Connector	BNC

Cue Tones	
Signal Type	Differential output
Signal Level	(-3 dBm minimum (600 Ω)/tone
Connector	Quick disconnect screw terminal

Alarm Contact Closure	
Number of Closures	1
Type	Form C

Physical Environment	
Operating Temperature	0° to 40° C
Humidity	95%, relative maximum
Dimensions	48 cm (W) x 46 cm (D) x 4.2 cm (H)
Weight	Approx. 5.0 kg
Power Input	90-250 VAC, 47-63 H, 25 W

OTHER	
Limited Warranty	One year
UL/TUV/CE	Listed/approved



Specifications subject to change without notice.