

## Satellite Multiplex Decrypter

MODEL

# DSR-4400MD



The DSR-4400MD from Motorola is a powerful digital head-end product, capable of simultaneous decryption of up to 24 services/72 PIDs. Whether your application is to feed a 256 QAM channel or a 64 QAM channel, the Motorola DSR-4400MD is the answer. With the Motorola DSR-4400MD, you can output a full MPEG-2 multiplex at an information rate of 38.8 Mbps or 26.97 Mbps, depending on your needs.

The Motorola DSR-4400MD comes equipped with industry standard interfaces that enable seamless connection to DigiCipher II IRT-1000, IRT-2000, MPS Remultiplexer and other head-end equipment for cable encryption and cable modulation.

The full range of DigiCipher II system symbol and code rates is supported, including the higher combined symbol rate of 29.27 Msps, rate 3/4 to enable 40.46 Mbps information rate transmission. With the lower SCPC rates, the Motorola DSR-4400MD becomes a flexible product that supports partial transponder utilization. Packaged in a 1RU chassis, the Motorola DSR-4400MD offers local monitoring of a single service and the ability to step through the authorization and encryption state for each service.

In the event of a transport stream fault, or loss of authorization for any of the provided services, the Motorola DSR-4400MD will trigger an alarm indication for the user.

### Features

- Supports 256 and 64 QAM satellite multiplexes
- Concurrent decryption of up to 24 services/72 PIDs. Each service may include video, multiple audio channels and data
- Manual or automatic assignment of services to decryption processors (ACPs)
- Transport stream output grooming from 38.8 Mbps to 26.97 Mbps for the DHEI output can be flexibly controlled from the uplink via encryption or service definition
- Two L-Band input ports
- DHEI input rate is auto selected for 26.97 or 38.8 Mbps
- ASI input rate up to 40.46 Mbps
- Analog video with optional diagnostics display for local monitoring
- Analog audio for local diagnostics
- DHEI output. Selectable 38.8 (default) or 26.97 Mbps transport outputs
- ASI output rate matches input up to 40.46 Mbps
- Stackable 1RU chassis
- MCPC and SCPC operation

# DSR-4400MD Professional Satellite Receiver Specifications

## L-Band Input

Input Signal Level	(-)60 dBm to (-)25 dBm
Input Frequency	0.95 to 1.55 GHz
Input Impedance....	75Ω
Input Connectors	Two F-type
LNB Power Out F-Connector	16V DC min/450 mA

## Digital Processing

Modulation Modes	OQPSK and QPSK
Symbol Rate Range	3.25 to 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 and 29.27 Msps = 5/11, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 7/8
Eb/No	4.0 db @ 19.5 Msps (FEC=3/4)

## Data

Asynchronous Data Rate	1200, 2400, 4800, 9600 and 19200 bps
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## ASI Output/Input

Format	ASI
Transmission	Data Burst or Byte
Standard	GENELEC EN 50083-9

## DHEI Output/Input

Format	MPEG-2
Packet Clock Rate	29.26 or 38.81 MHz

## Decryption

Number of Services	24 independent encrypted services* or up to 72 PIDs
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## Cue Tones

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

## Alarm Relay

Form-C	Quick disconnect screw terminal
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## 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/FCC	Listed/Approved

Each service may have 1 video, up to 3 audio, 1 async data, 1 isoc data, subtitling and other associated data

