

DSR-4410MD

Satellite Multiplex Decrypter



PRODUCT OVERVIEW

The ARRIS DSR-4410MD is a powerful digital headend product, capable of simultaneous decryption of up to 64 services. With advanced modulation support, the DSR-4410MD can output a full transport multiplex with both MPEG-2 and/or MPEG-4 services at an information rate of up to 160 Mbps.

The ARRIS DSR-4410MD comes equipped with industry-standard interfaces, such as dual ASI outputs, that enable seamless connection to head-end equipment. The DSR-4410MD also accommodates the current trend for distributing MPEG-2 transport streams over Gigabit Ethernet interfaces throughout digital headends.

Packaged in a 1RU chassis, the DSR-4410MD offers local monitoring of a single service and the ability to step through the authorization and encryption state of each service. In the event of a transport stream fault, or loss of authorization for any of the provided services, the DSR-4410MD will trigger an alarm indication for the user.

KEY FEATURES

- DigiCipher® II conditional access control
- Concurrent decryption of up to 64 services, each service may include video, multiple audio channels and data
- Stackable 1RU chassis design
- Dual L-Band input ports
- Supports both C-band and Ku-band
- Advanced modulation support for 8PSK Turbo and DVB-S2
- ASI Input
- Dual ASI and Gig-E transport output with selectable rates
- 10/100 Base T Ethernet port for SNMP monitoring and control
- IP datacasting output
- Outputs NTSC video and analog audio for local monitoring
- Form-C relay for fault signaling
- Background software download capabilities

SPECIFICATIONS

L-Band Input

Input Signal Level	(-)65 dBm to (-)25 dBm
--------------------	------------------------

Input Frequency	950 - 2150 MHz
-----------------	----------------

Input Impedance	75 Ω
-----------------	-------------

Input Connectors	Two (2) F-type
------------------	----------------

LNB Power Out	16V DC min/450 mA
---------------	-------------------

Digital Processing

Modulation Modes	OQPSK, QPSK, 8PSK turbocodes, and DVB-S2
------------------	--

Symbol Rates	3.25 to 29.27 Msps (QPSK), 1 to 30 Msps (8PSK turbocodes), 5 to 30 Msps (DVB-S2)
--------------	--

FEC Rates

QPSK	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 7/8 (@3.25 to 29.27 Msps) 5/11 (@ 19.51 and 29.27 Msps)
------	---

DVB-S2 8PSK	3/5, 2/3, 5/6, 8/9, 9/10
-------------	--------------------------

8PSK Turbocodes	2/3 (1.9), 3/4 (2.05), 3/4 (2.11), 3/4 (2.19), 5/6 (2.30), 8/9 (2.40)
-----------------	---

Eb/No	4.0 db @ 19.5 Msps (FEC=3/4)
-------	------------------------------

Composite Video Output

Frequency Response (NTSC)	± 0.75 dB, p-p, 1 kHz – 4.2 MHz
---------------------------	-------------------------------------

Frequency Response (PAL)	± 0.9 dB, p-p, 1 kHz – 5.5 MHz
--------------------------	------------------------------------

Signal/Noise Ratio	57 dB (min)
--------------------	-------------

Differential Gain	4.0 deg. p-p (max)
-------------------	--------------------

Difference Phase	1.5 deg. (max)
------------------	----------------

Output Impedance	75 Ω
------------------	-------------

Output Level	1.0 V p-p $\pm 10\%$
--------------	----------------------

SPECIFICATIONS (CONTINUED)

Audio Output

Output	Two stereo pair or two mono
Output Level	± 18.0 dBu, ± 1.0 dB into 600 Ω balanced load, adjustable (0 to -15 dB)
Frequency Response	± 1.3 dB, 20 Hz to 20 kHz
Total Harmonic Distortion	0.25% or better at 1kHz
Signal/Noise Ratio	85 dB or better at 1 kHz Isolation, L/R: 80 dB at 1 kHz
Isolation, L/R	80 dB at 1 kHz
Audio Impedance	600 Ω load
Connector	Quick disconnect screw terminal

Data Output

Ethernet 10/100 Base T	RJ-45 (1)
Gig-E 10/100/1000 Base T	RJ-45 (1)

GigE Output

Connector	RJ-45
Format	10/100/1000BaseT
Transport Stream Data Rates	27 Mbps, 54 Mbps, 81 Mbps and 160 Mbps Decryption
Number of Services	Up to 64 independently encrypted services

ASI Interface

Format	Asynchronous Serial Interface
Transport Stream Data Rates	27 Mbps, 54 Mbps, 81 Mbps and 160 Mbps Decryption
Standard	CENELEC EN 50083-9
Connectors	BNC (two out, one in)

Alarm Relay

Form C	Quick disconnect screw terminal
--------	---------------------------------

Cue Tones

Signal Type	Differential output
Signal Level	0 dBm, ± 3 dB (600 Ω)/tone
Connector	Quick disconnect terminal

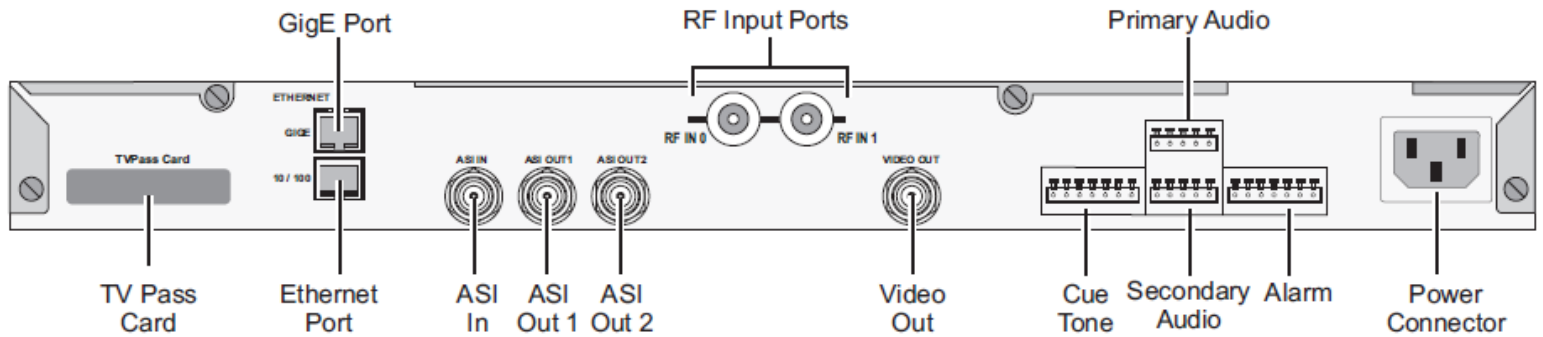
Physical

Width	18.9 in (48cm)
Depth	18.11" (46cm)
Height	1.65 in (4.2cm)
Weight	11 lb (5.0kg) approx
Power Input	95-240 VAC, 47-63Hz, 40 W max
Operating Temperature	0° to 40°C ambient
Humidity	95% relative maximum

Other

Limited Warranty	One year
Compliance	UL listed/approved, FCC part 15

DSR-4440 REAR PANEL



MODEL AND ORDERING INFORMATION

Model Name	Part Number	Description
DSR-4410MD	532618-001-00	Satellite Multiplex Decrypter

CUSTOMER CARE

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656