advanced media technologies®

MODEL
DSR-4450
COMMERCIAL INTEGRATED RECEIVER/DECODER

A R R I S®

PRODUCT OVERVIEW

The DSR-4450 Integrated Receiver/Decoder from ARRIS brings revolutionary technology advances from the leader in premium satellite program delivery. The DSR-4450 can decode HEVC, MPEG-4 or MPEG-2 compressed video in HD or SD formats and deliver outstanding video and audio performance via analog/composite video output. The inclusion of DCII QPSK, DVB-S2, DVB-S2x and 8PSK Turbocode demodulation enables full compatibility with the latest satellite distribution networks.

The DSR-4450 comes equipped with industry standard input and output interfaces such as dual GigE and ASI enabling seamless connections to headend equipment and its sleek packaging design fits in a standard 19" relay rack and requires only a single rack unit of space.

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KEY FEATURES

- Stackable 1RU Chasis design
- 2 RF Inputs (L-Band)
- Dual Gig-E and ASI transport inputs and outputs
- Multi-format HEVC, MPEG-4 and MPEG-2 HD and SD processing
- AFD support for processing proper SD output aspect ratio
- Configurable DCII subtitle overlay on decoded output
- DVB and DCII subtitle passthrough
- Advanced Modulation support with DCII QPSK, DVB-S2 8PSK, DVB-S2x 8PSK and 16APSK and 8PSK Turbocodes
- DigiCipher II conditional access control
- Dolby® Digital audio processing
- VBI reinsertion for closed caption
- DTMF cue tones for local ad insertion
- Front panel confidence monitor
- Gig-E port web browser monitoring and control
- SNMP monitoring
- Composite video output

SPECIFICATIONS

L-Band Input	
Input Frequency	950 - 2150 MHz
Input Impedance	75 Ω
Input Connectors	Two (2) F-type
LNB Power Out	16-22V DC at 450 mA
Port-to-Port Isolation	40 db (minimum)
Digital Processing	
Modulation Modes	DC-II QPSK, DVB-S2, DVB-S2x and 8PSK Turbocodes
Symbol Rates	
DCII QPSK	19.51 Msps and 29.27 Msps
DVB-S2 8PSK	3 to 35 Msps
DVB-S2x 8PSK/16APSK	3 to 35 Msps
8PSK Turbocodes	1 to 30 Msps
FEC Rates	
DCII QPSK	3/4
DVB-S2 8PSK	3/5, 2/3, 3/4, 5/6, 8/9, 9/10
DVB-S2x 16APSK	26/45, 3/5, 28/45, 23/36, 25/36, 13/18, 7/9, 77/90
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)
Aspect Ratio Conversion (HD down-conversion)	4x3 center-cut, 4x3 letterbox, 14:9 and 16:9 (Anamorphic)
Video Decoding	
Compression Formats	HEVC, MPEG-4 and MPEG-2
HD Resolution	1080i60, 720p60 and 1080p23.98
SD Resolution	528x480i , 544x480i, 704x480i, 720x480i, 528x576i (25 fps), 544x576i (25 fps), 704x576i (25 fps) and 720x576i(25 fps)

SPECIFICATIONS (CONTINUED)

Composite Video Output (NTSC)

Frequency Response	±0.75 dB, 1kHz–4.2 MHz
Signal/Noise Ratio	57 dB (min)
Differential Gain	4.0% p-p (max) (10% to 90% APL)
Difference Phase	4 degrees p-p max. (10 to 90% APL)
Output Impedance	75 Ω
Output Level	1.0 V p-p ± 5%
Connectors	One BNC

Audio Output

Compression Formats	Dolby AC-3 and MPEG-1 Audio Layer II
Output	Two stereo pair or four mono
Output Level	±20.0 dBu, ±1.0 dB into 600 Ω balanced load, adjustable (0 to -20 dB)
Frequency Response	±1.0 dB p-p maximum, 20 Hz to 20 kHz
Total Harmonic Distortion	0.25% maximum at 1kHz, measured at 20 Hz to 20 kHz
Signal/Noise Ratio	86.2 dB minimum at 1 kHz, measured at 20 Hz to 20 kHz
Isolation, L/R	80 dB at 1 kHz
Audio Impedance	600 Ω load

Ethernet Management Port

Connector	RJ-45
Format	10/100/1000BaseT

GigE Input/Output Interface

Connector	RJ-45 (2)
Format	10/100/1000BaseT

ASI Input/Output Interface

Format	Asynchronous Serial Interface
Transmission	Byte or packet mode
Standard	CENELEC EN 50083-9
Connectors	BNC (two out, one in)

Contact Closures

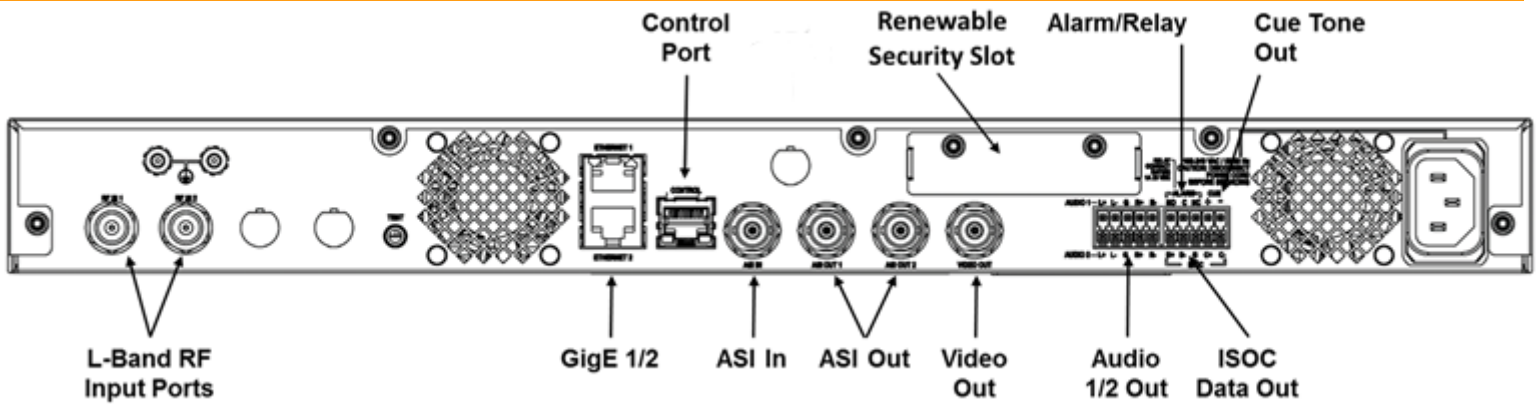|	
Number of Contact Closures	One (Alarm or ad insertion)
Contact Closure Type	Form C, SPDT

Cue Tones

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

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SPECIFICATIONS (CONTINUED)

Physical	
Width	18.9 in (48cm)
Depth	20.5" (52.1cm)
Height	1.65 in (4.2cm)
Weight	12 lb (5.5kg) approx
Power Input	100-240 VAC, 47-63Hz, 50 W max
Operating Temperature	0 °C to 50 °C
Humidity	95% relative maximum
Display	2.2" color LCD
Other	
Limited Warranty	One year
Compliance	UL listed/approved, FCC part 15

DSR-4450 REAR PANEL

MODEL AND ORDERING INFORMATION

Model Name	Part Number	Description
DSR-4450	612302-001-00	Single Channel Decoder

CUSTOMER CARE

Contact Customer Care for product information and sales:

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

DSR-4450 **365-095-32588** (rev x3 01-2019)

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