

DSR-4450

Commercial Integrated Receiver/Decoder



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-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.



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

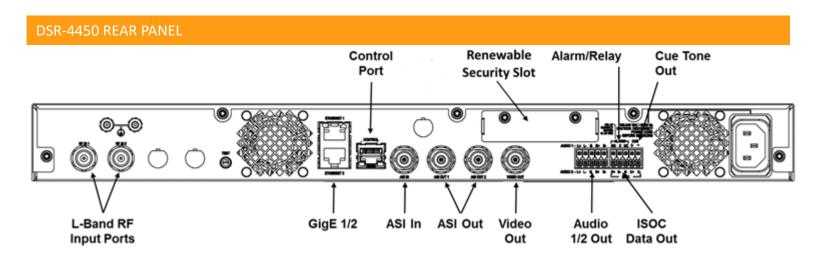
SPECIFICATIONS		
L-Band Input		
Input Frequency	950 - 2150 MHz	
Input Impedance	75 Ω	
Input Connectors	Two (2) F-type	
LNB Power Out	16-22V DC at 450 mA	
Port-to-Port Isolation	40 db (minimum)	
Digital Processing		
Modulation Modes	DC-II QPSK, DVB-S2, DVB-S2x and 8PSK Turbocodes	
Symbol Rates		
DCII 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)	



Frequency Response $\pm 1.0 \mathrm{dB} \mathrm{p-p} \mathrm{maximum}$, 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 $600 \Omega \mathrm{load}$ Ethernet Management Port Connector RJ-45 Format $10/100/1000\mathrm{BaseT}$		
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Signal/Noise Ratio57 dB (min)Differential Gain4.0% p-p (max) (10% to 90% APL)Difference Phase4 degrees p-p max. (10 to 90% APL)Output Impedance75 ΩOutput Level1.0 V p-p ± 5%ConnectorsOne BNCAudio OutputAudio OutputCompression FormatsDolby AC-3 and MPEG-1 Audio Layer IIOutputTwo stereo pair or four monoOutput Level±20.0 dBu, ±1.0 dB into 600 Ω balanced load, adjustable (0 to -20 frequency Response±1.0 dB p-p maximum, 20 Hz to 20 kHzTotal Harmonic Distortion0.25% maximum at 1kHz, measured at 20 Hz to 20 kHzSignal/Noise Ratio86.2 dB minimum at 1 kHz, measured at 20 Hz to 20 kHzIsolation, L/R80 dB at 1 kHzAudio Impedance600 Ω loadEthernet Management PortEthernet Management PortConnectorRJ-45Format10/100/1000BaseT		
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Ethernet Management Port Connector RJ-45 Format 10/100/1000BaseT GigE Input/Output Interface	80 dB at 1 kHz	
ConnectorRJ-45Format10/100/1000BaseTGigE Input/Output Interface	600 Ω load	
Format 10/100/1000BaseT GigE Input/Output Interface		
GigE Input/Output Interface	RJ-45	
	10/100/1000BaseT	
Connector RJ-45 (2)	RJ-45 (2)	
Format 10/100/1000BaseT	10/100/1000BaseT	
ASI Input/Output Interface		
Format Asynchronous Serial Interface	Asynchronous Serial Interface	
Transmission Byte or packet mode	Byte or packet mode	
Standard CENELEC EN 50083-9	CENELEC EN 50083-9	
Connectors BNC (two out, one in)	BNC (two out, one in)	
Contact Closures		
Number of Contact Closures One (Alarm or ad insertion)	One (Alarm or ad insertion)	
Contact Closure Type Form C, SPDT	Form C, SPDT	
Cue Tones		
Signal Type Differential output	Differential output	
Signal Level 0 dBm, \pm 3 dB (600 Ω)/tone	0 dBm, \pm 3 dB (600 Ω)/tone	
Connector Quick disconnect terminal		



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	



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)