

DSR-4470

Commercial Integrated Receiver/Decoder



PRODUCT OVERVIEW

The DSR-4470 Integrated Receiver/Decoder from ARRIS brings revolutionary technology advances from the leader in premium satellite program delivery. The DSR-4470 can decode HEVC, MPEG-4 or MPEG-2 compressed video in HD or SD formats and deliver outstanding video and audio performance via HD/SD-SDI output or 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-4470 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 Chassis design
- 2 RF Inputs (L-Band)
- Digital video output (HD/SD-SDI) with embedded audio
- 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 (1.92), 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/PAL M)

| | |
|--------------------|------------------------------------|
| 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 |

HD/SD-SDI

| | |
|------------------|------------------------|
| Output Level | 800 mV, ±80 mV |
| Output Impedance | 75 Ω |
| Standards | SMPTE-259M, SMPTE-292M |
| Connector | BNC |

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 |

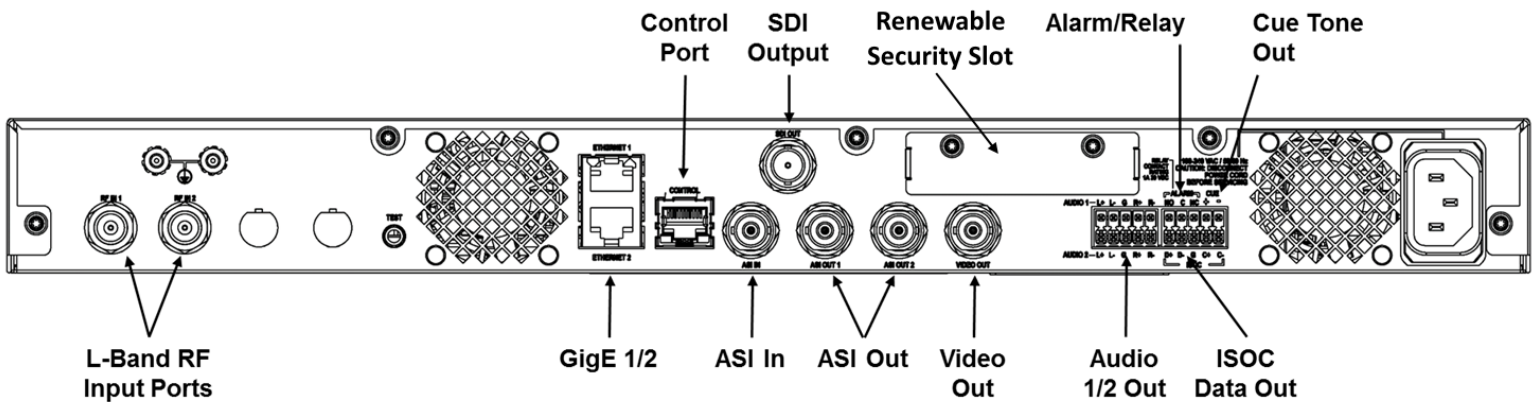
Cue Tones

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

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-4470 REAR PANEL



MODEL AND ORDERING INFORMATION

| Model Name | Part Number | Description |
|------------|---------------|--|
| DSR-4470 | 597651-001-00 | Single Channel Decoder with HD/SD SDI Output |

CUSTOMER CARE

Contact Customer Care for product information and sales:

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