telairity

Real-Time HD

BE-IRD 5504-G Enhanced Multi-format Router

The BE 5504-G is a universal (internationally ready) source-quality modular video I/O and decoder system, capable of handling all MPEG-2 and MPEG-4 (H.264/AVC), HD and SD, SPTS and MPTS input formats, with either 4:2:2 or 4:2:0 chroma sampling. Interfaces are available for DS3/G.703, QPSK, QAM, SDI, ASI, and Ethernet, as well as analog composite and component. Audio inputs may be embedded in an SDI stream, or input separately in digital AES/EBU or analog format. There are no limits on input bit-rate. By default, 1 video and 2 audio channels can be decoded, with an option to add a second video and 2 more audio channels. Transmission packet lengths of both 188 and 204 bytes are supported. DVB-S/S2, -T/T2 tuners available.

Features and Options

Video Input Formats

- **High Definition**
  - MPEG-2 4:2:2, 4:2:0
  - MPEG-4 (H.264/AVC) 4:2:2, 4:2:0
  - 1080i: 25, 29.97, 30 fps
  - 720p: 50, 59.94, 60 fps
- **Standard Definition**
  - MPEG-2 4:2:2, 4:2:0
  - MPEG-4 (H.264/AVC) 4:2:2, 4:2:0
  - 480i: 29.97 fps
  - 576i: 25 fps
- **Bit Rates**
  - No limit

Audio Input Formats

- MPEG-1 Layer 2
- MPEG-2
- Dolby Digital / AC-3
- AAC-LC
- AAC-HE & AAC-HE version 2

Input Transport Streams

- Either SPTS or MPTS
- EIA-608 closed captions decoded and output

Operation & Control

- Front Panel Setup
- Net Manager (included with product)
- User-selected SNMP Manager

BE-IRD 5504-G
Enhanced Multi-format Router

Applications

The Telairity BE-IRD 5504-G offers professional modular video I/O and contribution HD and SD H.264/AVC 4:2:2 decode capabilities, in addition to MPEG-2 and 4:2:0 distribution decoding. For customers using Telairity's versatile five-way BE8500 encoder, this decoder enables full advantage to be taken of all modes

- MPEG-2 / MPEG-4 (H.264/AVC)
- HD / SD
- 4:2:0 / 4:2:2

Benefits

Compact 1RU system for source-quality video decoding, with no limits on input bitrates

Part of the Telairity family of professional video compression products for trouble-free integration with Telairity encoders.

Decodes all 4:2:0 & 4:2:2 video formats: HD & SD, MPEG-2 & MPEG-4 (H.264/AVC)

Decodes most common audio formats, including MPEG-1 Layer 2, MPEG-2, Dolby Digital / AC-3, AAC-LC and AAC-HE and AAC-HE v2

Video and audio input formats auto-detected and automatically decoded

Receive signals from a wide variety of sources, including Ethernet, Radio Frequency satellite or cable, and ASI or DS-3 / G.703 networks

Full support for BISS descrambling

Decodes both Multi-Program and Single-Program Transport Streams (MPTS & SPTS)

Local front panel and Remote Net Manager or SNMP control

Upgrades via download for easy field maintenance

telairity
Real-Time HD

Ordering Information

Part Number: **BE-IRD 5504-G**

Contents

- 5000-series Decoding Platform
- USB flash drive with User manual, Net Manager software
- Cables
  - Power cord
  - Bag with connectors and adaptors for plug-ins on unit back

Requirements

- PC for control system
- Encoded source
- Display to view decoded images

System Control

- LCD panel menus
- Net Manager
- SNMP-based network management systems

About Telairity

Telairity, based in Santa Clara, California designs, manufactures and markets H.264/AVC and other advanced encoding and transcoding solutions for broadcast and professional video applications. Telairity's breakthrough video architecture (Telairity-1™) is the foundation for all its real time encoding products, which combine outstanding video quality with state-of-the-art, video compression based on the AVC (H.264 / MPEG-4.10) standard to achieve the lowest possible bitrates.

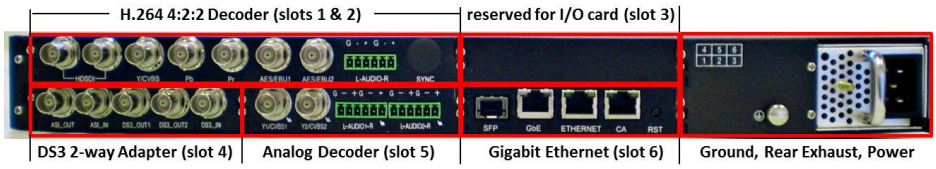
Telairity
3375 Scott Blvd., Suite 300
Santa Clara, CA 95054
tel 408 764 0270
fax 408 764 0271
www.telairity.com

Configuration Modules

- **H.264 4:2:2 Decoder card (2 slots)**
  - Video Outputs: SDI x 2 (2 BNC), Y/CVBS – Pb – Pr (3 BNC)
  - Audio Outputs: AES/EBU x 2 (2 BNC), 6-pin Phoenix (L/R analog balanced)
  - CVBS supports NTSC, PAL, PAL-M, PAL-N
- **Analog decoder card (1 slot)**
  - Video/Audio Outputs: CVBS x 2 (2 BNC); 6-pin Phoenix x 2 (L/R analog balanced)
- **DS-3 (G.703) 2-way Adapter card (1 slot)**
  - ASI: 1 In, 1 Out (2 BNC)
  - DS3 / G.703: 1 in, 2 Out (3 BNC)
- **Gigabit Ethernet card (1 slot)**
  - Ethernet ports: 2 RJ-45 (1 management, 1 CA)
  - GigE ports: 1 RJ-45, 1 SFP (data)
  - Reset button
- **QPSK card (1 slot) or DVB- QPSK, 8PSK, 16APSK, 32APSK, and more**
  - 2 or 4 RF Inputs, various loop outs available (depending on card)
- **QAM card (1 slot)**
  - 1 RF Input, 1 RF-Test
- **Bit-rate Retrofit card (1 slot)**
  - 3 ASI In, 1 ASI Loop-out (for ASI In1)
- **I/O card (slot 3 exclusively)**
  - 2 ASI In, 2 ASI Out, 1 RJ-45 Ethernet In/Out

Physical Specifications

- BNC connectors: 75 ohm
- RF connectors: 75 ohm, 0-20 GHz frequency range
- Power: AC 100V~240V, 50/60Hz, 65W (max)
- Dimensions: 1RU (H) / 19 (W) x 23 (L) in / 483 (W) x 584 (L) mm
- Weight: 17.4 lbs / 7.9 Kg



BE-IRD 5504-G back panel

The H.264 4:2:2 Decoder card occupies two of the six slot positions in the BE 5504 1RU chassis, leaving four available slots. Of the remaining four slots, one (slot 3) is reserved exclusively for use by the I/O card. In the 5504-G configuration pictured above, the I/O slot is left blank, and the three open general slots are filled by a DS3 2-way Adapter card, an Analog Decoder card, and a Gigabit Ethernet card.

Configurations with two double-wide H.264 4:2:2 Decoder cards have only general slot 6 available for added I/O or analog decoder capability, since the other open slot (slot 3) is exclusively reserved for use by the I/O card.