**Features**

- Inputs: DVB-T, DVB-T2, IP, DVB-ASI
- Automatic switchover from DVB-T+T2 to ASI in
- Optional 2nd RF Input – DVB-S+S2, or DVB-T-T2
- Supports Pro-MPEG FEC on IP input
- Includes CAM module and BISS-1/E and DVB-CI support
- Outputs: IP (up to 4 IP transport streams out, SPTS or MPTS), HD-SDI, SDI, DVB-ASI, YPrPb, RGB, composite, MPEG or AC-3 audio
- May choose or automate choice of digital stream from DVB-T or DVB-T2 or DVB-ASI or SMPTE-310M or IP signal. Auto switching with sync loss.
- Selected digital stream is supplied in DVB-T, DVB-T2, or IP format signal
- Dual MPEG-2 (HD/SD) decoding, single MPEG-4/ H.264 decoding (single audio decoding only)
- H.264 (MPEG-4) or MPEG-2 MP@HL compliant video decoder supplies digital and analog video signal
- Digital video signal compliant with SMPTE-259M or SMPTE-292M (SDI) with embedded 8 channel audio (SMPTE-299M)
- Dolby Digital® AC-3, HE-AAC, and MPEG-1/2 5.1 channel audio decoder
- Dolby Digital® AC-3 or PCM stereo audio selectable over BNC connector
- Dolby Prologic compatible stereo audio output on one XLR connector and one D-Sub 9P connector
- RGB video signal with 1080i/720p/576p/576i (480i) video mode
- 2 Lines by 40 characters LCD display
- Supports subtitles
- Down converts HD input to SD out
- Firmware upgradeable via Internet or USB
- USB 2.0 Support
- SNMP (10/100/1000 Ethernet) management support
- Supports LNB power on RF in if needed
- Tested with many other Encoders with FEC

**Applications**

- Off air terrestrial receiver
- MPEG-2/4/H.264 HD Decoder
- Video Quality Monitoring
- Content repurposing

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**Overview**

The **Virenza-T+T2™** is a new generation professional frequency agile frequency agile DVB-T receiver that demodulates all terrestrial frequencies and supplies crystal clear digital or analog video with the DVB-T and DVB-T2 formats used by Broadcast Professionals in Europe, Asia, and parts of Africa and South America. It not only functions as a broadcast demodulator but also works extremely well as a professional H.264 and MPEG-2 decoder. It features an easy-to-use GUI, plus front panel controls. Both allow you to change settings quickly.

The output of the demodulator is available on DVB-ASI connectors. With its IP, DVB-ASI, or its DVB-T/T2 inputs, it is able to decode transport streams up to 45 mbps. Designed to support all the industry standard forms of the DVB standard, it supports 576i/480i, 576p/480p, 720p and 1080i decoding. Supported video outputs include both digital and analog formats with HD-SDI with embedded audio, SDI, YPrPb, IP, RGB, and composite. A useful feature is its ability to automatically switch between RF and IP inputs.

Audio support is via embedded audio or via XLR connectors. Audio support includes analog audio output (L, R) on XLR’s. For Dolby Pro Logic audio output there is a front panel control to enable Pro Logic surround sound audio on the two XLR’s. For users looking for digital audio via PCM or compressed audio, the output TS via the BNC connectors and the outputs here are enabled via the MAIN/AUDIO/DIGITAL LCD menu. The compressed audio on the BNC has a Dolby AC-3 with 5.1 channels.
Rear View

Front Panel View

Specifications

Front Display/Keys
- 2 lines by 40 characters LCD
- 18 keys for Easy Control
- LOCK, ENTER, EXIT, ARROW, and Numeric Keys
- LED (3 colors: Green, Amber, Red)

DVB-T or DVB-T2 RF Input
- Input Frequency: 55 ~ 2150 MHz (VHF/UHF)
- Channel: 6/7/8 MHz RF Selectable
- Standard: ETSI TS 102 773 V1.2.1
- Connector: 2 x 75 Ohm BNC-type Connector (DVB-S/S2 Option available)
- Symbol Rate: DVB-T: 10 ~ 30 Mps
- Note: *Supports T2MI multiplexed streams

Optional Second RF Input
- DVB-S/S2, DVB-T+T2, 8VSB, or QAM

TS Input
- Format: SMPTE 310M or DVB-ASI (Select ASI or 310M at front panel)
- Connectors: 75 ohm BNC, RJ-45

Audio Output
- Signal: AES3-id (Select ASI or 310M or AES3-id output at front panel)
- Connector: 75 ohm BNC
- Format: Dolby AC-3 audio with 5.1, AAC, MPEG 1/2, PCM
- 1st Audio Output: Connector: XLR connector (AES 3-id)
- 2nd Audio Output: Connector: D-sub 9p connector
- Audio Pairs Decoded: Standard – Select any one of four stereo pairs Optional – audio decoder board for selecting one additional stereo pair, for a total of 2 of 4 stereo pairs
- Audio Levels: Set to +4dBm for -20dBFS digital audio contents when the audio attenuation menu is set to zero. The audio level can be attenuated using the front panel audio configuration menu.

Supported SDI Modes

The SDI has EIA-608 and EIA-708 closed caption (=DTVCC) Embedded. It also has line 21 closed caption on 480i mode.

Supported modes of SDI are:

<table>
<thead>
<tr>
<th>Video Mode</th>
<th>Frame Rate</th>
<th>Embedded Audio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1080i</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>720p</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>480p/576p</td>
<td>Not defined</td>
<td>Not defined</td>
</tr>
<tr>
<td>480i/576i</td>
<td>Supported</td>
<td>Supported</td>
</tr>
</tbody>
</table>

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Ordering Info

Virenza-T+T2 – DVB-T+T2 Version
Virenza-T+T2/2RF – Optional 2nd DVB-T+T2 RF input
Virenza-S+S2 – DVB-S+S2 Version