

# VIRENZA-S+S2™

Frequency Agile Satellite Receiver and MPEG-2 and 4 and H.264 HD Decoder with DVB-S+S2, IP (with Pro-MPEG FEC), or ASI Input. Demodulates All Satellite Frequencies and Decodes Either H.264 or MPEG-2 Video Formats to SMPTE 259M (SD-SDI), SMPTE 292 (HD-SDI), YPrPb, or IP. Supports AES-3 id Audio as well as MPEG-1/2, AAC, and AC-3. Supports BISS and Other CA.



## Features

- Inputs: DVB-S, DVB-S2, IP, DVB-ASI
- Automatic switchover from DVB-S/S2 to ASI in
- Optional 2nd DVB-S+S2 RF input
- 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 digital stream from satellite or DVB-ASI or IP signal with or without auto switching on loss of "lock"
- H.264 (MPEG-4) or MPEG-2 MP@HL compliant video decoder supplies digital 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 satellite receiver
- MPEG-2 HD or SD Decoder
- HD-SDI file playback
- Content repurposing
- Receiving audio over Sat Link

## Overview

Satellites revolutionized long distance content delivery. Satellite receivers are the workhorses of the content delivery industry. The **Virenza-S+S2™** is a new generation professional frequency agile DVB-S and DVB-S2 receiver that demodulates all satellite frequencies and supplies crystal clear digital or analog video with all formats used by Broadcast Professionals in Europe, USA, Canada, Mexico, and Korea. 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.

With its IP, DVB-ASI, or its DVB-S/DVB-S2 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.



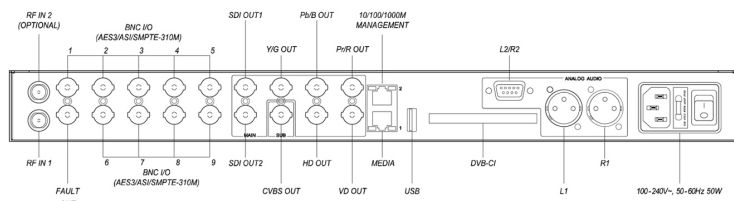
Computer Modules, Inc.

11409 West Bernardo Court  
San Diego, CA 92127

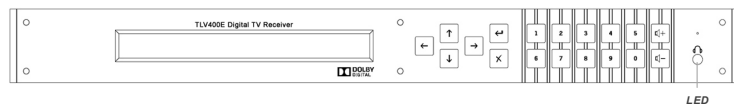
Tel: (858) 613-1818 Fax: (858) 613-1815

[www.dveo.com](http://www.dveo.com)

## Rear View



## Front Panel View



## Specifications

<b>Front Display/Keys</b>	<ul style="list-style-type: none"> <li>• 2 lines by 40 characters LCD</li> <li>• 18 keys for Easy Control</li> <li>• LOCK, ENTER, EXIT, ARROW, and Numeric Keys</li> <li>• LED (3 colors: Green, Amber, Red)</li> </ul>
<b>DVB-S2/S RF Input</b>	
Channel:	950-2150 MHz RF Selectable
Connector:	2 x 75 Ohm BNC-type Connector (DVB-T+T2 Option available)
Symbol Rate:	DVB-S2 (8PSK/QPSK): 10 ~ 30 Msps DVB-S (QPSK): 2 ~ 45 Msps
<b>Optional Second RF Input</b>	
DVB-S/S2, DVB-T+T2, 8VSB, or QAM	
<b>TS Input</b>	
Format:	SMPTE 310M or DVB-ASI (Select ASI or 310M at front panel)
Connectors:	75 ohm BNC, RJ-45
<b>Audio Output</b>	
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.
Digital Audio Output	Choose either PCM mode or COMPRESSED audio output mode for MAIN channel. The chosen audio mode is used for all BNC output ports. You can have PCM mode only for the SUB channel. You may have COMPRESSED audio out of MAIN channel over BNC port and PCM audio out of SUB channel over BNC port.
Amplifier/Speakers	One 10W amplifier and speaker for L+R channel

## Ordering Info

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

## Supported SDI Modes

Supported modes of SDI are:

Video Mode	Frame Rate			Embedded Audio	
	29.97 Hz (59.94)	30 Hz (60)	25 Hz (50)	PCM	Compressed
1080i	Supported	Supported	Supported	Supported	Supported
720p	Supported	Supported	Supported	Supported	Supported
480p/576p	Not defined (480p)	Not defined (480p)	Not defined (576p)	Not Available	Not Available
480i/576i	Supported for 480i	Not supported (480i)	Supported (576i)	Supported	Supported

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

<b>TS Output</b>	
Format:	SMPTE 310M, DVB-ASI, or IP (up to 4 IP TS out, SPTS or MPTS – does not alter the source program)
Connectors:	75 ohm BNC, RJ-45
<b>Component Video Output</b>	
Formats:	1080i/720p/576p/480p/576i/480i
Connectors:	BNC connector, YPbPr/RGB Selectable
<b>Preview Out (Composite)</b>	
Signal:	NTSC/PAL
Connector:	75 ohm BNC
<b>Digital Video Output (SDI, HD-SDI)</b>	SMPTE-259M/SMPTE-292M with embedded audio (SMPTE-299M)
<b>Ethernet Input/Output</b>	10/100/1000 Mbps MPEG over RTP/UDP
<b>USB 2 for Software Updates</b>	Connector: Type “A” Ethernet adapter available
<b>Fault</b>	Relay contact on signal loss
<b>Conditional Access</b>	BISS-1/E and DVB-CI for popular CA
<b>Network Management</b>	NMS supported through SNMP
<b>CPU and RAM</b>	MIPS 300 MHz 32 bit RISC
<b>Unit</b>	1 RU 19-inch rackmountable
<b>Operating Temperature</b>	+0 ~ +45°C (32 to 113°F)
<b>Storage Temperature</b>	-20 ~ +50°C (-4 to 122°F)
<b>Operating Humidity</b>	10 to 90%, non-condensing
<b>Power Supply</b>	AC 100-240V ~ 50-60 Hz 50W Max
<b>Dimensions</b>	HxWxL: 1.7 x 19 x 13.6 inches (4.3 x 48.26 x 34.55 cm)
<b>Weight</b>	10 lbs. (4.54 kg)
<b>Conformities</b>	 FCC, RoHS CE Mark: Electromagnetic Compatibility Directive 2004/108/EC Low Voltage Directive 2006/95/EC