



UNITY 4422

BROADCAST RECEIVER

ADVANCED DIGITAL TECHNOLOGIES



Compel™
Controlled

features:

- ✓ MPEG2/DVB Compliant
- ✓ 4:2:2 and 4:2:0 Video Decoding
- ✓ SDI and AES/EBU Outputs
- ✓ MPEG Audio, Two Stereo Pair
- ✓ Asynchronous Data Output
- ✓ Enhanced VBI Support
- ✓ Closed Captioning
- ✓ Teletext - 4:2:2 Only
- ✓ Front Panel Control



MPEG 4:2:2 AND 4:2:0

The UNITY 4422 digital video receiver provides MPEG 4:2:2 decoding for the highest quality video available. It is a highly reliable receiver which can be used for satellite QPSK reception or terrestrial with ASI inputs. The UNITY 4422 automatically detects if 4:2:0 or 4:2:2 video is present. You simply set the frequency and bandwidth parameters via front panel control (or remotely via Compel Network Control).

UNITY OPTION CARDS

UNITY Option Cards allow the UNITY 4422 to expand its feature set. The UNITY Sync DataCard provides high speed broadcast data up to 6.8 Mbps. The UNITY DVB-ASI Input Card provides easy interface to terrestrial networks. The UNITY 4-way RF Switch lets you command the receiver to look at up to four separate satellites for unparalleled disaster recovery. The UNITY RelayCard puts 14 remote controllable relay contacts at your command.

Your UNITY network will enjoy the power of Compel Control. You can control your UNITY receivers as individual sites or groups. This means more than just permissioning a receiver. Compel Control issues commands. Scheduling commands let you regionalize programming and regionalize commercials, thus increasing revenues. In addition, switching between satellite transponders or even to a different satellite for disaster recovery (this feature has saved networks — ask about it). Over 150 networks worldwide enjoy the unique power of Compel Network Control systems. Take control of your network with the right digital choice; UNITY receivers with the power of Compel Control.

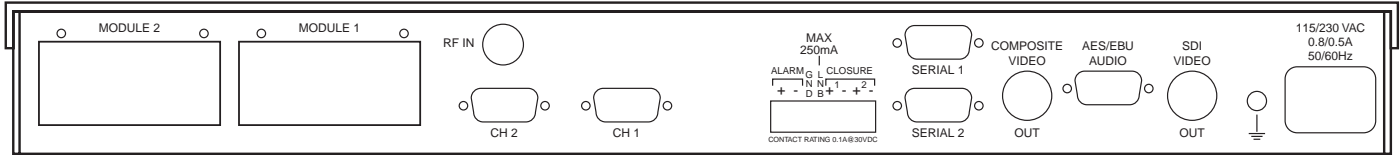


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The UNITY4422 Rear Panel



UNITY 4422 MPEG2 RECEIVER TECHNICAL SPECIFICATIONS

RF CHARACTERISTICS

Input Frequency Tuning via Front Panel Control or COMPEL	
Input Frequency Range	950 to 2150 MHz
Carrier Lock Range	+/- 1.0 Mhz
Input Level Range	-25 dBm to -65 dBm
Input Impedance	75 ohms
LNB Power	250 mA max.
Relays (2)	Solid State Relay closure via screw terminals
Tuning Resolution	1 kHz
Modulation	QPSK
Transport Rate Range	1.55 - 30 Msps
FEC Coding (DVB)	1/2, 2/3, 3/4, 5/6, 7/8

VIDEO COMPRESSION CHARACTERISTICS

Video Data Rate	2.5 to 50 Mbps
Compression Type	MPEG2 Studio Profile (4:2:2) MPEG2 Main Profile (4:2:0)
Resolutions	
Horizontal	720, 704, 640, 544, 480, 352
Vertical	480 lines @ 30 Hz (NTSC) 240 lines @ 30 Hz (NTSC) 576 lines @ 25 Hz (PAL) 288 lines @ 25 Hz (PAL)

VIDEO OUTPUT CHARACTERISTICS

Video Format	NTSC/PAL Composite or SDI
Output Level	1Vpp±5%
Output Impedance	75 Ohms
Differential Gain	4%
Differential Phase	<1.5°
Line Time Distortion	1 IRE
Field Time Distortion	3 IRE

AUDIO COMPRESSION CHARACTERISTICS

Compression Type	MPEG Layer 2
Data Rate	64 - 384 kbps
Output Modes Supported	Mono, Dual Mono, Joint Stereo

AUDIO OUTPUT CHARACTERISTICS

Frequency Response	20Hz to 20kHz
Output Level @ max PPL	+18.0 dBm
Impedance Balanced	<60 Ohms
Harmonic Distortion	<0.1%
S/N Ratio	>80 dB

OUTPUTS

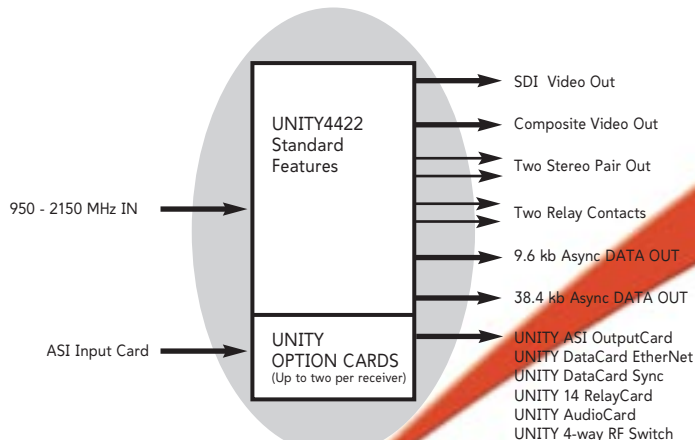
Video Analog	75 ohms via BNC connector
Video Digital	SDI via BNC connector
Audio Analog (2 stereo pair)	<60 ohms via DB9
Alarm	Relay closure via screw terminals
Relays (2)	Solid State Relay closure via screw terminals
Data Port One	RS232 via DB9 connector, 38.4 kbps
Data Port Two	RS232 via DB9 connector, 38.4 kbps

MECHANICAL

Power	Universal switching power supply
Size	Rack mount: 1.75"H x 19"W x 13.5"D
Operating Temperature	10° to 40°C

AGENCY APPROVALS

FCC Class A, UL, CSA, CE



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WEGENER COMMUNICATIONS

11350 Technology Circle, Duluth, GA 30097
voice 770.814.4000 fax 770.623.0698
e-mail: info@wegener.com www.wegener.com