

VORTEX™ Receiver

Modular Video Diversity Receiver

DVBR-1000 Series

The DVBR-1000 Vortex™ Diversity Video Receiver has all of the same features you'll find in the single VBR-500 Vortex but adds the heightened performance of DTC's Diversity Technology inside.

Diversity receiver systems work on the principal of receiving two signals, with antennas placed apart from each other. The VideoVoter™ compares the incoming signals continuously, and instantly switches to the better signal, thus eliminating "drop outs" or dead spots. Our exclusive VideoVoter board automatically switches to the best signal at more than 15 thousand times each second.

Side-by-side comparisons of single receiver systems versus DTC Diversity show dramatically improved performance in common tactical situations using our diversity technology. Even with two receivers built into this rugged aluminum enclosure, the unit measures only 2" x 3" x 5.25".

Features

- ▲ DTC exclusive VideoVoter™ Diversity Technology
- ▲ Two receivers installed with ten user programmable video and dual audio subcarrier channels
- ▲ Audio subcarriers maybe used to receive data
- ▲ Video only and composit video output
- ▲ Heavy duty standard connectors
- ▲ Rugged compact design
- ▲ Programming software and cable

Models

- ▲ DVBR1000-L-KT01 1700-1850 MHz
- ▲ DVBR1000-S2-KT01 2200-2300 MHz
- ▲ DVBR1000-S-KT01 2400-2500 MHz
- ▲ DVBR1000-C-KT01 4400-5000 MHz

Contact your DTC sales representative for other frequency bands which are not listed here

Add "ENC" to any of the above model numbers for Video Encryption

Add "ENC-AV" for Audio & Video Encryption

Ordering Information

- ▲ Call for availability
- ▲ Antennas optional



Specifications

RF

Operating Frequency Range	1700 – 1850 MHz 2200 – 2300 MHz 2400 – 2500 MHz 4400 – 5000 MHz
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Number of Channels	10 max. (user-programmable)
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Sensitivity @ 40 dB Video SNR	-83 dBm
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Input Impedance	50 ohms
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Video 1

Video Frequency Response	6 Hz – 4.5 MHz ±1 dB
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Output Impedance	75 ohms
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Video 2

Video Frequency Response	6 Hz – 7.5 MHz ±1 dB
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Output Impedance	75 ohms
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Audio

Number of Subcarriers	2 per video channel
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Subcarrier Frequencies	6 – 7.5 MHz (user-programmable)
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Tuning Step Size	10 KHz
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Power

Input Voltage	9 – 16 VDC
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Input Current	300/400 mA max. 375/475 mA max. (with descramble enabled)
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Reverse Polarity Protection	30 V
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Connectors

Video Output Jack	BNC M
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Repeater Video Output Jack	BNC M
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Audio Subcarrier Jack	Lemo EHG Series 3 pin (x2) M
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Multiple I/O	Hirose® Power, ground RS-232 Data in, Out RSSI (analog 0-5 VDC output) Clear/Scramble (logic level input for overriding panel switch setting)
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Indicators

RSSI	Five-section LED; Part of membrane assembly; Indicates RF received signal strength
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Video Descrambler Clear/Scramble LED	Part of membrane assembly; Indicates status of descrambler module
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Encryption

Descrambling of Encrypted Video	Ovation Systems Micro-ViewLock II (optional)
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Environment

Operating Temperature Range	-20° to +60° C ambient
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Mechanical

Enclosure Dimensions	5.25" W x 3.00" D x 2" H
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Finish	Black hard anodized aluminum
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Weight	1.2 lb max
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Mounting Provisions	Supplied with three mounting holes-top and bottom-with Helicoil™ 4-40 inserts
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