

PVR Portable Video Repeater

Self Contained, Rapid Deployment

Diversity System

A complete video repeater system in a single hard-sided wheel case. Our Diversity Vortex Receiver operates inside the Pelican 1610 case and is mounted in an aluminum enclosure to provide excellent shielding. The Ant-4 Receiver Antennas are mounted inside the case. The receiver section incorporates DTC's Video Vortex Diversity technology. Special VideoVoter™ circuitry is used to select the best signal at all times to provide superior performance. This feature provides the strongest possible signal and helps to eliminate multipath interference and "drop-outs" or dead spots.

The receiver utilizes omnidirectional antennas because the exact position of the camera transmitter is generally not known so these antennas provide equally good coverage in all directions. Circularly polarized antennas are used to minimize the effect of multipath signals.

The Communications Buffer/Controller detects when a receive signal is present OR when there is video sync detected and then automatically switches ON the transmitter, which operates on a separate frequency band. This circuitry also provides a 25 mS turn-on time and a 25 second transmitter time out delay. This circuit also ensures smooth communications by allowing a large coverage area while minimizing noise.

The video/audio transmitter is a DTC 2 Watt/5 Watt VMX Model, which is highly efficient and dependable. This transmitter and a pointable VDAR-1 directional transmitter antenna are also mounted inside the pelican case. Both the transmitter and receiver are user-programmable, and have a ten channel (non-paired) select switch. Each Portable Video Repeater from DTC gives the option of an internal power supply.

Features

- ▲ Transmit/Receive operation Inband or Crossband
- ▲ Repeater fully synthesized
- ▲ Received video with embedded audio subcarriers are re-transmitted intact
- ▲ DTC Video Vortex Diversity Receiver
- ▲ Auxiliary RX video output ports on receiver
- ▲ Additional RF filtering on RX
- ▲ DTC VMX Series 5 Watt video transmitter:
 - 2 Watt / 5 Watt switch selectable
 - Ten user programmable channels



Specifications

Enclosure	Weather tight Pelican 1610
Receiver	Vortex dual diversity receiver with built in VideoVoter
Sensitivity	-83dBm
Channel	Programmable within frequency band, 250 KHz tuning increments, 10 Channel external selector switch
Transmitter	VMX 5000
Power Out	2/5 Watts switch selectable
Encryption	Optional
Antenna RX	Two QHA-4, 4 dBi Omnidirectional Right Hand Circular Polarization
Antenna TX	VA-5, 5 dBi, 90 degree directional, Right Hand Circular Polarization, attached to a Pan Tilt articulating mount
AC Power	Universal power supply with isolation transformer, 90 – 240 VAC, 35 Watts, additional AC outlet provided
DC Power	12 – 16 VDC, 3 Amps
Temperature	-10°C to +50°C (14F to 122 F), thermostat switched cooling fan

- ▲ DTC VDAR-1 circular polarized TX antenna on pointable mount
- ▲ Repeater powerline surge protection.
- ▲ 110 VAC or 12 VDC Repeater operation.
- ▲ Optional Encryption

Model

x = Frequency bands L, S, S2 or C band

- ▲ PVRPT-BC-X-5000 Portable Inband 5Watt Repeater
- ▲ PVRPT-BC-XX-5000 Portable Crossband 5 Watt Repeater

