

Strain Security Systems



I.P.S.S

Integrated Perimeter Surveillance Systems

The Model ST-CD-56NVIR Hammerhead PTZ Camera System which is part of the IPSS family of surveillance products is a portable self-contained wireless Audio/Video system designed to aid law enforcement and security agencies in quickly responding to tactical situations.

- Contains a completely Ruggedized Weatherproof wireless High Resolution Day / Night Pan Tilt Zoom Camera system with integrated long range Infrared Night Vision Illuminator
- Modular system designed for quick and easy setup of video surveillance, which can be hand carried and deployed by two men in under 10 minutes.
- Choice of 12-channel 1.2GHz FM transmitter, 4-channel 2.4 GHz FM transmitter or 6-channel 2.4 GHz digital encrypted video transmitter for increased security.
- Tripod mounting for easy leveling on a multitude of uneven surfaces such as hillsides, fields, and rooftops. Tripod can be extended to 8 feet.
- The ST-CD-56NVIR will run battery operated using the supplied ST-12WPS - 24 power supply 18 hours at above freezing temperatures (32° F) and 12 hours below freezing. It can also operate from A.C. line power when available.
- The Battery Pack has an integral charging system capable of recharging the pack in 10 hours.
- System includes an Mpeg-4 High Resolution Digital Video Recorder.
- Operating Range: Up to 10 miles line of sight depending on the type and power output of the video transmitter.





ST-1200/8CH/WP-T
1.5 Watt 8 Channel
Video Transmitter

ST-DT900
Wireless Data Transmitter



**ST-DT-900/K106 Multifunction Keyboard Controller
DT-900 Wireless Data Controller ST-K106 Multifunction keyboard
integrated 5 Inch High Resolution LCD Monitor.**



The ST-DT-900/K106 is a Field Portable remote control system for controlling the Hammerhead CD-56NVIR Pan/Tilt/Zoom Camera using the Multifunction Joystick Keyboard while viewing the images live on a high resolution 5 Inch LCD Screen Monitor mounted within the Keyboard.

The ST-DT-900/K106 Multifunction Keyboard Controller is completely self-contained, battery-powered and integrated with a DT-900 Wireless Data Controller installed within the ruggedized Pelican case.

The Model 1200/8CH/WP-R wireless video receiver can be quickly set up and mounted to the Bogan Quick Disconnect Tripod and connected to an externally mounted power and video connector located on the right side of the case. This in turn supplies power and video to the wireless video receiver. The wireless video image is then viewed on the integrated video monitor.

The ST-DT-900/K106 is powered from long lasting Lithium Ion rechargeable batteries or can be powered externally from a 12 Vdc source such as from a police vehicle 12 Vdc Adapter.

The ST-1200/8CH WP-T video transmitter can be placed remotely from the Hammerhead camera support and attached to a pipe or other tubular structure. This allows the transmitter to be placed up to 60 feet away from the camera on rooftops or other tall structures, affording a better line of sight for the transmitter to the control and command center. This also allows the Hammerhead camera to be more easily camouflaged in situations requiring a covert placement of the camera.



ST-12WPS/24

Battery Backup 12 Vdc Power Supply

Outdoor Ruggedized 12 Vdc 24 Amp/Hr Power Supply

For use with All Integrated Perimeter Surveillance Systems Transmitters /
Receivers / I.P.S.S and Hammerhead PTZ Day Night Camera Systems

Front View



Rear View



Weatherproof 3 way AC/DC power supply for the remote wireless video transmitters and cameras. The Pelican Case was chosen for its proven battlefield durability. The Power Supply has an internal 12 Vdc switching power supply and rapid battery charger Combined. This keeps the batteries in a fully charged state while plugged into 110 Vac mains.

If AC Power is interrupted, the system automatically switches to fully charged batteries for uninterrupted service up to 28 hours. The power supply has an external 12 dc input connector that allows the customer to use extended life batteries outside the case such as a vehicle battery.

When the external batteries are plugged into the case, the internal batteries are then disconnected thus allowing longer run time in remote areas where AC power is not available.

Example: Using an external 12Vdc-200 amp/hour battery would run the wireless video transmitter and camera for about 2 days.

ST-CD56NVIR Specifications

<u>Image Sensor:</u>	<u>1/4" CCD</u>
<u>Active Pixels:</u>	<u>752H x 582V</u>
<u>Synchronization:</u>	<u>Internal</u>
<u>Video Output:</u>	<u>VBS 1.0Vp-p /75 ohms</u>
<u>White Balance:</u>	<u>Auto/Manual</u>
<u>Scanning Frequency:</u>	<u>15625 KHz (H) x 50 Hz (V)</u>
<u>Resolution:</u>	<u>More than 480 Lines</u>
<u>S/N Ratio:</u>	<u>More than 50 dB</u>
<u>Electronic Shutter:</u>	<u>1/3~1/10000s</u>
<u>Lux:</u>	<u>0.01 Lux</u>
<u>Focal & Iris:</u>	<u>Auto & Manual</u>
<u>Lens Focal Length:</u>	<u>f=3.9~155 mm 36X Optical</u>
<u>Iris/Zoom:</u>	<u>Auto / Manual</u>
<u>Tilt Speed:</u>	<u>0~40°/s</u>
<u>Pan Speed:</u>	<u>0~80°/s</u>
<u>Pan Rotation:</u>	<u>360°</u>
<u>Tilt Rotation:</u>	<u>90° (180° Auto Overturn)</u>
<u>Preset:</u>	<u>128</u>
<u>Patrol Function:</u>	<u>6 Patrol Patterns</u>
<u>Scanning Speed:</u>	<u>0.5 ~ 30° /s</u>
<u>Infrared Illuminator:</u>	<u>High Brightness LED×40pcs</u>
<u>I/R Wavelength:</u>	<u>850 nm</u>
<u>I/R Project Distance:</u>	<u>80 m</u>
<u>I/R Power Consumption:</u>	<u>1.6 W</u>
<u>Presets:</u>	<u>128 presets , 6 Tracks</u>
<u>Communication:</u>	<u>Multiprotocol, Baud rate from 2400Bps to 19200bps for optional RS485 control</u>
<u>Control of Infrared Lamp:</u>	<u>Auto/Manual control on menu</u>
<u>Service Life of Infrared Lamp:</u>	<u>Over 20000 hours</u>
<u>Alarm Four Channel Inputs:</u>	<u>Normal Open, closing for alarm</u>
<u>Alarm One Channel Output:</u>	<u>Normal Open, Normal Close Output</u>
<u>Power Supply:</u>	<u>12 VDC ± 10%</u>
<u>Power Consumption:</u>	<u>1.2 Amps</u>
<u>Weight:</u>	<u>10 Kg</u>
<u>Installation Style:</u>	<u>Normal Open, closing for alarm</u>
<u>Alarm One Channel Output:</u>	<u>Plain Base Installation/Vehicle-Carried</u>
<u>Relative Humidity:</u>	<u>10-90%</u>
<u>Operation Temperature:</u>	<u>-35°C~55°</u>
<u>Waterproof Class:</u>	<u>IP 66</u>

Description of Components



ST-1200/8CH/WP-T

Remote Wireless Video Transmitter:

8 Channel Wireless Video Transmitter with a 11 Db gain Yagi Antenna integrated into a NEMA 5 enclosure with weatherproof cable connectors. Transmitter enclosure assembly is mounted to 1 inch diameter Delrin with Bogan quick disconnect plates which can be attached to either a quick release tripod or the Grip Action Ball Head. The receiver and the antenna are integrated together and are locked into place using quick disconnect plates.

There is an external BNC connector located at the bottom of the transmitter housing to allow Law Enforcement the option of attaching any of their existing cameras, Thermal Imaging Systems, or Night Vision Systems.



ST-1200/8CH/WP-R

Remote Wireless Video Receiver

Description:

8 Channel Wireless Video Receiver with a 11 Db gain Yagi Antenna integrated into a NEMA 5 enclosure with weatherproof cable connectors. Receiver enclosure assembly is mounted to 1 inch diameter Delrin with Bogan quick disconnect plates which can be attached to either a quick release tripod or the Grip Action Ball Head. The receiver and the antenna are integrated together and are locked into place using quick disconnect plates and then mounted to a pole. The receiver antenna is then aimed at the Hammerhead PTZ to get a lock on the Video signals.

There is an external BNC connector output jack on the bottom of the receiver housing, to provide the customer the option of adding an external viewing monitor, or other types of video recording devices.



The ST-DT900 is a highly integrated, high-performance wireless data transmission system. Operating in the 902-928 MHz ISM band, the system allows the user to extend the range of the Hammerhead and IPSS Pan Tilt Zoom Camera Systems. The system uses asynchronous serial interface, including controlling the pan, tilt, and zoom (PTZ) functions of the Hammerhead and IPSS systems that operates in an RS-232, RS-422 or RS-485 standard.

The system employs the same state-of-the-art, frequency-hopped, spread spectrum technology that has been used in military systems in the past. Because of the spread spectrum technology, the DT-900 has a low-probability of intercept (i.e. secure communication) and excellent transmission characteristics, which substantially increases the reliability of the data transfer with respect to comparable analog systems. The system was designed to minimize installation time and maximize results right out of the box.

The DT-900 is provided with configuration software that allows the user to adjust the features of the system to operate in the most hostile propagation environments. Some of the features include adjustable bit rate, controllable output power levels and even the ability to address multiple camera systems to operate in a network configuration. The ST-DT-900 Data Controllers can also be configured to work point to point, point to multipoint and as a repeater.

Pricing Structure

ST-CD-56NVIR

Hammerhead PTZ Surveillance Package which includes:

ST-CD56NVIR - Hammerhead PTZ Camera

ST-1200/8CH-WPT – 1 Watt Video/Audio Transmitter with 11 Db Gain Yagi Antennas

ST- DT-900 - Data Controller with 8 Db Gain Omni-directional Antenna.

ST-12WPS -24 - Battery Backup 12 Vdc Power Supply

\$8,350.00

ST-DT-900/K106 Multifunction Keyboard Controller and ST-1200/8CH/WP-R Wireless
Video receiver with Tripod

\$2,960.00

Total \$11,310.00