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VS 5800

Video Sweeper

USER MANUAL

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PRODUCT WARRANTY

Optoelectronics, Inc. warrants all products and accessories for one (1) year against defects in materials and workmanship to the original purchaser. Products returned for warranty service will be repaired or replaced at Optoelectronics' option.

Specifically excluded are any products returned under this warranty that upon examination, have been modified, had unauthorized repairs attempted, have suffered damage to the input circuitry from the application of an excessive input signal, have suffered damage to the charging circuitry or internal batteries from the application of excessive voltage, or show other evidence of misuse or abuse. Optoelectronics reserves sole right to make this determination.

NON-WARRANTY

Products not under warranty must be returned, transportation prepaid, to Optoelectronics' service center. Factory service will be performed on a time and materials basis at the service rate in effect at the time of repair. A repair estimate prior to commencement of service may be requested. Return shipping will be added to the service invoice and is to be paid by the customer.

RETURN POLICY

Please contact us first for assistance and to obtain a return authorization number. Service Department: (954) 642-8997. Monday - Friday 9:00 AM to 4:00 PM Eastern Time.

Specifications

Frequency Range:	970MHz - 1.2GHz / 2.4GHz - 2.5GHz / 5.7GHz - 5.8GHz
Scan Time:	45 seconds for all three bands
Sensitivity:	-80dBm
Detection Distance:	Up to 300 feet depending on output power of transmitter
Audio Demodulation:	1.2GHz band: 6MHz / 6.5MHz / 5.5MHz 2.4GHz band: 6MHz / 6.5MHz/ 5.5MHz 5.8GHz band: 6MHz / 6.5MHz
Video Protocols:	NTSC, PAL/SECAM
Display:	3.5" color LCD
Size:	5.5"H x 6.5"W x 2"D
Weight:	2 lbs
Power:	12vdc, 110/240v adapter supplied
Battery:	Internal 10 AA Ni-MH
Operating Time:	1 hour on full charge
Charging Time:	8 hours with unit OFF / 36 hours with unit ON



CAUTION

WARNING - Maximum input voltage is 12VDC. Automotive voltages may exceed 12V causing damage to internal circuitry. Damage resulting from excessive input voltage is readily apparent and will not be covered under warranty. Units returned for warranty service that have damage resulting from excessive supply voltages will incur service charges.

Introduction

The Optoelectronics, Inc. VS5800 Video Sweeper wireless camera detector allows you to detect hidden wireless video cameras in the frequency range of 970MHz-1.2GHz / 2.4GHz-2.5GHz / 5.7GHz-5.8GHz. With a 3.5" color LCD the VS5800 Video Sweeper shows you what the hidden camera is looking at. The VS5800 Video Sweeper quickly scans all the available video frequencies used in about 45 seconds.

The VS5800 Video Sweeper works with a full range of video protocols, automatically switching for NTSC, PAL/SECAM systems. The VS5800 has both an automatic and manual scan mode.

The VS5800 can detect some signals from as far away as 300 feet. The detection distance depends upon the power output of the transmitter and the sensitivity level selected on the unit.

With three AV outputs the VS5800 may be interfaced to a DVR for recording of video captured. In addition, the VS5800 has a built in speaker for the Demodulation of audio that is being transmitted.

The VS5800 can sweep all three bands simultaneously and can lock a signal on each band at the same time.

Audio Demodulation / AV Outputs

There are three AV output jacks on the right side of the unit. Using the supplied cables, you may connect to a DVR to record the scanned audio and video signal of the three separate bands individually. The DVR should have an audio input to enable the audio recording. Only the signal that is displayed will have the audio recorded.

There are three video output tuners for adjusting the video output of each frequency band. It may be necessary to adjust these in order to match the DVR.

The VS5800 has audio demodulation that covers the most popular frequencies.

1.2 GHz band	6MHz (default)	6.5MHz	5.5MHz
2.4GHz band	6MHz (default)	6.5MHz	5.5MHz
5.8GHz band	6MHz	6.5MHz (default)	N/A

If the camera detected is transmitting audio then you can hear it through the built in speaker output.

1. To switch the audio frequency output press the blue band button of the desired band. While holding down the blue button press the Scan/Stop button of the corresponding band. This will change the frequency. Repeat the step to change the audio output frequency again.
2. For example: The default audio demodulation of the 1.2GHz band is 6MHz. While the yellow LED is lit beside the 1.2GHz band press and hold the blue band button and at the same time press the Scan/Stop button to shift the audio frequency to 6.5MHz. Repeat steps as necessary.
3. After cycling power the audio frequencies reset back to the default frequencies.

Scanning Cont.

5. The unit is capable of locking three signals in at the same time. Once you have a signal locked you may press the the blue band button to go to the next band that has been locked to look at the video for the new band. Once a signal is locked it will stay that way until you press the Scan/Stop button to resume scanning.
6. If one band has been locked then the other two bands will continue to scan. Likewise, if two bands are locked then the remaining band will scan. If a signal is detected on one of the bands that are scanning then that signal will be displayed.
7. You may press the blue band button to manually switch to the band you would like to scan. If there is a signal detected on the next band you are scanning you may lock the signal by pressing the Scan/Stop button for the that band.

Controls and Connections

DC 12V IN: Plug supplied 12vdc adapter in to power up the unit and to charge the battery pack.

LOW BATTERY INDICATOR: Red LED located under DC input. When battery is low LED is lit.

OFF ON: After plugging in the AC adapter or using the internal batteries use this switch to turn the unit ON/OFF.

EARPHONE OUT: 2.5mm mono output for supplied earphones.

SCREEN ON/OFF: Turn LCD on or off.

MENU: Scroll though for Volume, Contrast, Brightness, Hue, Color, and Sharpness adjustments

UP/DOWN: Use for adjusting settings in the Menu.

ANTENNA: Three SMA antennas included for 1.2GHz, 2.4GHz and 5.8GHz.

AV OUTPUT ADJUSTMENTS: Three AV adjustments when unit is connected to DVR through AV outputs

AV OUTPUT JACKS: 3.5MM stereo jacks for Audio/Visual output to a DVR or other device using supplied 3.5MM stereo to RCA cables.

Getting Started and Setting Display Parameters

Install Antennas: There are three SMA antennas included with the VS5800. The antennas are labeled for 1.2GHz, 2.4GHz and 5.8GHz. Attach each antenna in the corresponding antenna input on top of the unit. .

Power On: Connect the supplied 12v adapter into the connector on the left side of the unit. The unit has a built in 10 cell AA NiMh battery pack. The AC adapter will charge the batteries when plugged in. Charging time is 8 hours with the unit turned off, and 36 hours with the unit on. Discharge time is one hour on a full charge. Turn the unit on with the ON/OFF switch also located on the left side. You may operate the unit on battery power or with the AC adapter plugged in.

Screen On/Off: You may turn the screen on and off using this button.

Menu: Press the menu button to enter the on screen display controls. There are six different display parameters. Volume, Contrast, Brightness, Hue, Color, Sharpness. If no parameter is adjusted in 5 seconds the display defaults back to its normal screen.

Down/Up: After pressing the menu button to access the parameter you wish to adjust press either the down or up button to adjust that parameter. If no adjustment is made in five seconds the display defaults back to its normal screen.

Turn the unit on and it will start auto scanning. There are three separate scanning ranges with each one having a red LED to indicate approximately where it is scanning in each band. The three bands will scan simultaneously and it takes about 45 seconds to scan the three bands

- 1.** When the unit detects a camera the yellow LED will light next to the specific band that has detected the signal. At the same time either the NTSC or PAL/SECAM green LED will light. This indicates which video format the camera is using.
- 2.** To lock the signal press the red Scan/Stop button to the right of the LCD that corresponds with the frequency band. The red lock LED will light, indicating you have successfully locked the signal.
- 3.** Once a signal has been detected and the Scan/Stop button has been pressed in order to lock the signal, you may then press the green +/- button to manually fine tune the video signal.
- 4.** To continue scanning in that particular band, press the red Scan/Stop button again and the red LED will go out and the unit will resume scanning. If you do not press the Scan/Stop button after first detecting a signal the unit will pause momentarily on the signal detected but will soon continue to scan.