

STALKER® BASIC MOVING STATIONARY RADAR

General Specifications

Type:	Handheld Moving/Stationary Doppler Radar
Operating Frequency:	24.15 Ghz (K-band)
Stability:	±45 Mhz
Battery Type:	7-cell 2/3 AA removable NiMH battery pack
Cell Capacity:	960 mah
Power Requirements:	Internal Battery: 7.2 VDC to 10.5 VDC; 8.4 VDC nominal Cigarette Plug coil cord: 8.0 to 18.0 VDC. (currents are typical at 12VDC without battery) XMIT with all displays and back light on: 308 ma XMIT with all displays off and back light off: 268 ma XMIT with moving target and back light: 350 ma XMIT with no target and back light: 300 ma Standby with no target and back light on: 240 ma Standby with no target and back light off: 215 ma
Environmental:	-30°C to +60°C, 90% Relative Humidity, Operating 0°C to 45°C, 90 Relative Humidity, Battery Charging -40°C to +85°C, non-operating
Display:	Back-lighted LCD with 3 speed windows (Target speed, Lock speed, and Patrol speed), 4-digit Alphanumeric status window, XMIT icon, and CHG icon
Mechanical:	Weight – 1 lb. 10 oz. with battery Height – 7.6 inches Length – 8.6 inches Width – 2.8 inches Case Material – High impact polycarbonate
Accuracy:	+1, -2 mph stationary, ±2 mph moving +1.6 km/h, -3.2 km/h stationary, ±3.2 kmh moving
Auto Self-Test:	Performed every 10 minutes while transmitting
Stationary Speed Range:	5 mph to 200 mph Standard 15 mph to 200 mph (set-up menu selectable)
Moving Speed Range:	Patrol speed - Selectable with P.S. 5/20 key: 5 in patrol window for <u>acquisition</u> of 5 to 85 mph 20 in patrol window for <u>acquisition</u> of 20 to 85 mph Patrol speed, once locked, will track to 199 mph Opposite lane target speed - 210 mph Max closing For 5 mph patrol speed: 20 mph to 195 mph For 70 mph patrol speed: 35 mph to 130 mph.

Microwave Specifications

Antenna:	Conical horn
Polarization:	Circular
3db Beamwidth:	15°
RF Source:	Gunn-Effect diode
Receiver Type:	Direct Conversion Homodyne using low-noise Schottky barrier mixer diode
Power Output:	2.5 mw minimum 5 mw nominal 10 mw maximum
Power Density:	2 mw/cm ² maximum at 5 cm from lens

Display Messages


TEST:	TEST in the alphanumeric window indicates that a self-test sequence is in process.
PASS:	PASS in the alphanumeric window indicates the unit has just passed self-test.
FAIL:	FAIL in the alphanumeric window indicates the unit has just failed self-test. Speed readings are inhibited. Remove the unit from service and repair. FAIL will remain on the display until reset by being powered off.
SEn:	Eight settings are used to adjust range and patrol speed cutoff. SEn 1 thru SEn 4 is used to indicate the current range setting. SEn 1 is minimum; SEn 4 is maximum. The right number (5 or 20) indicates the patrol speed cutoff setting. i.e. SEn 4 20 indicates maximum range with 20 mph patrol speed cutoff.
PS:	PS 5 or PS20 is shown in the alphanumeric window when using the remote to set the patrol speed cutoff.

ON:	ON is always in the alphanumeric window when the unit is powered on and no other status is displayed.
VOL:	VOL0, VOL1, VOL2, VOL3, VOL4, VOL5, VOL6, VOL7, VOL8, and VOL9 indicate the audio volume level.
SQL:	SQL+ and SQL- in the alphanumeric window indicates the squelch setting. See instructions below.
LOCK:	LOCK in the alphanumeric window indicates a speed lock condition.
REL:	REL in the alphanumeric window indicates that a speed reading was just released.
MOV:	MOV appears momentarily in the alphanumeric window when switching from stationary mode to moving mode using the remote control.
STA:	STA appears momentarily in the alphanumeric window when switching from moving mode to stationary mode using the remote.
LOW:	LOW appears in the alphanumeric window when the battery is nearing exhaustion – below 7.7 VDC
DEAD:	DEAD appears in the alphanumeric window when the battery is exhausted – below 7.2 VDC. The unit becomes inoperative.
RFI:	RFI appears in the alphanumeric window when the unit detects an interfering RF signal. The display is blanked.

Switch Definition

TRIGGER:	Press the trigger to transmit and release the trigger for hold.
PWR:	Toggles main power ON and Off.
LIGHT/TEST:	The LIGHT key toggles the LCD backlight and the keyboard backlight on and off. To perform a self test, hold down the LIGHT/TEST key until you hear the second beep. Display of TEST followed by 40 and PASS indicates a successful test. Display of TEST followed by FAIL indicates failure of self-test. A FAIL condition will disable the unit from operating.
AUDIO/SQL:	The AUDIO/SQL key may be used to adjust the volume of the speaker from low to high in 10 steps. Press the AUDIO/SQL key once to display the audio level or press repeatedly to advance. VOL 0 is off. VOL 1 is low and VOL 9 is high. Hold the AUDIO/SQL key until you hear the second beep to open or close the audio squelch. SQL + indicates squelched operation and SQL - indicates unsquelched operation.
SEN:	The SEN key may be used to adjust the range up and down at any time. Maximum sensitivity is SEN 4 and minimum sensitivity is SEN 1 . SEN 4 is the highest sensitivity. In addition, the SEN key is used to select Patrol Speed cutoff of either 5 mph or 20 mph. The 5 or 20 setting is observed in the Patrol window while stepping SEN .
LOCK/REL:	To LOCK the Target speed, press LOCK/REL once to transfer the contents of the Target speed window to the LOCK speed window. Press again to RELEASE (clear) the LOCK speed window.

Remote Control Functions (moving model only)

REL:	REL clears the locked contents of the lock window and the patrol window. During lock, the patrol window will lock the present patrol speed and LOCK will light in the Alphanumeric window. The target window and Doppler audio remain active after locking.
 :	Press the LAMP key to activate the remote control backlight for 10 seconds.
LOCK:	LOCK causes the contents of the Target window to be transferred to the Lock window, and the Patrol window locks the present patrol speed.
MOV/STA:	Toggles between moving and stationary modes. Moving mode is indicated by either [] or a speed in the patrol window.
XMIT/HOLD:	Toggles between xmit and hold (standby).
P.S. 5/20:	Used to select a low-end patrol speed of either 5 mph or 20 mph. For example: 5 in patrol window for an acquisition speed of 5 to 85 mph 20 in patrol window for an acquisition speed of 20 to 85 mph
P.S. BLANK:	Used to re-acquire patrol speed to eliminate a shadowing condition.