

STALKER® PATROL SPECIFICATIONS

General Specifications

Type:	Dual Antenna Moving/Stationary Doppler Radar
Operating Freq:	24.125 GHz (K-Band)
Stability:	±50 Mhz (K-band)
Power Requirements: (With 2 Antenna)	9.0 to 16.0 VDC. (currents are typical at 12VDC) XMIT ON: with maximum display brightness: 0.39A XMIT ON: with minimum display brightness: 0.29A XMIT OFF: with maximum display brightness 0.24A XMIT OFF: with minimum display brightness 0.13A
Low Voltage Threshold:	8.7 VDC (± 0.3 VDC)
Environmental:	-30° to +70° C Operating, 90% Relative Humidity at 37° C -40° to +85° C, non-operating
Display:	Sunlight viewable WHITE on BLACK Liquid Crystal Display (LCD) panel with seven icons and triple 3-digit windows for target, lock/fast and patrol windows. LCD has HEA film and 9:00 polarization.
Mechanical:	Counting unit Wt. - 1.1 lbs (0.498 kg) 1.68" Height, 3.59" Depth, and 5.52" Width (4.26 cm Height, 10.0 cm Depth, and 14.0 cm Width) Antenna Wt. -1.2 lbs. (0.544 kg) 2.89" Dia. X 5.26" (includes connector) (7.3 cm Dia. X 13.3 cm) Remote Weight - 0.4 lb. (0.181 kg) 1.25" Height, 6.50" Length, and 2.25" Width (2.0 cm Height, 16.5 cm length and 6.8 cm Width)
Accuracy:	±1 mph (or kph) stationary ±1mph (or kph) moving, when using Vehicle Speed Sensor ±2mph (or kph) moving, when Vehicle Speed Sensor is not used
Automatic Self-Test:	Performed every 15 minutes while transmitting
Stationary Speed Range:	10 mph to 210 mph Standard (16 to 337 Km/h) 2 mph to 210 mph (3 to 337 Km/h(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 90 mph (8 to 144 Km/h) 10 in patrol window for <u>acquisition</u> of 10 to 90 mph(16 to 144 Km/h) 20 in patrol window for <u>acquisition</u> of 20 to 90 mph (32 to 144 Km/h) Patrol speed, once acquired, will track to 150 mph (241 Km/h) <u>Same lane patrol speed</u> must be greater than 19 mph (30 Km/h) Opposite lane target speed - 210 mph (337 Km/h)Max closing For 5 mph (8 Km/h)patrol speed: 20 mph to 205 mph (32 to 329 Km/h) For 70 mph (112 Km/h)patrol speed: 35 mph to 140 mph(56 to 225 Km/h). Same lane target speed - Related to patrol speed: ±75% of patrol speed to within 5 mph (8 Km/h) of patrol speed i.e. For 50 mph (89 Km/h): 15 → 44 mph (24→ 70 Km/h)and 55 → 85 mph (88→ 136 Km/h) Faster Speed - Same speed range as opposite lane speed






Microwave Specifications

Antenna:	Conical horn with corrective lens
Polarization:	Circular
3 db Beam width:	13° nominal, 15° maximum
Microwave Source:	Gunn-Effect diode
Receiver Type:	Direct Conversion Homodyne using low-noise Schottky barrier mixer diode
Power Output:	8 mw min (K-band) 12 mw nom (K-band) 20 mw max (K-band)
Power Density:	2 mw/cm ² maximum at 5 cm from lens

Display Messages

PASS:	PASS spelled out in display with a 4-beep "happy" tone indicates the unit has just passed self-test.
FAIL:	FAIL spelled out in display with a 15-beep tone indicates a circuit malfunction has been detected, in which case speed readings are inhibited. Remove the unit from service and repair. FAIL will remain on the display until reset by being powered off.
SEn 1, SEn 2, SEn 3 or SEn 4:	SEn 1 thru SEn 4 is used to indicate the current range (sensitivity) setting. SEn 1 is minimum; SEn 4 is maximum. Opposite lane sensitivity is independent of same lane sensitivity. They are separately set.
5, 10 or 20:	5, 10 or 20 spelled out in the patrol window indicates the low-end patrol speed is set to either 5, 10 or 20 mph (8,16 or 32 Km/h)
Aud 0 .. Aud 9:	Aud 0 thru Aud 9 spelled out on the display unit indicates the current speaker volume setting. Aud 0 is off; Aud 9 is loudest.
bri 1, bri 2 bri 3, bri 4, bri 5, or bri 6:	Used to indicate display brightness. bri 1 is the dimmest; bri 6 is the brightest.
Hot:	The display flashes Hot and powers down when the internal temperature exceeds specifications. Automatically resumes operating when the temperature drops.
Lo V:	A Lo V message indicates the input voltage is too low. Operation is inhibited while the Lo V message is displayed but normal operation will resume automatically when the input voltage is restored. All other speed windows will be blanked.

Remote Control Functions

SAME/OPPOSITE:	The SAME/OPPOSITE key is used to alternate between same lane moving mode and opposite lane moving mode. The SAME icon toggles on and off to indicate same lane mode.
LOCK/RELEASE:	The LOCK/RELEASE key is a dual function key. This key alternates between the lock and the release functions. LOCK is used to transfer the contents of the target window to the lock window. RELEASE clears the locked contents of the lock window and the patrol window. During lock, the patrol window will lock the present patrol speed and the LOCK icon will light. The target window and Doppler audio remain active after locking.
ANT:	Used to switch between the front and rear antenna. The FRONT or REAR icon will light. A 1-beep tone corresponds to the front antenna while a 2-beep tone corresponds to the rear antenna. The counting unit can sense the presence or absence of either antenna.
XMIT/HOLD:	Toggles between xmit and hold (standby). The XMIT icon will light.
MOVING/STATIONARY:	Toggles between moving and stationary modes.
FASTEST:	Used to select <i>fastest</i> mode. A high pitched tone indicates that <i>fastest</i> mode is selected. Any power off event will reset the <i>fastest</i> mode to OFF.
SLOWER:	The SLOWER key is used to toggle between <i>fast target</i> same lane mode and <i>slow target</i> same lane mode. The SLOW icon is on for a slower target.
SEn :	Used to adjust the range (sensitivity) at any time. Maximum sensitivity is SEn 4 ; minimum sensitivity is SEn 1 . Opposite lane sensitivity is independent of same lane sensitivity. They are separately set.
SQL:	Toggles the squelch override off and on. In the normal (off) position, audio will only be heard when a target is being tracked.
P.S. 5/20:	Used to select a low-end patrol speed of either 5 mph, 10 mph or 20 mph. For example: 5 in patrol window for speed of 5 (8 Km/h) 20 in patrol window for speed of 20 (32 Km/h)
TEST:	Performs a complete self-test on display/counting unit and the <u>selected</u> antenna. The display unit shows the temperature inside the display/counting unit in °F (e.g., 110 °F); and input battery voltage (e.g., bAt 13.8); followed by "PASS" and a 4-beep "happy" tone or "FAIL" and a 15-beep tone..
	Used to adjust the volume of the Doppler audio up or down. Aud 0 is off; Aud 9 is loudest.
P.S. BLANK:	Dual function key. Used to re-acquire patrol speed. Also, blanks the patrol speed after a target speed and patrol speed are locked. Pressing the P.S. Blank key again restores the blanked speed.
	Dual function key. A single depression of the  key activates the keyboard backlight for six (6) seconds. Two rapid depressions of the  key activates the display brightness control. Additional depressions of the  key toggles display brightness from bri 1 (low) to bri 6 (high).