STALKER® II *SDR* **Stationary Radar**

GENERAL SPECIFICATIONS

Type:	Handheld Stationary Doppler Radar
Operating Frequency:	34.7 GHz (Ka-band)
Stability:	±100 MHz
Battery Type:	Removable/rechargeable sealed battery handle containing a 7.2 Volt Li-Ion battery
Cell Capacity:	3700 mAh

Power Requirements:	Removable Battery Handle: 7.2 VDC nominal
	Cigarette Plug Coil Cord Handle: 7.0 to 18.0 VDC
	(currents are typical at 12VDC with external power)
	   XMIT with all displays off and back light off: 300 mA
	   XMIT with moving target and back light: 350 mA
	   XMIT with no target and back light: 350 mA
	   Standby with no target and back light on: 160 mA
	   Standby with no target and back light off: 105 mA
	   Sleep mode: 35 mA (when battery powered only)

Environmental:	-30°C to +70°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/Fast speed, and expansion window), 4-digit Alphanumeric status window, **XMIT** icon, and **CHG** icon
Mechanical:	**Weight** – 2.15 lb. (0.98 kg) with battery handle attached **Height** – 7.35 in. (18.5 cm) **Length** – 7.9 inches (20.1 cm) **Width** – 2.83 inches (7.2 cm) **Radar Body Material** – Aluminum and Magnesium die castings **Handle Case Material** – ABS polymer
Accuracy:	+1, -2 MPH, +2, -3 KM/H
Auto Self-Test:	Performed every 10 minutes while transmitting
Speed Range:	5 MPH to 200 MPH Standard 15 MPH to 200 MPH (option menu selectable)

MICROWAVE SPECIFICATIONS

Antenna:	Conical horn
Polarization:	Circular
3db Beamwidth:	12° ±1°
RF Source:	Gunn-Effect diode
Receiver Type:	Two Direct Conversion Homodyne receivers using four low-noise Schottky barrier mixer diodes
Power Output:	10 mW mininum 25 mW nominal 50 mW maximum
Power Density:	2 mW/cm^2 maximum at 5 cm from lens

DISPLAY WINDOW INDICATORS

BAT:	A flashing BAT message indicates a nearly exhausted battery
V LO:	A V LO message indicates the battery voltage is too low.

SPEED WINDOW MESSAGES

PASS:	PASS in the speed windows indicates the unit has just passed self-test.
FAIL:	FAIL in the speed windows 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.

MESSAGE WINDOW MESSAGES

RFI:	An RFI message indicates the presence of an interfering signal. Operation is inhibited during an RFI indication
MENU:	A MENU message displayed in the message window after the **MENU** key is pressed and indicates that the radar is in MENU mode
TEST:	A TEST message indicates that a test sequence is in process
FAWY:	FAWY showing in the message window indicates that the radar is set to track targets moving <u>away</u> from the radar
FCLO:	FCLO showing in the message window indicates that the radar is set to track targets <u>closing</u> on the radar
FBTH:	FBTH indicates that the target direction is set to simultaneously track both <u>closing</u> and <u>away</u> targets
STOP:	A STOP message indicates that the radar is in stopwatch mode. Stopwatch mode is selected from the OPERATOR MENU
LOCK:	A LOCK message indicates that a strong target has been locked. The LOCK message will alternate with the operating mode in the message window
FORK:	A FORK message indicates that the radar is in fork mode. The FORK message will alternate with the operating mode in the message window

SWITCH DEFINITION

TRIGGER:	Press the trigger to transmit and release the trigger for hold. A push (to transmit) push (to hold) operation is optional. The trigger can also be used in stopwatch mode to perform the start/stop function.
<u>MENU</u>:	**MENU** is used to enter the operator menu
STA/MOV:	**STA/MOV** is for expansion and is not used
▲/**TEST**:	▲ sets distance in stopwatch mode and increments settings in the operator menu. **TEST** performs a diagnostic check on the radar.
LIGHT/▼:	**LIGHT** switches the backlight on and off. ▼ sets distance in stopwatch mode and decrements settings in the operator menu.
LOCK/REL:	**LOCK/REL** is used to LOCK and RELEASE strong speed targets
<u>BOTH</u> DIRECTION:	This key is used to select target direction
POWER:	**POWER** toggles the main power ON and Off.