

STALKER® II MDR Moving Radar

GENERAL SPECIFICATIONS

Type:	Handheld Moving/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:	2000 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 Cigarette Plug Handle) XMIT with all displays off and back light off: 950 ma XMIT with moving target and back light: 1020 ma XMIT with no target and back light: 1010 ma Standby with no target and back light on: 370 ma Standby with no target and back light off: 330 ma Sleep mode: 180 ma
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 Patrol speed), 4-digit Alphanumeric status window, XMIT icon, and CHG icon
Mechanical:	Weight – 2.15 lb. with battery handle attached Height – 7.35 inches Length – 7.9 inches Width – 2.83 inches Radar Body Material – Aluminum and Magnesium die castings Handle Case Material – ABS polymer
Accuracy:	+1, -2 mph stationary, +2, -3 mph moving +1, -2 kmh stationary, +2, -3 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 (option menu selectable)
Moving Speed Range:	Patrol speed - Selectable with P.S. 5/20 key: 5 in patrol window for acquisition of 5 to 90 mph 20 in patrol window for acquisition of 20 to 90 mph Patrol speed, once locked, will track to 199 mph Opposite lane target speed - 200 mph Max closing For 5 mph patrol speed: 20 mph to 195 mph For 70 mph patrol speed: 35 mph to 130 mph. Same lane target speed – Related to patrol speed: ±70% of patrol speed within 5 mph of patrol speed. i.e. For 50mph: 16→45 mph and 55→85 mph. Same lane patrol speed must be greater than 16 mph.

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 minimum 25 mw nominal 50 mw maximum
Power Density:	2 mw/cm ² maximum at 5 cm from lens

SPEED WINDOW MESSAGES

PRSS:	PRSS in the speed windows indicates the unit has just passed self-test.
FRIL:	FRIL in the speed windows indicates the unit has just failed self-test. Speed readings are inhibited. Remove the unit from service and repair. FRIL will remain on the display until reset by being powered off.

DISPLAY WINDOW INDICATORS

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

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
AWAY:	AWAY showing in the message window indicates that the radar is set to track targets moving away from the radar in stationary mode
CLOS:	CLOS showing in the message window indicates that the radar is set to track targets closing on the radar in stationary mode
BOTH:	BOTH indicates that the target direction is set to simultaneously track both closing and away targets in stationary mode
SAME:	A SAME message indicates that same lane moving mode has just been selected
OPP:	A OPP message indicates that opposite lane moving mode has just been selected
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
FLOK:	A FLOK message indicates that a faster target has been locked. The FLOK 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.
MENU:	MENU is used to enter the operator menu
STA/MOV:	STA/MOV selects stationary or moving mode
▲/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
BOTH DIRECTION:	This key is used to select target direction
POWER:	POWER toggles the main power ON and Off.

REMOTE CONTROL FUNCTIONS

▲:	▲ is used to set distance in stopwatch mode and to increment settings in the operator menu
STRONG LOCK/REL:	STRONG LOCK/REL is used to lock and release strong targets
MENU:	MENU is used to enter the operator menu
XMIT/HLD:	XMIT/HLD toggles between transmit mode and hold mode
SS:	SS is the Start/Stop control for stopwatch operation
STA/MOV:	STA/MOV selects either stationary mode or moving mode
FAST LOCK/REL:	FAST LOCK/REL is used to lock and release faster targets
▼:	▼ is used to set distance in stopwatch mode and to decrement settings in the operator menu
BOTH/ DIRECTION:	BOTH/DIRECTION is used to select target direction
SEn:	SEn adjusts the sensitivity (range) of the radar
100:	100 is used for setting distance in stopwatch mode
SQL:	SQL toggles the squelch control on/off
10:	10 is used for setting distance in stopwatch mode
PS 5/20:	PS 5/20 is used to set the minimum patrol speed
1:	1 is used for setting distance in stopwatch mode
TEST:	Press TEST to perform a diagnostic check on the radar
⏮▶:	⏮▶ is used to adjust the doppler volume and the beep volume
PS BLANK:	PS BLANK will blank a locked patrol speed and it is also used to re-acquire a new patrol speed
LIGHT:	LIGHT activates the remote backlight for 6 seconds