Optional Accessories

The versatile Stalker II has available mounts, holsters and antenna connections for nearly any application.

Mounts

The Stalker II can be dash mounted (with or without handle) in the police vehicle.

A variety of mounts are available for several makes and models of vehicles and motorcycles.



Holster

The holster fully protects the Stalker II when not in use, keeping it safely and securely tucked away on motorcycle patrol. Available with and without keyed lock.



Detachable Battery Handle



With its detachable highcapacity battery handle, the Stalker II is easily mounted to any law enforcement vehicle, and will go from hand-held to dash mount and back to hand-held in a snap.

The intelligent battery charger protects batteries and operates using either the 120 VAC wall adapter or an optional 12 VDC cigarette plug cable.



Stalker II - SDR | Stationary Directional Radar **Stalker II - MDR** | Moving Directional Radar

Model/Features

	Stalker II SDR	Stalker II MDR	
Moving mode	N/A	Standard	
Automatic Same Lane mode (no slower key)	N/A	Standard	40
VSS operation	N/A	Standard	70
VSS Moving/Stationary modes auto switching	N/A	Standard	
Removable rechargeable Battery Handle	Standard	Standard	
Waterproof down to 2 ft of water depth	Standard	Standard	
Rugged but lightweight Die-Cast metal body	Standard	Standard	
Stopwatch mode	Standard	Standard	
Directional sensing	Standard	Standard	
Strongest and Faster display in all target modes	Standard	Standard	
Faster Target Lock in all target modes	Standard	Standard	
Software upgradeable	Standard	Standard	
Video interface connector	Standard	Standard	
Battery Handle Charger accessory	Standard	Standard	
Cordless Remote Control	Optional	Standard	
Dash Mount operation	Optional	Standard	
Motorcycle operation	Optional	Optional	
Motorcycle Holster	Optional	Optional	
Wired Remote Control	Optional	Optional	
Rear facing antenna	N/A	Optional	



Power to Enforce.

applied concepts, inc. 2609 Technology Drive ■ Plano, Texas 75074 972.398.3780 Fax 972.398.3781



006-0347-00 Rev J

800-STALKER



■ 3 Window Display

Battery Handle

Construction

for MDR Model

Stalker II - SDR | Stationary Directional Radar **Stalker II - MDR** | Moving Directional Radar

The performance and range of a vehicle-mounted radar in a versatile, hand-held lightweight package. The Stalker II includes direction-sensing and moving mode technology and is available in either moving / stationary or stationary-only versions.







STALKER®

Power to Enforce.

■ Stalker II MDR | Moving Directional Radar

The Stalker II MDR, moving directional radar, brings direction-sensing technology to a hand-held radar. The Stalker II can automatically distinguish between faster or slower same-lane targets in moving mode without a slower key and can simultaneously track targets closing or going away. The rear antenna option allows the connection to a rear-facing antenna to yield performance of a two-antenna dash-mounted unit.

An ergonomic infrared remote control is standard.

Stalker II SDR | Stationary Directional Radar

The Stalker II SDR, stationary directional radar, has the range and performance of a vehicle-mounted radar in a versatile hand-held package with patented direction-sensing technology. The ergonomic infrared remote may be added to increase the Stalker II's versatility.

Backlit Rear Display

The 3-window backlit display presents an intuitive user interface with clear messaging and control buttons. It features LCD display windows for simultaneously displaying Strongest Target, Faster Target, with direction arrows that indicate the direction of travel for both the strongest and faster targets along with Patrol Speed (in moving mode).

By displaying both strongest and faster targets simultaneously, the Stalker II can monitor faster vehicles passing larger vehicles and display the speed of both targets.

TRIGGER – Pull the trigger to transmit and release for hold. A pull (to transmit) pull (to hold) operation is optional. The trigger is used in stopwatch mode to perform the start/stop function.

MENU – is used to enter the operator menu.

STA/MOV – selects stationary or moving mode in the **MDR**. Not used in the **SDR**.

▲/TEST – ▲ sets distance in stopwatch mode and increments settings in the operator menu.

TEST performs a diagnostic check on the radar.

LOCK/REL – is used to LOCK and RELEASE strong speed targets.

BOTH/DIRECTION – This key is used to select target direction.



Rear Antenna Option



The Stalker II MDR can be purchased with an optional rear antenna port. With this feature, a second, rear-facing antenna can be connected to the Stalker II MDR to yield the performance of a two-antenna dash-mounted unit either in a patrol vehicle or on a motorcycle.

Motorcycle/Waterproof Applications





The Stalker II brings versatility to motorcycle applications as a handlebar mount, with or without the battery handle attached, or used as a traditional handheld with an optional holster.

Its die-cast-metal case is smaller and lighter than most hand-helds, and the Stalker II is waterproof to a depth of 2 feet. That makes the Stalker II at home on the water as well as on the roadway.

LIGHT .

STALKER II

Full-Function Remote Control

The full function remote control adds to the Stalker II's versatility and provides direct access to the operator settings that can also be accessed in the Operator Menu.

— is used to set distance in stopwatch mode and to increment settings in the operator menu.

STRONG LOCK/REL – is used to lock and release strong targets.

ANT – toggles between integral antenna and optional, rear-facing antenna.

FAST LOCK/REL – is used to lock and release faster targets.

V – is used to set distance in stopwatch mode and to decrement settings in the operator menu.

BOTH / DIRECTION – is used to select target direction for both stationary and moving modes.

SEn / 100 – SEn adjusts the sensitivity (range) of the radar. 100 is used for setting distance in stopwatch mode.

TEST / MENU – TEST performs a diagnostic check on the radar; MENU is used to enter the operator menu. XMIT/HLD – toggles between transmit mode and hold mode.

SS – is the Start/Stop control for stopwatch operation.

STA/MOV – selects either stationary mode or moving mode.

SQL / 10 - SQL toggles the squelch control on/off. 10 is used for setting distance in stopwatch mode.

PS 5/20 / 1 – PS 5/20 is used to set the minimum patrol speed. 1 is used for setting distance in stopwatch mode.

PS BLANK – will blank a locked patrol speed and it is also used to reacquire a new patrol speed.

((() – is used to adjust the Doppler volume and the beep volume.

LIGHT – activates the remote backlight for 6 seconds.



STALKER® II MDR Moving Radar

GENERAL SPECIFICATIONS

GENERAL S	PECIFICATIONS	
Type:	Handheld Moving/Stationary Doppler Radar	
Operating	34.7 GHz (Ka-band)	
Frequency:	5 1.7 GIE (Ita cana)	
Stability:	±100 MHz	
Battery Type:	Removable/rechargeable sealed battery handle containing a	
	7.2 Volt Li-Ion battery	
Cell Capacity:	2000 mAh	
Power	Removable Battery Handle: 7.2 VDC nominal	
Requirements:	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: 280 mA	
	XMIT with moving target and back light: 280 mA	
	XMIT with no target and back light: 300 mA Standby with no target and back light on: 150 mA	
	Standby with no target and back light off: 130 mA	
	Sleep mode: 30 mA (when battery powered only)	
Environmental:	-30°C to +70°C, 90% Relative Humidity, Operating	
Environmental.	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,	
Display.	Lock/Fast speed, and Patrol speed), 4-digit Alphanumeric status	
	window, XMIT icon, and CHG icon	
Mechanical:	Weight – 2.15 lb. (0.98 kg) with battery handle attached	
112021111110111	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 stationary, ±2 MPH moving	
	+2, -3 KM/H stationary, ±3 KM/H moving	
Auto Self-Test:	Performed every 10 minutes while transmitting	
Stationary	5 MPH to 200 MPH Standard	
Speed Range:	15 MPH to 200 MPH (option menu selectable)	
Moving	Patrol speed - Selectable with P.S. 5/20 key:	
Speed Range:	5 in patrol window for <u>acquisition</u> of 5 to 90 MPH	
	20 in patrol window for <u>acquisition</u> of 20 to 90 MPH	
	Patrol speed, once locked, will track to 150 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 mininum	
	15 mW nominal	
	25 mW maximum	
Power Density:	2 mW/cm ² maximum at 5 cm from lens	

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.

DISPLAY WINDOW INDICATORS

	A flashing HRT message indicates a nearly exhausted battery
V L□:	A V L□ message indicates the operating voltage is too low.

MESSAGE WINDOW MESSAGES

MILOSAGE	WINDOW MESSAGES
RFI:	An RFI message indicates the presence of an interfering signal. Operation is inhibited during an RFI indication
MENLI:	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
FRWY:	FRWY showing in the message window indicates that the radar is set to track targets moving <u>away</u> from the radar in stationary mode
FCLO:	FCLD showing in the message window indicates that the radar is set to track targets <u>closing</u> on the radar in stationary mode
FBTH:	FBTH indicates that the target direction is set to simultaneously track both <u>closing</u> and <u>away</u> targets in stationary mode
FSAM:	A F5RM message indicates that same lane moving mode has just been selected
FOPP:	A FOPP message indicates that opposite lane moving mode has just been selected
5TOP:	A STOP message indicates that the radar is in stopwatch mode. Stopwatch mode is selected from the OPERATOR MENU
LOCK:	A LOEK message indicates that a strong target has been locked. The LOEK 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 FURK message indicates that the radar is in fork mode. The FURK message will alternate with the operating mode in the message window

SWITCH DEFINITION

SWITCHL	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

A :	▲ is used to set distance in stopwatch mode and to increment
	settings in the operator menu
STRONG	STRONG LOCK/DEL in made to the dealers of
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	FAST LOCK/REL is used to lock and release faster targets
LOCK/REL:	THE LEGITATE 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-
FO BLANK:	acquire a new patrol speed
LIGHT:	LIGHT activates the remote backlight for 6 seconds

STALKER® II SDR Stationary Radar

GENERAL SPECIFICATIONS

Type:	Handheld Stationary Doppler Radar	
	Tranunciu Stationary Doppier 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	Removable Battery Handle: 7.2 VDC nominal	
Requirements:	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: 280 mA	
	XMIT with moving target and back light: 280 mA	
	XMIT with no target and back light: 300 mA	
	Standby with no target and back light on: 150 mA	
	Standby with no target and back light off: 130 mA	
	Sleep mode: 30 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	
A	1 1	
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:	Output: 10 mW mininum	
	15 mW nominal	
	25 mW maximum	
Power Density:	2 mW/cm ² maximum at 5 cm from lens	

DISPLAY WINDOW INDICATORS

	A flashing HT message indicates a nearly exhausted battery
V L□:	A $V \perp \square$ 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
MENLI:	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:	FRWY showing in the message window indicates that the radar is set to track targets moving <u>away</u> from the radar
FCLO:	FELD showing in the message window indicates that the radar is set to track targets <u>closing</u> on the radar
FBTH:	FITH 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.
MENU:	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
BOTH DIRECTION:	This key is used to select target direction
POWER:	POWER toggles the main power ON and Off