Stalker DUAL | Single Zone Non-Directional Radar

STALKER DUAL SL

The Industry Standard for moving Police radar with the best range and performance available.

The Stalker DUAL SL sets the standard in the industry for range and performance. The best performance means accurate monitoring at greater distances, which results in superior tracking history and better target identification.

- ■ Automatic Same Direction Operation
- ■ Track-Thru-Lock
- ■ Digital Antenna Communications
- ■ Ergonomic Backlit IR Remote Control
- ■ True Audio Doppler in Moving Mode
- ■ Waterproof Ka-Band Antennas
- ■ Software Upgradable
- ■ CAN/VSS Connection for Perfect Patrol Speed is Standard
- ■ *Stalker - Used by more State Agencies than all other radar brands combined*

StalkerRadar.com

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STALKER®

Power to Enforce.

3 Window Fastest Speed Tracking

Stalker's patented Faster Speed Tracking assists the operator in making proper target identification by displaying both the Strongest and highest speed targets simultaneously on separate, multi-color display windows.
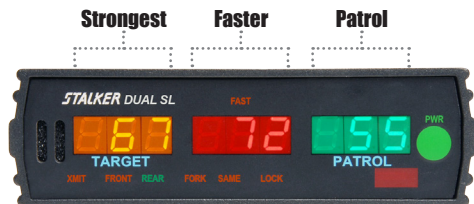
Automatic Same Direction Operation

With direction sensing capabilities, the DUAL SL is able to automatically determine if vehicles traveling in the same direction are closing or going away from the radar. This allows the DUAL SL to automatically measure same direction traffic speeds as simply and accurately as it does opposite direction traffic.

True Doppler Audio

The Stalker DUAL compensates for patrol speed variations when generating the Doppler audio. Since the audio tones do not vary with patrol speed, the operator learns to correlate this true Doppler audio with target speed, which eliminates the need to constantly watch the display to determine target speed.

Vehicle Speed Sensing (VSS) Operation Is Standard

Connecting the radar to power and VSS has never been simpler. Plug the Stalker CAN/VSS cable into the car's OBD II diagnostic port located under the dash on the driver's side, and you're done. No cables to splice, no wire harnesses to locate, just simple plug-n-play.

Detachable Display Unit

The tiny display module can be easily separated from the counting unit using an optional cable. This allows for nearly limitless installation options.

Serial Port

The serial RS-232 port can interface with most video cameras, computers, remote readouts, printers, and the Stalker CopTrax In-Car Video System.

The Most Sophisticated Ka-Band Antenna

Patented Digital Antenna Communication

The Stalker DUAL SL achieves longer range by digitizing the Doppler audio signal at the antenna and using a high speed bi-direction communication link to transmit data between the antenna and the counting unit. Other two-piece radar units (even DSP radar units) send a low level Doppler audio signal from the antenna to the counting unit for processing and speed display. This method is susceptible to noise induced by the auto ignition and 2-way radio transmissions, which result in reduced range and increased potential for false signals.

Four-Direction Speed Monitoring

With two antennas, the Stalker DUAL SL's moving mode can track vehicles in four directions:

- In **front** of the Patrol moving the **same** direction
- In **front** of the Patrol approaching in the **opposite** direction
- **Behind** the Patrol moving in the **same** direction
- **Behind** the Patrol receding in the **opposite** direction

Cordless Ergonomic Remote

The Infrared cordless remote moves all controls into the palm of the operator's hand. After experiencing the convenience and ergonomic sensibility of the Stalker Omnidirectional and backlit cordless remote, no operator will ever want to return to corded or faceplate controls.

Optional Waterproof Motorcycle Components

The Stalker's DUAL SL shares the optional waterproof motorcycle components with the Stalker 2X. Durable, accurate products for continuous duty in the worst conditions.

See StalkerRadar.com for a complete listing of products and pricing.

STALKER®

Power to Enforce.

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MANAGEMENT SYSTEMS CERTIFIED TO
ISO 9001: 2008
STALKER Radar | Lidar

006-0266-00 Rev F

800-STALKER

STALKER® ENHANCED DUAL SL SPECIFICATIONS

General Specifications

Type:	Dual Antenna Moving/Stationary Doppler Radar
Operating Frequency:	33.4 GHz - 36.0 Ghz (Ka-Band)
Stability:	±100 Mhz (Ka-band)
Power Requirements:	9.0 to 16.0 VDC. (currents are typical at 12VDC)
(With 2 Antenna)	XMIT with all displays on: 1.3A (Ka)
	XMIT with all displays off: 1.1A (Ka)
	XMIT with moving target: 1.3A (Ka)
	XMIT with no target: 1.2A (Ka)
	Standby with no target: .7A (Ka)
Environmental:	-30 to +70 C, 90% Relative Humidity Operating
	-40 to +85 C, non-operating
Display:	Triple 3-digit Light Emitting Diode (LED) for target, lock, and patrol, plus LED icons
Mechanical:	**Display Unit** Wt. - 0.5 lb.
	1.65" Height, 1.05" Depth, and 5.50" Width
	Counting unit Wt. - 1.6 lbs.
	1.65" Height, 3.90" Depth, and 5.50" Width
	Antenna Wt. - 1.4 lbs. (Ka)
	2.50" Dia. X 4.60" (Ka)
	Remote Weight - 0.4 lb.
	.80" Height, 6.50" Length, and 2.70" Width
Accuracy:	+1, -2 mph stationary, ±2 mph moving
	+1.6 km/h, –3.2 km/h stationary, ±3.2 km/h moving
Automatic Self-Test:	Performed every 10 minutes
Stationary Speed Range:	12 mph to 200 mph Standard
	2 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 90 mph
	10 in patrol window for <u>acquisition</u> of 10 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
	<u>Same lane patrol speed</u> must be greater than 15 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 to within 5 mph of patrol speed
	i.e. For 50 mph: 15 → 44 mph and 55 → 85 mph
	Fastest Speed - Same speed range as opposite lane speed

Microwave Specifications

Antenna:	Conical horn with corrective lens
Polarization:	Circular
3 db Beam width:	12° nominal
Microwave Source:	Gunn-Effect diode
Receiver Type:	Two Direct Conversion Homodyne receivers using four low-noise Schottky barrier mixer diodes
Power Output:	10 mw min (Ka-band)
	25 mw nom (Ka-band)
	50 mw max (Ka-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 mph, 10mph, or 20 mph
Aud 0, Aud 1, Aud 2, Aud 3, or Aud 4:	**Aud 0** thru **Aud 4** spelled out on the display unit indicates the current speaker volume setting. **Aud 0** is off; **Aud 4** 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.
rFI:	**rFI** is displayed in the Target window indicating the presence of an interfering signal. Operation is inhibited during an **rFI** indication.
ULo:	**ULo** is displayed in the Target window when the input voltage falls below approximately 8 volts. Operation is inhibited, but normal operation will resume automatically when the input voltage is restored to a normal voltage (>9.0 volts).

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.
FASTER:	In opposite lane and stationary modes, the **FASTER** key is used to select *faster* mode. A high-pitched beep tone (for fast) indicates that *faster* mode is selected. A normal beep tone indicates that faster mode is turned off.
	When the *faster* mode is selected and when no **LOCK** target is present, the middle window is used to track the *faster* target in the radar beam. *Faster* mode is turned on and off by alternately pressing the **FASTER** key. The presence of the **FAST** icon indicates that the *faster* mode is selected. **FASTER is not active in the Same Lane mode.**
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. <u>They are separately set.</u>
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 to 70 mph
	10 in patrol window for speed of 10 to 70 mph
	20 in patrol window for speed of 20 to 70 mph
TEST:	Performs a complete self-test on display/counting unit and the <u>selected</u> antenna. The display unit shows speeds of **10**, **35**, and **65**; 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 4** 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).