Your Choice of Two **Full-Function Remote Controls**

The Stalker 2X uses automation to reduce officer distraction caused by remote control use. Set-and-Forget Operation: Just select the two Target Zones you want to monitor and put the remote down. You simultaneously monitor four targets (strongest and faster in each zone) without touching the remote.

Strong target locking and Faster target locking in all Target Zones is standard with the Fast-Lock Remote, while Strong target locking is standard with the Instant-On Remote.

Other remote control features include tactile feedback keys, an ergonomically contoured body, amber backlit keys for night use, and omni-directional infrared operation that eliminates the need to point the remote.



This remote is designed for departments that require Fast Lock operation and normally operate in constant transmit mode.



Optional Waterproof Motorcycle Components

The Stalker's 2X waterproof components are durable, accurate products for continuous duty in the worst conditions. A full selection of brackets. mounts and cables are available.

Contact us for a Stalker Motorcycle Components brochure or go to StalkerRadar.com for more information.

> MOV/STA FRONT ANTENNA

> > HOLD

REAR ANTENNA

MENU.

LIGHT

STALKER DSR 2X

Instant-On Remote

This remote is designed for

departments that do not require Fast

Lock operation but routinely use the

"instant-on" feature. A dedicated

XMIT/HOLD key provides instant transmitter ON/OFF operation.

PS BLANK

OLUME



XMIT Turns the associated antenna on and selects the previous Target

HOLD Instantly places the associated antenna into hold (standby) mode.

Zone.

SAME (Front & Rear) Turns on the front or rear transmitter (if in hold) and directly selects a Same Direction Target Zone.

MENU Press and release the Menu key to enter the Operator Menu system allowing the \uparrow and \checkmark keys to change the operator settings. Press and hold the Menu key turns

on the Dual Zone mode.

PS BLANK An incorrect patrol speed can be blanked and reacquired or, after a target lock, the patrol speed can be blanked and restored.

TEST Initiates a diagnostic check on the display unit, counting unit, and both antennas.

STALKER®

remote control backlight for six (6)

toggles the display intensity through

seconds and each additional press

six levels of brightness and auto.

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Power to Enforce.

006-0334-00 Rev K



Stalker 2X | Dual Zone Direction-Sensing Radar



The Industry-leading Stalker 2X is unequalled in technology, performance, and safety. The Stalker 2X is actually two, full functioning direction-sensing radars in one compact unit which can simultaneously monitor front same and front opposite or rear opposite and rear same target zones from a single antenna. And, features a patented Rear Traffic Alert to warn the officer of a rapidly overtaking same-direction traffic in situations when the vehicle is most vulnerable.



- New Dual Zone Mode
- Rear Traffic Alert Feature for Officer Safety
- 2 Ergonomic Backlit IR Remote Controls
- Automatic Same-Direction Tracking
- Plug-n-Play Vehicle Speed Sensing
- Voice Verification of Antenna, Mode, and Direction
- Stalker Used by more State Agencies than all other radar brands combined



800-STALKER

Power to Enforce.

All 4 Target Zones Stationary; Any 2 Target Zones Moving

The most advanced and easiest to use Police Traffic Radar just got better.

Conventional moving radar can only monitor traffic in one Target Zone. With the Stalker 2X, two moving Target Zones or all four stationary Target Zones can be monitored simultaneously. Stalker 2X is actually two independent radar units



operating on a single 5-window display. The 2X's Dual Zone capability distinguishes it from competitors' moving radars: only the 2X can monitor two zones from a single antenna. With the 2X, an operator can simultaneously monitor front same and front

opposite or rear opposite and rear same Target Zones. No other police speed enforcement radar on the market has this feature

In default moving mode, any combination of one front and one rear Target Zones can be monitored, for example front opposite lane and rear same direction. In Dual Zone moving or stationary mode, both target zones on a single front or rear antenna can be monitored.

In default stationary mode, one up to four Target Zones can be simultaneously monitored.

True Doppler Audio

The audio Doppler tone in opposite-lane operation is generated from the target's actual speed (not closure speed) so the tone always correlates directly to the target's speed - regardless of patrol 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, wire harnesses to find, just simple plug-n-play.

Rear Traffic Alert

Rear Traffic Alert, a proprietary feature of the 2X, is designed to warn the patrol officer of rapidly overtaking same-direction traffic when the patrol vehicle is most vulnerable to rear-end collisions - pulling into traffic from a standing start. If the 2X senses a rapidly approaching vehicle within adjustable speed parameters, it warns the officer with a distinctive alert tone. Rear Traffic Alert is a patent pending Stalker technology.

Read-Thru Lock, With Multi-Colored LEDs

The Stalker 2X allows tracking patrol speed after lock and utilizes three colors (amber, red, and green) to differentiate between the strongest, faster, and patrol speeds.

Removable Counting Unit Display



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 Stalker 2X uses O-ring sealed. Ka-Band antennas. These compact, completely waterproof antennas include locking connectors and can be exterior mounted with no environmental concerns.

Patented, RFI Immune Digital Communication

The Stalker 2X achieves the industry's longest range by digitizing the Doppler audio signal at the antenna and using a high-speed digital communication link to transmit data between the antenna and the counting unit.

Traditional two-piece 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 results in reduced range and increased potential for false targets.

By using digital antenna signaling, we've virtually eliminated false signals and improved the range of our products.

"Faster" Target Locking Is Another STALKER First

Now, an operator has a choice of locking the faster target or stronger target in any Target Zone, including same-direction faster targets.

Dramatically Simplifies Moving "Same-Direction" Operation While Automatically Ensuring Accuracy



2X antennas' direction-sensing ability as well as fully utilizing the radar's display to present speed data simultaneously on up to four targets.

A Giant Leap in the Effectiveness of Stationary Operation



a distant closing target.

Imagine the typical situation where you wish to measure closing vehicles at a lengthy distance on a two-lane road. Just when a distant car enters the picture, a truck passes by your location heading away from you (and towards the approaching car) A conventional radar would display the truck's speed until it is out of the area-and you could not measure the closing car's speed. The 2X is able to completely ignore the truck because it is traveling away from the radar, thereby being able to clock the closing vehicle-even though it is still distant. The Stalker 2X makes stationary operation very useful and highly effective in all locations.

Provides Voice Verification of the Antenna, **Radar Mode, and Direction**

Whenever a target is locked, the Stalker 2X audibly tells the operator WHICH antenna is in use (front or rear), what MODE the radar is operating in (moving or stationary), and the DIRECTION (opposite or same direction) the vehicle is traveling. This added step assists the operator in ensuring accuracy every time.

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Your Choice of Two Full-Function Remotes

Fast-Lock Remote

This remote is designed for departments that require Fast Lock operation and normally operate in constant transmit mode.

Instant-On Remote

This remote is designed for departments that do not require Fast Lock operation but routinely use the "instant-on" feature. A dedicated XMIT/HOLD key provides instant transmitter ON/OFF operation.



 Faster Target Acquisition More Dynamic Range Waterproof Ka-Band



With direction sensing antennas, the Stalker 2X is able to automatically determine if same-direction vehicles are closing or going away from the radar. This allows the 2X to automatically measure same-direction traffic speeds as simply and accurately as it does with opposite-direction traffic

STALKER

No longer does the operator need to tell the radar if same-direction traffic is faster or slower than the patrol vehicle. The Stalker 2X makes same-direction operation simple, accurate, and automatic. Plus, Stalker Radar's new Dual Zone technology takes full advantage of the Stalker

The direction sensing ability of the Stalker 2X allows the operator to select a specific direction of traffic to monitor. The 2X can measure closing targets while automatically ignoring vehicles that are going away-even if the target moving away is closer than



Power to Enforce.

STALKER® 2X SPECIFICATIONS

General Specifications

Туре:	Dual Antenna Direction Sensing Moving/Stationary Doppler Radar
Operating Frequency:	33.4 GHz - 36.0 GHz (Ka-Band)
Stability:	±100 MHz (Ka-Band)
Power Requirements: (With 2 Antennas)	10.0 MH2 (Ka-Band) 10.0 to 16.4 VDC. (currents are typical at 12.0 VDC): XMIT on FRONT & REAR, no targets, stationary: 1.35A XMIT on FRONT & REAR, no targets, moving: 1.40A XMIT on FRONT & REAR, with 25mph targets, stationary: 1.75A XMIT on FRONT & REAR, 25mph patrol with 15mph targets: 1.53A XMIT on FRONT & REAR, 25mph patrol with 15mph targets: 1.53A XMIT on FRONT & REAR, 25mph patrol and 15mph target and 1.46A XMIT on REAR with no target: 1.46A HOLD on FRONT & HOLD on REAR, stationary: .78A HOLD on FRONT & HOLD on REAR, moving: .82A XMIT - 1 antenna, HOLD - 1 antenna, no target, moving: 1.05A XMIT - 1 antenna, HOLD - 1 antenna, 25mph target, stationary: 1.66A
Environmental:	-30° C to +70° C, 90% Relative Humidity Operating -40° C to +85° C, non-operating
Display:	Five multi-color (red, green, amber) 3-digit Light Emitting Diode (LED) windows for target, fast/lock, and patrol, plus red LED mode indicators and LED target direction arrows
Mechanical:	Display Unit Size - 1.65" Height, 1.05" Depth, and 5.50" Width
	Counting Unit Size - 1.65" Height, 3.35" Depth, and 5.50" Width
	Antenna Weight - 1.4 lbs. Size - 2.60" Dia. X 4.75" Length
	Remote Weight - 0.4 lb. Size - 1.00" Height, 6.20" Length, and 2.25" Width
Accuracy:	±1 mph stationary, ±2 mph moving ±1.6 km/h stationary, ±3.2 km/h moving
Automatic Self-Test:	Performed every 10 minutes while transmitting
Stationary Speed Range:	12 mph to 200 mph Standard or 2 mph to 200 mph (set-up menu selectable)
	Stationary Fastest Speed - Same speed range as stationary speed
Moving Speed Range:	Patrol Speed – Once acquired, will track to 150 mph. Acquistion speed is selectable with PS 5/20 key. 5 in patrol window for patrol speed acquisiton speeds of 5 to 95 mph 20 in patrol window for patrol speed acquisiton speeds of 20 to 95 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.
	Opposite Lane Fastest Speed – Same speed range as opposite lane speed
	Same lane target speed – Related to patrol speed: ±70% of patrol speed within 5 mph of patrol speed. For 50 mph patrol speed: 15 → 45 mph and 55 → 85 mph. Same lane patrol speed must be greater than 15 mph

Microwave Specifications

Antenna:	Conical horn with corrective lens
Polarization:	Circular
3 db Beam Width:	12°±1°
Microwave 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, and 50 mW maximum
Power Density:	2 mW/cm ² maximum at 5 cm from lens

Display Messages

HLd:	The HLd message display in one of the middle windows indicates that the transmitter for that antenna is in hold mode or turned off.
V Lo:	A V Lo message indicates the input voltage is too low. Operation is inhibited while the V Lo message is displayed but normal operation will resume automatically when the input voltage is restored. All other speed windows will be blanked.
RFI:	The RFI message indicates the presence of an interfering signal. Operation is inhibited during an RFI indication. All other speed windows will be blanked.
PAS S:	PAS S is displayed at the end of a successful internal test cycle along with a "happy tone."
FAI L:	A FAI L message (along with fail tone) indicates that a circuit malfunction has been detected, in which case speed readings are inhibited and the unit should be removed from service and repaired. FAI L will remain in the message window until reset by being powered off.
HOT:	The HOT message is used to indicate that the counting unit is outside of its rated temperature range. After the counting unit cools down, it will automatically begin normal operation.

Remote Control Functions

MOV/STA:	The MOV/STA key toggles between moving and stationary modes. A speed or a [] in the patrol window indicates moving mode, while a blank patrol window indicates stationary mode. With a VSS cable installed, the radar will automatically switch between moving and stationary modes based on the presence (or absence) of VSS pulses and [] will not be seen in the patrol window.
	After selecting moving mode or stationary mode, the operator can use the four zone keys (described below) to select two target zones to monitor (one zone on the front antenna and one zone on the rear antenna). The SAME and OPP icons display the zone selection in both moving and stationary modes. Each antenna is totally independent of the other relative to target zone selection. The stationary modes (and associated icons) for the front antenna are: stationary closing (OPP), stationary away (SAME), and stationary bi-directional (OPP/SAME). The stationary modes for the rear antenna are: stationary closing (SAME), stationary away (OPP), and stationary bi-directional (OPP/SAME).
START/STOP:	When in Stopwatch Mode, the START/STOP key is used to start and stop the electronic timing of the target vehicle as it enters and exits the speed measurement zone.
OPP/FAST LK:	FOR STATIONARY MODE - The OPP/FAST LK key is a two (2) function key: 1. Press and hold the OPP key to turn on the corresponding transmitter (if it is in hold mode) and directly select the Opposite lane speed zone for the associated antenna. 2. While a fast target (either SAME or OPP) is displayed in the corresponding Fast Window, press the FAST LK key (actually either FAST LK key for that antenna) to lock the fast speed in the Fast Window.
	In stationary mode, both speed zones (OPP/SAME stationary mode) are selected for an antenna when both the OPP mode key and the SAME mode key are pressed within 5 seconds of each other for either (or both) antenna.
	FOR MOVING MODE - The OPP/FAST LK key is a two (2) function key:
	 Press and hold the OPP key to turn-on the corresponding transmitter (if it is in hold mode) and directly select the opposite lane speed zone for the associated antenna. If you press and hold the OPP key a second time, it will only beep (no action). While a fast target is displayed in the corresponding Fast Window, press the FAST LK key (actually either FAST LK key for that antenna) to lock the fast speed in the Fast Window.
HOLD/LK REL:	The HOLD/LK REL key is a three (3) function key: 1. Press and hold the HOLD key to place the associated antenna (both zones for that antenna) in hold (standby) mode. HLd will be displayed in the lock window (for that antenna) and all icons and arrows, associated with that antenna will turn off (unless that antenna has a locked target). 2. Press the LK PEL human press that LOCK a strengt target for the second strengt to the lock window.
	 <u>Press</u> the LK REL key normally to LOCK a strong target for the associated antenna. LOCK activation occurs with a key <u>press</u>. <u>Press</u> the LK REL key normally to RELEASE any locked target (strong or fast) for the associated antenna. RELEASE activation occurs with a key <u>release</u>.
↑ and ↓:	The \uparrow key and the \checkmark key (located on the HOLD/LK REL keys) are used with the MENU key to select options from the SET-UP menu.
SAME/FAST LK:	 FOR STATIONARY MODE - The SAME/FAST LK key is a two (2) function key: Press and hold the SAME key to turn on the corresponding transmitter (if it is in hold mode) and directly select the Same lane speed zone for the associated antenna. While a fast target (either SAME or OPP) is displayed in the corresponding Fast Window, press the FAST LK key (actually either FAST LK key for that antenna) to lock the fast speed in the Fast Window.
	In stationary mode, both speed zones (OPP/SAME stationary mode) are selected for an antenna when both the <u>OPP</u> mode key and the <u>SAME</u> mode key are pressed within 5 seconds of each other for either (or both) antenna. <u>FOR MOVING MODE</u> - The <u>SAME/FAST LK key is a two (2) function key:</u>
	 Press and hold the SAME key to turn on the corresponding transmitter (if it is in hold mode) and directly select the opposite lane speed zone for the associated antenna. If you press and hold the SAME key a second time, it will only beep (no action). While a fast target is displayed in the corresponding Fast Window, press the FAST LK key (actually either FAST LK key for that antenna) to lock the fast speed in the Fast Window.
MENU:	The MENU key is used to enter the SET-UP menu system allowing the \uparrow and \checkmark keys to select options from the SET-UP menu. Exit the menu system by pressing any zone key (OPP or SAME).
VOLUME/ <u>TEST</u> :	 The VOLUME/TEST key is a two (2) function key: 1. The VOLUME key is used with the ↑ and ↓ keys to adjust the Doppler volume, the Beep volume, and the Voice volume. The first press of the VOLUME key will display AuD, the second press will display BEE P, and the third press will display VOI CE. The ↑ and ↓ keys are used to increase or decrease the volume of each sound. For each attribute, 0 is off and 3 is maximum volume. Two different Aud levels can be set – one associated with the moving mode and the other associated with the stationary mode. The levels are set when the radar is in the appropriate mode. When VSS is enabled, the radar will automatically switch between moving Aud level and stationary Aud level when it switches between modes. The bEE P and UO 1 CE volume levels remain the same in both modes. 2. Press and hold the TEST key to perform a diagnostic check on the display/counting unit and antenna. The display/counting unit will complete a processor check, memory check, and crystal check, followed by the display of speeds of 10, 35, and 65, followed by counting unit temperature display and input voltage display. A comprehensive test is also performed on each antenna by the counting unit to ensure the integrity of the antenna cable and antenna electronics. PAS S or FAI L (with tone) is indicated on the display unit after the completion of each antenna test. After PAS S is displayed for each antenna, the radar goes into a 60-second "fork mode" time interval that is used for the tuning fork tests. This "fork mode" state is indicated by decimal points being displayed in both the Front and Rear Strong Target windows simultaneously.
PS BLANK:	 The PS BLANK key is a dual function key: While any target speeds are locked (front, rear, or both), the PS BLANK key can be used to toggle between: 1) blanked patrol speed window, 2) front lock patrol speed, or 3) rear lock patrol speed. When toggling between a front lock condition and a rear lock condition, the patrol speed decimal point and the associated lock decimal point will flash three times together. In addition, if the patrol window indicates an incorrect patrol speed, the PS BLANK key can be used to blank the patrol speed window and acquire a new patrol speed. When a VSS cable is installed, this function is not needed and is disabled.
LIGHT:	This is a dual function key. With a single depression, the LIGHT key activates the remote control back light for six (6) seconds. Additional depressions of the LIGHT key toggle the display intensity through six levels of brightness, ranging from bri 1 (low) to bri 6 (high) and the bri A (automatic) position. The auto brightness function is selected with the bri A position and uses the front panel light sensor to select either full brightness for day operation or reduced brightness for night operation.