STALKER® *ENHANCED DUAL DSR* SPECIFICATIONS

General Specifications   C€ **Approved**

Type:	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 to 16.4 VDC. (currents are typical at 13.6 VDC):
	    XMIT with all displays on: 1.28A
	    XMIT with all displays off: 1.08A
	    XMIT with moving target: 1.15A
	    XMIT with no target: 1.11A
	    Standby with no target: .8A

Total Power Consumption:	1.28 A
Environmental:	-30° to +70° C, 90% Relative Humidity Operating -40° to +85° C, non-operating
Display:	Triple (red, green, amber) 3-digit Light Emitting Diode (LED) for target, lock, and patrol, plus LED icons

Mechanical:	**Display Unit**
	    Weight - 0.5 lb. Size - 1.65" Height, 1.05" Depth, and 5.50" Width
	 Counting unit
	    Weight - 1.6 lbs. Size - 1.65" Height, 3.90" Depth, and 5.50" Width
	 Antenna
	    Weight - 1.4 lbs. Size - 2.50" Dia. X 4.75" Length
	 Remote
	    Weight - 0.4 lb. Size - 1.00" Height, 6.20" Length, and 2.25" Width

Accuracy:	+1, -2 mph stationary, ±2 mph moving +2 / –3 km/h stationary, ±3 km/h moving
Automatic Self-Test:	Performed every 10 minutes
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 **P.S. 5/20** key.
	    5 in patrol window for patrol speed acquistion speeds of 5 to 90 mph;
	    10 in patrol window for patrol speed acquistion speeds of 10 to 90 mph;
	    20 in patrol window for patrol speed acquistion speeds of 20 to 90 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
Antenna gain:	22 db
Polarization:	Circular
3 db Beam width:	12° ±1°
Microwave Source:	Gunn-Effect diode
Antenna 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 Radiated Output Power, 1.0 db. (Radiated output power does not change more than +/- 1.5 db when the source power changes +/- 20%.)
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.

[ ], SC, SA, or S_:	Indicates the radar mode of operation in the patrol speed window. **[ ]** or a speed display in the patrol window indicates moving mode radar operation. **SC** indicates stationary operation with display of closing targets only. **SA** indicates stationary operation with display of targets proceeding away from the radar unit. **S_** is a mode for stationary operation which allows the display of targets in both directions.
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 or 20:	**5, 10,** or **20** spelled out in the patrol window indicates the low-end patrol speed is set to either 5 mph, 10 mph, 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.
b 0, b 1, b 2, or b 3:	These symbols are spelled out in the Patrol Speed display during the time that the audio number (Aud 3) is shown in the Target and Lock displays. The b number indicates the beep volume and is accessed by using the **P.S. BLANK** key.
U 0, u 1, u 2, or u 3	These symbols are spelled out in the Patrol Speed display during the time that the audio number (Aud 3) is shown in the Target and Lock displays. The **u** number, when displayed, indicates the state of the voice volume and is accessed by using the **SQL** key.
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:	**U Lo** 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

STRONG LOCK/REL	The **STRONG LOCK/REL** key alternates between the lock and the release functions for the strong target. **LOCK** is used to transfer the contents of the target window to the lock window. **REL** 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 lock.
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.
MOV/STA:	Sequences between Moving mode and three stationary modes of operation: targets closing only, targets away only and targets in either direction.
SAME/OPP:	The **SAME/OPP** 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.
FAST LOCK/REL	The **FAST LOCK/REL** key alternates between the lock and the release functions for the fast target. **LOCK** is used to lock the contents of the fast window and **REL** clears the locked contents of the fast window. During fast lock, both the **FAST** icon and the **LOCK** icon will light and the patrol window will lock the present patrol speed. The target window and Doppler audio remain active after locking.
STOPWATCH MODE:	Toggles the unit from radar mode to stopwatch mode and back again.
S/S:	In Stopwatch Mode, the S/S (or 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.
100:	In stopwatch mode, this key can be used to change the timing distance in 100 yard increments.
10:	In stopwatch mode, this key can be used to change the timing distance in 10 yard increments.
1:	In stopwatch mode, this key can be used to change the timing distance in 1 yard increments.
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. They are separately set.
SQL:	The **SQL** key toggles the squelch override off and on. In the normal (off) position, audio will only be heard when a target is being tracked. When the Doppler audio menu is displayed, this key can be used to change the voice volume.
PS 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 patrol speed acquisition of 5 to 90 mph 　　　**10** in patrol window for patrol speed acquistion speeds of 10 to 90 mph; 　　　**20** in patrol window for patrol speed acquisition of 20 to 90 mph
SELF TEST:	In radar operation, performs a complete self-test on display/counting unit and the underlined selected 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. At the end of a successful test, the **FORK** icon is lit on the display to allow a measurement of non-directional speeds such as that produced by a tuning fork.
)((►	Used to adjust the volume of the Doppler audio up or down. **Aud 0** is off; **Aud 4** is loudest.
P.S. BLANK:	In radar operation, this is a three 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. When the Doppler audio menu is displayed, this key can is used to change the beep volume.
🔆	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 the display unit's brightness from bri 1 (low) to bri 6 (high).