

KUSTOM SIGNALS, INC.

PRO-1000DS™

Traffic Safety Radar



*Radar designed for professionals
by professionals.*

PRO-1000DS™ Traffic Safety Radar

The affordable PRO-1000DS is downsized – a kustom fit for any size patrol vehicle.

What's in a name? For Kustom's PRO-1000DS the name says it all: DS for downsized. Current technology has allowed us to make the PRO-1000DS, one of the smallest radar units available.

Unbeatable Tracking History

The Target Lock display allows you to lock a target speed and continue to monitor the target speed in the active Target Speed display. You'll see if the target slows down or speeds up and you'll hear the Doppler audio reinforcement. *Indisputable tracking history and target identification!*

Exclusive QuikTrak™ Feature

QuikTrak™, a Kustom Signals exclusive, is a convenient shortcut, performing two functions at once. By pressing one button, the unit comes out of Hold mode and immediately monitors speeds. Releasing the button locks a target speed and puts the unit back into Hold.

Videotape Traffic Violations

Increase conviction rates and establish "probable cause" by choosing the optional feature of interfacing the PRO-1000DS with Kustom's in-car video systems. You'll have video-taped evidence of the speed violation as it occurs, with the actual speeds superimposed onto the footage. Unbeatable!

Kustom-Built to Last

Like all Kustom radar, the PRO-1000DS meets or exceeds all federal specifications. We use only the best componentry available; that means years of accurate, trouble-free performance.

PRO-1000DS. The convenience you want and the reliability you expect in your Kustom radar.



For more information, call
1-800-4KUSTOM (458-7866)
www.kustomsignals.com

First in
traffic safety

Radar System Functions

Target Speed Display shows speed of approaching vehicle in moving mode. Shows speed of approaching or receding vehicle in stationary mode.

Alpha messages appear in this display to inform you of the radar's status: hold mode, low voltage, RF interference, and error.

Target Lock Display shows locked target vehicle speed. Allows you to lock a vehicle's speed and continue to monitor it on the Target Speed Display to establish a tracking history.

Antenna Direction Indicators light to show that the unit is operating from the front or rear antenna.

Light Sensor automatically adjusts display brightness for light conditions.

Patrol Speed Display shows speed of patrol vehicle in moving mode.



Test/Patrol Blank checks displays' digit segments and performs an internal circuit test. In moving mode, allows operator to blank the patrol speed display during lock.

Lock-Release freezes and releases both target and patrol speed displays. On the handheld remote, the Lock-Release also controls the **QuikTrak™** function.

Squelch Control defeats the normally squelched audio, allowing you to determine whether interference is present and to hear what the unit sees to establish tracking history.

Range Control sets the distance for target acquisition, assisting in proper target identification.

Power lights to verify the unit is receiving power.

Power/Volume Control powers the system and sets the volume for the Doppler audio.

Moving/Stationary Mode Selector allows operator to select mode of operation.

The **Remote Control** features **RF Hold** to defeat radar detectors, **Lock-Release** to freeze the target speed in the lock display window, and **front/rear antenna** selection. **QuikTrak™** is operated by depressing and holding the Lock-Release button.

PRO-1000DS™

Radar System Specifications

System – General

Type:	Two-Piece Moving/Stationary True Doppler Radar.
Measurement:	Available in miles or kilometers per hour.
Operating Environment:	-22°F to +140°F (-30°C to +60°C); 90% relative humidity at +99°F (+37°C), non-condensing.
Power Requirements:	10.8 to 16.5 VDC, negative ground. 13.6 VDC nominal, 1.0A max.
Reverse Polarity Protection:	No damage will result, due to reversal of power supply.

Antenna

Operating Frequency:	24.15 GHz (k-band) ± 100 MHz.
Type:	Circular polarized, conical horn.
Microwave Source:	Gunn-Effect Diode.
Beam Width:	13° +1°.
Side Lobes:	25 dB below main beam.
Receiver:	Low-noise Schottky Barrier Diode (100 mW rating).
Power Output:	15 mW typ., 50 mW max.
Power Density:	<5 mW/cm ² (measured 5 cm from antenna face).
Weather Resistance:	For mounting inside or outside patrol vehicle.
Dimensions:	3.5"H x 3.6"W x 3.75"L, 1.88 lbs. (8.89 x 9.14 x 9.53 cm, 0.85 kg)

Display/Counting Unit

QuikTrak™:	One-button operation of Hold, target tracking, and Lock functions. Depressing the Lock/Release button takes the unit out of Hold mode to monitor speeds. Release of the button locks a target speed and puts the unit into Hold mode.	Displays:	Seven-segment, high-brightness LED displays automatically adjust to ambient light conditions.
Speed Processor:	Microprocessor automatically performs internal speed verifications, crystal and lamp tests.	Lock Time:	Instantaneous.
Test / PB:	Test: Upon activation, performs three tests: Light Test: Displays' digit segments are operational. Audio Test: Audio components are operational. Internal Test: Circuit test of both target and patrol readings (32) cross-checks the system's dual independent quartz crystal time bases. Patrol Blank: Allows operator to blank the locked patrol speed.	Lock Display:	Displays locked target speed. Unit continues to display an active target speed in the Target Display.
Auto Test:	Automatic comparison of the two quartz crystal oscillators occurs – without displays – approximately every 1/4 second.	Automatic Clear:	Displays clear when a mode of operation changes.
Accuracy:	Moving: ±2 mph (+3 km/h). Stationary: ±1 mph (+2 km/h).	Harmonic Detect:	Prevents the display of erroneous target readings resulting from strong reflections of the patrol vehicle. (-) appears in the Target Display.
Audio:	Operator-controlled circuit amplifies the true Doppler audio.	Interface Port:	15-pin I/O connector for interfacing the unit with Kustom's Eyewitness In-Car Video System, Giant P.R. Display, or data collection device (optional).
Squelch Control:	Allows operator to unsquelch audio to determine level of potential interference.	Dimensions:	1.75"H x 6.5"W x 5"D, 1.63 lbs. (4.44 x 16.51 x 12.70 cm, 0.74 kg)
Range Control:	Presets range for target acquisition.		
Speed Range:	Target: 35 to 90 mph (56 to 145 km/h) within 10 dB sensitivity range; typ. readings from 10 to 199 mph (26 to 320 km/h). Max. displayed closing rate: 199 mph (320 km/h). Patrol: 15 to 80 mph (24 to 128 km/h); displays acquired patrol speed from 10 to 100 mph (16 to 160 km/h) typ.		
Alpha Messages:	Hd – Unit placed in non-transmitting mode to defeat radar detectors. Lo – Low voltage condition exists. Er – Crystal failure or frequency drift. rF – Excessive radio frequency interference present.		

Accessories

Included:

- Remote Control
- Tuning Forks: 35 and 65 mph (45 and 80 km/h)
- Antenna Mount
- Operator's Manual

Optional

- Dual Antenna Kit: Antenna, Mount, Cable
- In-car video interface
- Battery Pack with 120 or 240 VAC Charger
- Mounts: window (for outside operation), visor, trim, dash, rear deck
- Heavy-duty carrying case
- Auxillary shielded cable power receptacle

The PRO-1000DS is included on the NHTSA/IACP Consumer Products List (CPL). In keeping with Kustom Signals' policy of continued refinement of its products, these specifications are subject to change without notice. Kustom Signals' warranty includes parts and labor, and warrants all components – without exception – against defects in materials and workmanship. Service can be performed by an Authorized Service Center near you, or by the Kustom Signals manufacturing facility. Lease/Purchase available. Visit our website at www.kustomsignals.com or for more information, a quote, or to place an order, call toll-free: 1-800-4KUSTOM (458-7866).

