

Rocky Mountain™ RADAR



Phantom-T

Radar and Laser Detector
Radar and Laser Scrambler
Owners Manual

Versión en español disponibles consulte la página 9 para obtener más información

Radar & Laser Detector:

Frequencies:

24.125 GHz
33-36 GHz
904 Nano-meter

Sensitivity:

K-116 Dbm
Ka-wide-115 Dbm
Laser < .5 microwatt

Alarm:

Separate for each Band
Variable alarm for Range

Controls:

Volume, On/Off, Dim, Mute,AutoMute,
City/Highway, Test

Spectre:

100% Undetectable [Spectre I, II,
VG-2: III; VG-2, 3]

Size:

1.4" x 3.6" x 4.0"

The Phantom-T detector is a full-featured radar and laser detector. It detects 360° radar and laser.

The radar detector is a dual conversion scanning superheterodyne receiver with separate alarms for each of the radar bands and the following selectable features: dim function, city/highway, mute and auto-mute. It detects front and rear laser and radar.

Other:

One-Year Ticket Rebate Program
Three-Year Warranty

FCCID: QKK-TRK

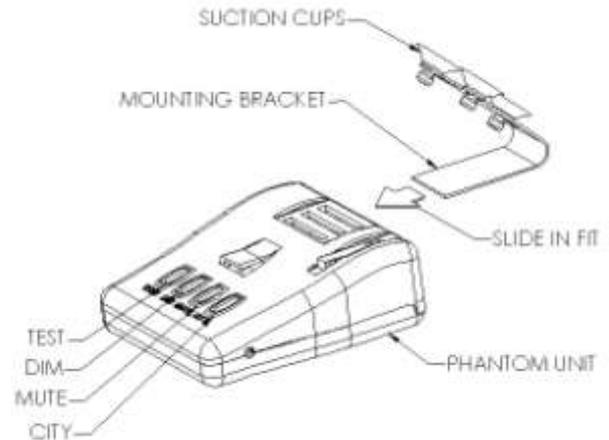
This product has been designed and certified to comply with Part 15 of the FCC Rules. Any changes or modifications not expressly approved by Rocky Mountain Radar may void your authority to use this product. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Installation:

- 1) Complete, sign, and mail the Ticket Rebate Registration Card within 30 days from the date of purchase.
- 2) Attaching the windshield bracket to the Phantom-T detector. Align the edge on the bracket with the slot opening on the front of the case. Gently slide the bracket into the case until it locks into place.
- 3) Place the windshield bracket in the upper center portion of the windshield. The ideal position will be right below the rear view mirror. Make sure the unit has an unobstructed view of the road. Then press firmly to seat suction cups. Note: Tinted glass will degrade the laser performance.
- 4) Bend the windshield bracket mount to a level position.
- 5) The Phantom-T will hang from the bottom of the bracket and must have an unobstructed view of the road ahead.
- 6) Insert the small end of the power cord gently into the power jack on the right side of the unit and the large end into the cigarette lighter receptacle.

Remote mounting is not recommended.

Hard wire: Remove cigarette lighter plug. Connect the black with white stripe wire to +12 Volts, and then connect the solid black wire to ground.



CONTROLS: There are 4 buttons on top of the PHANTOM-T, Test, Dim, Mute and City.

Dim: Press the Dim button for one second to dim the alarm lights. There are 3 levels of brightness. To brighten the alarm lights press the dim button again. The unit will beep two times for Dim, One beep for dimmer; two beeps for dark, one beep for bright.

NOTE: MUTE function will not operate on DARK mode.

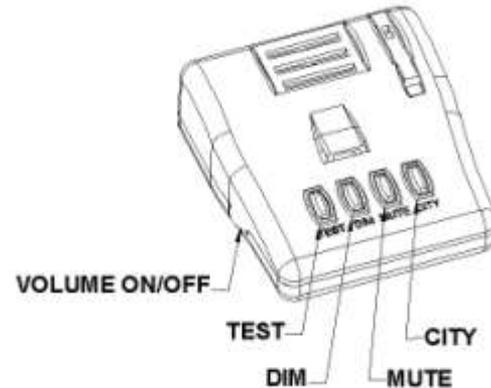
Mute: Press the Mute button for one second to disable the alarm speaker for quiet operation. To re-activate the alarm speaker press the Mute button again for one second. The unit will beep one time for “mute on” and three beeps for “mute off.”

Auto-Mute: Press the Mute button for a split second (momentary contact) to disable the alarm speaker for quiet operation. In Auto-Mute operation the unit will give 4 beep alerts then keep mute. The unit will beep three times for “Auto-Mute.”

City: Press the City button for one second to reduce false alarms in high RF noise areas. The yellow City light will illuminate to show activation.

The unit will beep one time for Highway and two beeps for City.

Test: Press the “Test” button to get into the test mode. It automatically changes the settings to “MUTE OFF, BRIGHT, and SCRAMBLER ON”. It will give test alert in the order of SCRAMBLER -> K -> Ka -> Laser. After Test Alert is done, it will automatically go back to stand by status.



Selectable Tones: The Phantom-T has selectable tones. To change the tone of the unit, press and hold the mute button down for 3-5 seconds for high tone the unit will beep three times for low tone the unit will beep one time.

Reminder! The Phantom-T will memorize the settings of the features above when the unit is powered off. Be sure to readjust the settings to your normal preferences.

Power and Volume: Power is provided through the thumb wheel switch on the left side of the unit. Rotate the wheel forward to turn on and increase the volume for the alarm.

Display shows: [P] [K] [Ka] [C] [2] [3] [4] [T]
[P] : Power
[K] : K Band Alert
[Ka] : Ka Band Alert
[C] : CITY Mode Display
[2][3][4]: Signal Strength LED
[T] : Scrambler Test LED

Alarms: LED Display when alerting
Laser -->All LEDs will flash together except for [T] LED (In City Mode, [CITY] will flash as well).
K band--> [K] LED on and [2] [3] [4] will be on one by one depending on the strength.
Ka band --> [Ka] LED on and [2] [3] [4] will be on one by one depending on the strength.

Signal Strength:

Signal Strength Level 1: [K] or [Ka] LED will flash
Signal Strength Level 2: Signal strength LED [2] will flash.
Signal Strength Level 3: Signal strength LED [2] and [3] will flash.
More than Level 4: Signal strength LED [2], [3], [4] will flash.
Alert beep will sound faster according to the strength of signal.

Diagnostics: The Phantom-T has a full internal automatic diagnostic system. If the power light goes off and remains off, check the 2-amp fuse in the power cord by unscrewing the silver tip and removing the fuse. If the fuse is good (wire inside the fuse unbroken), return the unit for service. 4

Rocky Mountain Radar does not condone the use of excessive speed on the highways, nor does it endorse breaking the speed limit laws of the United States of America. Please drive safely when using this or any other electronic product in your car.

Auto Memory: The Phantom-T has an automatic memory. Any settings enabled when the unit is turned off will still be enabled when the unit is turned back on. **If you have set the unit on Mute or have dimmed the alarm lights be sure to readjust the settings to your normal preference.**

VG-2, VG3: 100% undetectable.

Tamper Fee

Tampering with, disassembly, or modification of this product voids the warranty and a tamper fee of **\$150.00** will be charged to repair it.

It is your responsibility to be familiar with all laws applicable to the possession and use of Radar Detectors and Scramblers in your locality. The manufacturer and retailer assume no liability for use or application of this product in Violation of any applicable law. Please check your state and local laws and regulations of this product

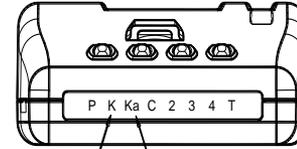


FIG A. "K" BAND — "Ka" BAND

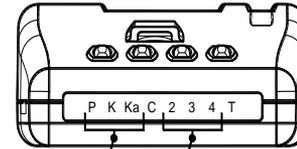


FIG B. "LASER"

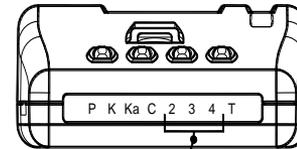


FIG C. SIGNAL STRENGTH

Scrambler Activation:

All scramblers are factory set to the off position:

Scrambler: Phantom-T to turn the scrambler on/off, power off the unit, press and hold the city button down while turning power back on the unit. If the scrambler is on, the "T" LED light will be included in the startup sequence. The "T" LED light is the test diagnostics for the scrambler.

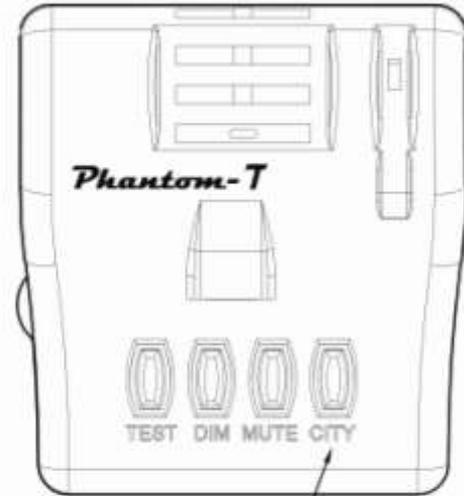
Scrambler Operation:

Drive normally. When the detector sounds an alert, take your foot off the gas, check your speed, adjust if necessary, and resume driving. Do not apply brakes unless you are grossly exceeding the speed limit. The scrambler will disable the radar long enough for you to adjust speed safely, if necessary.

Important information:

When driving in states that ban scramblers - turn off the scrambler function. Detectors are legal in all states except Virginia and

Washington D.C. With the scrambler off, this unit is only a detector.



PRESS AND HOLD THE
CITY BUTTON DOWN WHILE
TURNING ON THE UNIT

SPECIFICATIONS:

Radar Scrambler:

Frequencies: 8.0-38.2 GHz

Antenna: Dual ridge cast waveguide

Mixer: Custom MM wave Schottky

Doppler: Pseudo Random Digital Noise Generator

Lidar Scrambler:

Full laser coverage using asynchronous pulse position modulation to confuse the lidar computer.

How does it work?

The Rocky Mountain Radar scramblers are full-featured radar and laser scramblers combining active laser and passive radar scrambling capabilities.

The radar scrambling circuit mixes Pseudo Random Digital Noise Generator (PRDNS) with the incoming police radar signal and reflects it back to the radar gun. The computer in the radar gun must receive eight identical, consecutive readings before it will display

your speed. All the different speeds contained in the White Noise confuse the computer in the radar gun so it does not display any speed. This effect duplicates the normal operation that the officer often sees.

Since it is normal to occasionally lose the target speed, the officer is not suspicious. Reasonable care should be used as flagrant violators could still be caught with an estimated speed.

The laser scrambling circuit transmits a series of pulses at the same wavelength used by the police laser guns (Lidar), which are electronically timed at about 100 feet apart. When the pulses pass through the windshield they will lose up to 50% of their power. The power output is 6 to 10 times that needed to trigger the detector in the laser gun. Lidar sends out laser pulses and measures how long it takes to hit your car and come back. From the speed of light it can determine your *range*. It sends out several more pulses and calculates your speed from the change in distance over time. The Rocky Mountain Radar scramblers only allow the Lidar to see up to 100 feet so it is unable to calculate your speed.

Limited Warranty

The manufacturer warrants you Phantom-T against all defects in materials and workmanship for the period of 36 months from the date of the original purchase, subject to the following terms and conditions: The sole responsibility of the manufacturer under the Warranty period is limited to either repair or, at the option of the manufacturer, replacement of the Phantom-T. There are no expressed or implied warranties, including those of fitness for a particular purpose of merchantability, which extend beyond the face hereof. Some states do not allow limitation on how long an implied warranty lasts, so the above Limitations may not apply to you.

Returns should be sent freight prepaid with an explanation of the problem including your physical address (no PO Boxes), proof of purchase, and telephone number. If the information is not included there will be a delay in the repair or replacement of your unit. If the unit is out of warranty there is a \$62.00 Service fee and a 90 day warranty on repairs.

Send To:

ROCKY MOUNTAIN RADAR

6469 Doniphan Drive

El Paso TX 79932

Phone: 915-587-0307 Fax: 915-587-6408

We do not accept COD shipments

We do not accept freight collect shipments

Accessories

The following accessories and parts are available:

Windshield mount \$ 5.00

Suction Cups (set of 3) \$ 2.00

2 amp fuses (two each) \$ 2.00

Power Cord \$ 5.00

Replacement Owners Manual \$ 3.50

(Free online download from our website)

A \$10.00 shipping and handling fee will be added to the total of each order.

PayPal, VISA/MC and Discover Accepted

IS IT LEGAL?

The Rocky Mountain Radar scramblers conform to all FCC rules and regulations. Part 15 of the FCC code regulates consumer products that may leak or transmit radio frequency energy into the atmosphere. Since the scramblers are not transmitters, these sections do not apply.

The radar scrambler is a *reflective receiver* and has no emissions. **It does not transmit**, but uses the police radar gun's own signal as a carrier of its information. The laser scrambler transmits a series of light pulses. There are no laws regarding the transmission of invisible light.

Rocky Mountain Radar does not condone the use of excessive speed on the highways, nor does it endorse breaking the speed limit laws of the United States of America. Please drive safely when using this or any other electronic product in your car.

For a complete list of FAQ's please visit our website www.rockymountainradar.com

FREQUENTLY ASKED QUESTIONS

The Rocky Mountain Radar scramblers are designed to give you radar and laser scrambling from the front half of the car.

- *Can I test it with roadside trailer radars?*

The trailers you see on the side of the road that show your speed are not legal to write tickets. They do not contain the sophisticated sampling computers that are in police radar guns. Since our - will not work reliably against the trailers.

- *Can the police detect it?*

The radar and laser scramblers do not have RF emissions and cannot be detected. **On the Phantom-T the new MMIC prevents detection of radar detector completely.**

- *What states are they **NOT** legal in?*

The Rocky Mountain Radar scramblers are **not** legal in Colorado, Utah, California, Nebraska, Oklahoma, Minnesota, Illinois, Tennessee, South Carolina

(unless the switchable scrambler feature is set to off) and Virginia. The Rocky Mountain Radar detectors are **not** legal in commercial vehicles in most states. Use caution in these states.

• ***What is Punch-Through?***

The signal reflected by the car gets stronger the closer the target is to the radar gun. The Rocky Mountain Radar scrambler uses the radar signal as a carrier and reflects it through a high-gain antenna. It will work only as long as the scrambling signal is greater than the signal from the target. Punch-through is when these signals are equal or within 50-200 feet.

• ***What is the effective range?***

The radar scrambler works at four to six times the range of the radar gun. The laser scrambler is effective at more than two times the Lidar range.

• ***How do I know the scrambler is working?***

When you turn the unit on and it goes through the self-test (a series of tones), to confirm all the circuits in the scrambler are working correctly.

• ***Why won't my unit turn on?***

Check the following:

- 1) The on/off thumbwheel on the side of the unit
- 2) The fuse in the power cord. (To check the fuse in the power cord, unscrew the silver tip end that plugs into the cigarette lighter. If the fuse is blown, replace with a 2 amp fast burning fuse).
- 3) The fuse for your cigarette lighter
- 4) If it is none of these, return the unit to the manufacturer for repair/replace at our discretion.

• ***Where is the best place to mount my unit?***

The manufacturer recommends in the upper center of the windshield (right below the rear-view mirror) for the maximum coverage. There can be no metallic interference with the unit.

• ***Donde puedo conseguir un manual en español?***

Versión en español del manual es disponible en nuestro Web site como descarga gratuita:

<http://rockymountainradar.com/store#manuals>

Manufactured Exclusively by
Rocky Mountain Radar in the USA
www.rockymountainradar.com