

# *MOTO-RAPTOR*

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**Advanced Micro Technology Design  
Remote Radar and Laser Detector**



**Owner's Manual  
Rocky Mountain Radar**



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# INTRODUCTION

Dear Owner,

Congratulations on your purchase of the world's most sophisticated motorcycle radar and laser detector. The *Moto-Raptor* is a completely integrated radar and laser detector for motorcycles which responds not only to all the radar guns in use today, but to the other latest development in speed monitoring devices- laser guns.

The *Moto-Raptor* is the first and most sophisticated device in the world which has wireless data communication for motorcycles.

We are pleased to have you as a valued customer and hope you will be delighted with your *Moto-Raptor*. This manual provides all the information needed to make this device work in the best suitable way for you.

Note:

The *Moto-Raptor* is not designed to help you disobey the law. A defensive driver always obeys the posted speed limit and legal driving methods.

FCC ID: QKK-MC1

This device complies with part 15 of the FCC Rules. 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.

In addition, any changes or modifications to this product, which are not expressly approved by Rocky Mountain Radar in writing, could void the user's authority to operate this product.

## SAFETY WARNING

While using the *Moto-Raptor* Radar and Laser Detector, it is the sole responsibility of the operator to properly install the unit and to ensure that it does not interfere with the safe operation of the vehicle and/or cause any personal injury or damage in the event of an accident. The operator should operate the vehicle in a safe manner and obey all traffic laws while using the Radar Detector.



**Warning:** Using this device is not a license to Speed!  
Always ride safely and obey traffic laws.



**Warning:** It is your responsibility to be familiar with all laws applicable to the possession and use of Radar Detectors in your locality. The manufacturer and retailer assume no liability or responsibility 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.

## COMPONENTS

Your *Moto-Raptor* package consists of the following components.

- (1) Radar Detector
- (1) Head Set
- (1) Bracket for Radar Detector
- (2) Screws and washers for bracket
- (2) Dual lock tapes
- (5) Locking cable ties
- (1) Power cable
- (1) Speaker
- (1) AC/DC Adaptor

## INSTALLATION

**Radar Detector:** It is very important that the antenna is mounted properly. Determine the best location for the Radar Detector. The optimal location for mounting the Radar Detector depends on the motorcycle's type.

For **Speed Bikes** the optimal location is usually found around the cowl or front or side fairings. Under the cowl is probably the best place if your motorcycle allows it.

For **Cruisers** the optimal location is usually found under the headlight. Choose a location that better suits your motorcycle type. Make sure it will have a clear view of the road.

Using the supplied mounting bracket, mark location. Drill pilot holes in the motorcycle if desired and/or necessary. Make sure bracket is securely fastened.

Avoid placing Radar Detector in a location that will interfere with the view of the road or the gauges.

Fit the mounting bracket using the washer screws.

Make sure that the lens of the antenna faces in the driving direction.

Note:

**DO NOT** drill holes in the Radar Detector itself and always thoroughly inspect the location before drilling any holes. **We do not recommend installing the unit with locking tape although sometimes it is used.**

Note:

The Radar Detector may not power on if engine is not running.

## CONNECTING TO POWER SUPPLY

Connect the Radar Detector power cable to any power source that has 12V and is powered with the ignition. Example: ignition fuse or main power fuse. **DO NOT** connect directly to battery.

The wire with both red and black is positive.

The solid black wire is ground.

Press the POWER button on the wireless Head Set. Communication between radar and Helmet device will be automatically connected, as long as the detector is powered on by motorcycle.

Keep all cables away from moving parts and hot surfaces (motor, tires, muffler, etc.).

Make sure the wires are fastened securely with provided cable ties to avoid accidental damage to the wire.

Extra wire should be fastened securely and placed out of the way.



**Warning:** The flashing LED in the Head Set can be extremely bright, especially at night time. It can be distracting and dangerous if you are not familiar with the brightness level. Before riding with the Visual Alert,

## **WIRELESS HEAD SET**

Before installing the Head Set make sure you leave enough space to be able to position the LED in view.

Mount the Head Set on the helmet using the dual lock tape. Thoroughly clean any surface before the tape is applied.

Position the LED display in such a way that it doesn't interfere with your view of the road, but is still visible.

Mount speaker inside of the helmet using provided dual lock tape.

Make sure to tuck in extra speaker wire so it will not interfere with turning of the head.

Position the speaker and power connector face down to prevent them from damage from the elements.

## **RADAR DETECTOR FUNCTIONS:**

- K and Ka band detection
- Laser signal detection
- LED Display
- Auto Mute
- Volume Level memory
- Head Set Low Battery Alarm
- Auto Power Off after 1 hour of inactivity
- Head Set Battery Charge Mode
- Head Set Three Buttons [ (+)Volume Up – (0) Power– (-) Volume Down]



## **LED DISPLAY OPERATION**

The LED of the Head Set displays all of the different radar and laser alerts.

- On Standby: LED is OFF
- K band, Ka band and Laser alert: LED blinking
- Radar Signal Strength Level 1: blinking slow
- Radar Signal Strength Level 2: blinking fast
- Radar Signal Strength Level 3: blinking faster than level 2
- Head Set Low Battery Alarm: LED quickly blinks 5 times every 20 minutes
- Head Set Auto Power Off Alarm: LED blinks once per second for 10 seconds
- Head Set Battery Charge Mode: LED On while battery charging and LED off when completed.

## **PREAMBLE OPERATION**

In preamble mode the LED will be on for 3 seconds with one beep alert when you turn on the power. If the Volume Up or Down button is pressed, the unit will exit preamble operation.

## **POWER BUTTON**

Press power button to turn on the power. LED will stay on for 3 seconds with one beep when power on. You get one long beep when head set is connected with the radar. Press and hold power button for two seconds to turn off the power. The head set will give power off beep with led blinking. It gives a 2 beeps alerts every 10 seconds when disconnected.

## **VOLUME UP BUTTON**

Press Volume up button to increase it from level 1 to level 5. Volume level 1 and 5 give one long beep and levels 2-3-4 give one short beep. Factory Default is level 3.

## **VOLUME DOWN BUTTON**

Press Volume down button to decrease it from level 5 to level 1. Volume levels 1 and 5 give one long beep and levels 2-3-4 give one short beep. Factory default is level 3.

## **RADAR AND HEAD SET CONNECTION**

The Head Set and Radar Detector will automatically connect as soon as both the Head Set and the Radar Detector are powered on. The Head Set will give one beep when it is connected with radar. If the Head Set does not receive any data from the Radar Detector for 5 seconds, the Head Set will give a 2 beep alerts every 10 seconds as a disconnection alert.

## **HEAD SET AUTO POWER OFF**

The Head Set will auto power off after 60 minutes of inactivity. The Head Set will give auto power off warning alarm if disconnection continues for more than 60 minutes. Head Set will give one beep per second for 10 seconds with LED blinking. Press any button to cancel auto power off during 10 seconds warning.

## **RADAR & LASER SIGNAL STRENGTH**

There are 3 levels of signal strength alarms for K and Ka bands. Laser alert level is not related to signal strength. Laser alert remains at the same alert level.

## **AUTO MUTE OPERATION**

The Head Set will beep 4 times to alert for K, Ka and laser detection Every two minutes if the signal is still present the unit will beep 4 times then goes back to mute status until signals are out of range or a new signal is detected.

## **HEAD SET LOW BATTERY ALARM**

The Head Set will give a beep alert with the LED blinking 5 times every 20 minutes if the Head Set is running low on battery. Charge the battery using the supplied adaptor. The Head Set will not work when it is charging.

## **HEAD SET BATTERY CHARGE**

Connect the supplied adaptor to the power jack of the Head Set to charge the battery. The LED will turn on until the battery has been fully charged. Once the battery is fully charged the LED will turn off.

## **MEMORY**

The Head Set will store the volume levels in the memory.

## **SPEAKER**

Connect the speaker jack into the audio hole of the Head Set.



**Using a Charger that is not supplied for the Head Set is not recommended. Any damages caused by this voids warranty. We will not be held liable for any damaged caused by a different charger.**

## FREQUENTLY ASKED QUESTIONS

- **Is the Radar Detector water proof?**

The Radar Detector is weather proof. The Radar Detector was designed to be resistant to rain or a carwash. It is however best to keep the unit from being submerged in water.

- **My Head Set and Radar detector do not connect with each other?**

Check the connection of the detector with the motorcycle and make sure the ignition is running. Check that the Head Set has been charged completely before trying to use it for the first time. Check the 2 amp fuse in the power cable.

- **How Can I tell if the detector itself is on?**

If there is no connection between the Head Set and Radar Detector the Head Set will give 2 beep alerts every 10 seconds as a disconnection alert to let you know that the Radar detector is not receiving power.

- **Can the Head Set or Radar Detector module be connected to other things such as Bluetooth?**

No it is not Bluetooth. The Head Set uses Wireless Data communication.

- **LED does not blink.**

Make sure the Head Set has been fully charged.

- **The detector shakes a lot where it is mounted will it mess up?**

No the Radar detector was made to withstand constant shaking. Make sure that the bracket is securely fastened.

- **I cannot hear anything through the speaker?**

Make sure the wire is connected to the right port and the unit is powered on. Make sure the Head Set was charged. Check the wire for any damage that might have occurred.

- **Will the Head Set bend with the air if so what can be done to prevent it?**

The Head Set should not move with the air as long as it was installed flat on the Helmet with the double sided tape that was provided.

- **Accidentally the motorcycle was dropped. Is the detector shock resistant?**

Yes the Radar detector was made to withstand shock but inspection of the power cable should be performed.

- **Do you sell extra Head Sets?**

Yes you can purchase a Head Set or Radar Detector separately.

- **How long does the Head Set Battery last between charges?**

Full battery charge will last about 15hrs based on no alerts; it will decrease depending on the frequency of alerts. Full battery charging time is about 1hr 30min.

**For a full list of frequently asked questions please visit our website.**

## LIMITED WARRANTY

The manufacturer warrants your *Moto-Raptor* against all defects in materials and workmanship for a period of one (1) year 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 *Moto-Raptor*. 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 an \$82.00 Service fee and a 90 day warranty on repairs.

Send to: Rocky Mountain Radar  
6469 Doniphan Drive  
El Paso, Texas 79932  
(915) 587-0307 phone  
(915) 587-6408 fax

**We do not accept COD shipments.**

**We do not accept freight collect shipments.**

### **Tamper Fee**

**No repair or replacement will be attempted by the manufacturer on units that have been modified, disassembled or tampered with. There will be absolutely No exceptions.**

## **SPECIFICATIONS**

### **RADAR**

- Receiver Type: Dual conversion superheterodyne
- Antenna Type: Linear polarized, self-contained Antenna
- Device Type: Frequency discriminator
- Frequency of Operation
  - 24.050 \_ 24.250GHz(K band)
  - 33.400 – 36.000GHz(Ka super wide band)

### **LASER**

- Receiver Type: Pulsed laser signal receiver

### **GENERAL**

- Operation Temperature: -20C --- +70C
- Storage Temperature: -30c --- +100C
- Power Requirement: 12V to 15V DC, 150mA negative ground

Specifications are typical. Individual units might vary.  
Specifications are subject to change without notice.

## **FUSE REPLACEMENT**

The power cable contains a 2-amp fuse that is replaceable. Check and replace if needed.

## **ACCESSORIES:**

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Accessories are available as follows:

Head Set.....	\$150.00
Radar Detector.....	\$150.00
Installation Kit.....	\$20.00
2-Amp Fuse..... (Two Fuses)	\$2.00
Replacement Owner's Manual..... (Free online download from our website)	\$3.50

Add \$10.00 Shipping and handling per shipment for accessories only.

Register your email on our website and receive a free gift.  
**(Your private information and email will not be shared with other companies.)**

**VISA/MC and DISCOVER ACCEPTED  
NOTES**



Serial Number: \_\_\_\_\_

Date of purchase: \_\_\_\_\_

Purchased From: \_\_\_\_\_

(Keep information for future reference)

# MEMO



Rocky Mountain radar  
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(915)587-0307 Phone  
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