MOULTRIE MOBILE™

Instructions for Field Modem MV1

THANK YOU for your purchase of the Field Modem MV1. Please read this booklet before using the unit. If you should have any questions about this product or any other Moultrie product, please contact us using the information on the back of this booklet. Please register your Field Modem MV1 at **www.moultriefeeders.com/warranty-form** to activate your warranty.

IMPORTANT - BEFORE YOU START

Please read the below checklist of what is needed to get set up on the Moultrie Mobile System. We will walk you through the set up in the following pages of this manual.

❑ **MoultrieMobile.com** account and data plan

  1. Data plan purchased through Moultrie at time of activation.
     (this process covered in section B2)

❑ Verizon Network 3G Coverage

  1. Go to the cameras section on MoultrieMobile.com to check if you have coverage
     in your location

❑ Compatible Camera

  1. Firmware update may be required. Go to **MoultrieFeeders.com/firmware-faq**
     for more information.

  2. Batteries – 8 AA or 12AA (depending on camera).
      See Page 12 for important battery information.

  3. SD Card – we recommend an 8GB or smaller Class 10 SD card

❑ Computer/browser/internet

❑ Field Modem MV1

  1. USB Cable & Antenna (both included in box)

  2. Serial # and Modem ID located on the back of the modem
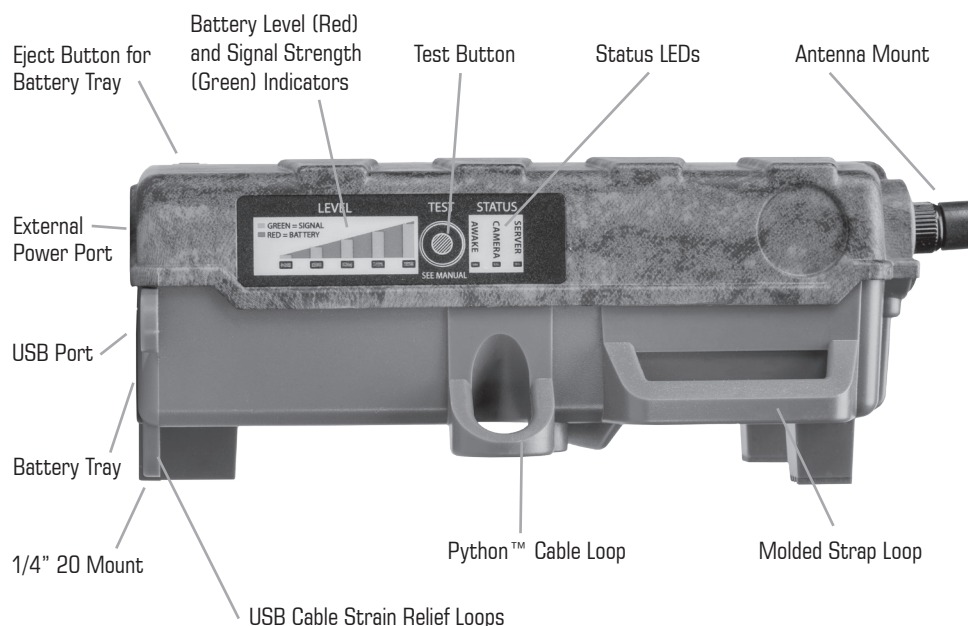
  3. Batteries – 8AA

We recommend that you write down the Serial # and Modem ID from the back of the modem below and keep this manual for reference after setting up your modem.

Serial # :

Modem ID:

IMPORTANT: It is recommended that you go through the setup process at home to ensure your modem is working correctly before taking to the field for use. For any questions or concerns, please contact Customer Support anytime via email at **CustomerSupport@MoultrieMobile.com** or call **1-800-653-3334** Monday through Friday 8 a.m. to 5:00 p.m (CST).

Eject Button for Battery Tray

Battery Level (Red) and Signal Strength (Green) Indicators

Test Button

Status LEDs

Antenna Mount

External Power Port

USB Port

Battery Tray

1/4" 20 Mount

USB Cable Strain Relief Loops

Python™ Cable Loop

Molded Strap Loop

Mounting Features
There are three different mounting features available for the Field Modem MV1: Molded Strap Loops, Python Cable Loop, & 1/4" 20 Mount. A mounting strap is provided for you to attach the modem to a tree or post through the molded strap loops. For added security, you can attach the modem to a tree with a Master Lock "Python" cable locking system. Or you can use the 1/4" 20 mount with the Moultrie EZ Tree Mount or Camera Stake accessories. Visit **MoultrieFeeders.com** to purchase these mounting accessories.

Battery Tray
The Field Modem is powered by eight (8) AA alkaline or lithium batteries. Lithium batteries are recommended for optimum performance. Do not mix alkaline and lithium batteries and never mix old and new batteries when replacing. **Do NOT use rechargeable batteries.**

External Power Port
The External Power Port is used to connect an optional Moultrie Power Accessory to extend battery life. It is strongly recommended that you still install internal batteries when using the external power port. Doing so will allow continued operation in the event the external power supply becomes disconnected. Visit **www.MoultrieFeeders.com** to purchase Moultrie Power Accessories.

USB Cable
A steel braided weather and animal resistant USB cable is provided with your Field Modem MV1. This cable will connect your modem with Moultrie Mobile compatible cameras.
Visit **www.MoultrieMobile.com** for a list of compatible cameras.

IMPORTANT: only use the provided USB cable with your Moultrie Mobile system.

B | SETUP INSTRUCTIONS

1. Setup Moultrie Mobile Account Online
Go to **www.MoultrieMobile.com** and select "Register New Account". Please enter all requested information to submit your account registration. **IMPORTANT:** after submitting your registration, you will receive an email at the email address you provided. You will not be able to log into your account at **www.MoultrieMobile.com** until you have confirmed your registration through this email. Please check your spam, clutter, junk, etc folders for this email. Should you not receive the confirmation email, please call customer service.

**2. Activate Field Modem & Choose a Data Plan**
Upon confirming your account registration and logging into MoultrieMobile.com, you will be prompted to activate a modem. You can begin the modem registration process then, or should you choose to wait and activate your modem later, go to "Activate Modem" under the "My Account" drop down at the top of your MoultrieMobile.com account.

To begin the modem activation process, you will need the Serial Number and Modem ID from the back of your modem. Enter this information into the requested fields and select "Next". Choose the monthly data plan that you want for this modem. If you are activating more than 1 modem select "Add Another Modem", or to continue with activation for the 1 modem select "Next".

If you already have a credit card on file you will proceed to the "Summary" screen where you can confirm the Serial Number and Modem ID as well as the monthly data plan you selected for the modem. If you want to change the data plan, select "Edit" under the "Actions" section. Otherwise, select "Purchase" to complete your modem's activation.

If you do not have a credit card on file, after choosing the data plan and selecting "Next" you will be directed to the Credit Card section to add your information. Once you click "Save" you will be redirected back to the "Summary" screen. Once you have confirmed the Serial Number, Modem ID, and monthly data plan click "Purchase" to complete your modem's activation.

NOTE: The data and price will be prorated based on when you are activating in the month.

Modem Serial Number

Modem ID
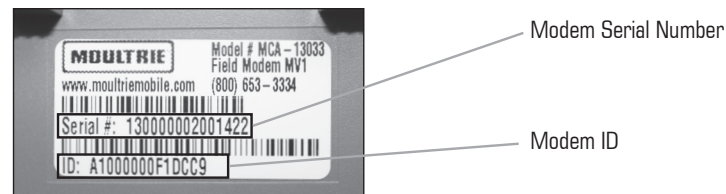
3. Prepare Your Camera
Make sure you have a Moultrie Mobile compatible camera. You can see a full list of compatible cameras by going to **www.MoulrieMobile.com** and selecting "CAMERAS" at the top of the website.

Check that your camera has the latest firmware by going to **www.MoultrieFeeders.com/firmware-faq** for a list of the newest firmware by camera as well as step-by-step instructions. **IMPORTANT:** this firmware step is very important to ensure full operation of your Moultrie Mobile system.

Ensure your camera has fresh alkaline or lithium batteries. We recommend Energizer™ lithium batteries. **NOTE: Do NOT mix old and new batteries and do NOT use rechargeable batteries.**

Insert a new SD card that is empty and has been properly formatted. To format the card, go to "Erase All Images" on your camera and select "YES". We recommend that you use an 8GB or smaller Class 10 SD card.

4. Setting your Camera

For camera models with the "Custom Start" option, your camera must be set to "Custom Start" to ensure full compatibility with Moultrie Mobile. If your camera does not have "Custom Start", set it to the "ON" position.

The first time your modem connects to the Moultrie Mobile server, your camera settings will be overwritten by the default values on the website. You can change to your desired camera settings from the camera, website or mobile app after your camera and modem have connected to sever for the first time.

We recommend that you set the date and time on your camera prior to connecting it to the modem so your pictures will have the correct date and time once transmitted to your account.

Note: Although your camera can still record and store video, video will not be transmitted to the Moultrie Mobile server.

5. Prepare Your Modem

Attach the antenna provided in the Moultrie Mobile box to the top of your modem. Rotate antenna base clockwise to attach the antenna to the modem.

IMPORTANT: do not overtighten the antenna. Hand tighten only.
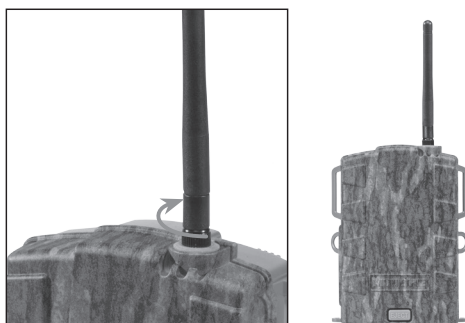
Push the eject button on the front of the modem to release the battery tray. Install 8AA batteries following the polarity markings on the battery tray. Reinsert the battery tray into the modem. **NOTE:** ensure the modem has fresh alkaline batteries (don't mix old and new batteries), and do NOT use rechargeable batteries. .

**6. Connect the Modem to the Camera**

Plug the micro USB end of the cable into your Moultrie game camera's micro USB port, ensuring the rubber gasket fits snugly in the opening. Connect the other end of the USB cable into the Field Modem. *Note: to ensure the rubber gasket is inserted properly, we recommend that you insert the gasket into the camera's micro USB opening before plugging the cable in. If your cable is inserted correctly, you will not be able to see the two holes on the front side of the USB cable.*
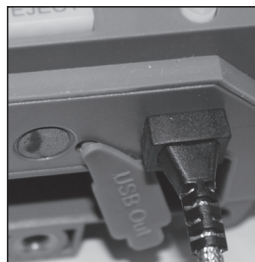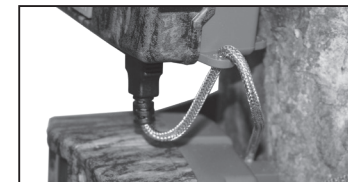
Camera's USB Port　　　　　　　　　**Modem's USB Port**
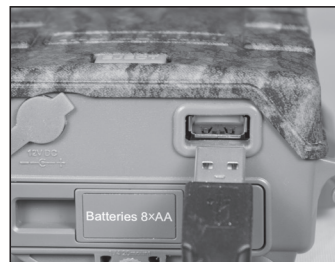
To reduce the potential of unwanted disconnections, we recommend that you thread the braided USB cable through the USB cable strain relief loops on the side of the camera and modem.

7. Mount Field Modem MV1 Next to Or Above Camera

Thread the mounting strap through the molded strap loops on the back of the modem and camera. Secure the straps around a post or tree, being careful to avoid sharp bends on the USB cable. Ideal positioning of the modem is above your game camera – see picture.

IMPORTANT: It is recommended that you go through the below steps at home before deploying your camera in the field to ensure your modem is operating correctly.

Field Modem MV1

Moultrie Game Camera

8. TEST Button

Press the "TEST" button once to force the modem to begin the communication process with the camera and server.

To avoid sending old photos on the camera's SD card, hold the test button for 10 seconds. Some scenarios where you wouldn't want to send old photos include:

- When installing new batteries in the modem, if you don't want to send camera photos that may have been taken while the modem was dead.

- When installing a different SD card in the camera that may have old photos that you don't want sent to your Moultrie Mobile account.

- When connecting your modem to a camera that has been running and has old photos that you don't want sent to your Moultrie Mobile account.

9. STATUS LED's

- **Awake** – a green LED will illuminate upon pressing the TEST button if the Field Modem is awake and operational

- **Camera** – a green LED will illuminate after the Field Modem has successfully connected to camera. **IMPORTANT:** for your modem to connect to the camera for the first time, the camera must have taken at least 1 new picture

- **Server** – a green LED will illuminate after the Field Modem has successfully communicated to the Moultrie Mobile server.

Note: if all of the above LEDs do not illuminate after 5-10 minutes please refer to the Troubleshooting on Page 6.
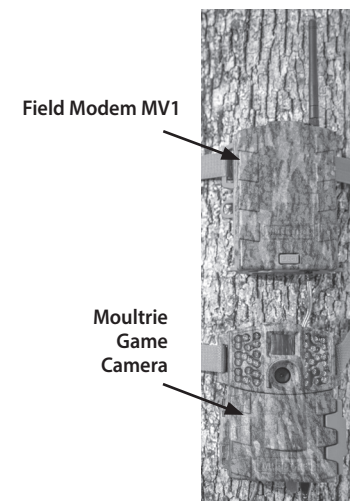
MOULTRIE MOBILE MV1 – TROUBLESHOOTING GUIDE

NOTE: When activating your modem, if it appears to not be properly connecting, please eject battery trays from both camera and modem and remove USB cable, then reattach cable, insert batteries in camera, then modem. Turn on camera and then press the TEST button on the modem.

| SYMPTOM	POSSIBLE CAUSE	POSSIBLE SOLUTION
TEST button is pressed, but Awake LED is off.	1. Batteries not installed or batteries are dead. 2. Modem is not functioning properly	1. Install fresh batteries 2. Contact Moultrie Customer Service
Awake LED is on and Battery Level shows only one red LED.	1. Batteries are very low.	1. Install fresh batteries
Awake LED is on and Cellular Signal LEDs are off.	1. Not enough time allowed to determine signal strength 2. Insufficient Verizon 3G network coverage	1. Allow at least 20 seconds for signal strength to be established. 2. Move Modem to less obstructed location or to a location with better coverage. If your Modem will still not connect, contact Moultrie Mobile Customer Service.
Awake LED is on and Camera LED is off.	1. Not enough time allowed to determine Camera Communications 2. Camera USB Cable is not connected to Camera 3. Camera is not turned on 4. Camera batteries are dead 5. Camera USB Cable is improperly connected 6. Camera USB Cable is damaged 7. Internal communication fault	1. Allow at least 20 seconds for Camera LED to be established 2. Connect Camera USB Cable to Camera 3. Turn on Camera 4. Install fresh batteries in Camera 5. Check for proper connection and integrity of Camera USB Cable 6. Check Camera USB Cable for damage. 7. Contact Moultrie Customer Service
Awake LED is on, Cellular Signal Strength LEDs are on, and Server LED is off.	1. Not enough time allowed to determine Wireless Communications 2. Wireless Modem is not active. 3. Moultrie network server is down	1. Allow at least 3 minutes for Wireless LED to be established 2. Activate the wireless modem via the setup instructions starting on page 3 of this manual. Verify that the modem successfully activated. 3. Check online for notification. Wait for server to come on-line
Awake LED is on, Camera LED is on, Cellular Signal Strength LEDs are on and Wireless LED is on, but photos are not being uploaded.	1. Modem has not connected to network yet based on "Transmit Frequency" setting 2. No new photos have been taken 3. No SD card in camera or SD card is full 4. Monthly data limit has been reached	1. Wait until Modem connects to network 2. Check camera to determine if new photos have been taken since last upload 3. Delete photos from Camera, replace SD card, or change Camera setting to activate Managed Memory 4. Increase monthly plan limit or purchase additional data; visit website and check status before purchasing additional data
Awake LED is on, Camera LED is on, Cellular Signal Strength LEDs are on and Server LED is on, but online settings and Camera settings are not synchronized.	1. Modem has not connected to network yet based on "Transmit Frequency" setting	1. Wait until Modem connects to network
Batteries do not seem to last long enough.	1. Modem "Transmit Frequency" set to "immediate" 2. Large number of photos being captured and transmitted. 3. Lithium or alkaline batteries are not being used	1. Set "Transmit Frequency" to once per day 2. Reduce Camera settings for Photo Delay, Multi-Shot, and/or TimeLapse Interval. Move camera to location that has less traffic 3. Replace batteries with alkaline or lithium batteries
Getting too many photos.	1. Camera is set to take more photos than necessary	1. Reduce Camera settings for Photo Delay, Multi-Shot, and/or TimeLapse Interval. Move camera to location that has less traffic
Data plan is being used up too quickly.	1. Number of photos being captured is high 2. Monthly data plan is too small 3. Requesting a large number of high resolution images.	1. Reduce Camera settings for Photo Delay, Multi-Shot, and/or TimeLapse Interval 2. Increase monthly data plan 3. Request fewer high resolution images and/or decrease the resolution setting on the camera.

10. LEVEL LEDs

On initial power up, or when pressing the "TEST" button, the "LEVEL" indicator LEDs will illuminate red.

• The first LED turns green once the modem starts its connection process.

• The second LED turns green once there is good signal quality.

• The third and fourth LED turns green as the modem connects to the Verizon network.

• The fifth LED turns green once the modem has completed connection.

After all 5 LEDs turn green, the LED indicators will cycle back and forth between red and green to show the modem battery and signal strength.
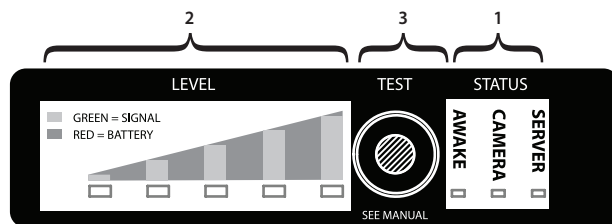
LEDs LIT	BATTERY LEVEL (RED)	SIGNAL STRENGTH (GREEN)
	Unit not in WAKE/TEST Mode	No Signal
•	Battery Low - Replace batteries and/or external supply	Marginal Signal Strength - May lose ability to transmit
• •	Battery Level between 20-40%	Acceptable Signal Strength
• • •	Battery Level between 40-60%	Good Signal Strength
• • • •	Battery Level between 60-80%	Better Signal Strength
• • • • •	Battery Level above 80%	Best Signal Strength

Note: Higher Signal Strength will allow for more reliable and faster transmissions and improve battery life.

If the STATUS and LEVEL LEDs do not illuminate as described in section B9 & B10 please contact Moultrie Mobile Customer support for assistance at 1-800-653-3334 Monday through Friday from 8am to 5pm CST.

11. Verify Operation

Once deploying your modem to the field, before leaving, we recommend you reverify the modem operations check performed at home. Please reference section B9 & B10 for more information. Should you need any assistance please contact Moultrie Mobile customer support.

1. Camera Settings

Online camera settings and actual camera settings are synchronized whenever the modem and camera communicate with the server at the scheduled check in times. Or you can press the "TEST" button once to force the camera and modem to check in with the server to update settings. During synchronization, if an online setting and corresponding camera setting are different, the camera setting is updated to the value that was most recently set.

Camera settings vary from camera model to camera model – refer to your camera instructions for details on settings. Refer to section B4 for more information on setting your camera.

Note: Settings for 2015 A-Series cameras controlled by input switches - Detection Delay, Resolution, Photo or Video - cannot be set remotely.

2. Upload Frequency
The upload Frequency setting applies to your Field Modem. It regulates how often the Modem connects to the network to upload photos and synchronize online settings.

NOTE: You <u>must</u> be logged-in to your account on www.MoultrieMobile.com to adjust the Upload Frequency settings for the Modem. You will find the upload frequency setting under "Edit Settings" on the Cameras dashboard.

• **Once per day (1/day)** – provides the longest battery life

• **Twice per day (2/day)**

• **Immediate** – The modem will not transmit a picture when in "Immediate" mode until there has been no activity from the camera for at least 15 seconds.

    NOTE: If there has been continuous activity for 2 minutes, the modem will automatically transmit pictures to the Moultrie Mobile server.

For all upload frequencies (except Immediate), specific upload times will be determined by the Moultrie Mobile server.

3. Upload Warning Limit
The upload warning limit allows you to set the maximum number of pictures that will automatically upload when the modem connects to the server without receiving your approval. You can set this limit under "edit settings" on your camera's dashboard which can be viewed on both the website and apps. **NOTE: The upload warning limit automatically defaults to 50, but you can change this to better suite your preferences.**

If your modem checks in and has more pictures to upload than the upload warning limit is set to, you will be prompted with a warning message on your camera's dashboard, telling you how many pictures are available for upload. If you choose to "Upload", all the images they will be uploaded at the next modem check in. If you choose "Skip", the images will not be uploaded to your Moultrie Mobile account, but they will remain on the camera's SD card.

NOTE: No images will be uploaded to your account until you clear the warning message for your camera by selecting either "Upload" or "Skip".

For example: if you deploy your camera to a location where 100 pictures a day would be the most you would expect to receive, you may set your upload warning limit to 100. Then when your camera checks in, if it has more than 100 pictures you have the opportunity to choose whether or not to use your data to upload those pictures.

D GET MOULTRIE MOBILE APP!

The Moultrie Mobile app is FREE for iOS and Android! Search "Moultrie Mobile" in the Apple App Store™ or on Google Play™.

The Moultrie Mobile app allows you to:
- Easily view, manage and share your pictures
- Change you camera settings straight from your smartphone
- Monitor the status of your camera and modem, such as data usage & battery and SD card levels
- Manage your account notification settings and preferences
- And more!

Scan the QR codes above to take you directly to the Moultrie Mobile App for download.

Google Play is a trademark of Google Inc.

Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries.
App Store is a service mark of Apple Inc.

E MOULTRIE ACCESSORIES (Sold Separately)

Visit **www.MoultrieFeeders.com** to purchase these and other accessories:

Moultrie EZ Tree Mount
Three-pack allows you to quickly and easily mount three different game cameras or Field Modems! Connects to the modem via the 1/4' 20 mount.
MFHP12571 • 0-53695-12571-8

Moultrie Universal Camera Stake
Position your game camera or modem anywhere you want it in an instant with this heavy-duty, powder-coated steel mounting stake.
MCA-13051 • 0-53695-13051-4

Moultrie Camera Power Panel
To extend the life of your camera or modem in the field, connect the Moultrie Camera Power Panel. Place near the tree where the camera or modem is mounted and where it will receive the best sun exposure. We recommend leaving internal batteries in the camera or modem during use for cases where the power panel wasn't able to receive sunlight.
MFHP12401 • 0-53695-12401-8

Moultrie Battery Box
Extend the field life of your Moultrie camera or modem with a long-lasting, rechargeable external power source. Place near the tree where the camera or modem is mounted. Plug the Battery Box to the External Power Port.
MCA-12604 • 0-53695-12604-3

Moultrie Power Y-Splitter
Designed so that you can use a single power accessory, like the Moultrie Camera Power Panel or Moultrie Battery Box, to power both your Moultrie Mobile Field Modem and Camera.
MCA-13192 • 0-53695-13192-4

Important Battery Information

- Only use Alkaline or Lithium batteries. We recommend the use of Energizer lithium batteries.
- Do not mix old and new batteries. Always replace ALL the batteries at the same time.
- When the Field Modem is not in use, please remove the batteries.
- **DO NOT USE RECHARGEABLE BATTERIES.**
- Insert battery tray with batteries facing towards the front of the Field Modem.

NOTE: When using lithium batteries, the Moultrie Mobile system may report near full capacity and quickly drop to indicate low voltage within a short period. This is due to the properties of lithium batteries and is expected behavior.

Moultrie Limited Warranty

This product has been thoroughly tested and inspected before shipment. It is guaranteed from defects in material and workmanship from the date of purchase for 2 years. Under this limited guarantee we agree to replace or repair free of charge any part or parts which have been found to be defective in original material or workmanship. Should you require in-warranty service, call our Customer Service Department. If your problem cannot be addressed over the telephone, we may need you to send us your defective product plus proof of purchase.

You must register your Field Modem at **www.moultriefeeders.com/warranty-form** to activate your 2-year warranty. Physical damage, alterations or tampering with the equipment is not covered under warranty and will invalidate your warranty.
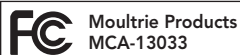
Contact Us

For any other questions contact us at **www.MoultrieMobile.com/#/contact**

Returns and Repairs

Please visit **http://www.moultriefeeders.com/return-policy** and complete the form or our Service Department will gladly answer any questions you have. Call 800-653-3334, Monday - Friday, 8:00 AM to 5:00 PM CST.

FCC Statements

FC	Moultrie Products MCA-13033

Field Modem MV1

Note: changes and modifications not expressly approved by the party responsible could void the user's authority to operate this device.

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.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

NOTE: This device complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

MOULTRIE MOBILE™

www.MoultrieMobile.com

PRADCO Outdoor Brands • 3280 Highway 31, Ste B • Calera, AL 35040

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