#### **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.
- Do not mix different brands of batteries or alkaline and lithium batteries.
- When the Field Modem is not in use, please remove the battery tray.

#### - 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.

#### Helpful Tips to Ensure Proper Communication Between Camera and Field Modem

- We recommend that you have one dedicated SD card for each camera.
- Avoid swapping SD cards between cameras or other digital devices.
- Always format your SD card in the camera before each use.
- DO NOT use micro cards inside the camera or any other type of SD card that is not compatible with the camera.
- DO NOT use high speed/performance SD cards inside the camera when using the field modem.
- Keep firmware current on the camera and modem.
- DO NOT use a security code on the camera when connected to the modem.
- Only use the USB cable provided with the Field Modem.

#### **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, contact our customer service using the "Contact Us" section of MoultrieMobile.com or the Moultrie Mobile app.

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 questions go to the "Contact Us" section of MoultrieMobile.com or the Moultrie Mobile app.

#### Warranty Returns

Please visit http://www.moultriefeeders.com/return-policy and complete the return form. For questions go to the "Contact Us" section of MoultrieMobile.com or the Moultrie Mobile app.

#### FCC Statements





Field Modem MV2

Field Modem MA2

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

1) Changes or modifications not expressly approved by EBSCO Industries Incorporated could void the user's authority to operate this device.

- 2) 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.
- (3) this device must be placed a separation distance of at least 20cm from all persons.

## MOULTRIE MOBILE<sup>®</sup>

### www.MoultrieMobile.com

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

10182018 / MCA-13300 • MCA-13311



## Instructions for Cellular Field Modem

THANK YOU for your purchase of the Field Modem. 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 at **www.moultriefeeders.com/warranty-form** to activate your warranty.

### **IMPORTANT - READ 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.

Field Modem

- 1. USB Cable (included in box)
- 2. Serial # and Modem ID located on the back of the modem
- 3. Batteries 8AA (Energizer Lithium batteres recommended)
- 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
- 4G Network Coverage

1. Go to MoultrieMobile.com to verify coverage in your location.

- □ Computer/Phone/Tablet/Internet Connection
- Carl Register an account at MoultrieMobile.com or from the Moultrie Mobile app
  - 1. Plan purchased through Moultrie Mobile at time of activation. (this process covered in section B2)

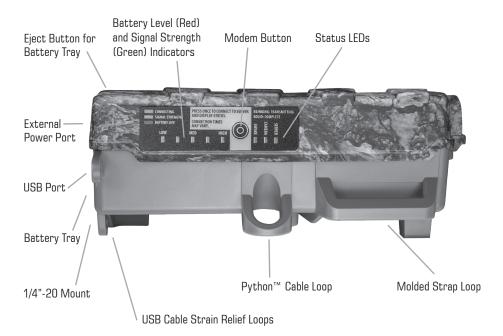
We recommend that you write down the Serial # and Modem ID from the back of the modem in the spaces below and keep this manual for reference after setting up your modem.

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 questions go to the "Contact Us" section of **MoultrieMobile.com** or the Moultrie Mobile App.

### A MODEM OVERVIEW



#### **Mounting Features**

There are three different mounting features available for the Field Modem: 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. *IMPORTANT: DO NOT use rechargeable batteries. See page 12 for important battery information.* 

#### **External Power Port**

The External Power Port is used to connect an optional Moultrie Power Accessory to extend battery life. Internal alkaline or lithium batteries are required 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. 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 USB cable that is provided with your Moultrie Mobile system.

### **B** SET-UP INSTRUCTIONS

**1. Set up your account at MoultrieMobile.com or on the Moultrie Mobile app** 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 until you have confirmed your registration through this email. Please check your spam, clutter, junk, etc., folders for this email. The activation link expires after 24 hrs. For questions go to the "Contact Us" section of MoultrieMobile.com or the Moultrie Mobile app.

#### 2. Activate Field Modem & Choose a Plan

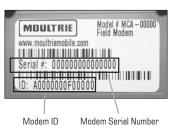
Upon confirming your account registration and logging into your account via the website or app, you will be prompted to activate a modem. You can begin the modem registration process then, or should you choose to wait and activate your modem later, go to "Activate Device" under the "My Account" section.

To activate, you will need the Serial Number and Modem ID (noted as "ID") from the label on the back of the modem. The app and website will walk you through the activation process step by step. If you do not have a credit card on file, the system will prompt you to add one before you complete the activation process.

The plan is purchased directly from Moultrie during the activation process. Should you experience any activation issues, contact Moultrie Mobile Customer Service for assistance, not the cellular network provider. Note that the plan will be prorated based on when you activate in the billing cycle.

# NOTE: You can use the Moultrie Mobile app to quickly scan the label on the back of the modem to automatically populate the Serial Number and Modem ID. To get started, tap "My Account" at

the bottom of the screen, then choose "Activate Device" and then select "Scan". When the scan screen appears, hold it over the label. Once close enough, the scanner will automatically scan the information and populate within the app. If you are having difficulty with the scanner reading the label, make sure you have good lighting and try again. If you are still having difficulty, then you can go back and enter manually.



#### 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.MoultrieMobile.com** and selecting "CAMERAS" at the top of the website.

Check that your camera has the latest firmware by going to **moultriefeeders.com/support-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 optimal operation of your Moultrie Mobile system.* 

Ensure your camera has new alkaline or lithium batteries. We recommend Energizer<sup>™</sup> lithium batteries. *NOTE: DO NOT mix old and new batteries and DO NOT use rechargeable batteries. See Important Battery Information on page 12 for more information.* 

Insert a new SD card that is empty and has been properly formatted to your camera. 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.

### B SETUP INSTRUCTIONS (cont.)

#### 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.

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. Please reference your cameras manual for these instructions, if needed.

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.

# NOTE: Although your camera may be able to record and store video, videos will not be uploaded to Moultrie Mobile. They will stay on your SD card.

Push the eject button on the front of the modem to release the battery tray. Install 8 AA batteries following the polarity markings on the battery tray. Reinsert the battery tray into the modem. *IMPORTANT: Ensure the modem has new alkaline or lithium batteries. DO NOT mix old and new batteries and DO NOT use rechargeable batteries. See Important Battery Information on page 12 for more information.* 

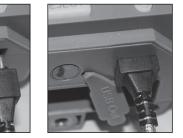
#### 5. Connect the Modem to the Camera

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: Before mounting the equipment, we recommend you ensure the cable is inserted properly. To do so, push the rubber gasket away from the plug, make sure the plug is in the correct direction, and then insert it into the camera. Then push the gasket up into the opening of the camera. Forcing the plug into the camera in the incorrect direction will cause damage to the camera.

It is important that you use the rubber gasket provided with the cable to ensure moisture doesn't get into camera.





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.



#### 6. Mount Cellular Field Modem 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.

#### 7. Modem Button

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

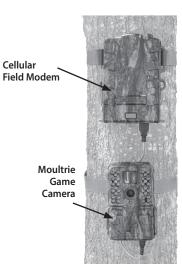
To avoid sending old photos on the camera's SD card, hold the modem button for 10 seconds. Some scenarios where you wouldn't want to send old photos include:

- 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.

#### 8. LEDs

- Awake A solid green LED will illuminate upon pressing the modem button or when the Field Modem is awake and operational.
- Camera A solid green LED will illuminate after the Field Modem has successfully connected to the camera. If there are new images to transmit, the light will begin blinking to indicate that images are being copied over to the modem.
- Server A solid green LED will illuminate after the Field Modem has successfully connected to the Moultrie Mobile Server. If there are new images to transmit, the light will begin blinking to indicate the images are being uploaded to the server.

### **SECTION B CONTINUES ON PAGE 8**



## **MOULTRIE CELLULAR FIELD MODEM – 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 button on the modem.

<b>SYMPTOM</b>	POSSIBLE CAUSE	POSSIBLE SOLUTION
Modem button is pressed, but Awake LED is off.	1. Batteries not installed properly or are dead. No batteries installed.	1. Install fresh batteries.
Modem only transmits images when modem button is pressed.	<ol> <li>Modem upload frequency is not set to immediate.</li> <li>A security code has the camera locked.</li> <li>SD card is not formatted to the camera or the SD card is corrupt.</li> </ol>	<ol> <li>Set the modem upload frequency to immediate via the website or app.</li> <li>Remove the security code from the camera.</li> <li>Format the SD card in the camera or replace the SD card.</li> </ol>
Awake LED is on and Battery Level shows only one red LED.	1. Batteries are very low.	1. Install new batteries.
Awake LED is on and Cellular Signal LEDs are off.	1. Not enough time allowed to determine signal strength. 2. Insufficient 4G network coverage.	<ol> <li>Allow at least 20 seconds for signal strength to be established.</li> <li>Move Modem to less obstructed location or to a location with better coverage.</li> </ol>
Awake LED is on and Camera LED is off.	<ol> <li>Not Enough time allowed to determine camera communications.</li> <li>Camera has a security code.</li> <li>Batteries in modem are to weak to transmit.</li> <li>Camera USB cable is not connected to camera.</li> <li>Camera is not turned on.</li> <li>Camera batteries are dead.</li> <li>Camera USB Cable is improperly connected.</li> <li>USB cable is damaged</li> <li>SD card is not formatted to camera or the SD card is incompatible or corrupt.</li> <li>Camera Firmware is not current.</li> </ol>	<ol> <li>Allow at least 20 seconds for the camera LED to be established.</li> <li>Remove security code form camera.</li> <li>Install fresh batteries in modem.</li> <li>Connect camera USB cable to camera.</li> <li>Turn camera on.</li> <li>Install fresh batteries in camera.</li> <li>Check for proper connection and integrity of camera USB cable.</li> <li>Check USB cable for damage.</li> <li>Format SD card to the camera or replace SD card.</li> <li>Update camera firmware.</li> </ol>
Awake LED is on, Cellular Signal LEDs are on, and Server LED is off.	<ol> <li>Not enough time allowed to determine Wireless Communications.</li> <li>Wireless Modem is not active.</li> <li>Network server is down.</li> </ol>	<ol> <li>Allow at least 3 minutes for Wireless LED to be established.</li> <li>Activate the wireless modem via the set-up instructions starting on page 3 of this manual. Verify that the modem successfully activated.</li> <li>Check online for notification. Wait for server to come on-line.</li> </ol>
Awake LED is on, Camera LED is on, Cellular Signal LEDs are on and Server LED is on, but photos are not being uploaded.	<ol> <li>Modem has not connected to network yet based on "Transmit Frequency" setting.</li> <li>No new photos have been taken.</li> <li>No SD card in camera or SD card is full.</li> <li>Monthly picture limit has been reached.</li> </ol>	<ol> <li>Wait until Modem connects to network.</li> <li>Check camera to determine if new photos have been taken since last upload.</li> <li>Delete photos from Camera, replace SD card, or change Camera setting to activate Managed Memory.</li> <li>Increase monthly plan or purchase additional pictures; visit website and check status before purchasing additional pictures.</li> </ol>
Batteries do not seem to last long enough.	<ol> <li>Modem "Transmit Frequency" set to "immediate."</li> <li>Large number of photos being captured and transmitted.</li> <li>Lithium or alkaline batteries are not being used.</li> <li>Camera firmware is not current.</li> <li>Large number of images stored on SD card.</li> <li>Using a high speed/performance SD card.</li> </ol>	<ol> <li>Set "Transmit Frequency" to once per day.</li> <li>Reduce Camera settings for Photo Delay, Multi-Shot, and/or TimeLapse Interval. Move camera to location that has less traffic.</li> <li>Replace batteries with alkaline or lithium batteries.</li> <li>Update camera firmware (moultriefeeders.com/support-firmware-faq).</li> <li>Delete SD card to eliminate additional images.</li> <li>Replace the SD card with a preferred card.</li> </ol>
Getting too many photos.	<ol> <li>Camera is set to take more photos than necessary.</li> <li>Camera firmware is not current.</li> </ol>	<ol> <li>Reduce Camera settings for Photo Delay, Multi-Shot, and/or TimeLapse Interval. Move camera to location that has less traffic.</li> <li>Update camera firmware (moultriefeeders.com/support-firmware-faq).</li> </ol>
Plan is being used up too quickly.	<ol> <li>Number of photos being captured is high.</li> <li>Monthly plan is too small.</li> <li>Requesting a large number of high resolution images.</li> </ol>	<ol> <li>Reduce Camera settings for Photo Delay, Multi-Shot, and/orTimeLapse Interval.</li> <li>Increase monthly plan.</li> <li>Request fewer high resolution images and/or decrease the resolution setting on the camera.</li> </ol>

### SET-UP INSTRUCTIONS (cont.)

#### 8. LEDs (continued)

B

On initial power up, or when pressing the modem button, the "AWAKE" indicator LED will illuminate green and "BATTERY LEVEL" / "SIGNAL STRENGTH" LEDs will display as follows:

- The first LED will begin blinking amber when the modem begins step one of connection process.

- When the first step is completed, the light will turn solid amber and the second light will begin blinking to indicate the start of step two in the connection process.
- This sequence will continue until all five LEDs are solid amber which indicates a successful connection to the cellular network.

After all 5 LEDs become solid amber, the LEDs will cycle between red and green to show the modem battery and signal strength.

NOTE: If amber lights are cycling from low to high, the modem is updating firmware. Do not interrupt the modem during a firmware update.



LEDs LIT	BATTERY LEVEL (RED)	SIGNAL STRENGTH (GREEN)
NONE	Unit not awake	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 improved battery life. Connection time could take longer in weak coverage areas.

If all the LED's do not illuminate as described in section B8, please refer to Troubleshooting on page 6.

#### 9. Verify Operation

We recommend verifying modem and camera operations before placing and leaving at remote location. Please reference section B8 for more information.

NOTE: An easy way to verify your system is working properly before you leave it is to allow your camera to take a single photo. Then press the button on the side of the modem. When all the lights go out, open the website or app on your phone and make sure you see the image.

### CAMERA SETTINGS

#### 1. Camera Settings

Camera settings set remotely via the app or website are updated on the camera at the next check in/communication with the Moultrie Mobile server. Or you can press the modem button to force the camera and modem to check in with the server to update settings. *NOTE: The settings will always reflect the most recent saved settings, regardless of whether the update was made on the camera or through the website/app.* 

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 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 in most cases.

Twice per day (2/day)

• Immediate – The modem will begin transmitting images 15 seconds after the last activity.

NOTE: If there is continuous activity, the modem will begin transmitting pictures after 2 minutes to the Moultrie Mobile server. The camera cannot take pictures while transmitting images to the server.

#### 3. Upload Warning Limit

The upload warning limit allows you to set the maximum number of pictures that will 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 app. **NOTE: The upload warning limit has a default value that can be changed at any time.** 

If your modem checks in and has more pictures to upload than the upload warning limit value, 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 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.

### 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:

- Activate your device
- Easily view, manage and share your pictures
- Change your camera settings straight from your smartphone
- Monitor the status of your camera and modem, such as battery usage and SD card levels
- Manage your account notification settings and preferences
- And more!

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### E MOULTRIE ACCESSORIES (cont.)

#### **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. MCA-13302 • 0-53695-13302-7



#### Moultrie Battery Box with

Rechargeable 12-Volt Battery and Y-Splitter

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 into the External Power Port. MCA-12604 • 0-53695-12604-3



### MOULTRIE ACCESSORIES (Sold Separately)

#### **Moultrie EZ Tree Mount**

Three-pack allows you to quickly and easily mount three different game cameras or Cellular 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 and modem anywhere you want it with this heavy-duty, powder-coated steel mounting stake. MCA-13051 • 0-53695-13051-4



#### **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 Cellular Field Modem and camera. MCA-13192 • 0-53695-13192-4



Moultrie Replacement USB Cable Steel-braided USB cable. MCA-13044 • 0-53695-13044-6



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