Important Battery Information

- Only use Alkaline or Lithium batteries. We recommend the use of Duracell or Energizer batteries.
- Do not mix old and new batteries. Always replace ALL the batteries at the same time.
- When the camera is not in use, please remove the batteries.

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 1 year. 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 camera at **www.moultriefeeders.com/warranty** to activate your 1-year warranty.

Troubleshooting

Please visit www.moultriefeeders.com/contact-us for troubleshooting and helpful tips.

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



M-990i (Gen2)

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.

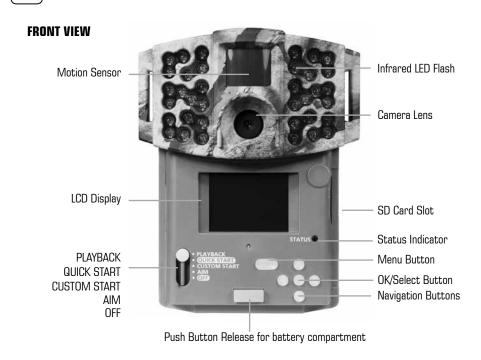




Instructions for M-990i (Gen2) Digital Game Camera

THANK YOU for your purchase of the M-990i (Gen2) Digital Game Camera. 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 camera at **www.moultriefeeders.com/warranty** to activate your 1-year warranty.

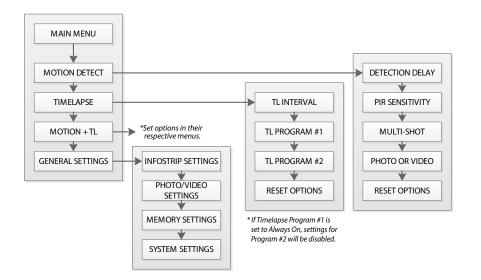
CAMERA OVERVIEW





MOULTRIE M-990i

MOULTRIE ACCESSORIES (Sold Separately)



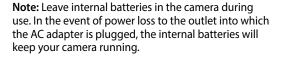
Using a Tree Mount

The camera can also be mounted directly to a tree using a mounting bracket that attaches directly to a tree or pole. Strap the tree mount to the tree and secure, then attach the camera to the tree mount using the tree mount socket located on the back of the camera.



Using the Moultrie AC Adapter

Keep your Moultrie camera running in the field with the constant power of an AC adapter. Plug into a standard 110-240VAC 50-60Hz electrical outlet and then connect to the External Power Port on your Moultrie camera.





DEFAULT SETTINGS

General	
DATE/TIME:	11/11/14 11:11pm
PHOTO QUALITY:	HIGH (4 MP)
VIDEO QUALITY:	HD (1280 x 720)
VIDEO LENGTH:	10 SECONDS
MOTION FREEZE:	ON
CAMERA NAME:	MOULTRIECAM
INFOSTRIP ACTIVE:	YES
TEMPERATURE:	FAHRENHEIT
AC CONNECTED?:	NO
PROGRAM SECURITY CODE:	00000
MANAGED MEMORY:	DO NOT OVERWRITE
ERASE ALL IMAGES:	NO
RESET TO FACTORY DEFAULTS:	NO

Using the Moultrie Camera Power Panel

Place near the tree where the camera is mounted. Place for best exposure to sun. To attach to a tripod secure the power panel to the tripod angled upward for best exposure. Plug the power panel to the Power Panel Plug. This will extend the life of your camera in the field.

Note: Leave internal batteries in the camera during use. The Camera Power Panel needs 4 hours of sunlight to fully power the camera.



Using the Moultrie Battery Box

Extend the field life of your Moultrie camera with a long-lasting, rechargeable external power source. Place near the tree where the camera is mounted. Plug the Battery Box to the Power Panel Plug. This will extend the life of your camera in the field.



N

VIEWING YOUR IMAGES OFF THE CAMERA

MENU MAP

There are a number of ways for you download and view the pictures, videos in the field or at another location.

Removing the SD Card

To remove the SD Memory Card, open the camera cover and push gently on the SD card and it will pop out slightly allowing you to remove it. Load the SD card into the player or card reader to view or move stored images to another location.

Important

Make sure that the camera is in the OFF position before removing SD card.

In the Field

You can download the pictures, videos, and time lapse pictures with the aid of external devices. To download, use an external player or card reader that is supported by 12V DC or Mini USB Jack.



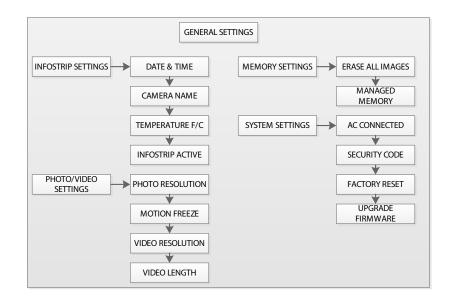


At Home

Remove the entire camera and transport to another location to download images. To connect the camera to a PC computer, turn the camera ON, press the MENU button once to change to SETUP Mode. Connect the USB cord (not included) between the USB out port and the PC computer. The computer will recognize the camera as a removable drive. The unit works with Windows XP/Vista/7 or Mac OS X 10.1 or higher. Copy the images and videos from the camera onto your PC for further editing or printing. When the USB cable is disconnected, the camera will go back to SETUP mode.



See the full line of Moultrie camera accessories at www.moultriefeeders.com



Motion Detect		Time Lapse	
RESET OPTIONS?:	DO NOT RESET	TIME LAPSE INTERVAL:	10 SECONDS
DETECTION DELAY:	10 SECONDS	TIME LAPSE PROGAMS/DAY:	2 PROGRAM
PIR SENSITIVITY:	HIGH	T.L. PROGRAM #1 START TIME:	6 AM
MULTI-SHOT:	1 (OFF)	T.L. PROGRAM #1 STOP TIME:	9 AM
PHOTO OR VIDEO:	РНОТО	T.L. PROGRAM #2 START TIME:	4 PM
		T.L. PROGRAM #2 STOP TIME:	7 PM

CAMERA OVERVIEW (cont.)

PLAYBACK / QUICK START / CUSTOM START / AIM / OFF

Aim - When Aim is ON and the PIR Motion Sensor detects motion, the Status Indicator's red LED on the front of the camera will come on and remain lit as long as motion is detected.

MENU BUTTON

The Menu Button selects Camera Setup or Main Screen. When camera mode is selected, the LEFT and RIGHT buttons navigate through the menu options. The Menu Button is also used to wake-up the camera and turn on the display when the camera is in power saving (or sleep) mode.

OK, UP/DOWN and LEFT/RIGHT BUTTONS

The OK button selects the item to be changed. The UP/DOWN and LEFT/RIGHT buttons are used to step through and modify the menu options. Pressing the OK button again, selects the option indicated on the display. The OK button is also used to manually take a picture.

BATTERY COMPARTMENT

The camera is powered by eight (8) AA alkaline or lithium batteries. Push the battery compartment release button to eject the battery tray. Install batteries as indicated on the engravings on the battery tray, taking care to note the correct polarity.

See Important Battery Information section on the back page of this manual.

SD CARD SLOT

Accepts up to a 32GB SD Card (Class 4 or higher) for photo and video storage.

NOTE: A Class 4 or higher SD Card must be installed for the camera to operate (sold separately).

USB PORT

Download still pictures and video onto your computer by connecting a micro-B to USB cable (not included) to the USB port.

EXTERNAL POWER PORT

Accepts the Moultrie PowerPanel, Moultrie AC Adapter or Moultrie Battery Box accessories (sold separately) only. Refer to **www.moultriefeeders.com** for more information.

NOTE: The use of any other power source will void your warranty and possibly harm your camera.

M

CAMERA SPECIFICATIONS

Memory & Storage

Your camera supports external SD memory cards ONLY and will accept up to a 32GB card (Class 4 or higher). Using large memory cards can slow the camera response. The camera cannot capture any photo or video without external memory. Please insert an SD memory card to operate camera. Estimates are based on the most common types of memory cards that can be purchased at electronic stores, office supply stores, or online. Estimates may vary based on camera settings or environmental conditions.

Important

Always turn the unit off when inserting or removing an SD memory card to avoid damage and ensure that the camera properly updates the memory information.

Photo Mode		
SD Card Size:	2 GB	16 GB
ENHANCED 4224 x 2376	1500	12000
HIGH 2688 x 1512	3800	30400
MED 1920 x 1080	7500	60000
LOW 1280 x 720	19000	152000
Video Mode		
SD Card Size:	2 GB	16 GB
HD 1280 x 720 (based on 10 sec video)	110	880
VGA 640 x 480 (based on 10 sec video)	230	1840

Actual capacity will vary based on image properties.

Specifications

Operational Mode Motion Detect / Time Lapse / Motion + Time Lapse

Resolution 10.0 MP
Still Resolutions JPEG

Low 1280 x 720, Med 1920 x 1080,

High 2688 x 1512, Enhanced 4224 x 2376

Video Resolutions VGA- 640 x 480, HD 1280 x 720

SD Memory Card Up to 32 GB SD card, Class 4 or higher (not included)

Format JPEG - Still pictures, AVI - Video clips

Power Supply 8 AA Alkaline or Lithium batteries (not included)

L

PLAYBACK MODE

Playback

To view images or videos on your camera's screen, slide the Mode Switch to the Playback position. From the Main Screen, you can view images, play videos or delete files.

PLAYBACK Press OK to begin viewing images Press • for Playback tips

Playback Tips

Pressing the Up button will show a quick review of the Playback commands. The commands are:

Up - Play Video

Left - Previous file

Right - Next file

OK - Toggles between Single View and Matrix View

Down - Delete file



QUICK START INSTRUCTIONS

Use the steps below as a guide to quickly set up your camera so it will function using the factory default settings.

STEP 1

Open camera cover. Press the battery chamber release button. Install eight (8) AA size alkaline or lithium batteries with polarities as indicated in the Battery Tray. Re-install the Battery Tray and insert your SD card. We recommend that you erase the SD card (ERASE IMAGES) inside the camera before taking pictures: this will not only erase all images, but will also format your SD card for use in the camera.

STEP 2

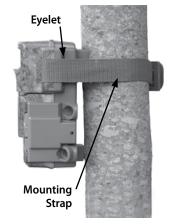
Insert SD Memory Card until you hear an audible click. Camera will not operate without SD Card. Slide the power switch to **Quick Start**. Press the Left button to set the time and date.

STEP 3

Mount camera in desired location using a mounting strap. NOTE: Camera must be attached to a stable object for motion detection to function properly. Mounting camera on an unstable structure may result in excess image captures with no subject (false triggers).



Switch camera to Aim. Aim camera using motion detection to determine target area. Walk in front of the camera at the desired distance and the camera LED will flash showing the covered area. Switch camera to **Quick Start**.



STEP 5

Close cover. The camera will operate using Default settings. You may also customize the settings if desired in Custom Start.



Setting Run Mode

When you choose Quick Start, the only settings that you will be able to change will be **Date and Time**, allowing for rapid setup. Other settings are:

OPTION	SETTING
Mode	Motion Detect
Detection Delay	30 seconds
Multi-Shot	3-Triggered
Photo or Video	Photo

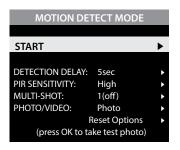
C)

CAPTURE MODES

You will see one of three status screen displays after you slide the Mode switch to the Custom Start position and select the capture mode.

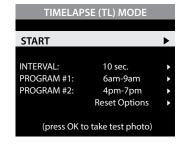
Motion Detect Mode

When the camera has been programmed for Motion Detect Mode - Photo, the camera will take still images when motion is detected. The following will be displayed on the Status Screen.



Time Lapse

When the camera has been programmed for Time Lapse photography, the camera will observe a full day of activity in the field during Time Lapse mode. The camera will record a block of still images following the Time Lapse program setting. The following will be displayed on the Status Screen.



Time Lapse + Motion

The camera operates in Time Lapse Mode during the programmed intervals and Motion Detect Mode for the remainder of the day.



SYSTEM OPTIONS (cont.)

Security Code

Press the **OK** button. Use the **Up/Down** and **Left/Right** buttons to select a 5 digit security code for your camera. Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.

NOTE: Please remember your security code. If the code is lost, you can contact Moultrie customer support to reset the password (charges may apply). Also, use caution when navigating through the Security Code option as not to set a code by mistake. For no Security Code, the setting should remain as "00000".

Confirm Security Code

Once a Security Code has been entered, the camera will prompt you to verify the code. This will keep you from mis-entering a code or seting a code inadvertantly.



SYSTEM SETTINGS CONFIRM SECURITY CODE 0 0 0 0 0

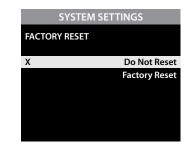
Reset to Default settings

You can reset your camera to the factory default settings. Press **Up/Down** to choose:

YES - all setups restored to factory default

NO - keep custom settings

Press the **OK** button again to make selection. Press the **Right** button to go to the Main Screen.



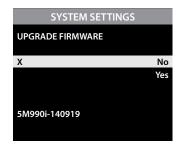
Upgrade Firmware

The firmware version is displayed. Press **Up/Down** to choose setting:

YES - To upgrade firmware.

NO - Keep current firmware.

NOTE: This operation should only be performed when prompted by a technician to do so.





MEMORY OPTIONS

Erase Images

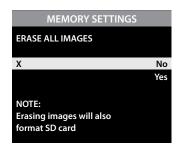
Press the **OK** button. Use the **Up/Down** buttons to choose between:

Yes - erase all images

No - does not change stored images.

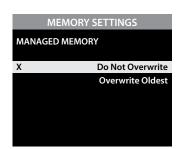
Press the **OK** button to select. When your selections has been made, press the **Right** button to move to the next option.

NOTE: This will also format your SD card for use in your camera.



Managed Memory

Selecting the OVERWRITE OLDEST option will cause the oldest files to be overwritten with new captures when the SD card reaches its capacity. With the DO NOT OVERWRITE option selected, the camera will cease image capture once the SD card reaches capacity. Press the **OK** button to select. When your selection has been made, press **Right** button to go to the next option.

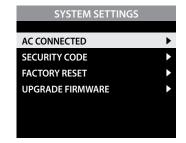


K

SYSTEM OPTIONS

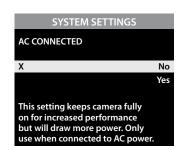
System Settings

From the System Settings Main Screen, use the **Up/Down** buttons to navigate to the setting you want to adjust. Press the **Righ**t button to select.



AC Connected

Press the **OK** button. When the camera is connected to an AC power supply and this option is selected, the camera will remain on instead of going to a sleep state between detection and capture sequences. This will greatly improve camera speed and performance and can be used in conjunction with most external supplies, but is only recommended when connected to an AC power supply. In the event this option is selected but no external supply is detected, it will default to the NO state. Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.

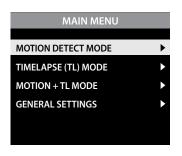


DM

MAIN MENUS

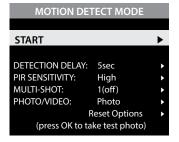
Main Menu

When the camera is placed into Custom Start, the Main Menu will appear. Use the Up and Down buttons to navigate to the mode you want and the Right button to select.



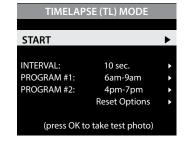
Motion Detect Menu

With Motion Detect Mode selected from the Main Menu, press the Right button to show the current settings for Motion Detect. Use the Up/Down arrows to select a setting to change, and press Right to view the available options. Press OK to take a test photo, and the Left button to return to the Main Menu.



Timelapse (TL) Menu

With Timelapse (TL) Mode selected from the Main Menu, press the Right button to show the current settings for Timelapse. Use the Up/Down arrows to select a setting to change, and press Right to view the available options. Press OK to take a test photo, and the Left button to return to the Main Menu.



Motion Detect + Timelapse Menu

With Motion + TL Mode selected from the Main Menu, press the Right button to show the Motion Detect + Timelapse menu. Press OK to take a test photo, and the Left button to return to the Main Menu.

NOTE: Options for Motion and Time Lapse can be set in their respective option menus.



General Settings Menu

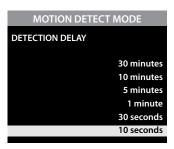
With General Settings selected from the Main Menu, press the Right button to show the current settings. Use the Up/Down arrows to select a setting to change, and press Right to view the available options. Press OK to take a test photo, and the Left button to return to the Main Menu. See page 11 for more information on General Settings.



SETTING MOTION DETECT OPTIONS

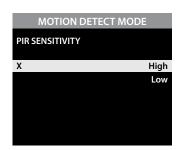
Setting Detection Delay

Detection Delay determines the number of minutes between pictures when an animal is detected and remains in range. Press the **OK** button. Use the **Up/Down** buttons to choose between (5 sec, 10 sec, 30 sec, 1 min, 5min, 10min, or 30 min). Press **OK** to lock in your selection, then press **Left** button to go to the next option.



PIR Sensitivity

PIR Sensitivity allows you to control as to how much movement and at what distance the camera will trigger. HIGH sensitivity will allow for more distance, but will make the camera slightly more susceptible to false triggers and is ideal for open areas such as fields and food plots. LOW sensitivity will shorten the distance but lower the chance of false triggers and is ideal for close range traps and deeply wooded areas. Press the **OK** button. Use the **Up/Down** buttons to choose between (HIGH or LOW). Press **OK** to lock in your selection, then press **Left** button to go to the next option.



Setting Multi-Shot

Press the **OK** button. Use the **Up/Down** buttons to choose between settings. Choose how many pictures you would like captured in a sequence when the camera is triggered (1 or 3).

Available options are:

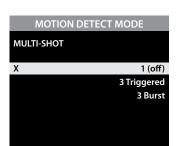
1 (OFF) - Single photo taken per event.

3 BURST - Three rapidly captured photos taken per event. All 3 photos are captured within one second.

NOTE: Burst mode is only capable of up to 4MP captures, regardless of your resolution setting.

3 TRIGGERED - Up to three photos are captured per event with an approximate one second delay between each capture. Each subsequent photo after the first requires an individual trigger. This allows for multiple potential image captures of the same event while reducing the chance of empty images if the subject moves out of the field of view after the first shot.

Press **OK** to lock in your selection, then press **Left** button to go to the next option.

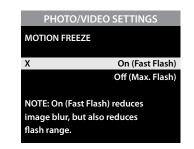


3

SETTING PHOTO/VIDEO OPTIONS (cont.)

Setting Motion Freeze

This feature maximizes the image clarity during night photos. When this feature is on the camera will adjust the exposure time to reduce blur associated with motion. Other adjustments are made to increase the brightness and clarity of the photo. When this feature is turned off the camera will use a maximum exposure time that will not reduce blur, but will increase the effective flash range and image brightness of night photos. Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.



Setting Video Quality

Press the **OK** button. Use the **Up/Down** buttons to choose between 2 image quality settings.

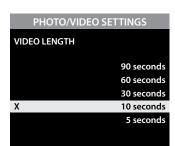
1. HD: 1280 x 720 2. VGA: 640 x 480

Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.

PHOTO/VIDEO SETTINGS VIDEO RESOLUTION SD (640x480) X HD (1280x720)

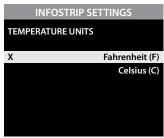
Setting Video Length

Press the **OK** button. Use the **Up/Down** buttons to choose between 5 video length settings (5, 10, 30, 60 or 90 seconds). Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.



Temperature Units

The temperature is imprinted on each photo and can be in degrees Fahrenheit or Celsius. To change the temperature units, press the **Up/Down** buttons to highlight the desired setting. Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.



Infostrip Active

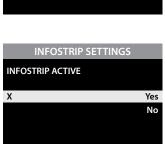
Use the **Up/Down** buttons to choose between:

YES - Camera Name, Time, etc, information will be imprinted at the bottom of the image/video as an infromation bar

Note: Remember to input the camera name in the setup and set the clock accordingly.

NO - No information bar will be imprinted.

Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.

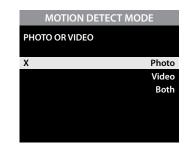


E

SETTING MOTION DETECT OPTIONS (cont.)

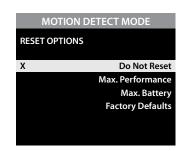
Setting Photo or Video

Press the **OK** button. Use the **Up/Down** buttons to choose between Photo, Video or Both. Press **OK** to lock in your selection, then press **Left** button to go to the next option.



Reset Options

Press the OK button. Use the Up/Down buttons to choose between a set of predefined configurations for Motion Detect mode to quickly configure your camera for certain levels of performance. Press **OK** to lock in your selection, then press **Left** button to go to the next option.

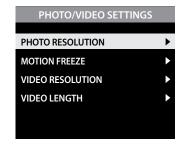




SETTING PHOTO/VIDEO OPTIONS

Photo/Video Settings

From the Photo/Video Settings Main Screen, use the **Up/Down** buttons to navigate to the setting you want to adjust. Press the **Righ**t button to select.



Setting Photo Quality

Press the **OK** button. Use the **Up/Down** buttons to choose between 4 image resolution settings.

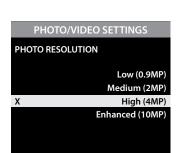
 1. Enhanced:
 4224 x 2376

 2. High:
 2688 x 1512

 3. Medium:
 1920 x 1080

 4. Low:
 1280 x 720

Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.





SETTING TIMELAPSE OPTIONS

TIMELAPSE SOFTWARE INSTALLATION

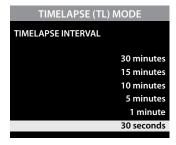
Download your free Time Lapse software at www.moultriefeeders.com/timelapsesoftware

For PC users: Installation and operation instructions are available here, as well.

For Mac users: This software is not Mac-compatible. You can import your image files into a program such as iMovie and create timelapse movies this way.

Interval Time Setting

Press the **OK** button. Use the **Up/Down** buttons to choose between 10, 30 seconds / 1, 5, 10, 15, or 30 minutes / 1, 2, 3, 6, 12 hours or 1 day. When your selection has been made, press the **Left** button to go to the next option.





SETTING TIMELAPSE OPTIONS (cont.)

Setting Program Wake up

Press the **OK** button. Use the **Up/Down** buttons to choose between 24 different settings: any hour from MIDNIGHT to 11 PM. This will determine what time the camera will wake up during the program and begin its time lapse program. Setting to ALWAYS ON will make the camera operate in timelapse 24 hours/day. Press Right button to go to the next option.



T.L. PROGRAM #1 START TIME

MIDNIGHT

11pm

10pm

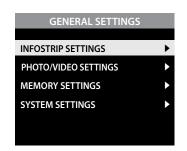
9pm

8pm

7pm

General Settings

From the Main Screen, use the Up/Down buttons to navigate to General Settings. Press the Right button to select.



Setting Program Sleep

When wakeup time is set, the camera will automatically move to the Sleep option. Set the sleep time after the wakeup time you already set. This will set the wake up and sleep during the time lapse photography. Press the **OK** button. Press **Left** button to go to the next option.

NOTE: Repeat the above steps for Program #2 to be set.

Press Left button to go to the Main Screen.

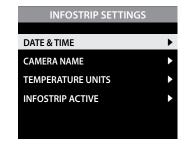
WARNING: If Program #1 is set to Always On, settings for Program #2 will be disabled.

TIMELAPSE (TL) MODE RESET OPTIONS Do Not Reset Х **Factory Defaults**

SETTING INFOSTRIP OPTIONS

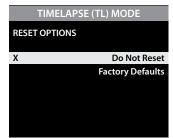
Infostrip Settings

From the Infostrip Settings Main Screen, use the Up/Down buttons to navigate to the setting you want to adjust. Press the **Right** button to select.



Reset Options

Press the **OK** button. Use the **Up/Down** buttons to choose between to reset your Timelapse options.



Setting Date and Time

Press the **OK** button. Use the **Left/Right** buttons to move from one value to the next and the Up/Down buttons to adjust each value. Press the **OK** button to lock in selections. When all your selections have been made, and the date and time has been set, press the **Right** button to move to the next option.



SETTING MOTION + TIMELAPSE OPTIONS

Setting Motion + Timelapse Features

When in this operating mode, the camera will operate on the Timelapse settings until it detects motion. The camera will then wake and capture the photo or video and then return to the set Timelapse program.

NOTE: The settings entered for both Timelapse and Motion Detect modes will be used when in this mode. Settings can be made in their respective menus.



Setting Camera Name

Press the **OK** button. Use the **Up/Down** and **Left/Right** buttons to select an identity for your camera. For example, you can use a name or a location; the identity you wish to use is up to you. Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.

