TimelapseCam Pro®
User's Guide

For Models:

WCT-00126 TimelapseCam Pro

WINGSCAPES™

wingscapes.com | 888.811.WING

WINGSCAPES®

Wingscapes TimelapseCam Pro

| VIDEO QUALITY | → | PHOTO QUALITY | → | MANAGED MEMORY | → | ERASE ALL IMAGES (FORMAT CARD) |

VIDEO QUALITY
↓
VIDEO LENGTH
↓
IMPRINT INFO
↓
CAMERA NAME
↓
WI-FI SD CARD? → AC CONNECTED? → TEMPERATURE UNIT → PROGRAM SECURITY CODE
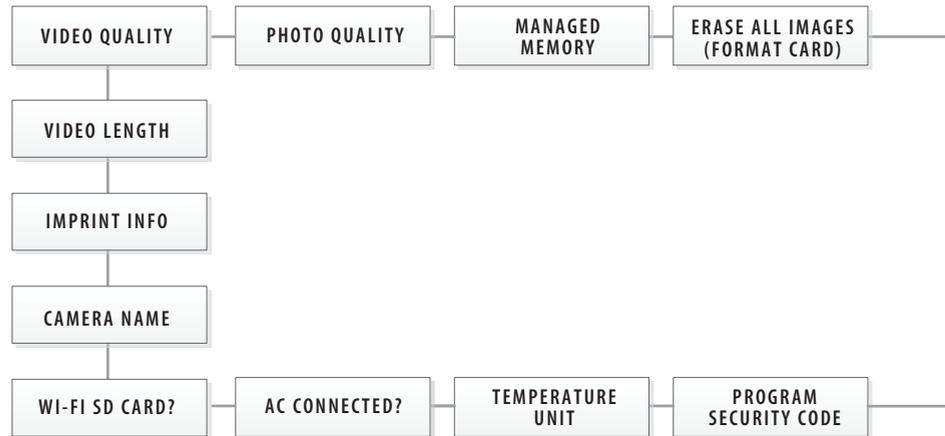
DEFAULT SETTINGS

DATE/TIME:	01/01/16 11:11pm
TIME LAPSE INTERVAL:	10 SECONDS
TIME LAPSE PROGAMS/DAY:	2 PROGRAM
T.L. PROGRAM #1 START TIME:	6 AM
T.L. PROGRAM #1 STOP TIME:	9 AM
T.L. PROGRAM #2 START TIME:	4 PM
T.L. PROGRAM #2 STOP TIME:	7 PM

Memory & Storage

Your camera supports external SD memory card ONLY and will accept up to a 32GB card. 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.

Auto Mode		
SD Card Size:	**2 GB**	**16 GB**
ENHANCED 6080 x 3420	900	7200
HIGH 4224 x 2376	1600	12800
MEDIUM 3008 x 1692	3650	29200
LOW 2112 x 1188	10900	87200
Video Mode		
SD Card Size:	**2 GB**	**16 GB**
HD 1280 x 720	300	2400
FHD 1920 x 1080	150	1200

Actual capacity will vary based on image properties.

Warnings & Regulations

FCC Statements

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.

This product may not comply with California Proposition 65 standards, known to the state of California to cause birth defects or other reproductive harm.

Camera Accessories (sold seperately)

Moultrie Mobile® Compatibility

Your camera is compatible with our Moultrie Mobile® cellular service when combined with the Field Modem MV1.

Please visit **www.moultriemobile.com** for more information.

NOTE: Camera firmware update may be required for full Moultrie Mobile functionality.

Using the Moultrie AC Adapter
Keep your camera running 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 Wingscapes camera.

Note: Leave internal batteries in the camera during use. In the event of power loss to the outlet into which the AC adapter is plugged, the internal batteries will keep your camera running.

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. Just plug the Power Panel into the camera's External Power Port. 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.
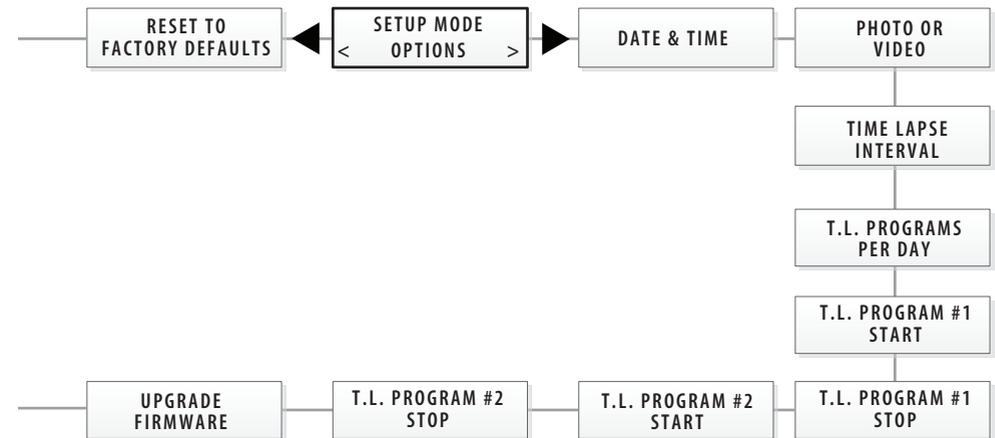
Using the Moultrie Battery Box
Extend the field life of your camera with a long-lasting, rechargeable external power source. Place near the tree where the camera is mounted. Just plug the Battery Box into the camera's External Power Port. This will extend the life of your camera in the field.

Menu Map

```
RESET TO            SETUP MODE                            PHOTO OR
FACTORY DEFAULTS  ◄  <  OPTIONS  >  ►  DATE & TIME         VIDEO

                                                          TIME LAPSE
                                                          INTERVAL

                                                          T.L. PROGRAMS
                                                          PER DAY

                                                          T.L. PROGRAM #1
                                                          START

UPGRADE         T.L. PROGRAM #2     T.L. PROGRAM #2     T.L. PROGRAM #1
FIRMWARE        STOP                START                STOP
```

UPGRADE FIRMWARE:	NO
PROGRAM SECURITY CODE:	00000
AC CONNECTED?:	NO
WI-FI SD CARD?:	NO
CAMERA NAME:	TIMELAPSECAM
IMPRINT INFO:	YES
PHOTO QUALITY:	HIGH (10 MP)
MANAGED MEMORY:	DO NOT OVERWRITE
ERASE IMAGES:	NO
RESET TO FACTORY DEFAULTS:	NO

Customer Support

Phone: 888.811.WING (9464)

Fax: 205.408.6157

Email: customerservice@wingscapes.com

Web: www.wingscapes.com/support

Address: Wingscapes
            3280 Highway 31, Ste B
            Calera, AL 35040

Find Us Online

Photogallery: wingscapes.com/photogallery

YouTube: youtube.com/wingscapes

Blog: wingscapes.com/blog

Facebook: facebook.com/Wingscapes

Twitter: @wingscapes (or tweet with hashtags #birdcam or
                    #plantcam)

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Tripods

For very precise placement and aiming, no mounting method will beat a camera tripod. A standard threaded tripod mount (¼"-20) is embedded into the bottom of the TimelapseCam Pro. This allows users to attach the TimelapseCam Pro to any tripod or any of thousands of 3rd-party camera mounting accessories – providing users with a world of creative opportunities through angle and height adjustment.

Wingscapes makes an optional mounting accessory for the TimelapseCam Pro:

**Universal Camera Stake
(MCA-13051)**

Mounting Strap

The TimelapseCam Pro comes with a Mounting Strap to facilitate mounting. You will find slots in the rear of the TimelapseCam Pro through which a strap can be threaded. Many users will tighten the TimelapseCam Pro to a tree, then wedge a stick or piece of bark between the TimelapseCam Pro and the tree to facilitate aiming.

Mounting Arm Accessories

This accessory will allow you to easily mount the TimelapseCam Pro to a common bird feeder pole, a post, a stake, a wall, or a tree. Numerous angle settings and 360° rotation make this mounting arm one of the most versatile setup options.

Your Wingscapes TimelapseCam Pro offers nearly limitless mounting opportunities, allowing you to capture images of wildlife in practically any situation.

To read more about attracting wildlife to your backyard and TimelapseCam Pro, visit our website at **www.wingscapes.com**.

Mounting your TimelapseCam Pro

The key to taking great photos and videos is proper mounting and placement of the TimelapseCam Pro. We designed the TimelapseCam Pro so that it can be mounted many different ways. Take a moment to learn more about mounting your TimelapseCam Pro properly, and you will quickly see improvement in your images.

Basic Principles

1. Stability - Mount the TimelapseCam Pro securely so that it does not move. It should never be hung from above or mounted to an object that moves in the wind.

2. Focus - Note that the TimelapseCam Pro lens can be focused manually. This is a snap. Use the included measuring tape to measure the distance between the TimelapseCam Pro and its target. Set the lens accordingly.

3. Lighting - As with all cameras, it is best to avoid aiming the TimelapseCam Pro at the source of light (for instance, the sun). Ideally during daytime, position the TimelapseCam Pro so it is facing its target, e.g. a bird feeder, but facing away from the sun.

On the Ground

Set up is simple, even on the ground. Just position your TimelapseCam Pro directly on the ground. If you're concerned about it falling over, use the included Camera Strap to secure the TimelapseCam Pro to the base of a tree, a post, or other solid feature (a brick works great).

Quick Start Guide

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 8 AA alkaline or lithium batteries. Recommended for use: Energizer® batteries. Reinsert the Battery Chamber into the camera until you hear an audible click.

Rechargeable batteries are not recommended.

STEP 2
Insert SD Memory Card (label side up) until you hear an audible click. Camera will not operate without SD Card. Slide the power switch to SETUP. Set the time and date by pressing the RIGHT button until DATE & TIME appear on screen. Press OK to begin entering the Time and Date, using UP/DOWN buttons to adjust the values and LEFT/RIGHT to move between fields.
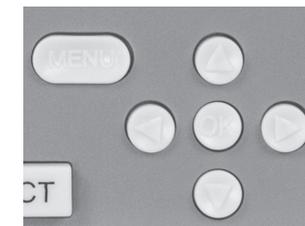
STEP 3
Mount Camera in desired location using a mounting strap or other accessories offered by Wingscapes (visit **www.wingscapes.com** for more information on mounting accessories). See page 16 for helpful mounting tips.

STEP 4
Slide the power switch to the ON position. The camera will operate using default settings for the respective mode selected. You may also customize the settings if desired in SETUP.

System Requirements

OS:	Microsoft® Windows® XP with Service Pack 2 or Service Pack 3 (recommended); Windows Vista® Home Premium, Business, Ultimate, or Enterprise with Service Pack 1; or Windows 7
Hard disk space:	100MB or above
CPU:	Intel® Pentium® 4 or AMD Athlon® 64 processor or above
Memory:	1GB of RAM

Specifications

Operational Mode	Playback / Setup / Timelapse
Resolution	20.0 MP
Still Resolutions	JPEG
	Low 2112 x 1188, Medium 3008 x 1692,
	High 4224 x 2376, Enhanced 6080 x 3420
Video Resolutions	HD 1280 x 720, FHD 1920 x 1080
Video Length	10, 20, 30, 90 seconds (Night: 10 seconds)
Image Output	USB Out, SD Card, TFT Display
Housing	Weather-resistant and lockable
Display	Thin Film Transistor (TFT)
SD Memory Card	Up to 32 GB SD card (not included)
Format	JPEG - Still pictures, AVI - Video clips
USB Output	Requires PC / MS Windows XP / Vista / 7
Time Lapse Interval	10 sec, 30 sec; 1, 5, 10, 15, 30 mins; 1, 3, 6, 12, 24 hrs
Time Lapse ON/OFF	2 Programs
Standby Time	300 Days
Run Time	180 days
Time Lapse Run Time	90 hours / (based on 30 seconds interval and 9 hours operation)
Focus	6" - Infinity
Infrared Sensor	Passive
Flash Type	24 LEDs
Flash Range	5'- 60'
Easy Read Bar	Moon Phase / Camera Name / Date / Time
Power Supply	8 AA Alkaline or Lithium batteries (not included)
External Power port	12V
Size	6.4" x 3.8" x 2.8"

Downloading & Viewing Images

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

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

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.

In the Field

You can download the pictures and videos with the aid of external devices. To download, use an external player or card reader that is supported by a 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 and 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. 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 Wingscapes camera accessories at **www.wingscapes.com**

To turn photo sequences into Time Lapse Video

**Reasons you may want to create a video with your images:**

• Makes it easier to e-mail your image sequences.

• Allows you to select the range of images you want included, to eliminate uninteresting images.

• Allows you to store the images as a video rather than a large number of images.

1. Download time lapse images to Time Lapse Software. (see section on downloading images).

2. Click on File. You will see the screen image to the right.

3. Choose a starting image (frame) and an ending image (frame). **Note: The frame limit is 300.**

4. Choose the frame rate. Options include 1, 5, 10, 20, and 30 frames per second (fps).
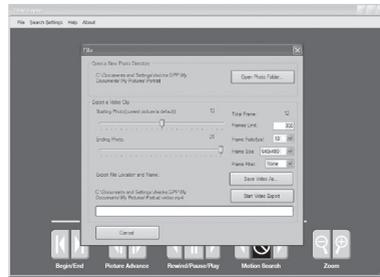
   Note: The frame rate says how many images of a video are displayed every second a video is played. The higher frame rate a video has the smoother movement appears in the video. However, a higher frame rate video will create a larger file and will require more memory.

5. Choose the video resolution:
   Note: The higher the resolution, the sharper the image. However, higher resolutions create a larger file and will require more memory. VGA (640x480) / 720p / 1080p

6. Choose frame filter: None, Low, Medium, or High.

7. Click on Save the Video As. Name the video and choose the location file folder you wish to save it in.

8. Click Start Video Export. The program will start to convert the images to video based on the settings chosen above. The green bars will advance until the conversion is complete.

   **Note:** Click on Cancel to abort the transfer.
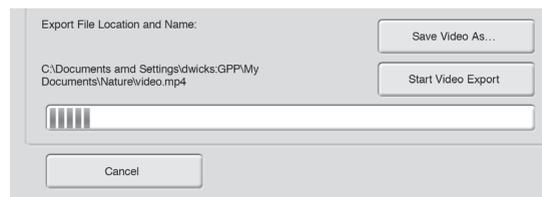
To View Time Lapse Video

1. Find the video in the folder you saved it into.

2. Click on the video.

3. The video will be open up automatically in QuickTime player. To install a free version of QuickTime, follow the on screen instructions at **www.apple.com/quicktime/download**.

4. Press play to view your time lapse video.
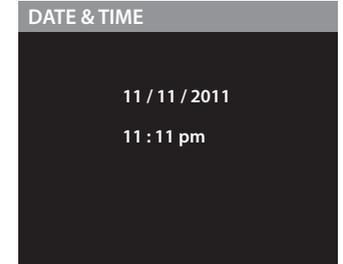

Setting Options
When you slide the switch to Setup Mode, the LCD Display will display the main General Setting screen. Using the navigation process, set the features you desire. Press the **Right** or **Left** button to begin setting the user options.

Pressing the **OK** button from this main screen will enter Aim Mode.

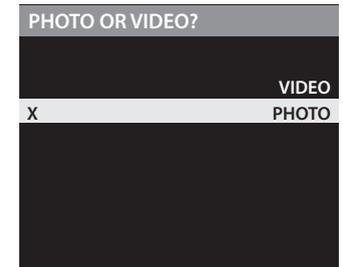| SETTINGS |
| --- |
| < OPTIONS   OPTIONS > |
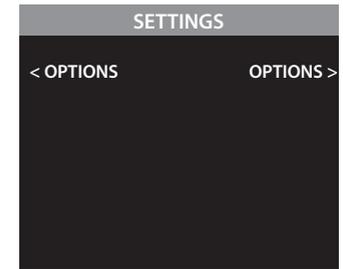
Setting Date and Time
Press the **OK** button. Use the **Left/Right** buttons to move from one value to the next and the **Up/Down** buttons to adjust each value. Press the **OK** button to lock in selections. When all your selections have been made, and the date and time has been set, press the **Right**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

| DATE & TIME |
| --- |
| 11 / 11 / 2011 |
| 11 : 11 pm |

Setting Photo or Video
Press the **OK** button. Use the **Up/Down** buttons to choose between Photo or Video.

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

PHOTO OR VIDEO?
VIDEO
X   PHOTO

Setting Time Lapse Interval
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 **Right** button to go to the next option.

TIME LAPSE INTERVAL
30 minutes
15 minutes
10 minutes
5 minutes
1 minute
30 seconds
X   10 seconds
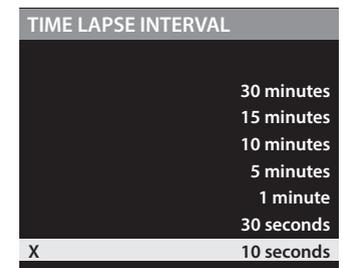
Setting Multi-Program
Press the **OK** button. Use the **Up/Down** buttons to choose between 2 available settings: 1 PROGRAM or 2 PROGRAM. This indicates the number of cycles the camera will operate within a 24 hour period. Press the **OK** button. Press **Right** button to go to the next option.

TIME LAPSE PROGRAMS PER DAY
X   2
1

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	
	9am
	8am
	7am
X	6am
	5am

Setting Program Sleep

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 **Right** button to go to the next option.

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

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

T.L. PROGRAM #1 STOP TIME	
X	9am
	8am
	7am
	6am
	5am

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.

Press the **Right** button to move to the next option.

UPGRADE FIRMWARE	
	YES
X	NO
TLPRO-150520	

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 Wingscapes 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".

PROGRAM SECURITY CODE
0 0 0 0 0

Time Lapse Software

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

INTRODUCTION
In time lapse photography a series of still photos are taken at regular time intervals. The PlotStalker Software allows you to load the time lapse file that was captured from your Moultrie Game Camera and scroll backward and forward through your photos, single step, search for activity in a designated area, and save the files.

SYSTEM REQUIREMENTS

Computer: Intel® Pentium® 4 or AMD Athlon® 64 processor or above; 1GB RAM minimum; 100 MB hard disk space minimum.

Operating System: Microsoft® Windows® 32 bit - XP with Service Pack 2 or later; Windows Vista® Home Premium, Business, Ultimate, or Enterprise with Service Pack 1; or Windows 7

NOTE: When installing this software, you must be logged in as an Administrator.

Download Images
1. Double-click on Time Lapse Icon to open the software.
2. Click on File -> Open Photo Folder
3. Browse through your files to the folder where the images you wish to view are stored.
4. Once the folder is selected, click OK.
5. The images saved in the folder are now available to view through the Time Lapse Software.

Viewing Time Lapse

This easy-to-use software allows you to advance through the series of images a number of different ways:

BEGIN/END
Goes to the first or last photo in the Plot File.

Begin/End

FRAME BY FRAME SEARCH
Individually step forward or backward through each photo.

Frame Advance

REWIND/PAUSE/PLAY
Play photos in sequence, pause, or play the photos in reverse order. These functions simulate a video and are useful for manually searching changes in the photos. When a sequence is being played, press fast-forward or fast-rewind multiple times to increase speed. (1x-5x)

Rewind/Pause/Play

SEARCH
This function allows quick scanning of images foreword and back. The scan pauses when the software detects a change in pixel content from the last photo viewed. We detect change based on averages so it will not be as accurate as a manual frame by frame search.
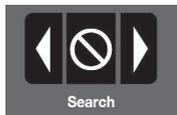
Search

SEARCH REGION
Click on Set Search Region Button.

This allows you to define a specific search area, rather than the whole photo. Drag the red outline to the area you want to search. This allows you to focus on a very precise area if required.
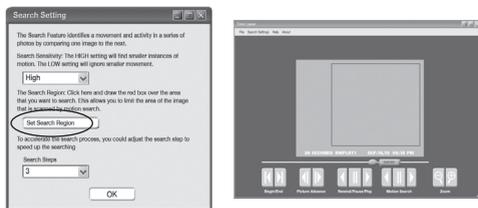
SEARCH STEPS
This allows for even faster scans by skipping the selected amount of images (1-50). The higher this setting, the lower the search results as it is ignoring selected photos. You may find this option helpful if you have a very large quantity of photos to scan.

Click OK.
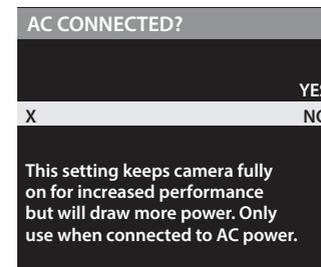
Click on Motion Search Advance button.

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.

TEMPERATURE UNIT
CELSIUS
X FAHRENHEIT
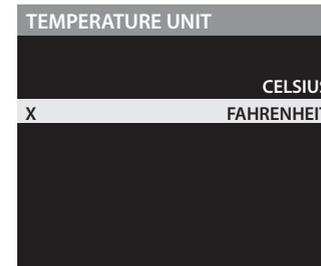
AC Connected
Press the **OK** button. When the camera is connected to an AC power supply and this option is selected, the camera will remain on instead of going to a sleep state between detection and capture sequences. This will greatly improve camera speed and performance and can be used in conjunction 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.

AC CONNECTED?
YES
X NO

This setting keeps camera fully on for increased performance but will draw more power. Only use when connected to AC power.

Wi-Fi SD Card
Select option when using a Wi-Fi enabled SD card.

Turning this feature on will keep the SD port powered for a set amount of time to allow the files to transfer off the card to the Wi-fi network set up. Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.
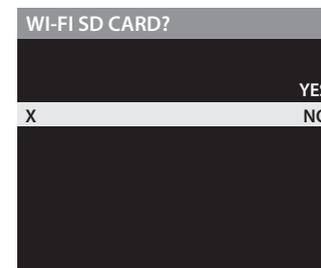
NOTE: Wingscapes does not offer technical support for Wi-Fi SD cards. Please contact your Wi-Fi card's manufacturer for support. Before use, you must setup your Wi-Fi SD card on your wireless network.

NOTE: Use of a Wi-Fi SD Card will decrease the battery life of the camera.

WI-FI SD CARD?
YES
X NO

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.

CAMERA NAME
TIMELAPSECAM

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.
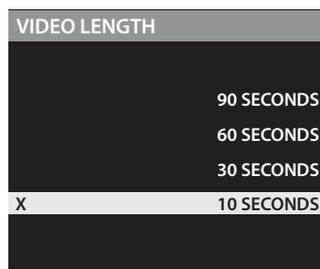
NO - No information bar will be imprinted.

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

IMPRINT INFO?	
X	YES
	NO
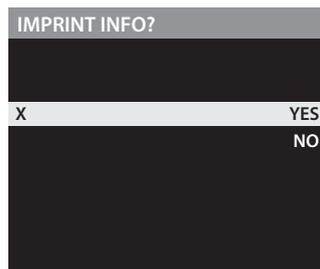
Setting Video Length

Press the **OK** button. Use the **Up/Down** buttons to choose between 4 video length settings (10, 30, 60 or 90 seconds).

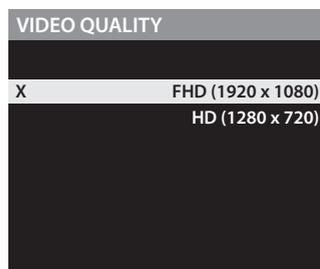Press the **OK** button to confirm the selection. Press the **Right** button to move to the next option.

VIDEO LENGTH	
	90 SECONDS
	60 SECONDS
	30 SECONDS
X	10 SECONDS

Setting Video Resolution

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

1. HD: 1280 x 720
2. Full HD: 1920 x 1080

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

VIDEO QUALITY	
X	FHD (1920 x 1080)
	HD (1280 x 720)

Setting Photo Quality

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

1. Enhanced: 6080 x 3420
2. High: 4224 x 2376
3. Medium: 3008 x 1692
4. Low: 2112 x 1188

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

PHOTO QUALITY	
	ENHANCED (20MP)
	HIGH (10MP)
	MEDIUM (5MP)
	LOW (2.5MP)
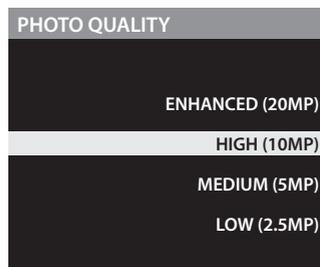
Managed Memory

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

| MANAGED MEMORY	
	OVERWRITE OLDEST
X	DO NOT OVERWRITE
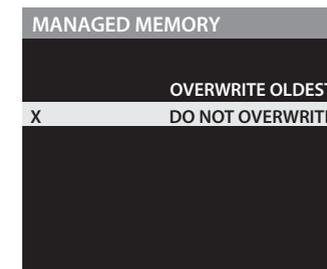
Erase Images

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.

ERASE ALL IMAGES?	
	YES
X	NO

NOTE:
Erasing images will also
format SD card
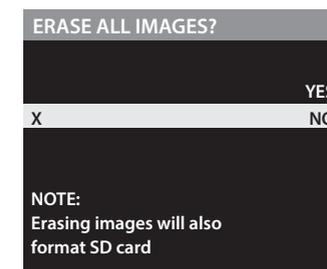
Reset to Default settings

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.

RESET TO FACTORY DEFAULTS?	
	YES
X	NO