

# Bushnell®



**TROPHY<sup>®</sup>  
CAM HD**

**ESSENTIAL**

## INSTRUCTION MANUAL

Model#: 119837

03-17

# IMPORTANT NOTE

Congratulations on your purchase of one of the best trail cameras on the market! Bushnell is very proud of this little unit and we are sure you will be pleased with it as well. We appreciate your business and want to earn your trust. Please refer to the notes below and the instructions in this manual to ensure that you are completely satisfied with this product.

# INTRODUCTION

ENGLISH

## *About the Trophy Cam HD Essential E3*

The **Bushnell Trophy Cam HD Essential E3** is a digital scouting camera. It can be triggered by any movement of game in a location, detected by a highly sensitive Passive Infra-Red (PIR) motion sensor, and then take high quality pictures (up to 16MP still photos), or video clips.

The **Trophy Cam HD Essential E3** consumes very little power (less than 0.08 mA) in a stand-by (surveillance) state. This means it can deliver up to six months stand-by operation time when the device is powered by eight AA alkaline batteries, and up to twelve months utilizing lithium AA batteries. Once motion in the monitored area is detected, the digital camera unit will be triggered at once (typically less than half a second) and then automatically take images according to previously programmed settings. The **Trophy Cam HD Essential E3** is equipped with built-in infrared LEDs that function as a flash, so that it delivers clear photos or videos (in black & white) even in the dark, and it can take color photos or videos under sufficient daylight. The **Trophy Cam HD Essential E3** is designed for outdoor use and is resistant against water and snow. Your trail camera is one of the latest generation of Bushnell **Trophy Cam HD Essential E3s**, and includes many new or improved features, such as:

- Auto PIR Sensitivity-the camera monitors ambient temperature conditions and automatically adjusts the sensor/trigger signal to be more sensitive to slight variations in temperature on hot days, less sensitive on cold days.
- Field Scan 2x with Live Trigger-The “time lapse” feature added in last year’s models has been enhanced with the addition of the option for a second block of recording with its own start/stop times. Trigger signals generated by nearby wildlife activity will still generate additional photos/videos as they normally would, independently of the Field Scan operation.
- Audio Recording capability in Video Mode. 720p HD Video.

## Applications

The **Trophy Cam HD Essential E3** can be used as a trail camera for hunting or scouting game. It is also suitable for surveillance usage.

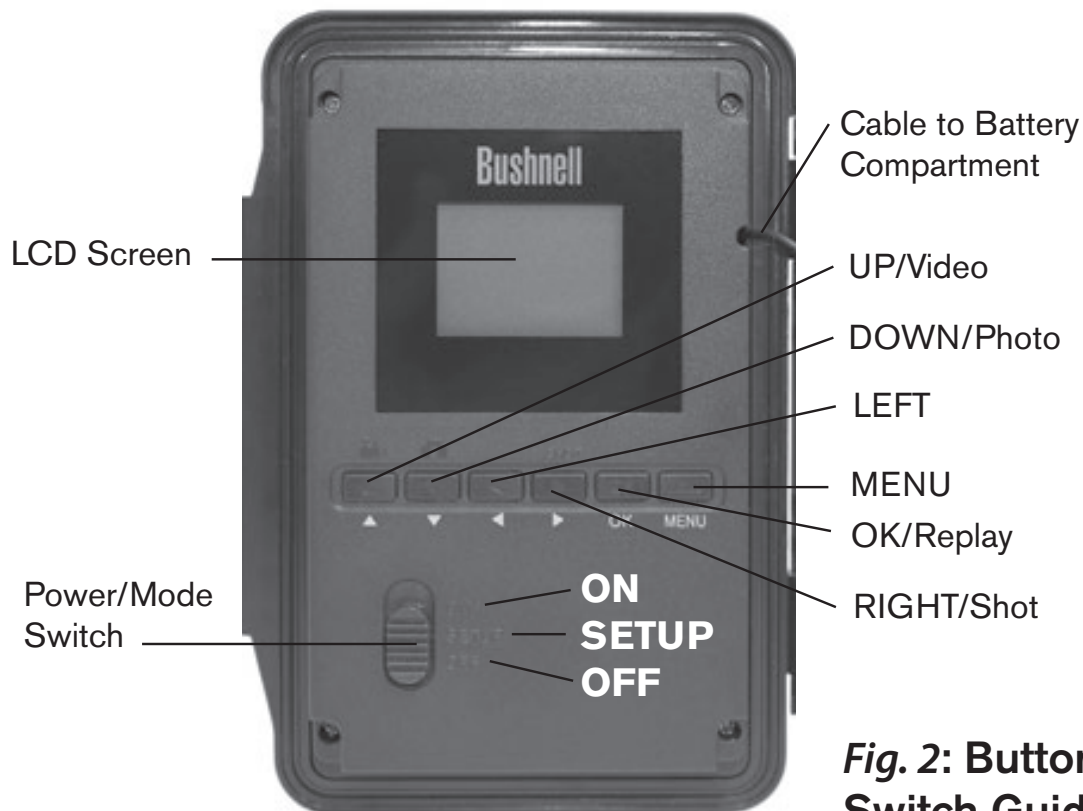
## PARTS AND CONTROLS

The **Trophy Cam HD Essential E3** provides the following connections for external devices: USB port and SD card slot (*Fig. 1, next page*).

A 3-way power switch is used to select the main operating modes: **OFF**, **SETUP**, and **ON** (*Fig. 2*).

A control key interface with six keys is primarily used in **SETUP** mode to select operational functions and parameters. As shown in *Fig. 2*, these keys are: **UP**, **DOWN**, **LEFT**, **RIGHT**, **OK** and **MENU**. Four of the keys can also perform a second function (shortcut operations in **SETUP** mode) in addition to their main function: The **DOWN** key can be used to set the camera to Photo mode (still camera icon), and the **UP** key can set the camera to Video mode (movie camera icon). The **RIGHT** key also serves as the manual shutter

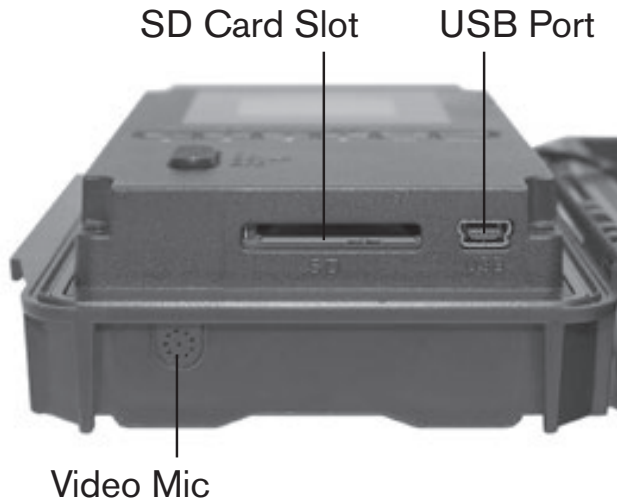
### BACK VIEW



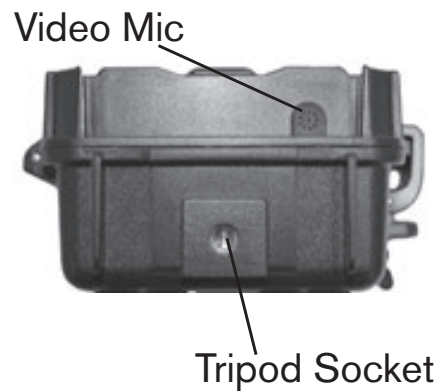
**Fig. 2: Button and Switch Guide**

("SHOT") button of the camera and the **OK** key switches the camera to the Playback ("REPLAY") mode. These secondary functions are indicated by icons or text above the key as shown in *Fig. 2*.

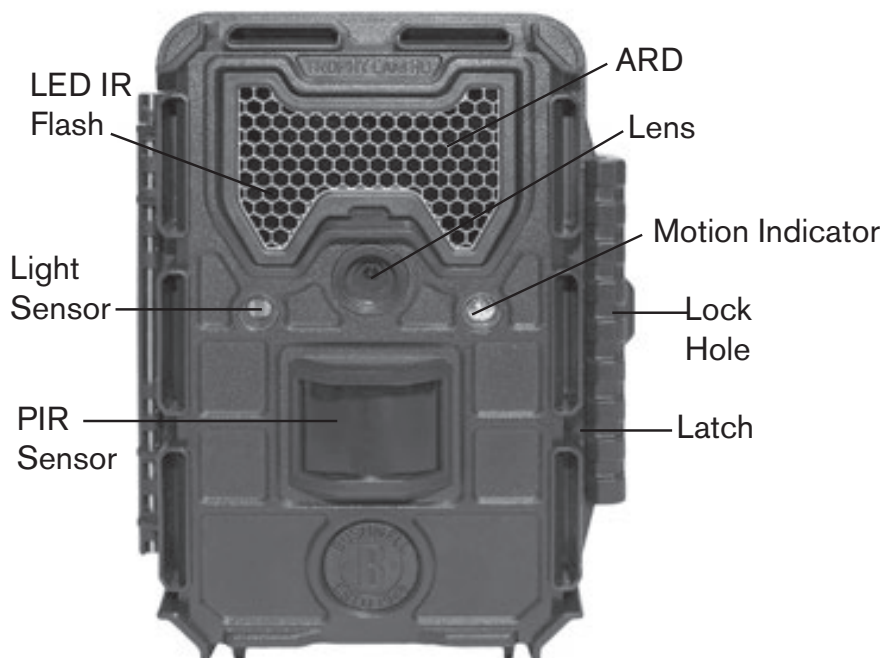
## PARTS AND CONTROLS



*Fig. 1: Connections*



### FRONT VIEW



## INSTALLING THE BATTERIES AND SD CARD

Before you begin learning how to use your **Trophy Cam HD Essential E3**, you will first need to install a set of batteries and insert an SD card. Although that may only take you a minute, there are some important notes about both batteries and SD cards you should be aware of, so please take the time to **read the following directions and cautions**:

### *Loading Batteries*

After opening the latch on the right side of the **Trophy Cam HD Essential E3**, you will see that the **Trophy Cam HD Essential E3** has eight battery slots. A full set of eight batteries must be installed for the camera to operate. Be sure to insert each battery with correct polarity (negative or “flat” end against the long spring of each battery slot).

Bushnell recommends using eight new lithium AA (Energizer® brand) or alkaline AA batteries. NiMh Rechargeable batteries can also be used, but they might have a shorter life span due to their reduced efficiency over time and at low temperature.



### *Inserting the SD Card*

The **Trophy Cam HD Essential E3** has 64MB internal memory, which can hold about 50 photos (@ 4K resolution). This is handy for testing and getting familiar with the camera, but you will no doubt want to leave the camera unattended for longer than a day or two, so using an SD card is recommended. Insert the SD card (with the camera's power switch in the **OFF** position) before beginning to operate the camera. Don't insert or remove the SD card when the power switch is in the **ON** position.

The **Trophy Cam HD Essential E3** uses a standard SD (Secure Digital) memory card to save photos (in .jpg format) and/or videos (in .mp4 format). SD and SDHC (High Capacity) cards up to a maximum 32GB capacity are supported. Before inserting the SD card into the card slot after opening the camera's front cover, please make sure that the write-protect switch on the side of the card is "off" (NOT in the "Lock" position). The following describes how to insert and remove the SD card:

- Insert the SD card into the card slot with its label side upwards (see *above*). A "click" sound indicates that the card is installed successfully. If the wrong side of the card is facing up, you will not be able to insert it without force-there is only one correct way to insert cards. If the SD card is not installed correctly, the device will not display an SD card icon on the LCD in SETUP mode (*the SD card icon displayed after switching to SETUP mode will have a "lock" symbol inside it if the card is locked*). Formatting the SD card by using the **Trophy Cam HD Essential E3's** "Format" parameter before using it for the first time is recommended, especially when a card has been used in other devices (see "Changing Menu Parameter Settings" for details).
- To take out the SD card, just gently push in the card (do not try to pull it out without pushing in first). The card is released from the slot and ready to be removed when you hear the click. Be sure the camera's power is switched OFF before inserting or removing SD cards or batteries.



## USING THE Trophy Cam HD Essential E3

Once you've prepared your **Trophy Cam HD Essential E3** by properly installing batteries and an SD card, you could simply take it outside, strap it to a tree, switch it on and leave-and you might get some great photos that are exactly what you wanted. However, we highly recommend that you first spend some additional time indoors with this manual and your camera until you know a bit more about what the 3-way switch and those control keys do. If nothing else, you'll probably want to at least set the date and time so the camera will imprint them (or not-it's your option) on your photos as they are taken, learn how to set the camera to shoot video clips instead of still photos if you like, and read some tips about mounting it on a tree.



# THE OFF, ON, AND SETUP MODES

The **Trophy Cam HD Essential E3** has three basic operational modes:

- **OFF** mode: Power switch in the **OFF** position.
- **ON** mode: Power switch in the **ON** position (LCD screen is off.)
- **SETUP** mode: Power switch at **SETUP** position (LCD screen is on).

## OFF MODE

The **OFF** mode is the “safe” mode when any actions must be taken, e.g., replacing the SD card or batteries, or transporting the device. You will also use **OFF** mode if you connect the camera to a computer’s USB port later to download your photos/videos. And of course, when you are storing or not using the camera, you will switch it to **OFF**. Please note that even in the **OFF** mode the **Trophy Cam HD Essential E3** still consumes power at a very low level. Therefore, it’s a good idea to take the batteries out of the battery compartment if the camera will not be used for a long time.

## ON MODE

Anytime after the batteries and SD card have been inserted, you can switch on the camera. When the power switch is moved to the top position, the camera will enter into the **ON** (Live) mode. The motion indicator LED (*pg. 7, “Front View”*) will blink red for about 10 seconds. This interval allows time for you to close the **Trophy Cam HD Essential E3’s** front cover, lock it, and leave the monitored area. Once in the **ON** mode, no manual controls are needed or possible (the control keys have no effect). The **Trophy Cam HD Essential E3** will take photos or videos automatically (according to its current parameter settings) when it is triggered by the PIR sensor’s detection of activity in the area it covers.

You can either move the power switch directly from OFF to ON mode, or stop at the SETUP position first to change one or more settings, then move the switch to ON after you have finished doing so.

## SETUP MODE

In the **SETUP** mode you can check and change the settings of the **Trophy Cam HD Essential E3** with the help of its built-in LCD. These settings, found in the SETUP Menu, let you change the photo or video resolution, interval between photos, switch the time imprint on, etc. Moving the power



switch to the **SETUP** position will turn on the LCD display, and you will see an information screen that shows how many images have been taken, the battery level, camera or video mode, etc (see *Fig. 3, pg. 12*).

**NOTE:** Always move the power switch from **OFF** to **SETUP** mode. It is possible that the camera could lockup if it is switched from **ON** to **SETUP** mode. If this occurs, simply move the switch to **OFF** and then push it up to **SETUP** again.

### *SETUP Mode Shortcut Keys/Functions*

As mentioned earlier in “Parts & Controls”, four of the keys below the LCD have secondary, “shortcut” functions when the camera is switched to **SETUP** mode (but the **MENU** key has not been pressed):

- Press the **UP** key to quickly set the camera to shoot video clips.
- Press the **DOWN** key to quickly set the camera to take still photos.
- Press the **RIGHT** key to manually trigger the shutter. This is useful for testing the camera-make sure you are in **SETUP** mode, press the **RIGHT** key, and a few seconds later a photo or video (depending on how the camera was set) will be saved to the SD card (or internal memory if no card is inserted). The “number of images taken” counter on the bottom left of the LCD will increase by one. If the display indicates “SD PROTECTED” when you press the SHOT key, switch the camera OFF, remove the SD card and slide its protect switch off.

## **USING THE SETUP MENU TO CHANGE SETTINGS**

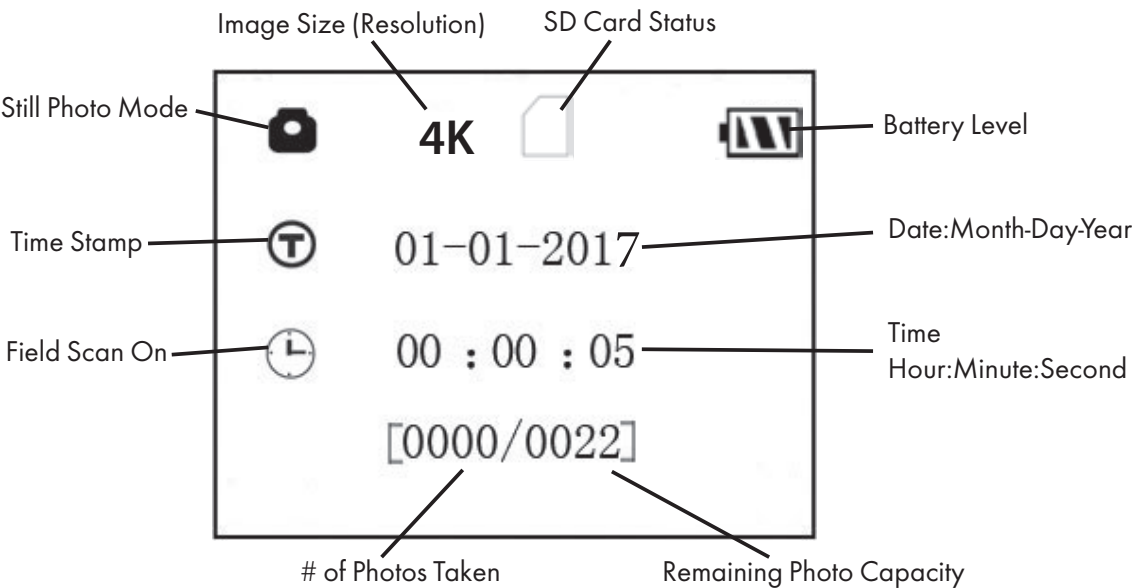
The main purpose of the **SETUP** mode is to allow you to change the settings of the camera’s parameters (14 different ones are available) so your **Trophy Cam HD Essential E3** operates exactly the way you want it to. You will do this by entering the SETUP Menu and pressing the keys below the LCD display, which will show you each parameter and its setting.

### *Changing Parameter Settings in SETUP Mode*

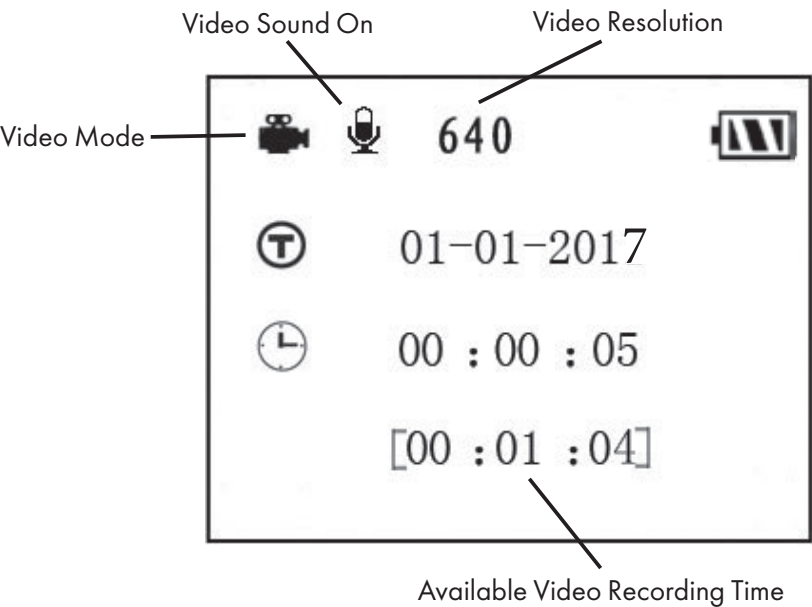
A wide range of options or “parameters” are provided to allow you to set the **Trophy Cam HD Essential E3** to your operational preferences. To change the setting of any parameter you must first switch to the **SETUP** mode. Once in **SETUP** mode, pressing the **MENU** button will allow you to select any parameter and change its setting. The name of the parameter

Fig. 3: **SETUP** Information Screen

**Camera (Still Photo) Mode**



**Video Mode**



and its current setting will be shown on the LCD. Pressing the **RIGHT** or **LEFT** key scrolls to the next or previous parameter (**RIGHT** key to move on to the next parameter and **LEFT** key to go back to the previous parameter), and pressing the **UP** or **DOWN** key lets you select a different setting for the currently displayed parameter. Once you have selected your preferred new setting for a parameter, press the OK button to save the new setting (actually change it). When have are finished changing the settings of one or more parameters, press **MENU** again to exit the **SETUP** menu. **MENU** can also be pressed anytime you want to cancel changing a parameter's setting after a new setting has been selected (but **OK** has not been pressed yet). After setting the parameters to your preferences, be sure to move the switch to **ON** to begin actually taking photos or videos. No images will be captured if the switch is left in the **SETUP** position (*unless you press the **RIGHT**/Shot key after exiting the menu*)-in fact, the camera will power off automatically after a few seconds with no key pressed.

### *Parameter Display*

The settings for a parameter are shown on the display as follows:

Only one setting is displayed at a time, starting with the current setting for the parameter when it is first selected (**Fig. 4a**). To change the setting, use the **UP/DOWN** keys to display the new setting you want (**Fig. 4b**), then press **OK** to "Execute" (make the actual change to this setting). If you want to confirm this setting is now the current one, just press the **RIGHT** key to scroll to the next parameter, then press **LEFT** to go back again to the previous one. You should see the parameter setting you just made.

**Fig. 4: Selecting Parameter Settings**

**Press MENU**

**(4a)**



**Press DOWN to select new setting  
for the highlighted parameter**

**(4b)**



**Press OK to confirm and execute  
the new setting**

## *EXAMPLES-Changing the Settings of Some Common Parameters*

Following this page, you will find tables listing all of the parameters found in the **SETUP** Menu, along with their possible settings (or range of settings), and a detailed description of what the parameter controls and what the settings do. If you read the previous section detailing how to select parameters and change their settings, you should be able to dive right in, find the parameter(s) you want, and setup the camera to your preferences. But maybe you'd rather walk through an example or two first:

To change any parameter's setting, always start with the power switch in the **SETUP** position. After the LCD comes on, press the **MENU** key.

The first parameter you will see when you enter the **SETUP** Menu is "Set Clock". As the Time Stamp feature is "On" by default, the camera will normally imprint the date and time on each photo or video, based on your settings here. Press **OK** and use the **UP/DOWN** keys to set the hour (24-hr format, "00"=midnight, "12"=noon), then press the **RIGHT** key move to the minute field and set it (again using **UP/DOWN**). Press **RIGHT** to move to the lower row and set the year, month and date using the same method. When finished, press the **OK** key to confirm the new time and date settings you made.

Now press the **RIGHT** key to move to another parameter in the Menu. The next parameter you will see is "Mode". To change it from its default setting of "Camera" (still photos) to "Video" (shoot video clips), press the **DOWN** key to select the "Video" setting. Press the **OK** key to "Execute" (Set) the new setting you've selected for this parameter.

Now press the **RIGHT** key to move to another parameter in the Menu. Pressing it four times will take you to "Video Length". Try using the **UP** and **DOWN** keys to scroll through the range of settings, then press **OK** to lock in your setting for the length of each video clip the camera shoots.

Pressing the **RIGHT** key several more times will get you to the "Default Set" parameter. Highlight or select "Execute" (using **UP** or **DOWN**) and press **OK** to restore all parameters (including the Mode and Video Length parameters you changed a minute ago) back to their original factory default settings. The default settings for each parameter are indicated in bold type in the **SETUP** Menu tables on the next several pages.

## ***Field Scan 2x with Live Trigger Feature***

Field Scan is a revolutionary new feature for the Bushnell **Trophy Cam HD Essential E3**, which allows you to monitor your food plots or field edges with time lapse images or video. When set to “On”, the **Trophy Cam HD Essential E3** will take a photo (or record a video clip) automatically at your choice of intervals (for example, once every five minutes) during one or two blocks of time you set up for each day, **without requiring a trigger from an active animal**. This has the advantage of giving you the ability to monitor the edge of a field that might be 50 or 150 yards away from the camera out of the PIR sensor’s range. The result is an effective range much greater than it would normally be, with the camera dependant on triggers generated by nearby animals. This is a great tool for hunters to scout an entire field with only one camera.

If an animal does enter the area covered by the PIR sensor and generate a trigger event during a time in between the Field Scan intervals you set, the camera will capture an image or video just as it normally would, based on your other menu settings. Here’s how to setup and use Field Scan (be sure you’ve set the current time in “Set Clock” first, so your Field Scan recording will stop and start at the correct times of day):

1. Move the main switch to **SETUP**, then press **MENU**.
2. Keep pressing the **RIGHT** key, stepping through the Setup Menu until you reach Field Scan.
3. Press the **UP** key to select On, and press **OK [Step 1, pg.18]**. You will see "A", representing the first block of time you can define (a second block of time later in the day, "B" can also be setup if you wish). Press **OK [Step 2]**. This takes you to the screen to set Start and Stop times, which determines the clock times when the first block of Field Scan recording will begin and end for each day. You can set these times to the exact hour and minute you want, for a recording “window” that lasts anywhere from just a minute to a full 24 hours.
4. Set the [Start] and [Stop] times, beginning with the Start hour, using the **UP/DOWN** keys to change the setting **[Step 3]**. The hour setting is based on a 24-hour clock, with “00” hours = midnight, “12” hours = noon, “23” hrs = 11PM, etc. To move to the next setting, press the **RIGHT** key, change the minute for the Start time with **UP/DOWN**, then on to the hour and minute settings for the Stop time.

5. After you finish setting the Stop minutes, press **OK** to confirm your settings for the first block of Field Scan recording. If desired, you can create a second block of time by pressing the **DOWN** key to select "B" **[Step 4]**, then press **OK** and follow the same process to set Start and Stop times for Field Scan block "B" **[Step 5]**. As an example of how you might use these two available time blocks, you could setup Field Scan time block "A" for the dawn hours from 6 AM to 8 AM, and block "B" to capture images between 5:30 and 7 PM. No Field Scan recording would occur from 8AM to 5:30PM, or from 7PM to 6AM.
6. After setting Start/Stop times to define Field Scan block "A" and/or "B", press **OK**, then press the **UP** or **DOWN** key to select "Interval" and press **OK** **[Step 6]**. The Field Scan "Interval" setting lets you control how often a photo or video clip is recorded during the block(s) of time you defined with the Start and Stop settings. Your options are 60 minutes, 30 minutes, 15 minutes, 5 minutes (this is the default), or 1 minute (still photo mode only). Use the **UP/DOWN** keys to select your preference, then press OK to save it **[Step 7]**. Note that for videos, "Interval" is independent of the Length of each video recording-it's **how often** videos are recorded, not how long each one lasts.
7. Here's an example of how the camera would operate, based on the following Field Scan settings:

**Field Scan: On**

**Field Scan A:**

**[Start]: 6:00**

**[Stop]: 8:00**

**Field Scan B:**

**[Start]: 17:30**

**[Stop]: 19:00**

**Interval: 15M**

**Note: avoid any "overlap" of Field Scan A & B recording blocks when setting their start and stop times, to assure correct operation.**

These settings would cause the camera to capture a photo (or video, if the camera is set to that mode) once every 15 minutes, beginning at 6 AM, until the Field Scan "A" recording block stops at 8:00 AM. Later that day, the camera would again take a photo or video every 15 minutes between 5:30 PM and 7:00 PM (during Field Scan time block "B"). The next day, the camera would again record an image or video once every 15 minutes between 6:00 and 8:00 AM, and between



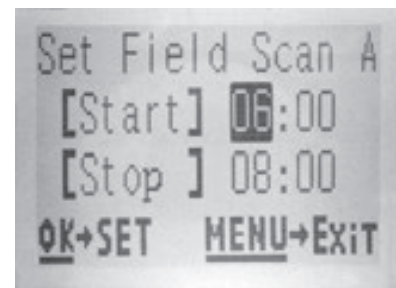
5:30 and 7:00 PM. No Field Scan recording would occur from 8AM to 5:30PM, or from 7PM to 6AM. Remember, Field Scan recording is independent of normal triggers due to animal activity—even if no animals enter the IR sensor coverage zone, an image or video will still be captured every 15 minutes during the block(s) of time. If an animal triggers the camera “in between” the 15 minute intervals, it will be recorded, same as it would if you had setup the camera with Field Scan turned Off. **Note: Field Scan settings of frequent intervals and/or long periods between start and stop time can reduce battery life.**



**[Step 1]-set Field Scan Mode to “On”**



**[Step 2]-select Field Scan "A" (press OK)**

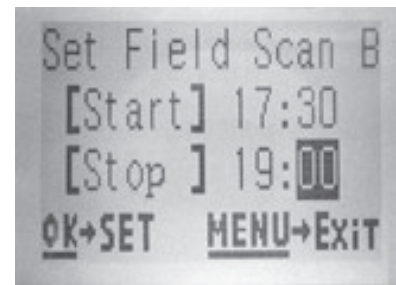


**[Step 3]-set Field Scan "A" Stop & Start**

**Steps 4 & 5 are optional** (only required if you want to set up a second block of Field Scan recording with different stop and start times)



**[Step 4] (opt)-select Field Scan "B" (press OK)**



**[Step 5] (opt)-set Field Scan "B" Stop & Start**

*Note: the Interval Setting sets the timing between each image for both Field Scan "A" and "B" recording blocks.*



**[Step 6]-select Field Scan "Interval"**



**[Step 7]-set Field Scan Interval**

## The SETUP Menu – Parameters and Settings

Parameter	Settings (Bold=default)	Description
<b>Set Clock</b>	Set	Press <b>OK</b> and use the <b>UP/DOWN</b> keys (to change the setting) and <b>LEFT/RIGHT</b> keys (to move to the next field) to set the hour ( <i>24-hr format only</i> , "00"= <i>midnight</i> , "12"= <i>noon</i> ) and minute, and then (on the lower row), the year, month and date.
<b>Mode</b>	<b>Camera</b> or Video	Selects whether still photos or video clips are captured when the camera is triggered.
<b>Image Size</b> <i>(only affects still photos)</i>	<b>HD Pixel</b> , 4K Pixel, 16M Pixel	Selects resolution for still photos. Higher resolution provides more pixels, but creates larger files that take up more of the SD card capacity (fills up faster). 4K is a good compromise between resolution and file size.
<b>Capture Number</b> <i>(only affects still photos)</i>	<b>1 Photo</b> , 2 Photo, 3 Photo	Selects how many photos are taken in sequence per trigger in Camera mode. <b>Please also refer to the Interval parameter. Note: only one photo will be captured if "Interval" is set to 1 second, regardless of the Capture Number setting.</b>
<b>Video Size</b> <i>(only affects video clips)</i>	<b>1280x720</b> , 640x360	Selects video resolution (in pixels per frame). Higher resolution produces better quality videos, but creates larger files that take up more of the SD card capacity (fills up faster). 640x360 is VGA video in standard 4:3 format, 1280x720 is widescreen 16:9 HD format.

Parameter	Settings (Bold=default)	Description
<b>Video Length</b> <i>(only affects video clips)</i>	<b>10S</b> (second) default, with 60S to 5S possible range <i>(15S max. for video at night)</i>	Sets length per captured video clip. Settings begin with 10 second default when parameter is first selected. After stepping down to 5S, video length settings start over at 60S.
<b>Interval</b>	<b>10S</b> (second) default, with a 60M (minute) to 1S (second) range of settings available.  <i>(60M-1M are set in one minute increments, 59S-1S are set in one second increments)</i>	Selects the length of time that the camera will "wait" until it responds to any additional triggers from the PIR after an animal is first detected and remains within the sensor's range. During this user set "ignore triggers" interval, the camera will not capture photos/videos. This prevents the card from filling up with too many redundant images. Settings begin with the default 10 seconds when parameter is first selected.  <i>Notes: after setting down past "1S", settings start over at "60M". Setting the Interval time to 1 second will capture the maximum # of images, but some may appear "washed out" if animal is too close to camera at night.</i>

Parameter	Settings (Bold=default)	Description
<b>Sensor Level</b>	<b>Auto</b> , Low, Normal, High	Selects the sensitivity of the PIR sensor. The "High" setting will make the camera more sensitive to infrared (heat) and more easily triggered by motion, and the "Low" setting makes it less sensitive to heat and motion. The High setting can be useful when the ambient temperature is warm (making it more difficult for the sensor to detect animals), and the Low setting may help in cold weather if the camera is being triggered too often by anything warmer than the surroundings. "Normal" is for average or moderate conditions. The default "Auto" setting will allow the camera to determine the best setting based on its current operating temperature. This is an ideal setting if the weather is expected to change significantly during the period the camera will be used.
<b>Camera Mode</b>	<b>24 Hrs</b> , Day, Night	Allows user to limit operation to only day or night period if desired. An ambient light level sensor determines "Day" vs "Night" automatically. This setting takes priority over any Field Scan settings.
<b>Format</b>	Execute	Deletes (erases) all files stored on a card to prepare it for reuse. Always format a card that has been previously used in other devices. <b>Caution! Make sure you have downloaded and backed up any files you want to preserve first!</b> Press <b>OK</b> to execute, press <b>MENU</b> (or select <b>NO</b> then press <b>OK</b> ) to exit without formatting.

Parameter	Settings (Bold=default)	Description
<b>Time Stamp</b> <i>(only affects still photos)</i>	<b>On</b> , Off	Select “On” if you want the date & time (that the photo was captured) imprinted on every photo, select “Off” for no imprint.
<b>Field Scan</b>	On, <b>Off</b> <i>(After On is selected): “A” Start/Stop, “B” Start/Stop, Interval</i>	Turns Field Scan (Time Lapse) recording mode on/off. When activated, Field Scan forces the camera to take photos or videos even when it is not triggered by a nearby live animal, useful for constant monitoring of an area that might be far away from the camera. The user can set the start and stop times for up to two independent “blocks” of Field Scan recording, as well as the interval time between each photo/video. To ensure correct operation, avoid setting overlapping start/stop times for Field Scan A and B. Please read the “Field Scan 2x...” section of this manual for details on using this feature.
<b>Video Sound</b> <i>(only affects video clips)</i>	<b>On</b> , Off	Select “On” to record audio along with the video when the camera is set to video mode (saved file sizes will be slightly larger).
<b>Default Set</b>	<b>Cancel</b> , Execute	Select “Execute” and press <b>OK</b> to restore all parameters to the original factory default settings. If the camera is behaving oddly and you think you may have changed the setting for something accidentally (but aren’t sure which one), this will reset all parameters to their most commonly used or “generic” settings.
<b>Version</b>	n/a	Displays firmware version

# MOUNTING AND POSITIONING THE Trophy Cam HD Essential E3

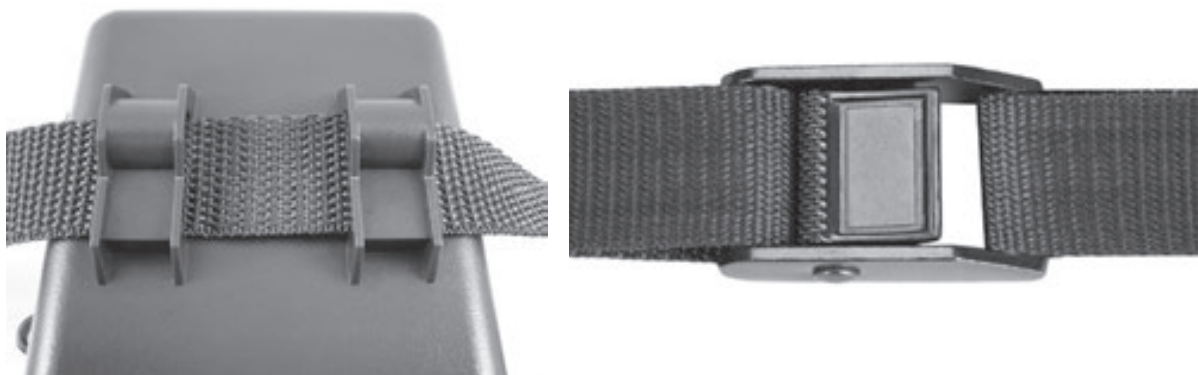
## *Mounting*

After you've set up the camera's parameters to your personal preferences at home or in your truck, you're ready to take it outside and slide the power switch to "**ON**". When setting up the **Trophy Cam HD Essential E3** for scouting game or other outdoor applications, you must be sure to mount it in place correctly and securely. We recommend mounting the **Trophy Cam HD Essential E3** on a sturdy tree with a diameter of about 6 in. (15cm). To get the optimal picture quality, the tree should be about 16-17 ft. (5 meters) away from the place to be monitored, with the camera placed at a height of 3.5-5 ft. (1 ~ 1.5 m). Also, keep in mind that you will get the best results at night when the subject is within the ideal flash range, no farther than 100' (30m) and no closer than 10' (3m) from the camera.

There are two ways to mount the **Trophy Cam HD Essential E3**: using the provided adjustable web belt, or the tripod socket.

**Using the adjustable web belt:** *Fig. 5* illustrates using the web belt on the **Trophy Cam HD Essential E3**. Push one end of the belt through the two brackets on the back of the **Trophy Cam HD Essential E3**. Thread the end of the strap through the buckle. Fasten the belt securely around the tree trunk by pulling the end of the strap firmly so there is no slack left.

**Fig. 5: Attaching the Belt**





**Using the tripod socket:** The camera is equipped with a socket at the bottom end to enable mounting on a tripod or other mounting accessories with a standard 1/4-20 thread.

Two optional mounting accessories, a "Bear Safe" metal camera box (model # 119754C) and Deluxe Tree Bracket (model# 119652C) are also available-please see your Bushnell dealer or website for more details.

### *Sensing Angle and Distance Test*

To test whether the **Trophy Cam HD Essential E3** can effectively monitor the area you choose, this test is recommended to check the sensing angle and monitoring distance of the **Trophy Cam HD Essential E3**. To perform the test:

- Switch the **Trophy Cam HD Essential E3** to the **SETUP** mode.
- Make movements in front of the camera at several positions within the area where you expect the game or subjects to be. Try different distances and angles from the camera.
- If the motion indicator LED light blinks, it indicates that position can be sensed. If it does not blink, that position is outside of the sensing area.

The results of your testing will help you find the best placement when mounting and aiming the **Trophy Cam HD Essential E3**. The height away from the ground for placing the device should vary with the animal size appropriately. In general, 3 to 6 feet is preferred.

You can avoid potential false triggers due to temperature and motion disturbances in front of the camera by not aiming it at a heat source or nearby tree branches or brush (especially on windy days).

### *Switching ON the Camera*

Once you switch to the **ON** mode, the motion indicator LED (red) will blink for about 10 seconds. This gives you time to close and lock the front cover of the **Trophy Cam HD Essential E3** and then walk away. During this time, the motion indicator LED will blink red continuously. After it stops blinking, the PIR is active, and any motion that is detected by it will trigger the capture of photos or videos as programmed in the **SETUP** Menu. Be sure you have read the descriptions of the Capture Number, Video Length, Interval and Sensor Level parameters. Please note, the PIR is strongly sensitive to ambient temperature. The greater the temperature difference between the environment and your subject, the farther the possible sensing distance. The average sensing distance is about 60 ft.



*Before leaving the camera unattended, please check for the following:*

- Are the batteries inserted with correct polarity and is their power level sufficient?
- Does the SD card have sufficient available space and is its write-protection (lock) switch off?
- Is the Power switch in the **ON** position? (do not leave it in **SETUP**).

### ***About the ARD (Anti Reflective Device)***

A removable filter grid (ARD) covers the LED flash, so that light reflections from the protective black glass panel over the LED array are greatly reduced. This helps to prevent detection of the camera by animals (and potential thieves). If getting maximum light output from the LED flash is a higher priority than concealment, the ARD grid may be easily removed by inserting a small screwdriver, key, etc. in the slot at the lower center of the ARD (above the camera lens), and gently pulling it up away from the camera (see pg. 7).

## **PLAYING BACK/DELETING THE PHOTOS/VIDEOS**

After you have setup, mounted and activated your **Trophy Cam HD Essential E3**, you will of course be eager to return later and review the images it has captured for you. There are several different ways this can be done.

### ***Reviewing Images Directly From the SD Card***

This is the most popular method of viewing images. Since unmounting the camera and taking it to your computer isn't very convenient, you may find it easier to just take the card out. By removing the SD card (swapping it for a new empty card if you like) and taking it to your home or campsite to view the images by using an SD card "reader" (*user supplied*) connected to your computer (some computers and TVs have a built in SD card slot), you can leave the camera in place ready to capture more images. Once connected, the card reader works the same way as described below-please read that section if you have any problem finding your files.

## *Reviewing Images by Connecting the Camera to a Computer*

You can always unmount the entire camera from the tree and connect its USB port to a computer—it will be recognized as a “removable disk”, without the need to install any drivers or software. When using a PC (or Mac\*) to view photos (or video clips\*), first connect the device to the computer with a USB cable (*not included, available at most electronics/computer retailers*) that has a “Mini-B” USB plug on one end (camera) and a “Standard-A” USB plug at the other end (computer). Then use commercial software with an image browser feature, or an image browser included with the PC’s operating system to view images saved on the SD card in the folder \DCIM\100EK113. Each new image or video will be numbered incrementally in order of the time it was captured (first four digits indicate month/day). For example, you will see file names such as “09030001.JPG” or “09030001.MP4”. Through the file format suffix you can distinguish whether the file is a still photo (with suffix .jpg) or a video (with suffix .mp4).

*\*“.mp4” video files may require additional software for viewing on a Mac.*

The **Trophy Cam HD Essential E3** supports 3 kinds of file system formats, FAT12, FAT16, and FAT32. The default value is FAT16 to save photos and videos. Here are some related notes:

- You don’t need to be concerned about the file system format of the **Trophy Cam HD Essential E3** unless your equipment has problems reading the SD card. If this happens, please format the SD card with the **Trophy Cam HD Essential E3** or in your computer first and then insert the card into your **Trophy Cam HD Essential E3** and try again.
- The default file system format of the **Trophy Cam HD Essential E3** is FAT16, which most computers can read. If you format an SD card for the **Trophy Cam HD Essential E3** in your computer, you should choose the file system format FAT16. Normally FAT16 is recommended unless you have another image viewer that uses FAT12 or FAT32 format.

## *Deleting Photos or Videos*

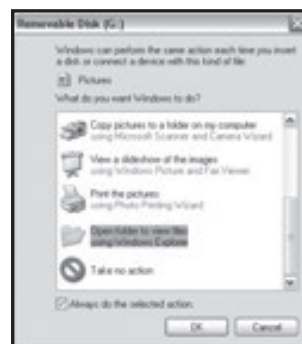
All files may be deleted from the card by using the Format parameter. (see pg. 21)  
**NOTE:** *after formatting the card, the deleted files can’t be restored!*

# DOWNLOADING THE PHOTOS/VIDEOS

To download your photos/videos to a PC or Mac\*, first make sure the **Trophy Cam HD Essential E3** power switch is in the **OFF** position. Connect a USB cable to the camera's USB port, then directly to a main USB port on your computer-do not use front panel/keyboard USB ports or unpowered "hubs".

The **Trophy Cam HD Essential E3** will be recognized as a standard "USB Mass Storage" device (this may take several seconds the first time you connect it). If you would rather leave your camera in the woods and just pull its SD card out, an SD card reader works the same way as described in this section once the card is inserted and the reader is connected to your computer.

With Windows XP or later, you can then simply use the options in the pop-up window to copy, view, or print your photos (*right*).



On all Windows OS, the **Trophy Cam HD Essential E3** will also be listed as a "Removable Disk" if you open the "My Computer" window (on Macs, an icon will appear on your desktop). The **Trophy Cam HD Essential E3**'s photo files are named "09030001.JPG" etc, and are located in the "DCIM\100EK113" folder on this "Removable Disk". Video file names will end with ".mp4". You may copy the photos/videos to your hard drive as you would any file-just copy/paste or drag the file names or icons to your drive or desktop.

After the photos are copied to your hard drive, you can disconnect the **Trophy Cam HD Essential E3**. (On Mac computers, drag the "disk" that appeared on your desktop when the camera was connected into your Trash to "eject" it before disconnecting.) The .jpg standard files from the **Trophy Cam HD Essential E3** may be viewed and edited with any photo software you choose to use. The .mp4 video files may be viewed with Windows Media Player (version 7 or later) as well as other video playback programs that may have been supplied with your computer, or are available online.

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# TROUBLESHOOTING / FAQ

## Camera takes continuous images of no subject

A camera has what is known as a “false trigger” if the PIR sensor thinks that there is motion and heat in front of the camera lens when there is no subject in the image. These “False Triggers” are the result of placing the camera in an environment where there is motion associated with tree branches creating motion in front of the camera or an area where there is high heat in the foreground and any motion from wind could set off the camera. Setting a camera up over water is also a potential cause for this issue. To remedy this situation:

1. Try moving the camera to an area that does not have any of these issues or try changing the sensor level on the menu settings.
2. If the camera continues to take images when there is no subject in them, try placing the camera in an inside environment and aiming at a location where there is no motion.
3. If the camera continues to show issues, then there is probably an electronic component issue. If this is the case, please contact our customer service to send the camera back for repair.

## Battery life is shorter than expected

1. Battery life will vary with operating temperature and the number of images taken over time. Typically, the **Trophy Cam HD Essential E3** will be able to capture several thousand images before the batteries die.
2. Check to make sure you have used new alkaline or lithium batteries. **Bushnell recommends using 8 Energizer<sup>®</sup> Lithium AA batteries in all Trophy Cam HD Essential E3s to obtain maximum battery life.**
3. Make sure that the power switch was turned to the “On” position and that the camera was not left in “Setup” mode while in the field.
4. Make sure that you are using a good quality name brand SD card in your camera. **Bushnell recommends SanDisk<sup>®</sup> brand SD Cards up to 32GB.** Our experience indicates that poor quality SD cards can sometimes reduce your **Trophy Cam HD Essential E3** battery life.

## Camera stops taking images or won't take images

1. Please make sure that the SD card is not full. If the card is full, the camera will stop taking images.

2. Check the batteries to make sure that they are new alkaline or lithium AA batteries. ***See note above about short battery life.***
3. Make sure that the camera power switch is in the **“On”** position and not in the **“Off”** or **“Setup”** modes.
4. Make sure that you are using a good quality SD card in your camera. **Bushnell recommends SanDisk® SD Cards up to 32GB.**
5. If the SD card has its write protect switch in the lock position, the camera will not take images.
6. If you have used an SD card in another device before inserting it in your **Trophy Cam HD Essential E3**, you might want to try formatting the card using the “Format” parameter in Setup mode (make sure you have backed up any important files first, as formatting will erase all previous files). In some cases, other devices may change the formatting of the SD card so that it will not work properly with the **Trophy Cam HD Essential E3**.

## **Camera won't power up**

1. Make sure that you have installed all eight batteries in the battery compartment, filling battery spaces 1-8 with no “gaps”.  
**Bushnell recommends using 8 Energizer® Lithium AA batteries in all Trophy Cam HD Essential E3s.**
2. Make sure that the batteries are installed correctly, observing proper polarity. Always place the negative (flat) end of each battery in contact with the spring side of its slot inside the camera.
3. After moving the switch from **“Off”** to **“Setup”** or **“On”**, make sure that the switch is correctly in position to ensure the proper mode (avoid positions “between” two modes).
4. Do not move the switch directly from **“On”** to **“Setup”**-always move the switch all the way down to **“Off”** first, then back up to **“Setup”**.

## **Still Photo and/or Video Quality Problems**

1. *Night photos or videos appear too dark*
  - a. Check the battery indicator icon to see if battery power is full. The flash will stop operating near the end of the battery life.
  - b. You will get the best results when the subject is within the ideal flash range, no farther than 100' (30m) from the camera. Subjects may appear too dark at greater distances.
  - c. Please note that when the Capture Number parameter is set higher than “1 Photo”, or with very short Interval settings,

some images may appear darker than others due to the quick response and rapid retriggering of the camera, allowing less time for the flash to fully recharge before firing again.

- d. The ARD (anti-reflective device) shield can be removed to maximize flash output. See *page 25 for more details*.

## 2. *Daytime photos or videos appear too dark*

- a. Make sure that the camera is not aimed at the sun or other light sources during the day, as this may cause the auto exposure to produce darker results.

## 3. *Night photos or videos appear too bright*

- a. You will get the best results when the subject is within the ideal flash range, no closer than 10' (3m) from the camera. Subjects may appear too light at closer distances.
- b. Change the Interval setting from 1S to 3S or higher. The camera will be in auto exposure mode to avoid "whiteout" photos.

## 4. *Daytime photos or videos appear too bright*

- a. Make sure that the light sensor will not be in the shade (from tree leaves/branches) while the camera lens is aimed into a bright area.

## 5. *Photos with streaked subject*

- a. In some cases with low lighting conditions and fast moving subjects, the 4K or 16MP resolution settings may not perform as well as the HD setting.
- b. If you have multiple images where fast moving subjects produce streaks on the photo, try the HD setting instead.
- c. Change the Interval setting from 1S to 3S or higher to minimize motion blur.

## 6. *Red, green or blue color cast*

- a. Under certain lighting conditions, the sensor can become confused resulting in poor color images.
- b. If this is seen on a consistent basis, then the sensor may need servicing. Please contact Bushnell customer service.

## 7. *Short video clips—not recording to the length set*

- a. Check to make sure that the SD card is not full.
- b. Make sure that the camera has good batteries in it. Near the end of the battery life, the camera may choose to record shorter video clips to conserve power.
- c. Maximum length of videos captured at night is 15 seconds per clip.



## Date/Time Stamp not appearing on images

Make sure that the **“Time Stamp”** parameter is set to **“On”**.

## Photos Do Not Capture Subject of Interest

1. Check the “Sensor Level” (PIR sensitivity) parameter setting. For warm environmental conditions, set the Sensor Level to “High” and for cold weather use, set the sensor for “Low”.
2. Try to set your camera up in an area where there is not a heat source in the camera’s line of sight.
3. In some cases, setting the camera near water will make the camera take images with no subject in them. Try aiming the camera over ground.
4. Try to avoid setting the camera up on small trees that are prone to being moved by strong winds.
5. Remove any limbs which are right in front of the camera lens.

## PIR Sensor LED Flashes/Doesn’t Flash

1. When the camera is in the “Setup” mode, a special LED on the front of the camera will flash when it senses motion. This is for setup purposes only and will help the user aim the camera.
2. During use, the LED will not flash when the camera takes an image. This is to help keep the camera hidden from game.

## LCD Screen Issues

1. *LCD screen powers on but no text is present.*
  - a. After moving the switch from **“Off”** to **“Setup”** or **“On”**, make sure that the switch is correctly in position to ensure the proper mode (avoid positions “between” two modes).
  - b. Do not move the switch directly from **“On”** to **“Setup”**-always move the switch all the way down to **“Off”** first, then back up to **“Setup”**.
2. *LCD screen shows a faint black line after turning from “Setup” to “On”.*
  - a. The LCD will turn off when you slide the switch to the **“On”** position. In some cases, this black line will appear and then fade in about 1 second. This is normal and the camera will function properly.
3. *Screen comes on but then powers off*
  - a. Make sure that you have installed the SD card correctly.



## Camera won't retain settings

Make sure that you have been saving the changes to any parameter settings that you made while in Setup mode, by pressing **"OK"** after changing the setting. If you don't save your new setting after changing it, the camera will continue to use the original default setting for that parameter.

## Field Scan (Time Lapse) not working properly

1. Make sure that the stop and start times of Field Scan "A" and "B" do not overlap (for example, do not set the start time of "B" to 8AM if the stop time of "A" is 10AM).
2. When using Field Scan in video mode, the smallest interval time available is 5 min, to avoid potential overheating of the batteries and electronic components, which could cause operational failure or damage to the camera. In still photo mode, a 1 min. Interval can be set.



**CAUTION!:** DO NOT USE the 1s Interval setting for Video at night at a feeder or similar environment. It may cause the LEDs to continue firing over a long period of time, which may overheat and shorten the operating life of the internal electronic components.

**Do not mix old and new batteries.**

**Do not mix battery types-use ALL lithium or ALL alkaline.**

**Rechargeable batteries are not recommended.**

# TECHNICAL SPECIFICATIONS

<b>Image Sensor</b>	3 Megapixel Color CMOS
<b>Maximum Pixel Size</b>	4624x3468 (16 MP)
<b>Lens</b>	F = 2.8; FOV=38°; Auto IR-Cut-Remove (at night)
<b>IR-Flash Range</b>	36'-100' (12m-30m)
<b>Display Screen</b>	Std B&W Display: 24x32mm(1.5")
<b>Memory Card</b>	SD or SDHC Card, Maximum capacity 32GB
<b>Internal RAM</b>	64MB
<b>Picture Size</b>	HD=1920x1440, 4K=3840x2880, 16M=4624x3468
<b>Video Size</b>	1280x720, 640x360
<b>PIR sensitivity</b>	PIR with 4 sensitivity levels: Auto/High/Normal/Low
<b>Operation</b>	User selectable: 24 Hour, Day only, or Night only (based on ambient light level)
<b>Response Time</b>	0.3 sec
<b>Triggering Interval</b>	1 sec. - 60 min. programmable
<b>Shooting Numbers</b>	1 – 3 programmable
<b>Video Length</b>	5-60sec. programmable (15sec max for night video)
<b>Power Supply</b>	8xAA required
<b>Stand-by Current</b>	< 0.08mA (<7mAh/day)
<b>User Interface</b>	LCD display
<b>Interface</b>	USB; SD card holder
<b>Security</b>	Strap; 1/4-20 attachment
<b>Operating Temperature</b>	-20 - 60°C (Storage temperature: -30 - 70°C)
<b>Operating Humidity</b>	5% - 90%