# Bushnell®









# **INSTRUCTION MANUAL**

Model #: 119936C / 119938C / 119975C / 119977C

# Quick Start Guide (119936C/119938C/119975C/119977C)

# To get Started using your Bushnell Trail Camera:

- Install 6 AA batteries (lithium\* or alkaline) and SD card (up to 32GB max.)
   \*lithium batteries are recommended
- 2. At the location you will place the camera, power it on.
- 3. Mount the camera using the tree strap.
- 4. Your camera is now ready to use at its default settings: photo mode, 10 sec interval between photos, 8MP resolutions, "Hi" LED Power.
- 5. The default settings can be changed to your preferences (for example, if you would rather capture videos, or photos at a different resolution, spaced further apart) using the display on the camera?

#### **IMPORTANT NOTE**

Congratulations on your purchase of one of the best trail cameras on the market! Bushnell is very proud of this camera 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.

If your Bushnell Core Trail Camera does not seem to be functioning properly or if you are having photo/video quality issues, please check the Troubleshooting/FAQ section.

Problems are often due to something simple that was overlooked, or require only changing one setting to solve.

Do not mix old and new batteries

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

Bushnell recommends using SanDisk® class 6 or faster SDHC Cards (up to 32GB capacity) in your Core Trail Camera.

#### INTRODUCTION

About the Core Trail Camera

The Bushnell **Core Trail Camera** 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 24MP or 30MP still photos), or video clips.

The **Core Trail Camera** 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 the full capacity of 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 within half a second) and then automatically take photos or videos according to previously programmed settings. The **Core Trail Camera** 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 **Core Trail Camera** is designed for outdoor use and is resistant against water and snow.

Your trail camera is one of the latest generation of Bushnell Core Trail Camera.

Core Trail Cameras, and includes many new or improved features, including:

- **Dual Sensor (119975C/119977C only)** the camera has dual sensors in order to capture the best quality images for both day and night.
- 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.
- **Removable Battery Tray** replaceable battery tray in order to easily exchange your batteries quickly. Built in latch in order to catch the tray from falling out of the camera.

- **GPS Geotag Capability** allows the user to input the longitude and latitude of the camera's position, which will be embedded in each photo file. This enables Google Earth, Picassa and other geotag enabled software to automatically show a map pinpointing each camera's location when a group of photos are reviewed on a computer. Especially useful for those who setup multiple **Core Trail Camera s** to monitor large or widely separated areas.
- **Hybrid Capture Mode** allows both still photos and videos to be captured at each trigger, up to highest resolution settings for each.
- **NV Shutter** user can select shutter speed for images captured at night allowing control over brightness vs. ability to stop motion.
- Camera Operating Mode can be limited to Day only, Night only, or 24 HRs
- **Dynamic Video** mode uses the duration of animal activity to determine the length of the captured file, so your video doesn't stop right as things get interesting.

And many more features such as video with audio, 0.2 second trigger speed and 0.6 second recover time (still photos), widescreen or fullscreen format still photos, imprintable camera name (user set) along with current data including temperature and moon phase.

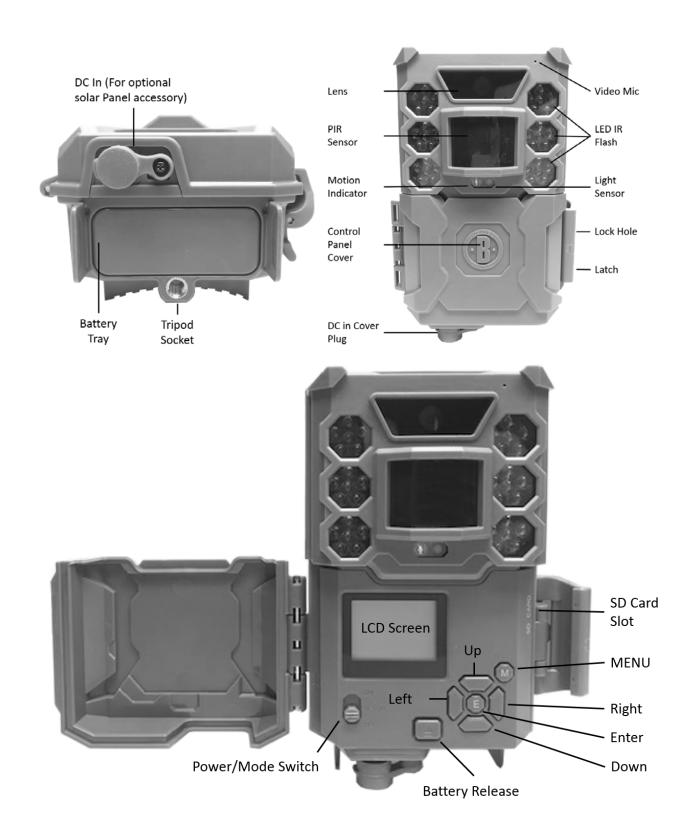
# **Applications**

The **Core Trail Camera** can be used as a trail camera for hunting or scouting game. It is also suitable for surveillance usage.

#### PARTS AND CONTROLS

The **Core Trail Camera** provides the following connections for external devices: USB port, SD card slot and external DC power in (pq 6, Fig. 1).

A 3-way power switch is used to select the main operating modes: **OFF, SETUP**, and **ON** (*pg 6, Fig. 2*). A D-Pad interface with five keys is primarily used in SETUP mode to select operational functions and parameters. As shown on the next page, these keys are: UP, DOWN, LEFT, RIGHT, OK and ENTER. Three 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 ("SHOT") button of the camera. These secondary functions are indicated by icons or text above the key as shown on the next page.



INSTALLING THE BATTERIES AND SD CARD

Before you begin learning how to use your **Core Trail Camera**, 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 Core Trail Camera, you will see that the **Core Trail Camera** has a battery release button. Depress this button and a battery tray will drop out of the bottom of the camera. The battery tray will stop about ½ inch out of the device, this is a latch system to prevent the tray from dropping onto the ground. Just apply a little pressure when pulling and the tray will release. The battery tray has six battery slots. Install a full set of 6 batteries. Be sure to insert each battery with correct polarity (negative or "flat" end against the long spring of each battery slot).

Bushnell recommends using a full set of new lithium AA (Energizer® brand) or alkaline AA batteries. NiMh Rechargeable batteries are not recommended, as the lower voltage they produce can cause operational issues.



You can also connect an optional Solar Panel accessory (model# 119756C) to the "DC In" jack at the bottom of the Core Trail Camera (other external power supplies should not be used, as the camera and/or display may not function correctly). If the solar panel is connected and AA batteries are installed, the Core Trail Camera will be powered by the solar panel's rechargeable lith-ion battery, as long as it provides adequate voltage (if not, the camera will switch to battery power). The solar panel's battery will power the camera at night.

#### Inserting the SD Card

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 **Core Trail Camera** 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. Using high speed SD cards (SanDisk® SDHC rated class 6 or higher) is recommended if you will use the 1280x720 or 1920x1080 video settings. 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 *below*). 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 in it if the card is locked). Formatting the SD card by using the Core Trail Camera "Format" parameter before using it for the first time is recommended, especially when a card has been used in other devices.
- 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.
   WARNING: Be sure the camera's power is switched OFF before inserting or removing SD cards or batteries.



# **USING THE Core Trail Camera**

Once you've prepared your **Core Trail Camera** 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 directional 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 **Core Trail Camera** 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 **Core Trail Camera** 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. 6, "Front View") will blink red for about 10 seconds. This interval allows time for you to close the **Core Trail Camera'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 **Core Trail Camera** 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 **Core Trail Camera's** 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 (*Fig. 3, next page*).

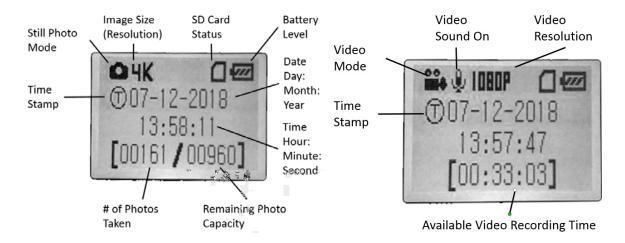
NOTE: Always move the power switch from **OFF** to **SETUP** mode. It is possible that the camera could lockup if it is switched from **ON** to **SETUP** mode. If this occurs, simply move the switch to **OFF** and then push it up to **SETUP** again.

#### SETUP Mode Shortcut Keys/Functions

As mentioned earlier in "Parts & Controls", four of the directional keys beside 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 LOCKED" when you press the SHOT key, switch the camera OFF, remove the SD card and slide its lock switch off.

Fig. 3: SETUP Information Screen (119936C/119938C)



#### 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 (available parameters vary with use of Presets-see pg. 18 for more details) so your **Core Trail Camera** operates exactly the way you want it to. You will do this by entering the **SETUP** Menu and pressing the keys beside 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 **Core Trail Camera** 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 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 **ENTER** button to save the new setting (actually change it). When you 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 minutes with no key pressed.

#### Parameter Settings Display

The settings for each parameter are shown on the display screen of your **Core Trail Camera**. Only one setting is displayed at a time, starting with the current setting for the parameter when it is first selected (pg. 13, Fig. 4a). To change the setting, use the UP/DOWN keys to display the new setting you want (Fig. 4b), then press ENTER 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**



(4B)

Press OK

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 suit 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 **ENTER** 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 **ENTER** key to confirm the new time and date settings you made.

Now press the RIGHT key one time to move to another parameter in the Menu. The 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 **ENTER** 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 three times will take you to "Video Size". Try using the **UP** and **DOWN** keys to scroll through the range of settings, then press **ENTER** to lock in your setting for the resolution 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 **ENTER** to restore all parameters (including the Mode and Video Size 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 **Core Trail Camera**, which allows you to monitor your food plots or field edges with time lapse images or video. When set to "On", the **Core Trail Camera** 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 dependent 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.17). 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 (default setting, also the lowest interval in video mode), 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:

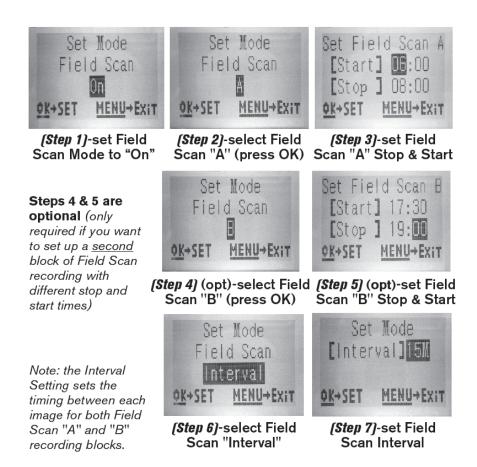
Field Scan: On Field Scan A: [Start]: 6:00 [Stop]: 8:00 Field Scan B: [Start]: 17:30 [Stop]: 19:00 Interval: 15M

Note: avoid any "overlap" of Field Scan A & B recording blocks when setting their start and stop times, to assure correct operation. Also-if the "Camera Mode" menu parameter is set to "Day" or "Night" operation only, that will take priority over your Field Scan settings. Set the Camera Model to "24 HR" if you are setting both day and night start and/or stop times in Field Scan.

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 5:30 PM, 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.

Note: Field Scan settings of frequent intervals and/or long periods between start and stop time can reduce battery life.



The SETUP Menu – Parameters and Settings List w/Descriptions

Parameter	Settings (Bold=default)	Description
Set Clock	(Set)	Press OK and use the UP/DOWN keys (to change the setting) and LEFT/RIGHT keys (to move to the next field) to set the hour (24-hr format only, "00"=midnight, "12"=noon) and minute, and then (on the lower row), the year, month and date.
Mode	Camera, Video, Hybrid	Selects whether still photos or video clips are captured when the camera is triggered. Hybrid capture mode: A photo (multiple photos, if NUM PICS is set >1) followed by a video clip will be captured for each PIR trigger event
NV Shutter	Low, Fast Motion, Long Range	Selects shutter speed in order to control the shutter speed for night vision shots – setting the shutter speed to 'Low' means more the picture will be more exposed but you may get more subject blur.

Image Size (only affects still photos in Camera)  Capture Number	<b>3MP</b> , 8MP, 24MP/30MP (119975C/119977C Only) <b>1 Photo</b> , 2 Photo, 3 Photo, 4	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).  3MP, 8MP, 24MP, 30MP  Selects how many photos are taken in sequence
(only affects still photos in Camera mode)	Photo, 5 Photo	per trigger in Camera mode. This setting affects photos taken in Field Scan mode as well (to snap two photos every 10 minutes, for example).  Note: only one photo will be captured if "Interval" is set to 0.6 second, regardless of the Capture Number setting. Please also refer to the Interval parameter.
Video Size (only affects video clips in Video mode)	1920x1080 60FPS (119975C/119977C only) 1920x1080 <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 "widescreen" 16:9 format. The highest setting provides HD video. Using high speed SD cards (SanDisk® SDHC class 6 or higher) is recommended if you will use the 1280x720 or 1920x1080 video settings.
Video Length (only affects video clips in Video mode)	SS to 60S fixed time range (10S default), or Dynamic variable length	Sets length per video clip. The default setting is 10 seconds fixed time per video, with an available range from 5S (5 seconds) to 60S (1 minute). Nighttime limit of 15 seconds when LED Control = High.  The "Dynamic" setting provides a variable video length, based on animal activity within PIR range and your Interval (next page) and LED Control settings as follows:  With Interval set to 0.6 sec: video length is a fixed 10 seconds per trigger. If a new trigger occurs during the last 4 seconds of a video, another 10 second video will be recorded immediately after the first. This will continue indefinitely as long as battery power is adequate, regardless of LED Control settings, during both day and night time.  With Interval set to 2 sec or longer, for daytime videos: video length is "adaptive" (determined by new triggers), with a minimum of 5 seconds. If a new trigger occurs during the last 4 seconds of this first video, the length is extended by another 1-4 seconds (based on when the new trigger happens), with a maximum total length

		of 2 minutes continuous video before a new video is initiated.  With Interval set to 2 sec or longer, and LED Control=High, for night videos: same as daytime, but maximum length is 15 seconds before recording ends and a new video is started if a new trigger occurs.  With Interval set to 2 sec or longer, and LED Control=Med/Low, for night videos: same as daytime, but maximum length is 60 seconds before recording ends and a new video is started if a new trigger occurs.
Interval	10S (second) default, with as60M (minute) to .2S (half second) range of settings available. (60M-1M are set in one minute increments, 59S-3S are set in one second increments, followed by the .6S setting)	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 10 second default when parameter is first selected. Setting the Interval time to .6 second will capture the maximum # of images, but some may appear "washed out" if animal is too close to camera at night. Note: after setting down past ".65", settings start over at "60M".
Format	Execute (followed by an additional No/Yes step)	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.  Caution! Make sure you have downloaded and backed up any files you want to preserve first!  Press OK to execute, press MENU (or select NO then press OK) to exit without formatting.
Time Stamp	On, Off	Select "On" if you want the date & time (that the image was captured) imprinted on every photo/video, select "Off" for no imprint. Note: the current temperature, moon phase, and (user set) camera name will also be imprinted on your still photos.
Video Sound (Only affects video clips in Video mode)	On, 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).
Sensor Level	Auto, Low, Normal, High	Auto sensor level will automatically adjust the sensor level depending on the surrounding

		temperature. >70°F(High); 45°F~70°F(Normal); < 45°F(Low), High Sensor will adjust the cameras sensitivity to reach out 70′, Normal Sensor will adjust the cameras sensitivity to reach out 100′, Low Sensor will adjust the cameras sensitivity to
		reach out 40'
Camera Mode	<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.
Default Set	Cancel, Execute	Select "Execute" and press OK 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 accidently (but aren't sure which one), this will reset all parameters to their most commonly used or "generic" settings.
Version	None	Displays current firmware version for reference.

#### USING THE SETUP MENU INPUT SCREENS

# Camera Name Input

After selecting the Camera Name parameter (the only setting is "Input"), press OK.

If necessary, delete the previous or default name by pressing the **RIGHT** key until the backspace symbol () (located between letters "A" & "B", also between "j" & "k") is highlighted, then keep pressing **OK**. Select (highlight) each alphanumeric character you want, using the **LEFT/RIGHT** keys, and pressing **OK** after each one to set it. When finished naming the camera, press **MENU** to save the name to memory.

#### Coordinate Input

After selecting the Coordinate Input parameter, press **UP** or **DOWN** to select the On setting and press **OK**. You can enter a nearby street address, just zip code, or use the various types of maps to locate the approximate position. The format you will need to use to enter the coordinates in the Core Trail Camera menu screen is shown below:

Note: You may see "negative" latitude or longitude coordinates online. These designate South latitudes and West longitudes. US/Canada locations will have North (+) latitude coordinates and West (-) longitude coordinates.

# MOUNTING and POSITIONING the Core Trail Camera 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 Core Trail Camera for scouting game or other outdoor applications, you must be sure to mount it in place correctly and securely.

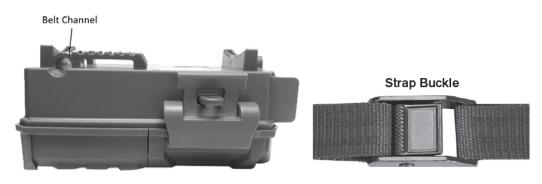
We recommend mounting the **Core Trail Camera** on a sturdy tree with a diameter of about 6 in. (15cm). To get the optimal picture quality, the tree should be about 16-17 ft. (5 meters) away from the place to

be monitored, with the camera placed at a height of 5-6.5 ft.  $(1.5^{\circ}2 \text{ m})$ . 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 100ft/30m (119936C/119975C) and no closer than 10ft (3m) from the camera.

There are two ways to mount the **Core Trail Camera**: using the provided adjustable web belt, or the tripod socket.

Using the adjustable web belt: *Fig. 5* illustrates using the web belt on the **Core Trail Camera**. Push one end of the belt through the two brackets on the back of the **Core Trail Camera**. 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. 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 standard1/4-20 thread.

Fig. 5 Attaching the Belt



#### Sensing Angle and Distance Test

To test whether the **Core Trail Camera** can effectively monitor the area you choose, this test is recommended to check the sensing angle and monitoring distance of the **Core Trail Camera**. To perform the test:

- Switch the Core Trail Camera 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 **Core Trail Camera**. 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 **Core Trail Camera** 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, 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 or DC power supply inserted/connected with correct polarity and is the power level is 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**).

#### REVIEWING/DELETING THE PHOTOS/VIDEOS

After you have setup, mounted and activated your **Core Trail Camera**, 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 (a new folder will be created every 1000 images). Each new image or video will be numbered incrementally with 8 digits in order of the time it was captured-the first 4 digits are the month and day, the last 4 digits the # of the image.

For example, you will see file names such as "09020001.JPG" or "09020001.MP4", etc. Through the file format suffix you can distinguish whether the file is a still photo (with suffix .JPG) or a video (with suffix .MP4). \*video files may require additional software for viewing on a Mac.

The **Core Trail Camera** 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 **Core Trail Camera** unless your equipment has problems reading the SD card. If this happens, please format the SD card with the **Core Trail Camera** or in your computer first and then insert the card into your **Core Trail Camera** and try again.
- The default file system format of the **Core Trail Camera** is FAT16, which most computers can read. If you format an SD card for the **Core Trail Camera** 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**

To delete all photos from the installed SD card, use the Format parameter (see pg. 23 for details).

#### DOWNLOADING THE PHOTOS/VIDEOS

To download your photos/videos to a PC or Mac\*, first make sure the **Core Trail Camera** 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 **Core Trail Camera** 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 **Core Trail Camera** 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 **Core Trail Camera**'s photo files are named "09020001.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 **Core Trail Camera**. (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 format photo files from the **Core Trail Camera** may be viewed and edited with any photo software you choose to use. The .MP4 video files may be viewed with the Windows Media Player on PCs with Windows 7.

#### 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. Setting the Interval time to 0.6 second will decrease battery life. Typically, the **Core Trail Camera** 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 Energizer® Lithium AA batteries in your Core Trail Camera model 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® brand SD Cards up to 32GB (Ultra® or Extreme® series for HD video). Our experience indicates that poor quality SD cards can sometimes reduce your **Core Trail Camera** 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 (*Ultra®* or Extreme® series for HD video).
- 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 **Core Trail Camera**, 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 **Core Trail Camera**.

#### Camera won't power up

- 1. Make sure that you have installed 8 batteries in the battery compartment. Bushnell recommends using Energizer® Lithium AA batteries in your Core Trail Camera.
- 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 80ft/24m (119938C/119977C) or 100 ft/30m (119936C/119975C). Subjects may appear too dark at greater distances.
  - c. Please note that when the Capture Number parameter is set higher than "1Photo", 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. Make sure "LED Control" in the setup menu is set to "High" to ensure maximum output. Check that "NV Shutter" in the menu is set to "Auto" and not "High", as higher shutter speeds can result in darker images.
  - e. The ARD (anti-reflective device) shield can be removed to maximize flash output. See
- 2. Daytime photos or videos appear too dark

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 If the subject is close to the camera (less than10ft/3m), change the LED Control parameter in the Setup Menu to "Medium" or "Low". Set trigger Interval to 2S or above.
- 4. Daytime photos or videos appear too bright 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 during the day.
- 5. Photos with streaked subject
  - *a*. In some cases with low lighting conditions and fast moving subjects, the 4K or HIGH 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. Set Interval to 2S or above to reduce motion blur.
  - d. Set "NV Shutter" to "Fast Motion" to minimize motion blur.
- 6. Red, green or blue color cast
  - $\it a$ . 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 expected
  - 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. When LED Control is set to "High" and camera is in Video mode, the maximum video length in "Dynamic" mode at night is 15 seconds, to avoid potential overheating of batteries and/or electronic components. Maximum video length available when set to "Dynamic" in daytime is 2 minutes.

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 temperature conditions, set the Sensor Level to "High" and for cold weather use, set the sensor for "Low". For variable weather, use "Auto".
- 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". 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 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.

# Moisture or Ants Inside Camera

- 1. To ensure humidity or rain is kept out of the camera, secure the DC In plug firmly in place.
- 2. Ants can be attracted by low level electronic vibrations, and enter through any gaps between the exterior and interior of the camera. Make sure the DC In plug is securely attached.

#### 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 0.6s 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

Maximum Pixel Size

119936C/119938C: 6528x3672 (16:9) 119975C/119977C: 7296x4104{16:9)

Lens F = 2.8; FOV=38°;

**IR-Flash Range** 

Selectable (Low/Med/High), >100ft/30m (119975C/119977C),> 100ft/30m (119936C/119938C)

Display Screen

Monochrome Display (119874C/119876C: 21x30mm(1.5")

Color Display (119875C/119877C only): 2.4"

Memory Card

SD or SDHC Card, Maximum capacity 32GB (Class 6 or higher for 1280x720 or 1920x1080 HD video)

Picture Size (pixels) 3MP=2304x1296, 8MP=3840x2160, 24MP=6528x3672

3MP=2304x1296, 8MP=3840x2160, 30MP=7296x4104

Video Size

640x360p, 1280x720p, 1920x1080p @ 30 fps (Day)/ 15 fps (Night)

1280x720p, 1920x1080 @ 30 fps (Day) / 30 FPS (Night), 1920x1080 @60 fps (Day) / 60 FPS (Night)

PIR sensitivity Hyper PIR with 4 sensitivity settings: Low/Normal/High/Auto

Operation

User selectable: 24 Hour, Day only, or Night only (based on ambient light level)

Response Time 0.2 second (Photo), 1.0 second (Video) Triggering Interval 0.6 sec. - 60 min. programmable

Shooting Numbers 1—3 programmable

Video Length

Fixed length video time settings range from 5 to 60 seconds. See

pq. 21 for Dynamic Video length details (trigger based, variable per interval and LED settings).

Power Supply 6x AA batteries recommended

Stand-by Current < 0.08mA (<7mAh/day)

Night Vision Shutter
Speed
User selectable (Auto/High)-affects night (NV) photos/videos only
Interface USB; SD card holder; DC external (12v)
Security Strap; ¼-20 attachment
Operating Temperature -20 - 60°C (Storage temperature: -30 - 70°C)
Operating Humidity 5% - 90%