

Ltl Acorn Mini30 Trail Camera

Box contents:

trail camera
LCD screen (if purchased)
strap
these instructions
warranty card (for your own records)

Set Up:

Open the hatch on the top of the camera and insert 4 x 1.2v AA batteries. Ensure you have inserted the batteries the correct way around as per the + and – polarity signs on the inside of the hatch. Close the hatch and carefully fix it down with the clip.

Please read the section, later in these information pages, about which batteries to use. Battery choice is vital to the performance of your Ltl Acorn trail camera.

Now undo the clip on the bottom of the camera and open that hatch. You will see (from left to right) the ON/OFF switch, a mini USB style socket and the micro SD card slot.

Insert your micro SD card. Maximum capacity is 128G.

Ensure you are using a genuine branded card and not a fake bought from Amazon or eBay! The online marketplaces are flooded with fake goods including cheap, fake memory cards.

Connect your external LCD screen (supplied with the camera) via the mini USB slot and carefully move the ON/OFF switch to the ON position. The LCD screen will now come on and you'll see the live view from the camera.

From this screen you can:

- *access the Menu,
- *manually take a photo,
- *manually record a video clip,
- *view captured images & videos

The on screen icons and information also show:

- * which video/image resolution you currently have set,
- *how many recordings there are stored on the micro SD card (plus the maximum that could possibly be stored using the current recording settings)
- *approximate indication of battery life.

If you wish to manually take a photo or record video you can push the SHOT button.

If you are in camera mode (image of a camera in top left corner of screen) an image will be taken and stored on the micro SD card.

If you are in video mode (image of a video camera in top left corner of screen) a video recording will start. To stop the video recording just push the SHOT button again.

To playback any of your recordings you can push the OK/Replay button.

From here you can scroll through all recordings using the UP & DOWN arrow buttons. If you currently have a video recording selected you can push the RIGHT arrow button to play the video.

If you want to exit Playback mode just push the OK button.

The Menu

Pushing the MENU button, when you have the LCD screen connected and the camera switched ON, will take you into the built in Menu. You can use the UP & DOWN arrow buttons to move up and down through the menu options and you can use the left and right arrow buttons to scroll through the various different settings available for each selected menu option.

If you change a setting remember to push the OK button to save the change!

The following are the menu options available:

Mode: Camera, Video or Cam+Video

Choose Camera to record images only, Video for videos only or Cam+Video for an image then a video.

Format: will erase everything on the micro SD card.

Photo Size: choose the quality of the image the camera will record, options are 3,8,14 or 30MP.

Video Size: choose the video quality the camera will record, options are VGA, 720P or 1080P.

Set Clock: set date and time plus the date format using the up/down arrow keys to change the number and the right/left arrow keys to move to the next parameter.

Picture No.: if you have the camera set to record images you can choose whether you want a single image or a burst of 2 or 3 images.

Video Length: set the length of video that's recorded each time the camera is triggered from 0-60 seconds, remember the longer the video recording the more battery life will be used (especially if recording in dark or low light periods as the infrared is the most power hungry component).

Interval: choose how long the camera will wait between triggers before it will start recording again.

Sense Level: set the trigger sensitivity level, options are Off, Low, Normal, High. You can find out more about the sensitivity levels later in these instruction sheets under the heading "Heat Sensors".

Time Stamp: choose On or Off dependent upon whether you want the date & time showing on each recording or not.

Timer 1 & Timer 2: these Timers allow you to set the camera to only record between certain times of day. For instance you may want the camera to record only between 6pm and 4am. Use the left/right arrow keys to change the setting from Off to On and then push the OK button. Now you can enter the start and stop recording times of your choice. You can choose to use just one or both of the Timers.

Password Set: choose between having to enter a 4 digit password when the LCD screen comes on or not. If you choose to set a password do not lose it! We can reset it but you'll need to send your camera back to us and there is a £20 charge for this.

Serial No.: this is a number or name for your camera and, if set, will show in the information bar at the bottom of each recorded image.

Timelapse: this feature allows you to set you camera to record a video or capture an image every X amount of hours, minutes or seconds regardless of whether or not there is any subject triggering the camera at that moment in time. For instance you may want to record the changes on a construction project and so take a new image every 12 hours to monitor progress over time.

If you do not want the camera to operate using your timelapse settings only and not to also trigger when there is movement/heat change within the lens view then you will need to switch the Sense Level to OFF.

Beep Sound: switch on or off the beep sound that the camera makes with each button push.

SD Cycle: if set to ON the camera will start recording over the oldest recordings when the micro SD card runs out of space. If set to OFF then the camera will stop recording any new images or video when the card is full.

Language: change between various languages

LED Brightness: this will alter the infrared/night vision power of your camera between LOW and HIGH. Can be useful if you find that the infrared power is too great and your images or video are too bright.

Exposure: options available are low, medium & high.

Software Version: gives you information of the firmware version your camera is using.

Default: returns the camera back to factory default settings, this can be useful if you think your camera is not performing correctly. Acts as a reset tool.

Finished setting up and ready to record?

Push the Menu button to exit the menu. Carefully disconnect the LCD screen, close the bottom hatch & fix the catch in place. For a few seconds you will see a red light on the front of the camera above the lens, once this red light has gone out your camera is now ready to start recording when triggered or as per your set up.

Remember to switch the camera OFF before connecting the LCD screen again. So switch off, connect the screen and then switch On – the LCD screen will then come on.

SD Cards:

Always use genuine branded micro SD (128G max) cards, there are often many fake cards on the market (especially being sold on Amazon & eBay). Also, always format your SD card using the “format” option in the camera menu, or format the card on your home computer.

SD cards do not last forever, if you think that yours may have developed a fault then try a new card before assuming your camera is faulty.

Manual Reset:

If you think your camera has developed a fault, try a system reset as below:
Remove all batteries & SD Card, bring the camera inside for 48hrs then test again.
Enter the Menu and select "Default" to return your camera back to factory settings – this acts as a reset for your camera.

Infrared:

The infrared beam is powerful so don't position the camera too close to any solid objects as your night shots could suffer “white out” issues. You can also use the LED Brightness option in the Menu to adjust the infrared power.

BATTERIES:

Batteries are not included but battery choice is vital for the performance of your camera.

Please speak to your retailer for advice on which batteries they recommend but the UK distributor recommends **Panasonic Eneloop Pro 2500mA rechargeable 1.2v AA**.

Do not use any Alkaline, Lithium or any other 1.5v batteries as the Mini30 is designed for 1.2v input and higher than that could give performance and/or sensor burn out issues over time.

Power issues can bring about many strange glitches and problems with any trail camera so it's very important to use a recommend brand and type before assuming you have a fault with the camera itself.

IMPORTANT – Do not leave batteries inside the camera if you are not using it, this could result in acid leak and ruin the camera – this is not covered under warranty!

What is Trigger Speed?

Trigger speed determines how quickly after detection by the sensor, will the camera then start actually recording.

Trigger speed is always going to be faster when capturing images/photos than it is for recording video due to it taking the camera a little longer to “wake up” and prepare for video recording than it does for it to “wake up” and take a quick snap.

So if you want to make sure you don't miss anything then it's recommended to either set the camera to take images or use the camera+video setting to take a photo first and then start recording the video clip.

Trail Camera Triggering & Placement - Best Practice & Information:

Your trail camera records when triggered, the trigger occurs when the camera senses heat change within the image that is different to the ambient air temperature. This increased heat signature within the image is usually (but not always) caused by something new entering the camera view such as a human or creature.

In most cases optimal camera placement is at 45-90 degrees from the area you expect the subject to enter the image from. This way you are most likely to get the best picture/video possible of the subject entering the camera view.

When a subject moves across the camera's field of view at 45-90 degrees to the lens axis the camera will be much more sensitive to this movement than if the subject is moving directly towards or away from the camera.

The reason for the lack of sensitivity in the latter is because the size of the subject will only change slowly as the camera's view of the subject expands or contracts against the background.

Whereas, if the camera is positioned at a 45 or 90 degree angle from where the subject enters the view, the entire subject will appear as "new" heat change from the camera's point of view.

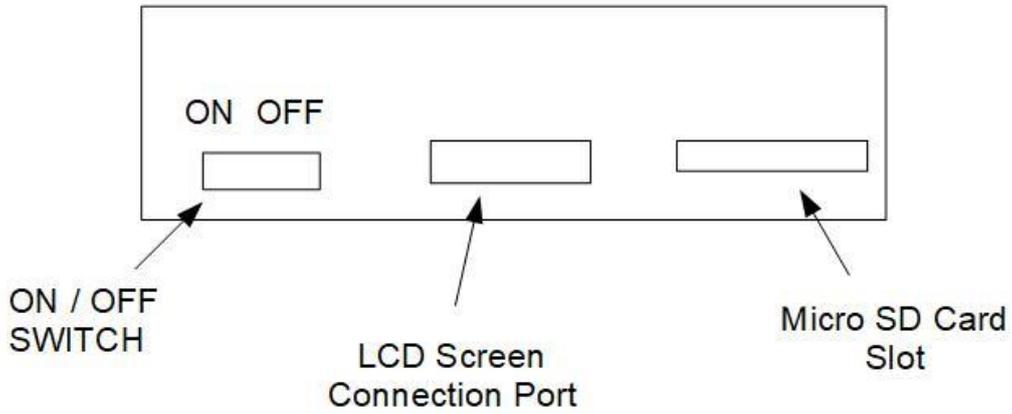
As you can imagine trail camera placement is not an exact science as we cannot always rely on any subject to enter the camera trigger area from where we want/expect them to! Trial and error is often the best way to find out where to place your camera.

Heat Sensors:

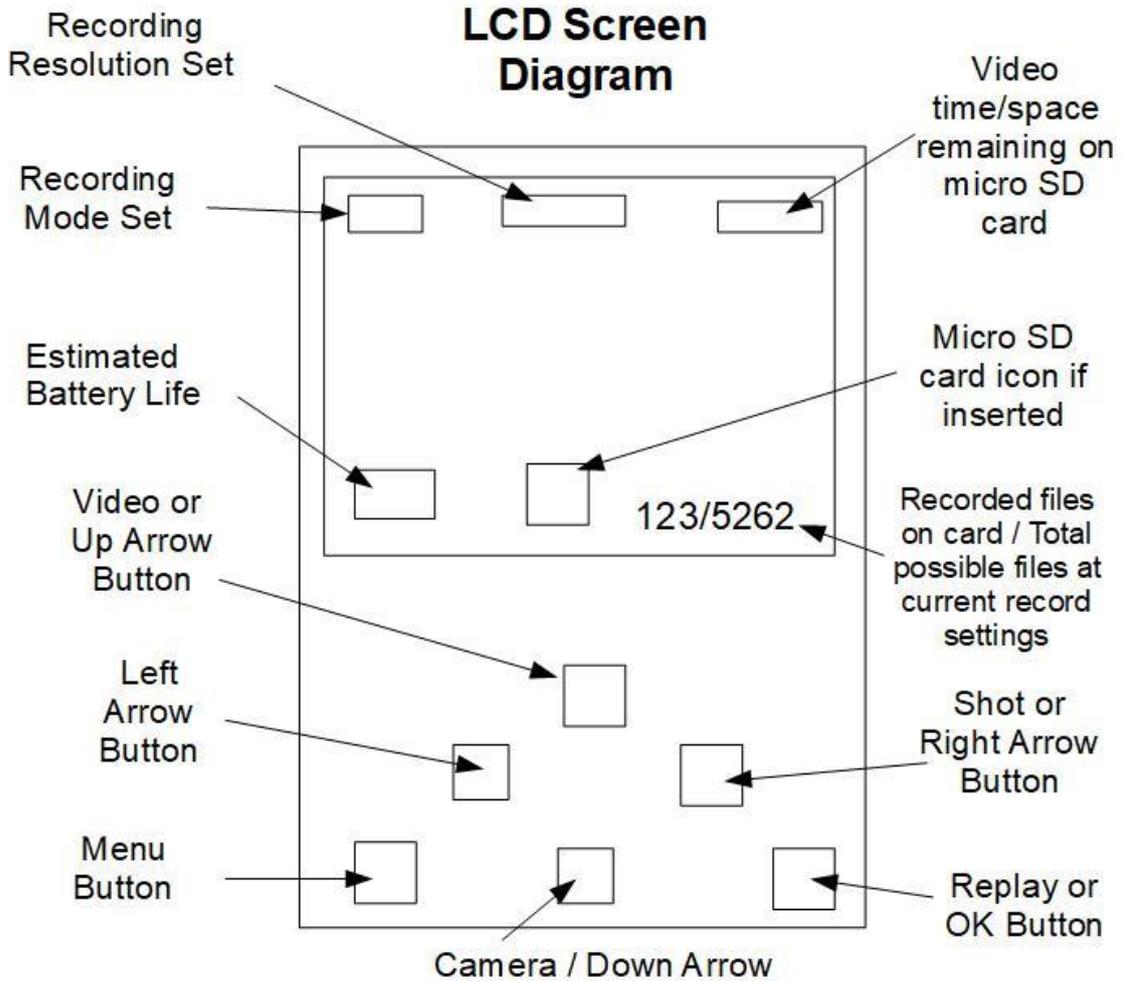
If the air temperature is 20C and a human with a body temperature of 37C moves in front of the camera then the camera will be sensitive to the change because of the 17C difference between the two. If the air temperature is 30C then the camera will be less sensitive because the difference is only 7C. With a small temperature difference between the air and subject temperatures it can be advantageous to set the camera's sensitivity to HIGH although this could also lead to some false triggers in some circumstances, such as a tree branch warming in the sun and then moving in the breeze for example.

Conversely, if a 37C object moves across a subzero air temperature of say -10C the camera will be very sensitive to this because the temperature difference of 47C is much greater. In these circumstances it may be advantageous to set the camera sensitivity to LOW.

Mini 30 Base View Diagram



LCD Screen Diagram



Some Troubleshooting Tips..

Batteries & SD Card

First port of call if you think your camera is not working correctly is always power! Have a read of the section within these instruction pages about batteries and always try new ones of the recommended type before assuming a fault with the camera itself.

Next stop is try to try a brand new SD card in your camera (make sure it's genuine and not bought from eBay or Amazon!).

Batteries (rechargeable or not) and SD cards do not last forever so these are the first pieces of hardware to check.

Reset to Factory Default

Use the Default option within the cameras' menu system to return the camera to the default factory settings, this may help to clear any little glitches in performance.

Reset & Moisture Removal

If your camera has been outside for a prolonged period of time in some damp/wet weather then bring it inside for 48hrs, remove all batteries & SD card and leave the hatches/doors on the camera open. This will allow the camera to reset and dry out if any moisture has sneaked in.

Above a radiator or inside an airing cupboard can be good spots to leave a camera.

You can even use Silica Gel packs to help absorb any moisture if you have some.

Remember moisture is not just rain water getting inside the camera but can come from moisture in the air (high humidity levels) or from moisture on your own fingers when opening a trail camera outdoors.