Camtraptions PIR v4 Manual

Contents

Introduction

The Introduction provides an overview of the Camtraptions PIR Sensor v4 — explaining how passive infrared detection works, what's new in this version, and how the sensor integrates into a camera-trap setup. It offers essential background for understanding the purpose and advantages of the PIR v4 system.

What is a PIR Motion Sensor?

All objects emit invisible infrared radiation. A **Passive Infrared (PIR)** sensor detects changes in infrared energy within its field of view—such as when a warm-bodied animal passes in front.

The term **"passive"** refers to the fact that the sensor does not emit any radiation itself—it simply monitors the infrared radiation naturally emitted by objects in its surroundings. This makes PIR sensors extremely energy-efficient and reliable for long-term use in the field.

In a camera-trap setup, the PIR sensor's role is to **detect an animal's presence and automatically trigger the connected photographic equipment**, such as a DSLR or mirrorless camera. This enables the capture of high-quality photographs and video footage of wildlife with minimal human disturbance.

What is New in Version 4?

Version 4 of the **Camtraptions Passive Infrared (PIR) Motion Sensor** represents a significant upgrade over previous models, introducing enhanced flexibility, usability, and performance. The following are the key new features and improvements:

Dual-Sensor System

Version 4 features **dual PIR sensors**—two independent detectors offering maximum flexibility.:

- **Long-range sensor** – Equipped with a narrow, high-focal-length lens for detecting animals at greater distances within a precise, narrow field of view. This allows extremely fine control over the trigger zone, ideal for carefully framed shots.
- **Wide-angle sensor** – Designed with a broader field of view for detecting animals earlier as they approach the sensor. While its range is shorter and its trigger zone less precise, this sensor is ideal for video and for open environments where animal positioning in the frame is less critical.

Each sensor can be **controlled independently**. Users can adjust their relative sensitivities, enable or disable either sensor, or assign different functions—such as using the wide sensor to **wake connected camera equipment** and the far sensor to **trigger it**.
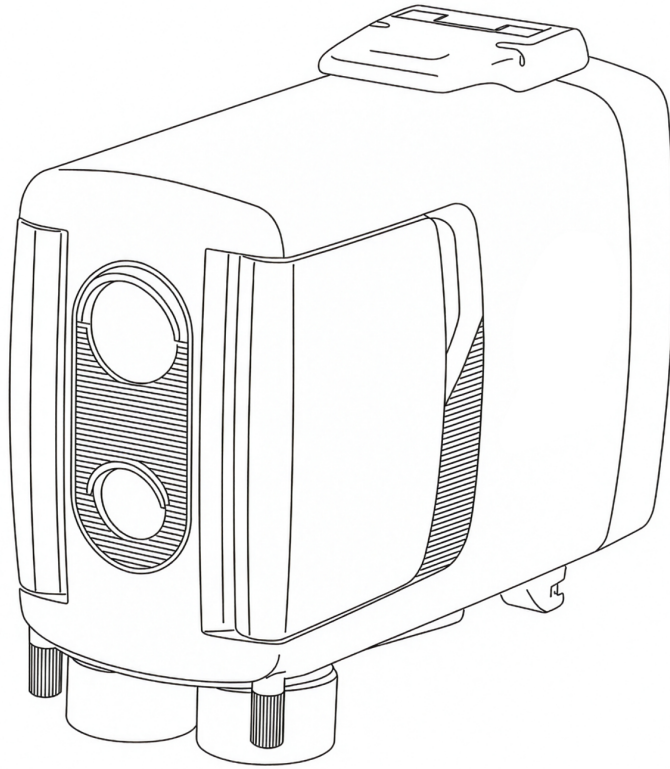
New User Interface

A built-in **display screen and button pad** provide an intuitive, menu-driven setup process. Users can easily configure parameters such as:

- Number of photos per detection and frame rate
- Length of video recordings
- Wireless channel
- Sensitivity levels
- Operating hours and many other settings

This marks a major step forward in ease of use compared with previous generations.

Clock Integration

The new **clock** allows precise scheduling of the sensor's active hours. Users can define a specific time window—down to the minute—when the sensor should operate, offering greater control and efficiency in the field.

Improved Battery System

Version 4 introduces support for **NP-F lithium-ion batteries**, which are widely used in photographic equipment and easy to source. With the largest NPF batteries, the standby of the sensor time equals or exceeds the previous model.

A **6xAA to NP-F battery adapter** (purchased separately) allows the sensor to be powered by six AA batteries as an alternative. Batteries are easily and quickly swapped by opening the rear compartment and sliding them in or out.

The battery voltage can be checked quickly from the home screen.

Firmware Upgradability

Version 4 now supports **firmware updates via microSD card**, enabling users to easily install future software improvements and feature enhancements without returning the unit for servicing.

Enhanced Connectivity and Durability

Version 4 remains compatible with both **wired and wireless triggering methods**, giving users the flexibility to connect their cameras and flashes using cables or **Camtraptions Wireless Receivers**. The sensor works seamlessly with existing **wireless channels and accessories**, ensuring full backward compatibility with previous systems.

Several other refinements further improve robustness and versatility:

- Improved **weather sealing** and an integrated **silica gel** cavity provide enhanced protection against moisture and humidity in challenging environments.
- Optional **external power input** for long-term installations
- New **signal output and power input connectors** compatible with existing cables, while also supporting an upgraded **screw-lock waterproof cable system** for a more secure connection
- Dual **tripod mounting points** on the base for added stability, especially when used with **Camtraptions Jungle Mounts**, allowing two screws to lock the sensor's orientation securely

Overview of the Sensor

The Camtraptions PIR Sensor v4 features a thoughtfully designed layout that balances functionality, durability, and ease of use. On the **front**, there are **two motion sensors**—one equipped with a **built-in indicator light** that is enabled during setup to show when motion is detected.

On the **back**, you'll find the **display screen and keypad**, which includes the **power (on/off) button**. The **rear side** is also the **battery door**, which can be opened using the **catch on the top** to access the internal battery compartment.

The **underside** of the unit includes **dual tripod mounting sockets** for secure installation, as well as the **wired output socket** and **DC power input**, both protected by **weather-sealed rubber cable bungs**.

On the **sides** of the sensor are **adjustable flaps** that can be used to limit or refine the field of view of the sensors for more precise control. Beneath the **right-hand flap** is a small **bung** that covers the **microSD card slot**, which is used for firmware updates.

Wide sensor

Far sensor + indicator light

Cable bungs

Thumbscrew

Flap for controlling sensor field of view

Door catch

Battery door

LCD screen

Arrow buttons

On/Off + Set button

microSD slot under flap
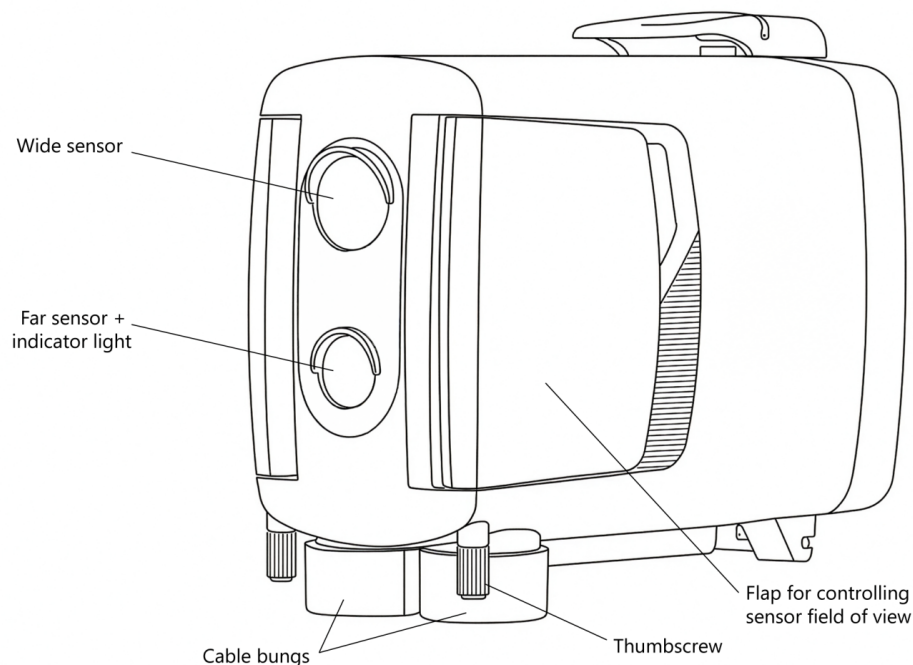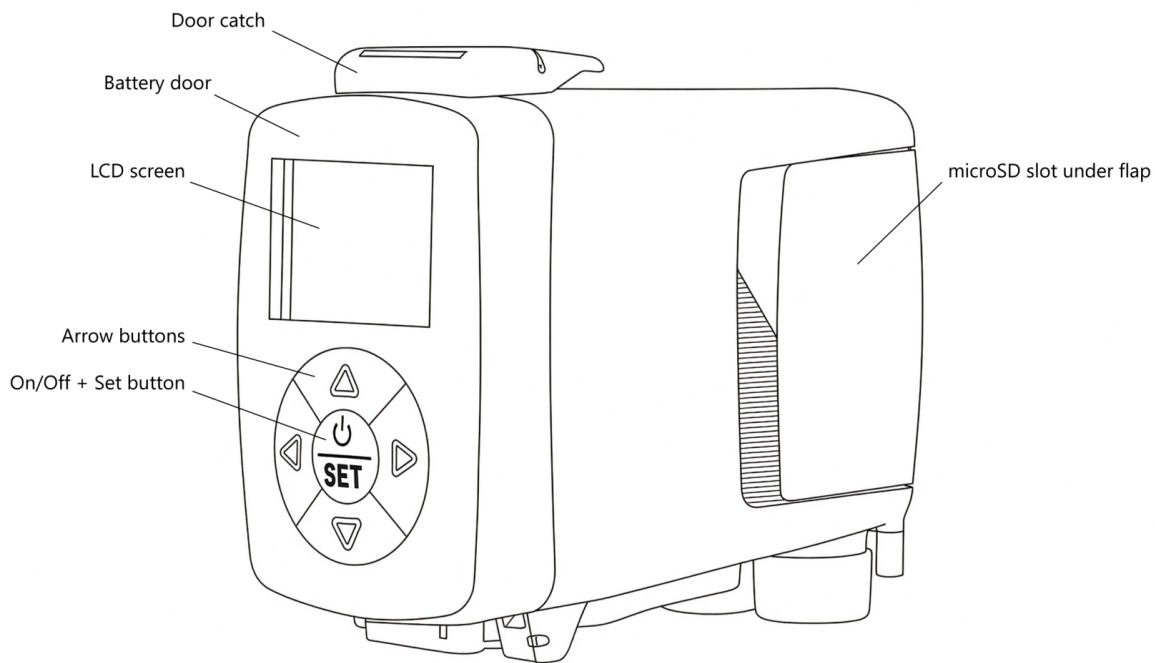
The information in this manual corresponds to firmware version 1.19. You can check the firmware version, and update it if necessary, by following the procedures on the firmware update page.

Getting Started

This section covers the fundamental steps for preparing your PIR Sensor for use — including powering, connecting, mounting, and aiming the unit. It guides you through initial setup so you can quickly get the sensor operational and ready for deployment in the field.

Powering Your Sensor

The Camtraptions PIR Sensor v4 can be powered in several different ways, offering flexibility for a wide range of field conditions and setup durations.
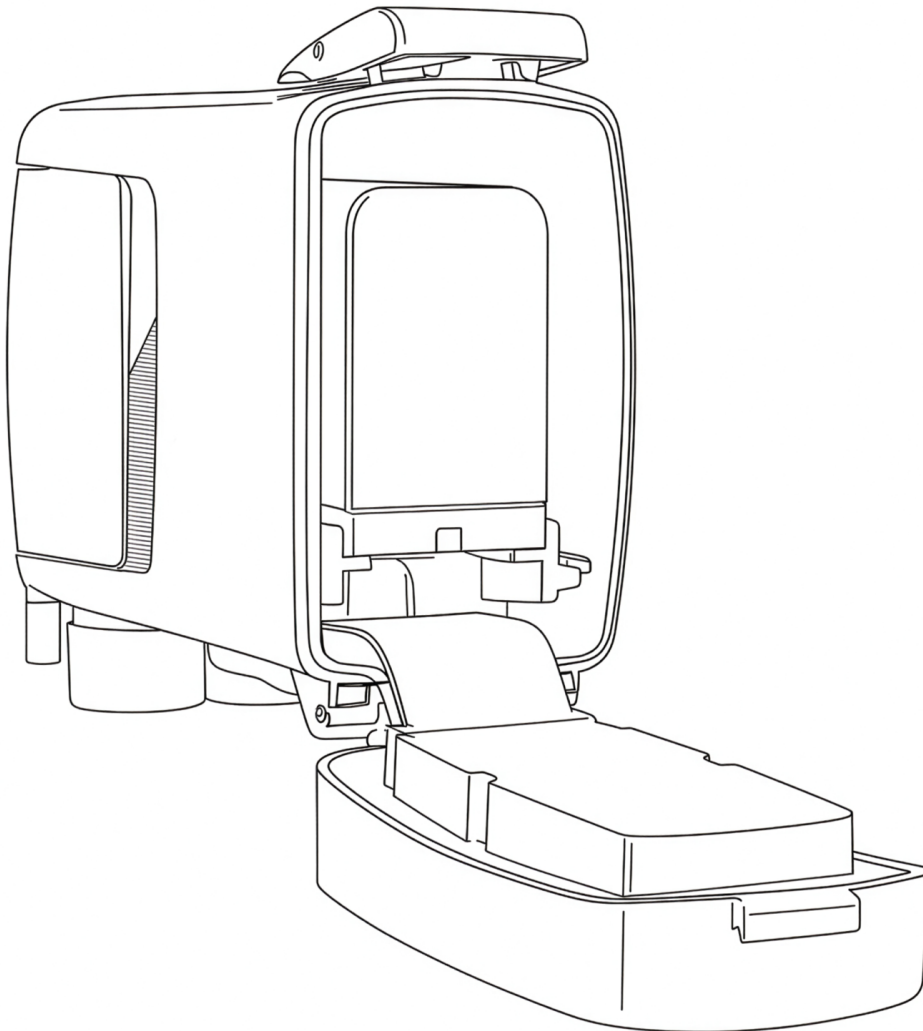
1. NPF-Type Rechargeable Battery

The primary power option is a **Sony-type NP-F lithium-ion battery**, a widely available and reliable standard used across the photographic industry. The PIR v4 is compatible with NP-F batteries up to the size of an NP-F970 and with a maximum height of 60mm. Note that some third-party manufacturers produce NP-F batteries with built-in USB-charging ports that exceed this height and will not fit inside the sensor.

NP-F batteries are **sold separately**, as they are easy to source locally from most camera or video equipment suppliers. Place the battery into the battery tray, about 1cm away from its fully engaged position. Apply slight downward force to ensure that the central locking tab in the battery tray is fully depressed and, at the same time, push the battery forward until it clicks into place.

To remove the battery, simply pull it backwards.

2. AA Battery Adapter

As an alternative, the sensor can be powered using **six AA batteries** installed in a **6xAA to NP-F battery adapter** (sold separately). The adapter fits into the same mounting slot as the NP-F battery. This option provides flexibility in situations where rechargeable lithium batteries are not available or convenient to use.

To install, insert the adapter in the same way as an NP-F battery, ensuring it is seated securely before closing the rear door. The individual AA cells may be removed/inserted while keeping the adapter in-situ inside the PIR v4, or alternatively the entire adapter can be removed in the same way as an NP-F battery.

3. External DC Power Input

For extended deployments or fixed installations, the sensor can also be powered via the **DC input jack** located on the underside of the unit. The sensor accepts **DC input voltages from 4V to 12V**.

For added reliability in the field, the sensor is compatible with **Camtraptions Waterproof Screw-lock DC connectors**, which provide a more secure and weather-resistant connection.

> Ensure that any **internal battery** is **removed** from within the PIR v4 before an **external battery** or power source is connected to the sensor. Internal batteries cannot be connected and used at the same time as an external power supply. The only exception to this is if you are connecting a small external solar panel to trickle charge 6x Ni-MH AA batteries inside the PIR v4.

Connecting Your Camera

The Camtraptions PIR Sensor v4 can trigger your camera in two ways: **wirelessly** or via a **wired connection**. Both methods are compatible with DSLR and mirrorless cameras that feature an external shutter-release socket.

1. Wireless Connection (Default)

The sensor includes a built-in **wireless transmitter** that communicates with **Camtraptions Wireless Receivers**. This is the simplest and most flexible way to set up your camera trap.

- The wireless transmitter is **enabled by default** and set to **Channel 1**.
- You can change the channel via the **Wireless Channel** screen in the sensor's menu.
- Up to **15 channels** are available, corresponding directly with the 15 channels available on Camtraptions Wireless Receivers.

To establish a connection:

1. Ensure the **wireless channel** on the sensor matches the **channel setting** on your wireless receiver.
2. Plug the **wireless receiver** into your camera's **shutter-release socket** using the appropriate **Camtraptions camera connecting cable**.

The wireless transmitter can be **disabled** in the menu if you prefer to operate the sensor via a wired connection.

2. Wired Connection

Alternatively, the sensor can be connected directly to the camera using a **wired cable**.

- The camera output socket is located on the **underside** of the sensor and protected by a **weather-sealing rubber bung**.
- Use the **Camtraptions Screw-lock Waterproof Cable for PIR Sensor v4** to connect the sensor to your camera's shutter-release socket. Ensure that the black silicone sealing band on the waterproof cable's connector jack is seated evenly around the connector barrel. Plug in the cable and screw on the locking nut to fasten. **Do not over-tighten the cable's locking nut** - excessive force is not required to make a good seal.

A robust and highly reliable direct connection is now created between the sensor and the camera.

Power cable
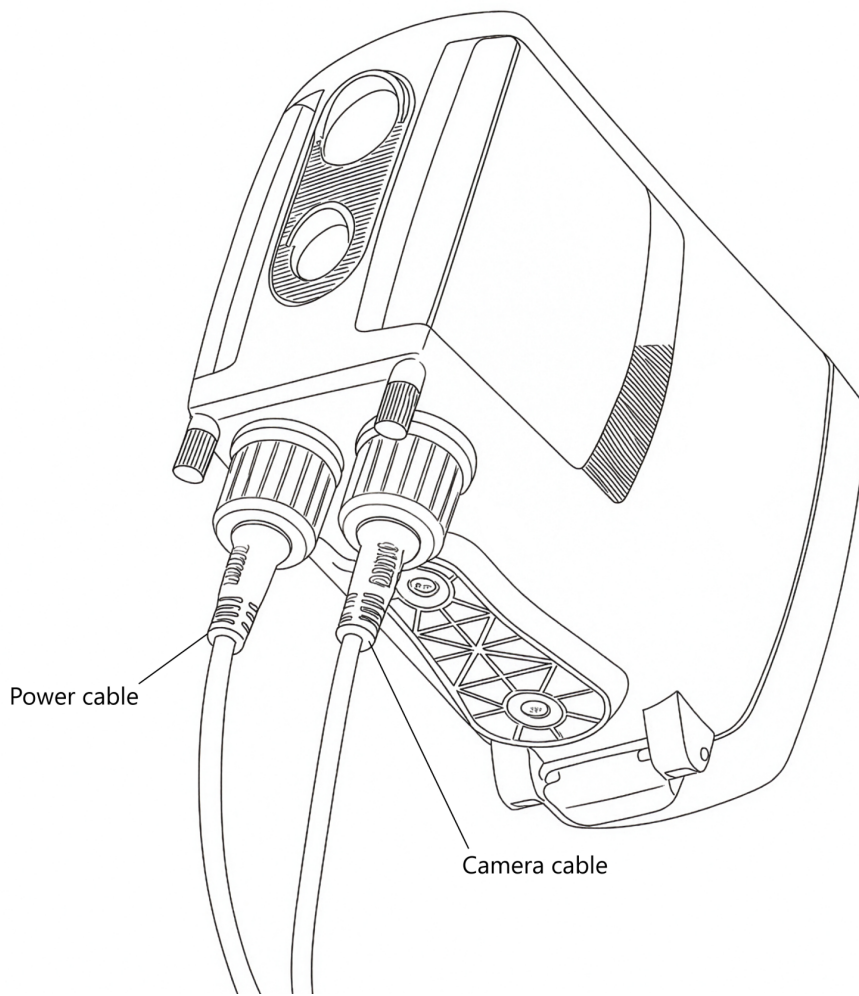
Camera cable

A standard **Camtraptions camera connecting cable** or **sensor extension cable** can also be plugged into the sensor, but using these basic cables instead of the dedicated waterproof cable system will void the warranty of the PIR Sensor v4, as its weather-sealing will not be maintained.

Waterproof Cable Connection Tips

- Even if only one of the waterproof connection types is being utilised, e.g. camera trigger signal output and not the external power input - it is recommended to securely fit **both ends** of the Screw-lock Waterproof Cable to the PIR v4. This ensures both of the sensor's ports and the cable's connectors are sealed against moisture and dirt, maintaining complete weather protection for the sensor and cable.
- If access is restricted, removing the side flap and thumbscrew can make it easier to tighten or loosen the cable nut securely.
- Additional Camtraptions Waterproof Cables and adapters will be necessary to complete the connection to the camera.

3. Choosing Between Wireless and Wired

Both connection types have advantages, depending on your setup requirements:

Connection Type	Advantages	Considerations
Wireless	Fast and simple setup. No long cables between camera and sensor, allowing greater flexibility in positioning. Reduces risk of cables being pulled, damaged, or chewed by animals.	Wireless receiver consumes additional power, impacting total standby time of the setup.
Wired	Very power-efficient. Does not require a powered receiver. Immune to wireless interference and blocked or weak wireless signals.	Requires a physical cable connection, limiting placement flexibility and adding potential for cable damage or disturbance.

In most cases, the **wireless setup** is preferred for its simplicity and flexibility, particularly when the sensor needs to be positioned several metres away from the camera. However, a **wired setup** is ideal when power efficiency is the priority or when the sensor and camera are mounted close together.

Camtraptions Wireless Receivers are designed for **exceptional energy efficiency**, making long-term wireless setups (lasting weeks or even months) possible when paired with larger batteries or solar power systems.

Mounting Your Sensor

The Camtraptions PIR Sensor v4 features **two tripod sockets** on the underside, providing flexible and secure mounting options for a wide range of setups.
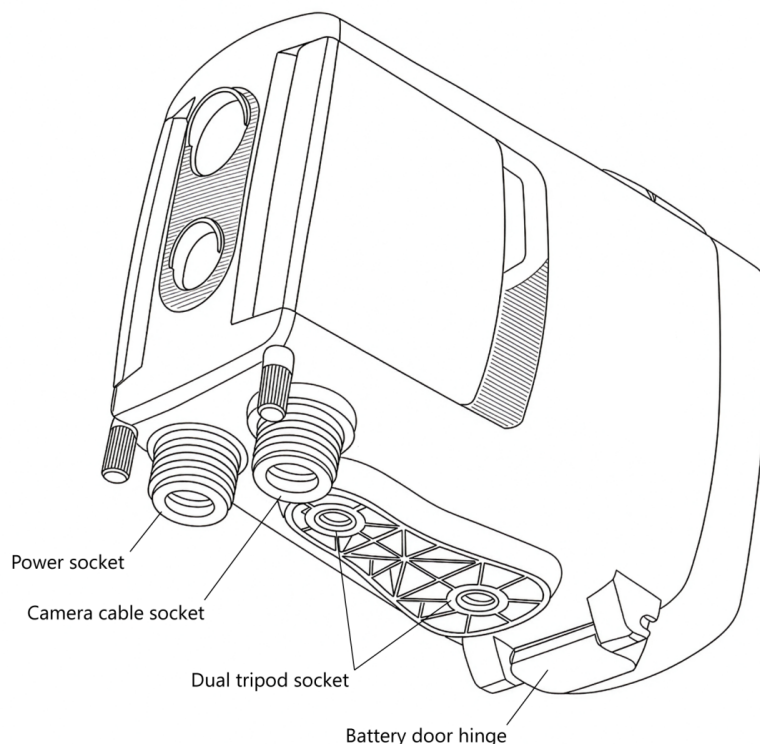
Single-Screw Mounting

For simple installations—such as when using a **MightyPod** or a **third-party tripod**—the sensor can be mounted using just **one tripod socket**.

Dual-Screw Mounting

For the most secure and stable mounting, particularly in outdoor or long-term deployments, a **dual-screw setup** can be used.

This prevents the sensor from twisting or shifting during installation or use. The **socket spacing** matches the standard used by the **Camtraptions Jungle Mount System**, enabling the sensor to be mounted on:

- The ground
- Posts or poles
- Tree limbs or trunks

This system provides a robust, flexible solution for positioning the sensor in almost any environment.

> When selecting a mounting method, ensure that the chosen mount **does not obstruct the rear door** of the sensor when it is opened. If the mount prevents the door from opening fully, forcing it may damage the hinge. Always allow sufficient clearance for the door to open freely for battery changes.

Controlling the Field of View

The **field of view (FOV)** of the Camtraptions PIR Sensor determines **where an animal will be when the camera is triggered**, making it a crucial part of composing your images—particularly for still photography. The field of view can be adjusted in several ways to precisely control the trigger zone.

Flaps

Thumbscrews
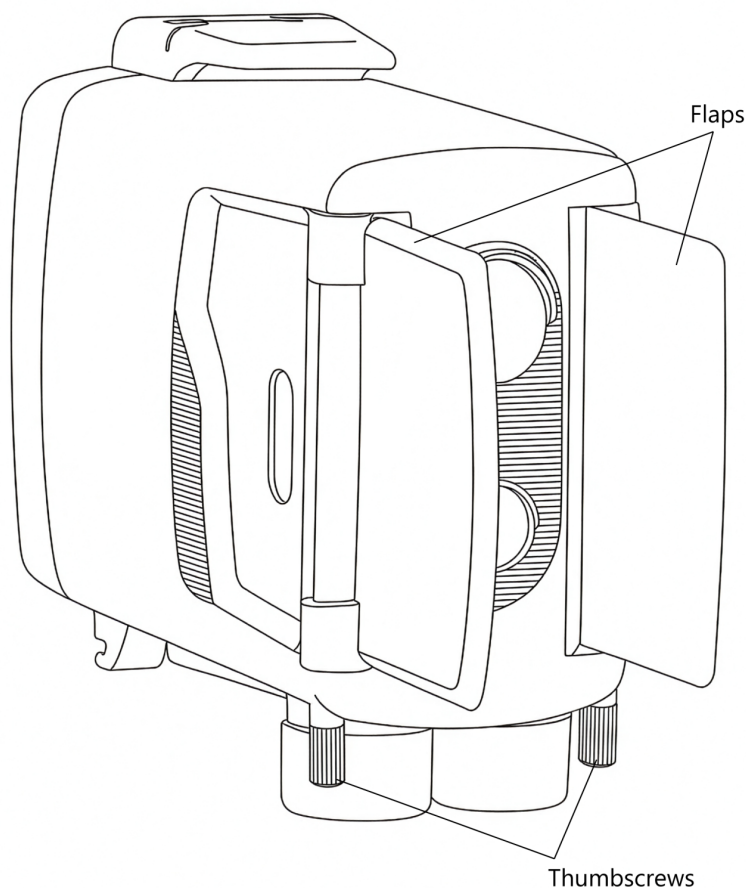
1. Using the Adjustable Side Flaps

Each side of the sensor is fitted with a **flap** or **blinker** that can be used to **limit the field of view** of the PIR sensors.

By folding the flaps outward, you can block unwanted detection zones to either side, ensuring that the sensor only triggers when an animal is directly in front of it.

To adjust the flaps:

1. **Loosen the thumbscrew** on each flap.
2. Rotate the flap into the desired position to restrict the field of view as needed.

3. **Tighten the thumbscrew** again to hold the flap firmly in place.

For best results, ensure that both flaps are positioned symmetrically, with the sensor aimed at the **centre of the intended trigger zone**. The PIR elements are most sensitive in the **middle of their field of view**, so symmetrical adjustment helps ensure that the sensor receives the strongest possible signal.

If you would like to **reduce the field of view** even further than the standard side flap positions allow, then you can undo the thumbscrews fully and **swap the left and right flaps** around. This makes it possible to achieve a very narrow angle resulting in an extremely precise trigger area.

Diagram showing flaps in reversed position:
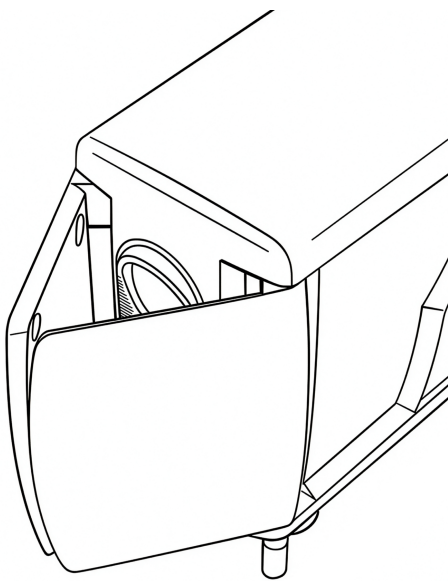
2. Using the Dual-Sensor System

Version 4 includes **two separate sensors**, each with a different field of view:

- **Wide sensor:** approximately **60° horizontal field of view, 4.5° upward field of view, 13.5° downward field of view** — shorter range but broader coverage.
- **Far sensor:** approximately **10° field of view (horizontal & vertical)** — longer range but more precise detection area.

By adjusting the **relative sensitivity** of these two sensors, or disabling one entirely, you can fine-tune the spread and range of the trigger zone.

It should also be noted that the Wide and Far sensors are both **most sensitive to motion along the horizontal axis** (sideways motion). They are less sensitive to upward/downward motion

along the vertical axis.

3. Using the Indicator Light for Setup

One of the two front sensors includes a **built-in red indicator light** that can assist with setup. When the light is active, it briefly illuminates whenever motion is detected - helping you see exactly where the trigger zone begins and ends.

To use the indicator light:

1. Turn on the sensor or press any button to **activate setup mode**.
2. Walk or wave a hand in front of the sensor to observe **where motion is detected**.
3. Adjust the sensor's position or flap angles until the trigger zone aligns with your intended composition.

The indicator light remains active for **five minutes** after the last button press, after which it automatically disables to conserve power. For more details, see the **Indicator Light** section later in this manual.

Turning Your Sensor On and Off

The Camtraptions PIR Sensor v4 has been designed for **maximum reliability in long-term field deployments**. Its power-management system ensures that the sensor automatically recovers from any momentary power interruptions.

Automatic Power-On

The sensor **automatically turns on** as soon as power is connected.

This behaviour is intentional and provides an important reliability safeguard. If power is ever **momentarily interrupted**—for example, by a brief loss of contact with the battery or vibration in the field—the sensor will automatically restart and resume operation without requiring user input. This ensures that your setup continues functioning even after jolts or disconnections.

Manual Power Control

Once power is connected, the sensor can be **turned on or off manually** using the **power button** on the rear keypad:

- To **turn on**: Tap the power button and the screen will switch on.
- To **turn off**: Hold the power button again for approximately **two seconds** until the screen shuts down.

Notes on Power Behaviour

- Because the sensor automatically powers on when a battery is inserted, it may **turn itself on during transport** if jostled or vibrated. This is normal and expected behaviour.
- When used in setups powered from a **central battery** (e.g. a shared DC power supply feeding multiple devices), the sensor will automatically **power back on** when the central power source is reconnected or replaced.
- In **solar-powered systems**, this feature ensures the sensor automatically resumes operation once solar charging restores power after an overnight or cloudy-day power loss.

This design guarantees the **highest possible reliability** in unattended camera-trap installations, ensuring the sensor always returns to active operation when power is restored.

The Home Screen

When the Camtraptions PIR Sensor v4 is powered on, it will display the **Home Screen**. This is the default screen shown when the sensor is idle and ready to detect motion. The Home Screen provides key information about the sensor's current operating state at a glance.

Screen Indicators

The following elements are displayed on the Home Screen:

- **S / V Symbol** – Indicates the current **shooting mode**.
    - **S** = Still photo mode
    - **V** = Video mode

  This icon is always visible and lets you confirm at a glance how the sensor will trigger the camera.

- **Clock Symbol** – Indicates that **time windows** are enabled.
  The clock icon only appears when the sensor has been configured to operate during specific times of day.
    - When the icon is **visible**, it means the sensor will operate during a specified time window and will be inactive outside those hours. The clock symbol will be accompanied by either **ON** or **OFF**. This provides a convenient indication of whether the sensor is currently inside an active time window (**ON**) and is therefore **working**, or outside an active time window (**OFF**) and is therefore is **disabled**.
    - When the icon is **not visible**, no time window is set and the sensor will operate continuously.

- **Camtraptions Logo (bottom-right corner)** – Acts as an **activity indicator**.
  The logo appears whenever the sensor has detected motion and is executing a sequence of commands, such as triggering a camera to take photos or run a video recording.
  While the logo is displayed, the sensor is "busy" and will not respond to further detections until the sequence has completed.
  Once the logo disappears, the sensor has finished the current sequence and is ready to trigger again.
  Note:
  - *The sensor may appear unresponsive while the logo is displayed. This is normal behaviour — it simply means the sensor is running its programmed sequence.*
  - *If a button is pressed while a sequence is running, the sequence will be cancelled and not completed.*

Button Shortcuts from the Home Screen

While on the Home Screen, pressing and holding certain buttons provides quick access to key information:

Button	Hold Duration	Function

Left	2 seconds	Displays the current **time** set on the sensor's internal clock — useful for quickly confirming the time setting.
Up	2 seconds	Displays the current **battery voltage**, allowing you to check the remaining charge.
Right	2 seconds	Displays the **firmware version**, so you can confirm you're using the correct manual or check if an update is available.

From the quick access screens, wait 20 seconds or press any arrow key to return to the home screen.

Battery Voltage Reference

When viewing the battery voltage, the displayed value provides an indication of the remaining battery charge. The relationship between voltage and capacity varies depending on the battery type and chemistry. For convenience, detailed **battery voltage reference tables** are provided at the end of this manual, showing how measured voltage corresponds to approximate remaining charge for different compatible battery types.

Front Motion Indicator Light

The **Front Motion Indicator Light** is a useful tool for **testing the sensor's field of view and detection range** during setup. When active, the light flashes **red** through the white PIR lens whenever motion is detected, helping you visualise exactly when and where the sensor is responding.

The indicator light remains active for **five minutes** after the sensor is first powered on or after any button is pressed. It then automatically **disables** to conserve power and to prevent the light from drawing attention to the sensor while it is deployed in the field.

The light is **bright and visible** in a wide range of lighting conditions, making it effective for setup in both indoor and outdoor environments.

Motion indicator light
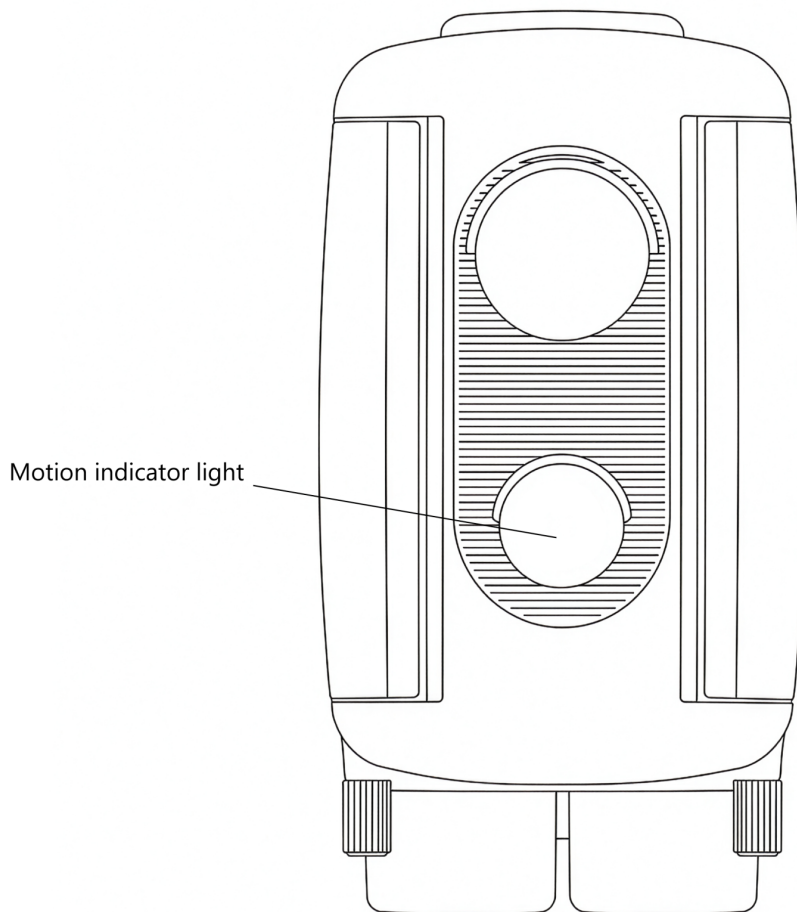
For practical guidance on using the indicator light to refine the trigger area, see the **Controlling the Field of View** section of this manual.

Navigating the Menu

The Camtraptions PIR Sensor v4 features a simple and intuitive **menu system** that allows you to adjust all key settings directly from the built-in screen and keypad.

When the menu is inactive, the screen will revert to the **Home Screen**. To access the menu, press the **Left** or **Right** buttons to cycle through the available screens. The list of menu screens will differ depending on whether the sensor is set to **Still Photo Mode** or **Video Mode**.

Adjusting a Setting

1. Navigate to the desired menu screen using the **Left** or **Right** buttons.
2. Press the **Up** or **Down** button — the setting's value will begin to **flash**.
3. Use the **Up** or **Down** buttons to adjust the value to your preference.
4. Press the **Set** (centre) button to **save** the change.

If you move to another screen while a value is still flashing (without pressing **Set**), the change will **not** be saved.

When you reach the end of the available screens, the menu will loop back to the **Home Screen** automatically.

Additional (Hold) Functions

Some menu screens have **secondary functions** that can be accessed by **holding** the **Up** or **Down** buttons. For example:

- **Sensor configuration screens (Far / Wide):**
  Holding the **Up** button cycles the sensor mode between **Enabled**, **Disabled**, and **Wake-Only**.
- **Wireless Channel screen:**
  Holding the **Down** button **disables** the wireless transmitter completely, switching the sensor to wired-only operation.

Refer to the individual **Settings** sections later in this manual for detailed descriptions of each menu screen and the available configuration options.

Setting the Operating Mode (Stills or Video)

The **Set Mode** screen allows you to choose whether the sensor operates in **Still Mode** or **Video Mode**. This determines which set of menu screens and settings will be available.
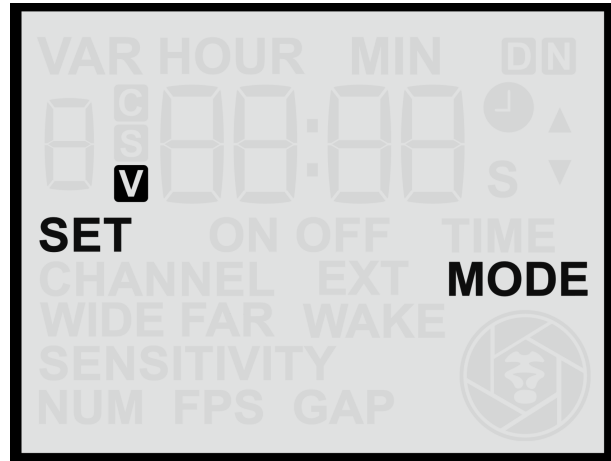
Changing the Operating Mode

1. From the **Home Screen**, press the **Left Arrow** once to reach the **Set Mode** screen.
2. Use the **Up** or **Down** buttons to toggle between:
   - **S** — *Still Mode*
   - **V** — *Video Mode*

Notes

- The **current mode** is always shown on the **Home Screen** as either **S** (Still) or **V** (Video).
- Changing mode will update the available menu screens to show the relevant settings for that mode.

Stills Mode

This section describes all settings specific to still photography. It explains how the sensor controls the number of frames, frame rate, and timing sequences, as well as how to optimise your camera and flash setup for reliable results across lighting conditions.

Still Mode Menu Overview

When the sensor is set to **Still Mode**, pressing the **right arrow** from the Home Screen will cycle through the following menu screens in order. Each screen allows adjustment of a key parameter controlling how the sensor detects motion and triggers the camera. After the final screen, the menu loops back to the Home Screen.

1. **Wireless Channel** – Set or disable the wireless transmission channel used to communicate with Camtraptions receivers.
2. **Wide Sensor** – Control the behaviour and relative sensitivity of the wide-angle PIR sensor.
3. **Far Sensor** – Control the behaviour and relative sensitivity of the narrow-field, long-range PIR sensor.
4. **Num (Number)** – Define how many photos the sensor will take per detection (1–6).
5. **FPS (Frames Per Second)** – Set the shooting interval between frames (0.25–3 fps).
6. **Gap** – Specify a retrigger delay between sequences to control how soon the sensor is able to reactivate.
7. **Wake** – Set a wake-up period to give cameras or flashes time to power up before triggering.
8. **Set Time** – Adjust the sensor's internal clock for accurate time-based functions.
9. **Time Mode** – Enable or disable time windows that limit when the sensor is active.
10. **Set On Time** – Define the time of day when the sensor becomes active.
11. **Set Off Time** – Define the time of day when the sensor becomes inactive.
12. **External Wake** – Schedule periodic half-press pulses to prevent connected equipment from sleeping.
13. **Set Mode** – Switch between **Still** and **Video** operating modes.

After the **Set Mode** screen, pressing the **right arrow** again returns to the **Home Screen**.

Still Mode Settings

When the sensor is set to **Still Mode**, two additional menu screens become available: **Number (NUM)** and **Frame Rate (FPS)**. These control how many photos are taken and how quickly they are captured when motion is detected.

Number (NUM)

The **Number** screen lets you choose how many photos the camera will take each time motion is detected.

Adjusting the Number of Photos

1. From the **Home Screen**, press the **Right Arrow** until you reach the **NUM** screen.
2. Use the **Up** or **Down** buttons to select a value between **1** and **6**.
3. Press the **Set** button to **save** your selection.

This value determines the total number of photos that will be captured per detection event.

For example, setting **NUM = 5** means the camera will take five photos each time the sensor detects motion.

Frame Rate (FPS)

The **Frame Rate (FPS)** screen determines how quickly the photos in each sequence are taken — that is, how many frames are captured per second during a detection event.

Adjusting the Frame Rate

1. From the **Home Screen**, press the **Right Arrow** until you reach the **FPS** screen.
2. Use the **Up** or **Down** buttons to select the desired frame rate.
3. Press the **Set** button to **save** your selection.

The available frame rate range is **0.25 to 3.0 FPS**, where:

- **3.0 FPS** = Three photos per second (maximum speed).
- **1.0 FPS** = One photo per second.
- **0.5 FPS** = One photo every two seconds.
- **0.25 FPS** = One photo every four seconds (minimum speed).

For example, if **NUM = 5** and **FPS = 1.0**, the camera will take five photos over five seconds.

If **FPS = 2.0**, those same five photos will be captured over 2.5 seconds.

Notes

- Higher FPS settings capture faster sequences but may increase camera buffer use and flash cycle demands, and may also be more disturbing to animals when using flash.
- Lower FPS settings conserve battery and flash power and can be useful for monitoring slower-moving subjects.

Suggested Camera Settings (Stills)

The following guide provides a **recommended starting configuration** for your camera when using the Camtraptions PIR Sensor v4. These settings are designed to produce reliable, well-exposed results in a wide range of conditions, both **day and night**.

This configuration is just one example — feel free to experiment with different settings to achieve specific creative effects or adapt to particular lighting conditions.

- **Focus Mode:** Set the camera to **Manual Focus** and pre-focus on the point where you expect the animal to trigger the sensor.
- **Drive Mode:** Set the camera to **Single Shot** mode rather than continuous drive. The sensor will automatically control the number of images and frame rate during each trigger sequence.
- **ISO Setting:** Use **Auto ISO** so the camera can automatically adjust to changing light levels.
  - Optional: Limit the **maximum ISO** to around **1600 or 3200** to prevent excessive noise at night.
- **Exposure Mode:** Set the camera to **Manual Exposure** mode.
  - Use a **shutter speed of 1/200 s** to avoid motion blur or ghosting.
  - Choose an **aperture of around f/8** to provide sufficient depth of field and ensure the image is not overexposed in bright daylight at base ISO.
- **Image Stabilisation:** If your lens includes **image stabilisation (IS)** or **vibration reduction (VR)**, **disable it**. (These systems are unnecessary in a stationary setup.)
- **Power Saving:** Enable the camera's **auto power-off** function so it powers down automatically after about **30 seconds** of inactivity.
- **Image Review:** Turn **off automatic image review** after each shot to conserve battery power.
- **Flash Power:**
  - Set each flash to **manual power mode** and adjust output to correctly expose the subject **in complete darkness**, based on your chosen manual exposure settings at the **maximum ISO** expected from Auto ISO.
  - As ambient light increases, the ISO will decrease, and the contribution from the flashes will naturally become less significant.
- **Image Format:** Shoot in **RAW** to retain maximum flexibility for adjusting exposure and brightness during post-processing.

This setup offers a dependable baseline that balances **exposure, responsiveness, and image quality**. Once you have verified that your sensor and flashes are triggering reliably, you can fine-tune exposure settings, flash ratios, or ISO limits to suit your specific environment and creative goals.

Video Mode

The Video Mode section outlines how to configure the sensor for video recording. It details trigger signal behaviours, extend-on-motion options, and timing parameters. This mode enables reliable video capture of wildlife behaviour using either natural or artificial lighting.

Video Mode Menu Overview

When the sensor is set to **Video Mode**, pressing the **right arrow** from the Home Screen will cycle through the following menu screens in order. Each screen allows configuration of a key parameter controlling how the sensor detects motion and manages video recording. After the final screen, the menu loops back to the Home Screen.

1. **Wireless Channel** – Set or disable the wireless transmission channel used to communicate with Camtraptions receivers.
2. **Wide Sensor** – Control the behaviour and relative sensitivity of the wide-angle PIR sensor.
3. **Far Sensor** – Control the behaviour and relative sensitivity of the narrow-field, long-range PIR sensor.
4. **Time (Recording Length)** – Define the duration of each video recording following a detection.
5. **Gap** – Set a retrigger delay between recordings to manage how soon the sensor is able to reactivate.
6. **Extend Time (EXT)** – Enable or disable Extend Mode. When enabled, motion detected during recording resets the timer, extending the clip until motion stops or the maximum limit is reached.
7. **Video Mode (Signal Type)** – Select the type of control signal used to start and stop video recording, depending on camera brand: *1 Press*, *2 Press*, or *Hold* mode.
8. **Wake Time** – Configure a wake-up period to give cameras time to power up before recording begins.
9. **Set Time** – Adjust the internal real-time clock to ensure accurate time-based operation.
10. **Time Mode** – Enable or disable time windows that restrict when the sensor is active.
11. **Set On Time** – Define the time of day when the sensor becomes active.
12. **Set Off Time** – Define the time of day when the sensor becomes inactive.
13. **External Wake** – Schedule periodic half-press pulses to prevent connected equipment from entering deep sleep.
14. **Set Mode** – Switch between **Video** and **Still** operating modes.

After the **Set Mode** screen, pressing the **right arrow** again returns to the **Home Screen**.

Video Mode Settings

When the sensor is set to **Video Mode**, three additional menu screens become available: **Recording Time (TIME)**, **Extend Time (EXT TIME)**, and **Video Trigger Mode (MODE)**. These settings control how long the camera records, whether recordings are extended when movement continues, and how the sensor communicates with your camera model.

Recording Time (TIME)

The **Recording Time** screen sets how long the sensor will command the camera to record each time motion is detected.

Adjusting the Recording Time

1. From the **Home Screen**, press the **Right Arrow** until you reach the **TIME** screen.
2. Use the **Up** or **Down** buttons to adjust the recording duration in **seconds**.
3. Press the **Set** button and then use the **Up** or **Down** buttons to adjust the recording duration in **minutes**.
4. Press the **Set** button to confirm and save.

The duration can be set from **10 seconds up to 15 minutes 59 seconds** using the same adjustment method as other time-based settings.

This value represents the **length of each video clip** triggered by motion detection.

Extend Time (EXT TIME)

The **Extend Time** option determines whether new motion detected during a recording will **extend the recording duration**. The Extend Time will be added to the remaining recording time from the moment that the last motion was detected.

This feature is useful for capturing continuous activity without cutting off prematurely when animals remain in view.

Adjusting the Extend Time

1. From the **Home Screen**, press the **Right Arrow** until you reach the **EXT TIME** screen.
2. Use the **Up** or **Down** buttons to adjust the number of seconds to extend the recording time by, from between 10s and 99s (10s by default).
3. Press the **Set** button to confirm and save.

Enabling or Disabling Extend Time

1. Navigate to the **EXT TIME** screen.
2. Press and **hold** the **Up** or **Down** button to toggle between **ON** and **OFF**.
3. Press **Set** to confirm.

Example:

If the Recording Time is **1 minute**, the Extend Time is **30 seconds** and new motion is detected **45 seconds** into the recording, then the clip length would be 45s + 30s for a total clip length of **1 minute 15 seconds**.

Note: C Var 6 (see the **Custom Variables** section) can be used to limit the total recording length when Extend Time is enabled.

Video Trigger Mode (MODE)

The **Video Mode** screen defines how the sensor sends **start and stop signals** to the camera. Different camera brands and models interpret these signals differently, so selecting the correct mode ensures reliable video triggering.

Mode	Description	Compatible Systems
1	Sends a full-press signal to start recording, then repeats a full-press signal every **10 seconds** to maintain recording. If more than 10 seconds elapse without a signal, the camera automatically stops recording.	Sony cameras connected to the Camtraptions Sony Video Cable v2.
2	Sends a full-press signal to start recording and another full-press signal to stop recording.	Most Canon and Nikon mirrorless cameras.
H	Sends a **wireless** full-press signal to start recording, then repeats a full-press signal every **10 seconds** to maintain recording. The sensor holds a **wired** full-press signal for the entire length of the video.	Used to activate equipment requiring a constant full-press signal.

Mode 1 is typically the most reliable, as it ensures that if any trigger signal is missed, the camera will automatically stop recording instead of continuing indefinitely or becoming out of sync with the sensor's start/stop commands.

Mode 2 - Many cameras (including Canon and Panasonic models among others) that operate using Mode 2, also need an **intial half-press signal, followed by a pause**, so that they fully wake up first before starting a recording. This initial half-press signal + pause can be added using the global **Wake Time** setting.

Mode 2 - If a button on the sensor is pressed during a recording then the sequence will be cancelled and not completed. This means a camera may not receive the stop recording signal and will continue recording unless manually stopped.

Suggested Camera Settings (Video)

When using the Camtraptions PIR Sensor in **Video Mode**, camera setup will depend largely on **creative goals** and **equipment preferences**. This section focuses on the key settings that ensure **reliable operation** when the camera is controlled by the sensor, rather than prescribing specific exposure or quality settings.

- **Focus Mode:** Use **Manual Focus** and pre-focus on the area where you expect the subject to appear. This prevents focus hunting when the camera is triggered and ensures consistent, sharp results. Use a small aperture to give a larger depth of field where necessary.
- **Exposure and Quality Settings:** Choose your preferred **resolution, frame rate, and picture profile** according to creative requirements, memory capacity and power considerations. The sensor will not affect these choices.
- **Power Saving:** Enable **Auto Power-Off** after approximately 30 seconds of inactivity to conserve battery life. The **Wake Time** feature of the sensor can be used (and for some cameras **must** be used) to reawaken the camera before a recording commences.
- **Stabilisation:** Turn **off image stabilisation (IS/VR)** on both the camera and lens to avoid unnecessary power use and framing drift.
- **Lights**: For night-time recording, use **continuous lights** rather than flashes. The sensor can trigger **Camtraptions Power Switches** to turn lights on and off using the same wireless signals that control the camera.

For Nikon and Canon cameras, the camera's menu settings must be configured to allow the shutter button to start and stop video recording. Enabling this option ensures the camera can respond correctly to trigger signals sent via the shutter release socket, allowing the sensor to start and stop video recording automatically.

Global Settings

The Global Settings apply to both Still and Video modes. These settings control the core behaviour of the sensor and remain active regardless of which shooting mode is selected. Global Settings include options such as Wireless Channel, Sensitivity, and the Far/Wide Sensor configuration. These settings define how the sensor detects motion and communicates with connected equipment.

Wireless Channel

The **Wireless Channel** menu screen allows you to select which **wireless channel** the sensor's built-in transmitter will use to communicate with your **Camtraptions Wireless Receiver**.

Accessing the Wireless Channel Setting

1. From the **Home Screen**, press the **Right Arrow** button until you reach the **Wireless Channel** screen.
2. Use the **Up** or **Down** buttons to change the wireless channel number.
3. Press the **Set** (centre) button to *save* your selection.

The selected channel must match the channel set on your **Camtraptions Wireless Receiver** for proper operation.

Available Channels

The sensor supports **15 wireless channels**, numbered 1–15. Each corresponds directly to the same numbered channel on the Camtraptions Wireless Receiver.

1   6   11

2   7   12

3   8   13

4   9   14

5   10   15
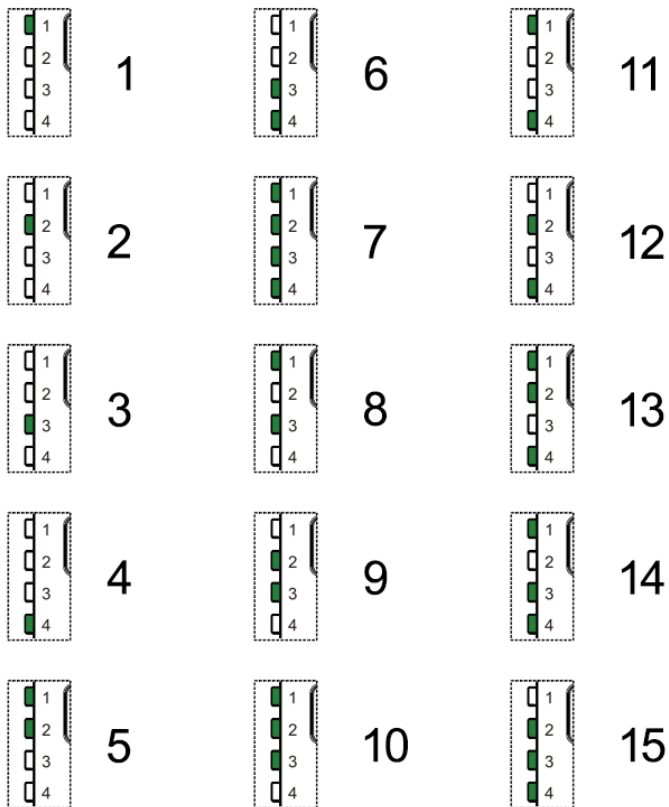
Disabling Wireless Transmission

To **disable the wireless transmitter** completely (for wired-only operation):

- Press and **hold** either the **Up** or **Down** button for more than **2 seconds** while on the Wireless Channel screen.

The display will show **"OFF"**, indicating that wireless transmission is disabled.

In this mode, the sensor will **only trigger connected devices via the wired output socket**. It will also conserve some power and allow the sensor to operate for even longer in the field.

Wide Sensor

The **Wide Sensor** menu screen allows you to adjust the behaviour and sensitivity of the **wide-angle PIR lens**. This sensor has a broader field of view (approximately **60°**) and is ideal for detecting animals earlier as they approach the camera.
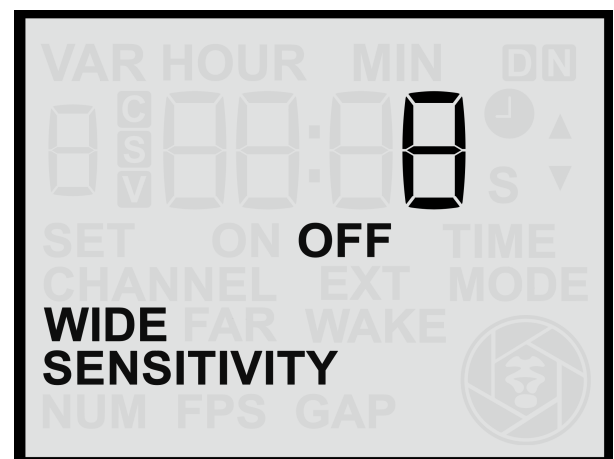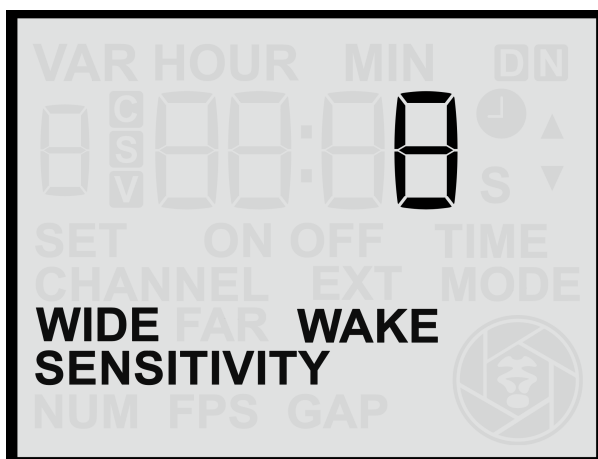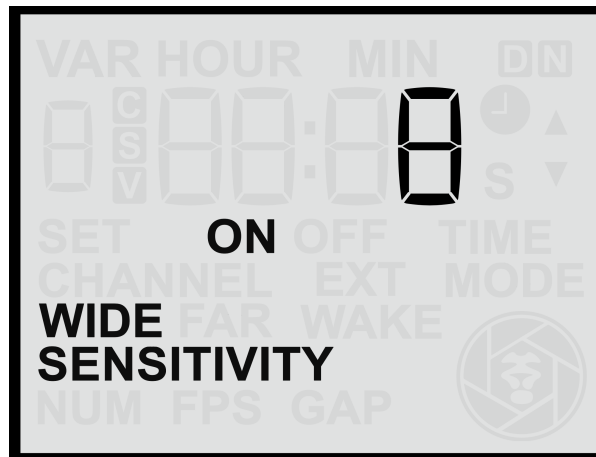
Accessing the Wide Sensor Screen

1. From the **Home Screen**, press the **Right Arrow** repeatedly until you reach the **Wide** screen.
2. Use the **Up** or **Down** buttons to adjust the sensitivity between **1 and 16**, where:
   - **16** = Maximum sensitivity (detects smaller or more distant motion).
   - **1** = Minimum sensitivity (detects only close or pronounced motion).
3. Press the **Set** button to **save** your chosen setting.

Testing the Wide Sensor

To understand and fine-tune how the wide sensor behaves in your setup:

- Temporarily **disable the Far Sensor** to isolate the wide lens's detection zone.

- Use the **red motion indicator light** on the front of the sensor to see when motion is detected.
- Once testing is complete, **re-enable** both sensors for normal operation.

Testing each sensor individually can help you visualise their detection ranges and ensure the trigger zone aligns precisely with your intended framing.

Changing the Wide Sensor Function

You can also change how the wide sensor behaves by pressing and **holding** either the **Up** or **Down** button for more than **2 seconds**. This cycles through three operating modes:

Mode	Description
Normal	The sensor behaves normally, triggering the camera or flash when motion is detected.
Off	The wide sensor is disabled and will not detect motion or trigger the camera.
Wake	The wide sensor will only send a **wake signal** to connected camera equipment when motion is detected, but not a full trigger signal.

The **Wake** mode is particularly useful because the wide sensor often detects animals **entering the frame** before the far sensor does. Using it to send a **wake signal** ensures that by the time the far sensor sends the **shoot signal**, the camera (and any connected flashes) are already active and ready to respond.

This function is especially beneficial for:

- **Cameras that take a long time to wake from standby**, such as some older or budget mirrorless models.
- **Third-party flashes** that require a charging period before firing.

Note: Camtraptions Z Pro Flashes remain fully charged and ready to fire instantly, so this feature is not required when using Z Pro units.

Note: If a sensor is set to **Wake** mode, then the signal will only be sent if the PIR v4 has not been active within the last 30 seconds. This ensures that no unnecessary wake signals (and potential trigger delays) are occuring during periods of continuous activity in front of the PIR.

Far Sensor

The **Far Sensor** menu screen allows you to adjust the behaviour and sensitivity of the **long-range PIR lens**. This sensor has a much **narrower field of view** (approximately **10°**) and is significantly more sensitive overall than the wide sensor. It is designed for precise control of the trigger zone, enabling the user to determine exactly **where in the frame** the animal will be when the camera is activated.

Because of its narrow detection zone, the far sensor can be used much like a **"beam break"**, ideal for cutting across an animal trail or pathway to ensure triggering occurs only when the subject reaches a specific point.
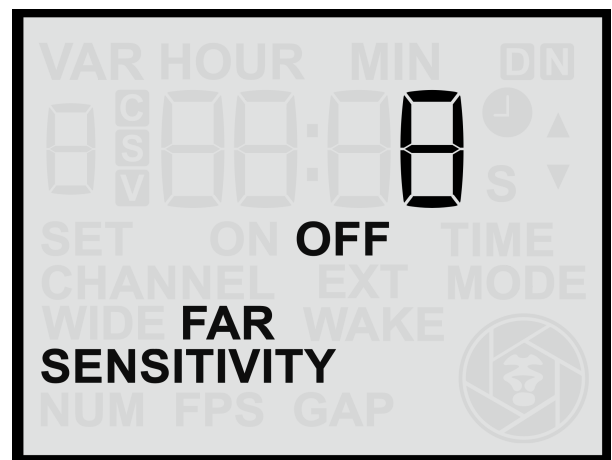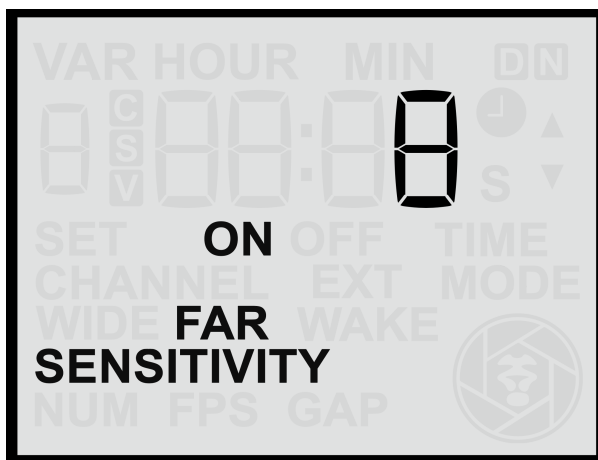
Accessing the Far Sensor Screen

1. From the **Home Screen**, press the **Right Arrow** repeatedly until you reach the **Far** screen.
2. Use the **Up** or **Down** buttons to adjust the sensitivity between **1 and 16**, where:
   - **16** = Maximum sensitivity (detects very small or distant motion).
   - **1** = Minimum sensitivity (detects only close or pronounced motion).
3. Press the **Set** button to **save** your chosen setting.

Testing and Positioning the Far Sensor

To understand and fine-tune the detection range and behaviour of the far sensor:

- Temporarily **disable the Wide Sensor** so you can observe only the far lens's performance.
- Use the **red motion indicator light** to see exactly when motion is detected.
- Adjust the sensor's position and side flaps to align the detection beam precisely with your desired trigger zone.
- Once testing is complete, **re-enable both sensors** for full functionality.

Because its range is very long, the far sensor may sometimes detect motion **beyond the intended trigger zone** or **outside the camera's framing**.

To prevent unwanted detections, it can be effective to **mount the sensor slightly higher** and **angle the far sensor downward** toward the desired trigger area. This positioning limits its view of distant background areas and ensures it primarily "sees" the ground where the subject will pass, triggering reliably and precisely when the animal enters the frame.

Changing the Far Sensor Function

As with the wide sensor, you can change the behaviour of the far sensor by pressing and **holding** either the **Up** or **Down** button for more than **2 seconds**. This cycles through three operating modes:

Mode	Description
Normal	The sensor behaves normally, triggering the camera or flash when motion is detected.
Off	The far sensor is disabled and will not detect motion or trigger the camera.
Wake	The far sensor sends only a **wake signal** to connected camera equipment but does not trigger a full shoot command.

The **Normal** mode is typically used for capturing the actual trigger moment. However, in some advanced setups, the **Wake** mode may be used strategically to coordinate multiple sensors or fine-tune camera wake-up behaviour.

Gap Time

The **Gap Time** setting controls the **delay between triggers**, defining how long the sensor will wait before it can activate again after completing a sequence. This lets you control how often the sensor triggers, conserving battery power and storage while allowing flashes to recharge and reducing the chance of disturbing subjects.

Adjusting the Gap Time

1. From the **Home Screen**, press the **Right Arrow** until you reach the **Gap Time** screen.
2. Use the **Up** or **Down** buttons to set the desired delay between 0.5s and 1min (1s by default).
3. Press the **Set** button to **save** your selection.

The chosen value determines how long the sensor will remain inactive after completing a sequence before it can trigger again.

- A **short gap time** allows the sensor to retrigger quickly and capture multiple events close together.
- A **longer gap time** limits the number of triggers, reducing the total number of images or videos recorded over time.

Practical Uses

Adjusting the Gap Time can help you:

- **Reduce excessive triggering** in areas with frequent animal movement.
- **Conserve battery power** and **memory card space** for longer unattended deployments.
- **Allow flashes time to recharge** between triggers, especially when using multiple flashes or high power levels.
- **Avoid disturbing animals** with rapid, repeated flashes.

In most cases, a **moderate delay** provides the best balance between responsiveness and conservation of resources. For fast-moving subjects or short-term deployments, a shorter delay may be preferable, while for long-term camera traps, a longer delay could help extend system endurance.

Wake Time

The **Wake Time** setting determines how long the sensor will wait after an initial **half-press (wake)** signal has been sent to the camera before beginning the main trigger sequence. This gives the camera (and any connected flashes) time to **wake up or prepare** before the full trigger (shoot) command is sent.
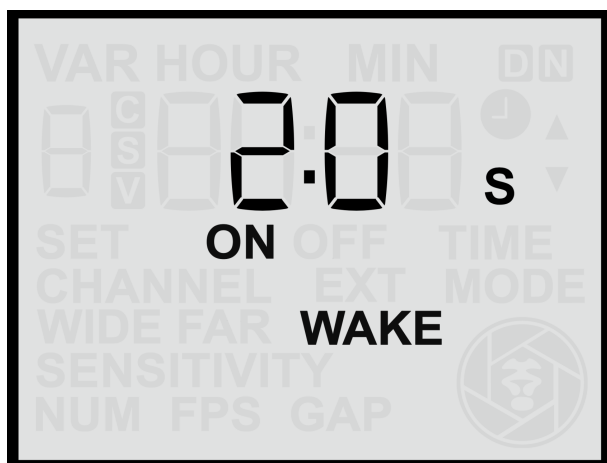
Adjusting the Wake Time

1. From the **Home Screen**, press the **Right Arrow** until you reach the **Wake Time** screen.
2. Use the **Up** or **Down** buttons to select the desired delay in seconds between 1s and 15s.
3. Press the **Set** button to **save** your selection.

The delay can be configured in **seconds**, depending on how much wake-up time your camera or flashes require. By default, this setting is **off** (no wake-up signal and delay).

Enable or Disable the Wake Function

- **Hold** either the **Up** or **Down** button for more than **2 seconds** while on the **Wake** screen.
- When active, the display will show the **ON** indicator.

Purpose of Wake Time

Some cameras require a short period to power up or establish communication before they will respond to a full trigger signal. If a **shoot signal** arrives too soon after the system has been idle, the camera may miss it entirely. This can lead to missed shots in still mode and, more critically, problems in video mode.

For example:

- Certain **Canon cameras** require a **full-press signal** to start and stop video recording. If the start signal is missed due to wake-up lag, the camera may only respond to the **stop** command later, resulting in continuous, indefinite recording.
- Cameras with **longer wake-up delays**, or flashes that require a moment to recharge, benefit from a wake period that ensures all equipment is ready before the main trigger occurs.

Recommended Use

It is recommended to use a **Wake Time** delay for:

- Cameras that take noticeable time to wake from standby (especially some older mirrorless cameras).
- **Canon and Panasonic cameras** used in **video mode**.
- Setups involving third-party flashes that require a short recharge time before firing. (Note: Camtraptions flashes do not require a wake delay, as they remain ready to fire instantly.)

Adjusting this delay ensures reliable operation by waking connected equipment first, then triggering the shutter or video start signal once everything is ready.

Set Clock Time

The **Set Clock Time** screen allows you to configure the sensor's **internal clock**, which is required for **Time Windows** (scheduled active hours). Setting the correct time ensures the sensor operates accurately within any defined time periods.

Setting the Clock

1. From the **Home Screen**, press the **Right Arrow** until you reach the **Set Clock Time** screen.
2. Press the **Up** or **Down** buttons to adjust the **hour** value.
3. Press the **Set** button to confirm the hour.
4. The **minute** value will then begin flashing — use the **Up** or **Down** buttons to adjust it.
5. Press **Set** again to save the time.

The clock uses a **24-hour format** (00:00 to 23:59).

Note: The clock setting is retained internally, even when the sensor is powered off or the battery is removed.

Note: For accurate operation of **Time Windows**, ensure the clock is set to **local time** in the location where the sensor is being deployed.

Enable Time Windows

The **Time Windows** setting allows you to control when the sensor is active during a 24-hour period. When enabled, the sensor will automatically disable itself outside the defined time window, allowing it to operate only during selected hours (for example, **nighttime only** or **daytime only** operation).
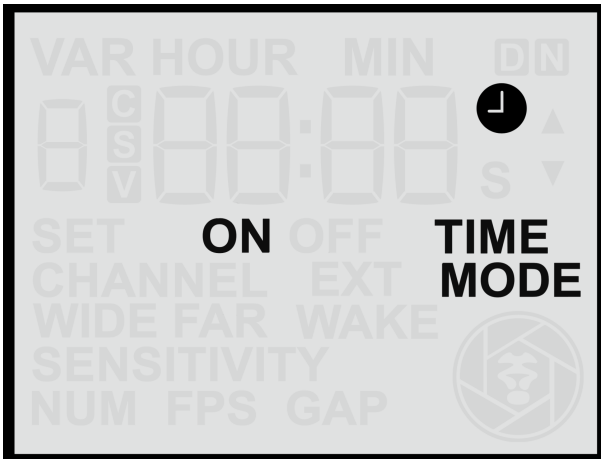
Enabling or Disabling Time Windows

1. From the **Home Screen**, press the **Right Arrow** until you reach the **Time Windows** screen.
2. Press the **Up** or **Down** button to toggle between **ON** and **OFF**.

When **Time Windows** are enabled, a **clock icon** will appear on the **Home Screen**, indicating that scheduled operating hours are active. The clock icon on the **Home Screen** will be accompanied by either **ON** or **OFF**. This provides a convenient indication of whether the sensor is currently inside an active time window (**ON**) and is therefore **working**, or outside an active time window (**OFF**) and is therefore is **disabled**.

Notes on Operation

- When Time Windows are **ON**, the sensor will remain **inactive** outside the specified time range.
- Currently, **only one time window** can be defined per 24-hour cycle (for example, limiting operation to daylight or night hours).
- Ensure the **internal clock** is correctly set before enabling Time Windows (see *Set Clock Time* section).

Future firmware updates may introduce the ability to configure multiple time windows. If multiple time windows would be a valuable feature for your application, please contact **Camtraptions** for updates or to provide feedback.

An active Time Window may cause the sensor to appear unresponsive. If the sensor does not seem to react to motion, first check whether the clock icon is visible on the Home Screen and if the activity indicator is displaying **OFF**. If it is, verify that the internal clock and time window settings are correct.

Set On Time

The **Window On Time** setting defines the time of day when the sensor becomes **active** — in other words, the start of the period during which motion detection and triggering are enabled.

This feature works in conjunction with the **Time Windows** setting. For example, if you wish the sensor to operate **only at night**, you might set the *Window On Time* to **18:00 (6:00 p.m.)** and the *Window Off Time* to **06:00 (6:00 a.m.)**.

Setting the Window On Time

1. From the **Home Screen**, press the **Right Arrow** until you reach the **Window On Time** screen.
2. Use the **Up** or **Down** buttons to adjust the **hour** value.
3. Press the **Set** button to confirm the hour.
4. The **minute** value will then begin flashing — use the **Up** or **Down** buttons to adjust it.
5. Press **Set** again to save the time.

The time is entered in **24-hour format** (00:00 to 23:59).

Notes

- Ensure the **Time Windows** feature is **enabled** for this setting to take effect.
- For reliable operation, confirm that the **sensor clock** is set accurately before adjusting time windows (see **Set Clock Time** section).

Set Off Time

The **Window Off Time** setting defines the time of day when the sensor becomes **inactive**, marking the end of the period during which motion detection and triggering are enabled.

This setting works together with the **Window On Time** to establish the daily operating period for the sensor. For example, if you want the sensor to operate **only at night**, you might set the *Window On Time* to **18:00 (6:00 p.m.)** and the *Window Off Time* to **06:00 (6:00 a.m.)**.

Setting the Window Off Time

1. From the **Home Screen**, press the **Right Arrow** until you reach the **Window Off Time** screen.
2. Use the **Up** or **Down** buttons to adjust the **hour** value.
3. Press the **Set** button to confirm the hour.
4. The **minute** value will then begin flashing — use the **Up** or **Down** buttons to adjust it.
5. Press **Set** again to save the time.

The time is entered in **24-hour format** (00:00 to 23:59).

Notes

- Ensure the **Time Windows** feature is **enabled** for this setting to take effect.
- The **sensor will remain inactive** outside the defined time window.
- If the Off Time is set to the same value as the On Time, the sensor will remain active at all times.
- For reliable operation, confirm that the **sensor clock** is set correctly before defining time windows (see **Set Clock Time** section).

External Wake

The **Periodic External Wake** setting allows the sensor to send a brief **half-press (wake)** signal to the connected camera or flash equipment at regular intervals. This periodic signal helps prevent certain devices from entering deep sleep modes and ensures they remain responsive for long-term deployments.

Purpose of Periodic Wake

This feature can be useful for a variety of situations, including:

- **Preventing cameras** from entering deep sleep or becoming unresponsive if left idle for long periods (for example, some models require a command at least once every 24 hours).
- **Keeping third-party flashes** active by preventing them from entering power-saving modes.

Although there are several potential uses, the **main purpose** of this setting is to maintain camera responsiveness in systems that may otherwise power down or lose connection over extended periods of inactivity.

Setting the Periodic Wake Interval

1. From the **Home Screen**, press the **Right Arrow** until you reach the **Periodic Wake** screen.
2. Use the **Up** or **Down** buttons to adjust the desired time interval in hours and minutes, from a minimum of 1 minute to a maximum of 24 hours.
3. Press the **Set** button to confirm and save your setting.

The interval can be configured in **minutes and hours**, and the sensor will send a brief **wake signal** to the connected equipment at each interval.

Enable or Disable the Periodic Wake Function

- **Hold** either the **Up** or **Down** button for more than **2 seconds** while on the **EXT WAKE** screen.
- When active, the display will show the **"ON"** indicator.

Panasonic cameras, such as the Panasonic GH4 and GH5, can enter a deep sleep state after extended inactivity. To prevent this, set a Periodic Wake interval of around 11 hours. This ensures the sensor sends a brief wake signal periodically, keeping the camera responsive during long deployments.

Notes

- **Periodic Wake signals are only sent during active time windows.** If Time Windows are enabled, wake signals will not be transmitted while the sensor is in an off-window period.
- If using **Camtraptions flashes** or cameras that remain active without assistance (which is the majority of cameras), this setting is not required.
- Using shorter intervals will slightly increase power consumption (not just of the sensor but of the equipment being woken), so choose the **longest interval** that reliably keeps your equipment awake.

Advanced Configuration

Advanced Configuration provides in-depth control through Custom Variables (C Vars), allowing you to fine-tune signal durations, flash behaviour, and specialist functions. It also explains how to restore factory defaults and manage complex custom setups safely.

Custom Variables

The **Custom Variables** menu provides access to advanced configuration options that allow the behaviour of the sensor to be **fine-tuned**. These variables modify timing parameters that affect how the camera is triggered, how long signals are held for, and other aspects of sequence timing. For the majority of users, customising these settings is generally unnecessary.

In some cases, enabling or adjusting a Custom Variable may **override standard Still or Video Mode settings**, resulting in slightly different sequence timing than expected. These options are intended for advanced users who require precise control over the triggering sequence.

Accessing Custom Variables

1. From the **Home Screen**, press and hold the **Left and Right Buttons** simultaneously for more than **2 seconds** until the **Custom Variables** (C VAR) screen appears.
2. Use the **Left** and **Right** buttons to select the desired variable number.
3. Use the **Up** and **Down** buttons to select the desired variable value.
4. Press **Set** to save the new value.
5. Some custom settings can also be enabled or disabled by holding the **Up** or **Down** button for more than **2 seconds** to toggle them **On** and **Off**.

Leaving the Custom Variable Menu

From the custom variable menu, you can return to the Home Screen by either:

- Not pressing a button for 20 seconds.
- Pressing the **Left and Right Buttons** simultaneously for more than **2 seconds.**

Available Custom Variables

C Var	Description	Default Value	Adjustable Range
0	**Sampling Frequency / Adaptive Sensitivity** – Fine-tune the sensor sensitivity and response speed.	8	1-16
1	**Half-Press Length (Before Full Press)** – Determines how long the half-press (wake) signal is held before the full-press trigger in both still and video modes.	0.1 s	0.1–5.0 s (in 0.1 s steps)
2	**Half-Press Length (After Full Press)** – Determines how long the half-press signal is held after the full-press trigger in both still and video modes.	0.1 s	0.1–5.0 s (in 0.1 s steps)
3	**Full-Press Duration (Still Mode)** – If enabled, this overrides the full-press timing determined by the FPS setting.	—	0.1–2.9 s (in 0.1 s steps)
4	**Gap Between Full-Press Signals (Still Mode)** – When *Number* (NUM) > 1, this defines the interval between shots. If enabled, it overrides the FPS-determined interval.	—	0.1–15.0 s (in 0.1 s steps)
5	**Full-Press Duration (Video Mode)** – Defines how long the full-press signal is held when starting or maintaining a video recording.	1.0 s	0.1–2.9 s (in 0.1 s steps)
6	**Maximum Video Length Extension Limit** – Sets an absolute maximum video extension length in minutes. This limits the total recording duration when *Extend Time* is enabled. The maximum recording time will be this variable plus the standard recording time.	—	1–60 min
7	**Flash Wake / Flash Fire Signals** – Controls whether flash trigger signals are sent during still sequences: • **0** – No flash wake or fire signals sent. • **1** – A 0.2 s **Flash Wake** signal is sent immediately before the **first** camera trigger signal in any still sequence. • **2** – A 0.2 s **Flash Wake** signal is sent immediately before the **first** camera trigger signal, and a 0.2 s **Flash Fire** signal is sent after **every** camera trigger signal in the sequence.	0	0–2
8	**Flash Signal Channel** – Sets the **wireless channel** (1–15) used for the Flash Wake and Flash Fire signals defined by C Var 7. This should be set to a different channel than the main camera trigger channel.	—	1–15
9	**Wireless Power Boost** – When set to "1", this setting increases the strength of the wireless signal to improve reliability in setups where there may be signal interference, long distances, or obstructions between the sensor and the receiver. This is an **experimental option** intended primarily for troubleshooting wireless connectivity issues. In most circumstances, the default power level provides the best balance between range, battery efficiency, and signal stability.	0	0–1

To restore factory defaults, see the **Reset to Defaults** section.

> Adjusting Custom Variables can affect the timing of the camera's wake, trigger, and release signals.

Custom Variable 0

The **C Var 0** menu screen allows you to adjust how **responsive** the sensor is to motion across both lenses. It controls how **frequently** the sensor is taking measurements to look for **movements** (changes in infrared radiations) across its field of view. Taking more frequent measurements means that the sensor will be able to pick up **smaller or more fleeting movements** that might otherwise be missed if it is sampling less frequently.

This is different to the **main [far](#) & [wide](#) sensitivity setting** which relate to the **amplitude** of the infrared signal required to trigger the sensor, i.e. how **warm, large or close** the subject must be.
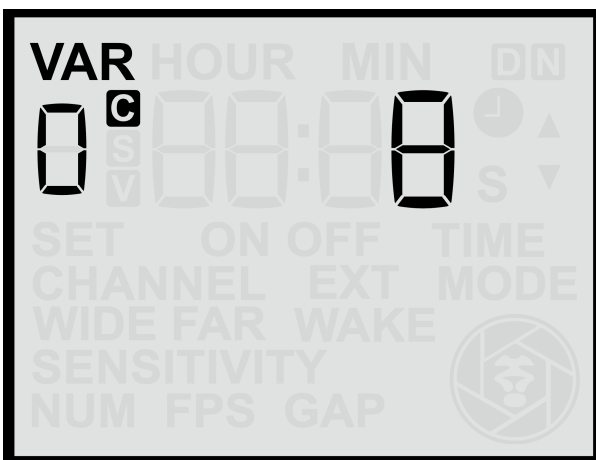
Adjusting Sampling Frequency

1. From the **C Var 0** screen, use the **Up** or **Down** buttons to change the value.
2. Press the **Set** button to **save** your selection.

Sampling Frequency can be set between **1** and **16** (the default is 8), where:

- **16** = Maximum sampling frequency (the sensor will detect faster, smaller and more momentary movements).
- **1** = Minimum sampling frequency (requires slower, larger and more pronounced movement to trigger).

At higher sampling frequencies, the sensor will consume slightly more power and may be more susceptible to false triggering from wind, vegetation or dappled light, but it will be more effective at detecting small, rapidly moving subjects. Therefore, you should look to optimise the sampling frequency based on the intended subject, the environmental conditions and your battery life requirements.

Adaptive Sensitivity Mode

The sensor also features an **Adaptive Sensitivity** algorithm designed to help reduce false triggers in challenging environments.

To enable or disable Adaptive Sensitivity:

- **Hold** either the **Up** or **Down** button for more than **2 seconds** while on the **C Var 0** screen.
- When active, the display will show the **"ON"** indicator for Adaptive Sensitivity.
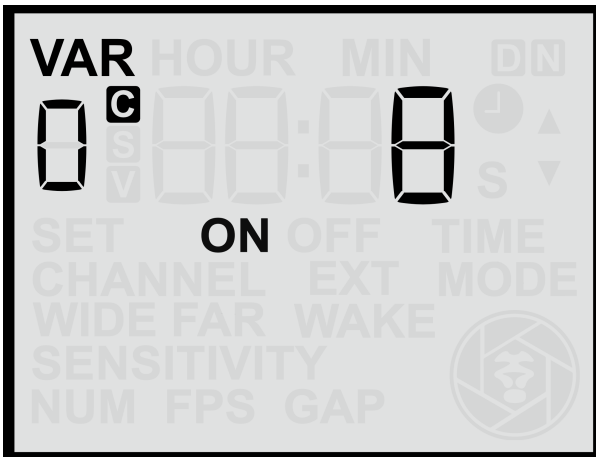
In this mode, the sensor dynamically adjusts its primary sensitivity thresholds, i.e. the thresholds that relate to the main [far](#) & [wide](#) sensitivity settings (**not** the sampling frequency) in response to background activity levels:

- If there is **persistent low-level motion or heat variation** (for example, caused by wind-blown vegetation or rising warm air during the middle of the day), the trigger threshold is automatically increased.
- When background movement decreases, the sensor gradually lowers the threshold again.

This adaptive behaviour helps the sensor remain effective while **reducing false detections** under fluctuating environmental conditions.

In most circumstances, **Normal Sensitivity Mode** provides sufficient control. However, if false triggers occur intermittently — such as at certain times of day or under windy or hot conditions — **Adaptive Sensitivity Mode** could improve reliability.

Using Half-Press Duration for Autofocus (C Var 1)

C Var 1 controls the **length of the half-press (HP)** signal that is sent to the camera before the full-press (FP) trigger. By extending this half-press duration, the sensor gives the camera time to perform **autofocus** functions before the image is taken.

With newer **mirrorless cameras** offering highly advanced autofocus systems — including **animal-eye detection** — this feature allows autofocus to be used in camera-trap setups for the first time.

When the half-press signal is active, the camera can detect and focus on the subject before the shutter is triggered, enabling the possibility of shooting with a **shallow depth of field** and precise eye focus, creating images that differ greatly from traditional manual-focus camera-trap photos.

Practical Considerations

- **Focus reliability:** Autofocus-based setups are inherently less reliable than manual focus. Some images may be misfocused if the camera fails to detect the correct point of interest or locks onto background elements.
- **Lighting:** Autofocus requires **continuous light** to function. For nighttime use, **video lights** may be necessary, as flashes alone will not provide light until after focus is attempted.
- **Timing:** The optimal half-press duration depends on the camera model and lens. Mirrorless cameras typically require between **0.2 s and 1 s** for accurate subject detection and focus acquisition.

This setting introduces a new creative approach to camera trapping — enabling **autofocus precision** and **shallow-depth-of-field imagery** previously impractical with PIR triggers. While manual focus remains the most dependable method for critical work, **C Var 1** offers an exciting opportunity to experiment with modern autofocus systems for more dynamic and cinematic results.

Custom Variables 7 and 8

Wireless Flash Wake and Flash Fire (C Var 7 & C Var 8)

C Var 7 and 8 provide advanced control for managing external flashes, particularly in situations where the **camera cannot wake or trigger flashes automatically**. This feature is especially useful with **Sony cameras**, which do not send a wake signal to flashes before triggering them.

While flashes such as the **Camtraptions F1** and **Z2** do not require a wake signal, the **Camtraptions Z Pro** achieves much longer standby times by entering a low-power sleep mode. As a result, it must be **woken** before it can be triggered.

In such cases, the **sensor** can take over flash control independently:

- **C Var 7 = 1:** The sensor sends a **0.2 s Flash Wake signal** immediately before the **first** camera trigger signal in any stills sequence. This wakes compatible flashes (such as the Z Pro) so that they are ready when the **camera** sends its normal shoot signal.
- **C Var 7 = 2:** The sensor sends both a **Flash Wake signal** before the **first** camera trigger signal **and** a **Flash Fire signal** after **every** camera trigger signal. In this configuration, the **camera does not need to send any flash trigger signal**—the sensor handles all flash timing directly.

The **wireless channel** used for these **flash signals** is defined by **C Var 8**, which can be set between **1 and 15**. This should be set to a **different channel** than the [main camera trigger channel](#).

The **C Var 7 = 2** configuration is particularly effective for **night-time photography**, where **long shutter speeds** allow the flash to fire during the exposure window.

As long as the **shutter speed is longer than the Full-Press duration**, the flash will fire within the open exposure, even when the camera itself is not controlling the flash. The Full-press duration can be customised using C Var 3 so that the flash fires as quickly as possible after the camera shutter opens.

This setup provides a **reliable and flexible method** to trigger flashes entirely via the sensor, simplifying configurations where cameras have limited flash-control capabilities or when using **off-camera flash systems** in low-light environments.

Reset to Defaults

From the **Custom Variables (C Var)** menu, if you continue scrolling past the last C Var entry, you will reach a screen labelled **"reset"**. This screen allows you to **restore all sensor settings to their factory defaults**.

This is useful if many settings or Custom Variables have been adjusted and you want to quickly return the sensor to its original standard behaviour.

Performing a Reset

1. Navigate to the **Custom Variables (C Var)** menu.
2. Continue scrolling using the **Right Arrow** until you reach the **"reset"** screen.
   - The word **"reset"** will appear **without blinking**.
3. Press the **Up** or **Down** button once — the word **"reset"** will begin **blinking**, indicating that the reset function is armed.
4. Press the **Set** button to confirm.
   - The text **"reset"** will disappear.
   - The **clock symbol** will blink for approximately **3 seconds**, indicating the reset is in progress.
   - When complete, the sensor will automatically return to the **Home Screen**.

Cancelling a Reset

If, while **"reset"** is blinking, you press **Left** or **Right** instead of **Set**, the screen will move back to the previous or next C Var setting, and **no reset will be performed**.

Notes

- Resetting the sensor restores **all user-configurable options** (including Global, Still, Video, and Custom Variable settings) to their **factory defaults**.
- The **firmware version** remains unchanged.

- After performing a reset, it's recommended to review your key configuration settings (e.g., wireless channel, mode, and time) before redeploying the sensor.

Maintenance and Care

This section covers best practices for maintaining the sensor's performance and reliability. Topics include weatherproofing, cleaning, and firmware updates — ensuring your equipment remains dependable in harsh field environments.

Weatherproofing

The Camtraptions PIR Sensor v4 is built for reliable operation in demanding outdoor conditions. However, regular checks and care are essential to maintain its weather resistance and ensure dependable long-term performance.

1. Check and Clean Seals

The main seal around the **battery door** is critical to maintaining a watertight enclosure.

- Ensure the seal and its contact surface are **clean and free from vegetation, debris or grit** before closing the door.
- Inspect the seal periodically for **wear, cracking, or deformation**.
- If a seal is damaged, it should be replaced. **Replacement seals** can be obtained by contacting **Camtraptions Support**.

2. Protect Unused Openings

All external ports and access points should be securely sealed when not in use.

- Ensure the **weatherproof rubber caps** covering the **power and camera signal sockets** are firmly fitted to prevent moisture or dirt ingress.
- Check that the **SD card bung** (located beneath the right-hand flap) is fully inserted after use to protect the memory card slot.
- Replacement caps and bungs are available from **Camtraptions** if any are lost or damaged.

3. Use Silica Gel

In all environments, but particularly in **wet or humid conditions**, it is recommended to place a **small sachet of silica gel** inside the **battery compartment**. There is space beside the battery for this purpose.

- The silica gel will **absorb residual moisture** introduced when the door is opened (for example, during battery changes) and helps prevent internal condensation.
- Any small silica sachet that fits can be used, though **Camtraptions 1 g individually sealed sachets** are ideal for this application.
- Replace the sachet every **4-8 weeks in humid climates** or every 3-6 months in temperate conditions. Replace the sachet more often if the battery door is being frequently opened.

This simple precaution can significantly enhance the **longevity and reliability** of the sensor in challenging climates.

4. Avoid Submersion or Flood Risk

The sensor is **weather-resistant but not waterproof**. It is not designed to be submerged and should not be deployed in locations where it could be flooded — for example, in areas prone to **rising water, heavy runoff, or riverbank overflow**. Always mount the sensor in a position where it remains above likely water levels.

5. Freeze-thaw Precautions

In cold, wet environments, water could accumulate in the seam between the battery door and the main enclosure body. If temperatures drop below freezing, this water can **turn to ice and expand**, placing pressure on the door latch and potentially compromising the seal.

To minimise this risk, you can apply a **wide strip of waterproof tape** around the door joint—running from one lower corner of the enclosure, across the top of the latch, and down to the opposite lower corner. This simple precaution helps prevent water from pooling in the seam, reducing the likelihood of freeze-related damage during cold, wet deployments.
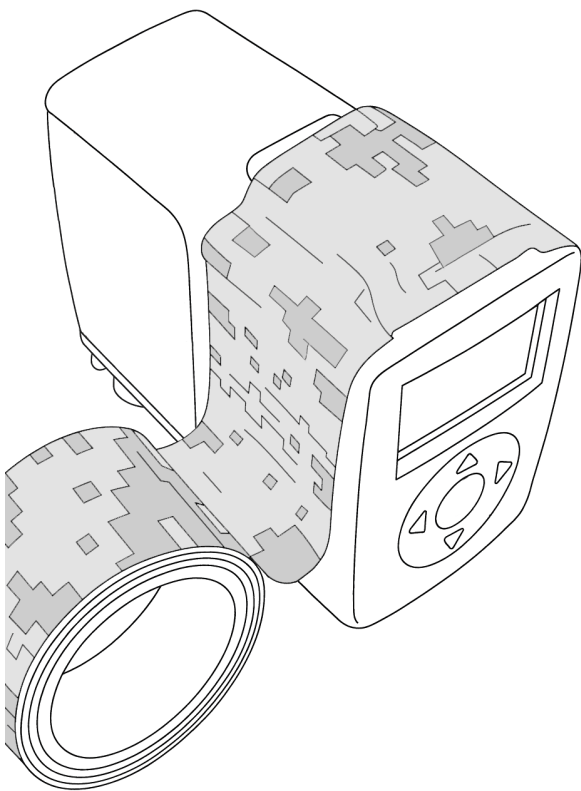
Firmware Update

The Camtraptions PIR Sensor v4 supports **firmware updates** via microSD card. This allows new features, improvements, and bug fixes to be installed easily by the user without returning the sensor for servicing.

This manual applies to firmware version 1.19. Check the sensor's current firmware version by navigating to the **Home Screen** and holding down the **right arrow** button for 2 seconds. If necessary, you can update the firmware by following the instructions below.

Downloading Firmware

The latest firmware releases can be downloaded from the **Camtraptions website**:

camtraptions.com/resources/pir-v4/

Each firmware version will include a short description of changes.

Preparing the microSD Card

To perform a firmware update, you will need a **microSD memory card** *(not supplied)*.

- The card must be **formatted in FAT32** and **no more than 32 GB in total capacity.**
- Copy the two downloaded firmware files directly into the **root directory** of the card — do not place them inside a folder or rename it.
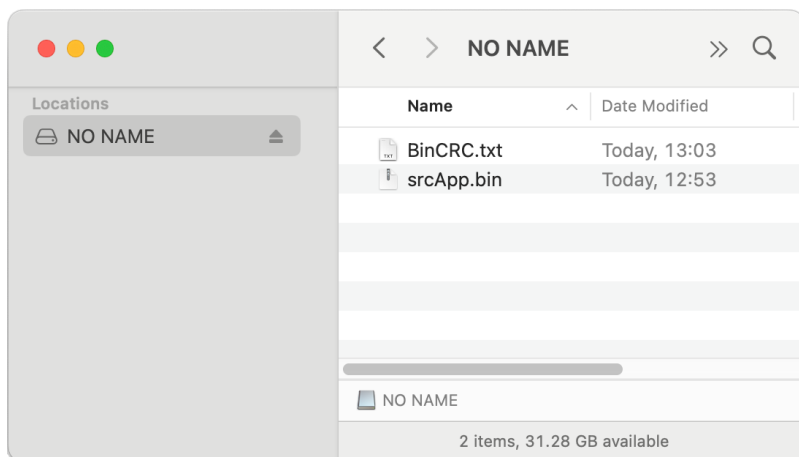
Inserting the microSD card

You may find it helpful to use a pair of thin-nose pliers to insert the SD card into the sensor. The card slot is located beneath the right-hand flap on the side of the sensor. Remove the bung and insert the SD card so that the edge of the card is flush with the edge of the board.

microSD card slot under bung

Use pliers to insert
microSD card
(note orientation)

SanDisk
32 GB Micro

microSD card sits flush
with edge of board
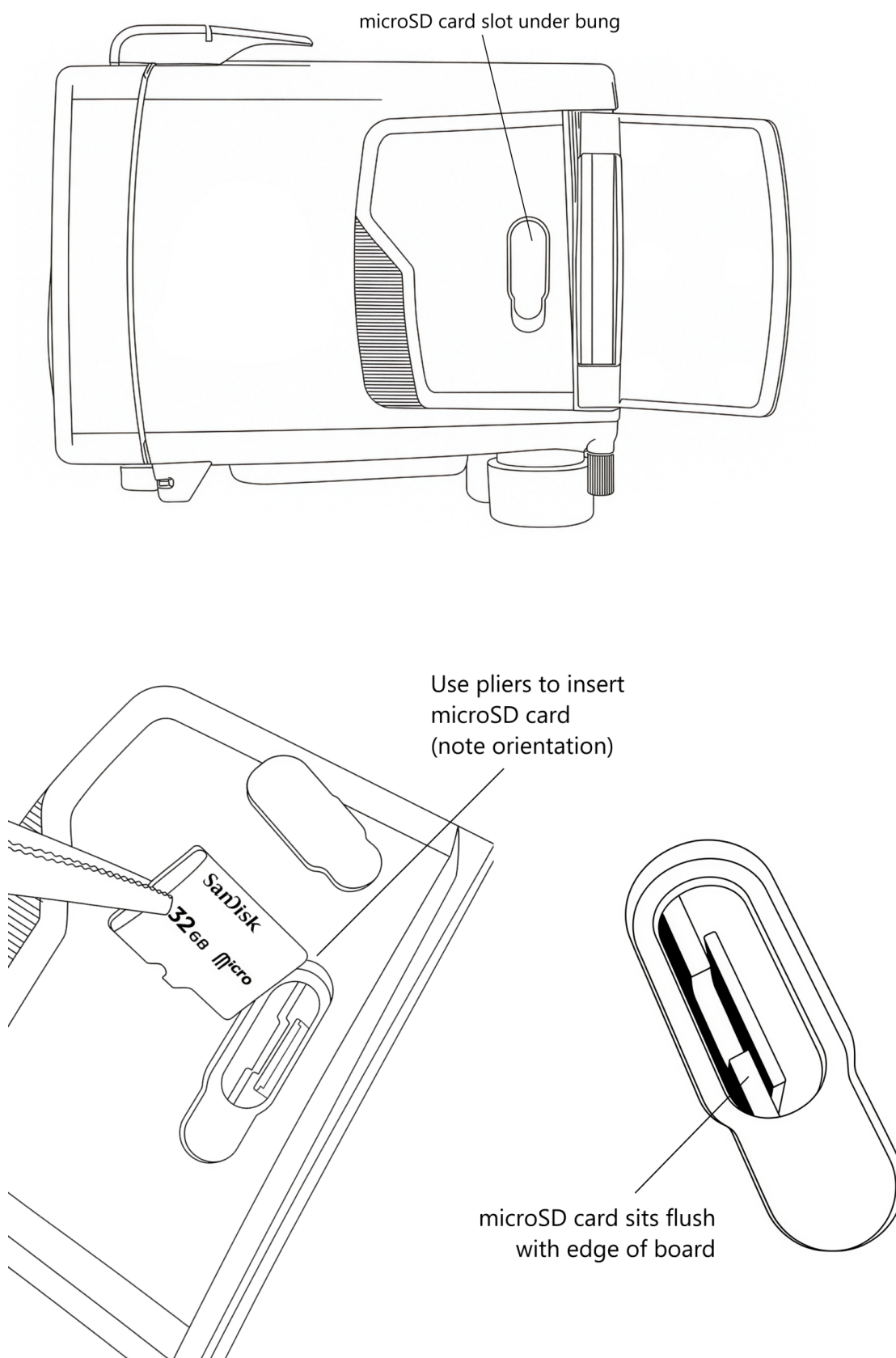
It is possible to accidentally drop the microSD card into the sensor. If this happens then just turn it over and shake it until the card falls out again.

Installing the Firmware

1. Ensure a **fully charged battery** is installed in the sensor.
2. Insert the prepared **microSD card** into the **card slot** beneath the right-hand flap.
3. **Hold the Down button** while switching the sensor **on** to begin the update process.
4. The screen will not display anything but the **red** indicator light on the front of the sensor will turn on and shine **constantly** to indicate that the update is underway.
5. Wait approximately **30 seconds** while the firmware updates.
6. When complete, the **front LED** will blink briefly to confirm the update has finished successfully. The sensor's LCD screen will automatically turn on.
7. You can now remove the microSD card carefully using thin-nose pliers and re-insert the rubber card slot bung, making sure it is fully seated.

Do **not** remove the battery or power during the update process, as this could interrupt installation and corrupt the firmware.

If the microSD card is not inserted correctly (or not inserted at all) and the update procedure is commenced using the sensor's keypad, then the red LED will **flash** rapidly to indicate an **error**. To resolve this, remove the battery from the sensor to turn it off, then make sure the microSD is **correctly inserted** before re-attempting the firmware update procedure.

Verifying the Update

To confirm the update was successful:

1. From the **Home Screen**, **hold the Right button** to display the new firmware version.
2. Check that the displayed version matches the firmware file you installed.

If the version number does not match or the sensor does not boot normally, repeat the update process using a freshly formatted microSD card.

Reference

The Reference section compiles technical data, timing charts, and specifications. It serves as a quick lookup guide for signal sequences, variable definitions, and voltage tables — useful for troubleshooting and advanced configuration work.

Stills Sequence Timings

These flowcharts outline the sequence of operations when the sensor is set to **Still Mode**, for both Wireless and Wired outputs, including all optional timing adjustments via menu settings and **Custom Variables (C Vars)**.

Stills Mode

Wireless

```
Motion detected
        │
        ▼
0.1s HP unless
overridden by "Wake
Time" or C Var 1
        │
        ▼
If C Var 7 is set to 1
or 2, 0.2s FW
        │
        ▼
FP as determined by  ◄──────────────┐
the FPS setting,                     │
unless overridden by                 │
C Var 3                              │
        │                     0.1s HP unless
        ▼                     overridden by
If C Var 7 is set to 2,       C Var 1
0.2s FF                              ▲
        │                            │
        ▼                     Pause as determined
0.1s HP unless                by the FPS setting,
overridden by                 unless overridden by
C Var 2                       C Var 4
        │                            ▲
        ▼                            │
Have number of        No            │
triggers specified by NUM  ─────────┘
been reached?
        │
       Yes
        │
        ▼
Pause as determined
by the "GAP Time"
setting
        │
        ▼
Standing by
```

Wired

```
Motion detected
        │
        ▼
HP only if specified
by "Wake Time" or
C Var 1
        │
        ▼
FP as determined by   ◄──────────────┐
the FPS setting,                      │
unless overridden by          HP only if specified
C Var 3                       by C Var 1
        │                            ▲
        ▼                            │
HP only if specified          Pause as determined
by C Var 2                    by the FPS setting,
        │                     unless overridden by
        ▼                     C Var 4
Have number of        No             ▲
triggers specified by NUM  ──────────┘
been reached?
        │
       Yes
        │
        ▼
Pause as determined
by the "GAP Time"
setting
        │
        ▼
Standing by
```

Signal Key

Abbreviation	Meaning	Description
HP	Half-Press	A half-press signal sent to the camera to wake it, initiate autofocus, or prepare flashes before a capture.
FP	Full-Press	A full-press signal that triggers the camera's shutter release or starts/stops video recording.
FW	Flash Wake	A signal sent to compatible wireless flash units to wake them from sleep before firing.
FF	Flash Fire	A signal sent to trigger compatible flashes at the moment of exposure.

Notes – Still Mode

- **Flash Control (C Var 7 / 8):** Enables the sensor to wake or fire flashes independently of the camera (useful for systems like Sony that lack flash-wake signals).
- **Time Windows:** Sequence only operates within defined On Time periods; outside these times, motion is ignored.

Video Sequence Timings

These flowcharts outline the sequence of operations when the sensor is set to **Video Mode**, for both Wireless and Wired outputs, including all optional timing adjustments via menu settings and **Custom Variables (C Vars)**.

Mode 1

Wireless Mode 1

```
┌─────────────────────┐
│   Motion detected   │
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│   0.1s HP unless    │◄──────────┐
│ overridden by "Wake │           │
│  Time" or C Var 1   │           │
└─────────────────────┘           │
           │                      │
           ▼                      │
┌─────────────────────┐           │
│  1s FP to commence  │           │
│  recording unless   │           │
│ overridden by C Var 5│          │
└─────────────────────┘           │
           │                      │
           ▼                      │
┌─────────────────────┐           │
│   0.1s HP unless    │           │
│ overridden by C Var 2│          │
└─────────────────────┘           │
           │                      │
           ▼                      │
┌─────────────────────┐           │
│    Pause for 10s    │           │
└─────────────────────┘           │
           │                      │
           ▼                      │
      ◇─────────◇      No         │
     Has as recording ───────────┘
     time exceeded the
     video length
     setting?
           │
          Yes
           │
           ▼
┌─────────────────────┐
│ Pause as determined │
│  by the "GAP Time"  │
│      setting        │
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│    Standing by      │
└─────────────────────┘
```

Wired Mode 1

```
┌─────────────────────┐
│   Motion detected   │
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│  HP only if specified│◄──────────┐
│ by "Wake Time" or   │           │
│      C Var 1        │           │
└─────────────────────┘           │
           │                      │
           ▼                      │
┌─────────────────────┐           │
│  1s FP to commence  │           │
│  recording unless   │           │
│ overridden by C Var 5│          │
└─────────────────────┘           │
           │                      │
           ▼                      │
┌─────────────────────┐           │
│  HP only if specified│          │
│     by C Var 2      │           │
└─────────────────────┘           │
           │                      │
           ▼                      │
┌─────────────────────┐           │
│    Pause for 10s    │           │
└─────────────────────┘           │
           │                      │
           ▼                      │
      ◇─────────◇      No         │
     Has as recording ───────────┘
     time exceeded the
     video length
     setting?
           │
          Yes
           │
           ▼
┌─────────────────────┐
│ Pause as determined │
│  by the "GAP Time"  │
│      setting        │
└─────────────────────┘
           │
           ▼
┌─────────────────────┐
│    Standing by      │
└─────────────────────┘
```

Mode 2

Wireless Mode 2

```
┌─────────────────────┐
│   Motion detected   │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  0.1s HP unless     │
│  overridden by "Wake│
│  Time" or C Var 1   │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  1s FP to commence  │
│  recording unless   │
│  overridden by C Var 5│
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  0.1s HP unless     │
│  overridden by C Var 2│
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  Pause as determined│
│  by the video length│
│  setting            │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  0.1s HP unless     │
│  overridden by C Var 1│
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  1s FP to end       │
│  recording unless   │
│  overridden by C Var 5│
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  0.1s HP unless     │
│  overridden by C Var 2│
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  Pause as determined│
│  by the "GAP Time"  │
│  setting            │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│    Standing by      │
└─────────────────────┘
```

Wired Mode 2

```
┌─────────────────────┐
│   Motion detected   │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  HP only if specified│
│  by "Wake Time" or  │
│  C Var 1            │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  1s FP to commence  │
│  recording unless   │
│  overridden by C Var 5│
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  HP only if specified│
│  by C Var 2         │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  Pause as determined│
│  by the video length│
│  setting            │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  HP only if specified│
│  by C Var 1         │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  1s FP to end       │
│  recording unless   │
│  overridden by C Var 5│
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  HP only if specified│
│  by C Var 2         │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│  Pause as determined│
│  by the "GAP Time"  │
│  setting            │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│    Standing by      │
└─────────────────────┘
```

Mode H

Wireless Mode H

Same as Wireless Mode 1

Wired Mode H
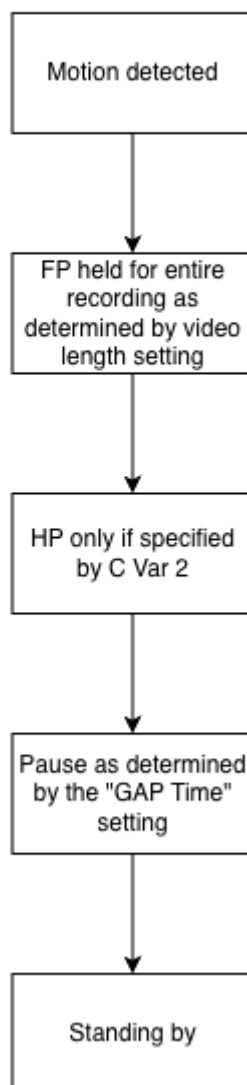
Signal Key

Abbreviation	Meaning	Description
HP	Half-Press	A half-press signal sent to the camera to wake it or initiate autofocus.
FP	Full-Press	A full-press signal that triggers the camera's shutter release or starts/stops video recording.

Notes – Video Mode

- **EXT Mode:** Extends recording if motion continues; use C Var 6 to impose a maximum video length limit.
- **Time Windows:** Sequence only operates within defined On Time periods; outside these times, motion is ignored.

Battery Voltage Tables

1. NP-F-Type Lithium-Ion Battery

(Nominal voltage: 7.4 V)

Voltage (V)	Approx. Remaining Capacity
8.4 V	100 % (Fully charged)
8.2 V	90 %
8.0 V	80 %
7.8 V	70 %
7.6 V	60 %
7.4 V	50 %
7.2 V	40 %
7.0 V	30 %
6.8 V	20 %
6.6 V	10 %
≤ 6.4 V	Battery nearly depleted — recharge recommended

2. Six AA Alkaline Batteries

(Nominal combined voltage: 9.0 V)

Voltage (V)	Approx. Remaining Capacity
9.3 V	100 % (Fresh batteries)
9.0 V	90 %
8.7 V	80 %
8.4 V	70 %
8.1 V	60 %
7.8 V	50 %
7.5 V	40 %
7.2 V	30 %
6.9 V	20 %
6.6 V	10 %

Voltage (V)	Approx. Remaining Capacity
≤ 6.3 V	Batteries depleted — replace soon

3. Six AA Ni-MH Rechargeable Batteries

(Nominal combined voltage: 7.2 V)

Voltage (V)	Approx. Remaining Capacity
8.4 V	100 % (Fully charged)
8.2 V	90 %
8.0 V	80 %
7.8 V	70 %
7.6 V	60 %
7.4 V	50 %
7.2 V	40 %
7.0 V	30 %
6.8 V	20 %
6.6 V	10 %
≤ 6.4 V	Recharge required

Specifications

- Detection Type: Dual PIR (Far and Wide sensors)
- Field of View: Far ≈ 10° horizontal & vertical | Wide ≈ 60° horizontal, 4.5° upward, 13.5° downward
- Power: NP-F lithium-ion battery (up to 60mm in height), 6 × AA (with adapter), or 4–12V DC input
- Trigger Output: Wired 2.5 mm jack / Wireless transmitter
- Firmware Updates: microSD card
- Dimensions: 14.8 × 11.7 × 6.7 cm (approx.)
- Weight (excluding battery): 405g
- Mounting: Dual ¼"-20 tripod threads (compatible with Jungle Mounts)
- Weather Resistance: Sealed construction with silica cavity (IP66)

The information in this manual corresponds to firmware version 1.19 of the Camtraptions PIR Sensor v4.

This manual applies to firmware version 1.19.

Exported from docs.camtraptions.com.