

# Wildlife Watcher User Guide

From wildlife.ai

For Wildlife Watcher project

# Setup the device

Download PDF

# 1. Setup the camera

#### 1.1 Powering the Camera

#### **Battery Pack Mode**

Ensure the internal battery is fully charged using the USB charging cable.

#### **AA Batteries Mode**

Ensure that you use high quality powerful, lasting AA batteries for the camera to stay active for the desired number of days. (e.g. ... battery will last x number of days)

#### Solar Mode

If using the optional solar panel, connect it to the camera and place it in a well-lit area

#### 1.2. Camera Setup

#### Connect camera to a power source

- Insert AA batteries
- · Open flap with battery picture on it
- · Insert batteries as shown and close it
- · Check that camera powers on
- · Connect battery pack
- · Charge battery pack using USB cable
- · Open battery pack slot?
- · Insert battery pack
- · Check that camera powers on
- · Connect solar panel
- Using USB cable connect camera to solar battery pack
- Ensure that the solar panel is placed in a well lit area
- · Check that camera powers on

#### Insert SD card

- · Open the SD card slot
- · Enter the SD card

#### 1.3. Camera add-ons

- Optionally user can connect another camera to the camera trap if the goal is to take high resolution photos
- Users need to:
  - Plug in the additional camera via the USB port?
  - Specify which camera to use when starting deployment (see below)
  - Check if the camera is working by following the steps in 'Camera testing' section (How to test an additional camera?)

### 1.4. Mounting the Camera

- Choose a strategic location with a clear view of the area to be monitored
- · Camera pointing to the ground
  - Use the camera stand to place the device securely facing the ground
  - Adjust the angle to cover the desired field of view.
  - Fix the wildlife platform in the camera view
  - Set up additional equipment:
    - Bait
    - other (tbc)
- · Camera attached to a poll/tree
  - Use straps and mounting clasps to fix the device onto a tree trunk/poll
  - o Adjust the angle
  - Set up additional equipment:
    - Bait
    - other (tbc)

#### 2. Connect the device to the camera

# 3. Machine learning model management

Using Edge Impulse (see setup external tools), you can:

- · View available models
- · Add model to project
- Train model
- Download model

On the Mobile application (see setup mobile application), you can:

- Upload model onto the camera (that you can download from Wildlife insights)
- Go to the devices section of the mobile app

- · Select a device or add a new one
- See if there is a model already loaded onto the camera
- · If so, remove it
- · Upload the downloaded model by selecting it from your files
- After the successful upload see that the correct model appears on the device

If you can, test camera before deployment to ensure that the model has been deployed correctly - see Camera Testing section below

# 4. Testing the device

## Camera testing and firmware updates

Before starting deployment we recommend that the camera is tested to ensure that it works and connects properly

#### Users need to:

- · Go into the the Devices section of the app
- See Connecting to the app section for download instructions
- · Turn on the camera and Bluetooth
- See Turn on the camera section for instructions
- · Select a device from the list
- · Check battery level change batteries if low
- Check SD card space free up space if low
- Install firmware update if available
- Test camera field view preview (in dev)
- Test a newly loaded machine learning model (TBC how)

## 5. Usage Instructions

### **Motion Detection & AI Recognition**

- As soon as the camera is deployed it detects motion and automatically takes pictures of wildlife activity.
- Al-powered recognition identifies species
- · Users receive real-time alerts and updates via email/phone

#### Night Vision & Low Light Performance

- Infrared sensors enable high-quality recording in low-light conditions (?)
- The camera automatically switches to night mode when necessary. (TBC)

#### **Storage & Data Management**

- Supports microSD cards up to 128GB for local storage.
- Cloud storage options available through the companion app. (Iteration 2)
- Users can access, download, and share footage directly from the app. (Iteration 2)