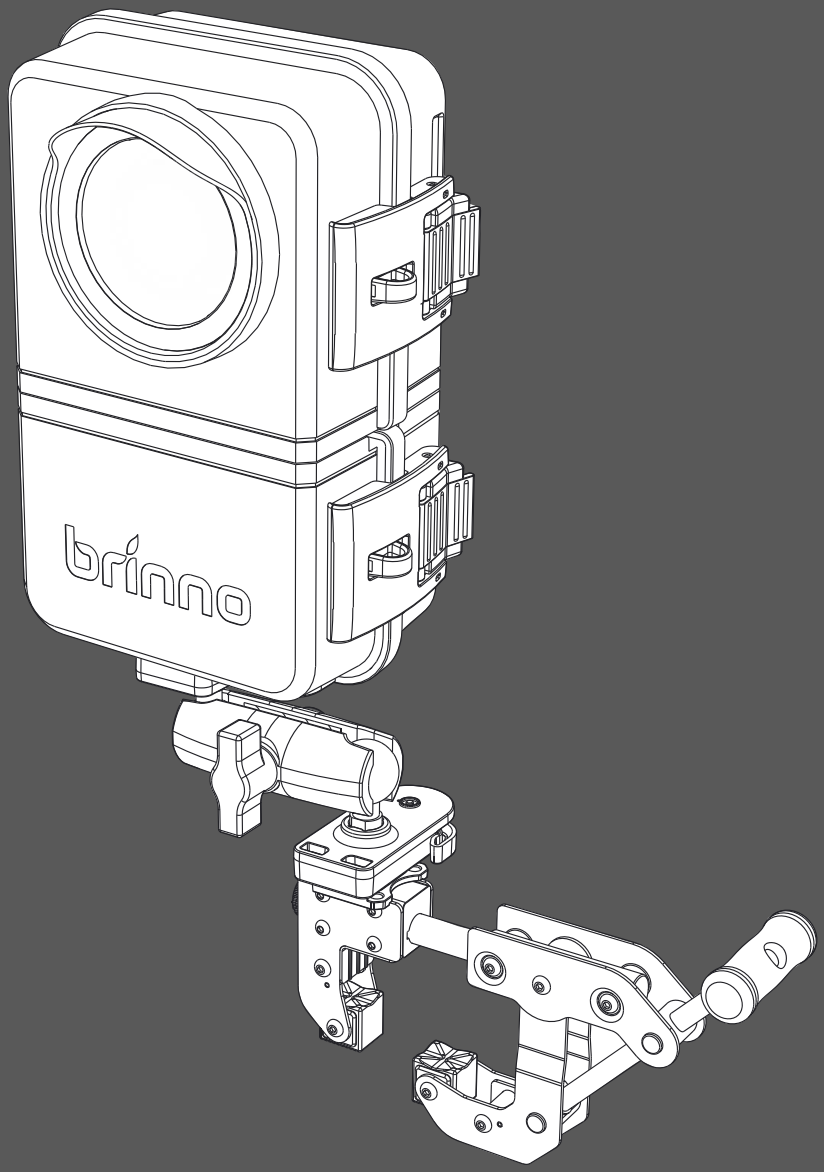
Wi-Fi & 4K CONSTRUCTION TIME LAPSE CAMERA

BCC5000



User Manual

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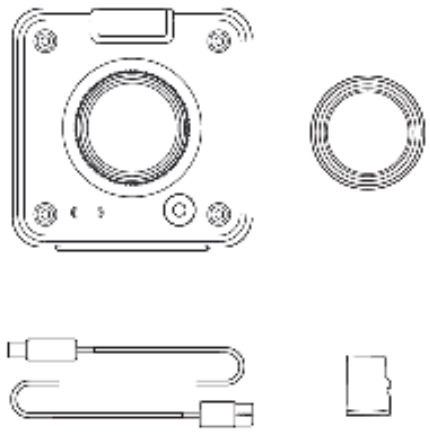
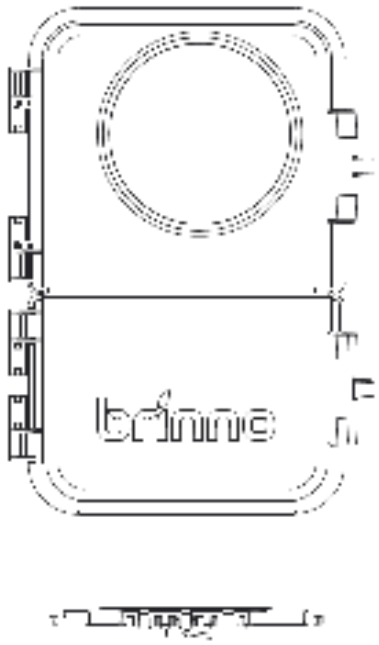
In the Box

1. 4K Time Lapse Camera – TLC5000



1.1. Camera
1.2. Lens hood
1.3. USB-C cable
1.4. MicroSD card with adapter

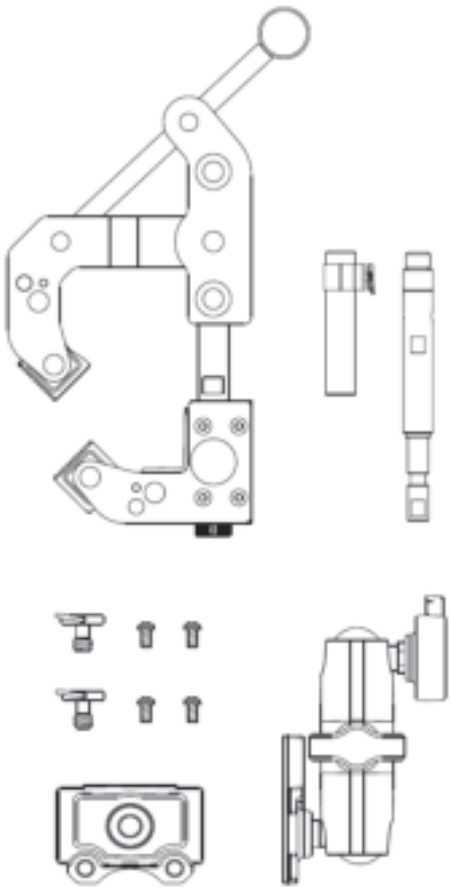
2. Construction Power Housing – ATH5000



2.1. Camera protective housing
2.2. Extra battery slot
2.3. Camera mounting adapter (pre-install in the camera protective housing)

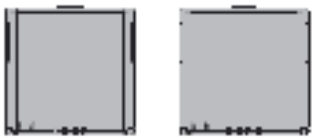
In the Box

3. Camera Clamp Pro – ACC5000



3.1. Camera clamp
3.2. Extension poles
3.3. Magic arm
3.4. Quick release adapter
3.5. Screws

4. Battery Pack – MRB1000



4.1. Rechargeable battery pack x2

Device Parts

1. Camera

FRONT

1.1. Spirit level
1.2. Lens
1.3. Start/stop button with LED indicator
1.4. Time interval button
1.5. Tripod mount (size: ¼”)

1.6. **SIDE**
1.7. Power switch
1.8. MicroSD card slot
1.9. USB-C socket
- Charging battery (need to turn on camera power)
- Power supply

BACK

1.10. Battery cover
1.11. Cover lock
Battery slot

Device Parts

2. Construction Power Housing

FRONT SIDE

FRONT SIDE

2.1. Extra battery slot x3
2.2. Battery lock
2.3. Power-in port (for solar power) (USB-C)
2.4. Data transfer port
2.5. Door & latch

BACK SIDE

BACK SIDE

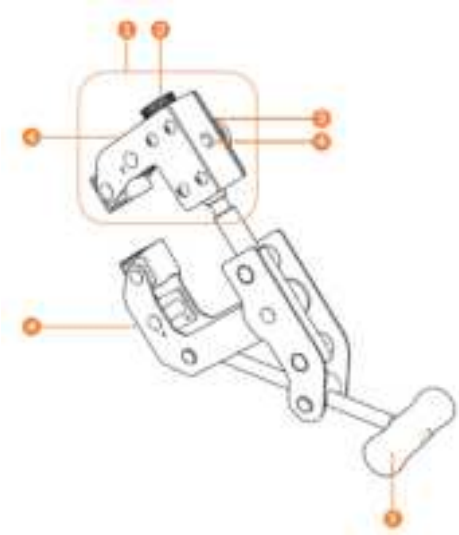
2.6. Camera mount adapter
2.7. External power connector (USB-C)
2.8. Door & latch
2.9. Tripod mount (size: ¼”)

Device Parts

3. Camera Clamp Pro

Magic Arm

3.1. Quick release adapter (for camera)
3.2. Flex arm knob
3.3. Clamp mount

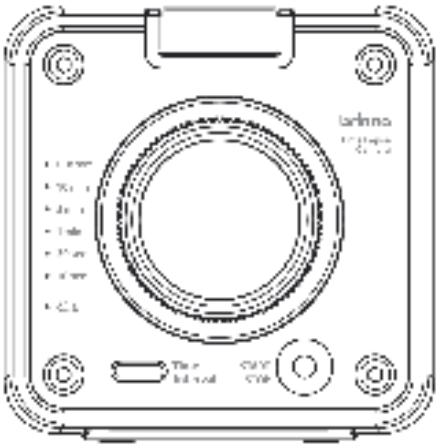


Camera Clamp

4.1. Clamp head
4.2. Extension pole hole knob
4.3. Clamp head knob
4.4. Mounting hole (1/4”) (x3)
4.5. Handle

LED Indicators

1. Camera



1.1 Power/recording status

● GREEN
Solid: Power on
Blinking: Recording

● RED
Solid: No SD card,
Blinking: Low battery, low MicroSD card storage

1.2 Time interval

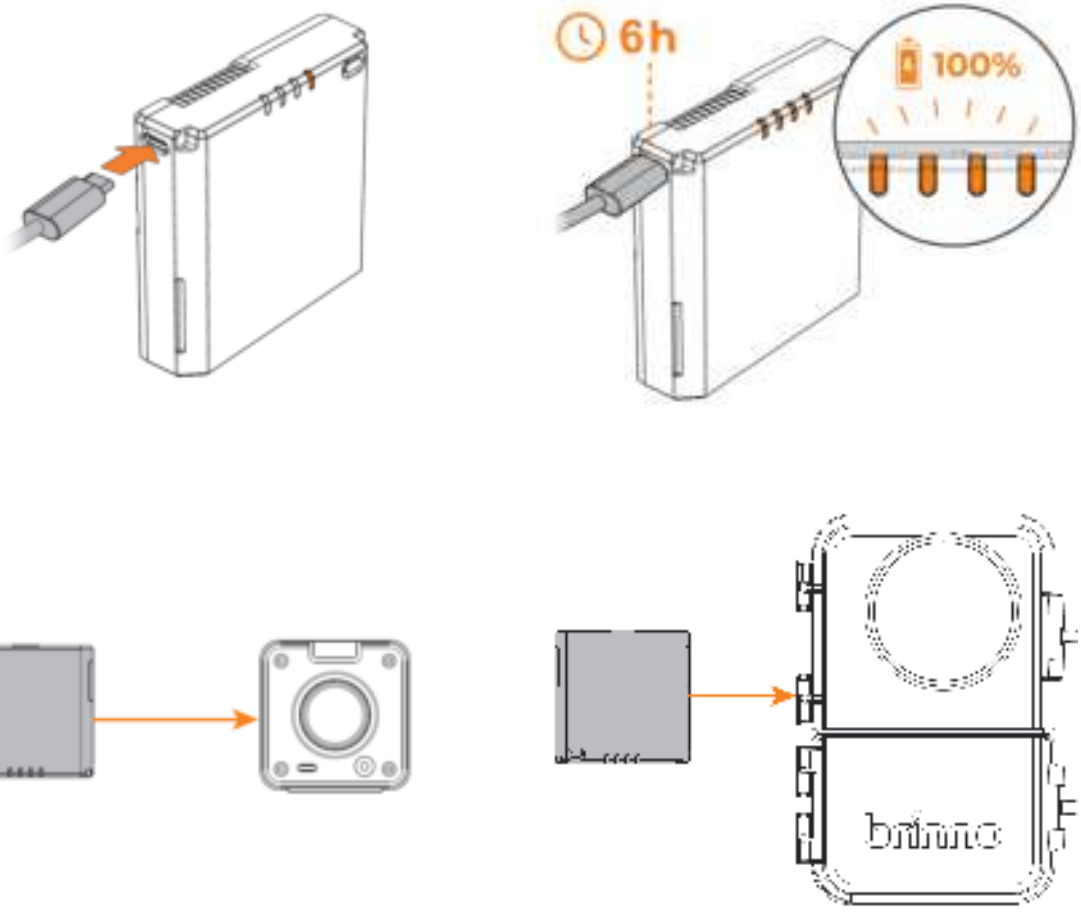
● GREEN
Solid: Indicated current time interval setting

1.3 Connection status

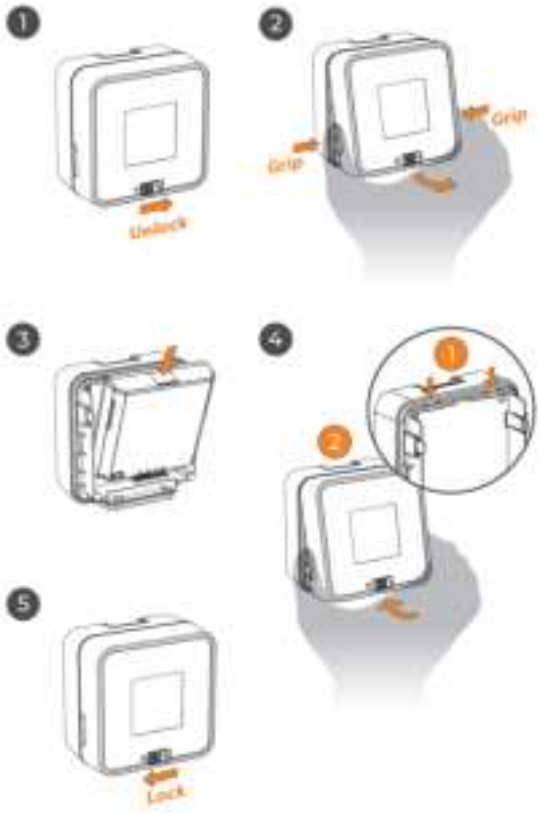
● BLUE
Solid: Camera connected to camera server
Blinking: Wi-Fi connecting

Initial Setup

Charge Before Use

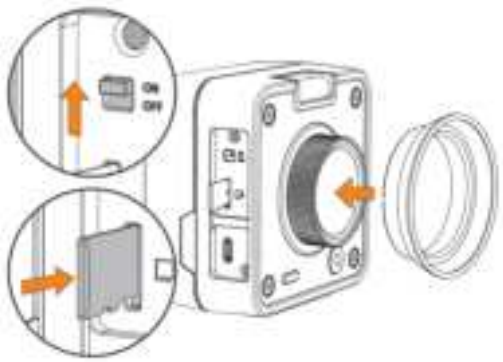


Camera | Installing Battery Pack



1. Unlock the battery cover.
2. Remove the battery cover.
3. Install battery pack.
4. Close the battery cover.
5. Lock the battery cover.

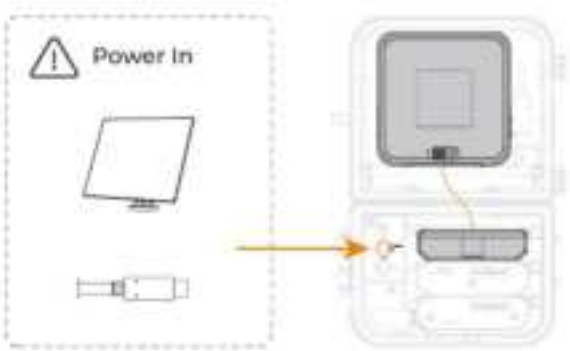
Camera | MicroSD Card & Lens Hood



Open the microSD card cover

6. Insert lens hood.
7. Insert microSD card.
8. Turn on camera.

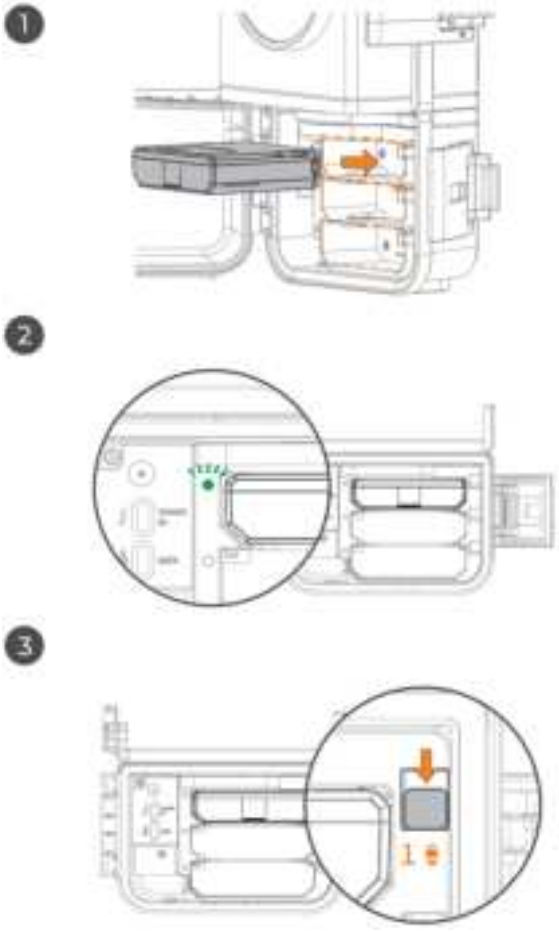
Housing | Charging Battery Pack



The BCC5000 waterproof power box has an additional battery expansion slot, which can be installed with up to 3 Brinno rechargeable battery packs (MRB1000), which will charge the TLC5000 camera.

1. If the waterproof power box has an external solar panel (ASP1000), it will charge the battery pack in the expansion slot.
2. When using an external power source, you must install a battery pack to charge the camera.

Housing | Installing Battery Pack

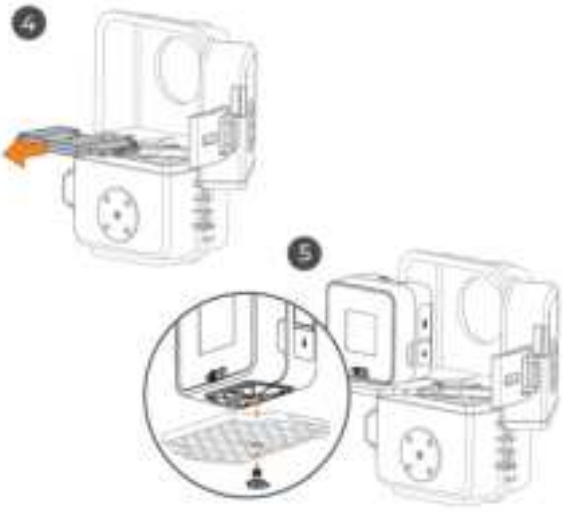


Open Battery slot cover

1. Insert the battery pack included in the package*.
2. Green LED lights on meaning the battery pack is installed correctly.
3. Lock the battery pack with battery lock.

Note:
1. Fully charged before use.
2. Supports up to 3 battery packs in total.

Housing | Installing Camera



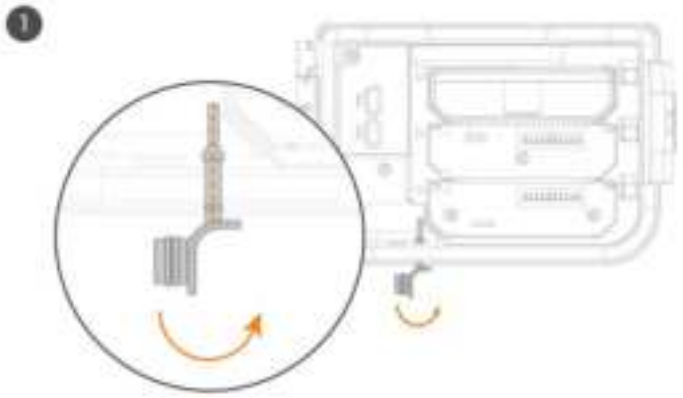
Open CAMERA HOUSING cover

4. Remove the camera mounting adapter.
5. Secure the camera and the adapter with the screw.
6. Open the USB-C cover on the camera, and plug the external power connector into the camera.
   Then, insert the adapter with the camera attached back into the camera housing.

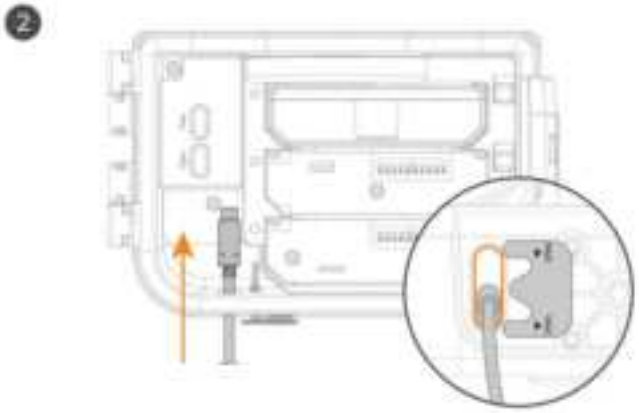
Housing | Locking the Door

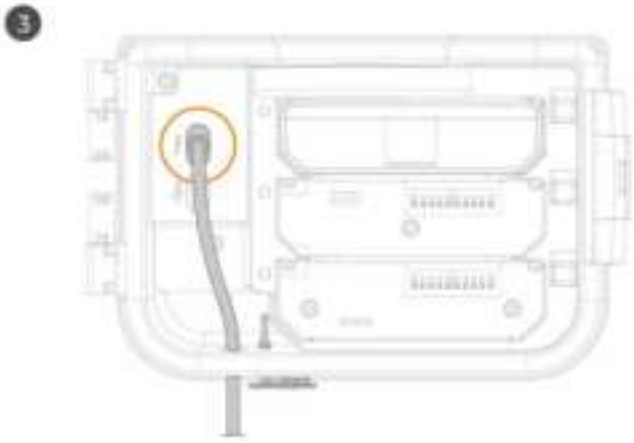
7. Secure the door of the housing.
8. Lock the latches, and a "click" sound means correctly installed.

Housing | Solar power kit



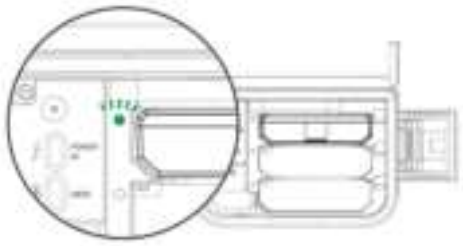
1. Gently unplug the black rubber located at the bottom of the waterproof housing.
2. Insert the USB-C cable from the ASP1000-P through the cord hole and ensure the cable passes securely through the opening.
3. Plug the USB-C connector into the Power-IN port of the waterproof housing.





Housing | LED Indicators

Construction Power Housing (Battery Slot)



When the battery pack is inserted into the housing, the LED flashes to indicate the battery is connected.

Refer to the following table for LED sign :

LED Color	Status	Meaning	Discharging	Charging
● Green	Solid	Battery available (>15%)	Not in use.	Not charging
	Blinking		Powering camera.	Not charging
● Orange	Solid		Not in use	Charging
	Blinking		Powering camera.	Charging
● Red	Solid	Battery low (≤15%)	Not in use	Charging
	Blinking		Barely powering.	Charging
No light	—	No battery or battery empty	Not in use	Not charging

Housing | LED Indicators

Charging Dock Power Management System Overview

1. **Battery Discharge Management (1-3 batteries):**

- Switches to the battery with the highest charge after one week of use or when battery level drops to 15–20%.
- If all batteries are low, cycles through them evenly while waiting for recharge.

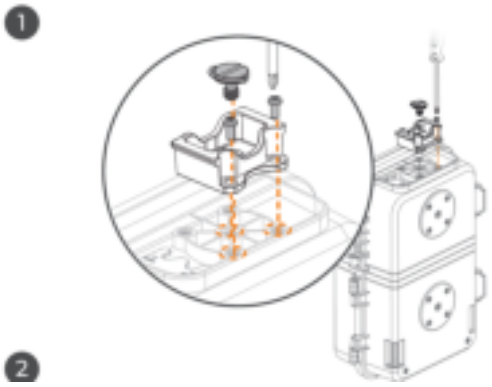
2. **Battery Charging Management (1-3 batteries):**

- Charges each battery for about one hour before switching to the one with the lowest charge to maximize efficiency.
- Switches within 3 minutes after a battery reaches over 90% charge.
- Batteries above 5% charge join the charging cycle to extend usage during low sunlight periods.

3. **Additional Features:**

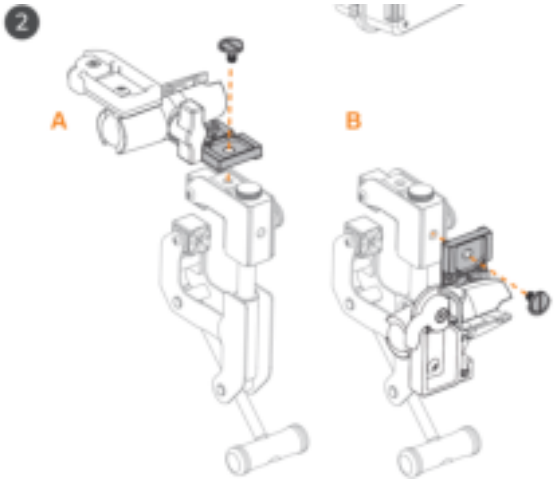
- Supports charging via 5V solar panels, USB Type-C, USB QC 5V, and USB PD 5V.
- For initial setup, charge MRB1000 batteries below 15% for 15–30 minutes before use.
- When not in use, fully charge all batteries before storage.

Clamp | Install Release Adapter



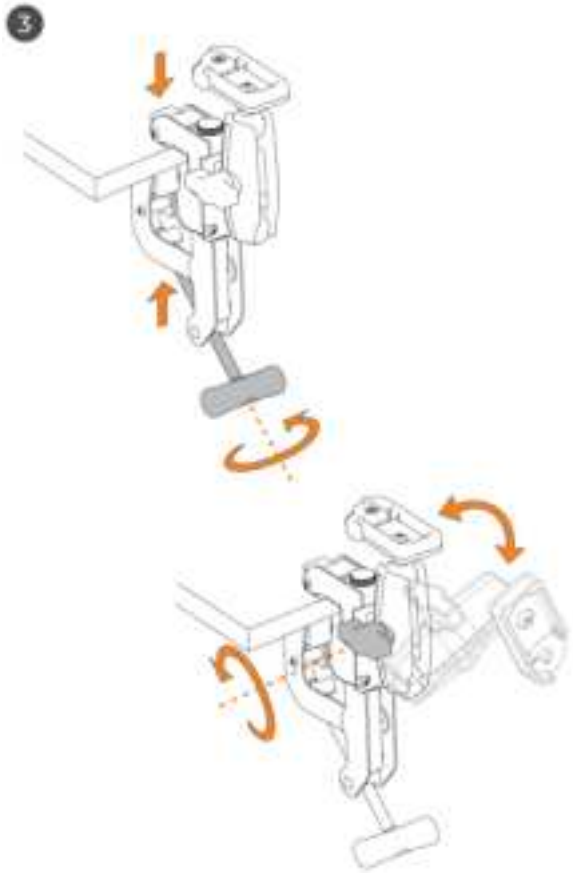
1. Remove the Quick Release adapter from the Magic Arm.
2. Install the Quick Release adapter to the Construction Power Housing with the big screw and two other small screws.

Clamp | Assemble Magic Arm



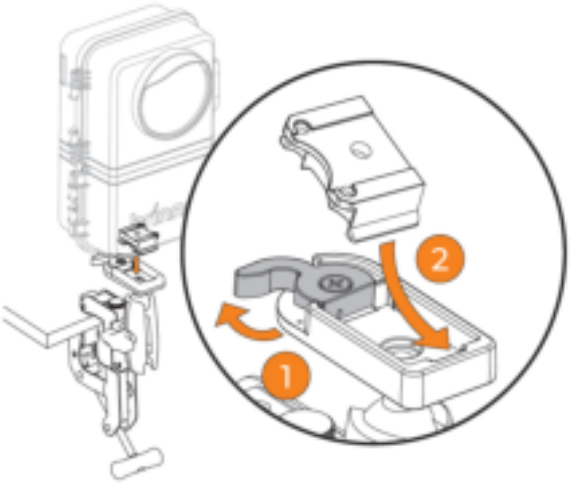
3. Install Magic Arm on the Camera Clamp

Clamp | Assemble

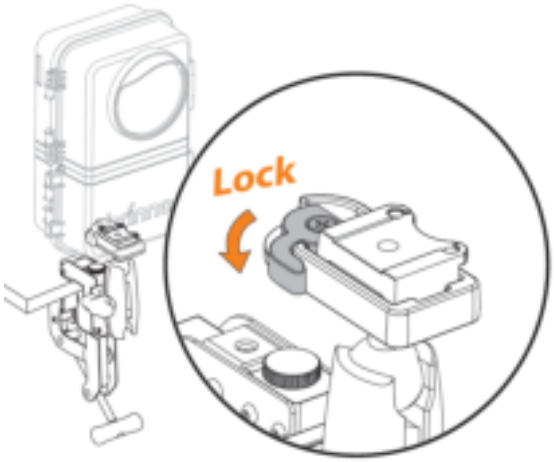


1. Attach Camera Clamp to a desired location, tightening the handle.
2. Adjust Magic Arm to a desired position.

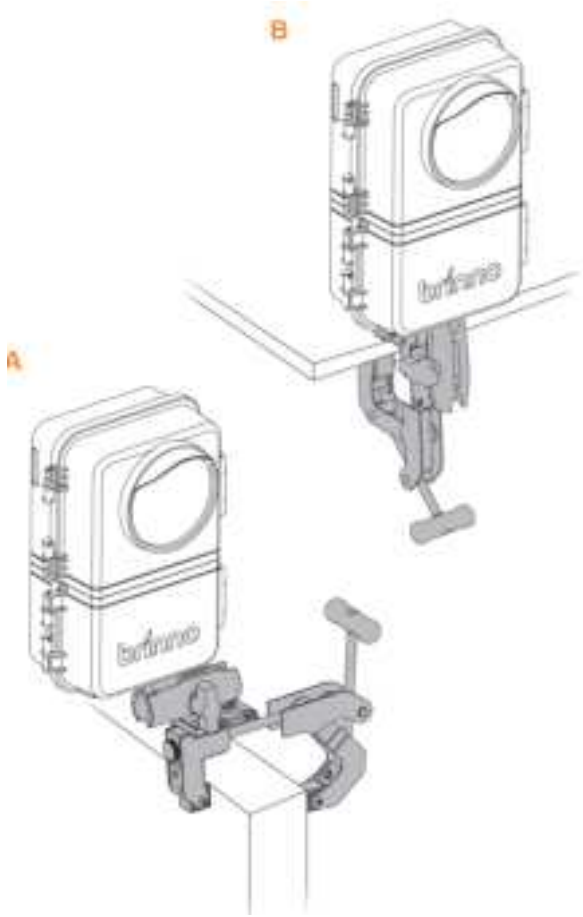
Clamp | Assemble Housing to Clamp



1. Loose the locking switch.
2. Slide the Quick Release adapter at a tilted angle to secure it.
3. Lock the switch.

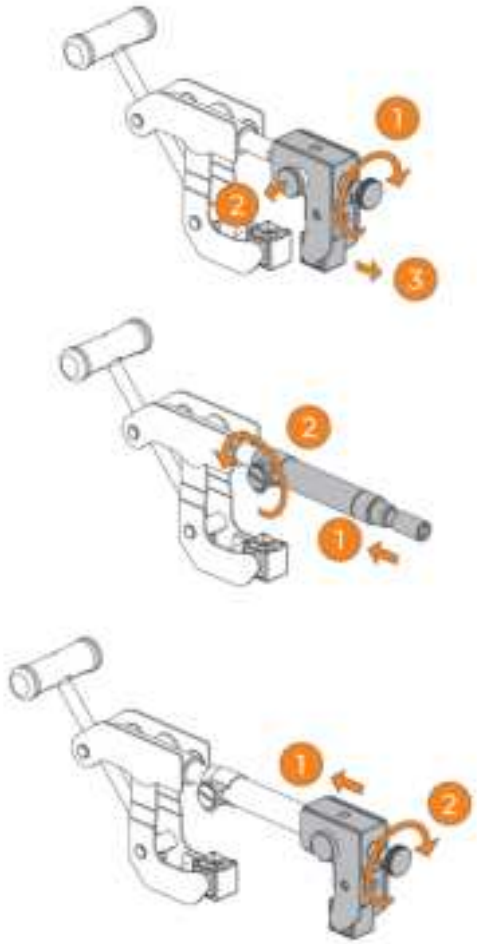


Clamp | Find Your Desired Position

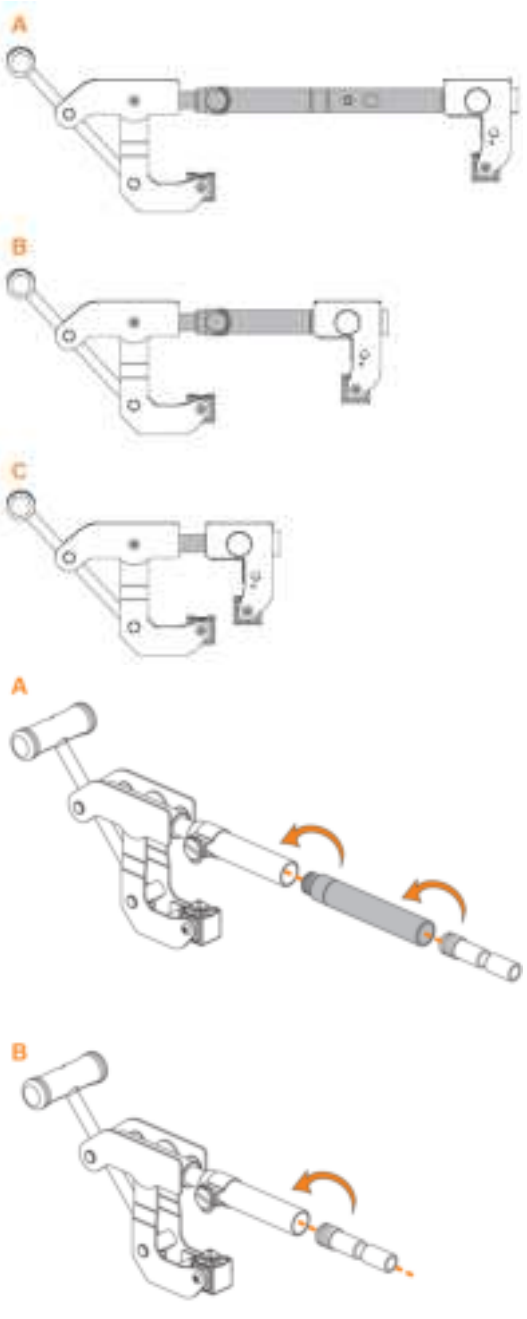


1. Adjust the whole set to find your desired position

Clamp | Install Extension Pole



Clamp | Install Extension Pole



Clamp | Install Extension Pole

Operating Methods

3 Operating Methods

The camera (TLC5000) can be operated through the following methods:

1. Bluetooth operation (initial setup, local control)

- Initial camera setup.
- Short-term project.
- Local control.
- Laptop or desktop.

Camera Control Center (CLICK HERE)

2. Wi-Fi operation (remote control)

- Completed Wi-Fi setting thru Bluetooth operation.
- Long-term project.
- Remote control.
- Phone, tablet, laptop or desktop.

Multi-Camera System (CLICK HERE)

3. On-Camera operation

- Select desired time interval.
- Start/stop recording.

Bluetooth Operation

Bluetooth Operation

Turn on the camera.

Using Google Chrome to access the following web app on your laptop or desktop*.

Camera Control Center(CLICK HERE)

Note: Make sure Bluetooth function on your laptop or desktop is enabled.

Requirements:

- Laptop or desktop with Bluetooth function
- Operating system: Windows or macOS
- Web browser: Google Chrome
- Connecting range: Within 10 meters.

Bluetooth | Home Page

1. Camera Connect
Connect camera through Bluetooth (BLE) for initial setup.

2. **Multi-Camera System**
Once the camera is connected to camera server through Wi-Fi, you can manage your cameras remotely.

3. Log info
Display all camera log info for internal analytics.

4. Notifications
Display all notifications.

5. Account Setting
Login/sign up, push notifications, language setting, help center.

Bluetooth | Camera Connect

	1. Click ***Camera Connect***.
	2. Find the camera with the unique **Bluetooth ID.** *Every camera has a unique Bluetooth ID. 3. Click ***Pair***.

Bluetooth | Camera Status

Once connected via Bluetooth, the browser will display the camera status.

1. Camera ID
2. Camera recording status
3. Camera battery & SD card capacity
4. Camera settings
5. Disconnect camera

Bluetooth | Camera Settings

Click ***Camera Settings***, go to setting page:

1. **Take a Photo**
   The camera will send one photo through Bluetooth.
2. **Start Recording**
   Start/stop recording with Camera Control Center.
3. **Schedule Setting**
   Set daily & weekly capture schedule.
4. **Time Interval**
   Set time interval.
5. **Camera Wi-Fi**
   Setup Wi-Fi connection to the camera for remote control.

Bluetooth | Take a Photo (adjust camera view angle)

	1. Click *Take a Photo.* Camera instantly captures the present frame and sends to Camera Control Center.
	2. Check camera view angle. Adjust camera view angle, and click ***Reload*** to receive updated frame. **Note:** **Take a Photo is unavailable when the camera is recording**

Bluetooth | Schedule Setting (daily & weekly recording schedule)

	1. **Click *Schedule.***
	2. **Enable/disable Schedule.** 3. **Select *Start Recording Time*** 4. **Decide *Start Recording Time*** 5. **Schedule Days** Select desired recording days of week. 6. **File Split** - ***Continuous:*** Camera will automatically combine several days of recording into a single file**.** - ***Daily:*** Every daily recording produces a single **daily video file.** *File exceeding 500mb will be split into multiple files. 7. **Click *Save* to save settings**

Bluetooth | Time Interval

	1. Click *Time Interval* Setting.
	2. Select desired time interval, or customize time interval according to your need. 3. Click *Save* to save settings

Bluetooth | How to Start a Time Lapse Recording

1. Take a photo to confirm camera view angle.
2. Set daily & weekly recording schedule.
3. Set desired time interval.
4 Start your time lapse recording.

Note:
To access the recorded video file, visit the Multi-Camera System for download.

Bluetooth | How to Check Camera Status During Recording

	Go to Camera Control Center(CLICK HERE) 1. **Click *Camera Connect*.** 2. **Find the camera with the unique Bluetooth ID.** 3. **Click *Pair* button.**
	At Camera Status page 1. **Indicate the camera is recording.** 2. **Check battery & SD card capacity**

Bluetooth | Add Camera to Your Account

Adding a camera to your account means you can remote control all your cameras, it will require two steps:

Step 1. Sign up/login to your account.
Step 2. Setup Wi-Fi connection to the camera.

Note:
At this process, your laptop/desktop & camera need to connect to a stable Wi-Fi.

After connecting the camera through Bluetooth.

1. Click *Register Camera*.

2. Sign up/login your account.

Bluetooth | Sign up/login Your Account

	1. **Login: If you already have an account.** 2. **Sign up: Create a new account.**
	3. **After completed account login/sign up, return to register camera page.**

Bluetooth | Set Camera Wi-Fi

	At Register Camera Page 1. **Click *Setup Wi-Fi*.**
	2. **Enter your Wi-Fi name (SSID) & password.** **Note: Please ensure your Wi-Fi supports 2.4 GHz or Dual (2.4/ 5 GHz) frequency bands.** 3. **Select *Remember my account*.** 4. **Click *Save* to save settings.**
	The Blue LED blinks while connecting to Wi-Fi, and turns solid when the connection completes.

Bluetooth | Register Camera

	While camera is connected to Wi-Fi **1. Click *Register*.**
	2. Camera Registered.

Bluetooth | Register Completed

Once the camera is registered, you can use the following functions:

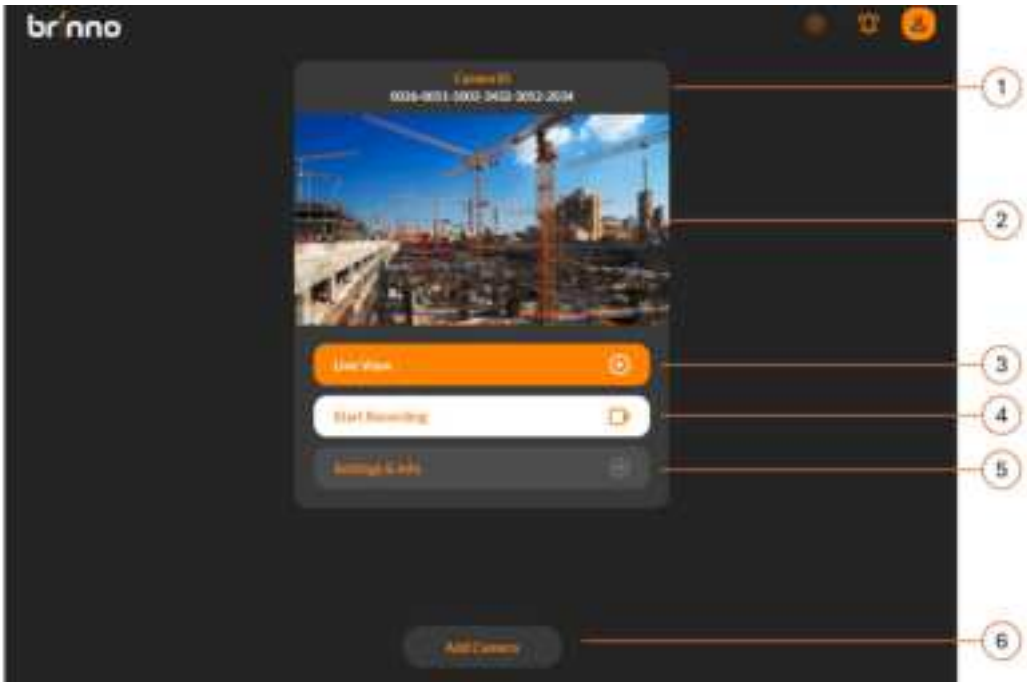
1. **Multi-Camera System**
   Remote control all your registered cameras through Brinno cloud platform.
2. **Unregister Camera**
   Remove the registered camera from your account.

Wi-Fi Operation

Wi-Fi Operation

	Mount construction camera at desired position.
	Using any browser to access the following web app on your mobile devices, laptop or desktop. Multi-Camera System (CLICK HERE) **Note:** **Make sure all devices are connected to Wi-Fi or LTE.**

Wi-Fi | Initial Page



At Multi-Camera System home page Multi-Camera System (CLICK HERE)

1. **Camera ID**
   Camea unique ID.
2. **Live view Screen**
   Displays the live stream from the camera.
3. **Live View Button**
   Activate the live view mode.
4. **Start/stop Recording**
   Start or stop a time lapse project recording.
5. **Camera Setting & Info**
   Access and adjust camera settings, check battery level, manage SD card storage, and update camera firmware.
6. **Add Camera**
   Add additional cameras to your account (Redirect to ***Bluetooth Operation*** web page).

Wi-Fi | Camera ID

1. **Camera ID**
   Each camera has a unique Camera ID, which can also be found on the label included in the package.

2. **Connection Status**
   If the Disconnected icon appears next to the Camera ID, it means the camera's Wi-Fi connection is disconnected.
   - Please wait a few seconds and try logging into the Wi-Fi Operation web app again.
   - If the issue persists, check the camera and Wi-Fi signal for possible problems.
3. **Disconnection**
   When disconnected, Live View and Start Recording functions will be unavailable.

Wi-Fi | Live View

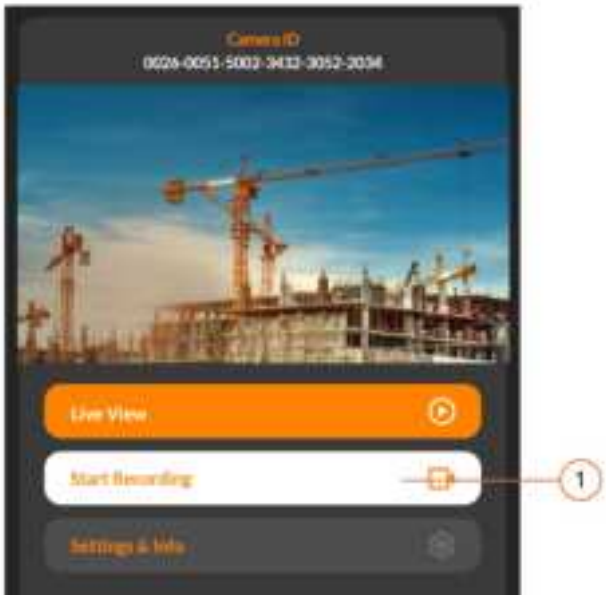
While camera is connected to Wi-Fi

1. **Click *Live View***

2. **View *Live Image***
   The camera streams live images at 5–10 frames per second, shown on the screen.

3. **Stop *Live View***
   Click again to stop Live View.
   Note: Live View is unavailable while the camera is recording.

Wi-Fi | Start/Stop Recording



After completing Time Interval and Schedule settings:

1. **Click *Start Recording***
   Begin recording your time-lapse project.
   Note: Live View, Time Interval & Schedule are unavailable while the camera is recording.

2. **Click *Stop Recording***
   Click again to stop recording.

Wi-Fi | Settings & Info

1. ***Schedule***
   Set the daily & weekly recording schedule.
2. ***Time Interval***
   Choose or customize the time interval.
3. ***Configure Settings***
   Flicker filter, time stamp, image setting, playback rate.
4. ***Battery Details***
   View the remaining battery level of the camera and the power housing.
5. ***SD Card***
   Check and manage files stored on the SD card.
6. **About Camera**
   View the current firmware version and update via OTA (Over-the-Air).
7. **Help**
   FAQ

Settings | Schedule

	1. **Click *Schedule.***
	2. Enable/disable Schedule. **3. Select *Start Recording Time.*** **4. Decide *Recording Duration.*** **5. Choose Schedule Days (days of the week to record).** **6. File Split Options.** - ***Continuous:*** Combines multiple days into a single video file. - ***Daily:*** Creates one file per day. *Files over 500 MB will be split automatically. **7. Click *Save* to confirm the schedule.**

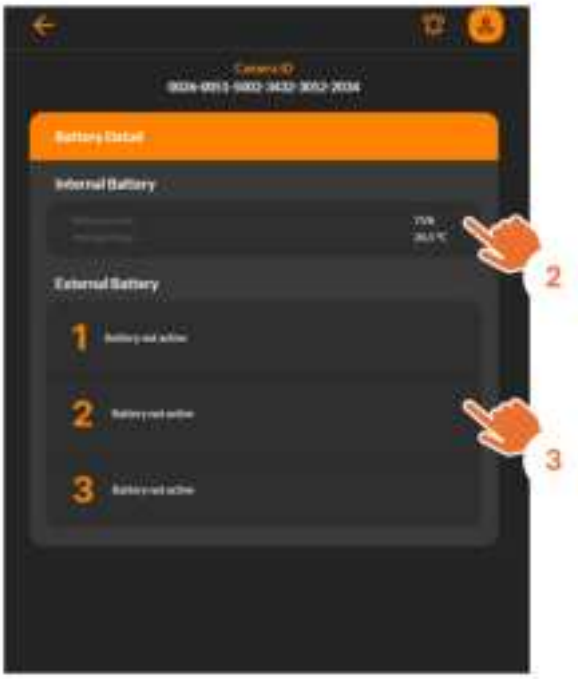
Settings | Time Interval

	1. Click *Time Interval*.
	2&3. Select desired time interval, or customize time interval according to your need. **4. Click *Save* to apply.**

Settings | Configure Settings

	1. Click *Configure* Setting.
	2. Optionally preview the image in Live View for advanced adjustments. **3. Flicker Filter** **Off**: Recommended for outdoor use. **50 Hz**: Europe, Africa, South East Asia, China, Australia and East Japan. **60 Hz**: America, Taiwan, Korea, Philippines, West Japan. **Note: Please set your preferred flicker filter for indoor recording.** **4. Time Stamp** Enable/disable time stamp. **5. Advanced Settings** Sharpness, saturation, and playback rate settings.

Settings | Battery Details

	1. Click *Battery Detail.*
	**2. Internal Battery** Displays the current battery level of the in-camera (internal) battery. **3. External Battery** Displays the battery level of the external battery (located in the camera housing).

Settings | SD Card

	1. Click *SD Card*.
	2. Click *Reload* to refresh and display the latest stored videos. 3. Click a *file name* to begin playback.
	4. Video playback page to view the selected recording.

Settings | About Camera

	1. Click *About Camera*.
	2. Firmware upgrade.

On-Camera Operation

On-Camera Operation

<table>
<tr>
<td>
</td>
<td>Turn on the camera.</td>
</tr>
<tr>
<td></td>
<td>Start Recording
1. Select the desired time interval by pressing Time Interval button.
2. Position the camera as needed.
(Tip: Use the spirit level.)
3. Press and hold the Start/Stop button for 2 seconds.
4. The Interval LED will light up and begin blinking.

<u>How can I know if the camera is recording?</u>
• During Recording, the start/stop button LED blinks once every 8 secs.
• Pressing the Start/Stop or Time Interval button will make the selected interval LED light up briefly.

Stop Recording
5. Press and hold the Start/Stop button for 3 seconds.
6. The Interval LED will light up and the Start/Stop button LED will blink for several seconds.</td>
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