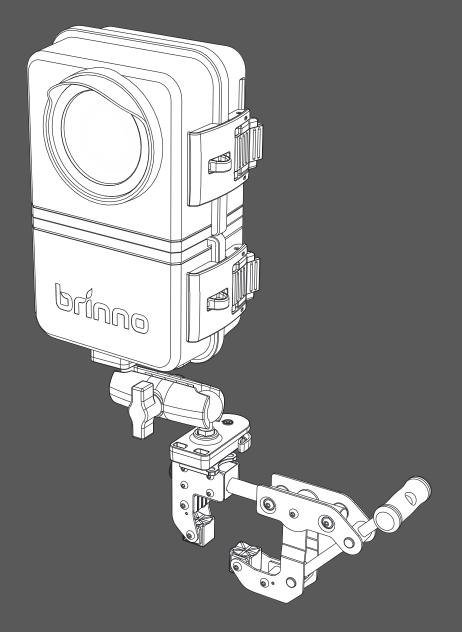
# Wi-Fi & 4K CONSTRUCTION TIME LAPSE CAMERA

BCC5000



**User Manual** 





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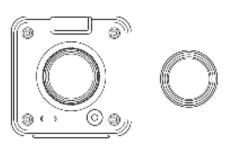
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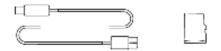
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### In the Box

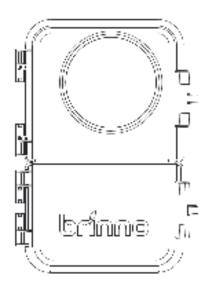
#### 1. 4K Time Lapse Camera - TLC5000



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



### 2. Construction Power Housing - ATH5000

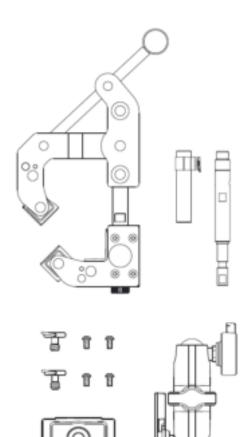


- 2.1. Camera protective housing
- 2.2. Extra battery slot
- 2.3. Camera mounting adapter (pre-install in the camera protective housing)

Wi-Fi & 4K Construction Time Lapse Camera BCC5000

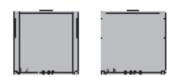
### In the Box

### 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: 1/4")



- 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: 1/4")

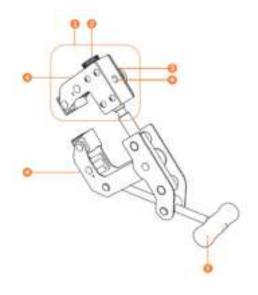
### **Device Parts**

### 3. Camera Clamp Pro



### Magic Arm

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

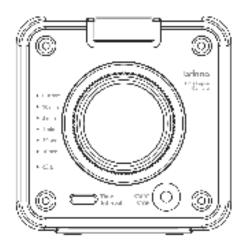


#### **Camera Clamp**

- 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

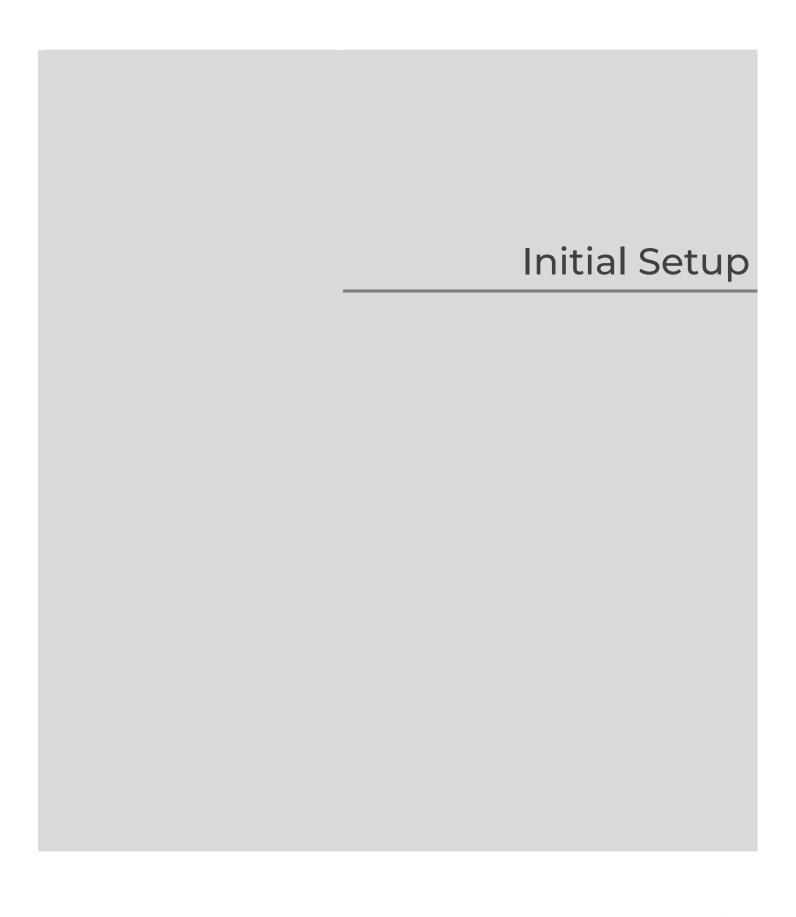
Solid: Indicated current time interval setting

#### 1.3 Connection status

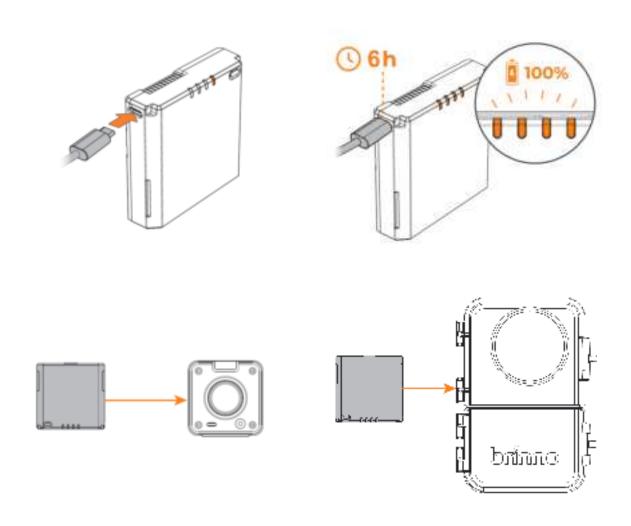
BLUE

Solid: Camera connected to camera server

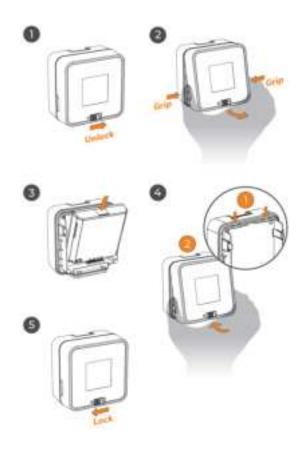
Blinking: Wi-Fi connecting



### Charge Before Use



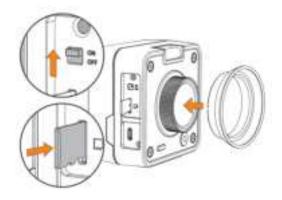
## Camera | Installing Battery Pack



- 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

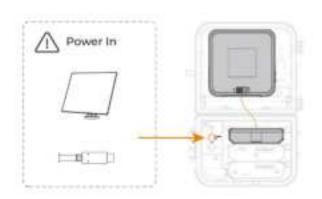




### Open the microSD card cover

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

### Housing | Charging Battery Pack

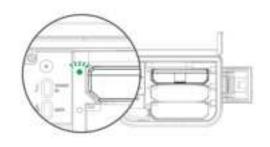


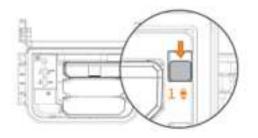
The BCC5000 waterproof power box has an additional battery expansion slot, which can be installed with up to 3 Brinno rechargeable battery packs (MRB1000), which will charge the TLC5000 camera.

- 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







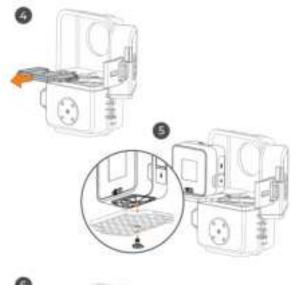
#### **Open Battery slot cover**

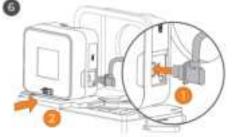
- 1. Insert the battery pack included in the package\*.
- 2. Green LED lights on meaning the battery pack is installed correctly.
- 3. Lock the battery pack with battery lock.

#### 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

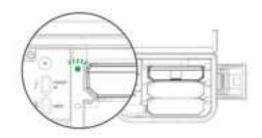


- 7. Secure the door of the housing.
- 8. Lock the latches, and a "click" sound means correctly installed.



### **LED Indicators**

### 2. 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<br>available<br>(>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<br>(≤15%)          | Not in use       | Charging     |
|           | Blinking |                                | Barely powering. | Charging     |
| No light  | _        | No battery or battery empty    | Not in use       | Not charging |

### **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.

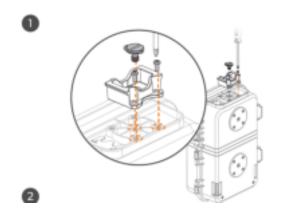
#### 2. Battery Charging Management (1-3 batteries):

- 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:

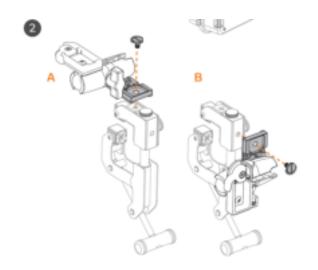
- Supports charging via 5V solar panels, USB Type-C, USB QC 5V, and USB PD 5V.
- For initial setup, charge MRB1000 batteries below 15% for 15–30 minutes before use.
- When not in use, fully charge all batteries before storage.

### Clamp | Install Release Adapter



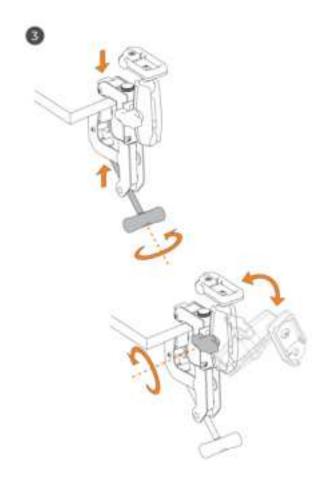
- 1. Remove the Quick Release adapter from the Magic Arm.
- 2. Install the Quick Release adapter to the Construction Power Housing with the big screw and two other small screws.

# Clamp | Assemble Magic Arm



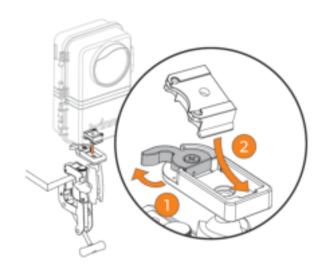
3. Install Magic Arm on the Camera Clamp

# Clamp | Assemble



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

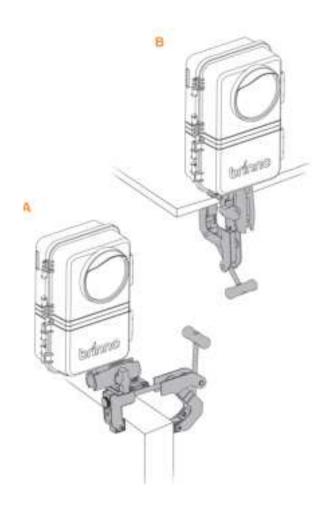
# Clamp | Assemble Housing to Clamp



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

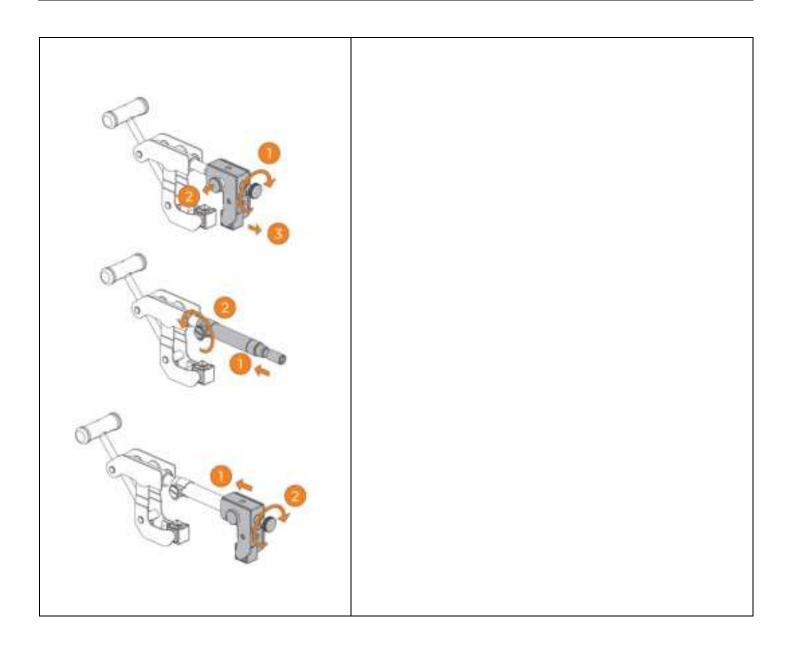


# Clamp | Find Your Desired Position

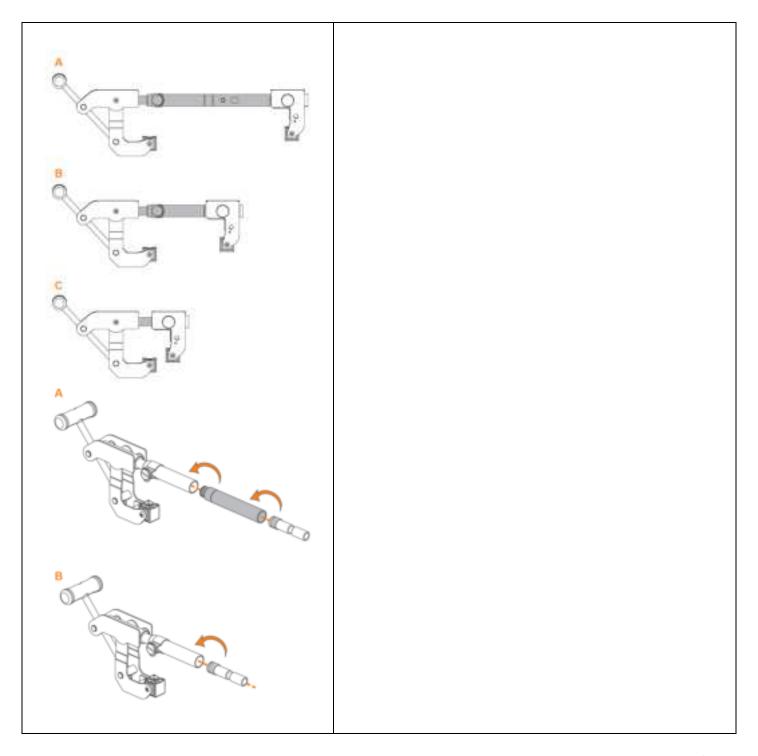


1. Adjust the whole set to find your desired position

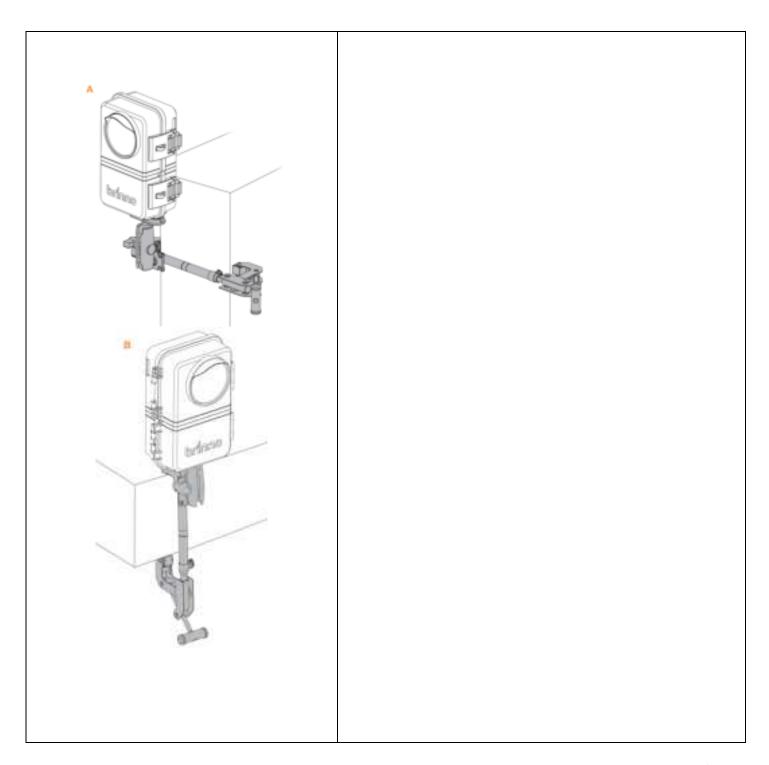
# Clamp | Install Extension Pole

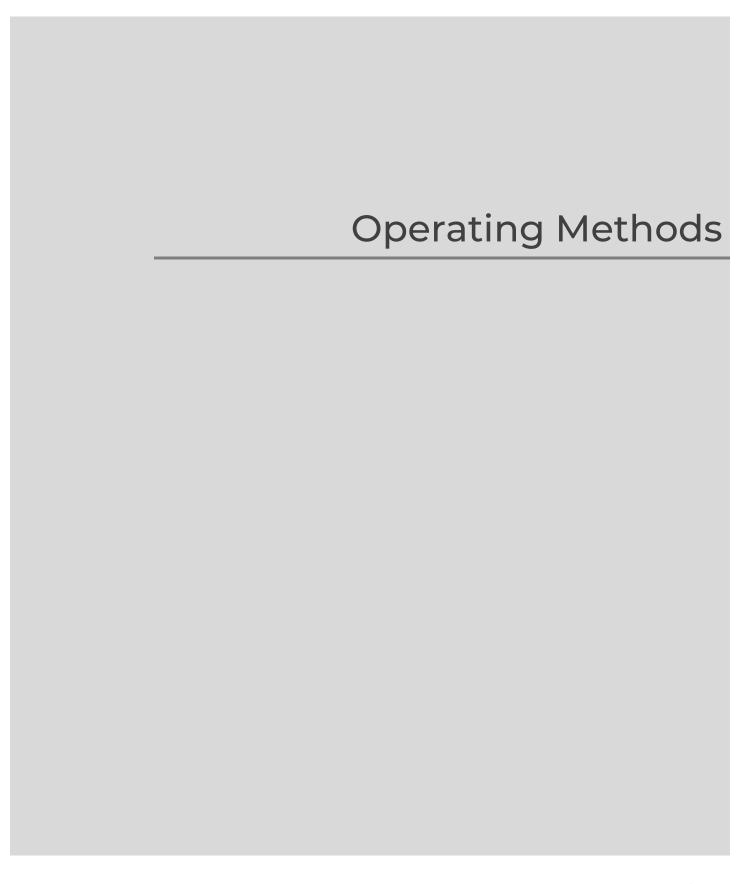


# Clamp | Install Extension Pole



# Clamp | Install Extension Pole





### 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.

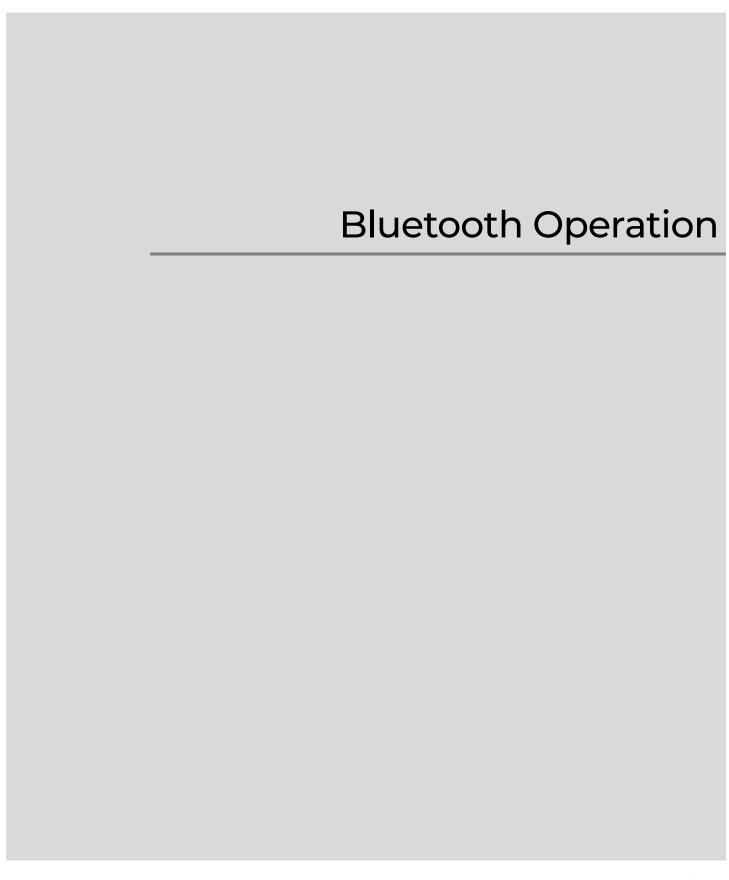


Multi-Camera System (CLICK HERE)

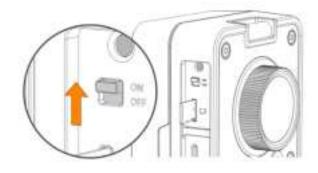


### 3. On-Camera operation

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

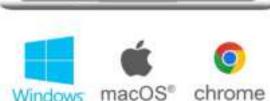


### Bluetooth Operation



Turn on the camera.





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

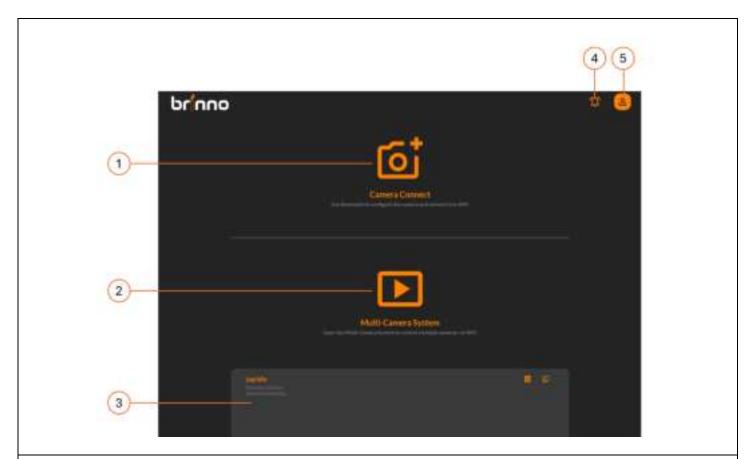
Camera Control Center(CLICK HERE)

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.

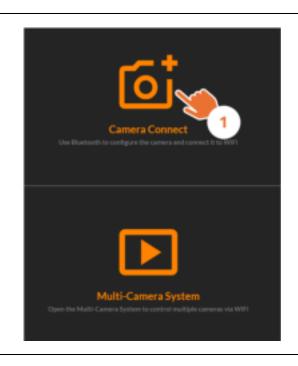
#### 4. Notifications

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.

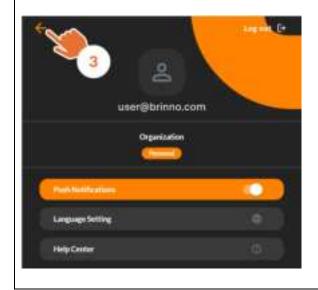


2. Sign up/login your account.

# 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



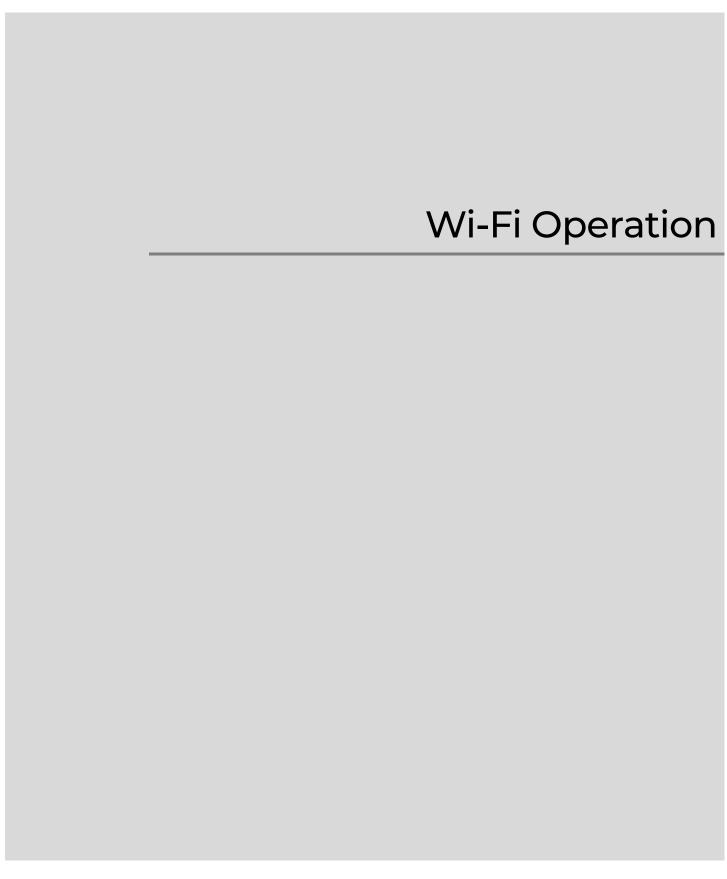
Once the camera is registered, you can use the following functions:

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



Mount construction camera at desired position.



Using any browser to access the following web app on your mobile devices, laptop or desktop.

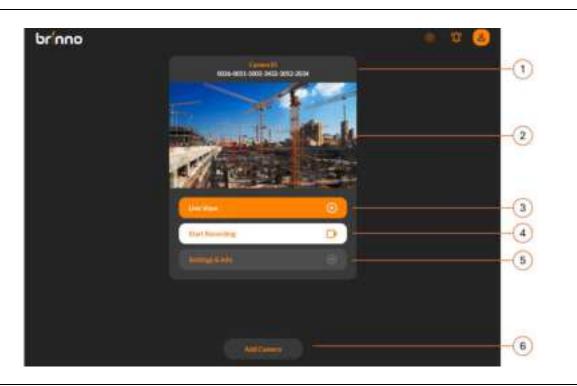


Multi-Camera System (CLICK HERE)

#### 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.

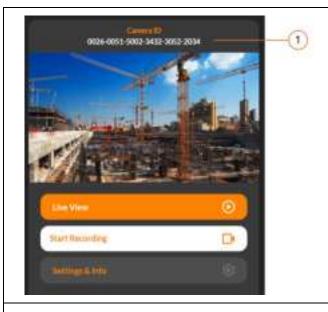
### 5. Camera Setting & Info

Access and adjust camera settings, check battery level, manage SD card storage, and update camera firmware.

#### 6. Add Camera

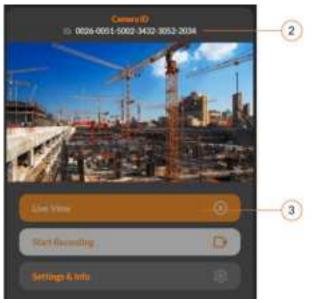
Add additional cameras to your account (Redirect to **Bluetooth Operation** web page).

# 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

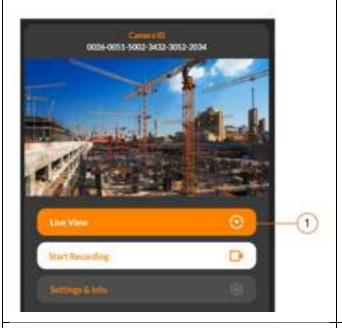
If the Disconnected icon appears next to the Camera ID, it means the camera's Wi-Fi connection is disconnected.

- 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

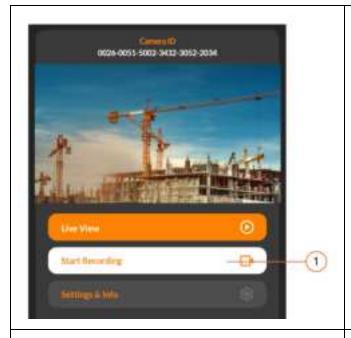
The camera streams live images at 5–10 frames per second, shown on the screen.

### 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 incamera (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.

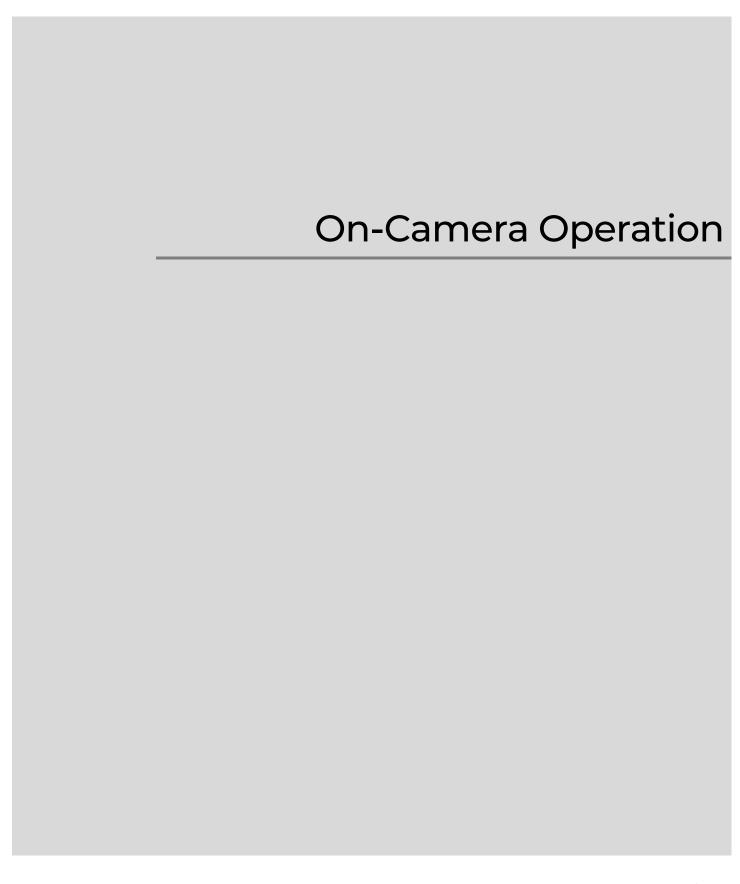
# Settings | About Camera



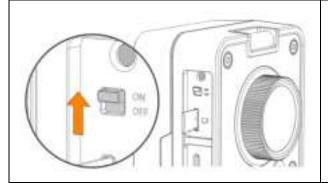
1. Click About Camera.



2. Firmware upgrade.



### On-Camera Operation



Turn on the camera.

### **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.

### How can I know if the camera is recording?

- 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.

