BC950 LTE Battery Camera



Setup Guide

Copyright © 2018. All Rights Reserved.

Document Version: 1.0

Table of Contents

Chapter 1 Introduction	1
Overview	1
Package Contents	2
Chapter 2 Setup	3
System Requirements	3
Physical Details - LTE Battery Camera	3
Physical Details - Battery charging station	
Pre-Installation	7
Installation	8
Mounting Installation	12
Chapter 3 Ovu App	13
Overview	13
OVU Application Installation	13
Account Registration	15
Camera Settings	18
Chapter 4 Troubleshooting	25
Overview	25
Problems	25
Appendix A Specifications	26
LTE Battery Camera	26
Regulatory Approvals	27
P2-01 Battery Caution	

Chapter 1 Introduction



This Chapter provides details of the LTE Battery Camera's features, components and capabilities.

Overview

This LTE Battery Camera that includes built-in LTE, which is designed for use in locations that need to be monitored but don't have power or Wi-Fi, like a construction site. That means it's powered by a rechargeable battery. The camera can be set up and controlled from your smartphone or device with the OVU app. Users can be alerted when they detect sound or motion and watch live video straight from the app.

Using enhanced H.264 technologies, the LTE Battery Camera is able to stream high quality video and audio directly to your mobile device or PC. The high compression capabilities of H.264 reduce network bandwidth requirements to amazingly low levels

This weather-resistant camera, which let you keep an eye on your belongings - even in harsh conditions such as rain and dust. It is also an all-in-one camera that has automatic and manual day/night switching, IR illumination and PIR sensor.

Features

- *Dual Video Support*. The LTE Battery Camera can support H.264 and MJEPG video for different image compression.
- Suitable for Home, Business or Public Facilities. Whether for Home, Business or Public Facility surveillance, or just for entertainment and fun, the LTE Battery Camera has the features you need.
- Micro-SD Card Slot. With the slot, you can insert the Micro-SD card to store recording files.
- *Day/Night Switch*. With the day/night switching feature, you are able to view and record better images even in the dark of night.
- *Motion Detection.* This feature can detect motion in the field of view. The LTE Battery Camera will compare consecutive frames to detect changes caused by the movement of large objects. This function only works indoors due to the sensitivity of the CMOS sensor. When motion is detection, an E-mail alert can be sent, or some other action may be triggered.
- **Audio Support.** You can listen as well as look! Audio is encoded with the video if desired. With built-in microphone, it is useful for bi-direction voice conversation.
- *NTP* (*Network-Time-Protocol*) *Support*. NTP allows the LTE Battery Camera to calibrate its internal clock from an Internet Time-Server. This ensures that the time stamp on Video from the LTE Battery Camera will be correct.
- **PIR** (**Passive Infrared Sensor**) **Support.** The Camera is embedded with a PIR Sensor, which senses infrared light radiating from human bodies in its field of view. This feature is very helpful in enhancing home security systems.

Package Contents

The following items should be included: If any of these items are damaged or missing, please contact your dealer immediately.

- 1. LTE Battery Camera x 1
- 2. Battery(P2-01) x 1
- 3. Stand x 1
- 4. Power MicroUSB cable x 1
- 5. Screw/Anchor x 3
- 6. USB Type Charger x 1
- 7. Battery Charging Station(BCSP2-01) x 1

Chapter 2

Setup

2

This Chapter provides details on how to install and configure the LTE Battery Camera.

System Requirements

- 1 A mobile device with Internet access
 - iOS based Smart Phone
 - · Android based Smart Phone
 - Minimum OS Requirement:

iOS 9.0 or later version

Android 6.0 or later version

- 2 An activated SIM card with a data plan
 - 2.1 Confirm APN of your SIM
 - 2.2 To Confirm your SIM card isn't locked by pin code
- 3 An Email account for Ovu APP using

Physical Details - LTE Battery Camera

LED

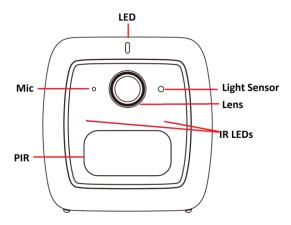
Color	Status
Solid Green	The camera is registered and connected to the mobile network. (Keep on for 30 seconds)
★ Slow Blinking Green	The camera is ready to be paired.
Fast Blinking Green	The camera is connecting to the cloud.
Solid Red	Connected to the 4G network but it cannot connect to the Cloud.
Blinking Red Timely	Low Battery alarm(once blinking per 2sec).
Blinking Red	The 4G network is not available. (No SIM card is inserted or SIM card can't be actived.)
Solid Amber	4G network coverage is weak. (only when connected with server)
Solid Blue	The camera is charging.
Blinking Blue	The camera is booting.



Blinking Green/Blue

The camera is receiving a firmware upgrade.

Front Panel



Microphone The built-in microphone is useful for bi-direction voice

conversation.

PIR Sensor This is hardware sensor to detect motion

Light Sensor This is hardware sensor to detect LUX.

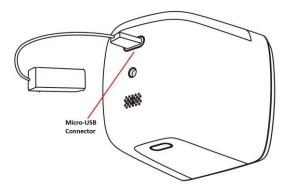
Lens No physical adjustment is required or possible for the lens, but

you should ensure that the lens cover remains clean. The image

quality is degraded if the lens cover is dirty or smudged.

IR LEDs It is used to provide illumination for night time.

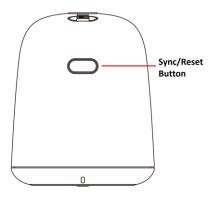
Rear Panel



Micro-USB Connector

This connector is used for charging the power. Connect the supplied Micro-USB cable to this port.

Top Panel



Sync./Reset

This button has two functions:

- **Pairing** When the green LED is flashing slowly, press the button until the green LED is flashing rapidly. And then use the Ovu app to scan the QR code.
- **Reset**: When pressed and held over 10 seconds, the LED will be flashing red and hearing a "ding" sound, which means the settings of Camera will be set to their default values.

Physical Details - Battery charging station

LED

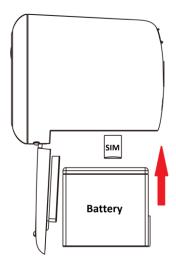


Color	Status
Solid Amber	Battery Charging is on going
Amber blinking three times, and then off	Battery can't be charged because battery level has been over 95%. (**Battery can be charged to 100% once battery level under 94%.)
Off	Battery Charging is completed

Pre-Installation

The camera sends the videos to the account in the cloud via the mobile network. To do this, the user needs an activated SIM card installed in the camera. See the instruction from your service provider for more information about how to activate the SIM card.

Please ensure SIM card and the battery are inserted into the camera before using the camera.



Insert a SIM Card

Please make sure that the SIM card is activated before using it.

- 1. Pull the battery cover up and then open the compartment.
- 2. Align the SIM card with the gold contacts facing up.
- 3. Insert the SIM card into the SIM card slot.

Insert the Battery

- 1. Align the battery contacts and then insert the battery into the camera.
- 2. Close the Battery cover.

Note: Be sure to charge the battery when use it for the first time.

Charge the Battery

You can charge your camera battery indoors by using the supplied charging cable.

Note: For safety reasons, the battery charging temperatures are from 5°C to 30°C.

- 1. Put the battery into the charging station.
- 2. Connect the supplied power MicroUSB cable to the charging station.

Note: You must use the provided power MicroUSB cable and charger to charge the battery. Do not try to power the camera or charge the battery with other charger or cable than the ones provided with the camera.

- 3. Connect the other end of power MicroUSB cable to the charger.
- 4. Plug the charger into an electrical outlet.

Note: You read no light or suddenly the light goes out once charging battery via battery charging station, the ambient temperature may be over requested charging temperature. Please move it to requested charging temperature and re-power it.

Installation

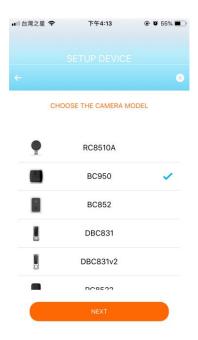
Please refer to Chapter 3 to know Ovu app installation first from Page.12.

Use the Ovu app and your account to set up your camera. If you already set up an account, you can add the camera to your account. During setup, the camera must be connected to the mobile network. This requires that you are using the camera that is with an activated mobile service plan. After you add your camera to your account, you can place the camera anywhere in your mobile network coverage area.

- 1. Locate the camera in the desired position
- 2. Make sure that you activate the SIM card, and the SIM card is inserted in the camera as well.
- 3. Tap the Ovu icon on your mobile device.
- 4. If you already set up an Ovu account, log in, and click **Add Camera** icon



5. Select BC950. Then press "NEXT".



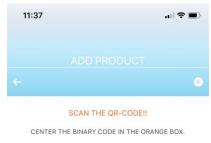
6. Read and follow the on-line instructions. Press "NEXT".



- 7. Press the Sync button on the camera.
- 8. Read and follow the on-line instructions.



9. Let the App scan the QR code on the camera with an appropriate distance. Be sure to hold the cell phone steady while scanning the QR code.





10. The pairing is in process and it may take a while to connect the camera to the cloud server



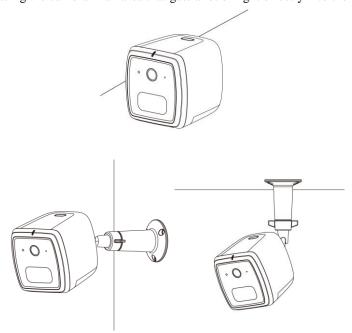
11. Enter desired names for the camera and zone in the following screen. Then press "DONE".



Mounting Installation

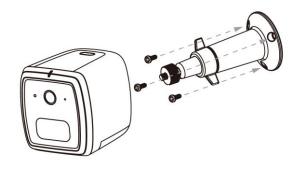
Place the camera in a flat surface or mount it on the wall/ceiling.

- For best results, we recommend to locate the camera in a location where the Ovu app displays at least three bars of mobile network signal strength.
- Check the mobile network signal strength in the place where you want to locate the camera.
- Avoid placing the camera in an area that gets a lot of light directly into the camera lens.



Wall Mounting

- Identify the location for mounting the Wireless IP Camera.
 Recommend: Set the camera around 2.1Meters height and tilt down 10degree.
- 2. Place the mounting plate and secure it with three screws. **Note**: Use anchors if necessary.
- 3. Attach the camera onto the camera stand.



Chapter 3

Ovu App



This Chapter describes how to use the Ovu App to get the access to the camera system.

Overview

This Ovu app can help you to get more from your surveillance system. With this easy to use app, now it's simple to be in control, get alerts and watch videos in the palm of your hand.

Note: Features may differ according to camera models.

OVU Application Installation

Ovu App is now available for FREE download on Apple and Android store.

Android

Simply select install followed by accept to start the installation process from the Android store.

- 1. Go to Google "Play Store" and tap the search tab.
- 2. Type "Ovu" on the search bar and tap "Search" button".
- 3. Click the "FREE" button to download the app.
- 4. Once installed, tap the "Ovu" app icon from your screen to open it.

Apple

 Open your "Safari" browser. In the address bar, type https://kronos.smartgaiacloud.com/ovu.html
 https://cronos.smartgaiacloud.com/ovu.html
 <a href="https://cronos.sma



2. Click "Install".



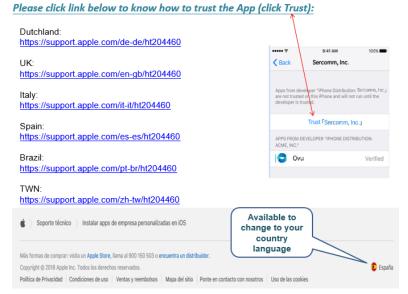
3. The following sample massage box will pop up.







4. Click the following link to trust the App.



5. Once installed, tap the "Ovu" app icon from your screen to open it.



Account Registration

Simple setup is required only for the first time you launch the App. If you access the Mobile App for the first time, you will be asked for account registration:

- 1. Press the "Ovu" icon in the desktop.
- 2. Click "SING UP".



3. Enter the email address, password and confirm password in the following screen. Then press the "SING UP" button.

Note: The requirements of the password: minimum of 8 characters in length; it contains lowercase letters, uppercase letters, numbers and special symbols.



4. You will receive an email in your email box. Click on a link in the email to activate the registration within 24 hours.

- 5. When the app launched, enter the e-mail address and password. Then tap "SIGN IN" to login.
- 6. The following sample screen will be displayed when you logged in successfully.

Note: The user needs to tab the icon to add a camera if the camera intended to use is not added.



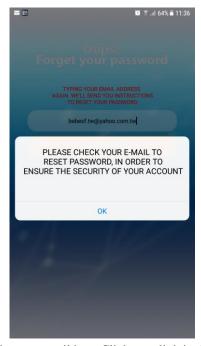
7. The user can follow Chapter2 Set up to know the instruction on the App screen to add a new IP CAM for use.

Forget Password

1. Press "FORGET PASSWORD" in the login screen,



- 2. Enter the email address.
- 3. Press "RE-SENDING EMAIL" button.
- 4. Click "OK".



5. You will receive an email in your email box. Click on a link in the email and follow the instructions to reset the password.

Camera Settings

The camera screen will display the still picture of the added camera (updated every 10 minutes). The camera name is displayed in the upper right corner. The setting button is located in the upper left corner. Other information like camera location, battery status, WIFI signal and Share button are located in the lower edge.

The user can press the camera picture to enter the corresponding camera live video screen if desired. Or press "SHARE" button to share with others by entering the Email addresses.

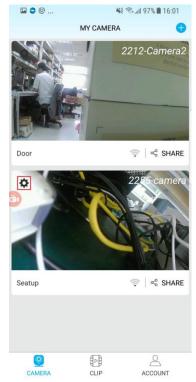
Note: The shared account should be the existing registered Ovu account. It does not have camera configuration rights and can only watch live videos and events.

Note: It will be good to continues living streaming within 5mins due to battery life concern.



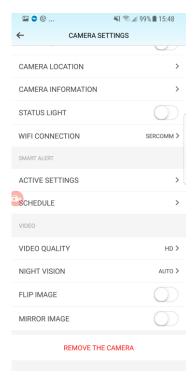
Deleting BC950

1. Press icon of the selected camera in the screen.



2. Press "REMOVE THE CAMERA" button in Camera Settings screen.

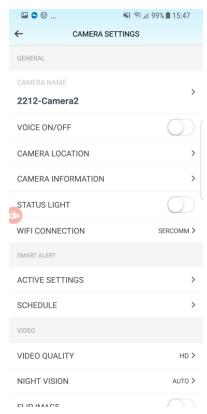
Note: AFTER REMOVING THE CAMERA, THE USER NEEDS TO RESET THE CAMERA TO DEFAULT FACTORY SETTINGS BEFORE RE-ADDING TO THE ACCOUNT AGAIN. Hold down the "RESET" button of the camera for more than 10 seconds until the LED lights up.



3. All related videos are deleted after camera is removed.

Camera Settings

Press icon of the selected camera to go to the Camera Settings screen.



Settings (settings may differ according to camera models)

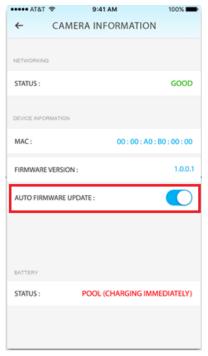
General	
Camera Name	Enter the name of the camera.
Voice On/Off	Use this to turn on/off the voice.
Camera Location	Enter the location of the camera.
Camera Information	 The following information will be displayed: Networking Status - It shows the current status of the WIFI connection. MAC Address - The MAC address is displayed. Firmware Version - It displays the current firmware version. Auto Firmware Update - If enable, the camera FW will be upgraded automatically without noticing users. If disable, when the new version of camera FW is available, the app will receive popup message and let users decide to upgrade FW or not; if yes, camera FW can be upgraded immediately or offline from app. Check the following section for more details. Battery Status - The status of the battery is displayed.
Status Light	Use this to turn on/off the status light.
WIFI Connection	Enter the WIFI SSID and password for the connection.
Smart Alert	

Active Settings	 Press > to go to the Active Settings screen. Motion Detection - Turn this on if you want to get notifications when motion is detected. Audio Detection - You will get an event notification if there is a sound detection. Push Notification -You will get an event notification if this is enabled. Email to Share Account - If this function is enabled, you and the shared account will get an email notification when there is an event detection.
Schedule	Press > to configure the related settings in the Schedule screen. You can schedule the time for the event detection. There are two options: Whole day Customize Time Slot
Video	
Video Quality	Set the desired video quality of the camera.
Night Vision	Configure the settings so you are able to view and record better images even in the dark of night.
Flip Image	This setting will have the image swapped top-to-bottom.
Mirror Image	This setting will have the image swapped left-to-right.

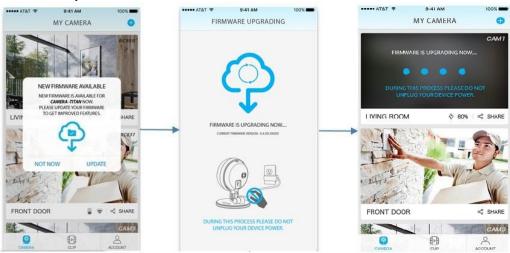
Firmware Upgrade

There are generally two ways to update the firmware: automatic updates or manual updates.

- Automatic Updates
- 1. Press icon of the selected camera to go to the **Camera Settings** screen
- 2. Tap CAMERA INFORMATION.
- 3. Enable "Auto Firmware Update" option.



After turning the option on, the firmware updates will roll out to the devices automatically. When this happens, you will receive a notification that will tell you that an update is ready to install and all you need to do is click "UPDATE" button to start.



Manual Updates

- 1. Press icon of the selected camera to go to the **Camera Settings** screen
- 2. Tap CAMERA INFORMATION.
- 3. Scroll down and check the firmware version. If you see new update instead, your device has new firmware available.
- 4. Tap UPDATE and follow the onscreen instructions to update the firmware.



4

Chapter 4

Troubleshooting

This chapter covers the most likely problems and their solutions.

Overview

This chapter covers some common problems that may be encountered while using the LTE Battery Camera and some possible solutions to them. If you follow the suggested steps and the LTE Battery Camera still does not function properly, contact your dealer for further advice.

Problems

Problem 1: The camera is not Streaming on a mobile device

Solution 1:

- Make sure that network signal strength is good for your mobile device
- Locate the camera to an area with better mobile network coverage.
- Make sure that your camera battery is not low.
- Make sure that the camera is at least 2 meters away from any WiFi enabled devices, major electrical equipment, large metal or concrete objects.
- Ensure that the battery power is not low

Problem 2 The camera is offline.

Solution 2

- 1. Unplug your camera, remove the battery, reinsert the battery, and pay attention to the camera LED behavior.
- 2. Note the LED behavior after the camera is done starting. Please check Chapter 2 LED section for more details.
- 3. If your camera is still offline, contact your dealer for further advice

Problem 3 The image is blurry.

Solution 3

Try cleaning the lens. Condensation can reduce picture quality for the camera that is used in a wet area. If your camera's picture quality is affected by condensation, the better solution is to set a camera under a shield.

Problem 4

Using the motion detection feature, I receive E-Mails which don't show any moving objects.

Solution 4

The motion detection feature doesn't actually detect motion. It compares frames to see if they are different. Major differences between frames are assumed to be caused by moving objects.

But the motion detector can also be triggered by:

- Sudden changes in the level of available light
- Movement of the camera itself. The better camera set-up location will be installed at 2.1 meter height and Lens tilt down around 10 degree.

Try to avoid these situations. The motion detection feature works best in locations where there is good steady illumination, and the camera is mounted securely.

Appendix A Specifications



LTE Battery Camera

Model	LTE Battery Camera
Dimensions (H x W x D)	80.8 mm *83 mm * 97.3mm
Operating Temperature	-10° C to 50° C
Charging Temperature	5° C to 30° C
Storage Temperature	-20° C to 55° C
Network Protocols	TCP/IP, HTTP, HTTPS, DHCP, NTP, RTP, RTCP, RTSP, DNS
Network Interface	LTE (3kinds of SKU) US (AT&T Verizon; Others) AT&T_Band 2,4,5,12; Verizon_2,4,13 EU_Band 1,3,7,8,20
IR LED	2
LEDs	1
Microphone	1 built-in Microphone
Button	1
Micro-SD Card slot	1 (w/o Micro-SD inside)
Speaker	1
Power Adapter	5V / 2A, 100 - 240V
Battery (P2-01)	1, Minimum capacity 8800Ahm (31Wh)

Regulatory Approvals

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

P2-01 Battery Caution



CAUTION

- 01. Do not put the battery in a microwave or a pressure cooker.

 Sudden heat may damage the seal of the battery and may cause heat generation, explosion, or fire of the battery.
- 02. Do not use the battery with other maker's batteries, different types and / or models of batteries such as dry batteries, nickel-metal hydride batteries, or nickel-cadmium batteries, or new and old lithium ion batteries together. In such a case, over-discharge during use, or over-charge during charge may occur abnormal chemical reactions and may cause heat generation, explosion, or fire of the battery.
- 03. Do not leave the battery in a charger or equipment if it generates an odor and / or heat, changes color and / or shape, leaks electrolyte, or causes any other abnormality.
 - In such a case, immediately take the battery out of the charge or equipment and keep it away from fire, otherwise, the battery might overheat, explode, or cause fire.
- 04. Discontinue charging after specified charging time even if the charge is not complete, otherwise, the battery might cause heat generation, explosion, or fire.
- 05. Do not use the battery in the place where the static electricity (more than the limit of the manufacturer's guarantee) occurs. Otherwise, the protecting device in the battery might be damaged and cause heat generation, explosion, or fire.
- 06. Do not use the battery in other than the following conditions; otherwise, the battery might cause heat generation, damage, or deterioration of its performance.

Operating environment:

When the battery is charged : 0° C \sim +45 $^{\circ}$ C When stored 3 months : -20 $^{\circ}$ C \sim +40 $^{\circ}$ C When stored 1 year : -20 $^{\circ}$ C \sim +20 $^{\circ}$ C

Humiditv: Less than 70% RH.