Mini Talking Camera
(Mini Cube HD Camera)

IPC2202

User Manual
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Chapter 1. Introduction

The Mini Cube HD camera is a high-definition (HD) camera that is used to connect with other devices via your Wi-Fi network to automatically record triggered events during the day or night. Users can switch between motion-activated or continuous recording mode, where still and live video is captured. The Mini Cube Camera is also equipped with speakers and a built-in microphone for two-way audio recording. The camera’s ball-and-socket mount makes it easy to swivel the camera in a range of directions, allowing you to keep a close eye on your kids or pets, or even cover key entry points into your home or office.

Key Features and Specifications

- Video resolution: 1280x720
- Automatic night vision
- Expandable flash storage
- Built-in microphone and speaker for two-way audio
- Operating temperature: 32°F to 104°F (0°C to 40°C)

1.1 System Requirement

This section explains the system requirements when using the camera.

<table>
<thead>
<tr>
<th>Network</th>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>When camera is connected to Security Shuttle*</td>
<td>Router with</td>
</tr>
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<td></td>
<td>- 10/100Mbps RJ45 LAN port</td>
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<tr>
<td></td>
<td>- DHCP service</td>
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<tr>
<td>When camera is connected directly to Wi-Fi Router</td>
<td>Wi-Fi Router supports</td>
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<tr>
<td></td>
<td>- IEEE 802.11n, 802.11g, 802.11b</td>
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<td></td>
<td>- WEP/WPA2-PSK Wireless Security</td>
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<td>Mobile Device</td>
<td>An Apple iPhone, iPad, or Android mobile device with:</td>
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<td>- iOS (version 8.1 above)</td>
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<td></td>
<td>- Android (version 4.1 above)</td>
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</tbody>
</table>

* See Appendix – Glossary of Terms.
Chapter 2. Hardware Overview

This section provides an overview of the Mini Cube HD camera and its accessories.
Chapter 3. Mini Cube HD Camera Setup

3.1 Before powering on the camera

If you wish to save video clips locally or turn on the continuous recording function, a MicroSD card needs to be inserted into the camera. For details on how to check the current storage size of the MicroSD card, see Section 4.6 – Local Storage.

![Micro SD card](image)

Note: Before you insert the MicroSD card into the camera, make sure it has been formatted to FAT 32. Do not insert the MicroSD card into the camera when it is powered on, as this may damage the MicroSD card.

3.2 Powering on the camera

To power on the camera, complete the following steps.

1. Remove the protective film from the camera lens.

2. Plug the micro USB connector of the USB cable to the camera; then, connect the other end of the cable to the USB power adapter.

3. Plug the USB power adapter into the power outlet to provide power to the camera.

4. The powering-on process first involves the LED indicator showing a flashing purple light. After a few seconds, the LED indicator will begin to show a solid purple light; then it will show a solid blue light, and you will hear “Internet mode”, which is the default setting. The other mode that you can chose is “Local mode”.


3.3 Camera Mode Selection

After the camera is powered on, the default setting will be “Internet mode”. The other mode that you can choose is “Local mode”. To switch between the two modes, short press the button on top of the camera. The switching process takes approximately 25 seconds, and you will hear “Internet mode” or “Local mode”.

1. Flashing purple light
2. Solid purple light
3. Solid blue light

Internet mode/Local mode change button
In “Internet mode”, the LED indicator will show a solid blue light.

In “Local mode”, the LED indicator will show a solid purple light.

3.4 Adding the Camera to the System

Before you begin using the camera, it will need to be added to the system first. This can be done with or without the security shuttle. For details, see the three subsections below.

Important: If you are unable to add the camera to the system or the app shows a message telling you to
reset the camera, see *Chapter 6 - Resetting the Mini Cube HD camera* for details.

### 3.4.1 Adding Camera to System with Security Shuttle

To activate the camera with the security shuttle, complete the following steps.

**Note:**
- Make sure the Security Shuttle is powered on and connected to your router.
- Make sure the camera is in “Internet mode”.

1. Tap the menu icon 📣 to show the sidebar menu.
2. Tap “Device Management”. If you have more than one security shuttle, you may need to swipe left more than once to find the one you want the camera to connect to. After selecting the security shuttle, tap the plus icon “+” located to the right of “Camera List”.

3. Select “IP Camera”.
4. Follow the on-screen instructions. When finished, press “Next”.

5. After scanning the QR code located on the bottom of the camera, the “camera adding” process will begin.
The process will take approximately 1 to 2 minutes.

6. When the activation is completed, the camera will be added to the device management page. In the illustration shown below, the name of the Security Shuttle is “Location 1” and the name of the camera is “New Camera”.

![Device Management Illustration](image-url)
7. The LED indicator on the camera will show a solid blue light.

![Solid blue light](image)

3.4.2 Adding Camera to System with Virtual Security Shuttle

To add the camera to the system when there is no security shuttle, complete the following steps. The process will involve the creation of a new virtual security shuttle.

To add the camera to an existing virtual security shuttle, see Section 3.4.3 - Adding Camera to System with an existing Virtual Security Shuttle.

**Note:**
- Make sure your Wi-Fi router is turned on.
- Make sure the camera is in “Local mode”.
- Make sure the Wi-Fi of your smartphone is turned on.

1. Tap the menu icon to show the sidebar menu; then, tap “Device Management”.
2. Swipe left across the screen and select “IP Camera”. At times, you may need to swipe more than once.
3. Follow the on-screen instructions. When finished, press “Next”.

4. The steps for iOS and Android devices will be different here.

For iOS devices:
After scanning the QR code located on the bottom of the camera, tap “Close”; then, tap “Settings” to access the Wi-Fi settings page to let your smart device connect to the IP camera network. Select the SSID marked as “milife”, followed by “_xxxxx”; then, follow the subsequent on-screen instructions.

Note: The 6 digit “_xxxxx” is the product serial number located on the bottom of the camera.
After connecting to the camera network, launch the app again. Select your Wi-Fi network and enter the password if necessary. When finished, tap “Join”.
For Android devices:

After scanning the QR code located on the bottom of the camera, the Wi-Fi settings page will appear to let your smart device connect to the IP camera network. Select the SSID marked as “milife”, followed by “_xxxxxx”.

Note: The 6 digit “_xxxxxx” is the product serial number located on the bottom of the camera.

After connecting to the camera network, tap “Previous”. Select your Wi-Fi network and enter the password. When finished, tap “Join”.

Connect IP camera to Wi-Fi Network.

SSID Password
james anthony _
CHT6727 _
chang _
3F _
ASUS _
3102 _
CHT1233 _
25-3F _
Other _

Connect IP camera to Wi-Fi Network.

ASUS
Password

Connect IP camera to Wi-Fi Network.

Wi-Fi

Wi-Fi on

Select IP Camera Network

On your mobile device, tap on the Settings icon and then tap on Wi-Fi.

Select the IP camera network, which follows the format milife_XXXXXX. XXXXXX is the last 6 characters/numbers of the IP camera serial number.

After selecting the network, launch the App again.

Close

milife_3538BC
connected

NETGEAR-JUN
Saved, secured with WPA2
MIVA-TW-1
Saved, secured with WPA2
OPLINK20141114181211
Secured with WPA2
OPLINK68238025
Secured with WPA2
OPLINK20131109162435
Secured with WPA2
dlink-p2p
Secured with WPA/WPA2 (WPS available)
cpu2120_rick
Connected with WPA2

Close

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5. Follow the on-screen instructions.

6. After the activation is completed, you will see the message “System is ready” on the screen. By clicking
“OK”, you will hear “Internet mode”, and a virtual Security Shuttle and the camera will be added to the device management page. In the illustration shown below, the name of the virtual Security Shuttle is “Location 2”, and the name of the camera is “Camera1”.

Note: As the name virtual Security Shuttle implies, there isn’t actually a new Security Shuttle. It is merely a virtual creation by the system to bridge the camera to the system.

The  icon represents a virtual Security Shuttle.

The  icon represents an actual Security Shuttle.

7. The LED indicator on the camera will show a solid blue light.
3.4.3 Adding Camera to System with an existing Virtual Security Shuttle

If you wish to add the camera to an existing virtual security shuttle, complete the following steps.

Note:
- Make sure your Wi-Fi router is turned on.
- Make sure the camera is in “Local mode”.
- Make sure the Wi-Fi of your smartphone is turned on.

1. Tap the menu icon ‒ to show the sidebar menu; then, tap “Device Management”.

![Image of menu options showing Device Management]

![Image of menu options after selecting Device Management]
2. If you have more than one security shuttle, swipe left across the screen until you find the virtual security shuttle you want the camera to connect to; then, tap the plus icon “+” located to the right of “Camera List” and select “IP Camera”.

For iOS devices:

For Android devices:
3. Follow the on-screen instructions. When finished, press “Next”.

4. The steps for iOS and Android devices will be different here.

**For iOS devices:** After scanning the QR code located on the bottom of the camera, tap “Close”; then, tap
“Settings” to access the Wi-Fi settings page to let your smart device connect to the IP camera network. Select the SSID marked as “milife”, followed by “_xxxxxx”; then, follow the subsequent on-screen instructions.

**Note:** The 6 digit “_xxxxxx” is the product serial number located on the bottom of the camera.

After connecting to the camera network, launch the app again. Select your Wi-Fi network and enter the password. When finished, tap “Join”.

**For Android devices:** After scanning the QR code located on the bottom of the camera, the Wi-Fi settings page will appear to let your smart device connect to the IP camera network. Select the SSID marked as
“milife”, followed by “xxxxxx”.

**Note:** The 6 digit “xxxxxx” is the product serial number located on the bottom of the camera.

After connecting to the camera network, tap “Previous”. Select your Wi-Fi network and enter the password. When finished, tap “Join”.

5. Follow the on-screen instructions.
6. After the activation is completed, you will see the camera add to your existing virtual shuttle. In the illustration shown below, the name of the camera is “Camera2”. 
7. Both LED indicators on the camera will show a solid blue light.

![Solid blue light](image)

**Important:** If you are unable to add the camera to the system or the app shows a message telling you to reset the camera, see Chapter 6 - Resetting the Mini Cube HD camera for details.

### 3.5 Positioning the camera

After the “camera adding” process has been completed, you can place the device at the desired location. To verify the connection of the camera, you can check the live video feed. For details about how to view the video feed, see Section 5.2 – Viewing the Live Video Feed.

**Note:**

- Rotation of the camera or adjustment of the tilt angle needs to be done manually.
Chapter 4. Mini Cube HD Camera Settings

For relevant camera setting adjustments, follow the steps shown below.

1. Tap the menu icon to show the sidebar menu.

2. Tap “Device Management”; then tap “New Camera” under “Camera List” to reach the “Edit Camera” page.

The following illustrations show the camera settings that can be adjusted:

- Display Name
- Motion Detection
- Sound Detection
- Live Video Resolution
- Wi-Fi
- Local Storage
- Turn On/Off Camera
- Turn On/Off Continuous Recording
- Restart/Remove IP Camera
- Record Audio
4.1 Display Name

This option allows you to change the display name. To do so, tap “Display Name”; then, change the name according to your preference. When finished, tap the check icon located on the upper-right corner.

**Note:** The maximum length of the display name is 40 characters.

4.2 Motion Detection

This option allows you to change the motion detection sensitivity. To do so, tap “Motion Detection”; then, change the sensitivity according to your preference.

**Note:** For more sensitive motion detection, set a higher sensitivity level.
4.3 Sound Detection

This option allows you to change the sound detection sensitivity. To do so, tap “Sound Detection”; then, change the sensitivity according to your preference.

Note:

For more sensitive sound detection, set a higher sensitivity level.

4.4 Live Video Resolution

This option allows you to change the live video resolution. To do so, tap “Live Video Resolution”; then, change the resolution according to your preference.

The video resolution for the three different levels is shown below:

- HD: 1280 x 720
- High: 864 x 480
- Medium: 432 x 240
4.5 Wi-Fi

This option allows you to connect to the Security Shuttle via a nearby Wi-Fi router.

If the wireless connection between the camera and Security Shuttle is too weak, you can connect to the Security Shuttle via a nearby Wi-Fi router that has a stronger signal. The router will need to be in the same network as the Security Shuttle. To do so, tap “WiFi”, and choose from the list of available WiFi networks. If necessary, enter the Wi-Fi password.

4.6 Local Storage

To verify that the MicroSD card in the camera is working properly and to view its current storage capacity, tap “Local Storage.”
4.7 Turn On/Off camera

To turn on/off the camera live view function, slide the button to the right or left.

**Note:** The camera is still able to record triggered events.

4.8 Turn On/Off Continuous Recording

To turn on/off continuous video recording, slide the button to the right or left. This is an intelligent recording function that captures and archives all suspicious motion/sound or sensor-triggered events even when the system is disarmed.
Note:

- When using **OPU3120**, the Mini Cube HD camera begins recording when an event is detected by any of the devices/sensors on the network, or if any of the cameras on the network detect motion or sound. No notification will be sent.
- When using Security **OPU1120** or **OPU2120**, if any of the cameras on the network detects motion or sound, the Mini Cube HD camera begins recording. No notification will be sent.
- The recorded video will consist of a 15 second clip.

Important:

To turn on the continuous recording function, make sure the following requirements are met:

- A MicroSD card must be inserted in the camera.
- Video Motion Detection level needs to be above 0%.

### 4.9 Restart/Remove IP Camera

To restart the camera, tap “Restart IP Camera”.

To remove the camera from the current Security Shuttle, tap “Remove IP Camera”.

**Note:**

- Do not unplug the camera until the removal process is completed. For “Internet mode”, the process takes approximately three minutes. When completed, the camera LED will show a blinking blue light.
- After the removal process is completed, it will restore the camera to the factory default settings.
4.10 Record Audio

Enables the camera to record nearby audio for both recorded and continuous recording events.

**Note:**
- By default, the record audio function will not be turned on due to privacy issues.
Chapter 5. Starting to Use the Mini Cube HD Camera

At this stage, your camera is now ready for use. Due to the built-in camera/sensor functionalities, the device offers the following three main functions:

- Sound/Motion detection
- Live video feed
- Video recording

5.1 System/Sensor setting

This section explains some system/sensor settings you need to configure or check when you begin using the camera as a sensor.

5.1.1 Arm / Disarm / Stay mode Selection

To switch between Arm, Disarm and Stay mode, follow the steps shown below. For details regarding the difference between the three modes, see Appendix – Glossary of Terms.

1. Tap the lock icon. The following illustration is an example that shows the system is currently “Armed”.
2. Tap Arm, Disarm or Stay mode.

Note:

- To add a schedule on when to arm/disarm the camera/sensors, tap the icon; then tap “Schedule” and choose your preferred time period.
To choose which camera/sensors to arm in Stay mode, tap the icon; then tap “Stay mode Profile” and choose your preferred devices.

5.1.2 Sensor setting

The ability of the camera to detect suspicious activity will be based on the selected sensitivity level. For details on how to set the motion and sound detection sensitivity level, please refer to Section 4.2 Set Motion Detection and Section 4.3 Set Sound Detection.
5.1.3 Event Notification and Recording

If any activity is detected, you will receive an event notification and you can use the live view function to immediately check the event and use the recorded video clip for further verification and analysis.

For details regarding the live view and to check video recording functions, see Section 5.2 - Viewing the Live Video Feed and Section and 5.3 - Viewing the Video Recording, respectively.

5.2 Viewing the Live Video Feed

To view the live video feed, tap the “Video” icon; then, tap the video image shown by the camera. If you have more than four cameras, swipe left to see the fifth camera.

Pinch your fingers to zoom in or zoom out when viewing the video feed.
The following describes the various controls.
Advanced camera features: When you tap the camera setting icon, the settings that can be configured will be shown, as seen in the following illustration.

- **Flip Camera View**: Flips the video feed to an inverted view.

- **Go to Default Position**: Returns the camera back to its default position.

- **Motion Detection**: Adjusts the motion detection sensitivity.

- **Sound Detection**: Adjusts the sound detection sensitivity.
**Speaker:** Allows you to hear the surrounding sounds near the camera.

**Microphone:** When you speak towards your smartphone, the camera will broadcast your voice.

**Note:** The speaker is turned off, by default. If you wish to broadcast your voice using the microphone, first tap the speaker icon; then, tap the microphone icon. When finished, tapping the microphone icon will simultaneously turn off both the microphone and speaker.

**Automation control:** Used to control various automation devices (for example Smart Plug) in the system.

**Recording + social sharing:** Begins recording the current video feed and saves the video clip to your smartphone. You can decide whether or not to share on social media outlets.
Emergency call: When you tap this icon, you can select from your list of pre-saved emergency contact numbers that you wish to call.

Note: If you have not set an emergency contact number, see the App manual.

Siren triggering: Manually triggers or dismisses an emergency event via the app.

5.3 Viewing the Video Recording
If a video has been recorded, you can replay the video clip by following the steps shown below. For details about how the system records a video, see Section 5.1 – System / sensor setting.

5.3.1 Viewing Recorded Events
To view recorded events, complete the following steps.

1. Tap the “VideoGram” icon and select the event you wish to check. Events marked with a red dot indicate you have not viewed the event yet.

2. Tap the play icon located in the middle of the screen to watch the recording.
Video recording events from the past three hours can be viewed from the video recording main screen. The grey bar shows the time and date of the recording within a three hour interval, ending at the current time. All recorded events within the three hour period are shown here.
The following illustration shows you how to navigate the video recording main screen.

For details regarding the four icons located on the bottom of the screen, see the descriptions below.

**VideoGram**: Takes you to the videogram menu.
Search: Searches a particular video event detected by the camera(s) or sensor(s).

Replay: Takes you to the replay page to view continuous recorded events.

Note:
• If network problems are encountered while replaying a recording, this icon ![warning_icon] will appear on the screen.

• For iOS devices, this animation icon ![animation_icon] allows you to swipe up to view more camera clips. The animation icon fades after 10 seconds. Both landscape and portrait views are supported.

• The play icon toggles between playing and pausing the video recording.
When several video clips are recorded at approximately the same time point thus making it difficult to select the one you wish to view, tap the time point to show a list of the video clips. A maximum of six clips are listed, with three clips before and three clips after the selected time point.

Home: Takes you to the app’s homepage.
Recorded events are represented by a red line and continuous recorded events are depicted by a grey line.
Chapter 6. Resetting the Mini Cube HD camera

When you are unable to add the camera to the system, or the camera is not working properly, you can try to reset the device. The app may also show a message telling you to do so.

- Resetting the camera when your camera is not working properly.

**Method 1:** Remove the camera from the system. Please see Section 4.9 – Restart/Remove IP Camera for details.

**Method 2:** Use the end of a paperclip or any pointed object to press the reset button. You will need to continuously press the button until you hear a “Beep” sound. The resetting process first involves the LED indicator showing a flashing purple light. After a few seconds, the LED indicator will begin to show a flashing blue light.
• Resetting the camera when you are unable to add the camera to the system.

Use the end of a paperclip to press the reset button. You will need to continuously press the button until you hear a “Beep” sound.

**Note:** Resetting the camera will restore your device to factory default settings.
Appendix – Glossary of Terms

- **Arm**: The cameras and other security related sensors in the system are actively monitoring the surroundings. Any suspicious activity that has been detected by the camera or sensor will prompt the app to immediately send a notification. A recording will also be performed by the camera(s) that witnessed the event.

- **Disarm**: The cameras and other security related sensors in the system are no longer actively monitoring the surroundings. The system will not react to any suspicious activity detected by these devices. No notification will be sent.

  **Note**: If the continuous recording function is turned on, video recording will always work regardless if the system is armed or disarmed. For more details regarding the continuous recording function, see Section 4.8 Turn On/Off Continuous Recording.

- **Event**: An event is created when any camera or sensor detects an activity, or is manually triggered by the user.

- **Internet mode**: The Mini Cube HD camera is connected to the Internet.

- **Local mode**: The smart device is connected to the Mini Cube HD camera for further configuration.

- **Security Shuttle**: Functions as a secure and intelligent hub to manage the devices and communicate with the cloud server. Currently, there are three types – **OPU1120**, **OPU2120**, and **OPU3120**.

- **Stay Mode**: The system is armed, but only the pre-selected camera and sensors will be actively monitoring the surroundings, and send a notification when any suspicious activity is detected.