

H102

Wireless Monitoring System

User Manual



"Care for your loved one"



v1.0

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1 Safety Instruction and Warnings

Please read carefully this user manual before using Hestia H102 wireless monitoring system.

Strangulation Hazard - Keep the adapter cord out of the reach of children. Never place the camera or cord within 3 feet (1 metre) of a crib or playpen.

Cord Protection - Protect the adapter cord. Route cord so that they are not walked on or pinched by items or against them.

Choking Hazard - This product contains small parts which may cause choking. Not for children under 3 yrs.

Wet and Moisture - Keep the monitoring system and all accessories away from water such as a sink, bath tub, laundry tub, swimming pool.

Heat and Fire - Keep all components away from heat source such as fireplace, radiator, stove.

Ventilation - Provide proper ventilation for both monitor and camera unit. Do NOT cover them with any material, such as a blanket, cloth.

Cleaning - Disconnect all units before cleaning. Do NOT immerse in water. Clean it only with a dry cloth.

Adapter and Battery - Use ONLY the AC adapters and battery supplied with this product. Using other 3rd parties AC adapters or battery may cause fatal damage to the product.

Do NOT attempt to open the monitor unit, camera unit, battery and A/C adapter. No user-serviceable parts inside. Risk of electrical shock, fire or death.

This product is not a substitute for responsible adult supervision. Check your baby's activities at regular intervals.

When not using the product for long periods, remove the battery and disconnect the A/C adapters from electrical outlet.

This product is intended for indoor use only.

This product is not a toy. **Do NOT** allow children to play with it.

Caution: Risk of explosion if battery is replaced by an incorrect type. Dispose of used battery according to the instructions.

Please review product information before operation

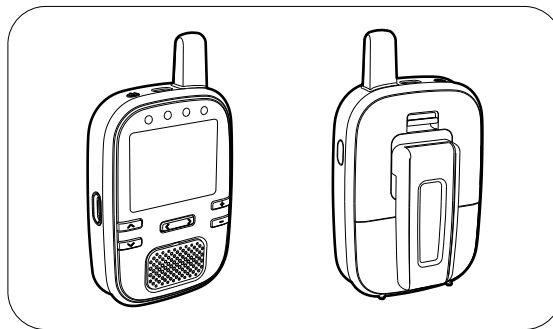
Monitor: Product information is located at battery compartment

Camera: Product information is located at back side of camera unit, after disassembled the camera stand

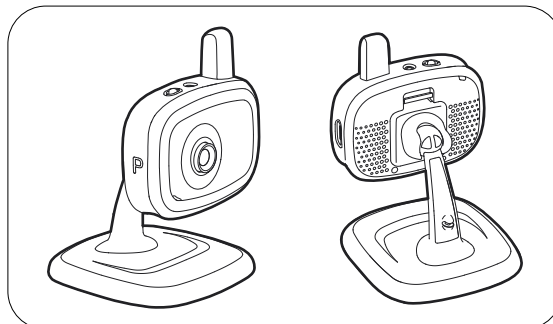
2 Component List

Thanks for purchasing Hestia H102 wireless monitoring system. Please make sure you have the following components in the packing.

Monitor unit with flip stand

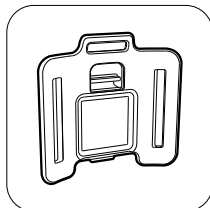


Camera unit with camera stand

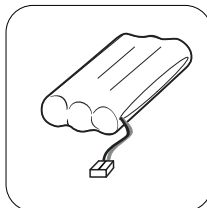


For combo kit, one more camera unit is bundled with H102 wireless monitor system.

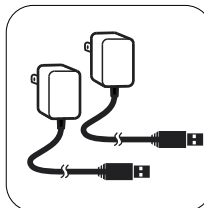
Multi-purpose Mount



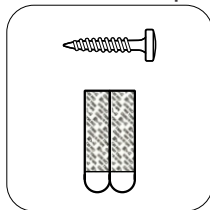
Rechargeable battery



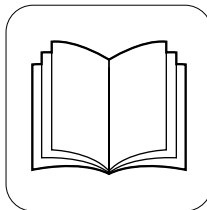
AC adapters x2



**Screw and
double-sided tape**



User Manual



A/C Adapter Information

Manufacturer	Chou Sen Electronics (Shenzhen) Co., Ltd.	Kuantech Company Ltd.
Model number	CS6D050100F series	KSAS0050500100 series
Input	100-240V ~ 50/60Hz	100-240V ~ 50/60Hz
Output	5V 1A	5V 1A

Battery Information

Manufacturer	J&Y Technology Co., Ltd.	Shenzhen HighPower Technology Co., Ltd.
Model number	Ni-MHAAA850 3.6V	HFR-AAA900x3(B)
Specification	Ni-MH rechargeable 3.6V	Ni-MH rechargeable 3.6V

3 Product Features and Overview

3.1 Features and Specifications

- Digital 2.4GHz (FHSS) Wireless Transmission.
- Extended transmission distance for greater than 300m in open area.
- Automatic night vision capabilities for operating in dim environment.
- Intercom (Push to talk) function allows dual way communication.
- Sound level indicator offers visible audio information during mute mode.
- 2x zoom function to provide high detail image.
- Video off mode (Audio only) for high efficiency power saving.
- Supports VOX (sound activation) and sensitivity setting available.
- Auto mute function to eliminate white noise during silence.
- 2 in 1 Split Screen and Auto Scan mode available for multiple cameras monitoring.
- Remote control lullabies playback.
- Built-in Battery charger at monitor unit.
- Supports max. 4 camera units simultaneously.

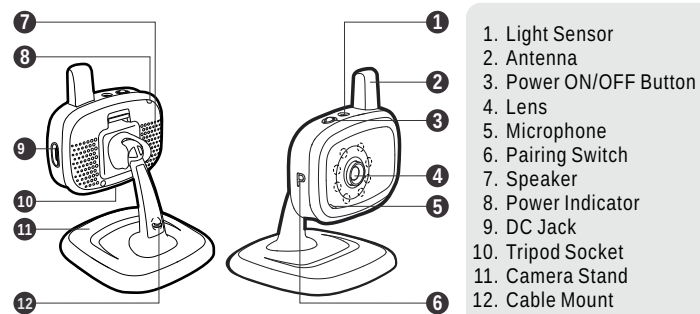
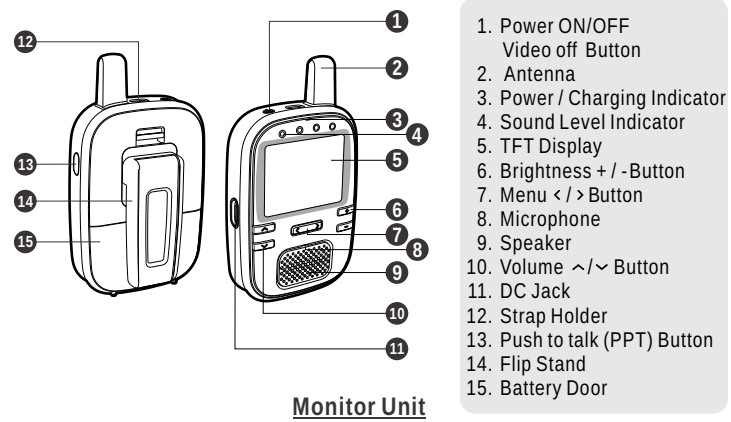
Monitor unit

Display	2.4" TFT color display at 320 x 240 resolution
Audio	1W
Control	Power, Volume +/-, Brightness +/-, Menu </>, Push to talk (PTT)
Indicator	Power (Blue) Battery Charging (Red) Sound Level Indicator(4 pcs)
Battery	3.6V NiMH AAA rechargeable battery
Adapter	5V 1A, 100-240VAC @ 50/60Hz
Mounting	Back mount compatible with flip stand and multi-purpose accessories

Camera unit

CMOS	1/6.5" color CMOS
Lens	F/1.8, EFL 2.95mm, FOV 61
Audio	1W
Indicator	Power(Blue)
Night Vision	8 x IR LEDs
Mounting	Back mount compatible with camera stand

3.2 Overview



4 Getting Started

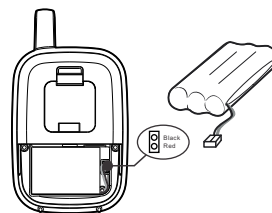
4.1 Powering and battery charging Monitor Unit

- As shown in *pic. 1*, remove the silicon sleeve and flip stand from monitor unit. Then open the battery door.



pic.1

- Insert the rechargeable battery to the battery bay and plug into the battery socket as instructed in *pic. 2*. Close the battery door, install the silicon sleeve.

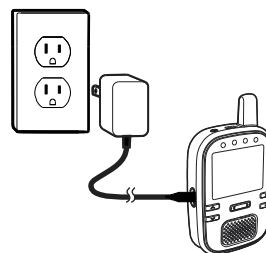


pic.2

- Plug the A/C adapter into the wall electrical outlet. Then attach the cord to the DC Jack as shown in *pic. 3*.

The battery charging process will be started automatically (Red Indicator on).

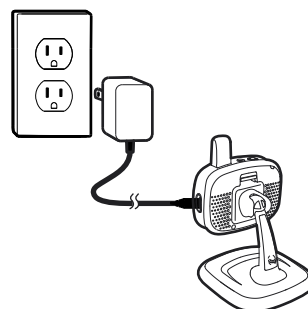
For first time usage, please keep charging the battery for at least 8 hours until the red Indicator goes off.



pic.3

4.2 Powering Camera Unit

Plug the A/C adapter into the wall electrical outlet. Then attach the cord to the DC Jack as shown in *pic. 4*.



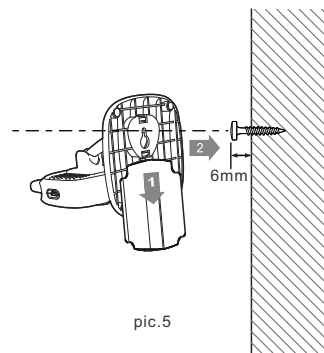
pic.4

4.3 Mounting Camera unit

The camera unit was designed to support different mounting mechanism, from simply putting on a table to mounting on a wall by screw or double-sided tape.

Mount the camera unit by screw

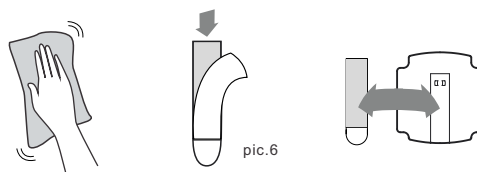
1. Tighten the provided screw onto the wall surface by a screw driver, until the screw only sticks out by about 6mm as shown in *pic. 5*.



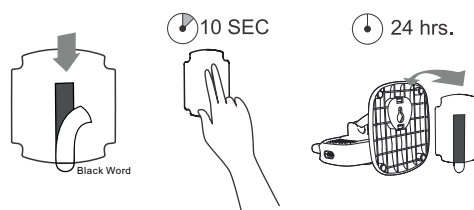
pic.5

2. Remove the base plate from camera stand, and hook the camera stand onto the screw.

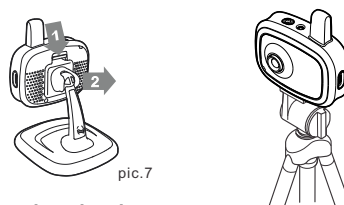
Mount the camera unit by double-sided tape



1. Clean the mounting surface by alcohol.
2. Remove the cover label from the double-sided tape, and stick it onto the recess area of camera base plate, as shown in *pic. 6*



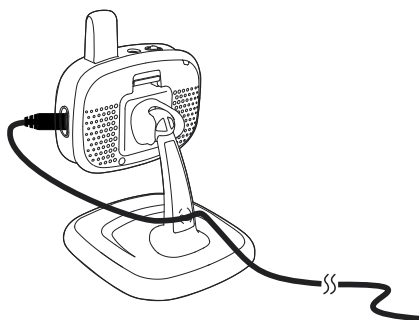
3. Remove the cover label from the other side of double-sided tape, and stick the camera base plate onto the mounting surface. Press the camera base plate onto the mounting surface for 10 seconds. Wait 24 hours then hook the camera stand onto base plate.



Mount the camera by tripod

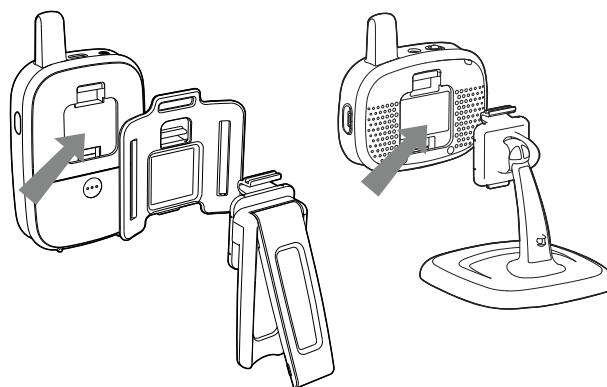
1. Remove the camera stand as shown in *pic. 7*.
2. Fasten the tripod (not included) to the tripod mount at the bottom of camera unit.

- Power cord cable can be inserted to the cable mounted as shown in *pic. 8*.



4.4 Back Mount Mechanism

Both monitor and camera unit carried an identical back mount mechanism. Different accessories (flip stand, multi-purpose mount, camera stand) can be installed to either monitor unit or camera unit based on different needs.

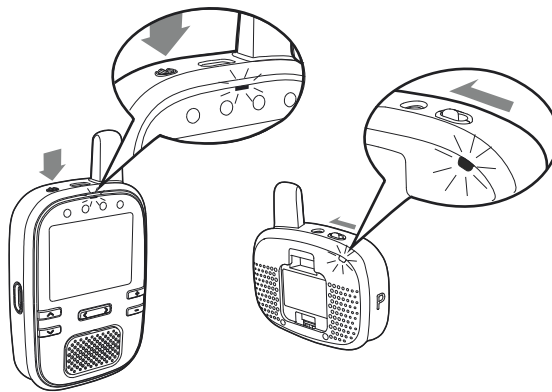



5 Operation

5.1 General Operation

User operation is divided into 2 different modes. General operation is referring to user operations when the capturing image being displayed on screen.

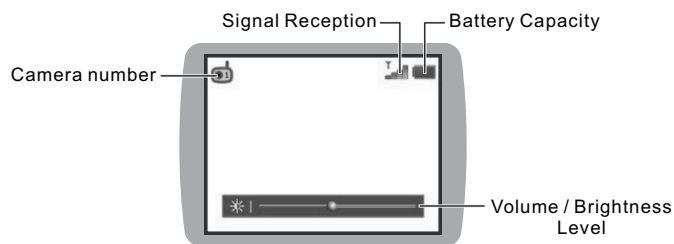
5.1.1 Power ON/OFF





To power on **Monitor** unit, press the power button  and hold for 1 second. The Power LED will emit blue light to indicate the system is on.

To power on **Camera** unit, slide the power switch to the 'ON' position. The Power LED will emit blue light to indicate the system is on.

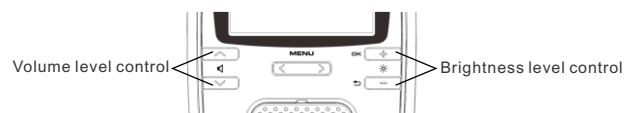
5.1.2 Icons Definition



Camera Number	Indicates the current camera shown on screen. The camera number will be displayed at numeric form inside the icon.
Signal Reception	Indicates the current signal reception strength from camera unit. During no signal status, a flashing icon will be shown.
Battery Capacity	Indicates the capacity of NiMH battery. During battery charging, a color changing icon will be shown.
Volume / Brightness Level	Indicates the current volume  and brightness  Level

5.1.3 Volume adjustment

Press ' ^ ' button to increase the volume level. Press ' v ' button to decrease the volume level. Once the volume level is changed, there will be a level bar shown on screen to display the current level.



5.1.4 Brightness adjustment

Press '+' button to increase the brightness level. Press '-' button to decrease the brightness level. Once the brightness level is changed, there will be a level bar shown on screen to display the current level.

5.1.5 Switching Camera number



Hot-keys is available for switching different camera number at general operation. Press and hold menu > button, then press + button will switch to next camera number. Press and hold the menu > button, then press - button will switch to previous camera number.




Tips

Switching camera function is also available at menu mode, as mentioned in section 5.5.1


5.1.6 Zoom

Hot-keys is available for activating zoom function at general operation. Press and hold menu < button for 2 seconds will activate the zoom function. During zoom mode, the camera icon  will be replaced by ball  icon. Press ^, v, <, > to move the zoom window. Press ↵ button to exit zoom mode.

5.1.7 Video Off mode

Video off mode is for saving power purpose by shutting down the screen of monitor unit manually. The wireless transmission and audio system will remain to operate during video off mode. To enable the video off operation, press the power button  once. Press any button of monitor unit will exit video off mode immediately.

5.1.8 Intercom

Intercom (two-way talk) can be activated by press and hold PTT (Push to talk) button. Upon activation, voice signal will be transmitted from microphone of monitor unit to camera unit. While intercom is activated, an  icon will be displayed next to the camera icon, and sound level indicator will be temporarily disabled. Release the PTT button will deactivate the intercom function.



Tips

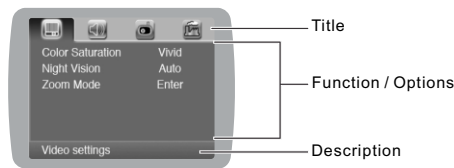
Intercom volume level can be adjusted, as mentioned in section 5.4.6

5.1.9 Sound Level Indicator

Sound Level Indicator are the 4 LEDs located at top of the display screen. It provides a visualized sound level captured from camera unit. The higher the sound level captured, the more LEDs will be lighted up.

5.2 Menu Mode

Menu mode can be activated by pressing either menu < button or menu > once. The below screen will be displayed during menu mode.



Title	Video Settings Audio Settings Camera Settings Load Defaults 4 main titles are available - Video, Audio, Camera and Defaults.
Function / Options	At different title, different functions and their current settings will be shown.
Description	Show a brief description of selected components.

To select different title, press ^ or v button until the cursor reaches Title column and highlighted. Press menu < or menu > button to select different title.

To select different function, press ^ or v button until the cursor reaches desired function column and highlighted. To change the option, press menu < or menu > to select different available options. Selected setting will be effective immediately. In some functions, it required to go to next page for more settings, as below screen. Upon selected, there will be a '...' displayed behind the function name, press 'OK' button to go to next page for further settings.



To exit menu mode, press - / ↵ button.

5.3 Menu Mode - Video

5.3.1 Saturation







Saturation	Adjust the color saturation of displayed images	Vivid	High saturated image
		Normal	Normal saturation
		Cool	Low saturated image

5.3.2 Night Vision


Night Vision	Select different Night vision mode	ON	Set ON the Night Vision mode
		OFF	Set OFF the Night Vision mode
		Auto	Use build-in light sensor to detect light level and trigger ON/OFF the night vision mode automatically

5.3.3 Zoom mode

To enter zoom mode, select '<ENTER>' option and press 'OK' button. It will exit menu mode and show the capturing image with zoom mode activated.

During zoom mode, the camera icon  will be replaced by ball icon . Press     button to move the capturing area.

To leave zoom mode, press  button.

 **Tips** Zoom function is also available at primary screen of split screen mode.

5.4 Menu Mode - Audio

5.4.1 VOX Delay

VOX is a power saving feature to turn off video and audio system of monitor unit, when the environment of camera side is silent. The system will be resumed automatically when camera unit detect noise. There are two user settings available for VOX function. VOX Delay is referred to the duration of silence before entering VOX mode.

VOX Delay	Duration of silent before entering VOX mode	30 seconds	VOX set ON and enter VOX mode after 30 seconds silence
		60 seconds	VOX set ON and enter VOX mode after 60 seconds silence
		3 minutes	VOX set ON and enter VOX mode after 3 minutes silence
		OFF	VOX set OFF

5.4.2 VOX Sensitivity

VOX Sensitivity is referring to the sound level detected by camera unit to be regarded as silence.

VOX Sensitivity	Adjust the sensitivity of camera microphone at VOX mode	High	Require less sound level to trigger VOX mode. For quiet environment.
		Medium	Require standard sound level to trigger VOX mode.
		Low	Require high sound level to trigger VOX mode. For noisy environment.

5.4.3 Audio Alert

The function of Audio Alert requires to go to new menu page for setting purpose. Press 'OK' at Audio Alert column will go to the new page.

Low Battery	ON	Enable audio alert when battery is at low capacity
	OFF	Disable audio alert when battery is at low capacity
Out of Range	ON	Enable audio alert when no signal reception from camera unit
	OFF	Disable audio alert when no signal reception from camera unit

5.4.4 Sound Level Indicator

Sound Level indicator is the 4 indicators located at top of display screen, showing the sound level captured from camera unit. Set ON to activate this function, set OFF to disable the indicators.

5.4.5 Auto Mute

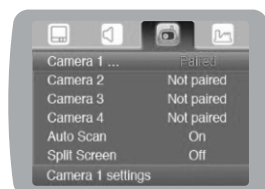
Auto Mute function acts as a white noise eliminator, which shut down the audio system when no sound is captured from camera unit for 10 seconds. When Auto Mute is activated, and noise is detected from camera unit, the audio system of monitor unit will be resumed. Set ON to activate Auto Mute function. Set OFF to disable Auto Mute function, and audio system will operate all the time.

5.4.6 Intercom Volume

Intercom Volume is to adjust the speaker volume of camera unit. 5 levels are available. Press menu > to increase the volume level, press menu < to decrease the volume level.

5.5 Menu Mode - Camera

The monitor unit is capable to pair with 4 camera units, as shown below :

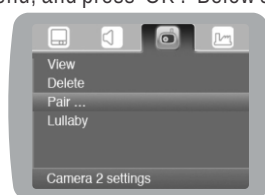


5.5.1 Camera Selection

The camera number labelled as 'Paired', indicates a camera unit is currently registered. The camera number labelled as 'Not paired' indicates no camera unit is registered. Press ^ or v to select different camera. Press 'OK' button will go to next page for setting purpose.


5.5.2 Camera Pairing

To pair a new camera unit, select a 'Not paired' camera number from Camera menu, and press 'OK'. Below screen will be shown :



Select 'Pair' function and press 'OK' button. The monitor unit will start searching the camera unit and a 'Connecting' status will be displayed.

Power on the camera unit. Press and hold 'P' button of camera unit will initiate the pairing mode and connecting to the monitor unit. When pairing process is completed, the description will display a 'Pairing Success' message.

To stop the pairing process, press  exit button once. The pairing process will be stopped if camera unit cannot be found in 30 seconds.

To view a paired camera, select 'View' function and press 'OK'. To un-register a paired camera, select 'Delete' function and press 'OK'.

To exit and go back to Camera menu, press  button

5.5.3 Lullaby Playback

Lullaby	Stop	Stop the Lullaby Playback
	Play Once	Play the Lullaby once
	Play 30 min	Play the Lullaby for 30 minutes
	Play 1 hour	Play the Lullaby for 1 hour

 **Tips** Lullaby volume level can be adjusted at Intercom volume function as mentioned in section 5.4.6

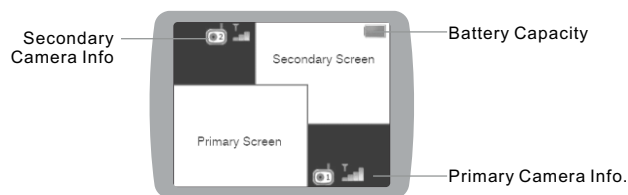
5.5.4 Auto Scan Mode

Auto scan mode is an automatic camera switching function to all paired camera units at an interval of 15 seconds. The display sequence is at numeric order of camera number.

For example : Cam1, Cam3 and Cam4 are paired, the sequence will be cam1 > cam3 > cam4 and loop. During auto scan mode, VOX function will be automatically set OFF.

5.5.5 Split Screen Mode

Split screen mode is a function to display 2 camera captured images simultaneously at the same screen. Camera image will be resized to ~60% from its original size, and part of the image will be overlapped in order to fit into the screen. The screen at lower left is regarded as primary screen and overlapped to the secondary screen at the upper right. Audio signal will be transmitted at primary screen only. During split screen mode, VOX Function will be automatically set OFF.



To switch the primary screen to next camera number, press - button. To switch the secondary screen to next camera number, press + button. Only paired camera units will be displayed.

PTT(Push-to-talk) function will be applied to primary screen only. During PTT, secondary screen will be disabled.

Tips If two camera units are paired in split screen mode, press either + or - button will swap the primary and secondary screen.

5.6 Menu Mode - Load Default

Select 'Restore factory settings...' function, and press 'OK' button. System will prompt to reconfirm the action, select 'YES' and press 'OK' button will restore the factory default. Select 'NO' and press 'OK' button will go back to Load Default page.



Camera pairing information will not be deleted during factory default reload.

6 Troubleshooting and Tips

Q. I don't get a screen at all.

- Make sure both monitor and camera unit are turned on. The blue power LED will light up and indicate the system is powered on.
- If blue power LED is not light up, please check if the A/C adapter is properly connected to the devices and to the wall outlet. For troubleshooting purpose, please remove the NiMH battery from the monitor unit, and use only A/C adapters to power on the system.

Q. I can see opening screen, but the screen shows 'Signal Lost ! Re-establishing connection...'

- A. The message indicates that the monitor unit cannot communicate with the camera unit.
- Check the current camera number from camera icon at the top left of the screen. Make sure it is the correct camera number. If not, please switch the camera number as mentioned in section 5.5.1.
 - If correct camera number is selected at monitor unit, please check the camera unit and make sure it is powered on, with blue LED light up. For troubleshooting purpose, please turn off the camera and turn on after 10 seconds.
 - For better reception purpose, place the monitor unit closer to camera unit and remove the obstruction between both devices.
 - If above steps all failed, please pair again the camera unit as mentioned in section 5.5.2.

Q. The system loses connection randomly.

- A. Check the signal reception icon. The icon with 1 or 2 bars indicates the system is placed at a marginal reception area. Try to improve the reception condition by :
- Place the monitor unit and camera unit closer together.
 - Place the monitor unit and camera unit at 1m or above from the ground.
 - Position the antenna vertically.
 - Remove the large obstruction or metallic objects between monitor unit and camera unit.
 - Use of other 2.4GHz devices, such as WIFI devices and microwave ovens, may cause interference and affects the signal transmission. Place the monitor unit and camera unit at least 1 meter away from other 2.4GHz devices, or turn them off

**Tips**

Tips: User can turn off the 'Out-of-range' audio alert manually as mentioned in section 5.4.3, if necessary.

Q. Why I get a black and white image instead of color image?

- A. It is the night vision mode image generated by infra-red light. At default setting, the system will automatically detect the ambient light level, and trigger On/Off the night vision mode. User can turn On/Off the night vision manually as mentioned in section 5.3.2.

Q. How can I avoid the shrill sound (feedback noise)?

- A. Avoid to put the monitor unit and camera unit close together. If necessary, adjust to a lower volume level before putting both devices together.

Q. Why the sound cut in and out all the time?

- A. It is likely caused by the Auto Mute function, as mentioned in section 5.4.5. Turn off the Auto Mute function will solve the problem.

TIPS: Protect your battery.

For first time usage, it is always recommended to fully charge the battery for at least 8 hours. Avoid to dry up the capacity before recharging, as it will degrade the battery, and shorten its life cycle.

TIPS: Some ideas on power saving and extend the duration.

All video, audio and wireless transmission functions require power. Below are some ideas for power saving purpose :

- Properly adjust brightness level based on your needs. Don't always use maximum level as it consumes highest power.
- Properly adjust volume level based on your needs. Alike brightness setting, the higher level will consume higher power.
- Use Video Off mode (section 5.1.7). It will save over 20% power than consumption.
- Use Auto Mute mode (section 5.4.5) for a long silence environment. Act as a white noise eliminator, it will turn off the audio system to save power and resume to work only noise is detected.
- Use VOX mode if applicable (section 5.4.1). When VOX mode is activated, both video and audio system will be temporarily turned off until noise is detected. Depends on the environment, set the VOX sensitivity (section 5.4.2) to maximize the function.

7 Warranty Information

We warrant to the original user that the product is free from material and workmanship defects for a period of one (1) year from the date of original purchase. If this monitoring system fails to function properly when used as directed under normal condition within the one year period, we will either repair or replace the product, at our discretion, free of charge.

Legal rights vary from country to country. Some countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty does not apply to a product which has been damaged as a result of improper maintenance, accidents, improper voltage supply, or other misuse. The warranty is also void if the owner repairs or modifies the product in any way. We are not liable for any incidental or consequential damages with regard to this product. The warranty also excludes any liability other than what is stated above. No other warranties are given.



Declaration of Conformity :

Hereby Hull Base International, declares that the H102 and the series is in compliance with essential requirements and other relevant provision of Directive 1999/5/EC. The product had designed, tested and manufactured according the European R&TTE Directive 1999/5/EC.



Information on waste Disposal for Consumers of Electrical & Electronic Equipment.

This mark on a product and/or accompanying documents indicates that when it is to be disposed of, it must be treated as Waste Electrical & Electronic Equipment, (WEEE) Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. For proper treatment, recovery and recycling; please take all WEEE marked waste to your Local Authority Civic waste site, where it will be accepted free of charge. If customers dispose of Waste Electrical & Electronic Equipment correctly, they will be helping to save valuable resources and preventing any potential negative effects upon human health and the environment, of any hazardous materials that the waste may contain.

8 FCC Statement

WARNING: Modifications not authorized by the manufacturer may void users authority to operate this device.

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. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 or more of 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.

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

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.
- The camera unit shall be installed and operated with a minimum distance of 20cm (8 inches) between the radiator and your body.

FCC ID : XGGH102M15
FCC ID : XGGH102C15

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