



SWIIDCAM+™

Z-WAVE® WIRELESS AUTONOMOUS PTZ IP CAMERA

Installation and User's Guide

I - FOREWORD

SwiidCam+™ is an autonomous and wireless Z-Wave® PTZ IP camera gateway, which is - as its name implies – combines :

- A **wireless IP (Wi-Fi) camera** which has the following features :
 - (i) Pan, tilt and zoom (PTZ),
 - (ii) Twin lens/sensor camera : daylight and IR,
 - (iii) Two-way voice over IP built-in,
 - (iv) Local storage on SD card (card not provided),
 - (v) Time lapse recording,
 - (vi) Built in multi-level motion and sound sensors as well as sound alarm signal, and
 - (vii) Easy plug-and-play installation feature
- A built-in **Z-Wave Plus® controller** gateway enabling the user to monitor and control Z-Wave devices such as sensors, dimmers, power meters, switches, RGBW bulbs, door locks, etc.
- A built-in **rechargeable battery pack**, the SwiidCam+™ is autonomous from an energy standpoint, making it possible for the user to roam wirelessly with the SwiidCam+™ within the range of the local Wi-Fi network

The **SwiidCam+View™ application** is available free on both the Apple App Store and on Google Play respectively in iOS and Android versions. This application provides an intuitive user interface for setting up and operating your SwiidCam+™.

Finally, the SwiidCam+™ is both Alexa- and Google Home enabled and is IFTTT compatible.

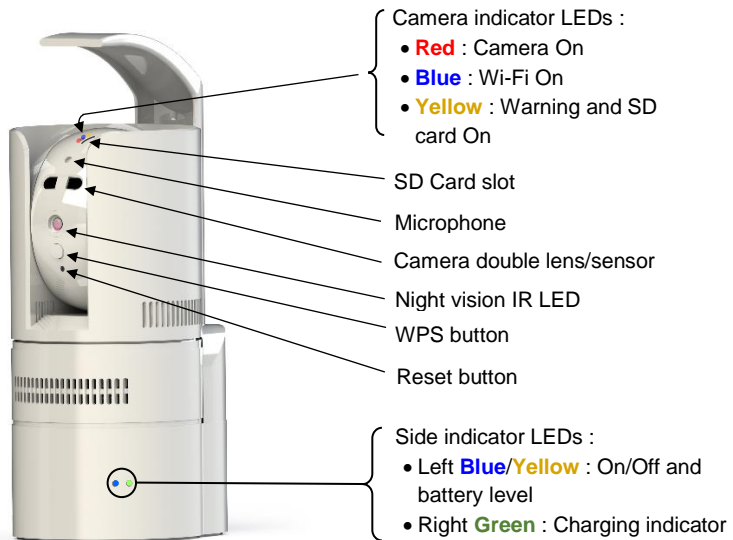
II - SPECIFICATIONS

Z-Wave® Device Type :	CENTRAL STATIC CONTROLLER
Power supply :	3.7V DC 5.8Ah Li-Ion NMC battery pack Adapter 230VAC / 5V DC 3A
Size :	177 x 95 x 75 mm
EU Norms :	EN 61058-1 & EN 55015
IP camera .	1 mega pixels, 1280x800, 30 fps max., H.264 video compression ; automatic IR LED
PTZ features .	340° pan; 90° tilt; 3x zoom (digital)
SD card .	128 GB max.
Audio .	Built-in microphone and 0.5W speaker ; G.711 audio compression
Wi-Fi :	IEEE 802.11 ; 2.4 GHz ; supports WEP and WPA/W/WPA2 security
HA radio protocol :	Z-Wave®
HA radio frequency :	868,42 MHz (EU)
HA transmission distance :	Up to 30m indoors (depending on materials)
Working temperature :	0 – 40°C

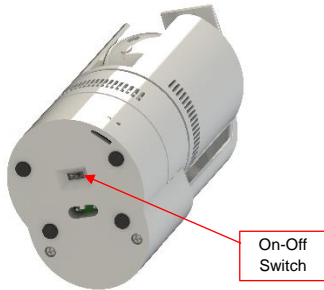
Your **SwiidCam+™** has been certified by a certification firm approved by the **Z-Wave® Alliance** and, as such, is fully interoperable with all the certified **Z-Wave®** devices produced by other manufacturers using the same authorised radio frequency (EU in our case).

III - KEY FEATURES

External features



Powering up the device



Remove SwiidCam+™ from charging base to access On-Off switch at the bottom of the device. For transport and when not being used, switch is set to Off.

When switched to On, the left LED on the plinth of the device will either be **blue** to indicate battery status OK or **yellow** to indicate low battery.

If low battery, switch back to Off and place back on charging base until right **green** LED on the plinth of the device turns off and then switch back on (left LED will then be **blue**).

When turning the On-Off switch to Off, the SwiidCam+™ will lose its Wi-Fi connection and it will may take up 30-45 seconds to reconnect the Wi-Fi, when the switch is set back to On

Charging the device

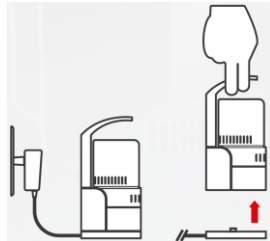


Remember to plug in the wall adapter of the charging base into the mains.

Place SwiidCam+™ on the charging base either with the left **blue** LED lit (On-Off switch to On) or **OTHERWISE ONLY** with the On-Off switch to Off.

Once fully charged the right **green** LED will switch off. Full recharging takes ca. 3 hours.

Once fully recharged the SwiidCam+™ can operate away from its charging base for around 3 hours



SwiidCam+ View™ application



SwiidCam+ View™ is a smartphone and tablet application which provides the user interface needed for setting up and operating your SwiidCam+™. It is intuitive and provides in-built help which makes most of the information contained hereafter in the present Installation and User's Guide redundant.

SwiidCam+ View™ is **available free of charge** both on Apple's App Store and on Google Play. For iOS devices, it requires iOS8 or greater and is available in separate versions for iPhone and iPad.

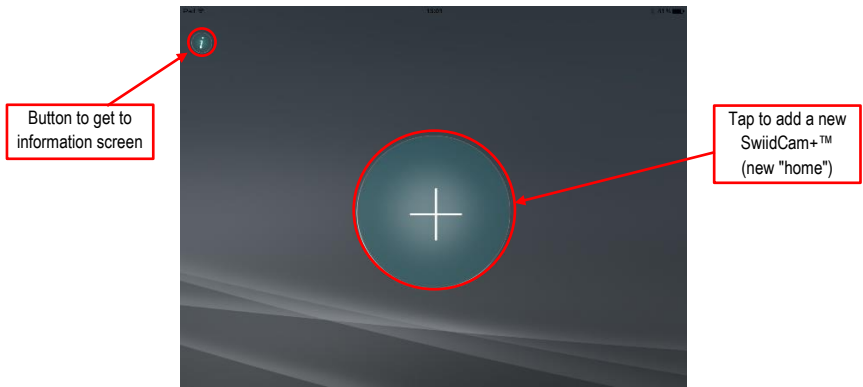
IV - INSTALLATION

Installation of your SwiidCam+™ is a two-step process :

- Getting your SwiidCam+™ to communicate wirelessly over your local network and with the internet; to the SwiidCam+ View™ interface on your smartphone or tablet, and
- Setting up a network of Z-Wave® home automation devices with your SwiidCam+™ as the network's primary controller.

IVa - INSTALLING THE WI-FI CAMERA

1. Download and install the SwiidCam+ View™ app onto your smartphone or tablet from the Google Play if it uses Android or from the Apple App Store in case of an iPhone or an iPad.
2. Open SwiidCam+ View™ app on your smartphone or tablet : it will show you the Home Screen illustrated below. Tap on the big circled "+" to add your new SwiidCam+™



Home screen

Steps thereafter are also indicated on the screen of your smartphone or tablet, namely :

3. Enter the name you want to give to the location (home) where you are setting your new SwiidCam+™ and press arrow button to continue
4. Select "Pan/Tilt camera gateway"
5. Select "Connect your camera to the Wi-Fi network"

Please make sure that your smartphone or tablet is connected to that specific Wi-Fi network to which you want your SwiidCam+™ to belong. **IMPORTANT** : Make sure this is a **2.4 GHz** Wi-Fi network not a 5.0 GHz Wi-Fi network.

6. Power up SwiidCam+™ by switching on the On-Off switch at the bottom of the device and the LED on the left side of the plinth will light up **blue** (provided the battery is sufficiently charged)
7. Wait until the **red** LED at the top of the camera starts **blinking slowly**, indicating the powering up phase has been completed
8. Enter on your smartphone or tablet the password of the Wi-Fi network to which it is connected and press "**Submit**"

9. Press the WPS button on your SwiidCam+™ (see illustration page 2) and the 3 LEDs (**red**, **yellow** and **blue**) at the top of the camera will blink in an uneven pattern
10. Press "Continue" on your smartphone or tablet until the screen shows a QR code
11. Place your smartphone or tablet 20 cm in front of the SwiidCam+™ camera lens and hold it until the SwiidCam+™ emits a loud beep signifying that it has read the QR code and the 3 LEDs at the top of the camera will blink in a sequential pattern
12. In due course (30-90 seconds), the **yellow** LED at the top of the camera will turn off and only the **blue** and **red** LEDs will remain lit : **blue** for the Wi-Fi connection and **red** for the powered-up status of the camera and a pop-up will say "Gateway found" and display the Camera ID number (same as on the ID/password card provided with your SwiidCam+™)
13. Set a name for your SwiidCam+™ and tap "**OK**". **Please note** that a pre-set SwiidCam+™ password will be displayed (same as on the ID/password card provided with your SwiidCam+™) and cannot be changed at that time (SwiidCam+™ ID/name/password are **not to be confused** with the administration ID/password - see point 15 hereunder)
14. You will then be back on the Home Screen and the big circled "**+**" in the centre of the screen will now show the name you have given to your SwiidCam+™
15. Tapping the big circled "**+**" in the centre of the and screen you will get to a pop-up request to enter an **administration ID/password** for your SwiidCam+™ (in case needed, the default values of **admin / [blank]**) and then the Controller Screen as pictured below will open :



Controller Screen (empty)

16. Once you press on the camera icon in the big circle you will be prompted to modify the SwiidCam+™ password and to confirm it (in lieu of the pre-set on the ID/password card) and then tap "**OK**"
17. By selecting on the Controller Screen, the camera icon in the big circle you can get to the live video stream of your SwiidCam+™

Thereafter, whenever you want to reach the Controller Screen when turning your SwiidCam+ View™ back on (after having exited the app), tap on the appropriately named home circle which will now

appears on the Home Screen. **Please note** that you may be prompted to change the administration ID/password if you were still using the original default value of admin / [blank].

IVb - SETTING UP THE Z-WAVE® CONTROLLER

As a certified Z-Wave® controller, your SwiidCam+™ can be used either as primary or a secondary controller, but the current section of this Installation and User's Guide will describe only how to use it as a **primary Z-Wave® controller**. By default, your SwiidCam+™ acts as a primary Z-Wave® controller.

As a primary Z-Wave® controller, your SwiidCam+™ is able to create its own network using its own internally-generated unique identification number (known as Home ID). The following describes the configuration steps necessary to associate your SwiidCam+™ with each of the Z-Wave® devices which you want to include in its Z-Wave® network, whether they are to be controlled directly (e.g. actuators) or not (e.g. sensors).

A- INCLUDING A Z-WAVE® DEVICE

Proceed as follows :

1. Tap on the small circle "Device #" on the left part of the Controller Screen of your SwiidCam+™ (below the camera icon in the big circle) so that it lights up.
2. Then tap on the big right-hand circle with a "+" which should be entitled "Add a device" (if there are no devices yet in your network) or on the small circled "+" in the upper right-hand corner above the list of already included devices.
3. The screen will show you a list of Z-Wave® device manufacturers in alphabetical order (after our own Swiid™ brand). Scroll to the manufacturer of the device you want to include, tap on it and then on the specific device concerned.
4. Your SwiidCam+™ will then **beep once** to indicate that it is ready to include the external device (if nothing is done, it will time out from the inclusion mode after about 30 seconds by sounding a double beep).
5. Put the Z-Wave® device you want to include and control in program mode (generally indicated in a pop-up window on the screen of your smartphone or tablet - otherwise see manual of the device).
6. The inclusion process will then start automatically : your SwiidCam+™ will sound a **three-tone chime once** to indicate success and a pop-up dialog box will then ask you to assign a name to the device you have just included. You will then automatically be able to control the device if it is a controllable one.

In the event the inclusion is **not successful**, your SwiidCam+™ will simply time out from the inclusion mode after about 30 seconds by sounding a **double beep**.

If in **Step 3** the **device you wish to include is not available** on the manufacturer/device list provided, it can always be included as an "unknown" device by scrolling down to the end of the manufacturer list to "Other Z-Wave device". Upon inclusion, the device will however only respond to commands of the Z-Wave Basic Command Class.

Please remember that the Z-Wave® device you want to include may have been included in another Z-Wave® network previously and it may be necessary to reset it by running an exclusion procedure (see below) before it can be included in your SwiidCam+™'s network.

Upon inclusion, the devices will be placed in an "unassigned room" and can be moved to dedicated rooms to be created by the end-user.

B- EXCLUDING A Z-WAVE® DEVICE

Exact same process as for inclusion except that :

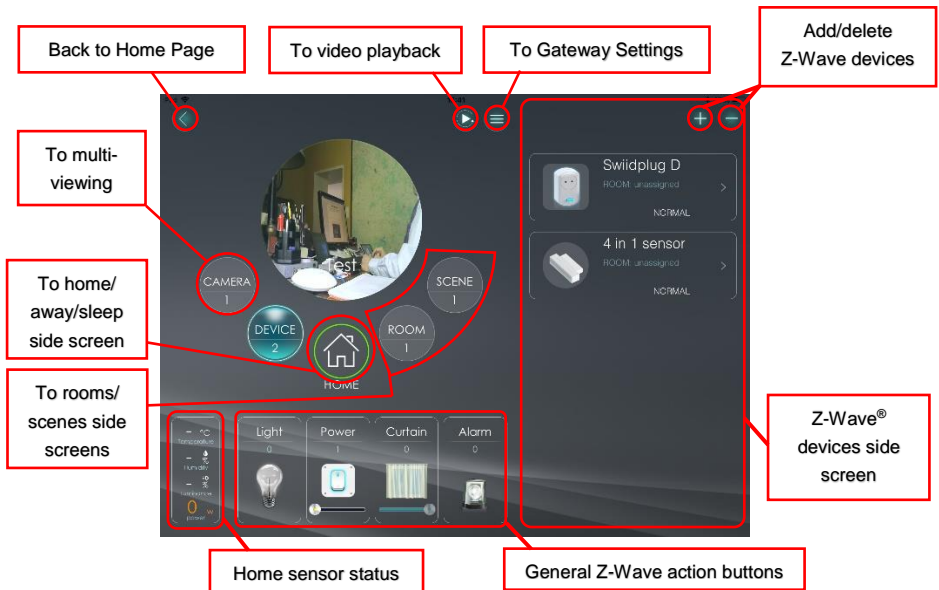
- **In Step 2**, tap either the text in the upper right which reads “Remove other device” or (if there are no devices yet in your network) or on the small circled “-” in the upper right-hand corner above the existing device list
- **In Step 7**, the successful conclusion of the exclusion process (**three-tone chime**) will obviously not be followed by a device naming request.

C- REMOVING/REPLACING A FAILED Z-WAVE® NODE

A node (device) included in its Z-Wave® network is deemed by your SwiidCam+™ to have failed if it does not to respond to a command which has been issued or if does not report back for more than 24 hours. In that case the device will show up on your smartphone or tablet with a red “❌”. Tap on the red “❌” to get to the Remove/Replace screen and follow on-screen instructions.

V – MANAGING THE Z-WAVE® NETWORK

A- THE CONTROLLER SCREEN (showing devices side screen)



B- ROOMS

The management of the Z-Wave® network of your SwiidCam+™ is organised in such a way as to get the end-user to assign the various Z-Wave® devices individually to rooms that he or she will create. Upon inclusion into the SwiidCam+™'s network, the devices will at first be placed in an “unassigned room”.

To create a room, proceed as follows :

1. Tap on the small circle "**Room #**" on the left part the Controller Screen of your SwiidCam+™ (below the camera icon in the big circle) so that it lights up and a scrolling list of rooms appears on the right side of the screen (Rooms Side Screen).
2. Then tap on the small circled **"+"** in the upper right-hand corner above the existing room list (may only contain "unassigned" if no room have yet been added)
3. Enter a room name of your choice and submit

You can then add devices to this room or remove them or move them to other rooms by tapping on the room rectangle on the list of rooms (Step1 above) and then tapping on the small circle "■" towards the bottom of the right side of the screen and following the on-screen instructions.

Non-Z-Wave : When tapping on the room rectangle on the list of rooms (Step1 above), you will get a list of all the Z-Wave® devices in the room, as well as the IP camera which has been attributed to that room. It is possible to assign another camera to this room (provided it has been previously added to the system) by tapping on the camera name and following the on-screen instructions.

All the rooms created (i.e. other than the "unassigned room") can be deleted by following the same procedure as the one described above except that one must tap the small circled **"-"** instead of the **"+"** and following the on-screen instructions.

Overall, your SwiidCam+™ is capable of handling up to **40 rooms** and a maximum of **60 Z-Wave® devices** (in 1-40 rooms).

C- SCENES

In Z-Wave®, scenes are software routines which make it possible to send different commands to different devices, making several different things happen at the same time or in sequence over time or not. Such scenes are subject to trigger conditions, either voluntary like pressing on a button, or automatic like the change of status of one or more devices and timing.

To add and programme a scene on your SwiidCam+™, proceed as follows :

1. Tap on the small circle "**Scene #**" on the left part the Controller Screen of your SwiidCam+™ (right side below the camera icon in the big circle) so that it lights up. The right hand side of the screen will change to the Scene Side Screen.
2. Then tap on the big right-hand circle with a **"+"** which should be entitled "Add a scene" (if this is the first scene to be programmed) or on the small circled **"+"** in the upper right-hand corner above the existing scene list, enter a scene name in the pop-up window and confirm by tapping **"OK"**.
3. The screen will then show you an input request for the conditions ("**IF**" and "**WHEN**") and the actions ("**THEN**"). Follow the on-screen instructions to fill in the various conditions/actions instructions and submit the scene for implementation.

IF conditions apply to the change of status of one or several Z-Wave® devices, of room conditions or conditions reported by any IP cameras which are in the network of your SwiidCam+™. These conditions can be alternative or cumulative : toggle by tapping on the circled **"+"** or **"or"** between condition icons. Each scene can accept up to six IF conditions

WHEN conditions contain the time period or periods during which the scene will be active.

THEN actions can include changes to the status of one or more actionable devices, sending out of alarm push notifications (see below), or recording of video and/or sound.

D- HOME/AWAY/SLEEP

By tapping on the small circle **"Home"** on the left part the Controller Screen of your SwiidCam+™ (immediately below the camera icon in the big circle), the right-hand side of the screen will change to

offer a choice between "Home", "Away" and "Sleep" statuses. These statuses can be used as a WHEN condition, so as to be able to trigger several scenarios in one go from any Controller Screen.

E- ALARM (PUSH) NOTIFICATIONS FROM Z-WAVE® DEVICES

Through your SwiidCam+™, each of the Z-Wave® devices in your network can be programmed to send you a push notification by e-mail in the event an alarm threshold is crossed. The end-user can set up alarms individually on the status of each parameters of each device. For example, with a multi-sensor you can set separate alarm thresholds for temperature (low or high), humidity, luminosity, open/close, battery level, etc.

To add an alarm to one of your Z-Wave® devices, proceed as follows :

1. Tap on the device rectangle of the desired trigger device on any screen which contains a scrolling list of devices
2. The device will show up with all its functions listed in separate rectangle and with a **bell icon** (alarm) on the right-hand side
3. Tap on the **bell icon** to set alarm conditions (tailored to type of function) and follow on screen instructions
4. **Remember** to tap on "Update" in the upper right-hand corner to validate and save the alarm setting you have just created

Follow the same procedure to delete an alarm : tap on highlighted bell icon to turn it off.

Non-Z-Wave : The SwiidCam+™ has its own motion- and sound-based alarm capabilities (see Sections VI-A and VI-B).

When any active alarm on a Z-Wave® device of the network of your SwiidCam+™ (or on the SwiidCam+™ itself) is triggered :

- It will show up automatically on the SwiidCam+ View™ screens on your smartphone or tablet,
- It may set off a wailing sound on the in-built speaker of your SwiidCam+™, and/or
- It may send push notifications by e-mail to up to 3 e-mail addresses.

The wailing sound and the push e-mail notifications can be programmed by going into the **Sensor & Record** section of the **Camera Settings** option page from the bottom right of the **Gateway Settings** page. To access the Gateway Settings page, tap on the "☰" button on the top middle-right of the **Controller Screen**.

Wailing sound : In Sensor & Record, tap the sub-section **Speaker alarm** to activate the speaker alarm and to set the number of loops.

E-mail notifications : In Sensor & Record, tap the sub-section **Email alarm** and enter up to three e-mail addresses as recipients of alarm notifications. **Do not forget** also to set up the SMTP server that will be used to send the email notifications

VI - OPERATING THE SWIIDCAM+™

The SwiidCam+View™ allows you to operate (locally or remotely) side-by-side one or more wireless IP (Wi-Fi) cameras and a network of Z-Wave® devices all from **individual room screens**.

The screen of any individual room on an iPad will show :

1. The **room** name with arrow to scroll to other rooms (starts with the home-named "room", i.e. where the images are from the base SwiidCam+™ which is the primary controller of the home's Z-Wave® network),
2. The **video window** showing the live stream from the IP camera located in that room, with above the right-hand corner of the video window a **Wi-Fi quality indicator**
3. The **status of sensors** in the room (if there are any) : Temperature, humidity, luminosity and power consumption
4. **4 actions buttons** under the video window for all the Z-Wave® devices in the room of a specific type : one for lights, on for all the on/off and dimmer power switches, one for curtains and other window coverings and one for alarms
5. On the right of the screen a scrollable **list of Z-Wave® devices** present in the room (but no possibility of adding or deleting devices from this screen).



Room Screen

Additional clarifications on some the elements just described above :

Video Window : By **tapping once** on the video window, you get access at the bottom of the video window to the various video functionalities described in paragraph A hereafter and, by **tapping twice**, the video window can be enlarged to full screen. By moving your finger on the video window, you can get the camera to **pan and tilt**, but careful of the time response lags. **To zoom**, widen gap between two fingers on screen.

List of Z-Wave® devices : By **tapping on the icon** any of the devices you can turn on or off (open/close) provided they are actionable devices (e.g. power switches) and by **tapping elsewhere** on any

of the device rectangles you can get a more complete listing of the device's functionalities (e.g. readings from a multi-sensor). Actionable devices are recognisable by the fact their icons are in a rectangular form, whereas the icons of non-actionable devices (e.g. sensors) are inscribed in a circle as shown below.



Actionable Z-Wave® device



Non-actionable Z-Wave® device

A- LIVE VIDEO STREAM

The video window on the Room Screen shows the live video feed from the camera with a time/date stamp along the top edge.

When tapping once on the screen the following video functionality icons will appear :



This icon enables you to set and go directly to up to **five preset** pan and tilt angles, thus avoiding the difficult-to-predict outcome of re-orienting the camera by moving your finger on the screen



Video recording button. If you tap on it, the central dot will turn red to indicate that your SwiidCam+™ is recording



Tap for screenshot



Tap to get your SwiidCam+™ to sound alarm for around 10 seconds



Tap to turn on and off two-way voice over IP. Cursor will appear to allow setting of sound volume.



Display or hide black bands on top and bottom of the video window

B- MANAGING THE IP CAMERA

On the Controller Screen, you will see the following icon in the top right-hand side :



Tap to go to the **Gateway Settings** of your SwiidCam+™ which include :

- Cam name, ID and icon
- Stream settings
- Fixed vs. live icon
- Video settings
- Alarm notification
- Camera settings

Tap on various options and follow on-screen instructions to change settings and in case of doubt please consult <http://www.swiid.com/en/ZCAM1-AS.pdf>. Video password is shown as "••••••", but cannot be modified from this screen.

C- ADDING A COMPATIBLE IP CAMERA

To add an IP camera to the network of your SwiidCam+™, tap on the circled "**Cameras #**" on the left part the Controller Screen of your SwiidCam+™ (below the camera icon in the big circle). This will take you to the Multi-Camera Screen. Tap on the small circled "+" in the upper right-hand corner and you will land on the same screen as in Step 4 of the installation of your SwiidCam+™ (Section IVa hereof). Follow the steps described in Section IVa for the new camera.

Only compatible IP cameras can be installed, but they do not need to have Z-Wave® capabilities as they would be redundant. Compatible IP cameras include those from our Taiwanese partner StarVedia, namely the IC711, IC717, IC722, the IC731 and IC727. Only one camera per room is allowed and only one per home can be used as a gateway (Z-Wave® primary controller).

D- ADDING OR DELETING "HOMES"

It is possible to add on your SwiidCam View+™ app additional SwiidCam+™ devices, each with its own independent Z-Wave® network (i.e. additional homes). To do this, return to **Home Screen** and tap on the circled "+" in the top right-hand corner of the screen. You will land on the same screen as in Step 3 of the installation of your SwiidCam+™ (Section IVa hereof). Follow the steps described in Section IVa for the new SwiidCam+™.

To delete an existing home, go to the Home Screen and simply drag and drop the circle with the home to be deleted into the trash can icon and confirm deletion by tapping "**OK**" in the pop-up box.

E- PLAYING BACK RECORDED VIDEO STREAMS

On the Controller Screen, you will see the following icon in the top right-hand corner :



Tap to go to the **Playback options** of your SwiidCam+™ which include :

- Local
- SD card (micro)
- Time-Lapse Recording
- Dropbox
- NAS
- Event History

Follow on-screen instructions to play back video and events.

VII - RESETTING THE SWIIDCAM+™

A- PRESSING THE RESET BUTTON

To reset the non-Z-Wave® part of your SwiidCam+™, press for around 5 seconds the reset button on the bottom part of the camera sphere (below the WPS button) with a paper clip or other pointed instrument. This will reset the non-Z-Wave® part of your SwiidCam+™ to its factory settings and terminated all Wi-Fi connections.

B- REBOOTING THE SWIIDCAM+™

To reboot the non-Z-Wave® firmware your SwiidCam+™, proceed as follows :

1. Tap on the small circle "⊖" (Gateway Settings) on the upper right-hand side of the Controller Screen
2. Then tap successively on "Gateway Settings" (2nd) > "Admin" > "Reboot"

Careful : when pressing the reset button or when rebooting your SwiidCam+™, the Z-Wave® settings will be preserved and may need to be reset separately as described in the next paragraph.

C- RESETTING THE Z-WAVE® FUNCTIONALITIES

To reset the Z-Wave® settings of your SwiidCam+™ to their original factory status, proceed as follows :

1. Tap on the small circle "⊖" (Gateway Settings) on the upper right-hand side of the Controller Screen
2. Then tap successively on "Gateway Settings" (2nd) > "Admin" > "Z-Wave Administrator" > "Z-Wave Reset"

Resetting the SwiidCam+™ Z-Wave® settings will result in its taking on a new randomly generated Home ID.

Careful : This Z-Wave® resetting will result in the nodes in the network being orphaned and it will be necessary after the reset to exclude all the nodes before re-including them in a network with a new Home ID.

If the SwiidCam+™ is being used as a secondary controller in the network, then this reset procedure should only be used once it has been excluded from the network, except of course if such exclusion is not feasible (e.g. if the network's primary controller is missing or otherwise inoperable).

Resetting the SwiidCam+™ Z-Wave® functionalities will however not delete the IP camera settings.

VIII - OTHER Z-WAVE® FEATURES

Your SwiidCam+™ offers a number of other Z-Wave® features. The main ones are described below and additional ones can be found under <http://www.swiid.com/en/ZCAM1-AS.pdf>.

A- USING YOUR SWIIDCAM+™ AS A SECONDARY CONTROLLER (Learn Mode)

Although it is intended for use as a primary Z-Wave® controller, your SwiidCam+™ can be made to work as a secondary controller. In order to do so, the first task will be to get your SwiidCam+™ included into the network of your primary Z-Wave® controller (i.e. substituting the Home ID of the primary controller for its own Home ID). To do this, proceed as follows:

1. Got to the Controller Screen of the SwiidCam+ View™ app onto your smartphone or tablet
2. Tap on the small circle "⊖" (Gateway Settings) on the upper right-hand side of the screen

3. Then tap on successive screens "Camera Settings", "Admin" > "Z-Wave Administrator"
4. Put the primary Z-Wave controller in the **inclusion** mode (see user's manual of the controller)
5. Tap on "Z-Wave Learn Mode" and the inclusion process will begin by replicating node information from the primary controller onto your SwiidCam+™

B- EXCLUDING YOUR SWIIDCAM+™ FROM A Z-WAVE® NETWORK

Exactly the same as for the inclusion described in Section A above, except that in Step 4 the primary Z-Wave controller must be put into in the **exclusion** mode.

C- ASSOCIATIONS

In Z-Wave speak, an "**association**" means that, within a Z-Wave® network, one node (i.e. device aka "Source Node") is programmed to control directly one or several nodes ("Destination Nodes") whenever the status of the status of the first node changes (by being triggered or operated), **without** needing to pass through the Z-Wave controller.

Your SwiidCam+™ cannot create associations between other devices in its Z-Wave network, but instead scenarios can be created to the same effect, **except that** these will only work if your SwiidCam+™ is on and working correctly.

When acting as a secondary controller, your SwiidCam+™ is required - like all Z-Wave Plus devices - to support associations on the Lifeline (Group 1) as a Source Node. Group 1 is called the Lifeline group because important "lifeline" information about your SwiidCam+™ are sent as notifications to that group's Destination Nodes.

IX - OTHER SWIIDCAM+™ FEATURES

Your SwiidCam+™ offers a number of other webcam features. These include :

- **Video stream settings** : Bandwidth, resolution, frame rate and microphone
- **Video settings** : Colour, brightness, sharpness, low-light sensitivity, indoor/outdoor, image quality, time display on image and video flip
- **Night mode control** : auto/manual and time schedule
- **Information** : includes firmware version, IP address, MAC addresses and other information concerning the IP webcam of your SwiidCam+™
- **Network** . Wi-Fi network configuration (as well as wired network configuration if using LAN connection)
- **Sensor & record settings** : Video recording on SD Card, NAS or Dropbox, speaker alarm and push alarm notifications (briefly covered at the end of Section V above), time-lapse recording parameters and camera sensor sensitivity
- **Admin settings** (requires administrator status by the end user) : Admin login, LED control, date and time, firmware upgrade, reboot and Z-Wave® administration (including Z-Wave® reset)
- **Playback function** : Already described in Chapter VI-E
- **Chart recordings** . Viewing of charts showing the values over time (per day or per month) reported by the various Z-Wave® sensors connected to the SwiidCam+™ : temperature, humidity, luminosity, power consumption

A description of these additional features and how to configure them can be found under <http://www.swiid.com/en/ZCAM1-AS.pdf>.

X - WHAT IS Z-WAVE?

Z-Wave is a bidirectional radio communication protocol designed specifically for controlling, operating and monitoring home automation equipment : lighting, heating, security, etc.

The Z-Wave protocol utilizes an optimized technology for weak bandwidth radio communications (9-100 kbps) around the 900 MHz band (868.4 MHz in Europe) and does not interfere with wireless receivers operating in 2.4 or 5.0 GHz (Wi-Fi, Bluetooth, ZigBee®).

The range of the Z-Wave signal is approximately 50m (higher outdoors and lower indoors). However, the Z-Wave technology automatically and dynamically creates a "**mesh network**" between the various Z -Wave® devices that compose it and each of these devices becomes itself a repeater. This enables connections between devices that are not within direct range of each other.

Each Z-Wave network has its own identifier (Home ID), which enables multiple Z-Wave networks in a single location to operate completely independently and without interfering with each other.

The main advantage of the Z-Wave radio protocols over mesh network competitors such as ZigBee® is the complete **interoperability** between the various Z-Wave devices from different manufacturers.

This interoperability is guaranteed by a specific Z-Wave certification process which is performed by companies approved by Silicon Laboratories Inc., which itself is the owner of the Z-Wave name and technology, and by the Z-Wave Alliance, which was created in 2005 to bring together all the stakeholders in the Z-Wave ecosystem.

By year-end 2017, the Z-Wave Alliance has more than 700 members and more 2400 products have been Z-Wave certified. It is estimated that, as of year-end 2017, more than 94 million devices using the Z-Wave technology had been sold worldwide.

XI - Swiid® / CBCC DOMOTIQUE

Swiid® is a registered trademark of **CBCC Domotique SAS**, a French limited liability company, incorporated in Paris under the Commerce Registry number 791 884 125 and having its registered address at 27 avenue de l'Opéra, 75001 Paris, France

WARRANTY

CBCC Domotique SAS (as defined in the next section and hereinafter referred to as the "Supplier") warrants to the original purchaser for a period of twelve (12) months from the date of purchase or delivery (whichever is later) that the present device is free from material defects in materials and workmanship and undertakes, subject to continuing availability of the device, to supply at its cost a new device to replace any malfunctioning or otherwise defective device. In no event, shall the Supplier refund any monies paid for the device.

Warranty claims must be filed by using the form provided on the Supplier's website (www.swiid.com/en/contact.html) and completing it in full and sending us (against refund) the defective device and a copy of the proof of purchase (with the date of purchase or delivery date!). Warranty claims made more than thirty (30) days after the occurrence of the event giving rise to the warranty claim and claims made without following the procedure set out above shall not be admissible.

The present warranty shall **NOT** cover, whether for damages to the device itself and for consequential damages, faults not resulting from a material or manufacturing defect on the device, including but not limited to:

- Accidents, actions of civil or military authority, civil disturbances, war, strikes, fires, floods or other catastrophic events ;
- Installation or operation of the device other than in conformity with the present Installation and User's Guide ;
- Devices which have been repaired or modified by any person not duly authorised to do so by the Supplier ;
- Damages caused by (i) software utilized directly or indirectly by the device's owner or user, (ii) computer viruses or other malware attacks or (iii) failure to implement any firmware updates supplied without charge by the Supplier ; and
- Damages caused by power surges, by improper connection to the power grid or by using unauthorised accessories
- The present warranty shall be governed by the laws of France.