WiFi Series configuration

Air Conditioning

Configuration process for the WiFi series product
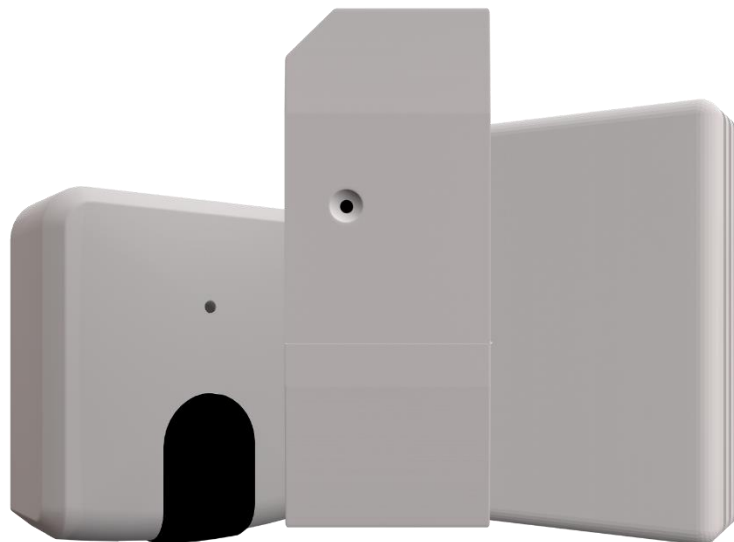
Important User Information

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URL　https://www.intesis.com

Configuration process for the WiFi series products.

ORDER CODE	LEGACY ORDER CODE
INWMPDAI001I000	DK-AC-WMP-1 (IBWMPDAI001I000)
INWMPDAI001R000	DK-RC-WMP-1 (IBWMPDAI001R000)
INWMPFGL001I000	FJ-AC-WMP-1 (IBWMPFGL001I000)
INWMPFGL001R000	FJ-RC-WMP-1 (IBWMPFGL001R000)
INWMPMHI001I000	MH-AC-WMP-1 (IBWMPMHI001I000)
INWMPMHI001R000	MH-RC-WMP-1 (IBWMPMHI001R000)
INWMPMIT001I000	ME-AC-WMP-1 (IBWMPMIT001I000)
INWMPPAN001I000	PA-AC-WMP-1 (IBWMPPAN001I000)
INWMPPAN001R000	PA-RC2-WMP-1(IBWMPPAN001R000)
INWMPLGE001R000	LG-RC-WMP-1 (IBWMPLGE001R000)
INWMPTOS001R000	TO-RC-WMP-1 (IBWMPTOS001R000)
INWMPUNI001I000	IS-IR-WMP-1 (IBWMPUNI001I000)

WiFi series configuration manual

1. Presentation

The Intesis WiFi gateways allows an easy Air Conditioner integration in any kind of control and monitoring system using a simple IP Protocol.

This range of products are specifically designed for home and building automation manufacturers or integrators interested in offering a control solution for the Air Conditioning system, allowing them to create a simple driver for their Home Hubs controllers.

Main features:

- Control and monitor: On/Off, Mode, Set Temp., Room Temp., Fan Speed, Vane Position.

- Power supply directly from the AC system[1].

- Does not require cable installation between the Air Conditioner & the Home Controller.

- Easy creation of new drivers for any Home Controller thanks to the easy IP protocol.

- Possibility to auto-discover the WiFi devices installed in the WiFi network.

- Easy installation: Hidden inside the AC unit, on the wall or over the desktop.
  Check your installation manual for more information.

- Automatic firmware updates through the configuration tool.

- WiFi configuration allows Dynamic IPs or Static IPs.

- AC unit status and monitoring.

- Available controls:

Control	Universal	Specific
On/Off	✔	✔
Mode	✔	✔
Set point	✔	✔
Room temperature	✔	✔
Fan speed	✔	✔
Vanes	✔	✔
Signal error	X	✔
Error code	X	✔
Others	X	✔

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[1] Only the INWMPUNI001I000 may need an external power supply. The AC/DC converter, with connection to EU, UK, US and AU plugs is provided by Intesis along with the device.

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2. Installation

For the product installation, please follow the steps given in the installation guide or refer to this web page for additional information: https://intesis.com/products/ac-interfaces/wifi-gateways

3. Device configuration and setup

Device factory settings is WiFi access point. WiFi access point means that the device generates their own WiFi network, so your PC or smartphone can connect to it. Once connected, you can access to device settings by using a web browser and configure the WiFi network that the device will use. All this process is easily done in two steps.

3.1. Device configuration via webbrowser (via PC or smartphone)

From now on, the whole process is explained as if the integration is being done from a PC but can be extended as if a smartphone were being used instead.

3.1.1 STEP 1: Connect to WiFi network

The device WiFi network should be visible after a few seconds once the device is powered. It is possible to identify the WiFi network of the device by its SSID name (WiFi network name):

DEVICE_XXXXXX

where "***XXXXXX***" corresponds with the last 6 characters of the device MAC address (MAC address is available in a silver sticker on the box, on device manual and on the device itself).

In the following screenshot you can see an example at doing a WiFi network scan and how this network may be found. As the network is an open network, no password is required.
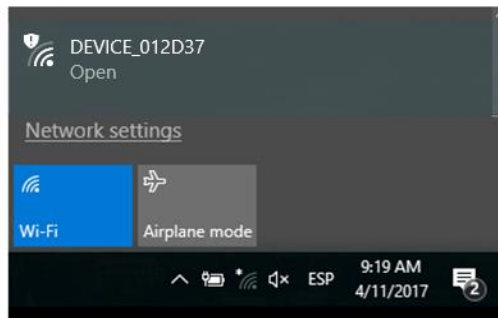

#### 3.1.2 STEP 2: Configure your local WiFi network in the device

We are referring as *local WiFi network* as the WiFi network to which the device will be connected to. Next step is, hence, to configure this network in the device.

To do this, once your PC connected to device WiFi network as explained in step 1, open a web browser and access to the device configuration settings, available in the following IP address:
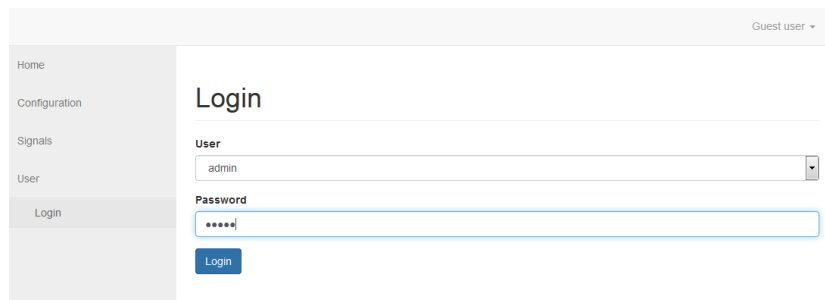
192.168.10.1
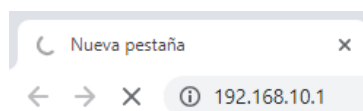
After loading the page, you will have accessed to the device main page. In this case, no login was still performed so you will be logged as a *guest* user. You can see current user active on the top-right side of the **webpage**.
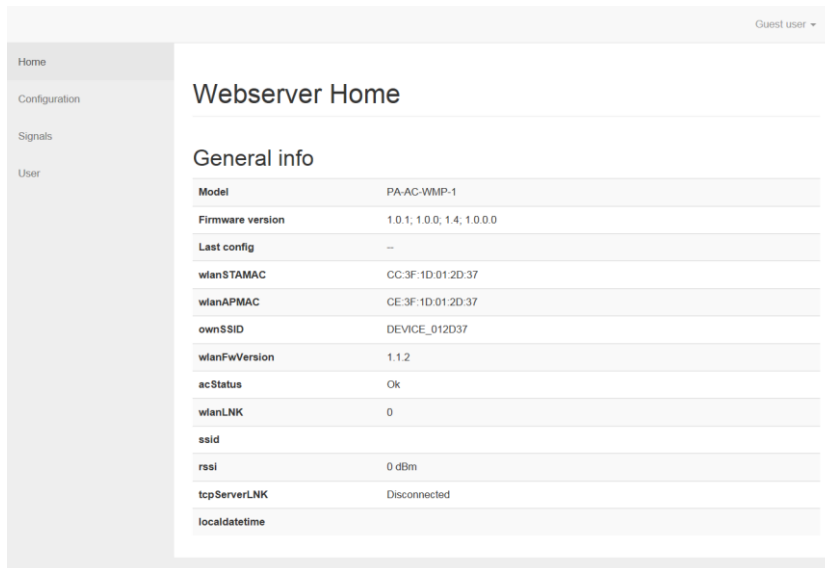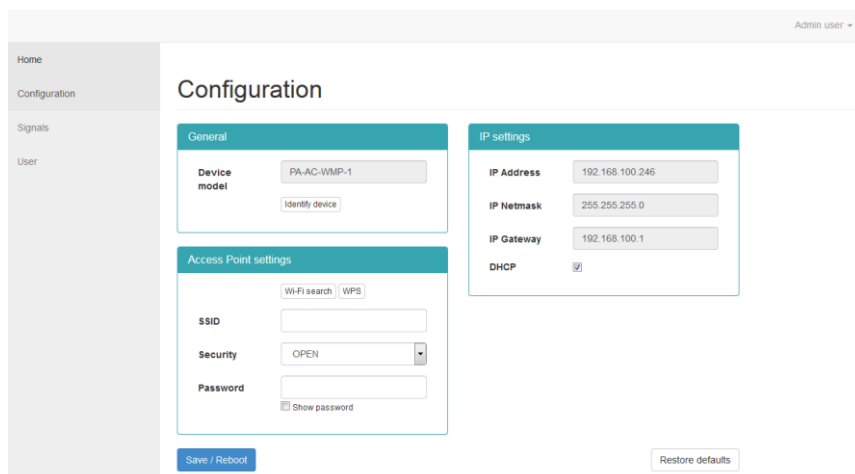
Log in by clicking on *User* section:

Login as administrator by using the default credentials. Admin user is required to access to WiFi configuration:

- User: **admin**
- Password: **admin**

Once logged as admin, go to section *Configuration*.

In this section you can find the WiFi networks in *Access Point settings*. But before going to the configuration side, all information on this view is explained:

URL | https://www.intesis.com

General

It indicates the model of the device and offers an identify device function. Clicking on this button, it will make the LED of the device blink white for a few seconds.

IP settings

It allows configuration of IP parameters of the device, which will take effect when connected to a certain WiFi. Parameters **IP Address**, **IP Netmask**, **IP Gateway** and **DHCP** can be changed in this section.

Access Point settings

It allows to configure your local WiFi network. This network must be reachable from device's location (WiFi coverage good enough).

This configuration may be done in different ways: **WiFi search**, were you can explore the WiFi networks available and select the one desired (recommended), **Manual configuration**, for hidden SSID, and **WPS**, for a quick setup. In the last choice consider safety recommendations regarding to the WPS usage of a private WiFi network.

WiFi search

Click 'Wi-Fi search' to use this function. Scan may take up to 45 seconds and the results appear in a list:

Your desired local Wi-Fi network must be visible in the list. Once located, click "select" to move to the next step.
In the next step you can include the corresponding password for selected network. Include it and click **Save / Reboot**.

Manual configuration (hidden SSID)

SSID, Security standard and Password can be entered in corresponding fields of Access Point settings section. This allows for connection to Wi-Fi networks with hidden SSID.

To end the process, button **Save / Reboot** must be pressed.

WPS

This function is available by clicking **WPS** button. Once pressed, WPS procedure will start and a dialog window will appear providing further instructions to complete the process.

Applying WiFi configuration

Once the device starts to apply the local WiFi network, the following page will be displayed. At the end of the sequence, once the device is successfully connected, LED will remain OFF:

URL https://www.intesis.com

Home

Configuration

Signals

User

Configuration success

Changes saved

If connection has been successful, device's LED will start the sequence shown below. If the device's LED follows the sequence indicated, the wifi configuration process have been finished properly.

Green Steady	>	Green Blinking	>	Yellow Blinking	>	Red Blinking	>	Off
Not configured		Checking		Configuring		Connecting		Connected & working

If the device is not following the proposed sequence and does not work properly, please check the LED status table below.

LED Color(s)	Behavior	Description
Blue	Blinking	Performing WPS connection (up to 2 min)
Green	Steady	Not configured
Green	Blinking	Checking device configuration parameter values (up to 2 min)
Red	Blinking	Connecting to access point and server (up to 2 min)
Yellow	Blinking	Downloading configuration. Wait (up to 2 min)
Red/Green	Alternate blinking	Error Connecting to Access point or router. Try to connect again and make sure you write the correct password
Yellow/Green	Alternate blinking	Server not reached. Check if there is Internet connectivity on your Access Point or router

If problem still persists, please check the device's installation manual.

If process does not finish properly (LED is not OFF), the configuration process failed in some point (for example, wrong password used or others).

In this case, it is necessary to repeat the configuration process. Before initializing this process, it is necessary to do a factory recovery in the device, which will move the device back to WiFi access point. To proceed, press and hold the device button for 10s. Device's LED will blink green and go to steady green. At this point, device is back to WiFi access point (DEVICE_XXXXXX) and configuration process can be initialized.

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3.2.   *Device configuration via WMP-CONFIG (via PC)*

WMP-CONFIG is a Windows compatible tool developed specifically to monitor and configure Intesis WMP series gateways. A unique configuration tool is used for all the WiFi serie products. The tool can be downloaded from:

<u>https://intesis.com/products/ac-interfaces/wifi-gateways</u>

Install the software and open it. The devices present in the network will appear automatically on the left column with some general information. Discover process may take up to 1 minute.

Device name changes into blue when a correct connection is stablished. If the connection is lost, it changes into red.
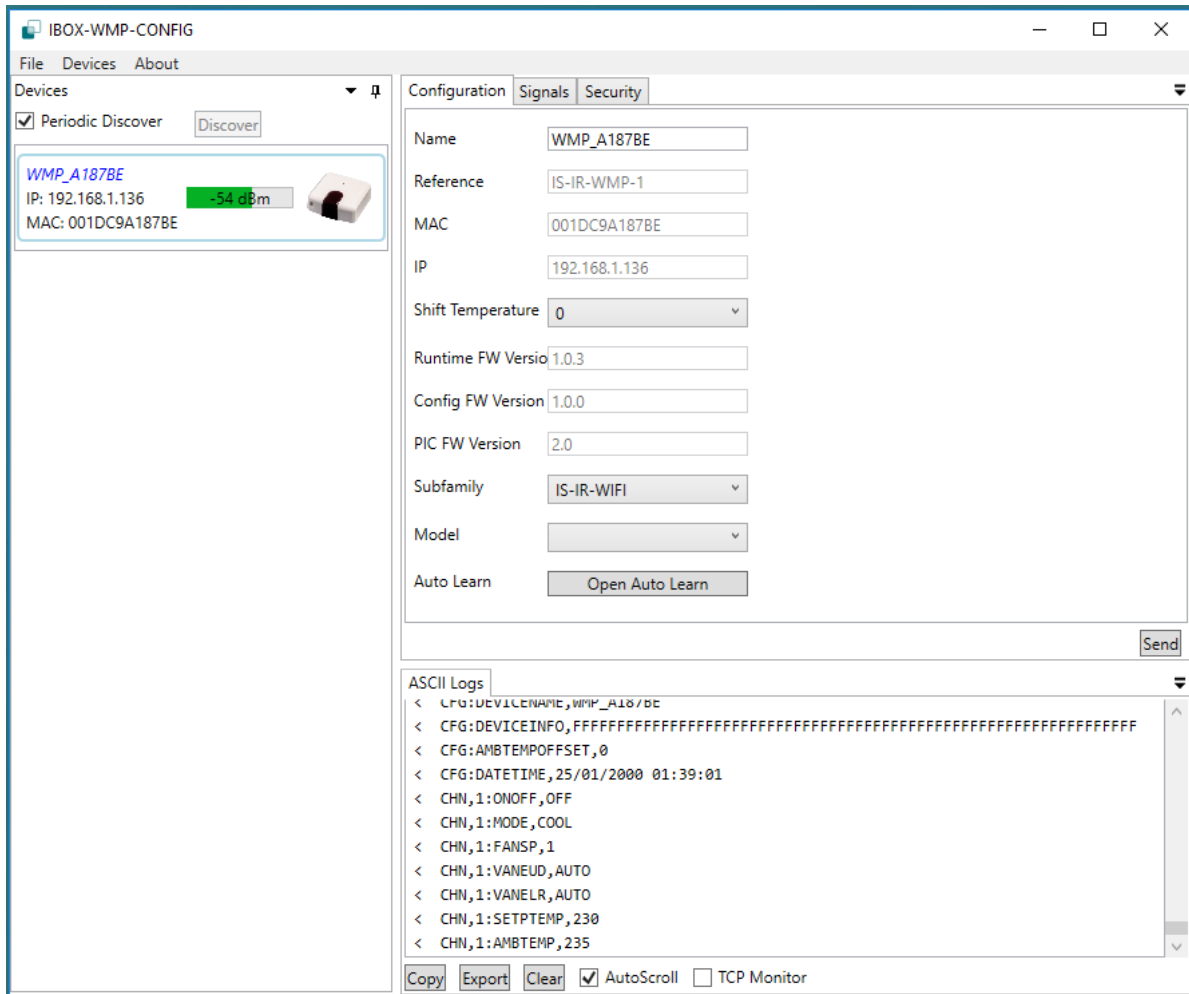
3.2.1   Device firmware update

If the device detects a new firmware available, the following window will appear automatically
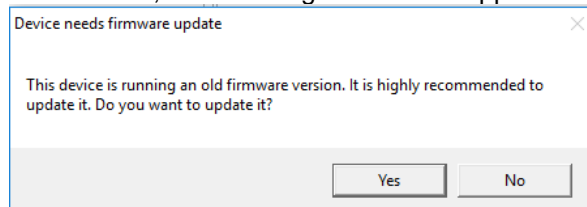
During the firmware update, the device might disappear from the list or the name might change into red. Once the process finishes, device restarts and after a few seconds will be available in the list.

URL https://www.intesis.com

3.2.2   Configuration

The configuration window displays general information of the product: name, reference, MAC, IP address…

Shift Temperature parameter allows to define a correction in the measurement of the ambient temperature. A value from -5 to 5 ºC can be selected. This is a useful option when the device is installed close to some heat/cool source and the measurement of the ambient temperature does not match with the real one.

Only for INWMPUNI001I000 product you can find **Subfamily**, **Model** and **Auto Learn**. These three fields allow the configuration of a specific IR remote. It can be selected manually or be discovered automatically by using auto learn.

### 3.2.2.1   Auto Learn (only for INWMPUNI001I000)

Auto learn function is available for INWMPUNI001I000 products with the firmware version 1.0.3 or newer. This function allows to identify the infrared remote control automatically by only sending a command pointing to the WMP device.

This function requires internet access. Accordingly, INWMPUNI001I000 must be connected to a WiFi network with internet connection.

To initiate the function, press **Open Auto Learn** and follow the instructions given in the pop-up window:
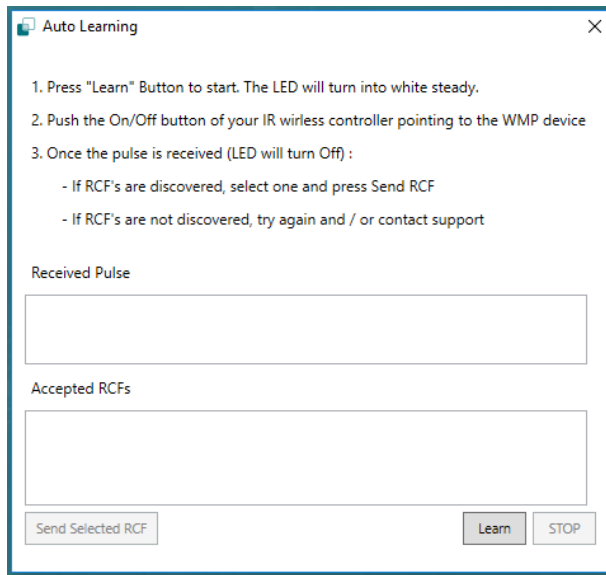
If RCF's are discovered, they will appear in the "Accepted RCF's" section:
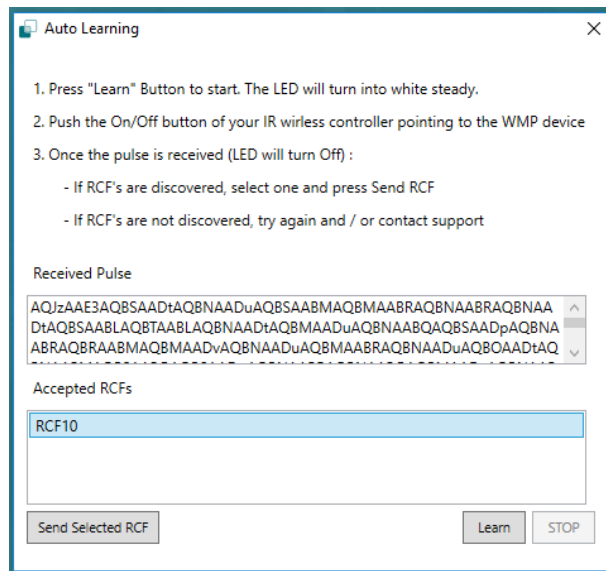
Finally, once the correct RCF is selected from the list, press **Send Selected RCF** and automatically **Subfamily** and **Model** will be filled according to your remote.

If there were any error during this process, please, refer to the different sequences explained in **4 AUTOLEARN FUNCTION THROUGH DEVICE BUTTON (ONLY INWMPUNI001I000)** section.

URL   https://www.intesis.com

3.2.3 Signals

Signals allows sending and receiving commands between the PC and the AC units. The current ambient temperature, error status and error code can be monitored.
It is a tool for testing and to be used during the commissioning stage.

3.2.4 Security

Security allows to generate a PIN code to access to product configuration and encrypt the communication.

Note: If any home automation driver is being used, please be sure the driver allows encrypted communication before creating any security.

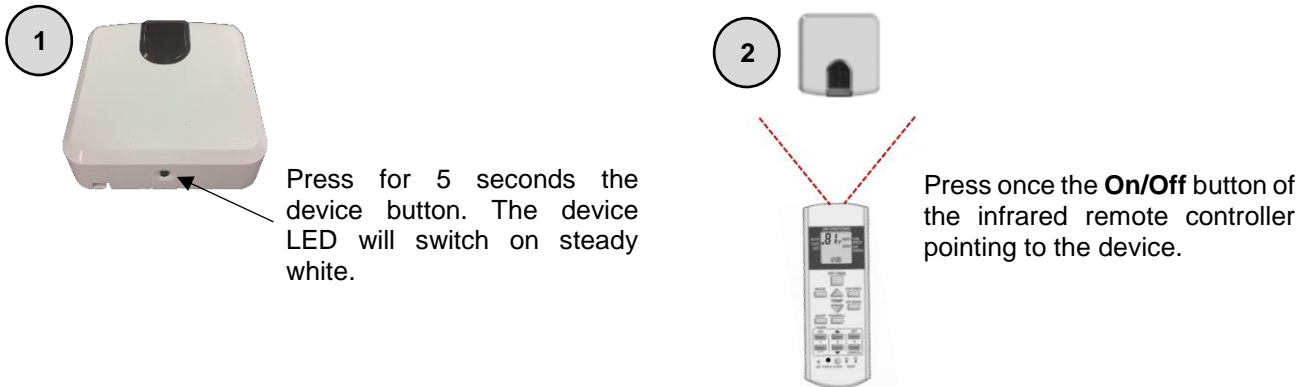### 3.2.5 ASCII Logs

ASCII traffic is displayed in this window. Here you can see the incoming and outcoming communication.

> **>** indicates the communication sent by the Intesis device
> **<** indicates the communication received by the Intesis device

# 4. AUTOLEARN function through device button (only INWMPUNI001I000)

Auto Learn function can be also launched by following this sequence:

1 Press for 5 seconds the device button. The device LED will switch on steady white.

2 Press once the **On/Off** button of the infrared remote controller pointing to the device.

After pressing the ON/OFF button towards the INWMPUNI001I000 device, there are **different sequences** that can result from this process:

4.1. Device configuration successful:

If the **Auto Learn** process follows this sequence, your device is ready for use. Colors refer to LED of the device.

**3** | **White Blinking** | **Green Blinking** | **OFF** ✓
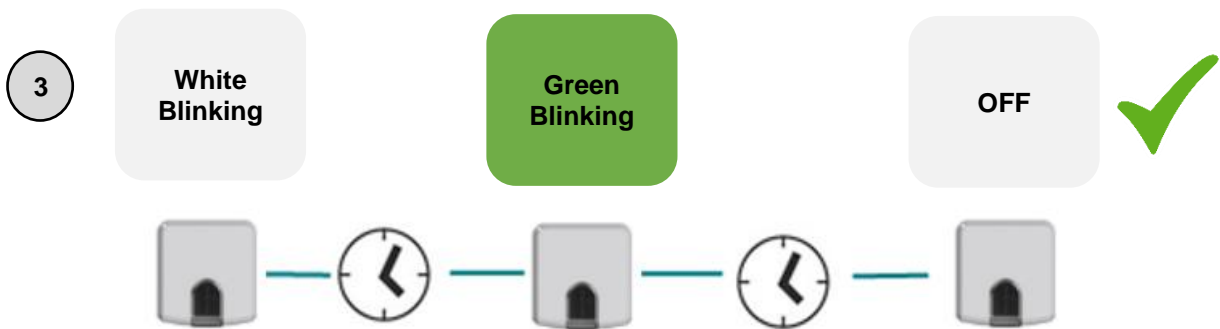
4.2. IR remote not recognized:

If the **WMP** device does not recognize the received command, the LED will follow the next sequence. To avoid any issue related to the installation, please repeat **Auto Learn** process. If the sequence remains the same, contact with our support department at:

3 | **White Blinking** | **Red Blinking** | **OFF** ✗
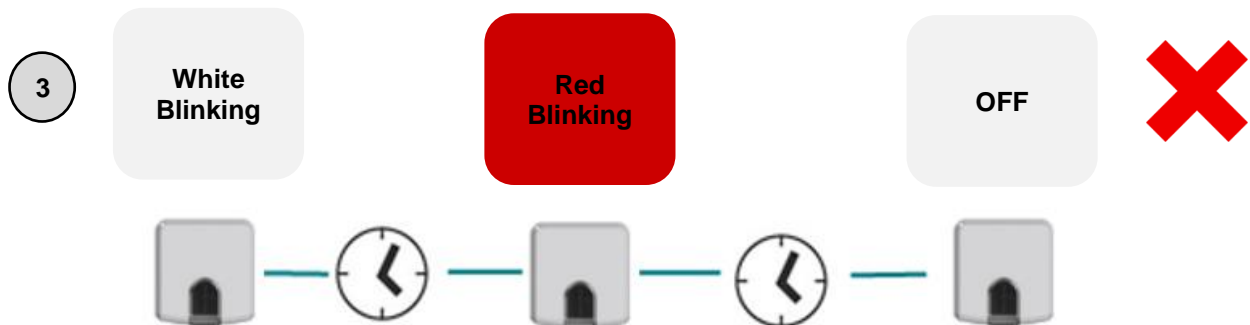
4.3. No internet connection

If the device has no Internet connection or the device lose the connection during the process, the device LED will follow this sequence:
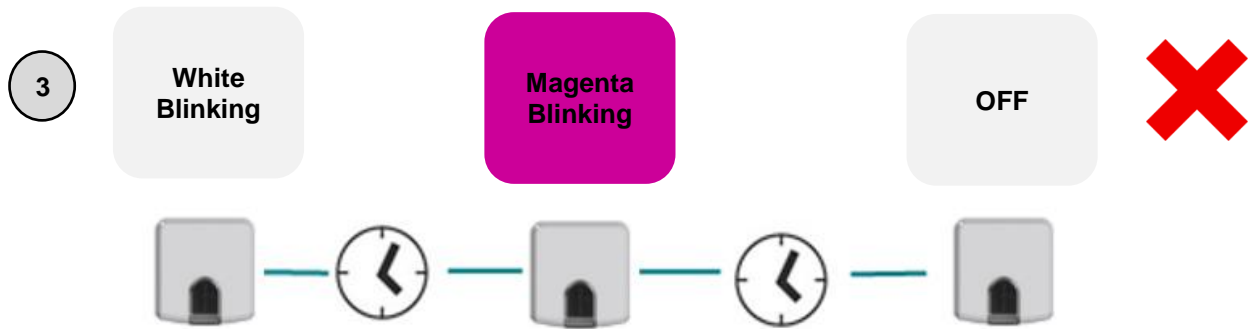
In this case, connect the device to a local WiFi network with accessible Internet connection or check the quality of the Internet signal.

URL   https://www.intesis.com

5. Compatible AC indoor units

A list of indoor unit model references compatible with the WMP products and their available features can be found in:

UNIVERSAL - INWMPUNI001I000:
https://www.intesis.com/docs/compatibilities/inxxxuni001i000_universal_compatibility

DAIKIN - INWMPDAI001I000:
https://www.intesis.com/docs/compatibilities/inxxxdai001xx00_compatibility

DAIKIN - INWMPDAI001R000:
https://www.intesis.com/docs/compatibilities/inxxxdai001rx00_compatibility

FUJITSU -INWMPFGL001I000:
https://www.intesis.com/docs/compatibilities/inxxxfgl001i000_compatibility

FUJITSU - INWMPFGL001R000:
https://www.intesis.com/docs/compatibilities/inxxxfgl001r000_compatibility

LG - INWMPLGE001R000:
https://www.intesis.com/docs/compatibilities/inxxxlge001r000_compatibility

MITSUBISHI ELECTRIC - INWMPMIT001I000:
https://www.intesis.com/docs/compatibilities/inxxxmit001ix00_compatibility

MITSUBISHI HEAVY INDUSTRIES - INWMPMHI001I000:
https://www.intesis.com/docs/compatibilities/inxxxmhixxxx000_compatibility

MITSUBISHI HEAVY INDUSTRIES - INWMPMHI001R000:
https://www.intesis.com/docs/compatibilities/inxxxmhi001rx00_compatibility

PANASONIC - INWMPPAN001I000:
https://www.intesis.com/docs/compatibilities/inxxxpan001ix00_compatibility

PANASONIC - INWMPPAN001R000:
https://www.intesis.com/docs/compatibilities/inxxxpan001rx00_compatibility

TOSHIBA - INWMPTOS001R000:
https://www.intesis.com/docs/compatibilities/inxxxtos001rx00_compatibility

URL https://www.intesis.com

6. Home automation drivers available

Drivers are common for all WMP devices. You can download your specific driver from the following links or by accessing to your product webpage:

[Link to AMX Driver](#)

[Link to Crestron Driver](#)

[Link to Control4 Driver](#)

[Link to eedomus Driver](#)

[Link to Elan Driver](#)

[Link to iRidium Driver](#)

[Link to RTI Driver](#)

[Link to Vera Driver](#)

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