KSAIF0101AAA, KSAIF0201AAA, KSAIF0301AAA, KSAIF0401AAA, KSAIF0501AAA, KSAIF0601AAA

Wi-Fi Interface Kit for Smart Phone Control for Ductless Systems

Owner's Manual

Table of Contents

SAFETY CONSIDERATIONS

Installing, starting up, and servicing air-conditioning equipment can be hazardous due to system pressures, electrical components, and equipment location (roofs, elevated structures, etc.). Only trained, qualified installers and service mechanics should install, start-up, and service this equipment. Untrained personnel can perform basic maintenance functions such as cleaning coils.

When working on the equipment, observe precautions in the literature and on tags, stickers, and labels attached to the equipment.

Follow all safety codes.

Wear safety glasses and work gloves. Keep a quenching cloth and fire extinguisher nearby when brazing. Use care in handling, rigging, and setting bulky equipment.

Read these instructions thoroughly and follow all warnings or cautions included in the literature and attached to the unit. Consult the local building codes and National Electrical Code (NEC) for special requirements. Recognize safety information.

This is the safety-alert symbol  . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury. Understand these signal words: **DANGER**, **WARNING**, and **CAUTION**.

These words are used with the safety-alert symbol. **DANGER** identifies the most serious hazards which will result in severe personal injury or death. **WARNING** signifies hazards which could result in personal injury or death. **CAUTION** is used to identify unsafe practices which may result in minor personal injury or product and property damage. **NOTE** is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

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WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death. Before installing, modifying, or servicing system, main electrical disconnect switch must be in the **OFF** position. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning

WARNING

EXPLOSION HAZARD

Failure to follow this warning could result in death, serious personal injury, and/or property damage. Never use air or gases containing oxygen for leak testing or operating refrigerant compressors. Pressurized mixtures of air or gases containing oxygen can lead to an explosion.

WARNING

EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

OVERVIEW

For the utilization of the hardware provided in the Wi-Fi kits (**KSAIF0101AAA**, **KSAIF0201AAA**, **KSAIF0301AAA**, **KSAIF0401AAA**, **KSAIF0501AAA**, and **KSAIF0601AAA**), the homeowner/end user needs to download the mobile app.

Applicable Systems: iOS, ANDROID

IMPORTANT: It is recommended to use iOS 7.0, Android 4.0 or later.

NOTE:

- APP supports the latest software versions of the Android and iOS systems.
- Due to special situations that may occur, the manufacturer explicitly claims:
  - •Not all Android and iOS systems are compatible with the app. The manufacturer does not bear any responsibility for any issue that may result due to incompatibility.

WIRELESS NETWORK TYPE

The Wi-Fi kits are only supported by WPA-PSK/WPA2-PSK encryption and no encryption. WPA-PSK/WPA2-PSK encryption is recommended.

CAUTION

Check the router website for more information. Due to different network configurations, the control process may occasionally return a time-out. If this situation occurs, attempt to use the app or function inside the app again.

NOTE: Try using the app or function within the app 2-3 times before reconfiguring the app.

If unsuccessful, reconfiguring the app may be necessary. Additionally, it may be necessary to configure the network again. If the time-out error continues, reinstall the APP and check your network connection. See “TROUBLESHOOTING” on page 23 for more support. If this situation occurs, the display between the board and app may differ.

NOTE: Manufacturer will not be liable for any issues and problems caused by the Internet, Wi-Fi Router and smart devices. Please contact the original provider for additional support.

DOWNLOAD AND INSTALL APP

Android Users: Go to Google Play™, search for the Carrier CliMate, Bryant ControlBox, Payne Panel, or Midea Air app depending on the type of equipment installed and download it.

iPhone Users: Go to the App Store ™, search for the Carrier CliMate, Bryant ControlBox, Payne Panel, or Midea Air app and download it.

NETWORK CONFIGURATION

CAUTION

Prior to starting the network configuration process, verify your Android or iOS device is connected to the Wi-Fi network you want to configure.
Ensure the Android or iOS device Wi-Fi function is turned on and auto-connects to your Wi-Fi network.

Important: During the network configuration process ('AP' mode), the air conditioning remote controller is unable to control the system. It is necessary to finish network configuration, cycle power, or wait eight (8) minutes for the system to time out to regain control.

USER REGISTRATION

Create an Account

1. Tap **Create Account** on the first screen when the app is launched for the first time (Fig. 1).

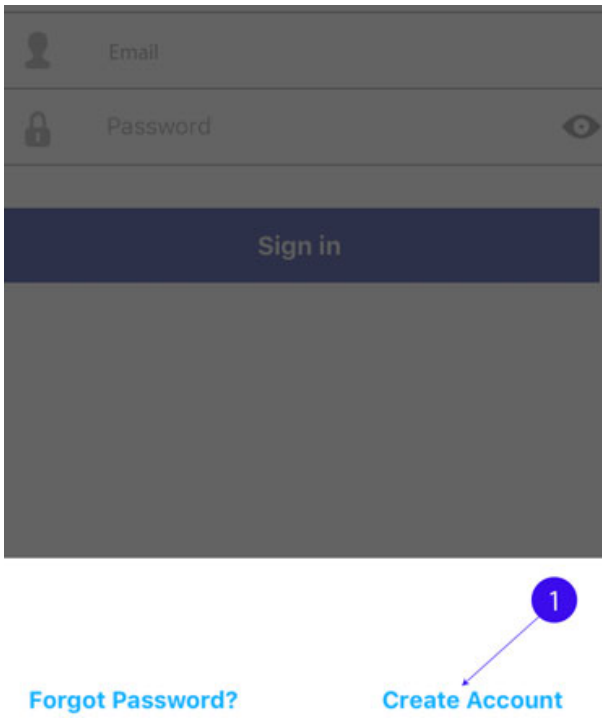


Fig. 1 — Registration

NOTE: Fig. 1 illustrates the generic app interface. The interface may vary depending upon the selected app.

2. Enter your **Email** and create a **Password** (Fig. 2).
3. Read and agree to the **Terms of Service**.

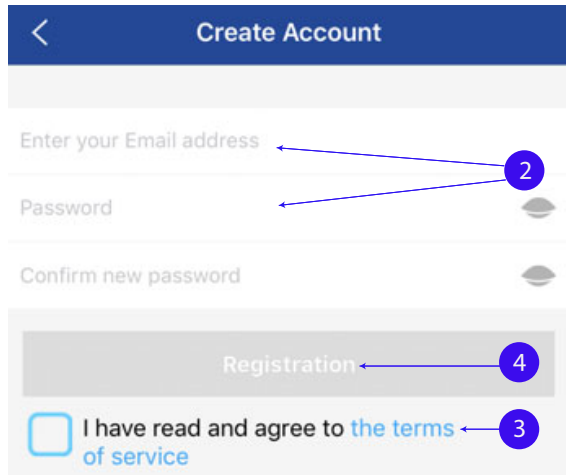


Fig. 2 —Tap Registration

4. Tap **Registration**.

MULTIPLE SMART PHONE DEVICE CONTROL

The app can run on multiple devices in a household. Simply download the app to other devices and sign in to the **SAME account** using the user name and password used to setup the system.

NOTE: Setting up the system again in a different smart phone device with a different user name will remove the unit from the first smart phone device.

CONFIGURATION PROCESS

1. Ensure your mobile device has already been connected to the Wi-Fi network you choose. It is recommended to select **FORGET ALL NETWORKS** except the one used to connect the fan coil to prevent configuration errors.
2. Disconnect the power supply from the Ductless system and wait thirty (30) seconds.
3. Reconnect the power supply to the Ductless system.
4. Open the app on your smart phone and log in using the previously configured email and password.
5. Select **Add Device**.

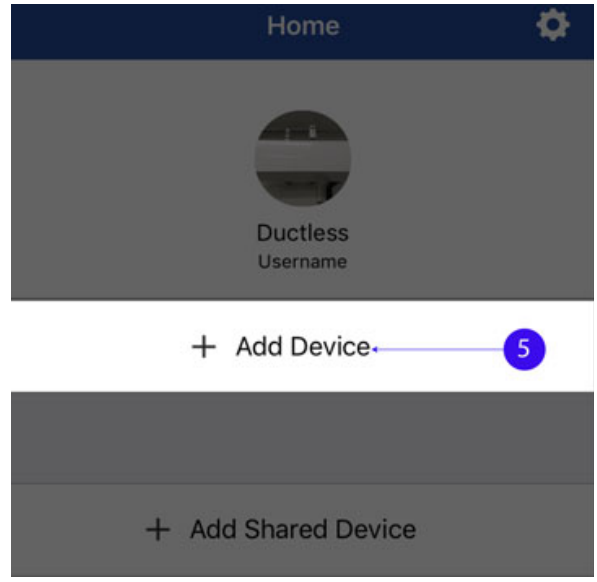


Fig. 3 — Add Device

6. On the screen's menu, select **Split-type AC** and follow the steps on the screen.

Use this method to eliminate the need to scan the QR code to complete the configuration.

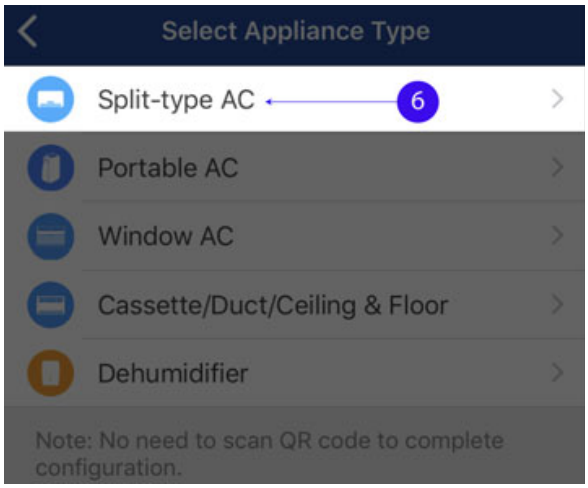


Fig. 4 — Select AC as the Method

7. Use the Wireless Remote Controller to press **LED** or **DO NOT DISTURB 7** times within **3** minutes. When the display shows '**AP**', the Ductless system is ready for network configuration. Once the indoor unit displays '**AP**' or the indoor unit beeps, tap **Next**.

NOTE: The ducted, cassette, and floor console displays does NOT display 'AP' during the network configuration.

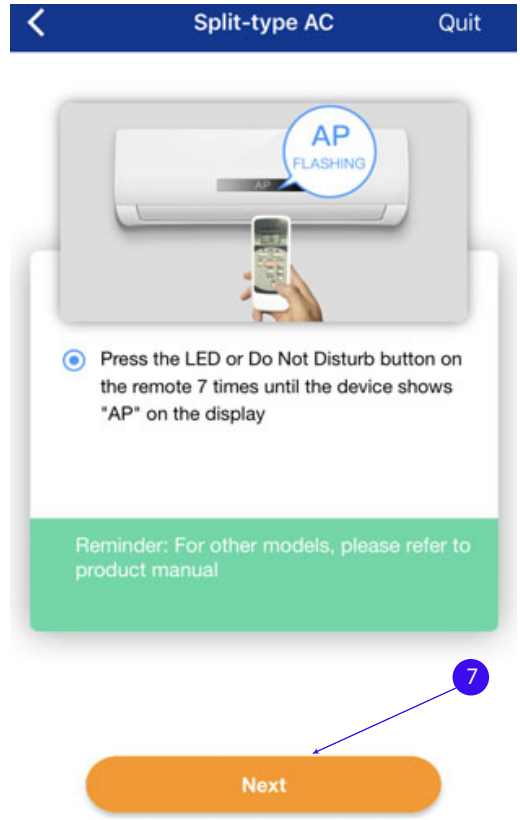


Fig. 5 — Split-type AC

8. On the mobile device go to **Settings > Wi-Fi**, and ensure Wi-Fi is turned on. Tap the name of the secure Wi-Fi network (**net_ac_XXXX**). Enter the password **12345678** then tap **Join**. Go back to the app and tap **Next**.

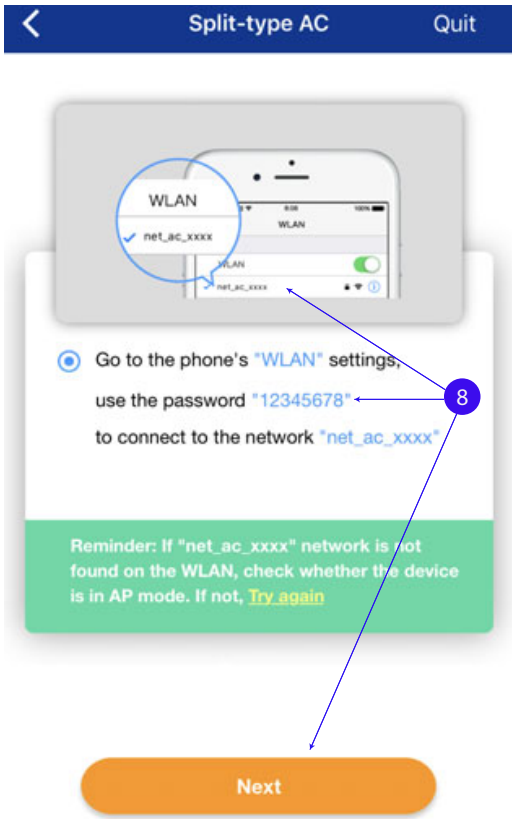


Fig. 6 — Select 'net_ac_XXXX'

9. Select the desired home Wi-Fi name and enter the Wi-Fi password. Press **Start Configuration**.

Fig. 7 — Select the Wi-Fi network

The system begins to configure based on the user's input. Once the connection is complete, a screen appears which allows the user to select the unit's name or to customize it.

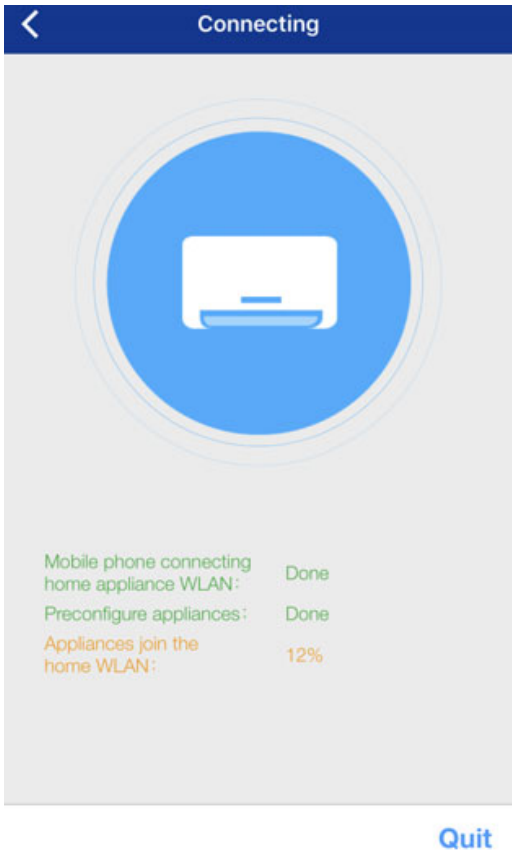


Fig. 8 — Configuration

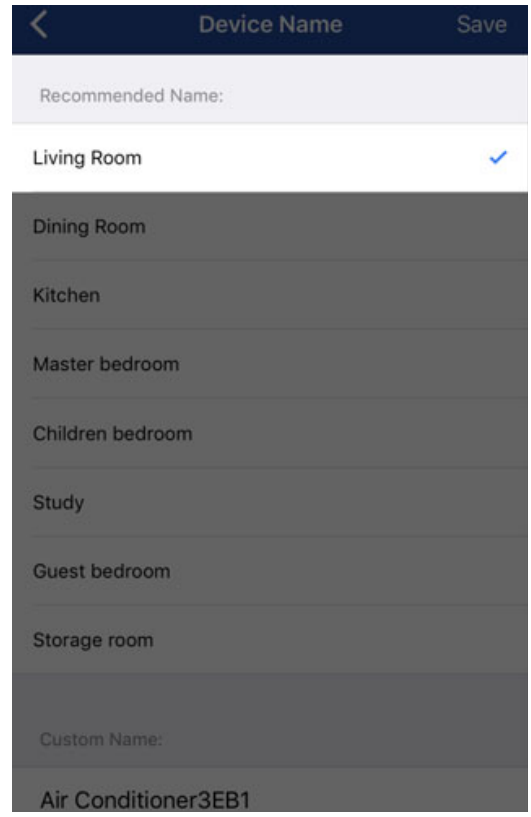


Fig. 9 — Select Device Name

NOTE: The app may take up to 3 minutes to configure the Wi-Fi kit for connectivity to your Wi-Fi network.

NOTES:

- When the network configuration is complete, the app confirms whether the connection was successful or not.
- Due to different LAN configurations, it is possible that the device status will display **"OFFLINE"**. If this occurs, refresh the device list by pulling down on the list shown on the app home screen or the ductless system power can by cycled and the device status changes to **"ONLINE"** after a few minutes.

HOW TO USE THE APP

Basic Functions

IMPORTANT: Prior to using the app, verify your mobile device and ductless system are connected to the Internet.

1. Log into the app using the previously configured email and password (see "USER REGISTRATION" on page 6).

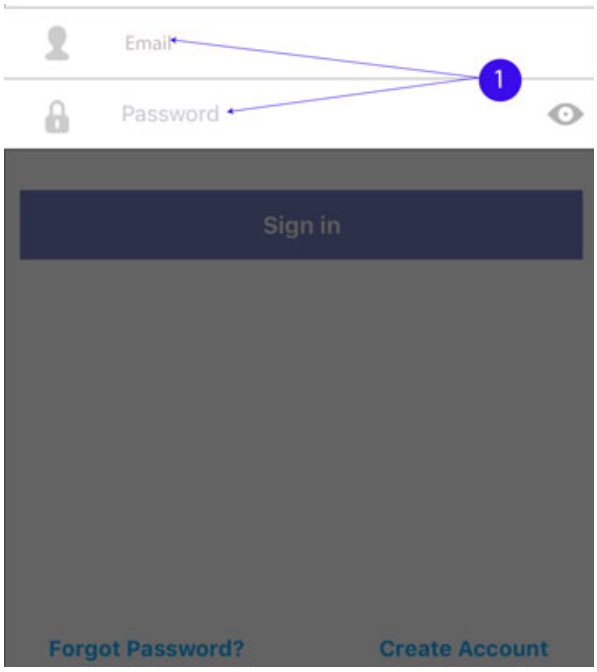


Fig. 10 — Log into the app

2. Select the desired device previously configured to enter the main control interface. To add a new device, tap + **Add Device** and follow the instructions.

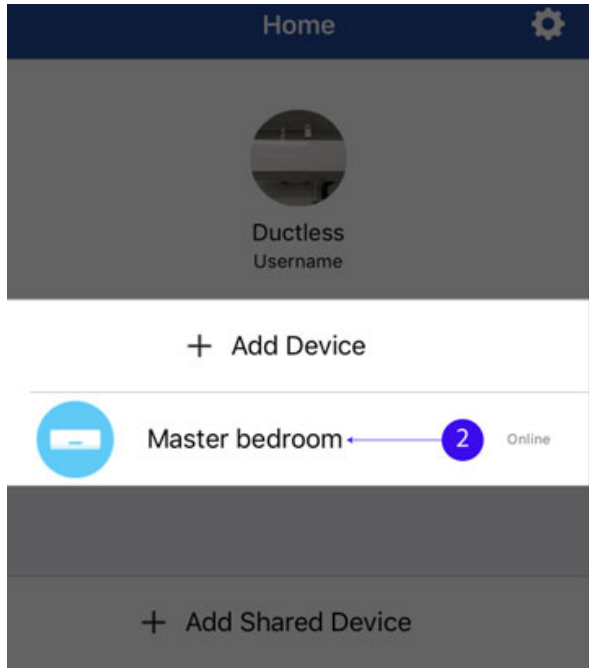


Fig. 11 — Select the system

MAIN CONTROL INTERFACE

3. From the **Main Control Interface** the user can control the ductless system's **ON/OFF** status, operation mode, temperature, fan speed, and other functions by touching the buttons at the bottom of the screen.

NOTE: Feature availability depends on the indoor unit type.

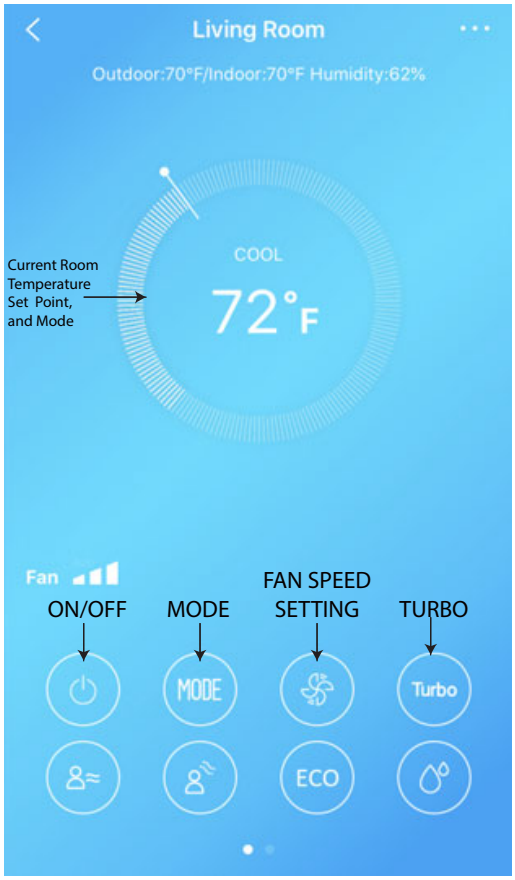


Fig. 12 — Main Control Interface

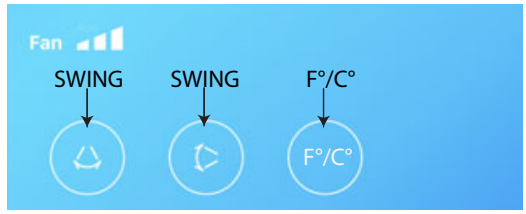


Fig. 13 — Main Control Interface

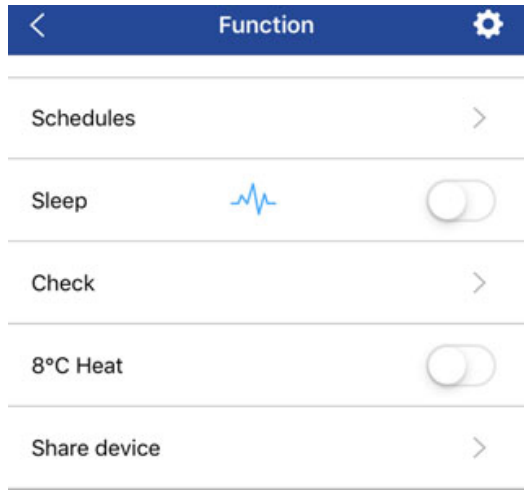


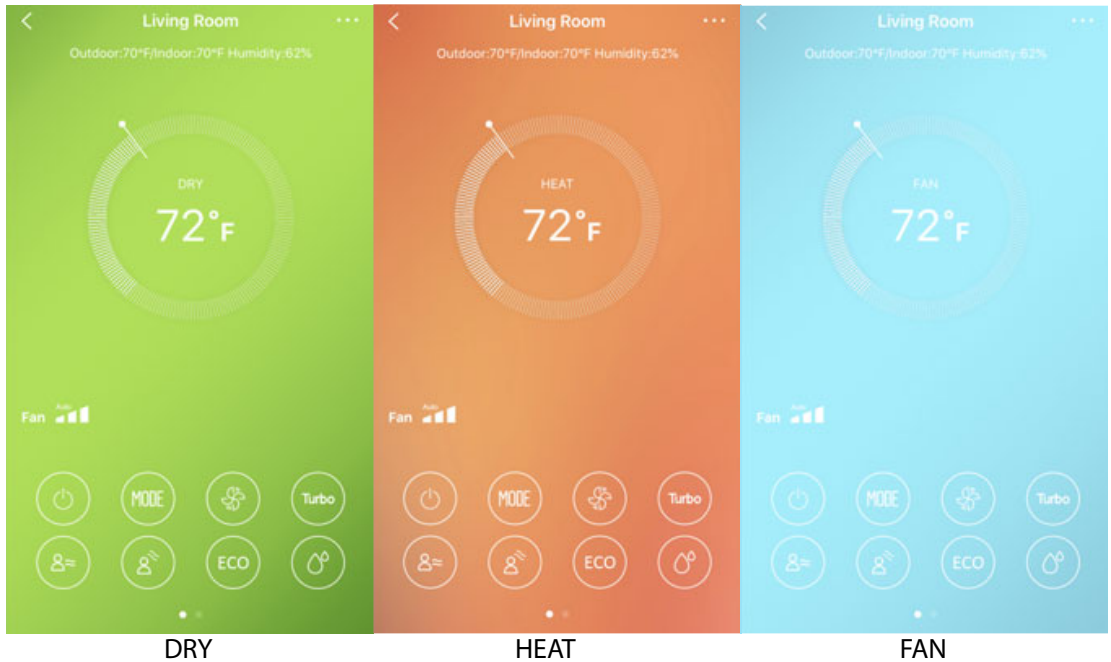
Fig. 14 — Main Control Interface

MODES

There are five (5) different modes available within the app: **AUTO**, **COOL**, **DRY**, **HEAT**, and **FAN**. When the user taps **MODE**, the Mode menu appears at the bottom. Once the mode changes, the screen's color changes depending on which mode is operational at the time.

AUTO COOL

Fig. 15 — Modes



DRY HEAT FAN

Fig. 16 — Modes

Important: When using the app to control the space setpoint and mode, the wireless or wired controller (where applicable) may not update with the settings from the app. Also, if the wireless or wired controller (where applicable) is used to control the setpoint and mode, the app will not update with the setting from the controller. The indoor unit responds to the last command from either the app or the controller.

AUTO

AUTO mode allows the ductless system to shift between the **HEATING** and **COOL** modes to maintain the setpoint. The dead band between setpoint and controllability is 2°F(1°C) and cannot be adjusted within the app. When this mode is selected, the screen color changes.

COOL

COOL mode allows the ductless system to lock into the **COOL** mode **ONLY** and condition the space by cooling the air to the setpoint. If the space temperature is lower than the setpoint, the ductless system turns off. When this mode is selected, the screen color changes.

DRY

DRY mode locks the ductless system into the **COOL** mode and reduces airflow to increase the water removal from the space. Conditioning of the space is done by cooling the air to the setpoint. If the space temperature is lower than the setpoint, the ductless system turns off. When this mode is selected, the screen color changes.

HEAT

HEAT mode allows the ductless system to lock into the **HEAT** mode **ONLY** and condition the space by heating the air to the setpoint. If the space temperature is higher than the setpoint, the ductless system turns off. When this mode is selected, the screen color changes.

FAN

FAN mode allows the ductless system to turn off except for the indoor fan. **FAN** mode is intended to circulate air through the space without conditioning it with the refrigeration system. When this mode is selected, the screen color changes.

Temperature Set Point

Once the operation mode is selected, setting the desired indoor temperature set point is usually desired. To do this, use the dial around the temperature setting number on the main screen.

Fan Speed Settings

There are 4 fan speed options available to the user: **AUTO**, **HIGH**, **MID**, and **LOW**.

NOTE: These speeds are available only when the system is set to the COOL or HEAT modes. Changing fan speeds is not available in the AUTO or DRY modes.

The adjustments to the fan speed should be done to improve the comfort of the occupant(s).

Turbo

TURBO is only available after the **COOL** mode is selected. **TURBO** is designed to decrease the time it takes for the space to achieve setpoint by triggering the compressor and fan to immediately move to a higher speed.

Louver Controls

The app provides 2 different louver controls, horizontal and vertical control. The use of these functions are dependent on the type of fan coil currently installed and if it has a vertical and/or horizontal louver control. When available, these buttons allow the user to adjust the direction of air flow from the motorized veins.

ECO Mode

ECO mode is available only after the ductless system is set to the **COOL** mode. This mode reduces the energy consumption of the ductless system up to 60% by slowing the compressor and reducing the maximum capacity output. This mode remains active for 8 hrs and then the system returns to the normal operating mode.

NOTE: While in this mode, the system may not obtain the setpoint if there is a large thermal load on the space.

Unit of Measure

By default, the app is configured in Celsius for the temperature unit of measure. Tap the °F/°C button to change to Fahrenheit. If pressed again, the unit of measure returns to Celsius.

Scheduling

7 day programmable features are available to set on and off times for the system to condition the space allowing customized time, days, modes and temperatures of operation.

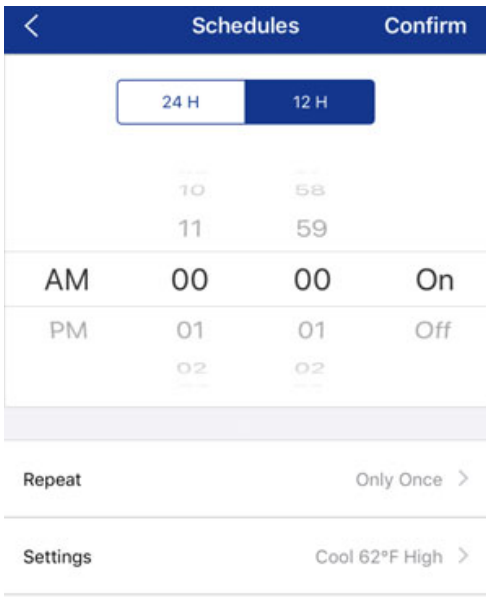


Fig. 17 — Scheduling

46°F (8°C) Heating Setback/ Vacation Mode

Feature allows the system to enter a setback/vacation mode when the space is or will be unoccupied. The system follows a space temperature setpoint of 46°F (8°C) to protect the space from freezing temperatures.

Sleep

SLEEP allows the user to customize the space temperatures throughout a sleep cycle of 8 hrs by setting a targeted temperature for each hour of the cycle. Adjust the temperature by dragging each round node to the desired temperature.

Important: This mode must POWER ON when it is desired to start the sleep cycle.

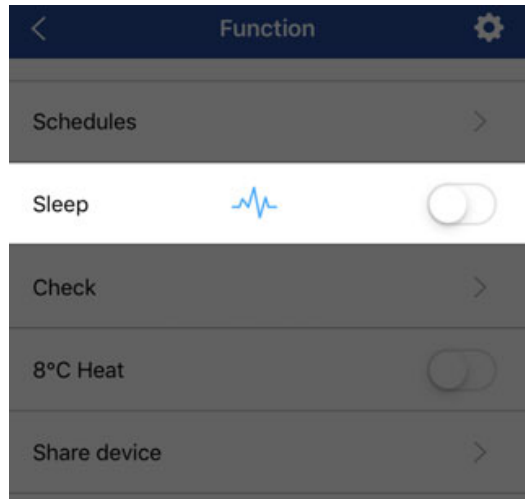


Fig. 18 — Function

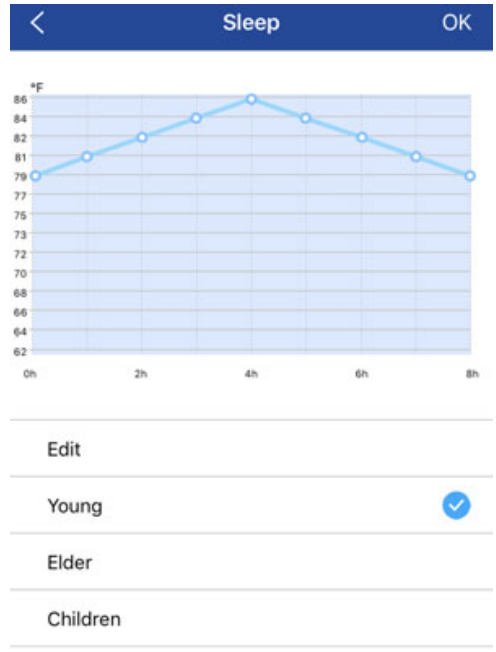


Fig. 19 — Sleep

NOTE: Start time scheduling for the sleep cycle is currently not available.

System Check

A systems health check can be performed in the check screen. The **SYSTEM CHECK** function informs the user or service technician of normal items, abnormal items, and detailed information about the operating characteristics of the ductless system while operating.

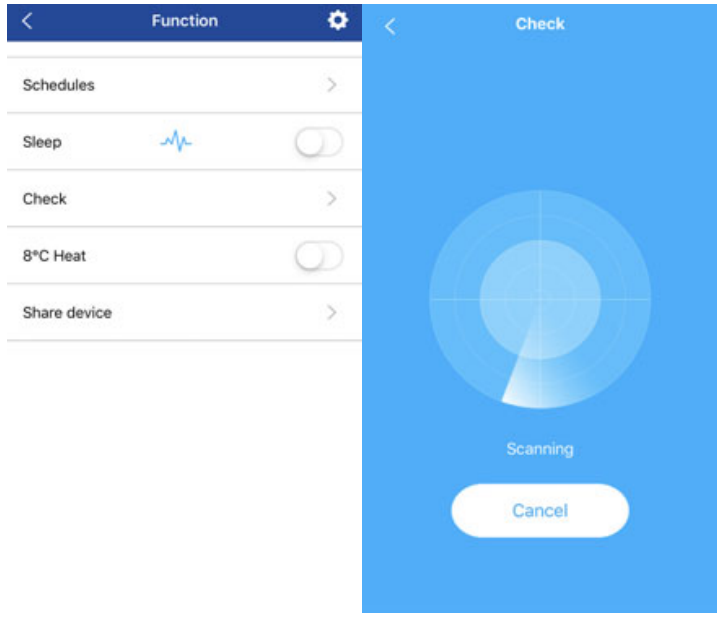


Fig. 20 — System Check

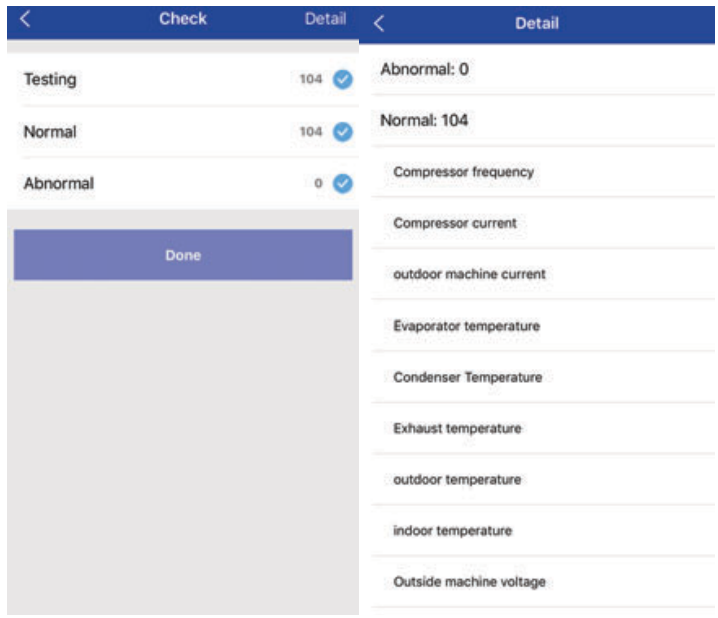


Fig. 21 — System Check

FAN COIL DELETION FROM APP

In the event a fan coil is decommissioned or a user moves from a location where a Wi-Fi kit is installed, the ductless system can be removed from the app by simply swiping to the left (see Fig. 22). Alternatively, by entering the Information menu via the function menu, accessible from the icon in the top right of the home screen (see Fig. 23).

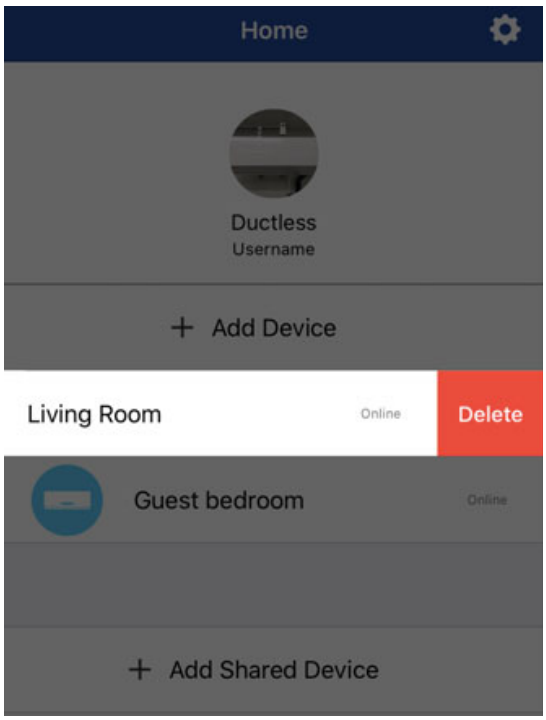


Fig. 22 — Fan Coil Deletion from App

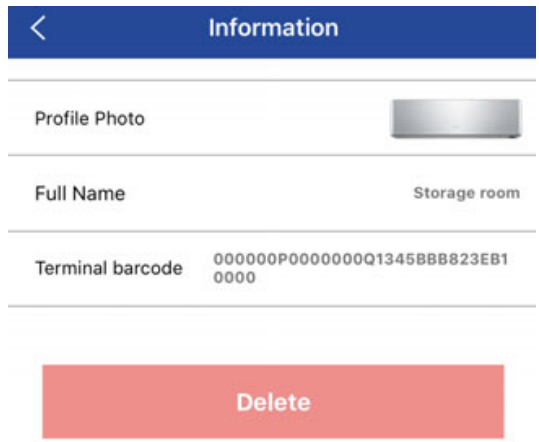


Fig. 23 —Fan Coil Deletion from App

GROUP CONTROL (SINGLE ZONE)

The systems can be grouped together to operate at the same time with the same set point fan speeds and modes.

To group the systems:

1. Under **Setting** click **Group Information**.

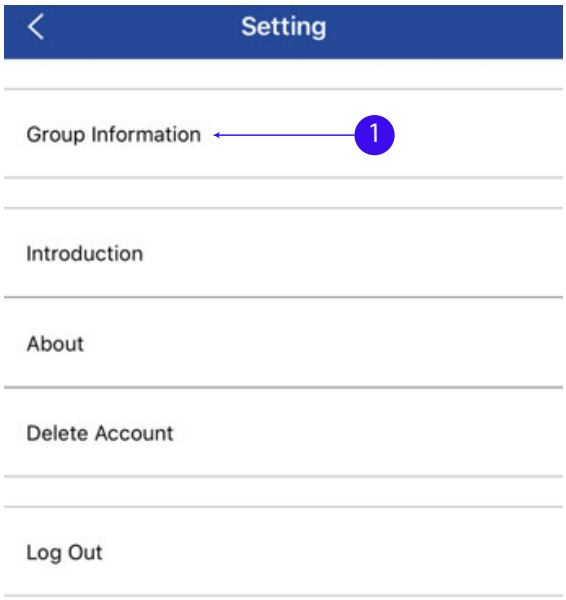


Fig. 24 — Setting

2. Click **Create Single Zone Group**.

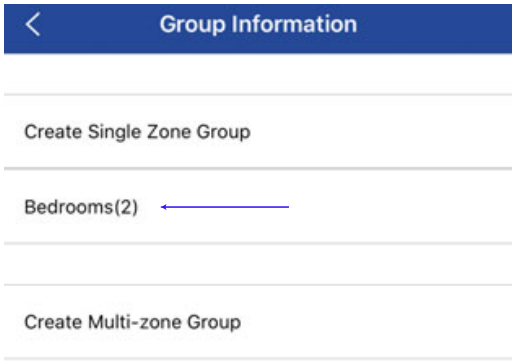


Fig. 25 — Group Information

3. Select the units to group and tap **Confirm**.

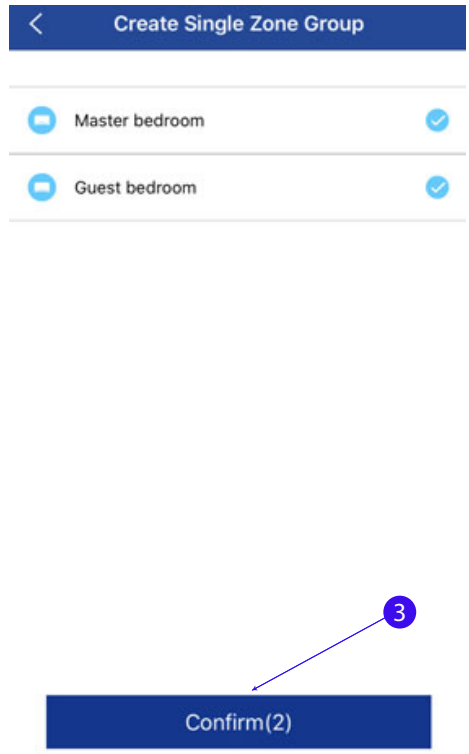


Fig. 26 —Confirm Single Zone Group

4. Name the group. Press **OK.**

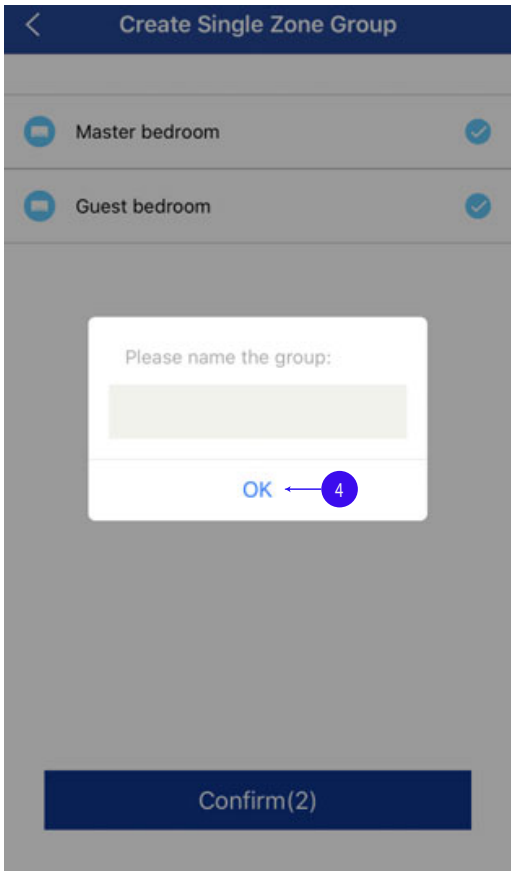


Fig. 27 — Please Name the Group

The **Group Information** screen shows the number of zones grouped.

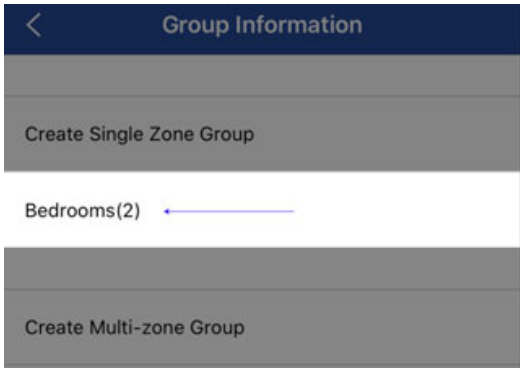


Fig. 28 — Group Information

The **HOME** screen appears with the new group listed.

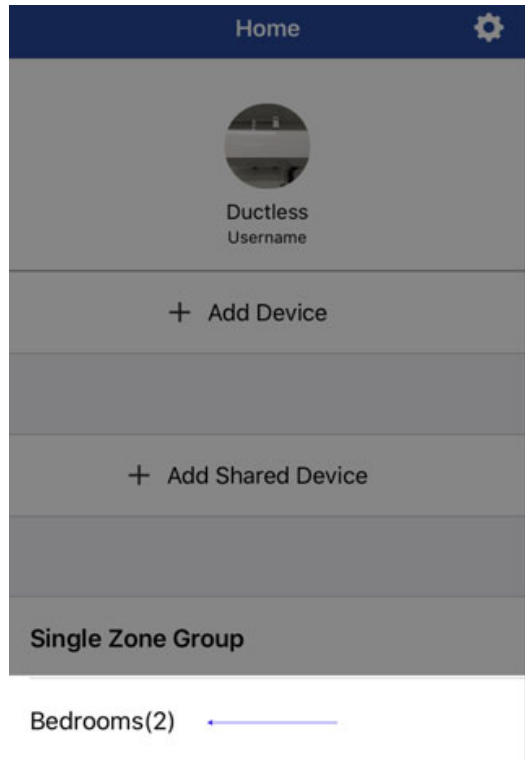


Fig. 29 — Home

5. Use the **Group Control** screen to control the new group. See Fig. 30 — on page 21.

GROUP CONTROL (MULTI -ZONE)

Each one of the indoor units on a multi-zone system can be grouped together to operate with the exact same set point, fan speeds and modes as well as select priorities.

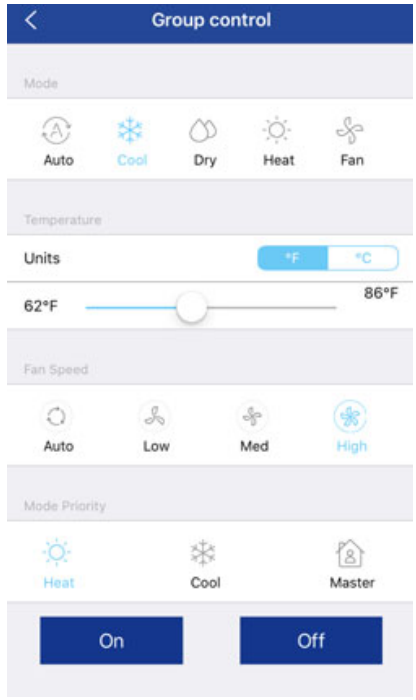


Fig. 30 — Group Control

Heating Priority: If any unit in the system is set to the **HEATING** mode, the system priority switches to **HEAT**. If any unit is set in **COOLING**, while any unit in the system is operating as **HEATING**, the units set to **COOLING** enter the **STANDBY** mode, which turns off the indoor unit until all the indoor units are in the same mode.

Cooling Priority: If any unit in the system is set to the **COOLING** mode the system priority switches to **COOLING**. If any unit is setup in **HEATING**, while any unit in the system is operating as **COOLING**, the units set to **HEATING** enter **STANDBY** mode, which turns off the indoor unit until all indoor units are in the same mode.

MASTER Priority: The unit set as master leads the priority that operates at the moment and communicates to the other units if it is approaching an error. Refer to the **Cooling** and **Heating** Priorities for details.

CAUTIONS

The Wi-Fi kit complies with 47cfr sub-part 15 and RSS 210 of the Industry and Science of Canada. Operation is subject to the following conditions:

1. This device may not cause a harmful interface, and
2. this device must not accept any interference received, including interference that may cause undesired operation.

- Only operate the device in accordance with the instructions provided. The Wi-Fi kit complies with FCC and IC electromagnetic radiation limits set forth for a residential environment. To avoid the possibility of exceeding the FCC and/or IC radio electromagnetic radiation limits, human proximity to the antenna shall not be less than 8 inches (20cm) during normal operation.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Table 1 — Troubleshooting

ISSUE	RESOLUTION
Connection failure between the Wi-Fi AC and home router	**Wrong password inputted:** If there is no response for a long time, disconnect from the AP mode then reconnect to the AP mode and repeat the network setup process.
	Password contains special characters: The Wi-Fi app only supports letters and numbers. The app does not support “*, @, /”.
	Unsupported Encryption: Check the router encryption to verify only **WAP-PSK** or **WAP2-PSK** or **no** encryption is used.
	Wi-Fi network requires a login to access: Some Wi-Fi networks in public places or businesses require a user name and password to access the Internet. The Wi-Fi kit does not support this type of access.
	The router is set to filter MAC addresses: In this case, the router forbids all connected devices except those listed in the router filter list. To resolve this, the Wi-Fi kit MAC address should be added to the accepted MAC list in the router settings or change the router configuration to abstain from filtering MAC addresses.
	Too many clients are connected to the router: The average household router cannot support more than 8 sub-routers connected to the main router via a wireless connection. In this case, reduce the number of sub-routers or add routers via a network cable instead of wireless.
Connection failure between router and cloud server	Use a computer or smart phone Internet browser to navigate to https://app.v1.appsmb.com:8443/V2/Login.ashx. If you see the following message, your connection is good: <?xml version="1.0" encoding="UTF-8"?><response result="3000" encry="0" code="0"/>
System removed from the app when other user adds the system	The app can run on multiple devices in a household. Sign in to the SAME account using the user name and password used to setup the system. **NOTE:** Setting up the system again on a different smart phone device with a different user name removes the unit from the first smart phone device.