User manual

English

MOBILE APP AIRCONNECTPRO

Summary

Revision History

Acronyms and abbreviations

| Acronym	Literal translation
HVAC	Heating Ventilation and Air Conditioning
MAC	Media Access Control
VRV	Variable Refrigerant Volume
VRF	Variable Refrigerant Flow

1. About the control app

The control app is a monitoring and control application for VRV/VRF, split, multi-split and mini-split air conditioning systems.

The control app makes your air conditioning system more accessible and easier to use from any device via the internet.

The control app connects to the HVAC system via CloudBox devices (CloudBox or gateways).

The control app includes the following features:

- Monitor and control HVAC (air conditioning) units
- Bi-directional access to HVAC internal communications lines
- Full control of indoor unit operations
- ON/OFF control (individual or all units)
- Set temperature and room temperature data
- HVAC operation mode selection (Cool/ Heat/ Fan/ Dry/ Auto)
- Fan speed control
- Louver position control
- Easy-to-use scheduling function
- Diagnostic display and real-time manufacturer error notification with fault codes
- Plug-and-Play installation and configuration
- Support for splits, multi-splits, mini-splits, ducted, VRV and VRF HVAC systems types
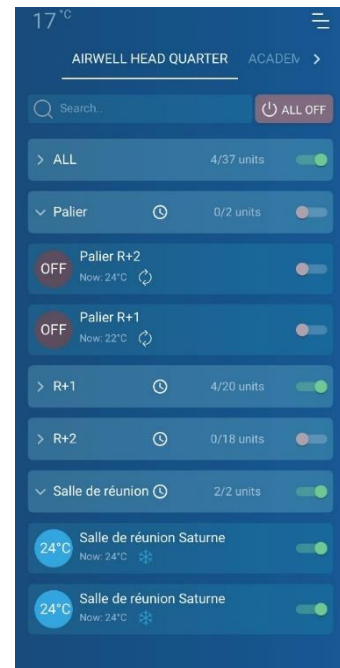
Compatible with the following HVAC system manufacturers:

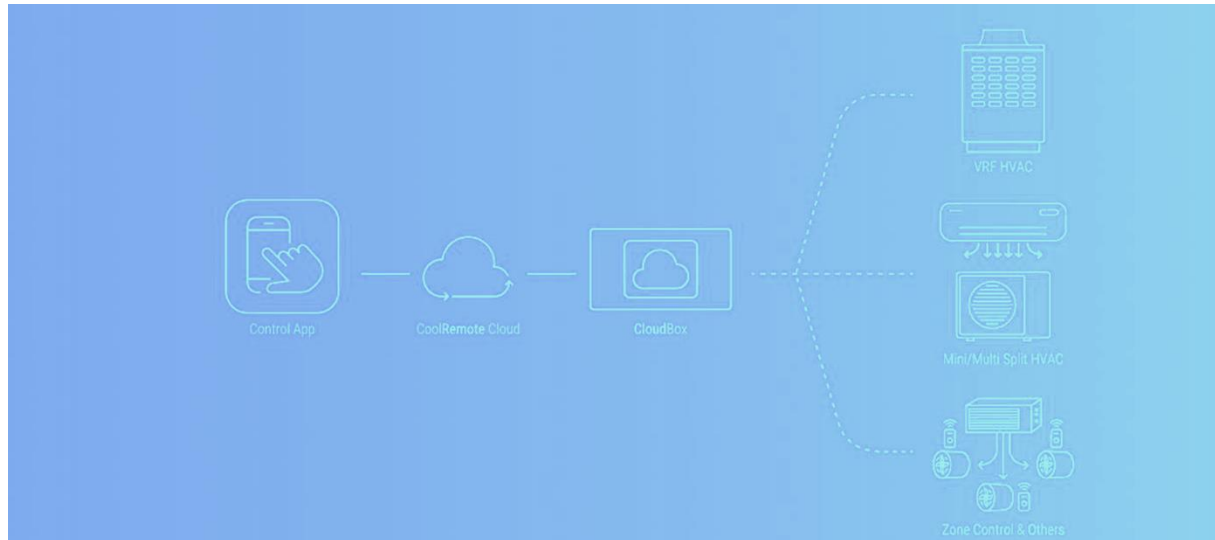- Each user can manage multiple sites
- Each user can manage multiple devices per site

Notes:

*Requires: CloudBoX with internet access for operation.

For additional information and compatibility contact us at: https://service.airconnectpro.com/

2.How the control app works

Control app

The control app is a web -based air conditioner to work with CloudBox and gateway solution, is compatible with any VRF and leading split air conditioning systems.

HVAC GATEWAYS (CloudBox)

CloudBox hardware communication bridges allow VRF/VRV, split, multi-split, heating, ventalition, and air conditioning system connectivity. The devices enable integration to our cloud-based control software: The control app.

Internet connection

After registering your CloudBox devices, you can connect and control your air conditioning systems via a smartphone, tablet, or desktop computer. Control is available for IOS, Android, and Windows-based devices.

HVAC system

Inverter-based air conditioners such as VRF/VRV, split pose different technological challenges when it comes to connecting to the internet. CloudBox can easily help overcome that challenge. All you need is to select a compatible gateway from our product selection, install it and you are all set!

3. Prior to registering the control app

First time registration of the control app requires that you have at least one active CloudBox device connected to the internet, and it should be connected to an HVAC system on its HVAC side.

3.1 Install CloudBox

Follow the instructions provided in the CloudBox Quick installation Guide.

Connect CloudBox to the internet via a router.

When the internet is connected, the CloudBox automatically connects to the AirconnectPro cloud service. Make sure the cloud icon, located at the bottom right-hand corner of the LCD, is colored white. If so, the CloudBox is connected to the internet.

3.2 Download the control app from the IOS/ Android Store

Prior to registering your control app account, the control app must be installed on your phone or opened on the website via the internet.

To download the control app:

For IOS:

https://apps.apple.com/us/app/ioccontrol/id1492865391#?platform=iphone

For Android:
https://play.google.com/store/apps/details?id=com.coolautomation.ioccontrol&gl=IL

To access from a web browser: https://control.airconnectpro.com/

4. Registration of the control app

Control app registration consists of the following three steps:

1. Register the CloudBox device
2. Create a user account
3. Register your site and add the new device to it
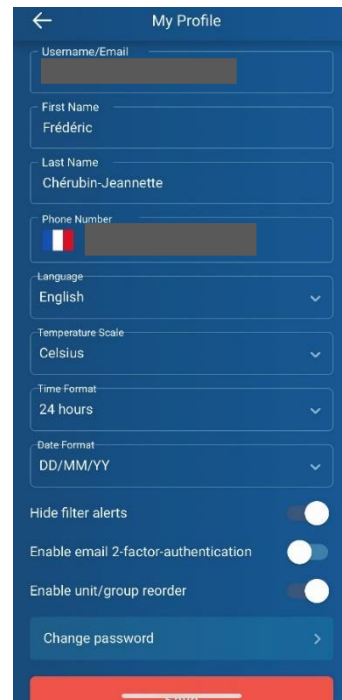
4.1 Register the CloudBox device

Before you start: Make sure that the CloudBox device is properly connected to the internet.

1. Locate, on the back of the device, the identification label with the product SN and PIN.
2. Scan the QR code on the identification label. The control application automatically fills-in all the necessary CloudBox details.
   Note: If you are not able to scan the QR code, go to
   and manually type-in the MAC/SN and PIN numbers from the identification label into the corresponding control application registration fields.
3. Make sure the SN and the security PIN code are correctly entered (after scanning the QR code).
4. Click either the continue as an existing user button (for creating a new customer account and adding the new device to the new account).
5. Proceed to the next step if you are a new user (Register your user account).
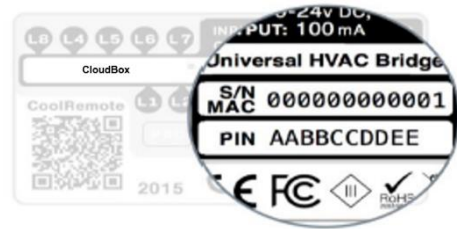
4.2 Create a new user account

1. Fill in first name and last name
2. Entrer a valid email address (uses the account username)
3. Enter your phone number
4. Select Celsius/ Fahrenheit
5. Enter a password and confirm it
6. Click the register button to proceed to the next step (Register your location)

4.3 Create a new site

Site details will be helpful for navigating in the app and for better understanding of the system operational conditions for saving energy in the future.

Note: The "Time Zone" setting is required for proper operation of the scheduling function.

- Click the Save button to automatically login and start using the application

4.4 Add a CloudBox device through the app menu

Option 1: Scan the QR code and select "Continue as an existing user"

The control application automatically fills-in all the necessary CloudBox details.
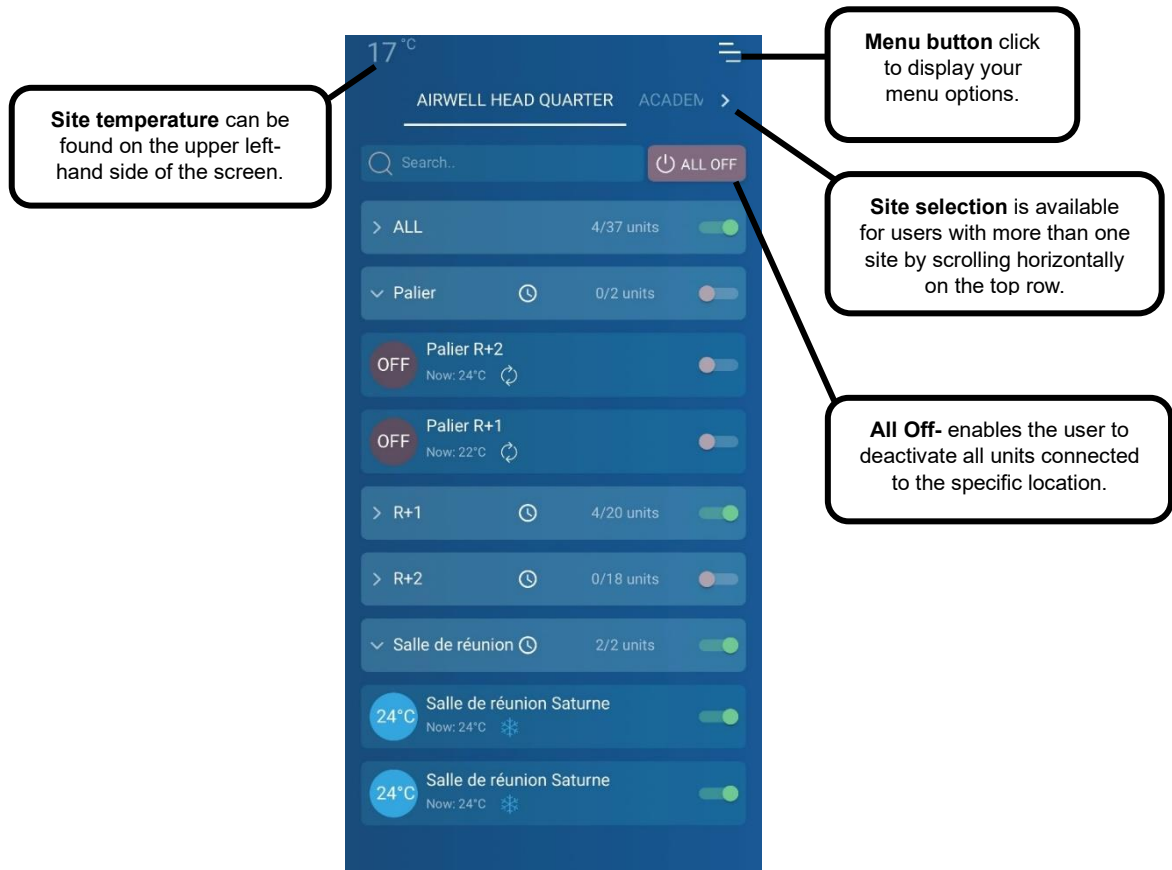
Option 2: Register additional device(s) to your control account

- Login with your existing control account
- Click the menu button

- From the menu select ☰ **"Site/Device Management".** You should see the other device(s) you have registered

- Click the 3 dots sign on the relevant site and select "Add Device"
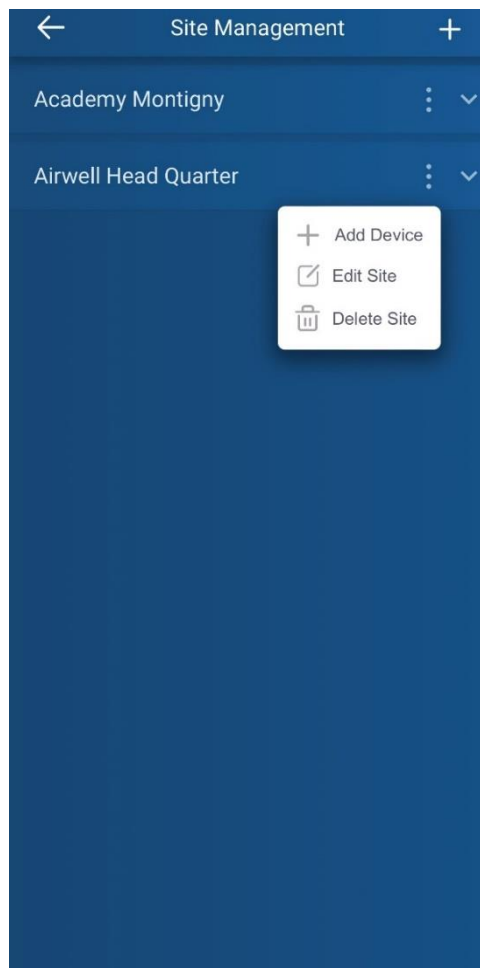
5. The control app user interface

Indoor unit operation list views each line display the operation status of the selected indoor unit. The indoor parameters and status display according to the operational state ON, OFF or malfunctioning. By clicking one of the units, the unit control screen will be shown.
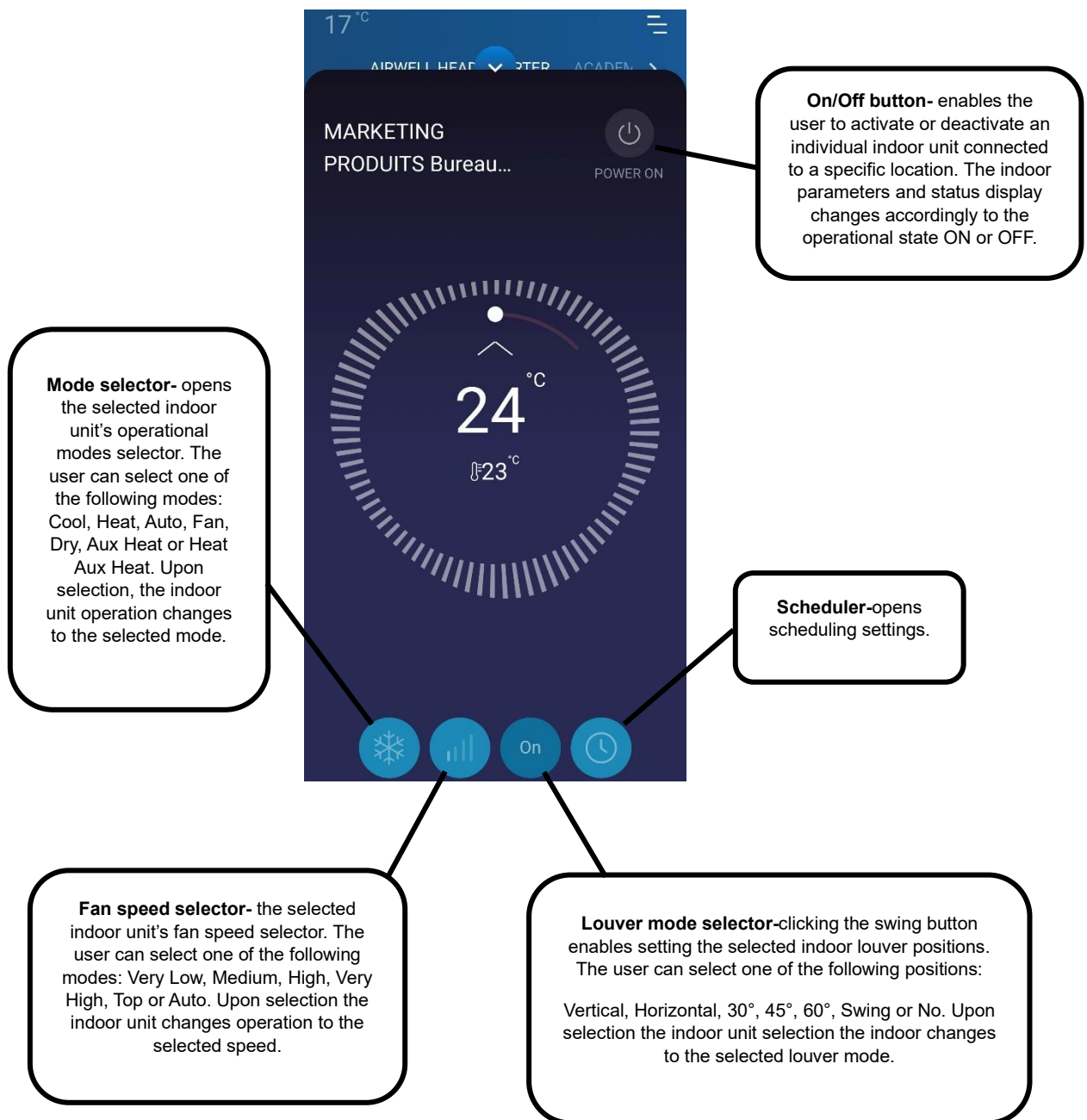
Menu button click to display your menu options.

Site temperature can be found on the upper left-hand side of the screen.

Site selection is available for users with more than one site by scrolling horizontally on the top row.

All Off- enables the user to deactivate all units connected to the specific location.

Show last selected unit- When selecting a unit, the app remembers the last unit selected and displays the last selected control screen each time it's opened.
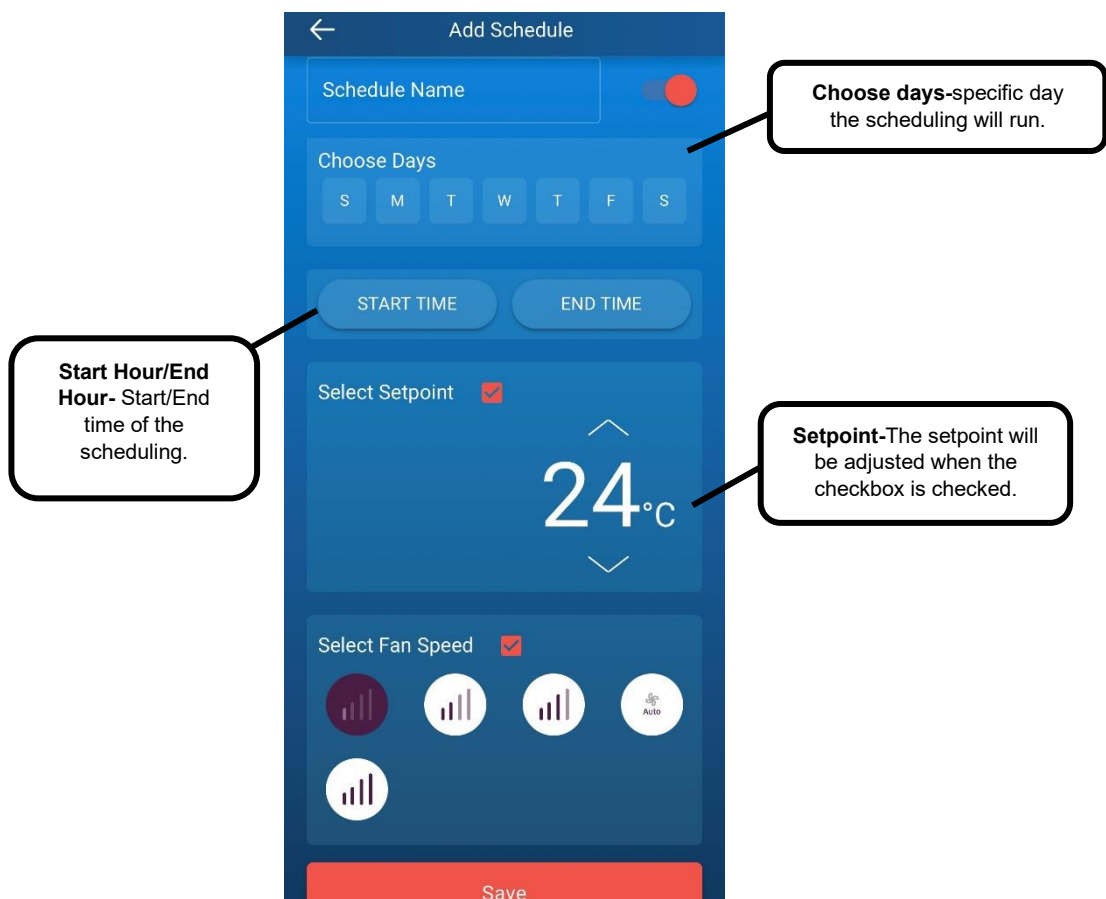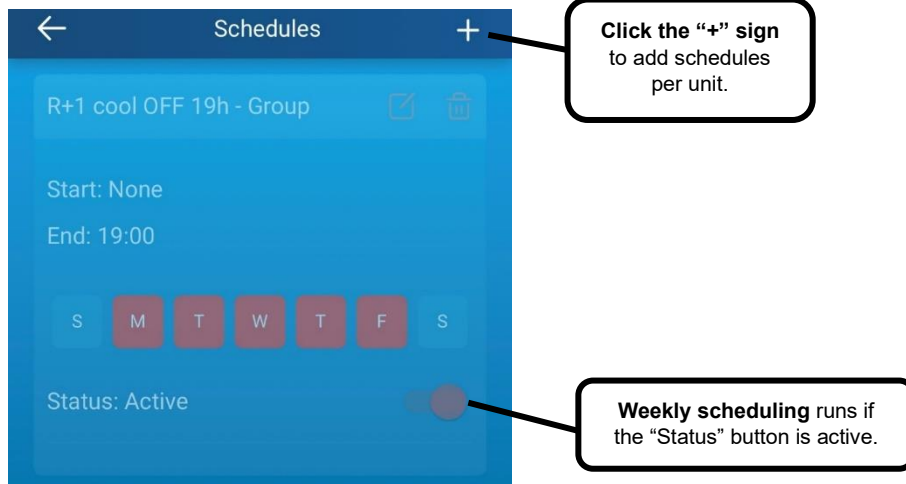
5.1 The remote-control screen

The remote-control screen enables the user to control the HVAC indoor unit activity, such as operating modes, power status, set point temperature, and fan louver modes. The screen also displays the status of all connected units. The screen operates as a unified central controller for all the connected system units.

The remote-control screen includes the following controls and indicators (see images):

On/Off button- enables the user to activate or deactivate an individual indoor unit connected to a specific location. The indoor parameters and status display changes accordingly to the operational state ON or OFF.

Mode selector- opens the selected indoor unit's operational modes selector. The user can select one of the following modes: Cool, Heat, Auto, Fan, Dry, Aux Heat or Heat Aux Heat. Upon selection, the indoor unit operation changes to the selected mode.

Scheduler-opens scheduling settings.

Fan speed selector- the selected indoor unit's fan speed selector. The user can select one of the following modes: Very Low, Medium, High, Very High, Top or Auto. Upon selection the indoor unit changes operation to the selected speed.

Louver mode selector-clicking the swing button enables setting the selected indoor louver positions. The user can select one of the following positions:

Vertical, Horizontal, 30°, 45°, 60°, Swing or No. Upon selection the indoor unit selection the indoor changes to the selected louver mode.

5.2 The scheduler settings

Click the "+" sign to add schedules per unit.

Weekly scheduling runs if the "Status" button is active.

Choose days-specific day the scheduling will run.

Start Hour/End Hour- Start/End time of the scheduling.

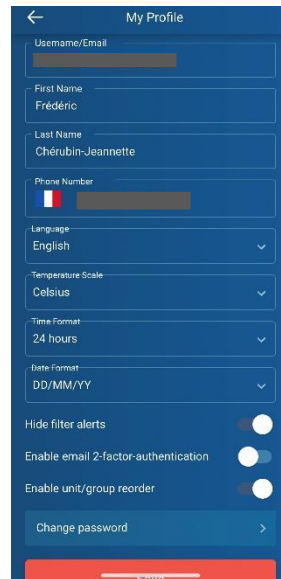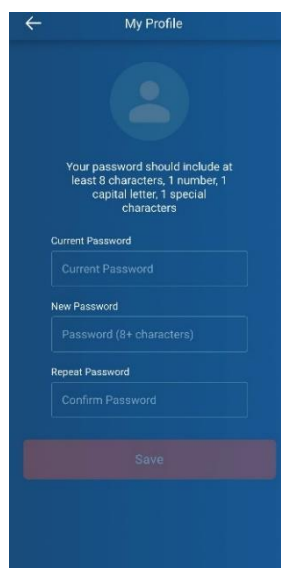**Setpoint-**The setpoint will be adjusted when the checkbox is checked.

6. My profile

6.1 My profile screen

On my profile screen you can manage user personal information and preferences.

1. Click the menu ☰ button and select "My profile".

2. You can modify first name, last name, phone number, language, select the temperature scale, time format and change password if necessary.
3. Click the save button to save the new user profile.
4. Changing the current password of the user is available by clicking "Change Password". Make sure you click the save button to save your password change.

7. User management

7.1 Invite new user

Note: Only **Admin** user can view the "**User Management**" screen.

On the user management screen, you can invite a new user and manage all user personal information. Click the menu button, then click, "User Management". On the displayed screen, click the "+" sign on the upper right-hand side of the screen to invite a new user. Enter the following user's information: First name, Last name, Email Adress, a user expiration date, and a user permission role.
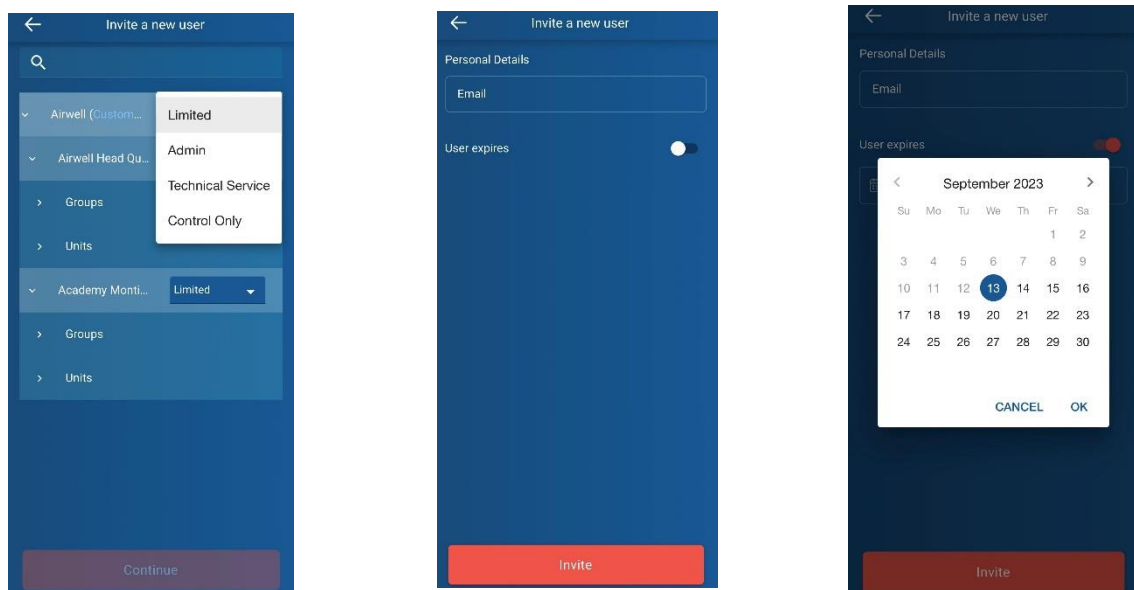
Expiration date: By checking the user expire checkbox and setting the date, you can limit how long a user can access the control app.

Permissions roles:

Admin-The admin user can control and manage all units and users.

Capabilities available for this permission:

Use management, Site/ Device Management, Unit setting, Group Management

Manager- The manager user can control and manage unit

Capabilities available for this permission:

Site/Device management, unit settings, group management

Guest- Guest users can control specific units only
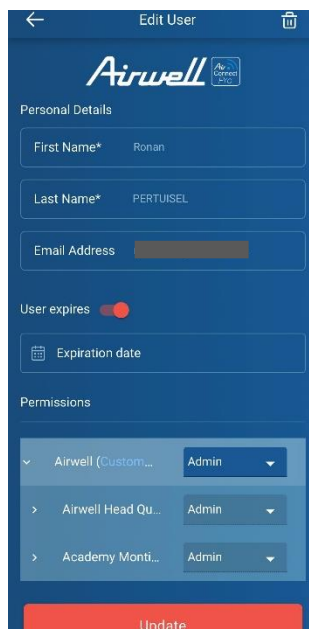
Click the create invite button to submit.

13

7.2 Edit user

To edit an existing user's information, click a specific user on the users management screen. You can also search for a user by entering his name on the search field at the top of the screen and then selecting the desired user from the displayed list of users.
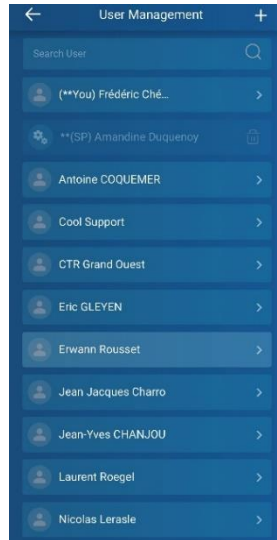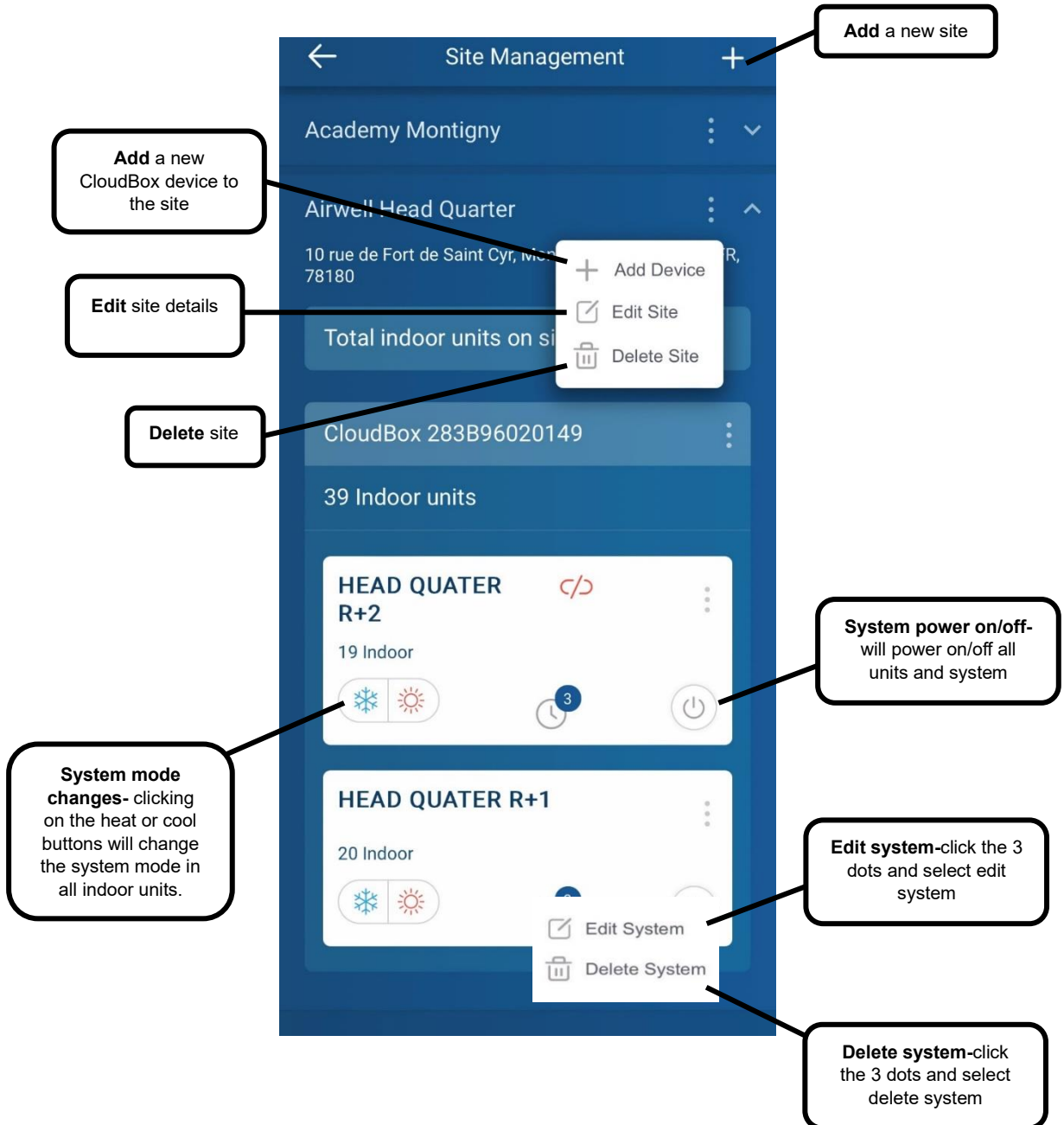

Update the user's setting such as First Name, Last Name, Email, User expiration date and user permission role. To delete the user, click the icon on the upper right-hand side of the screen.

To salve the changes, click the submit button.

8. Site/Device management

Create and manage device and site settings. Click the menu button, then click "Site/Device management" to view the list of devices installed per site.


Add a new site

Add a new CloudBox device to the site

Edit site details

Delete site

System mode changes- clicking on the heat or cool buttons will change the system mode in all indoor units.

System power on/off- will power on/off all units and system

Edit system-click the 3 dots and select edit system

Delete system-click the 3 dots and select delete system

15

9.Unit settings

Unit name structure- unit names are constructed from letters and numbers in the following format:

For example, L1.100, the L and number indicate the line number on the Cool device network and the 100 indicates the unit's unique number on that line.

You can change the unit's name to any name (letter/number combination) you wish. There is no need to keep the name as it's displayed in the setting screen.

<u>To edit indoor unit settings</u>

On the app menu, select "Unit settings"

Select site and unit
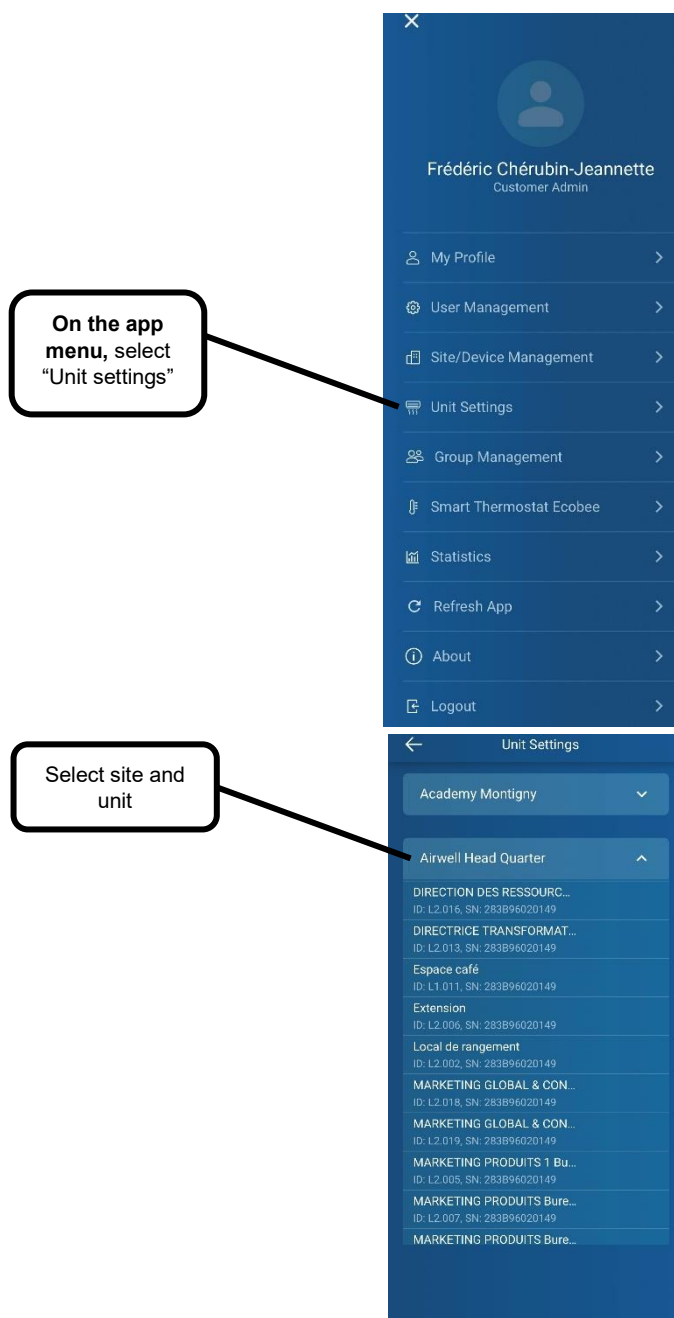
On the following screen, edit the required unit name and click the **save button.** The new unit's name is saved.

Single units- You can configure every indoor unit's setting separately. Each unit's configuration screen allows the user to change the following settings:

To exit the settings screen without saving, click the ← arrow on the upper left-hand side of the screen and

Show/Hide unit in list

Show/Hide Hvac modes:

- Cool (Default)
- Heat (Default)
- Auto (Default)
- Fan
- Dry

Show/Hide Louver modes

Show/Hide Fan modes

To save the changes, click the **save** button

10.Group management

A group is a virtual aggregation of units that allows easy control of all the group units with a single action. The functions that are available on the group are setpoint, schedule, ON/OFF.

Groups are seen on the control app as a "greyed out" block. To act on a group, you should select its item on the list. Groups can contain units from the same site or mixed from multiple sites. When a group contains units from multiple sites, a new "Site" is added called "Groups" and this group will only be visible and controllable through that "site".

Click menu and select **Group management.** The following screen is displayed.

Create a new group by clicking on the "**+**" **sign**

Enter new group **name**

Select units per site to define them as a group

Click on existing group to add/ remove units

Click **save changes** to save the new group

11. The Ecobee smart thermostat

Connect ecobee's smart thermostat to control VRF and split HVAC systems. This adds the additional connectivity for VRF and split HVAC systems, wich is not possible through the native ecobee smart thermostat wiring connections.

1. Click **menu and select smart thermostat ecobee**
2. Click "Connect account"

12.Statistics

The statistic and graphs screen shows a 1 day/ last 7 days/ last 30 days view of unit usage by selecting a specific unit.

A total of working hours of the selected unit is displayed at the bottom. This counter accumulates working hours from the time the system is connected to the AirconnectPro Cloud.

User can see statistics of working hours (bars) with breakdown to Heat/Cool periods, compare it with external site temperature (shaded area) brought from external weather service and the actual setpoint. This allows the user to better plan his system operational regime.

Counter can be reset to zero by an admin user through the CloudBox commercial application suite.
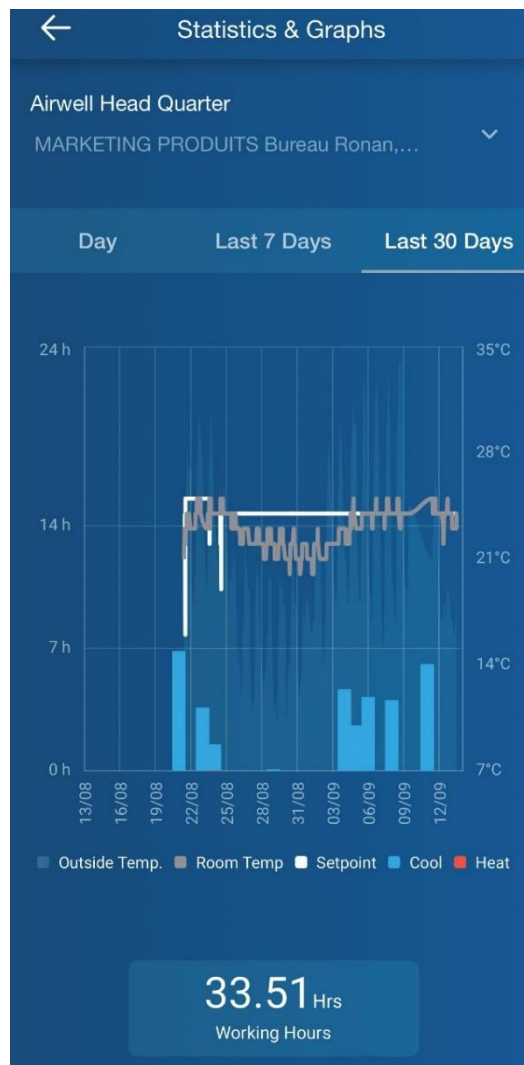
13. Support

For the technical support contact our customer support department at:

https://service.airconnectpro.com/