

# technical catalogue part 2



Index	
Description	Page No.
IZONE CONTROL SYSTEMS	
iZone 110	3-10
iZone 210	11-30
iZone 310	31-51
Wi-Fi and Home Automation	52-62
Serial interface specifications	63-76



#### iZone 110

#### **Description**

iZone 110 is our basic zoning system which is suitable for switching zones on and off.

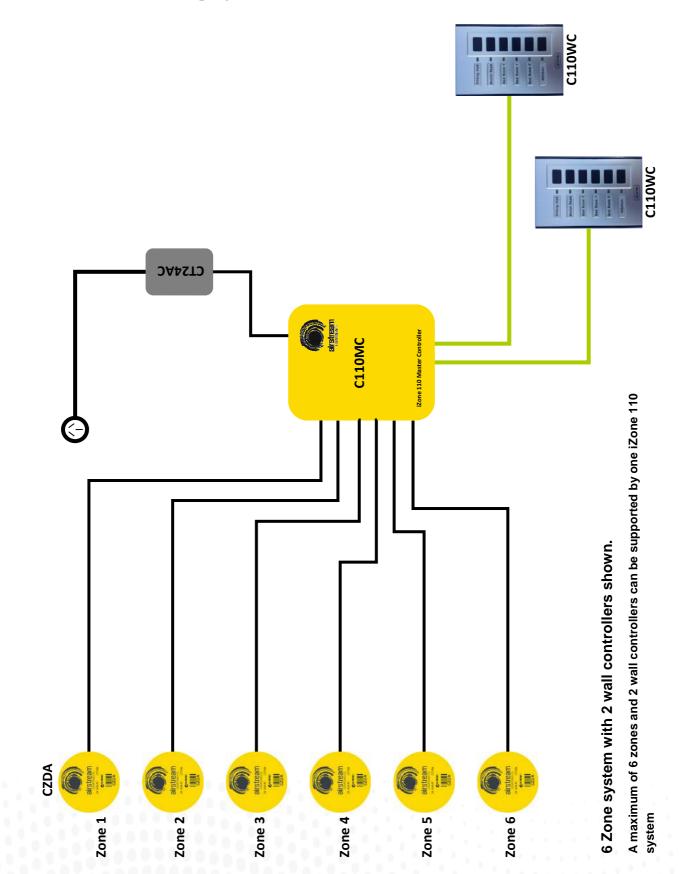
A summary of the features iZone 110 offers are listed below:

- Compatible with all leading air conditioning brands
- Up to 6 zones available
- Add up to 2 wall controllers
- Label zone names from a standard library of names
- Open zones are identified with a blue LED
- Up two zones can be configured as electronic constants.

iZone 110 does not interface with the air conditioning unit and the installation will require a separate controller for the air conditioning unit. Furthermore iZone 110 does not incorporate airflow control so balancing dampers should be included in the design.



iZone 110—Standard wiring layout





#### iZone 110—Installation instructions

- 1. The C110MC can be installed on top of the indoor fan coil unit.
- 2. Do **not** run the blue network cables alongside 240 Volt wiring.
- 3. When installing network cables down wall cavities or chasing network cables into walls, tape up and protect the RJ45 connector to avoid damage to the connectors.
- 4. Always install zones in consecutive ports starting at Zone 1. The back of the C110MC is marked with the zone port numbers.
- 5. Do not directly hardwire the CT24AC into the AC unit's power supply. This may void the warranty as it will require an electrician in the event that repair of the iZone 110 system is required.
- 6. Connect Zone Damper Actuators (CZDA) to the zone ports using the RJ11 cables as shown.
- 7. Connect the Wall controller(s) (C110WC) to the C110WC ports using the RJ45 cables.
- 8. Only connect the power supply to the CT24AC port after all components have been connected.



#### iZone 110—System initialisation

All new or modified systems must be initialised prior to system configuration.

To initialise the system press the button on the underside of any wall controller. This button is recessed so you will need to use a pen to press the button.

The time to initialise the system will vary depending on the number of motors connected.

The system will also initialise when power is restored after a power failure.



Using a pen, press the button on the underside of the screen.



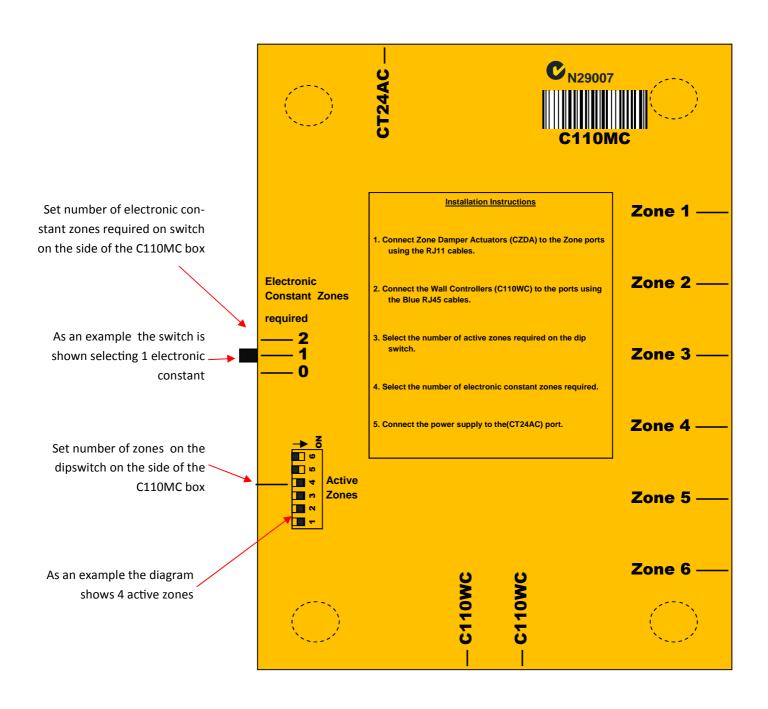
#### iZone 110—System configuration

**WARNING!** Only qualified iZone 110 installers should configure the iZone 110 System. Incorrect configuration could result in damage to your air conditioning unit and system.

- On the C110MC, set the number of active zones required on the 6 position dip switch. By moving the associated dipswitch up the respective zone will be deactivated and conversely by setting the dipswitch down (ON), the associated zone will be activated. The factory setting is all 6 zones activated.
- 3.2 On the C110MC set the number of electronic constants you require to ensure the safe operation of the system.
  - An electronic constant is a safety feature and ensures that a predetermined number of zones remain open at all times even if all the zones are switched off. If 1 electronic constant is selected, Zone 1 will automatically open if all the zones are closed. If 2 electronic constants is selected, Zone 1 and 2 will automatically open if all the zones are closed. Only set the number of electronic constants to 0 if the system is an old fashioned design with at least one supply air outlet that is not zoned.
- 3.3 Set the AC unit fan speed to high and close all zones. Open one zone at a time and check which room the air is being supplied to. Label the zone using the stickers provided, being care full to place the sticker squarely in the recess provided. Peel off the protective coating from the sticker.



iZone 110—Set up number of zones & electronic constants required





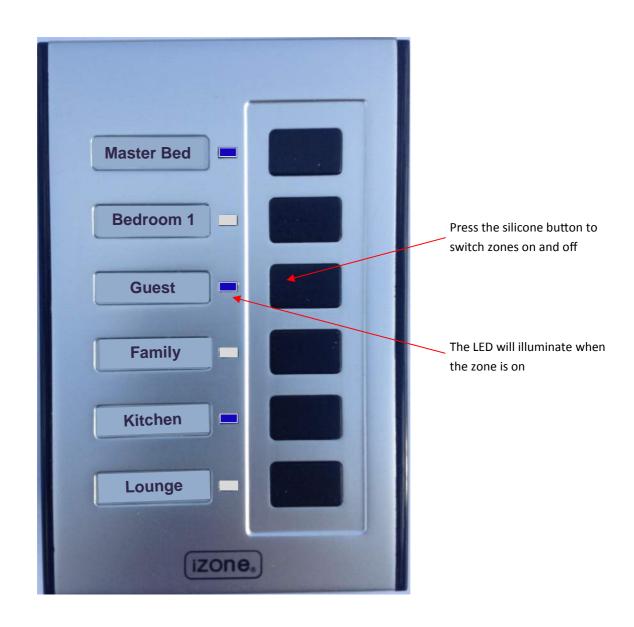
iZone 110—Testing and Labelling



Switch all zones OFF and one zone ON. Check which zone is being supplied with air.



iZone 110—User manual





#### iZone 210

#### **Description**

iZone 210 is our entry-level, proprietary touch screen climate control system. iZone 210 is an air side control system that provides Open / Closed zoning, air flow adjustment and temperature control via thermostatically controlled modulation of the airflow to a zone.

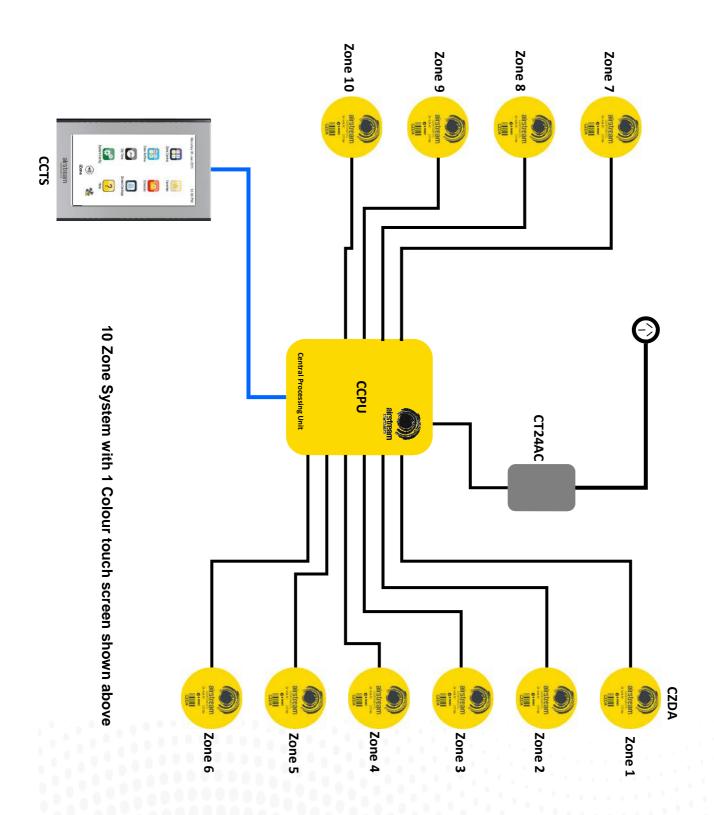
A summary of the features iZone 210 offers are listed below:

- Compatible with all leading air conditioning brands
- Adjust max and min airflow to any zone in 5% increments
- Up to 12 zones available
- Add up to 12 colour touch screens
- Touch screens can be used to temperature control in the zone as well as all system functions
- 7-day scheduling of zones, favourites mode
- Single-button operation for set-and-forget 'Favourite modes'
- Filter clean alert
- Customise zone names, favourite names or schedule names
- Open/close or fine-tune airflow from any screen
- Program schedules for automatic control
- Change the back ground colour of the home screen to suit your décor
- Any zone can be configured to perform as an Open / Closed, climate controlled or as an electronic constant.

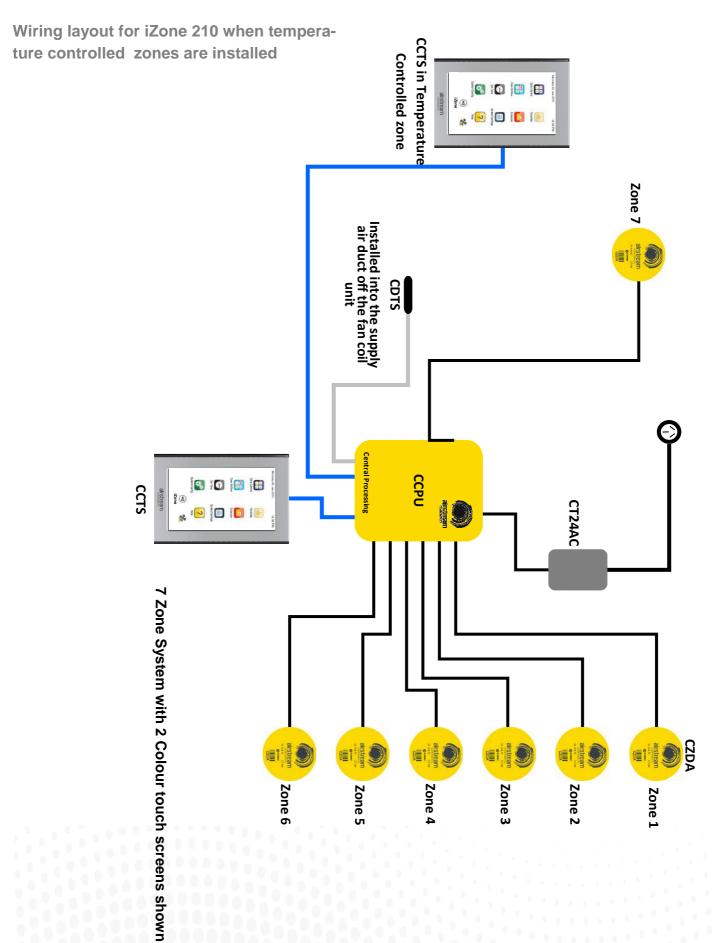
iZone 210 does not interface with the air conditioning unit and the installation will require a separate controller for the air conditioning unit.



Standard wiring layout for iZone 210 open / close zone system

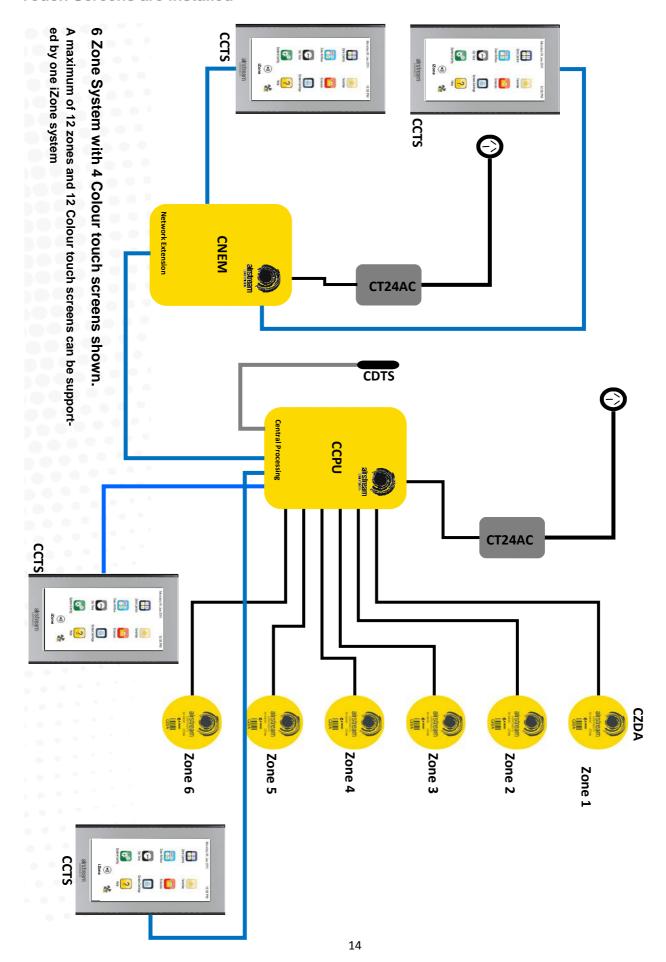








Wiring layout for iZone 210 when more than 3 Colour Touch Screens are installed





#### iZone 210 - Installation Instructions

- 1. The CCPU can be installed on top of the indoor fan coil unit.
- 2. Do **not** run the blue network cables along side 240 Volt wiring.
- 3. When installing network cables down wall cavities or chasing network cables into walls, tape up and protect the RJ45 connector to avoid damage to the connectors.
- 4. Always install zones in consecutive ports starting at Zone 1. The back of the CCPU is marked with the Zone port numbers.
- 5. Do not directly hardwire the CT24V into the AC unit's power supply. This may void the warranty as it will require an electrician in the event that a repair of the iZone system is required.
- 6. Connect Zone Damper Actuators (CZDA) to the Zone ports using the RJ11 cables as shown.
- 7. Connect the Colour Touch Screens (CCTS) to the CCTS ports using the RJ45 cables. If you are connecting more than 3 CCTS to the system you will need to connect a Network Extension Module (CNEM) to the CCPU using a short RJ45 cable.
- 8. If any CCTS is being used for Zone Temperature Control connect a Duct Temperature Sensor (CDTS) to the CDTS port. Install the sensor into the Supply Air Duct upstream of all dampers. Secure the sensor in place by using reinforced aluminium tape.
- 9. Connect the power supply to the(CT24AC) port.
- 10. When installing temperature controlled zones ensure the CCTS for the associated zone is installed in a location that is representative of the temperature in the room / zone. The CCTS should be installed at approximately 1600mm above the floor and should not be subject to draughts, direct sunlight or heat from equipment such as computers, TV screens etc. The supply air outlets to this room must <u>not</u> blow conditioned air directly onto the touch screen, as the temperature sensor is located in the CCTS.
- 11. Only connect the power supply to the CT24VAC port after all components have been connected.



#### iZone 210 - System Initialisation

All new or modified systems must be initialised prior to system configuration.

To initialise the system press the button on the underside of any colour touch screen. This button is recessed so you will need to use a pen to press the button.

The time to initialise the system will vary depending on the number of motors connected.

The system will also initialise when power is restored after a power failure.



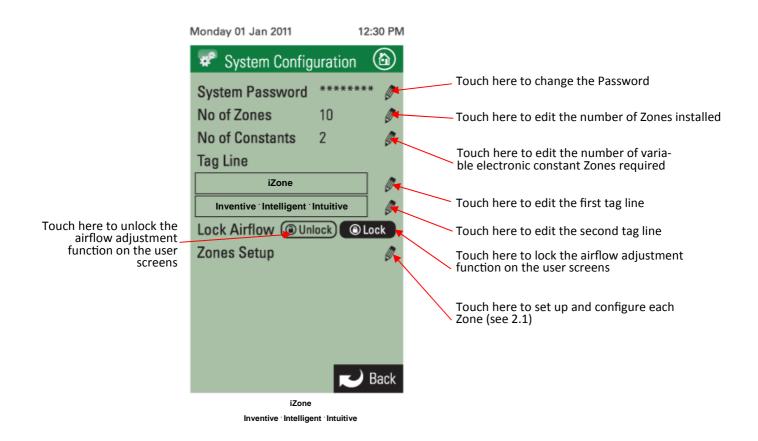


#### iZone 210 - System Configuration

**WARNING!** Only qualified iZone installers should configure the iZone System. Incorrect configuration could result in damage to your air conditioning unit and system.

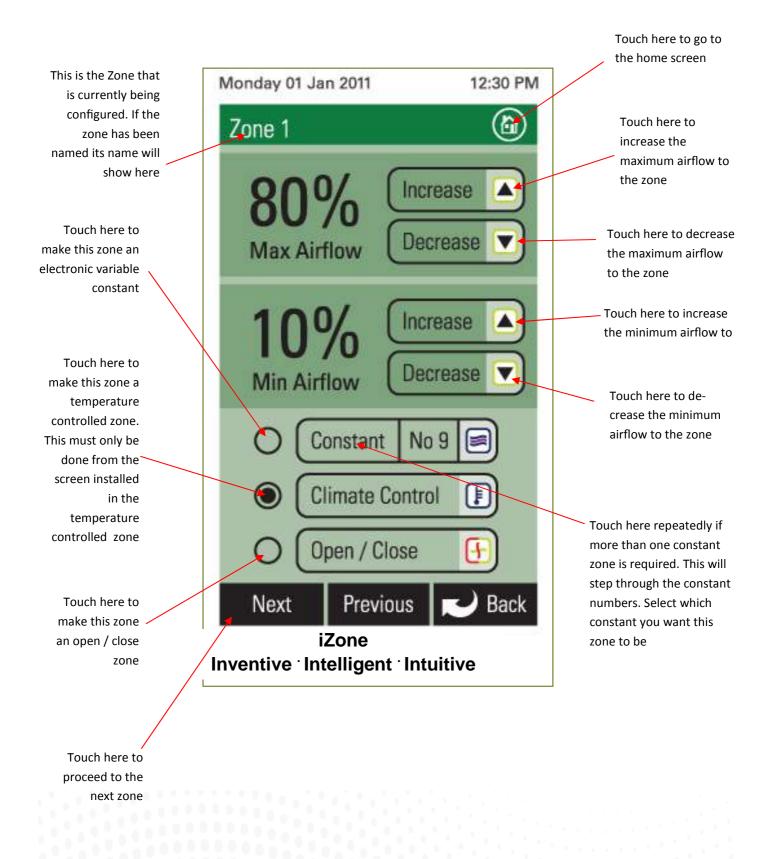
- 2.1 To configure your system click on the System Config icon on the home page.

  Enter the system password "wamfud" and press the enter button. The enter button must always be touched to save changes.
- 2.2-2.5 You will now be in the System Configuration area:





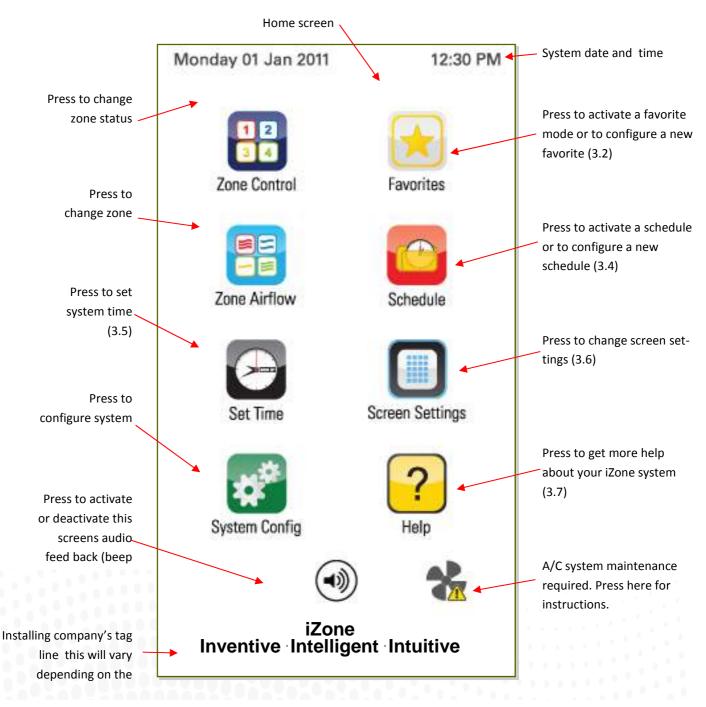
iZone 210 - Zone Set Up





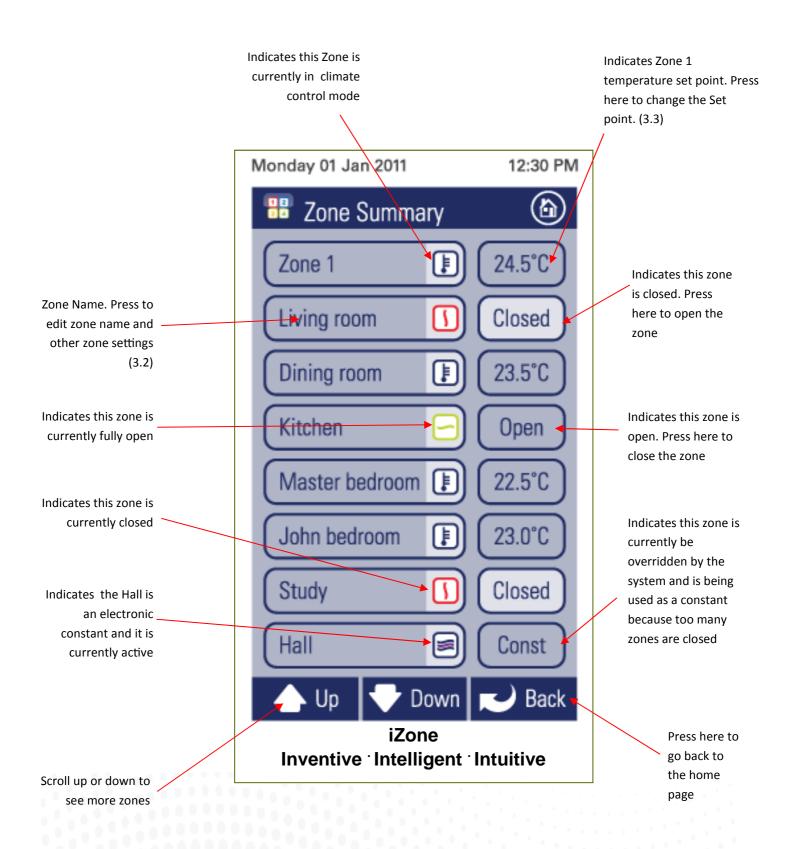
#### iZone 210 - User Manual

- 1. To get back to the Home screen at any time press
- 2. When entering names or values using the keyboard it is easier to use a thin object such as a toothpick. Do not use sharp, hard objects as they may damage the screen. The enter button must always be pressed to save the changes you have made.
- 3. Some functions may have been locked by your installer to ensure the commissioned values are not changed. To make changes to these values contact your installation company.



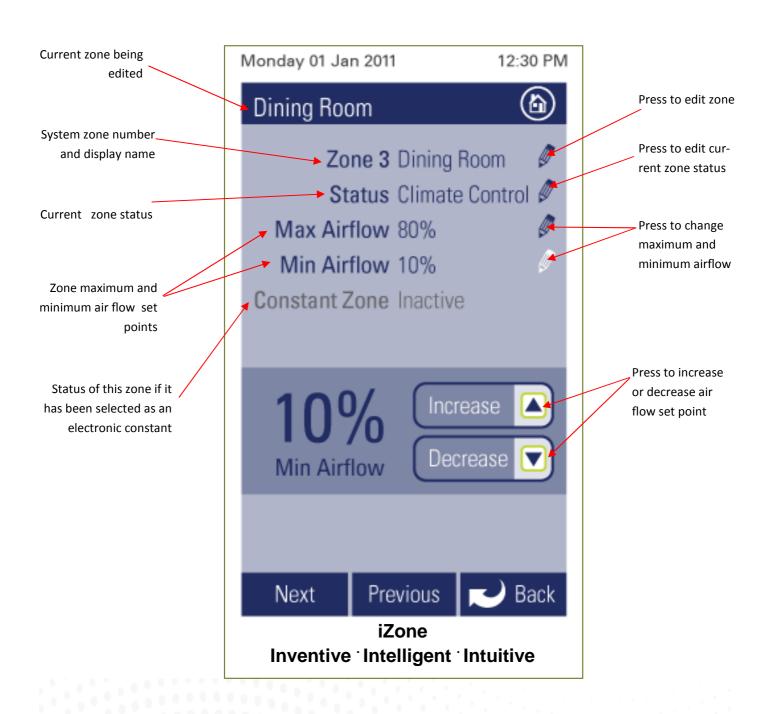


iZone 210 - Zone control



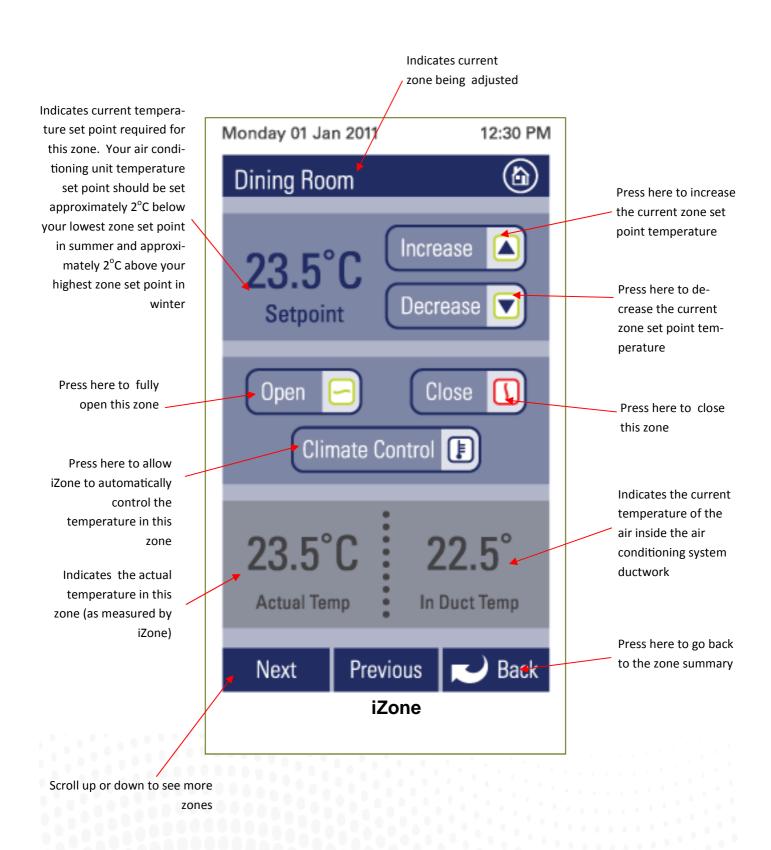


iZone 210 - Edit zone names & settings





#### iZone 210 - Adjusting temperature controlled zones



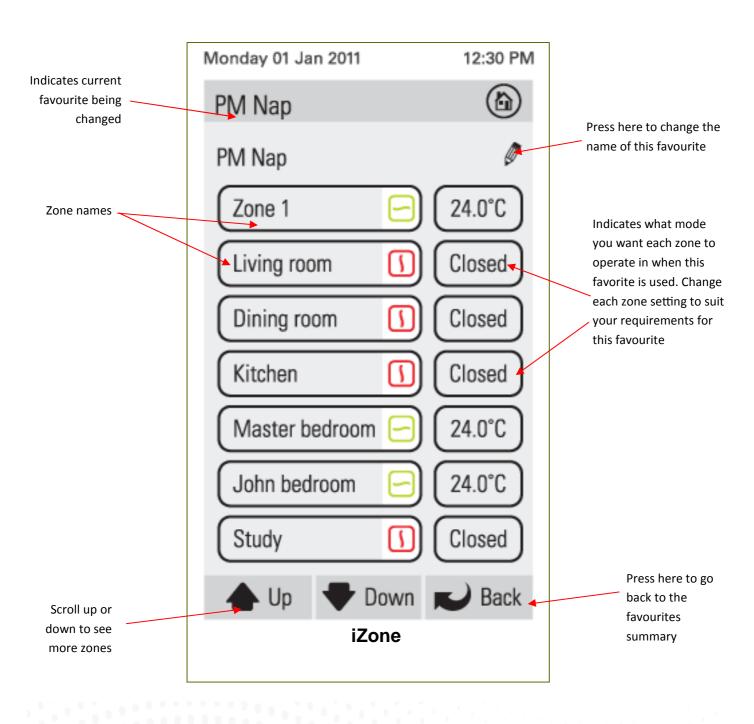


iZone 210 - Favourites



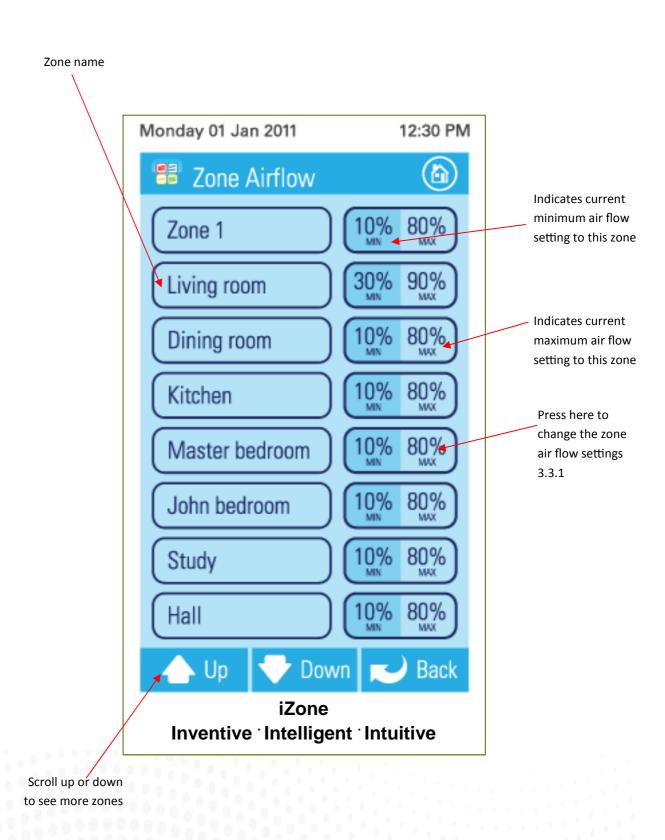


iZone 210 - Assign and edit favourites



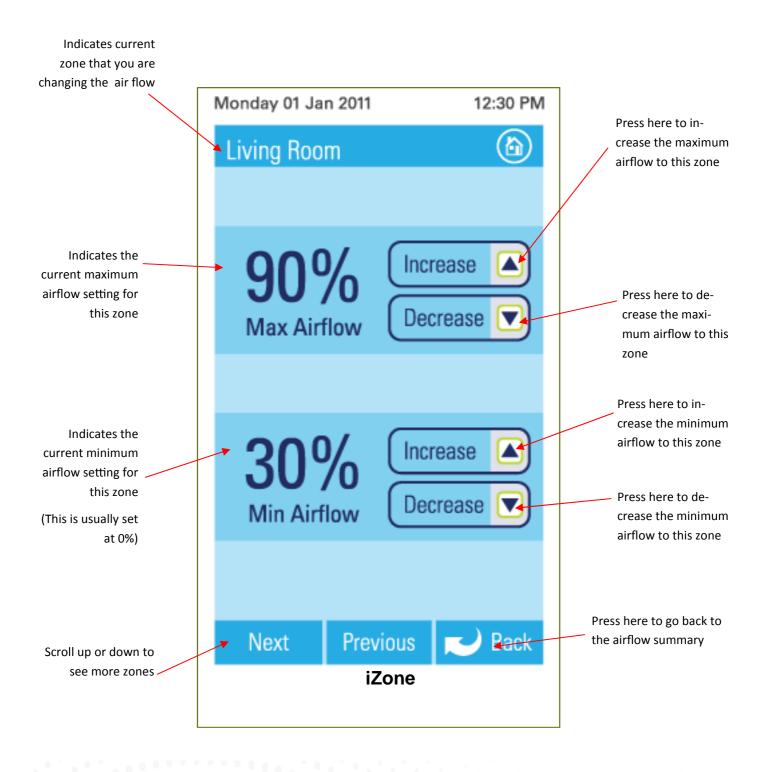


iZone 210 - Zone airflow summary



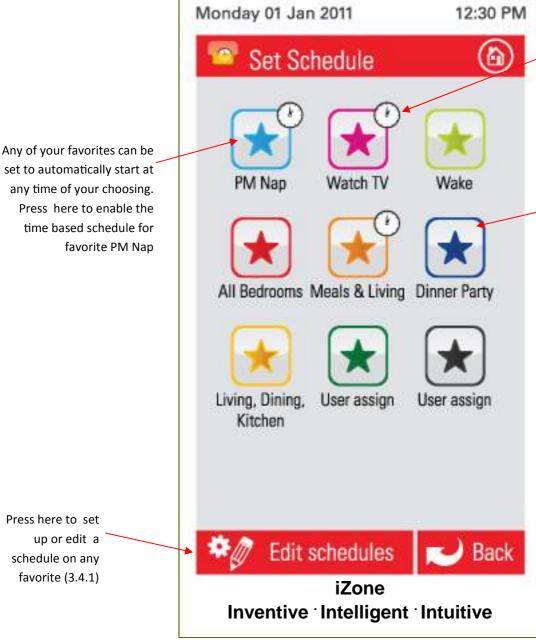


#### iZone 210 - Changing zone airflows





iZone 210 - Schedules



Indicates an automatic time schedule as been enabled for this favorite

Indicates no automatic time schedule as been enabled for this favorite

Press here to set



iZone 210 - Setting and editing a schedules



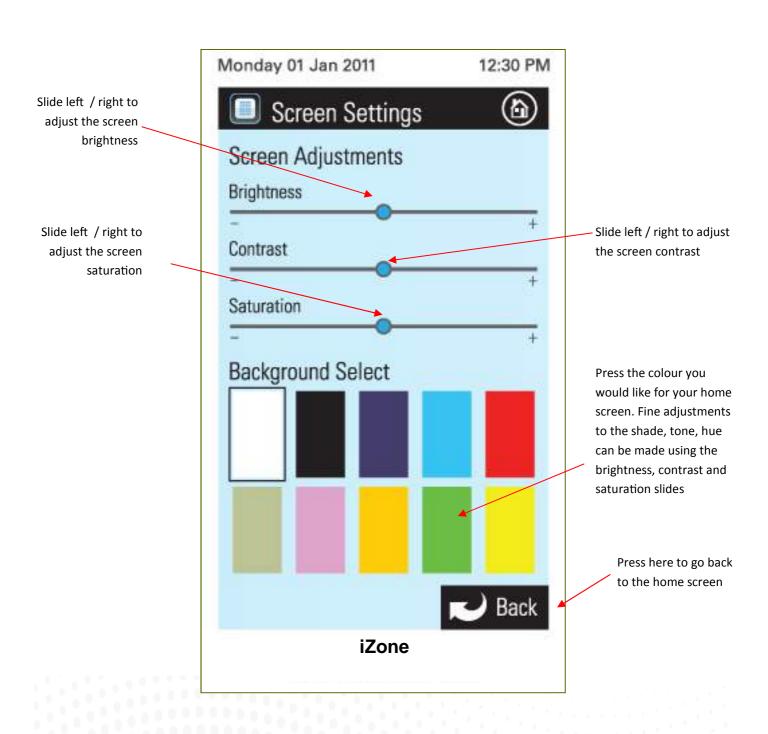


iZone 210 - Setting the time



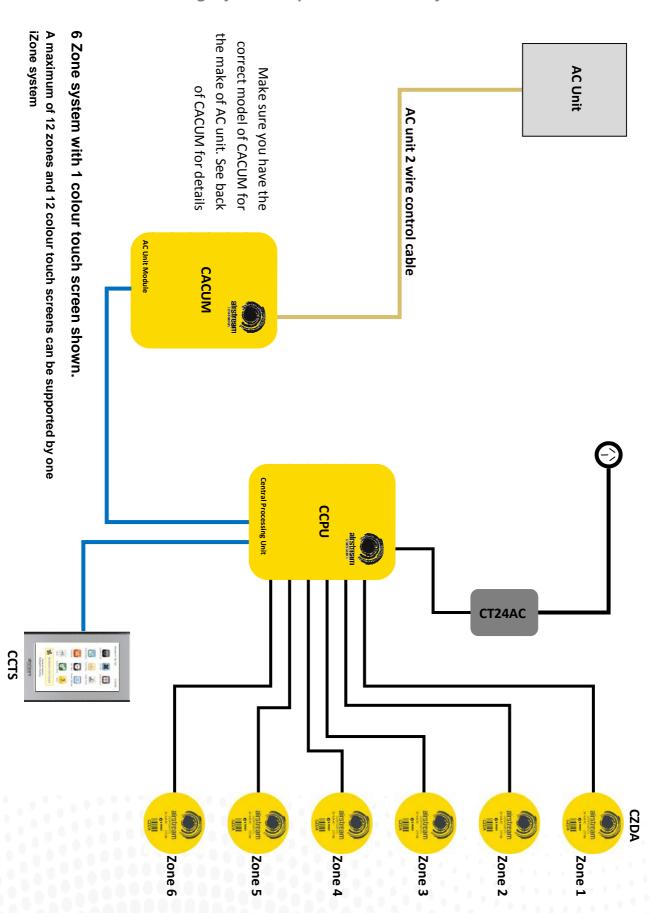


iZone 210 - Changing the home screen colour



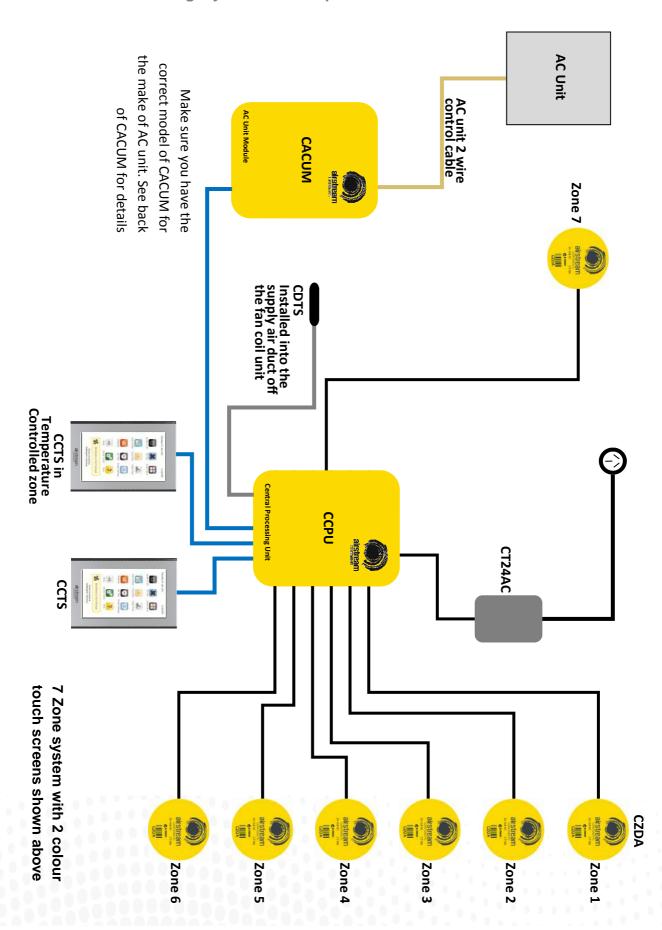


iZone 310 - Standard wiring layout for open / close zone system



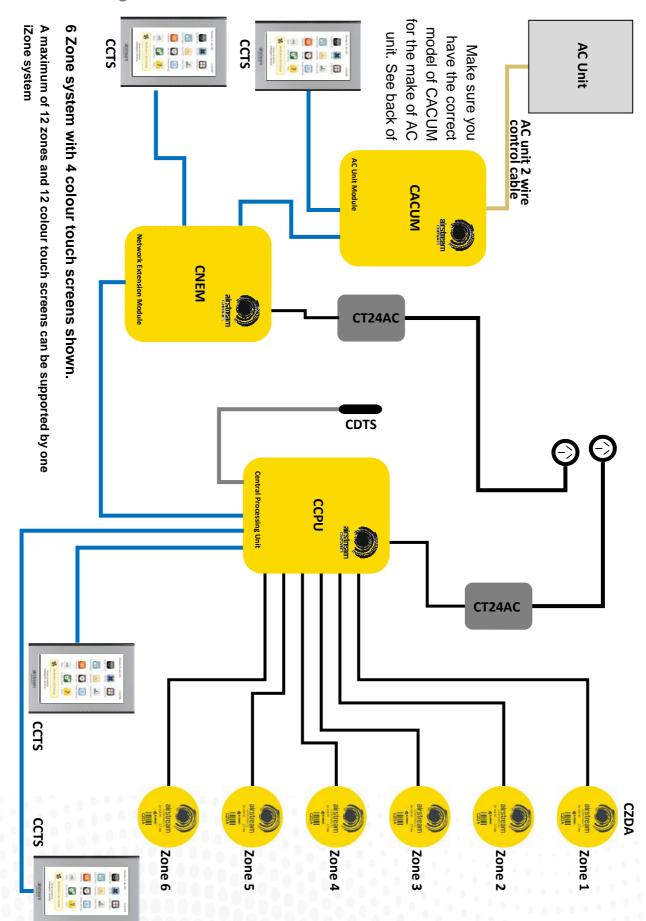


iZone 310 - Standard wiring layout when temperature controlled zones are installed





iZone 310 - Wiring when more than 3 colour touch screens are installed





#### iZone 310 - Installation instructions

- 1. The CCPU and CACUM can be installed on top of the indoor fan coil unit.
- 2. Do **not** run the blue network cables alongside 240 Volt wiring.
- 3. When installing network cables down wall cavities or chasing network cables into walls, tape up and protect the RJ45 connector to avoid damage to the connectors.
- 4. Always install zones in consecutive ports starting at Zone 1. The back of the CCPU is marked with the zone port numbers.
- 5. Do not directly hardwire the CT24V into the AC unit's power supply. This may void the warranty as it will require an electrician in the event that a repair of the iZone system is required.
- 6. Connect Zone Damper Actuators (CZDA) to the zone ports using the RJ11 cables as shown.
- 7. Connect the Colour Touch Screens (CCTS) to the CCTS ports using the RJ45 cables. If you are connecting more than 3 CCTS to the system you will need to connect a Network Extension Module (CNEM) to the CCPU using a short RJ45 cable. The CACUM will also support one CCTS.
- 8. If any CCTS is being used for zone temperature control connect a Duct Temperature Sensor (CDTS) to the CDTS port. Install the sensor into the supply air duct upstream of all dampers. Secure the sensor in place by using reinforced aluminium tape.
- 9. When installing temperature controlled zones ensure the CCTS for the associated zone is installed in a location that is representative of the temperature in the room / zone. The CCTS should be installed at approximately 1600mm above the floor and should not be subject to draughts, direct sunlight or heat from equipment such as computers, TV screens etc. The supply air outlets to this room must <u>not</u> blow conditioned air directly onto the touch screen, as the temperature sensor is located in the CCTS.
- 10. Connect the AC unit control cable from the fan coil unit controls to the CACUM. (This cable is supplied by the AC unit manufacturer and is normally used to connect the fan coil unit controls to the AC unit wall controller.
- 11. Only connect the power supply to the CT24VAC port after all components have been connected.



#### iZone 310 - System initialisation

All new or modified systems must be initialised prior to system configuration.

To initialise the system press the button on the underside of any colour touch screen. This button is recessed so you will need to use a pen to press the button.

The time to initialise the system will vary depending on the number of motors connected.

The system will also initialise when power is restored after a power failure.

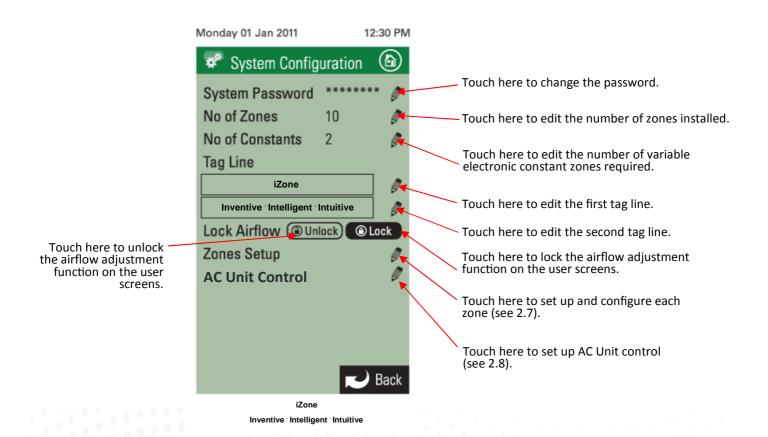




#### iZone 310 - System configuration

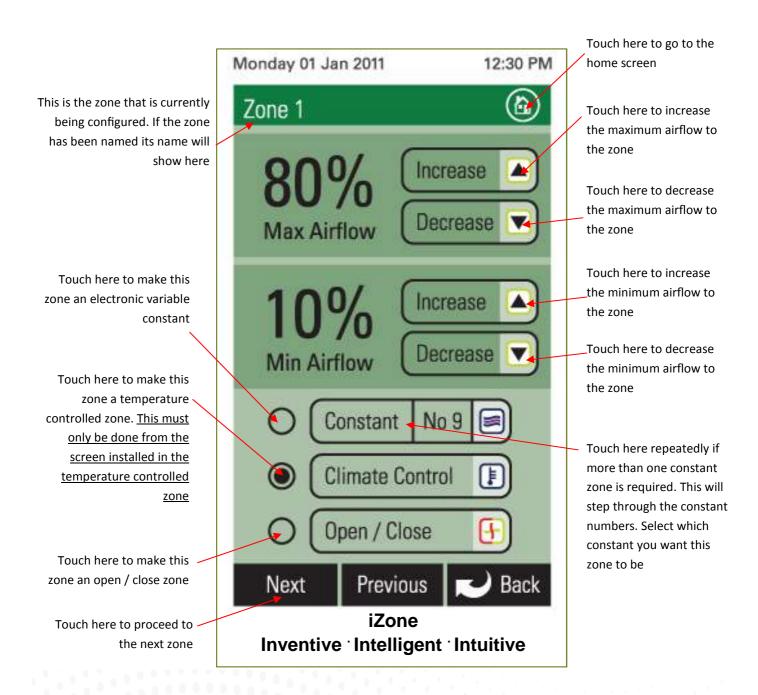
**WARNING!** Only qualified iZone installers should configure the iZone System. Incorrect configuration could result in damage to your air conditioning unit and system.

- 2.1 To configure your system click on the System Config icon on the home page. System Config icon on the home page. System Config icon on the home page. Enter the system password "wamfud" and press the enter button. The enter button must always be touched to save changes.
- 2.2-2.5 You will now be in the System Configuration area:





iZone 310 - Zone set up



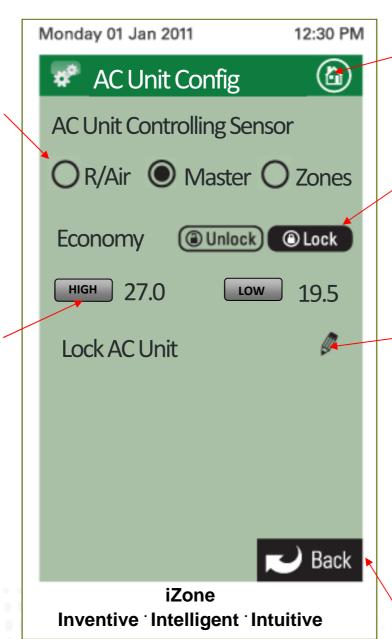


### iZone 310 - AC unit configuration

Select method of controlling the AC unit.

- R/Air will control using the unit's return air sensor.
- Master will control the AC unit from the colour touch screen that has been selected as the Master (3.1).
  - Zones will automatically control the AC unit from the temperature controlled zones (3.1.2).

Toggle the high and low buttons to select the maximum and minimum temperature set points desired for "Economy Lock Mode".



Touch here to go to the home screen.

Touch to lock the
Economy mode. The
Economy mode will limit
the maximum and
minimum temperature
the system can be set to
control at.

Touch to lock the AC Unit. You will need to enter a PIN number and the number of days the system will operate until it is locked off. Do not forget your PIN. Service charges will apply for a technician to attend site to unlock your system.

Touch here to go back and save the changes.

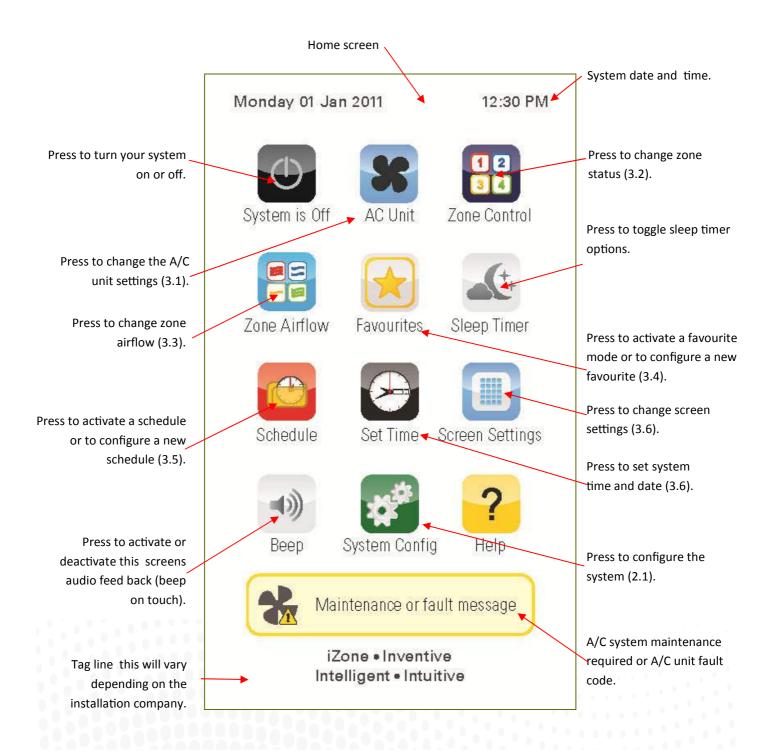


#### iZone 310 - User manual

To get back to the Home screen at any time press.

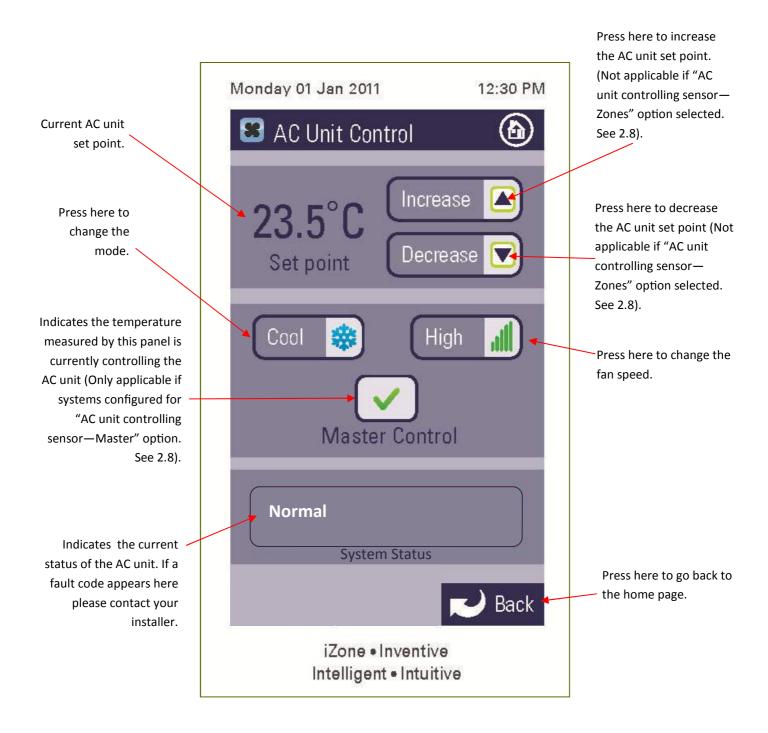


- When entering names or values using the keyboard it is easier to use a thin object such as a toothpick. Do not use sharp, hard objects as they may damage the screen. The enter button must always be pressed to save the changes you have made.
- Some functions may have been locked by your installer to ensure the commissioned values are not changed. To make changes to these values contact your installation company.



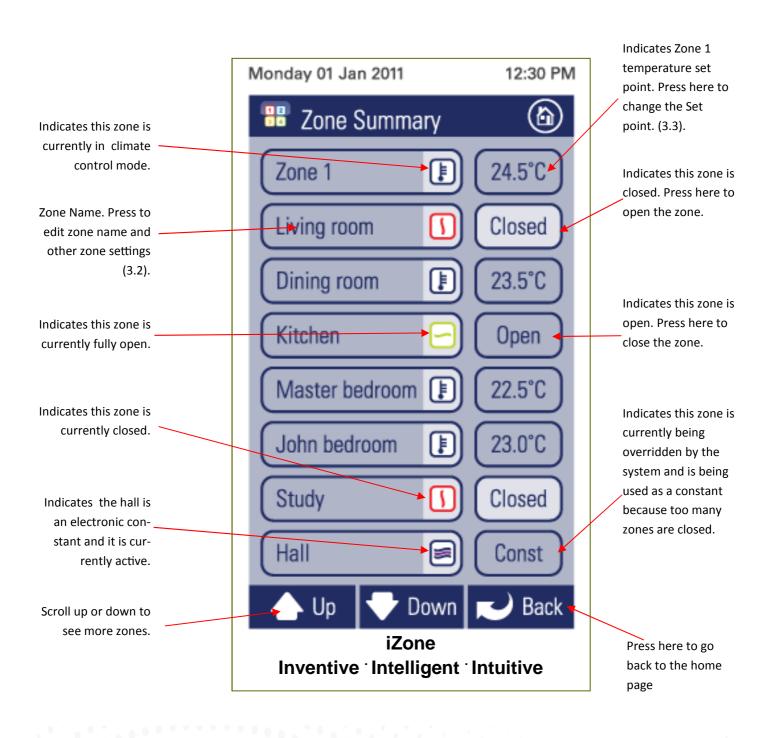


iZone 310 - AC unit





iZone 310 - Zone control



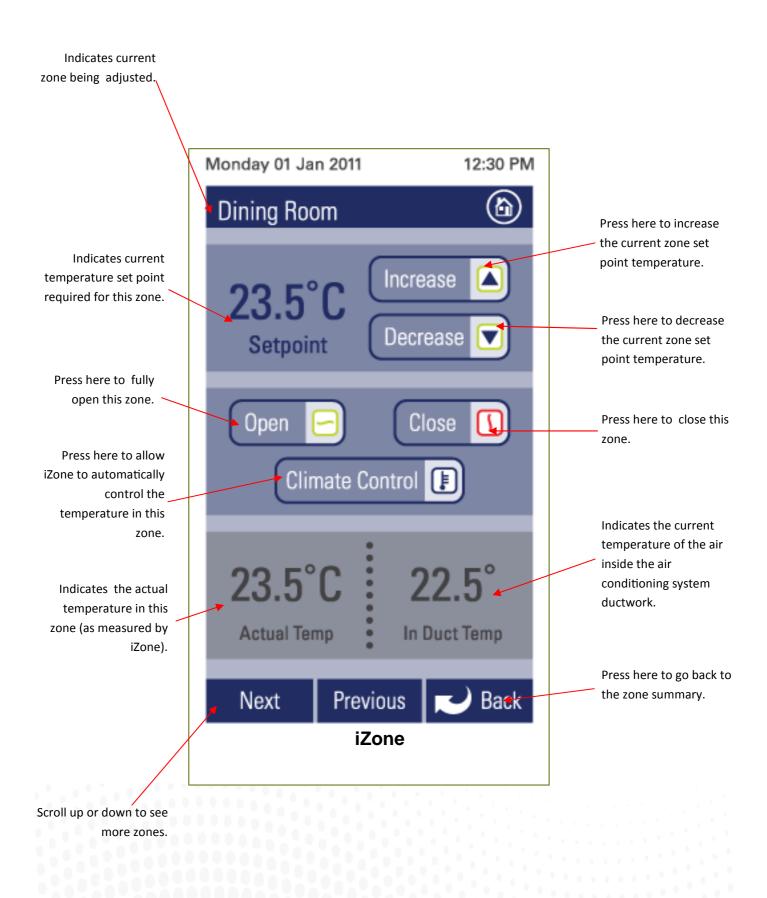


iZone 310 - Edit zone names & settings



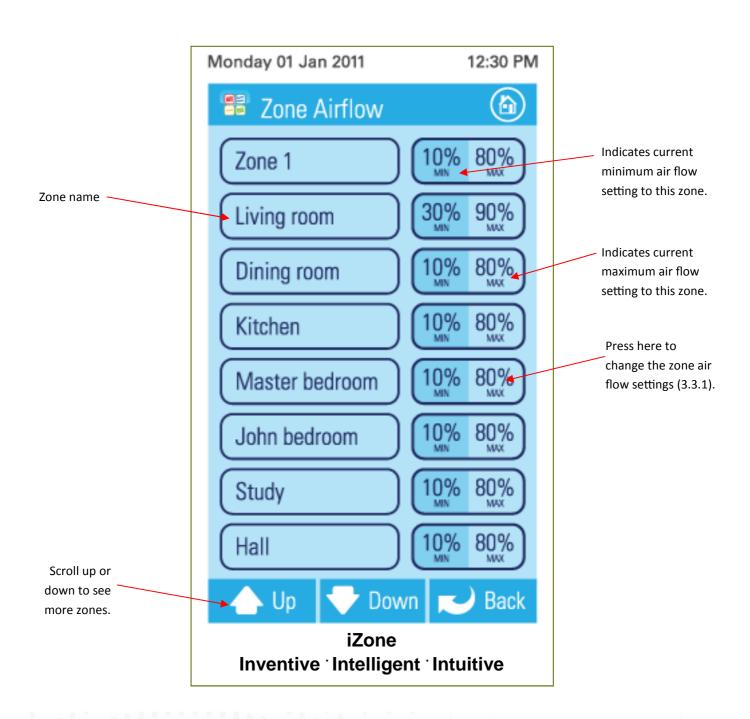


### iZone 310 - Adjusting temperature controlled zones



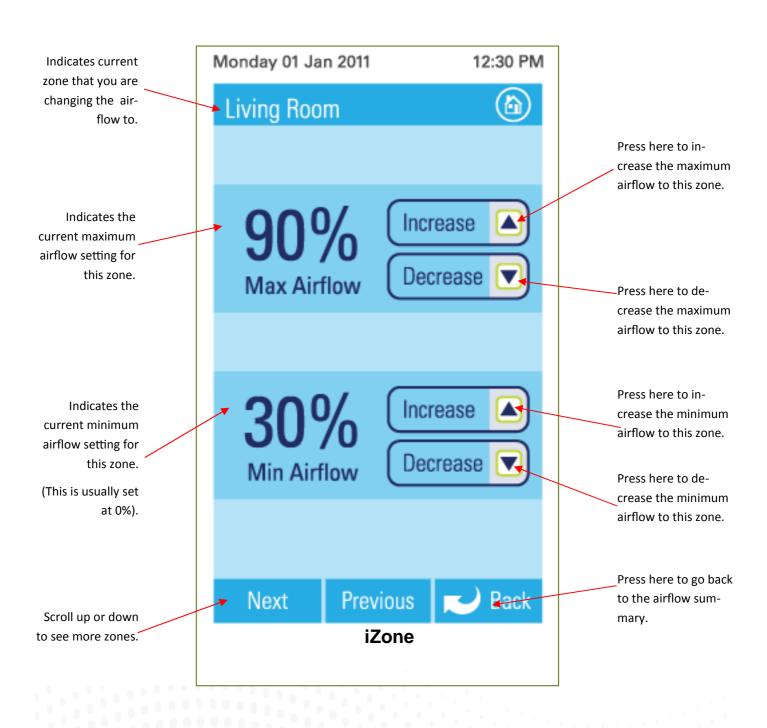


iZone 310 - Zone airflow summary



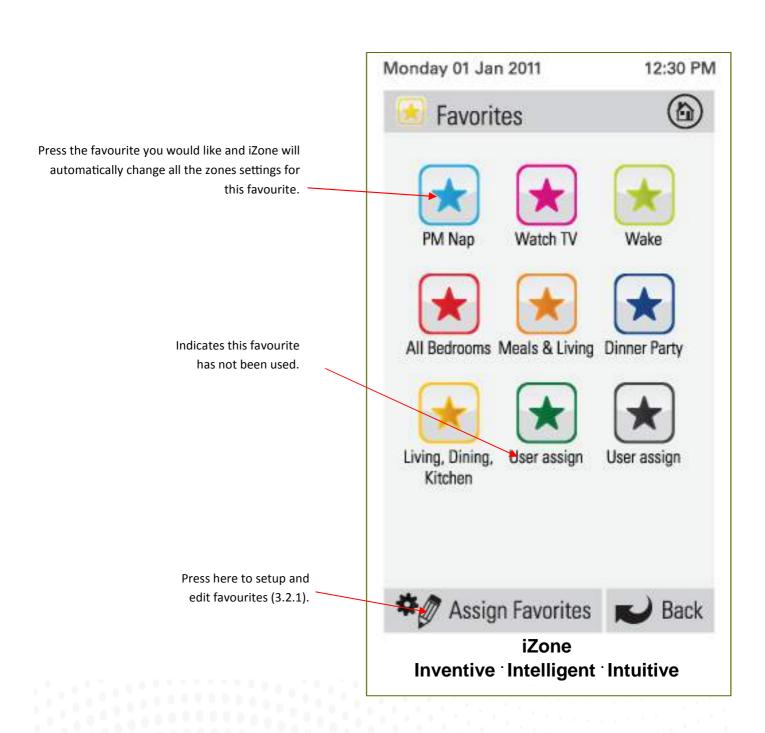


iZone 310 - Changing zone airflows



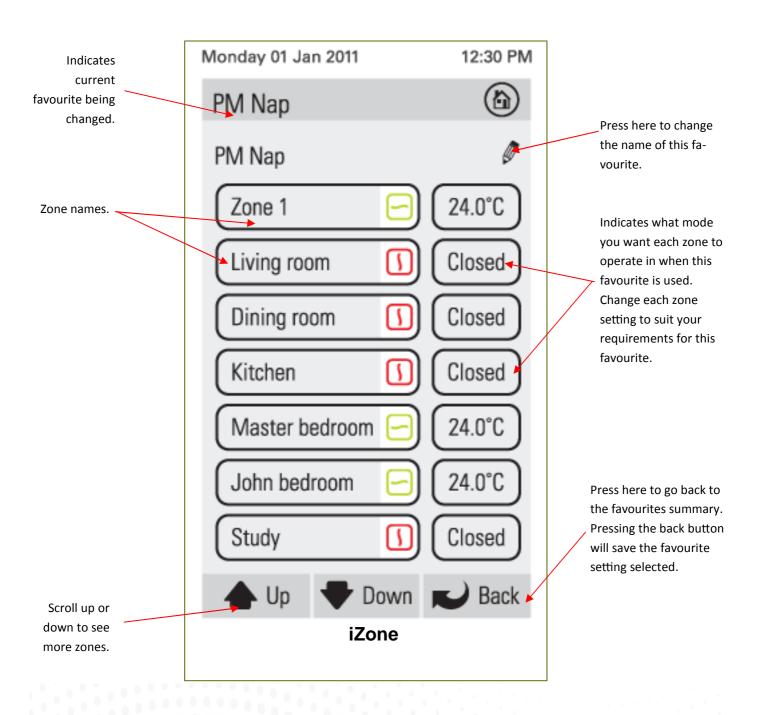


iZone 310 - Favourites





iZone 310 - Assign and edit favourites





iZone 310 - Schedules

Any of your favourites can be set to automatically start at any time of your choosing. Press here to enable the time based schedule for favourite PM Nap.



Indicates an automatic time schedule has been enabled for this favourite.

Indicates no automatic time schedule has been enabled for this favourite.

Press here to set up or edit a schedule on any favourite (3.4.1).



iZone 310 - Setting and editing a schedule



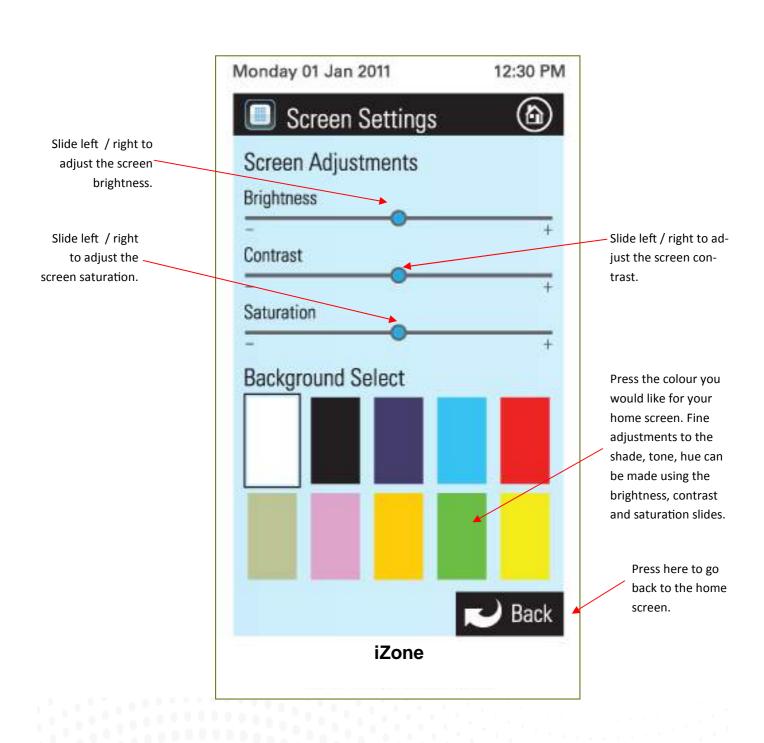


iZone 310 - Setting the time



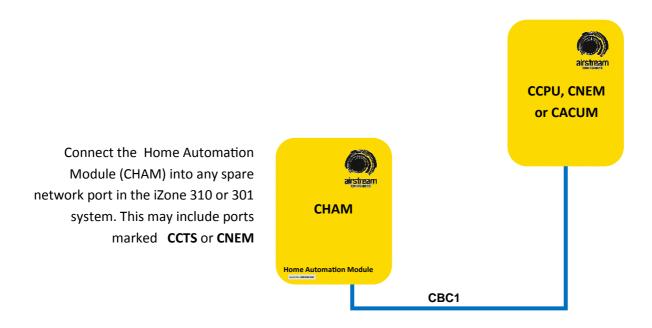


iZone 310 - Setting the time



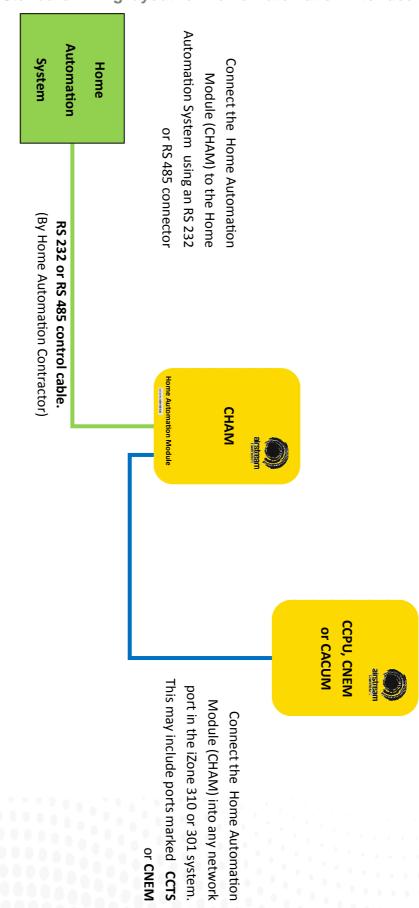


iZone Wi-Fi Control - Standard wiring layout





iZone Wi-Fi Control - Standard wiring layout for Home Automation interface





#### iZone Wi-Fi Control - Installation instructions

- 1. The Home Automation Module (CHAM) can be installed on top of the indoor fan coil unit. However, if there is interference due to the building structure and the Wi-Fi connection is unreliable, the CHAM should be relocated adjacent to the home Wi-Fi module / router and a longer RJ45 cable installed.
- 2. Do **not** run the blue network cables alongside 240 Volt wiring.
- 3. When installing network cables down wall cavities or chasing network cables into walls, tape up and protect the RJ45 connector to avoid damage to the connectors.
- 4. Ensure the colour touch screen CCTS installed on the system has the Wi-Fi software installed to enable Wi-Fi setup. If not return to Airstream for reprogramming.
- 5. If connecting the iZone system to a Home Automation system use an RS 232 or RS 484 serial connector.



## iZone Wi-Fi Control - System initialisation

All new or modified systems must be initialised prior to system configuration.

To initialise the system press the button on the underside of any colour touch screen. This button is recessed so you will need to use a pen to press the button.

The time to initialise the system will vary depending on the number of motors connected.

The system will also initialise when power is restored after a power failure.





## iZone Wi-Fi Configuration

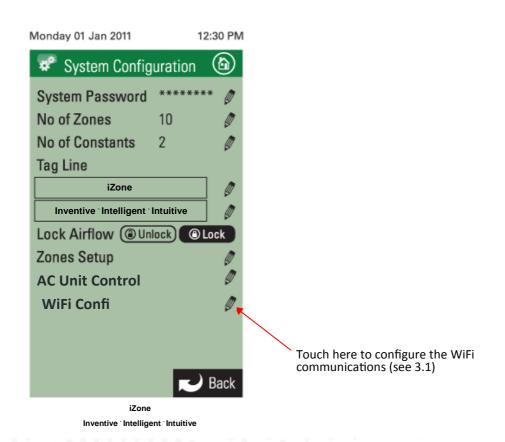
**WARNING!** Only qualified iZone installers should configure the iZone System. Incorrect configuration could result in damage to your air conditioning unit and system.

2.1 To configure your Wi-Fi connection click on the System Config icon on the home page.



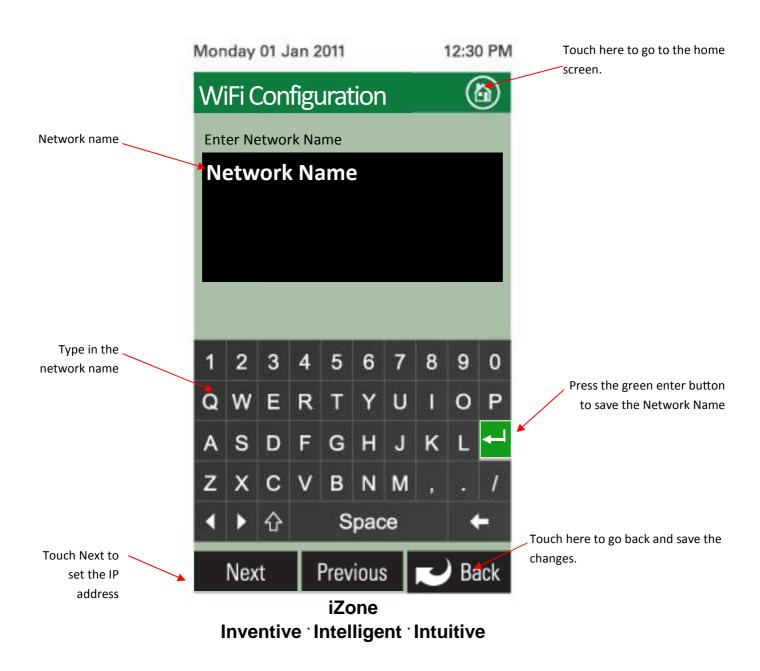
Enter the system password "wamfud" and press the enter button. The enter button must always be touched to save changes.

2.2-2.5 You will now be in the System Configuration area:



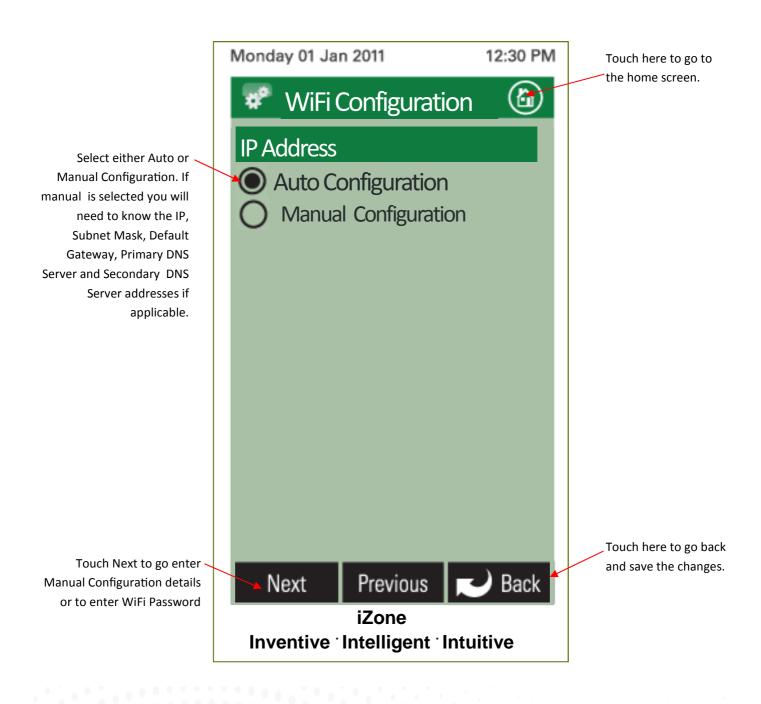


iZone Wi-Fi Configuration- Network name



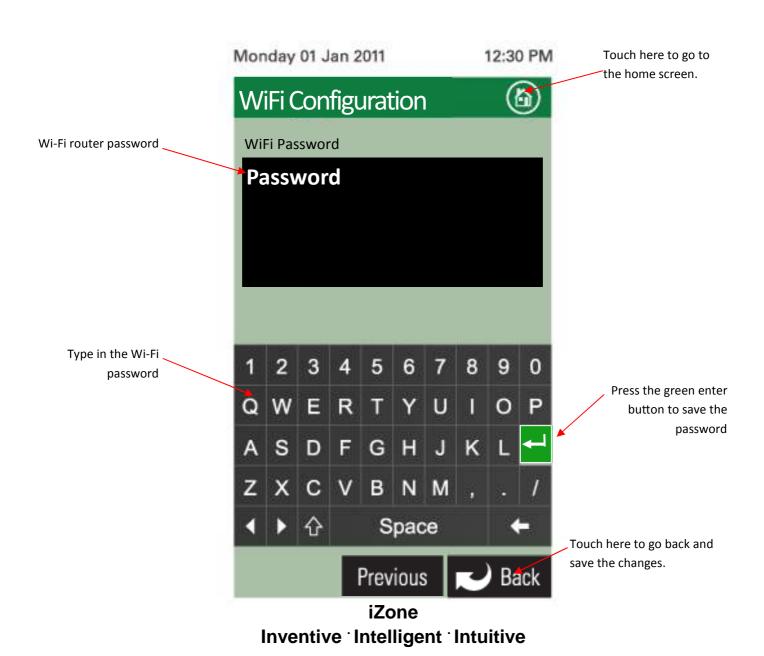


iZone Wi-Fi Configuration- IP address



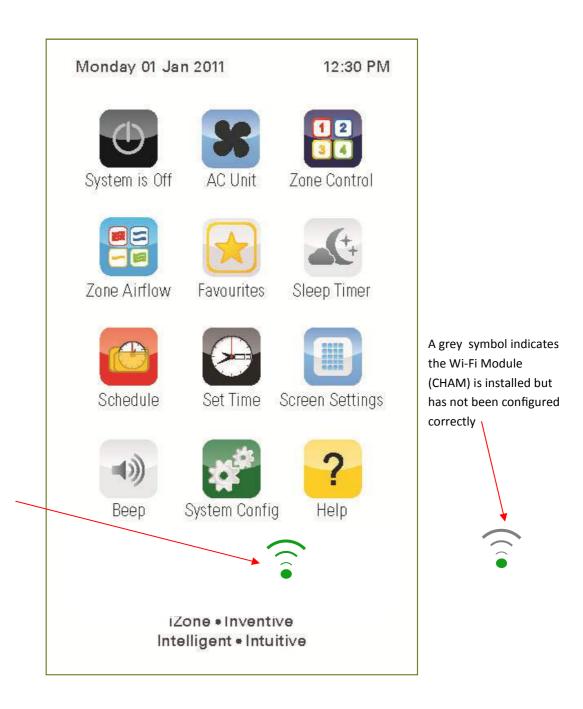


iZone Wi-Fi Configuration- Network password





**iZone Wi-Fi Connection** 



A green symbol indicates the iZone system is now connected to Wi-Fi and ready to use



## iZone Smart phone configuration

You will need to download the iZone App onto your smart phone. When using Wi-Fi from inside the home / office you will not be required to enter a password just press login.

If you want to access the system using your smart phone from outside the Wi-Fi range you will need to subscribe to iZone World Wide. Go to

http://www.air-stream.com.au/izone-world-wide-service.html

To subscribe you will need the serial number that is printed on your CHAM this is a nine digit number.

You will also be asked for a password which you should remember as you will need this password to access your system when you are trying to access your system from further afield.

To reduce the data usage there may be a slight delay between changing a function on your phone, and the system updating, when using iZone World Wide.



## iZone Home automation integration

iZone systems can be integrated into any home automation system that has an RS 232 or RS485 serial interface. The iZone home automation module is fitted as standard with RS 232 and RS 485 connectors for serial interface.

For serial interface specifications please see below in this technical catalogue.

Your home automation integrator will need to write the suitable code to control your AC system. This service is not provided by Airstream or iZone.



## RS232 / RS485

## **Table of Contents**

L.O	Introduction	<u></u> 4
2.0	Serial port interface.	<u></u> 4
2.1	Hardware specifications	<u></u> 4
2.2	Command specifications	
2.2.1	Command example 1	
2.2.2	Command example 2	
2.2.3	Command example 3	<u></u> 5
3.0	Commands List	<u></u> 6
3.1	System On/Off	<u></u> 6
3.2	System Mode	<u></u> 6
3.3	System Fan	<u></u> 6
3.4	System Setpoint	<u></u> 7
3.5	Sleep Timer	<u></u> 7
3.6	Zone Mode	<u></u> 7
3.7	Favourite/Schedule name	<u></u> 8
3.8	Schedule Settings	<u></u> 8
3.9	Favourite Settings	<u></u> 9
3.10	Zone Name	<u></u> 9
3.11	Check Airflow Lock	<u></u> 10
3.12	Zone Maximum Airflow	<u></u> 10
3.13	Zone Minimum Airflow	<u></u> 10
3.14	Execute Favourite	<u></u> 10
3.15	Activate Schedule	<u></u> 11
3.16	Set time	<u></u> 11
3.17	Check Number of Zones	<u></u> 11
3.18	Check System Type	<u></u> 12
3.19	Check Zone Type	<u></u> 12
3.20	Check Zone Temperature	<u></u> 12
3.21	Check In-Duct Temperature	<u></u> 13
3.22		<u></u> 13
3.23	Check Economy Maximum Temperature	



RS232 / RS485

## **Table of Contents**

3.24	Check Economy Minimum Temperature	13
3.25	Check Zone Current Status	_ 13
	Check System Current Status	
	Set Automatic Status Update	

RS232 / RS485



### Introduction

# Serial port interface Hardware specifications

Communication to the Airstream Components iZone control system is possible over RS232 or RS485 connection. The iZone controller expects the following setting from the serial interface:

Baud rate: 19200 data bits: 8 Parity: none Stop bits: 1

Handshaking: none

### **Command specifications**

The commands are text based. A command consists of up to 3 parts:

Command name
Command action

Command parameters

The command needs to be ended with a line feed character (0x0A). If a command requires more than one parameter, then they need to be separated by a comma. The commands are case sensitive.

If a command is successful, then on Ok will be returned from the module. Otherwise, an error will be returned. The module does not buffer commands, meaning that no command will be accepted until the previous one has executed.

Throughout the document **this font** indicates text sent to the Airstream Home Automation Module (command), and **this font** indicates text send by the Airstream Home Automation Module (response).

### **Command example 1**

To turn the system on the following command needs to be sent:

C: Syson=on

Where:

SysOn is the command name

= is the command action

On is the command parameter

RS232 / RS485



## **Command example 2**

To check whether the system is on, the following needs to be sent:

C: Syson?

R: Syson=Off

Where:

SysOn is the command name

? is the check action

All commands have the check action and will not be described beyond the above, unless required.

### **Command example 3**

To see help for a command, the following needs to be sent:

C: Syson

R: Syson help:

R: Parameter: On or Off
R: To check: 'SysOn?\r'

Where:

SysOn is the command name.

All commands have the help action and will not be described beyond the above.

### **Commands List**

The following is a list of commands, and their descriptions, which are supported by the HAM module.

### System On/Off

Command Name: SysOn.

Use this command to turn the system on or off.

#### SysOn=Param1

Where Param1 can be:

"On" to turn the system on

"Off" to turn the system off

#### Example:

C: Syson=On

RS232 / RS485



### **System Mode**

Command Name: SysMode.

Use this command to change the mode the system is to operate in.

#### SysMode=Param1

Where Param1 is the required system mode, and can be:

"Cool" for cool mode

"Heat" for heat mode

"Vent" for vent mode

"Dry" for dry mode

"Auto" for auto mode

#### Example:

C: SysMode=Cool

#### **System Fan**

Command Name: SysFan

Use this command to change the fan speed.

#### SysFan=Param1

Where Param1 is the required fan speed, and can be:

"Low" for low fan speed

"Med" for medium fan speed

"High" for high fan speed

"Auto" for auto fan speed

#### Example:

C: SysFan=Low

### **System Setpoint**

Command Name: SysSetpoint

Use this command to change the system setpoint temperature.

#### SysSetpoint=Param1

Where Param1 is the required system setpoint temperature. If the economy lock is enabled, then the temperature can be set between 'economyLow' and economyHigh' (these parameters are described in section ...), otherwise between 15.0 and 30.0. Temperature can be set in 0.5 increments.

## Example:

C: SysSetpoint=22.5

RS232 / RS485



## **Sleep Timer**

Command Name: SleepTimer

Use this command to set the sleep timer. The sleep timer can be set for up two hours in half hour increments.

#### SleepTimer=Param1

Where:

Param1 can be:

0hr

0.5hr

1hr

1.5hr

2hr

#### Example:

C: SleepTimer=0.5hr

#### **Zone Mode**

Command Name: ZoneMode

Use this command to change the zone mode. A zone can be set to one of three modes: Open, Close, Auto. Auto mode can only be applied to a zone which configured for temperature control (see 3.19). If a zone needs to be set in Auto mode, it also needs to be sent the setpoint as well.

#### ZoneMode=Param1,Param2,Param3

Where:

Param1 is the zone number (1-NumberOfZones, see 3.17)

Param2 is the required zone mode:

Open, to open the zone

Close, to close the zone

Auto, to set the zone temperature control mode.

Param3 is the required setpoint. This parameter needs to be sent only when setting the zone to Auto mode.

Example 1:

C: ZoneMode=1, Auto, 22.5

Example 2:

C: ZoneMode=2,Open

RS232 / RS485



## Favourite/Schedule name

Command Name: FavSchName

Use this command to change the Favourite/Schedule name.

#### FavSchName=Param1,Param2

Where:

Param1 – is Favourite/Schedule number (1-9)

Param2 – is the required name. The name will be truncated to 16 characters.

#### Example:

C: FavSchName=2, Summer morning

#### **Schedule Settings**

Command Name: SchSetting

Use this command to set schedule.

For 210 system (see 3.18) the following settings are required:

Schedule start time

Days the schedule is enabled on

#### SchSetting=Param1,Param2,Param3,Param4

Where:

Param1 is the schedule number

Param2 is the days enabled byte

set bit 0 to enable schedule on Monday, clear the bit to disable

set bit 1 to enable schedule on Tuesday, clear the bit to disable

set bit 2 to enable schedule on Wednesday, clear the bit to disable

set bit 3 to enable schedule on Thursday, clear the bit to disable

set bit 4 to enable schedule on Friday, clear the bit to disable

set bit 5 to enable schedule on Saturday, clear the bit to disable

set bit 6 to enable schedule on Sunday, clear the bit to disable

Param3 is the start hour

Param4 is the start minutes

For 310 system the following settings are required:

Schedule start time

Schedule stop time

Days the schedule is enabled on

RS232 / RS485



#### SchSetting=Param1,Param2,Param3,Param4,Param5,Param6

Where:

Param1 is the schedule number

Param2 is the days enabled byte

set bit 0 to enable schedule on Monday, clear the bit to disable

set bit 1 to enable schedule on Tuesday, clear the bit to disable

set bit 2 to enable schedule on Wednesday, clear the bit to disable

set bit 3 to enable schedule on Thursday, clear the bit to disable

set bit 4 to enable schedule on Friday, clear the bit to disable

set bit 5 to enable schedule on Saturday, clear the bit to disable

set bit 6 to enable schedule on Sunday, clear the bit to disable

Param3 is the start hour

Param4 is the start minutes

Param5 is the stop hour

Param6 is the stop minutes

Example 1 (210 system), enable schedule on Saturday and Sunday:

C: SchSetting=7,',12,30

Example 2 (310 system), enable schedule on Sunday:

C: SchSetting=8,@,15,55,19,10

#### **Favourite Settings**

Command Name: FavSettings

Use this command to set a favourite. This command needs to be provided with the settings for all the zones in a system.

#### FavSettings=Param1,Param2...

Where:

Param1 is the favourite number.

Param2 is the setting for zone 1

Param3 is the setting for zone 2

Etc, up to the number of zones in the system

The zone setting parameter can be set to:

"Open" to open a zone

"Close" to close a zone.

"Auto" to set the zone in auto mode. The auto mode can only be set for zones which have temperature control enabled. The setpoint for this zone will be set to the last setpoint used for that zone.

RS232 / RS485



Example (5 zone system):

C: FavSetting=3,Open,Open,Close,Auto,Auto

#### **Zone Name**

Command Name: ZoneName

Use this command to change the zone name.

#### ZoneName=Param1,Param2

Where:

Param1 – is zone number (1-NumberOfZones, see 3.17)

Param2 – is the required name. The name will be truncated to 16 characters.

#### Example:

C: ZoneName=3, Theatre room

#### **Check Airflow Lock**

Command Name: AirflowLock

Use this command to check whether the airflow lock is enabled. While the airflow lock is enabled, adjusting of zone airflow is not allowed. Serial interface does not allow to modify this parameter.

#### Example:

C: AirflowLock?

R: AirflowLock=false

#### **Zone Maximum Airflow**

Command Name: ZoneMaxAir

Use this command to change the maximum air flow into a zone.

#### ZoneMaxAir=Param1,Param2

Where:

Param1 – is zone number (1-NumberOfZones, see3.17)

Param2 – is the required air flow in %. This number can be set between ZoneMinAir (see 3.13) to 100%. The airflow can be changed in 5% steps.

#### Example:

C: ZoneMaxAir=2,90

RS232 / RS485



#### **Zone Minimum Airflow**

Command Name: ZoneMinAir

Use this command to change the minimum air flow into a zone.

#### ZoneMinAir=Param1,Param2

Where:

Param1 – is zone number (1-NumberOfZones, see 3.17)

Param2 – is the required air flow in %. This number can be set between 0% to ZoneMaxAir (see 3.11). The airflow can be changed in 5% steps.

#### Example:

C: ZoneMinAir=2,15

#### **Execute Favourite**

Command Name: FavExecute

Use this command to execute a favourite.

#### FavExecute=Param1

Where:

Param1 – is the favourite number to be executed (1-9).

Example:

C: FavExecute=6

#### **Activate Schedule**

Command Name: SchActivate

Use this command to activate or deactivate a schedule.

### SchActivate=Param1,Param2

Where:

Param1 – is the schedule number to be activated or deactivated (1-9) Param2 – true to activate the schedule, false to deactivate schedule

#### Example:

C: SchActivate=5, true

RS232 / RS485



#### Set time

Command Name: SetTime

Use this command to set the time in the iZone system. When using this command all parameters need to be set.

#### SetTime=Param1,Param2,Param3,Param4,Param5

Where:

Param1 is the year (0-99)

Param2 is the month

Param3 is the day of month

Param4 is the hour (24h)

Param5 is the minutes.

#### Example:

C: SetTime=13,4,22,22,14

#### **Check Number of Zones**

Command Name: NumberOfZones

Use this command to check the number of zones the system is configured for. Setting of the number of zones is not allowed over the serial interface.

Example:

C: NumberOfZones?

R: NumberOfZones=Value1

Where:

Value1 – is the number of zones in the iZone system.

**Check System Type** 

Command Name: SysType

Use this command the system type of the connected Airstream system. Setting of the system type is not allowed over the serial interface.

Example:

C: SysType?

R: SysType=Value1

RS232 / RS485



Where:

Value1 – is a string with the system type. Currently there are two systems:

"210" no unit control

"310" unit control.

**Check Zone Type** 

Command Name: ZoneType

Use this command to check the zone type. Setting of the zone type is not allowed over the serial interface.

Example:

C: ZoneType?Param1

R: ZoneType=Value1, Value2

Where:

Param1/Value1 – is the zone number

Value2 – is a string with the zone type. A zone can be set to:

"Auto" which allows for temperature control

"OpCl" zone is open/close only

**Check Zone Temperature** 

Command Name: ZoneTemp

Use this command to check the current temperature in a zone.

### ZoneTemp?Param1

Where:

Param1 is the zone number

Example

C: ZoneTemp? 2

R: ZoneTemp=2,23.0

#### **Check In-Duct Temperature**

Command Name: InDuctTemp

Use this command to check the current temperature in the duct.

Example:

C: InDuctTemp?

R: InDuctTemp=27.2

#### **Check Economy Lock**

Command Name: EcoLock

RS232 / RS485



Use this command to check whether the economy mode is enabled. When this mode is enabled, the setpoint adjustment will be limited to the values set in 3.23 and 3.24. Serial interface does not allow for the setting of this parameter.

Example:

C: EcoLock?

R: EcoLock=false

#### **Check Economy Maximum Temperature**

Command Name: EcoMaxTemp

Use this command to check the maximum allowable temperature setpoint setting when the economy mode is enabled.

Example:

C: EcoMaxTemp?

R: EcoMaxTemp=29.0

### **Check Economy Minimum Temperature**

Command Name: EcoMinTemp

Use this command to check the minimum allowable temperature setpoint setting when the economy mode is enabled.

Example:

C: EcoMinTemp?

R: EcoMinTemp=19.0

#### **Check Zone Current Status**

Command Name: ZoneStatus

Use this command to receive a zone status information.

C: ZoneStatus?Param1

R: ZoneStatus=Value1, Value2, Value3, Value4, Value5, Value6, Value7, Value8

Where:

Param1/Value1 is the zone number

Value2 is the zone name

Value3 is the zone type (see 3.19)

Value4 is the zone mode (see 3.6)

Value5 is the zone setpoint (this value should be ignored when the zone type is OpCl)

RS232 / RS485



Value6 is the zone current temperature (this value should be ignored when the zone type is OpCl) Value7 is the zone minimum airflow Value8 is the zone maximum airflow

#### Example:

C: ZoneStatus? 2

R: ZoneStatus=2, Kitchen, Auto, close, 22.5, 22.4, 25, 100

#### **Check System Current Status**

Command Name: SystemStatus

Use this command to check the current system status.

C: SystemStatus?

R: SystemStatus=Value1, Value2, Value3, Value4, Value5, Value6

Where:

Value1 indicates system on status (see 3.1)

Value2 indicates system mode (see 3.2)

Value3 indicates system fan (see 3.3)

Value4 indicates system setpoint (see 3.4)

Value5 indicates sleep timer status (see 3.5)

#### Example:

C: SystemStatus?

R: SystemStatus=off,Cool,Med,22.5,off

### **Set** Automatic Status Update

Command Name AutoUpdate

Use this command to enable or disable automatic sending of zone (see 3.25) and system (3.26) status messages. This command only applies to the RS232 interface. RS485 interface does not implement this command.

#### AutoUpdate=Param1

Where:

Param1 is true to enable automatic update, or false to disable automatic update.

#### Example:

C: AutoUpdate=true