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Electronic controls

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.
Electronic controls

iZone 110—Standard wiring layout

6 Zone system with 2 wall controllers shown. A maximum of 6 zones and 2 wall controllers can be supported by one iZone 110 system.
Electronic controls

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.
Electronic controls

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.
Electronic controls

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.

3.1 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 careful to place the sticker squarely in the recess provided. Peel off the protective coating from the sticker.
Electronic controls

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

1. Connect Zone Damper Actuators (CZDA) to the Zone ports using the RJ11 cables.
2. Connect the Wall Controllers (C110WC) to the ports using the Blue RJ45 cables.
3. Select the number of active zones required on the dip switch.
4. Select the number of electronic constant zones required.
5. Connect the power supply to the (CT24AC) port.
Switch all zones OFF and one zone ON. Check which zone is being supplied with air.

Label the zone accordingly
Electronic controls

iZone 110—User manual

Press the silicone button to switch zones on and off

The LED will illuminate when the zone is on
Electronic controls

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.
Electronic controls

Standard wiring layout for iZone 210 open / close zone system
Electronic controls

Wiring layout for iZone 210 when temperature controlled zones are installed.
Electronic controls

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

A maximum of 12 zones and 12 Colour touch screens can be supported by one iZone system.
Electronic controls

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 **not** 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.
Electronic controls

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.
**Electronic controls**

**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:

[Diagram of System Configuration interface]

- Touch here to change the Password
- Touch here to edit the number of Zones installed
- Touch here to edit the number of variable electronic constant Zones required
- Touch here to edit the first tag line
- Touch here to edit the second tag line
- Touch here to lock the airflow adjustment function on the user screens
- Touch here to unlock the airflow adjustment function on the user screens
- Touch here to set up and configure each Zone (see 2.1)
Electronic controls

iZone 210 - Zone Set Up

This is the Zone that is currently being configured. If the zone has been named its name will show here.

Touch here to make this zone an electronic variable constant.

Touch here to make this zone a temperature controlled zone. This must only be done from the screen installed in the temperature controlled zone.

Touch here to make this zone an open / close zone.

Touch here to proceed to the next zone.

Touch here to go to the home screen.

Touch here to increase the maximum airflow to the zone.

Touch here to decrease the maximum airflow to the zone.

Touch here to increase the minimum airflow to the zone.

Touch here to decrease the minimum airflow to the zone.

Touch here repeatedly if more than one constant zone is required. This will step through the constant numbers. Select which constant you want this zone to be.
Electronic controls

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.
Electronic controls

iZone 210 - Zone control

- Indicates this Zone is currently in climate control mode
- Indicates Zone 1 temperature set point. Press here to change the Set point. (3.3)
- Indicates this zone is closed. Press here to open the zone
- Indicates this zone is open. Press here to close the zone
- Indicates this zone is currently closed
- Indicates this zone is currently fully open
- Indicates the Hall is an electronic constant and it is currently active
- Indicates Zone Name. Press to edit zone name and other zone settings (3.2)

Scroll up or down to see more zones

iZone
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Electronic controls

iZone 210 - Edit zone names & settings

Current zone being edited
System zone number and display name
Current zone status
Zone maximum and minimum airflow set points
Status of this zone if it has been selected as an electronic constant

Press to edit zone
Press to edit current zone status
Press to change maximum and minimum airflow
Press to increase or decrease airflow set point

Monday 01 Jan 2011 12:30 PM

Dining Room

Zone 3 Dining Room

Status Climate Control

Max Airflow 80%
Min Airflow 10%

Constant Zone Inactive

10%

Min Airflow

Increase

Decrease

Next

Previous

Back

iZone

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Electronic controls

iZone 210 - Adjusting temperature controlled zones

Indicates current temperature set point required for this zone. Your air conditioning unit temperature set point should be set approximately 2°C below your lowest zone set point in summer and approximately 2°C above your highest zone set point in winter.

Press here to fully open this zone.

Press here to allow iZone to automatically control the temperature in this zone.

Indicates the actual temperature in this zone (as measured by iZone).

Indicates current zone being adjusted.

Press here to increase the current zone set point temperature.

Press here to decrease the current zone set point temperature.

Press here to close this zone.

Indicates the current temperature of the air inside the air conditioning system ductwork.

Press here to go back to the zone summary.

Scroll up or down to see more zones.
Electronic controls

iZone 210 - Favourites

Press the favorite you would like and iZone will automatically change all the zones settings for this favorite.

Indicates this favorite has not been used.

Press here to setup and edit favorites (3.2.1).

iZone
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Electronic controls

iZone 210 - Assign and edit favourites

- Indicates current favourite being changed
- Zone names
- Scroll up or down to see more zones
- Press here to change the name of this favourite
- Indicates what mode you want each zone to operate in when this favourite is used. Change each zone setting to suit your requirements for this favourite
- Press here to go back to the favourites summary
iZone 210 - Zone airflow summary

- Zone name
- Indicates current minimum air flow setting to this zone
- Indicates current maximum air flow setting to this zone
- Press here to change the zone air flow settings 3.3.1
- Scroll up or down to see more zones

iZone
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Electronic controls

iZone 210 - Changing zone airflows

Indicates current zone that you are changing the airflow

Indicates the current maximum airflow setting for this zone

Indicates the current minimum airflow setting for this zone
(This is usually set at 0%)

Scroll up or down to see more zones

Press here to increase the maximum airflow to this zone

Press here to decrease the maximum airflow to this zone

Press here to increase the minimum airflow to this zone

Press here to decrease the minimum airflow to this zone

Press here to go back to the airflow summary

iZone
Electronic controls

iZone 210 - Schedules

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

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 up or edit a schedule on any favorite (3.4.1)

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Electronic controls

iZone 210 - Setting and editing a schedules

Indicates current schedule that you are changing or setting

Indicates the start time for this schedule

Indicates the days this schedule will not run. Press the day you want the schedule to apply to

Press next to see the next schedule

Indicates the days this schedule will apply. Press to stop the schedule running on this day.

Press here delete this schedule

Press the key pad to change the time. Remember it is in 24 hour format so for 2:30am type in 0230

Press the enter button to save your new setting

Press here to go back to the schedule summary
Electronic controls

iZone 210 - Setting the time

Current time

Indicates the minutes are be changed

Current date

Press the left or right arrows to move to the value you want to change

You must press the enter button to save the changes you have made

iZone
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Electronic controls

iZone 210 - Changing the home screen colour

- Slide left / right to adjust the screen brightness
- Slide left / right to adjust the screen saturation
- Slide left / right to adjust the screen contrast
- Press the colour you would like for your home screen. Fine adjustments to the shade, tone, hue can be made using the brightness, contrast and saturation slides
- Press here to go back to the home screen
Electronic controls

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

A maximum of 12 zones and 12 colour touch screens can be supported by one iZone system.

6 Zone system with 1 colour touch screen shown.

Make sure you have the correct model of CACUM for the make of AC unit. See back of CACUM for details.

AC unit 2 wire control cable

CACUM

AC Unit Module

CCT5

Zone 1

Zone 2

Zone 3

Zone 4

Zone 5

Zone 6

CT24AC

CCTS

AC unit 2 wire control cable

CACUM

Central Processing Unit

CTDA

AC Unit

CCPU
Electronic controls

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

Make sure you have the correct model of CACUM for the make of AC unit. See back of CACUM for details.

CCPU

Central Processing Unit

CCTS

Controlled Temperature

Zone 1

Zone 3

Zone 2

Zone 4

Zone 6

Zone 7

Zone 5

CT24AC

Room Air Damper

AC Unit

AC Unit control cable

CDTS

Installed into the supply air duct off the fan coil unit

7 Zone system with 2 colour touch screens shown above
Electronic Controls

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

A maximum of 12 zones and 12 colour touch screens can be supported by one iZone system.
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 not 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.
Electronic controls

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.

Airstream logo will spin while system is initialising.

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

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. 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:

![System Configuration Screen](image)

- Touch here to change the password.
- Touch here to edit the number of zones installed.
- Touch here to edit the number of variable electronic constant zones required.
- Touch here to edit the first tag line.
- Touch here to edit the second tag line.
- Touch here to lock the airflow adjustment function on the user screens.
- Touch here to set up and configure each zone (see 2.7).
- Touch here to set up AC Unit control (see 2.8).
Electronic controls

iZone 310 - Zone set up

This is the zone that is currently being configured. If the zone has been named its name will show here.

Touch here to make this zone an electronic variable constant.

Touch here to make this zone a temperature controlled zone. This must only be done from the screen installed in the temperature controlled zone.

Touch here to make this zone an open / close zone.

Touch here to proceed to the next zone.

iZone
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Touch here to go to the home screen.

Touch here to increase the maximum airflow to the zone.

Touch here to decrease the maximum airflow to the zone.

Touch here to increase the minimum airflow to the zone.

Touch here to decrease the minimum airflow to the zone.

Touch here repeatedly if more than one constant zone is required. This will step through the constant numbers. Select which constant you want this zone to be.
Electronic controls

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).

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.

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

Touch here to go back and save the changes.
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.
Electronic controls

iZone 310 - AC unit

Press here to increase the AC unit set point. (Not applicable if “AC unit controlling sensor—Zones” option selected. See 2.8).

Press here to decrease the AC unit set point (Not applicable if “AC unit controlling sensor—Zones” option selected. See 2.8).

Press here to change the fan speed.

Press here to go back to the home page.

- Current AC unit set point.
- Press here to change the mode.
- Indicates the temperature measured by this panel is currently controlling the AC unit (Only applicable if systems configured for “AC unit controlling sensor—Master” option. See 2.8).
- Indicates the current status of the AC unit. If a fault code appears here please contact your installer.
Electronic controls

iZone 310 - Zone control

Indicates this zone is currently in climate control mode.

Zone Name. Press to edit zone name and other zone settings (3.2).

Indicates this zone is currently fully open.

Indicates this zone is currently closed.

Indicates the hall is an electronic constant and it is currently active.

Scroll up or down to see more zones.

Indicates Zone 1 temperature set point. Press here to change the Set point. (3.3).

Indicates this zone is closed. Press here to open the zone.

Indicates this zone is open. Press here to close the zone.

Indicates this zone is currently being overridden by the system and is being used as a constant because too many zones are closed.

Press here to go back to the home page.
Electronic controls

iZone 310 - Edit zone names & settings

- **Current zone being edited.**
- **System zone number and display name.**
- **Current zone status.**
- **Zone maximum and minimum air flow set points.**
- **Status of this zone if it has been selected as an electronic constant.**

**Press to edit zone name.**

**Press to edit current zone status.**

**Press to change maximum and minimum airflow set points.**

**Press to increase or decrease air flow set point.**

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Electronic controls

iZone 310 - Adjusting temperature controlled zones

- Indicates current zone being adjusted.
- Indicates current temperature set point required for this zone.
- Press here to fully open this zone.
- Press here to allow iZone to automatically control the temperature in this zone.
- Indicates the actual temperature in this zone (as measured by iZone).
- Scroll up or down to see more zones.
- Press here to increase the current zone set point temperature.
- Press here to decrease the current zone set point temperature.
- Press here to close this zone.
- Indicates the current temperature of the air inside the air conditioning system ductwork.
- Press here to go back to the zone summary.
Electronic controls

iZone 310 - Zone airflow summary

![iZone 310 - Zone airflow summary](image)

- **Zone name**: Indicates current minimum air flow setting to this zone.
- **Zone name**: Indicates current maximum air flow setting to this zone.
- **Scroll up or down to see more zones.**: Press here to change the zone air flow settings (3.3.1).

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Electronic controls

iZone 310 - Changing zone airflows

Indicates current zone that you are changing the airflow to.

Indicates the current maximum airflow setting for this zone.

Indicates the current minimum airflow setting for this zone.
(This is usually set at 0%).

Scroll up or down to see more zones.

Press here to increase the maximum airflow to this zone.

Press here to decrease the maximum airflow to this zone.

Press here to increase the minimum airflow to this zone.

Press here to decrease the minimum airflow to this zone.

Press here to go back to the airflow summary.
Electronic controls

iZone 310 - Favourites

Press the favourite you would like and iZone will automatically change all the zones settings for this favourite.

Indicates this favourite has not been used.

Press here to setup and edit favourites (3.2.1).

iZone
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Electronic controls

iZone 310 - Assign and edit favourites

- Indicates current favourite being changed.
- Zone names.
- Scrolls up or down to see more zones.
- Press here to change the name of this favourite.
- Indicates what mode you want each zone to operate in when this favourite is used.
- Change each zone setting to suit your requirements for this favourite.
- Press here to go back to the favourites summary. Pressing the back button will save the favourite setting selected.
Electronic controls

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
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Electronic controls

iZone 310 - Setting and editing a schedule

Indicates current schedule that you are changing or setting.

Indicates the start time for this schedule.

Indicates the stop time for this schedule.

Indicates the days this schedule will not run. Press the day you want the schedule to apply to.

Press next to see the next schedule.

Indicates the days this schedule will apply. Press to stop the schedule running on this day.

Press here to delete this schedule.

Press the enter button to save your new setting.

Press here to go back to the schedule summary.

START-08:00
STOP-17:30
Electronic controls

iZone 310 - Setting the time

Current time

Current date

Press the left or right arrows to move to the value you want to change

Indicates the minutes are to be changed

You must press the enter button to save the changes you have made

iZone
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Electronic controls

iZone 310 - Setting the time

Slide left / right to adjust the screen brightness.

Slide left / right to adjust the screen saturation.

Slide left / right to adjust the screen contrast.

Press the colour you would like for your home screen. Fine adjustments to the shade, tone, hue can be made using the brightness, contrast and saturation slides.

Press here to go back to the home screen.
Connect the Home Automation Module (CHAM) into any spare network port in the iZone 310 or 301 system. This may include ports marked CCTS or CNEM.
Electronic controls

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

Connect the Home Automation System (CHAM) to the Home Automation System using an RS-232 or RS-485 connector.

RJ-22 or RJ-45 control cable.

RS-232 or RS-485 control cable.

(Home Automation Contractor)

Connect the Home Automation Module (CHAM) to any network port in the iZone 3D or 301 system. This may include ports marked CCTS or CNEM.

CPU or CACUM

CHAM

Sei No. 000 969 552
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.
Electronic controls

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.
Electronic controls

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:

![System Configuration](image)

Touch here to configure the WiFi communications (see 3.1)
Electronic controls

iZone Wi-Fi Configuration– Network name

Touch here to go to the home screen.

Press the green enter button to save the Network Name.

Touch here to go back and save the changes.

Network name

Type in the network name

Touch Next to set the IP address

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iZone Wi-Fi Configuration– IP address

Select either Auto or Manual Configuration. If manual is selected you will need to know the IP, Subnet Mask, Default Gateway, Primary DNS Server and Secondary DNS Server addresses if applicable.

Touch Next to go enter Manual Configuration details or to enter WiFi Password

Touch here to go to the home screen.

Touch here to go back and save the changes.

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iZone Wi-Fi Configuration—Network password

Touch here to go to the home screen.

Wi-Fi router password

Type in the Wi-Fi password

Press the green enter button to save the password

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iZone Wi-Fi Connection

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

A grey symbol indicates the Wi-Fi Module (CHAM) is installed but has not been configured correctly.

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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.
Electronic controls

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.
# Serial interface specifications

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Serial interface specifications
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
Serial interface specifications
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*
Serial interface specifications
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
Serial interface specifications
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
Serial interface specifications
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
Serial interface specifications

**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.
Serial interface specifications
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*
Serial interface specifications
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
Serial interface specifications
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 to check 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
Serial interface specifications
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?
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
Serial interface specifications
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)
Serial interface specifications
RS232 / RS485

Value 6 is the zone current temperature (this value should be ignored when the zone type is OpCl)
Value 7 is the zone minimum airflow
Value 8 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 (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**