

# Troubleshooting Guide For Distributors

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# dirstream LIVING TECHNOLOGY

This is a basic guide to troubleshoot most common issues experienced while commissioning and using iZone and iLight systems.

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# Notes

- Component codes: C220/C225 : iZone CPU CB : WiFi/iLight Bridge CCTS : Wall Controller C320 : Module for a particular unit make. Converts 220/225 to 320/325 CEXT : Extension module if more than 8 zone ports are required CR: Repeater
- $\circ$  The reset button is a blue button located on the bottom side of the wall controller.
- When changing an ID/device number (C220/C225), make sure the device number details are updated on the user's worldwide services account if the user has registered.
- iLight bridges have their own ID numbers but when paired with an iZone system it takes the iZone system's ID number. If the iLight bridge is replaced, the bridge that is taken out will still have the iZone system's ID number that it had been paired to and will need to be reconfigured.
- If temperature sensors are being used for zones, set AC unit controlling sensor to 'Zones'. (Except in the case of VRV systems which has to be left on R/A regardless of whether temperature sensors are being used or not)
- To check component versions go to 'config' on the home screen. Enter password "wamfud".
  Go to 'iZone device list'.
- 320 versions: CB v2.2; CCTS v2.26 or higher.
- 325 versions: CCTS v3.3 or higher; C220 v3.16 or higher (ID:\*\*\*\*\*\*\*\*); CB v3.8 or higher.

# **1. Zone Damper Faults**

"Zone damper faults" lets users know that a particular zone (or zones) isn't working. But it will also show up if a zone port isn't being used (the port hasn't been connected to a working zone motor). By default the number of zones has been set to 8. If you have only 5 zones plugged in, zones 6, 7 and 8 will show up with faults until the number of zones is changed from the default 8 to 5.

If there is no "zone damper faults" message but a zone isn't working check the airflow settings. If maximum airflow is set to 10%, that is probably the reason why it isn't opening/airflow is low. Similarly if minimum airflow is set to anything above 0% it could be the reason why the zone isn't closing. Another reason for a zone not closing could be that the zone has been set as an electric constant and there aren't enough zones open. For a constant to close there should be at least one other zone open that has its maximum airflow set to 100% or multiple zones whose combined maximum airflow adds up to at least 100%. If the constant opens when it's actually set to close it will display the airflow symbol in 'zones'.

<u>Causes:</u> Faulty zone motor, loose connection, faulty zone cable, faulty port.

<u>Instructions</u>: First check if the cable connectors are loose in the sockets of both the zone motor and the C220. If they are, either change cables or re-crimp cables with bigger connectors.

- Swap two zone cables at the CPU and reset the system. If fault doesn't move to the other zone, the C220/CEXT has a faulty port and will need to be replaced. If fault moves to the other zone it's either a faulty zone motor or faulty zone cable.
- $\circ$   $\;$  Try a new zone motor first and then a new zone cable.

 Remember to reset the system every time you change a component or swap a cable to check if the "zone damper faults" goes away or if the fault moves. Once "zone damper faults" goes away, try opening and closing the zone a few times to check if the fault comes back.

# 2. Wall Controller

# 2.1. Controller resetting by itself

Usually occurs if a motor is faulty or stopped working. It can also occur while attempting to pair the ILight Bridge. Refer to **8.1 Unable to pair iLight bridge** 

# 2.2. Touch screen making random inputs

<u>Causes:</u> Scratch guard on touchscreen, schedules have been set, wrong WiFi component versions, at least two users have the same ID number and at least one of them has registered to world wide services.

<u>Instructions:</u> If there is a scratch guard on the touchscreen it will need to be taken off as it can make random inputs. If schedules have been set, ask user if changes occur at the scheduled times. Schedules can only turn the system ON/OFF and open/close zones. Check if the right component versions are being used especially the CB, refer to <u>Notes</u> on page <u>3</u>. Check if another user has registered to worldwide services with the user's ID number. If there is an account registered to somebody else, change the user's ID by changing the C220/C225. If the ID number has been registered to the user itself, change the ID number anyway as another user could still have the same ID number but hasn't registered to worldwide services yet.

# 2.3. No comms to CPU

<u>Causes:</u> Damaged controller cable, faulty CCTS, faulty C220/C225, faulty port on C220/C225, faulty C320, faulty connection between the C320 and C220/C225

It also occurs on a 220 (not 320) if a CEXT is used (more than 8 zones) and the version of the C220 isn't v3.12 or higher.

If the fault is intermittent and goes away after resetting the system, the C220/C225 will need to be replaced.

<u>Instructions</u>: To eliminate causes, use a different CCTS and a shorter RJ45 cable and connect it to the same port of the C220/C225 that the original CCTS was connected to. If the fault disappears, either the controller cable will need to be recrimped/replaced or the CCTS replaced. If the fault still exists try a different port or try changing the components one at a time. Remember to reset the system every time you change a component. Also check the pin connections between the C220, C320 and CEXT (if present).

# 2.4. Controller display shaky

Causes: Damaged controller cable, faulty CCTS

<u>Instructions</u>: First change CCTS. If that doesn't fix it, the controller cable will either need to be recrimped or replaced.

# 2.5. Controller not lighting up

Causes: No/low power to iZone system, damaged controlled cable, faulty CCTS, dead C220

Instructions: First check if the mains switch and the isolator switch to the unit are ON.

- Try a different CCTS.
- Check if there is a light on the C220/C225 box. If there is, use a different CCTS and a shorter RJ45 cable and connect it to the same port of the C220/C225 that the original CCTS was connected to. If it lights up, the controller cable will either need to be recrimped or replaced. If not, try a different port.
- Try a different C220/C225

# 2.6. Controller lighting up but can't select any icon

Causes: CCTS out of calibration, faulty CCTS, damaged controller cable

<u>Instructions</u>: Calibrate the CCTS by using the following instructions: Press and hold reset button - press and hold touchscreen - release reset button - release touchscreen, follow prompts on touchscreen. If that doesn't fix it try a different CCTS or recrimp/replace the controller cable.

# 2.7. Icons missing

<u>Causes:</u> Faulty C320, faulty connection between C320 and C220/C225, damaged controller cable.

<u>Instructions</u>: To eliminate causes, use another CCTS and a shorter RJ45 cable and connect it to the same port of the C220/C320 that the original CCTS was connected to. If the fault disappears, either the controller cable will need to be recrimped/replaced or the CCTS replaced.

- Try a different C320
- $\circ$  Check the pin connections between the C220, C320 and CEXT (if present).

# 2.8. Line running down controller

Causes: Dead pixels on the touch screen

Instructions: Change touch screen

# 2.9. Background colour on touchscreen stuck

Replace CCTS

# 3. WiFi

# 3.1. WiFi dropping out

Check antennae on C220/C225 and CB for damage and make sure antenna is positioned correctly. If CB is too far from the C220/C225 install a CR (repeater).

# 3.2. WiFi not working

If WiFi did work and has now stopped working refer to **<u>3.1 WiFi dropping out</u>**. Check controller for WiFi symbol (home screen, bottom right). If it isn't present the CB isn't paired. If the WiFi symbol is present, check if the lines are green. If the lines are green, the device ID should show up on the app,

provided the device you are using the app on is connected to the same WiFi network. If the lines are grey check if the CB is connected to the Ethernet port of the modem and the 'Ethernet' LED on the CB has lit up. If not, try changing the CB or the RJ45 cable. If the lines are green and the device ID is not showing up on the app, either the device is not connected to the same WiFi network or the modem is incompatible with the iZone system. Refer to **4.1 ID number not showing up on the iZone app**.

# 3.3. CB not pairing

- Check if the right components are used. Refer to **Notes** on page **3**.
- $\circ~$  Check the antennae on C220/C225 and CB for damage and make sure they are positioned correctly.
- Try pairing the CB closer to the C220/C225 and if it pairs but drops out when plugged in at a different point, it is probably out of range and a CR will need to be installed.
- Check the ID number of the C220/C225 on 'iZone Device List'. To go to iZone Device List, go to Config on the home screen and enter the password "wamfud". The device will not pair up if the ID number is invalid.
- Try using another CB or C220/C225

# 4. iZone Controller App

# 4.1. ID number not showing up on the iZone app

If the WiFi symbol (home screen, bottom right) is green and the device you are using the app on is connected to the same WiFi network as the iZone system, a device number should show up on the app (If there is no WiFi symbol or if the WiFi symbol is grey, refer to **3.1 WiFi dropping out** or **3.2 WiFi not working**). If the ID number doesn't show up on the app either the device is not connected to the same WiFi network or the modem is incompatible with the iZone system. Test the system using a different modem by connecting the CB to a test modem and connecting the device to the WiFi of the test modem. If it still doesn't show up, use a different C220 or a different CB.

# 4.2. App stuck on initialising once ID number is pressed

Try disconnecting the CB from the power supply and connecting it back again. If that doesn't work, try changing the CB or C220/C225.

# 4.3. App not working on worldwide but works on WiFi

- First check if account has been registered correctly using the correct ID number.
- $\circ$   $\;$  Try disconnecting the CB from the power supply and connecting it back again.
- Login to the account using a web browser and remove the ID number. Register the device number to a test account and check if it works on worldwide services. If it does, ask the user to create a new account by using a different email address. Don't forget to delete the device number from the test account.
- $\circ~$  If it doesn't work on the test account either, change the ID number by changing the C220/C225
- For iLight refer to 8.2 iLight App works on WiFi but not on Worldwide Services

# 5. AC Unit

# 5.1. System turning ON/OFF and zones opening and closing automatically

### Refer to **2.2 Touch screen making random inputs**.

# 5.2. "Not connected" showing where controlling sensor temperature is usually displayed

<u>Causes:</u> Faulty connection between the AC unit and iZone system, faulty connection between C220 and C320, faulty C320, fault with the AC Unit, dip switch settings on the unit.

#### Instructions:

- Try a different green connector and reset the system
- Check the connection between the C220, C320 and CEXT (if present)
- Try a different C320
- Change cable connecting AC unit and iZone system
- Check if the unit starts up with the unit controller

# 5.3. Unit not turning ON/OFF

- If "Not Connected" is showing where the controlling sensor temperature is usually displayed refer to <u>5.2</u> "Not connected" showing where controlling sensor temperature is usually <u>displayed</u>. If not, change the C320 and try running the system
- $\circ$   $\;$  Check if the unit starts up with the unit controller connected
- If the unit is a Daikin VRV system, the AC controlling sensor has to be left on R/A regardless of whether temperature sensors are being used or not
- For LG 320, the C220 should be v3.7 or higher
- For Daikin systems, the unit won't turn ON (and will display a fault code) if the RA temperature is too high and AC controlling sensor is set to 'RA'. Change the AC unit controlling sensor to 'Master' and reset the system

# 5.4. System not working on heating, works fine on cooling

- For a Mitsubishi Electric 320, the C320 has to be v2.4 or higher
- For other units, replace C320

# 5.5. System not working on cooling, works fine on heating

- For a Temperzone 320, the C220 has to be v3.18 or higher
- For other units, replace C320

#### 5.6. System turning ON but not heating or cooling

- Make sure the set point is below the controlling sensor temperature reading for cooling and above the controlling sensor temperature reading for heating.
- Check if the outdoor unit turns ON. If it doesn't, try running the system with a different C320

- If the outdoor unit does turn ON, check for temperature change in the pipes. The larger diameter pipe should become cold for cooling and hot for heating. If there is no change in temperature, it is possible that the refrigerant has leaked
- $\circ$   $\;$  Check if the unit works with the unit controller connected

# 5.7. Fault Code UA

Usually goes away after resetting the system (might need to reset the system more than once). Try turning the main isolator switch OFF and ON. If it still shows up check if the unit works with the unit controller connected.

# 5.8. Unit cutting out too quickly

Usually occurs on heating with the AC Unit controlling sensor set to 'RA'. This happens when the RA has reached the set point while the living area is still quite cold. This can be fixed by changing the AC Unit controlling sensor to 'Master'.

# 6. Temperature Sensors

### 6.1. Wireless sensors not working

To check if sensors have been set up correctly:

- AC Unit controlling sensor is set to 'Zones'
- In-duct sensor is reading from the Supply Air. In-duct temperature will display 0.0 degrees if no sensor is plugged in.
- o Zones have been changed in Zone Setup from 'Open/Close' to Wireless Sensor
- All sensors have been paired up (turn either red or blue when pressed and does not flash red and blue)
- All temperature controlled zones should have minimum airflow set to 0%
- Sensors have been set to the right zone. To test if the right sensor is set to the right zone, turn the unit ON with the mode on 'vent'. Have the zone that you are testing set to 'open' on the controller. Check if you have airflow through the zone that you are testing. Press the button on the sensor (it should flash red) and check if the airflow to that zone shuts off

# 6.2. Wireless sensor dropped out (flashing red and blue when pressed)

- If all sensors have dropped out, check the antenna on the C220/C225 and replace the C220/C225 if necessary
- If a sensor doesn't pair up at all the sensor will need to be replaced
- If a sensor pairs up but then drops out the sensor is probably out of range. Check the antenna on the C220 for damage and install a CR is necessary

# 6.3. Temperature going well above set point for individual zone temperature control

• Occurs usually if a Panasonic system is used. A Panasonic system takes a little longer to cut out. It also by default begins to cut out only once the temperature crosses 3 degrees above the set point on heating (can be changed using a Panasonic controller). During this period,

one or more zones may open if they become the controlling zone (even if they have reached their set points). This may cause the zone (or zones) to become a lot warmer than the set point. It can be solved by using the Panasonic controller to change the cut-out margin to 1 degree above set point.

• It can also occur if a zone is stuck on open or if the minimum airflow is set above 0%

### 6.4. Sensors closing the zones before they reach set point

- Check if in-duct sensor is working and reading from the supply air. If the in-duct sensor reading is stuck, try resetting the system.
- If AC controlling sensor is set to RA the unit can cut-out once the RA reaches the set point even though the zones haven't reached their set points. This can be fixed by changing the AC Unit controlling sensor to 'Zones'.

### 6.5. No zone sensor detected

This is displayed if the sensor isn't paired up (or has dropped out) or the sensor hasn't been set for the particular zone. It can also show up if the sensor hasn't taken a temperature reading yet and you try to set the zone to 'climate control'. When a sensor has just been paired or the system has been reset, it can take up to a minute for a temperature reading of the sensor to be displayed.

# 7. iSave

### 7.1. iSave damper faults

Occurs in 320/325 if iSave has been enabled and no motor is connected to ports 7 and 8 (or 13 and 14 if a CEXT is present). It also shows up if one of the iSave motors is faulty or the connections are loose just as in the case of "Zone Damper Faults". Refer to <u>1 Zone Damper Faults</u>

#### 7.2. Low airflow when iSave is ON

Check if ductwork has come off, if the iSave has been wired correctly and if the iSave motors are working fine. Also windows should be left slightly open in the zones that are being used.

# 8. iLight

#### 8.1. Unable to pair iLight bridge

Check if C225 version is 3.16 or higher. If the version isn't at least 3.16, the controller will be stuck on the resetting screen after attempting to pair the iLight bridge.

#### 8.2. iLight App works on WiFi but not on Worldwide Services

Check if the correct ID number has been used to register the device on the Worldwide account.

Try resetting the iLight system. To reset, first disconnect the iLight bridge from the power supply. Press the reset button on the wall controller (blue button on the underside of the wall controller) and wait until the system has been reset. Connect the iLight bridge to the power supply. The wall controller should reset again automatically once the iLight bridge is plugged back in. Try the worldwide account once the system has finished resetting.