

iZONE Control4 Integration Guide

Version 1.0

Introduction

iZone produces a range of air-conditioning distribution solutions, using unique control algorithms to maximise efficiency and minimise costs. It's a smart system for the smart home.

This driver works with the iZone network interface unit, allowing you to control the system through a Control4 installation. It allows the control of the main system as well as the attached zones.

The driver will read the settings off the iZone system, and dynamically update the Control4 GUI to match the available settings.

For example, if the system only has 2 fan speeds, the GUI will only show those two fan speeds. It requires minimal setup from the Control4 integrator perspective, and allows for the usual programming you would expect from a Thermostat driver.

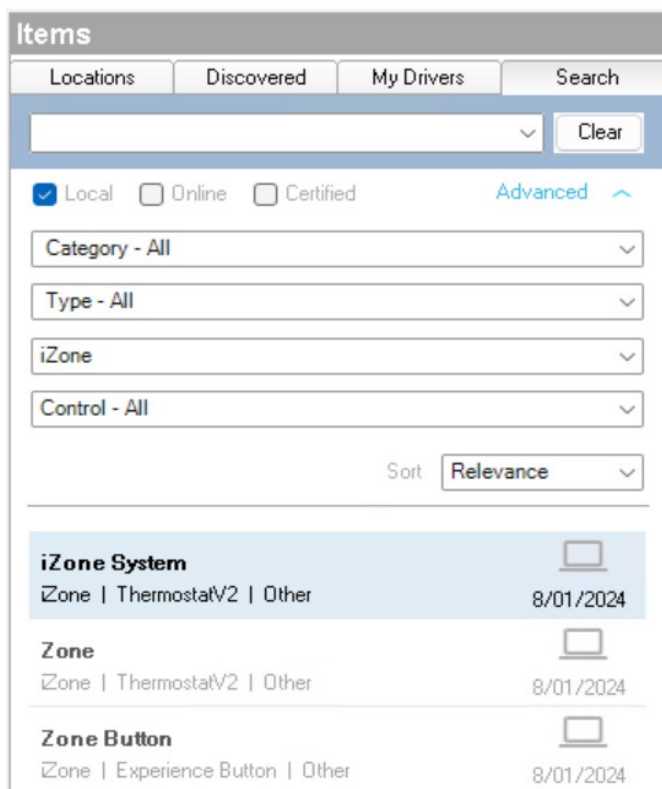
The driver also implements the preset and scheduling functionality, so it allows the customer to setup their own schedules to turn on/off the iZone system.

Driver Installation

You first need to install the driver so that composer can detect it. Copy the C4Z driver files into your *My Documents/Control4/Drivers* folder. You may need to restart the composer software for it to detect the driver.

Once you have copied the drivers, you can find them within the drivers search tab. Ensure you have 'Local' selected, and from the Manufacturer drop down list, you can select iZone.

There are currently three drivers associated with the iZone System, 'iZone' for control of the main system, 'Zone' to control the zones with a full thermostat interface and 'Zone Button' to control the zones with just an on/off button.



iZone System Driver

Once you have added the system driver, you will need to enter the iZone C220 ID. This can be obtained from the iZone installer, or by inspecting the physical C220 unit. The ID will be labelled on the unit.

Advanced Properties		
Properties	Documentation	Lua
Driver Version	261	
Driver Status	CB found and connected.	
CB ID	000002820	
CB IP	192.168.67.168	
Temperature Display	Supply Sensor	
Presets	Off	
Poll CB	Off	
Debug	Off	

This ID allows the unit to be automatically found on the network, so you do not need to worry about the IP address. Once the device has been found and connected the Driver status will update to show it's Online. The driver should then auto configure itself with the correct HVAC and Fan modes which are available.

Note: You need to ensure the Control4 controller and the C220 are on the same network subnet.

iZone Zone Driver

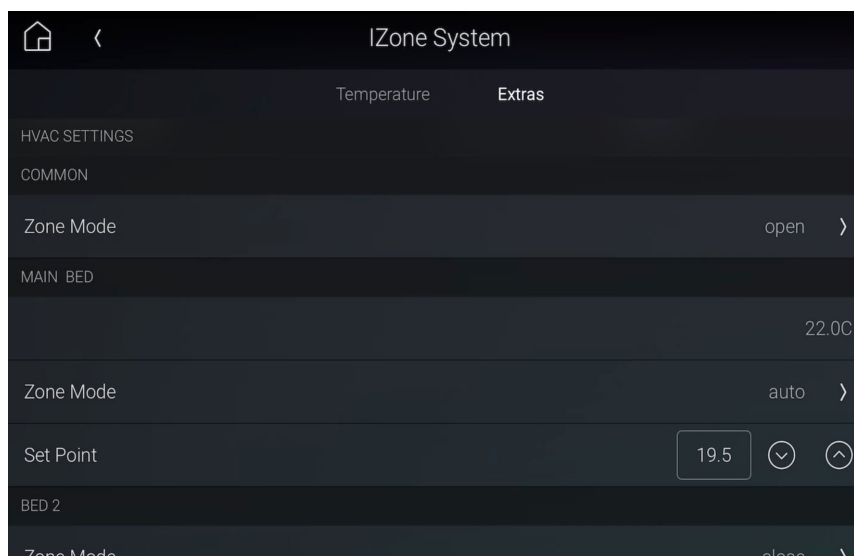
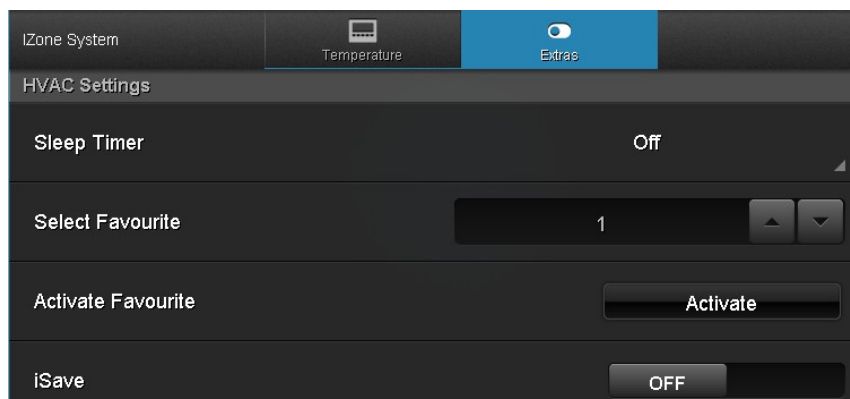
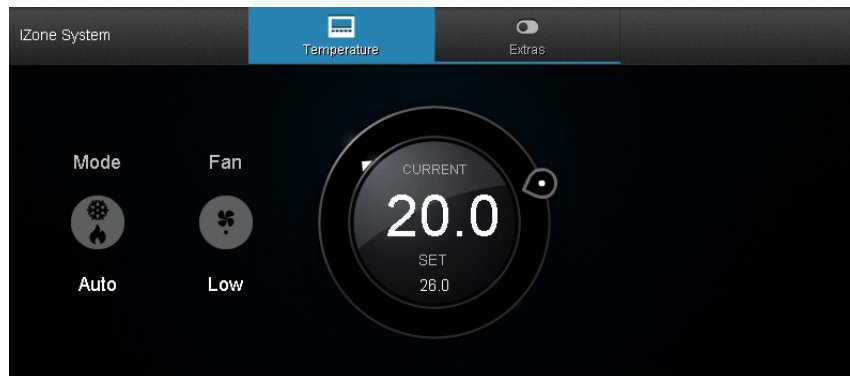
You will need to add a Zone driver for each of the Zones on the iZone system. When you add the Zone Driver, you will need to go into the connection section, and connect it to the correct zone number on the System Driver. The driver will automatically configure itself, and only allow those modes which are available (Close,Open,Auto).

iZone System				
Name	Type	Connection	Input/Output	Connected To
Proxy				
 Zone ID 1	Proxy	IZONE_NETWORKK	Output	Zone 1->IZONE NETWORK
 Zone ID 2	Proxy	IZONE_NETWORKK	Output	Zone 2->IZONE NETWORK
 Zone ID 3	Proxy	IZONE_NETWORKK	Output	Zone 3->IZONE NETWORK
 Zone ID 4	Proxy	IZONE_NETWORKK	Output	Zone 4->IZONE NETWORK
 Zone ID 5	Proxy	IZONE_NETWORKK	Output	Zone 5->IZONE NETWORK
 Zone ID 6	Proxy	IZONE_NETWORKK	Output	

Driver Functionality

iZone System Driver

This driver makes use of the new functionality within Control4 OS 2.7+. It has the ability to display extra functionality of the system. The extras page allows for functionality such as setting the systems sleep timer, activating a favourite, or schedule, also enabling/disabling the iSave functionality if available. The driver now also supports controlling the Zones via the Extras tab, so negate the need of adding in extra zone drivers. Everything is now controllable through the 1 driver.



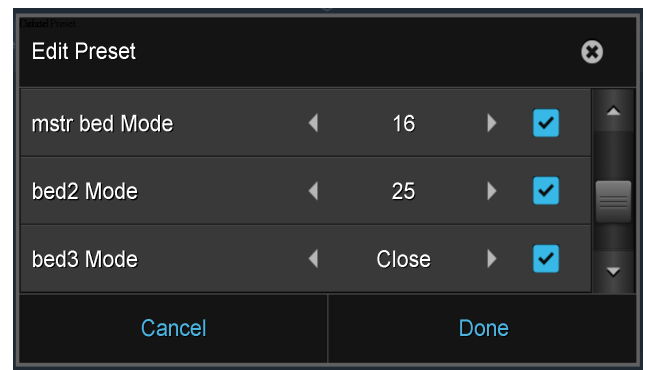
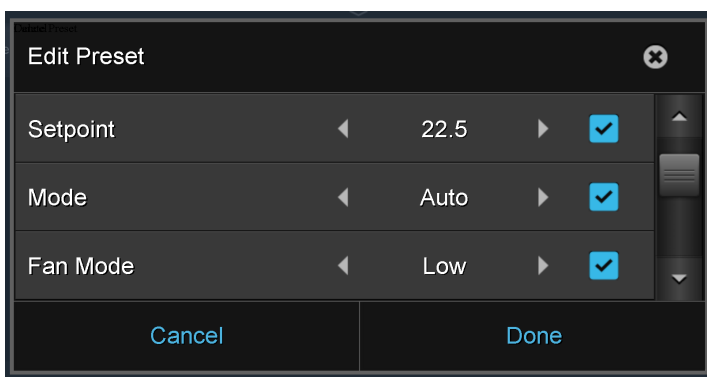
Presets and Scheduling

This driver supports the preset and scheduling functionality of the thermostat proxy. Make sure you enable it within the drivers properties for it to show on the navigators. The functionality follows general Control4 thermostat functionality. You create presets to set settings on the HVAC driver, as well as the zone drivers, and these presets can be recalled through navigator, or by setting schedules to automatically recall the presets.

Creating a Preset

Presets are created through the main iZone driver. There will be a preset button available, and within there you can create multiple presets. Below is the screen when creating/editing a preset, you will be presented with various options which can be set.

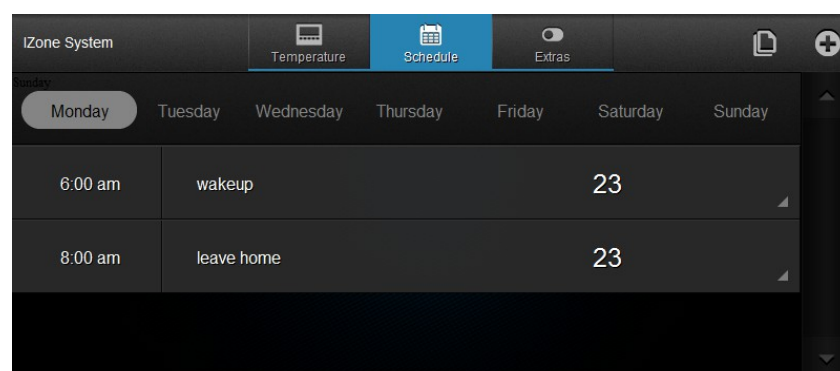
To set a particular setting within the preset, tick the box next to the setting, and then press the arrows to cycle through the available settings. These will dynamically update to only allow valid settings to be set. You will also notice the zones are updated with the names given to them on the iZone system, this will make it easier for the home owner to know which zone they are setting.



Creating a Schedule

Schedules are created using the main iZone driver, you need to ensure presets are first created, as the scheduler will call these presets. On the thermostat GUI, you will be presented with a Schedule tab, within there you can set schedules on a per-day basis.

The example below shows Mondays schedule calling a wakeup preset, and a leaving home preset.

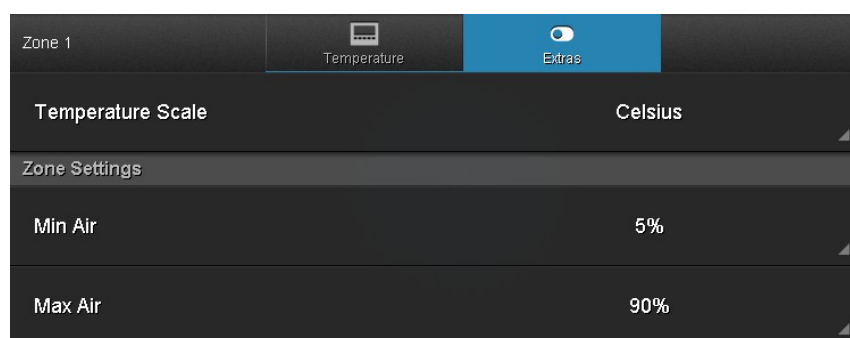


Selecting Temperature Source

In the driver's properties, there is a Temperature Display property. From here you can select between the IZone's main temperature sensor, or the supply air temperature sensor. You would usually leave it on the main temperature sensor, unless for some reason it doesn't have one.

iZone Zone Driver

This driver will allow for automatically set-up depending on the zone type. It makes use of the extras page which allows for control of extra functions within the system. This driver allows for easy adjustment of the minimum and maximum airflow for the zone (as long as this is enabled in the system).



Selecting Temperature Source

In the driver's properties, there is a Temperature Display property. From here you can select between the iZone's main temperature sensor, the system supply air temperature sensor, or any of the zones available. You would usually leave it on the zone's own temperature sensor, unless it doesn't have one and always reports 0 degrees. You would normally use the experience button for a zone which doesn't have a temperature sensor, as it will usually be a simple open/close zone.

izone Zone Button Driver

This driver makes use of the new functionality within Control4 OS 2.9+. It uses an experience button to provide simple on/off control of a zone. Rather than confusing the customer with a full thermostat interface just to open/close a zone.



This driver is connected in the same way as the regular zone. All you need to do is connect this driver's connection to the particular zone on the main iZone system driver.

iZone Zone Driver Properties

Advanced Properties	
Properties	Lua
Driver Version	261
Driver Status	
Temperature Source	Supply
Zone Name	dining
Zone Index	5
Zone Type	opcl
Is Master	false

Diver Version: This displays the currently running version of the driver.

Driver Status: Will display information if there are any issues.

Temperature Source: Allows you to select which temperature source to show on the Navigators for this zone. In case this zone doesn't have it's own temperature sensor.

Zone Name: This is the name given to the zone on the iZone system. This is helpful in identifying the zone this driver is controlling.

Zone Index: The zone number on the iZone system.

Zone Type: The type of zone this is. It will either be const which is a zone that is always on. You usually wouldn't use a driver for a const zone. It could also be opcl, which is a simple open/closed zone, it is recommended to use the experience button driver for these zones. The last zone type is auto, which it's recommended to use the thermostat zone driver for this type of zone, as it will usually have its own temperature reporting, and allow you to set a setpoint for the zone.

Is Master: If true, this is the master zone, which can control the setpoint on the main system.

Custom Programming

The drivers make use of Control4's custom programming to allow you, the programmer, to activate system functionality off various events. You have access to program the HVAC modes, setpoints, fan modes etc. On top of this you also have access to program the extra features of the system, such as min/max airflow for zones, calling a favourite etc.

You access this functionality through Composers programming section. Select the event on the left hand side, and then select the iZone driver from the right hand side which you want to control.

