

iZone — Control4 Integration Guide

Drivers for iZone ducted air conditioning and VRF systems.

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 bridge or hub, allowing you to control the system through a Control4 installation. It allows control of the main system as well as the attached zones.

The driver implements the preset and scheduling functionality, so the customer can set up their own schedules to turn the iZone system on and off.

What's new in this release

- **iZone API v2 is supported.**
- **VRF systems are supported.** Where a bridge reports a VRF system, each indoor unit gets its own section on the Extras page, with power, mode, fan, setpoint, swing and a sleep timer.
- **VRF units have their own drivers**
- **The System driver can add the zone/VRF drivers for you.**
- Two new properties on the System driver: **System Type** (read-only, what the bridge said it is) and **API Version** (an override, normally left on *Auto*).
- **Debug Level** on every driver, so logging can be turned down without being turned off.

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 Composer for it to detect the drivers.

Items

Locations

Discovered

My Drivers

Search

Clear

☒ Local
☐ Online
☐ Certified

Advanced

Category - All

Type - All

iZone

Control - All

Sort

Relevance

iZone System

iZone | ThermostatV2 | Other

8/01/2024

Zone

iZone | ThermostatV2 | Other

8/01/2024

Zone Button

iZone | Experience Button | Other

8/01/2024

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

There are four drivers associated with the iZone system:

Driver	What it is for
iZone System	Control of the main system. One per iZone controller. Required.
Zone	A full thermostat interface for one zone.
Zone Button	A simple on/off experience button for one zone.
VRF Unit	A thermostat interface for one VRF indoor unit.

iZone System driver

Once you have added the system driver, you will need to enter the iZone **CB ID**. This can be obtained from the iZone installer, or by inspecting the physical iZone unit — the ID is labelled on the unit. You can also watch the debug output of the system driver and obtain it from the discovery messages.

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 found automatically on the network, so you do not need to worry about the IP address. Once the device has been found and connected, **Driver Status** will update to show that it is online. The driver then auto-configures itself with the HVAC and fan modes the system actually supports.

The Control4 controller and the iZone must be on the same network subnet.

Discovery is a UDP broadcast, and broadcasts do not cross subnets.

API generation and VRF

The bridge announces what it is in its discovery reply. The driver reads that and speaks the newest API the bridge offers, so no configuration is needed in the normal case.

What it settled on is shown in the read-only **System Type** property — for example `iZonev2`, `Split`, `VRF`. If that property is blank, the controller has not been found yet.

API Version overrides the choice. Leave it on **Auto**. *Force v1* is there for a network that mangles the discovery broadcast, and for testing the older path against a newer bridge.

Adding the zone and VRF drivers

Zone drivers are optional — the System driver controls every zone from its own Extras page — but a driver of its own gives a zone a thermostat interface, the same goes for VRF

units.

The quick way

Once **Driver Status** shows the controller online, go to the System driver's **Actions** tab and run **Add Drivers For Everything Discovered**. It creates a driver for every zone and every VRF unit that does not already have one, binds each to the System driver, and tells each which zone or unit it is. The drivers are named after the zone or unit names on the iZone system, and land in the room the System driver is in — drag them where you want them afterwards.

Which driver a zone gets is decided by the **Add Zones As** property:

Add Zones As	Result
Match Zone Type (default)	A climate zone (<code>auto</code>) gets the Zone thermostat; every other zone, <code>opc1</code> and <code>const</code> alike, gets the Zone Button.
Thermostat	Every zone gets the Zone driver.
Button	Every zone gets the Zone Button driver.

Run it again at any time; zones and units that already have a driver are skipped, so it is safe to press twice. **Print Bound Drivers** lists what the System driver currently believes is connected to it, and which zones have none.

The manual way

Add the driver yourself, connect its **iZone System** connection to the System driver's, and set its **Zone** property (or **VRF Unit**, on a VRF driver). A driver with that property left on *Not set* deliberately does nothing at all and says so in **Driver Status**.

Upgrading a project built before this version

The per-zone bindings are gone, so Composer drops the connections a project was built on. Each Zone and Zone Button driver has to be re-connected to the System driver's single **iZone System** connection.

The zone number is recovered automatically: each driver reads it from the **Zone Index** it was last told and fills in its own **Zone** property, so after re-connecting you should not have to set anything by hand. Check the **Zone** property on a couple of them, and run **Print Bound Drivers** on the System driver to confirm the whole set.

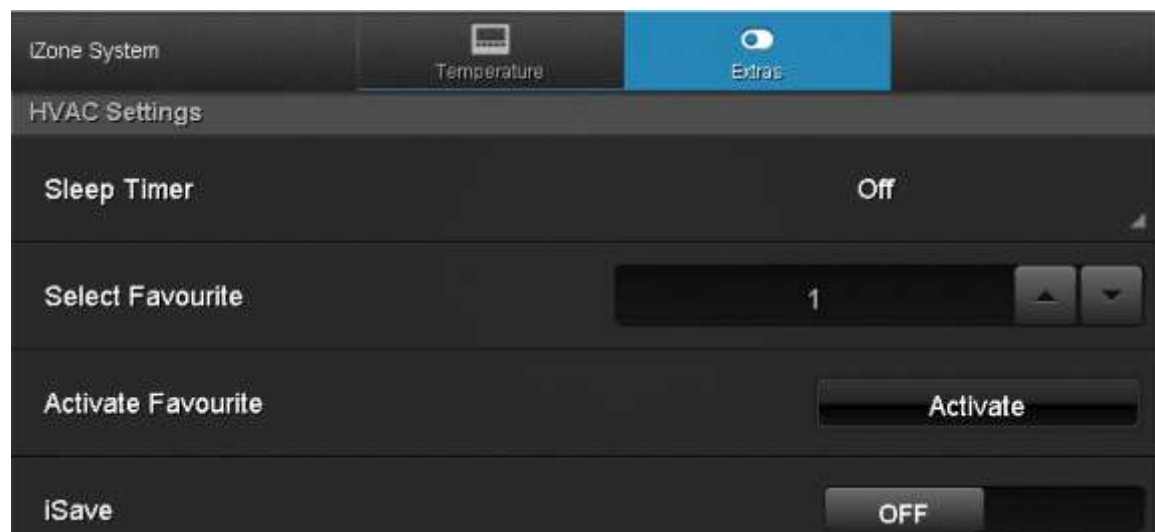
Driver functionality

iZone System driver

This driver makes use of the Extras functionality in Control4, which lets it display controls a thermostat proxy has no native concept of.



The Extras page carries the system's sleep timer, favourite activation, and the iSave (free air) switch where the system has it.



The Extras page also controls **every zone**, so adding separate Zone drivers is no longer necessary just to open and close zones. Each zone gets its own section with a mode control, and — for zones running in `auto` — a setpoint and a temperature reading.



VRF indoor units

A VRF system has each unit appears as its own section on the same Extras page, below the ducted zones, named as the unit is named on the iZone system.

Each unit's section carries:

Control	Notes
Power	On/off for that unit alone.
Mode	Cool, Heat, Vent, Dry, Auto.
Fan	Low, Medium, High, Auto.
Set Point	15–30 °C in whole degrees .
Swing	Off, Horizontal, Vertical, Both. Narrowed to the axis the unit reports where it reports one.
Sleep Timer	Off, 30 minutes, 1, 2, 4, 6, 8 or 12 hours. Per unit, and separate from the ducted system's own sleep timer.

Two read-only rows appear alongside them: the unit's return-air temperature, and the time left on its sleep timer. Both hide themselves when there is nothing to report.

Sections are built only for the units the bridge actually reports, so a two-unit system gets two sections rather than sixteen empty ones.

The VRF Unit driver

A unit can also have a driver of its own, which gives it a thermostat interface. Add them with the System driver's **Add Drivers**

For Discovered VRF Units action, or by hand with the driver's **VRF Unit** property set to the unit's position in the list above.

The thermostat interface carries power, mode, fan and setpoint; swing and the sleep timer are on that driver's own Extras page, with the time remaining below them.

The Extras page on the System driver keeps working either way. A unit with a driver appears in both places, and both show the same state.

Presets and scheduling

This driver supports the preset and scheduling functionality of the thermostat proxy. Make sure you enable it in the driver's **Presets** property for it to show on the navigators. The functionality follows general Control4 thermostat behaviour: you create presets that set values on the HVAC driver and on the zones, and those presets can be recalled through Navigator or by a schedule.

Creating a preset

Presets are created through the main iZone driver. A preset button is available in Navigator, and within it you can create multiple presets. To set a particular value within a preset, tick the box next to the setting and press the arrows to cycle through the available options. These update dynamically to only allow valid settings.

Default Preset

Edit Preset

Setpoint	◀	22.5	▶	☒
Mode	◀	Auto	▶	☒
Fan Mode	◀	Low	▶	☒

CancelDone

The zones are listed under the names given to them on the iZone system, which makes it easier for the home owner to know which zone they are setting.

Default Preset

Edit Preset

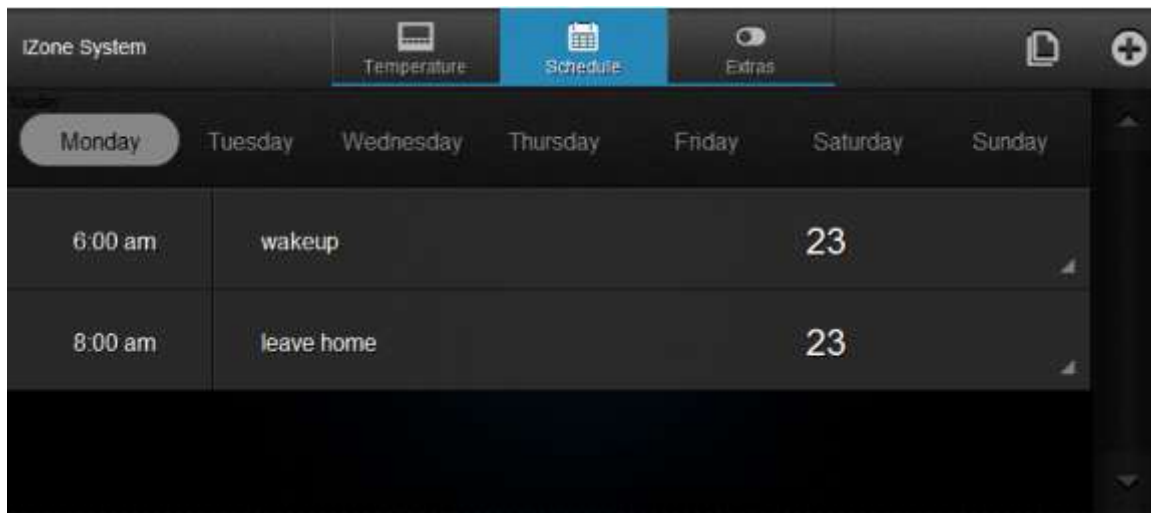
mstr bed Mode	◀	16	▶	☒
bed2 Mode	◀	25	▶	☒
bed3 Mode	◀	Close	▶	☒

CancelDone

Creating a schedule

Schedules are created using the main iZone driver. Presets must exist first, because the scheduler calls them. On the thermostat GUI you will be presented with a Schedule tab, where schedules can be set on a per-day basis.

The example below shows Monday's schedule calling a *wakeup* preset and a *leave home* preset.



The system setpoint and the control zone

An iZone system can be set up to follow one zone — the **control zone** — so the unit works to that zone's temperature and setpoint rather than to one of its own. Where that is configured, the System driver's thermostat shows **the control zone's setpoint**, and changing it changes the control zone's setpoint.

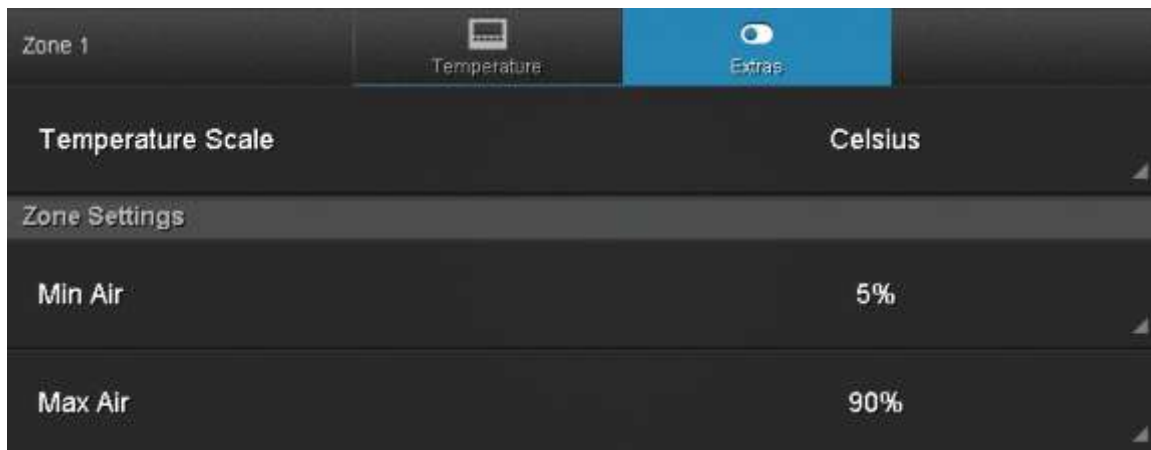
Where no control zone is configured, the thermostat shows and sets the unit's own setpoint, exactly as before. Nothing needs to be set for either case: the driver reads which arrangement is in use from the controller.

Selecting the 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 and the supply air temperature sensor. You would usually leave it on the main temperature sensor, unless for some reason the system does not have one.

iZone Zone driver

This driver sets itself up according to the zone type. It uses the Extras page to allow easy adjustment of the minimum and maximum airflow for the zone, as long as that is enabled on the iZone system.



Selecting the temperature source

In the driver's properties there is a **Temperature Source** property. From here you can select the zone's own sensor, the iZone system's main sensor, the system supply air sensor, or any other zone. You would usually leave it on the zone's own sensor unless it does not have one and always reports 0 degrees.

For a zone with no temperature sensor, the Zone Button driver is normally the better choice — such a zone is usually a simple open/close zone.

iZone Zone Button driver



This driver makes use of the experience button functionality in Control4 OS 2.9 and later. It provides simple on/off control of a zone, rather than confusing the customer with a full thermostat interface just to open and close a damper. The button icon follows the damper state.

It is connected in the same way as the regular Zone driver: connect this driver's connection to the particular zone on the main iZone System driver.

Properties reference

System driver properties

Property	Notes
Driver Version	Read-only. The currently running version of the driver.
Driver Status	Read-only. Displays information if there are any issues.
CB ID	The iZone CB ID, as labelled on the unit. This is the only field that must be filled in.
CB IP	Read-only. The address the controller was found at.
Temperature Display	<i>Temp Sensor</i> or <i>Supply Sensor</i> — which reading the system tile shows.
Presets	<i>Off</i> , <i>On</i> , or <i>On with Scheduling</i> . Enables the preset and schedule tabs in Navigator.
System Type	Read-only. What the bridge advertised: which API generation it speaks, and whether Split or VRF systems sit behind it.
Add Zones As	Which driver the Add action creates for a zone: <i>Match Zone Type</i> , <i>Thermostat</i> , or <i>Button</i> .
API Version	<i>Auto</i> , <i>Force v1</i> or <i>Force v2</i> . Leave on <i>Auto</i> unless troubleshooting.
Poll CB	Poll the controller rather than relying on its change broadcast. See the note below.
Debug	<i>Off</i> , <i>Print</i> , <i>Log</i> , or <i>Print and Log</i> . Turns itself back off after a period.
Debug Level	<i>Fatal ... Trace</i> . How much detail to log while debugging is on.

Poll CB and the newer API. The original API broadcasts a notice when something changes, and *Poll CB* decides whether the driver polls as well. The newer API and the VRF endpoints have no such broadcast, so when either is in use the driver polls regardless of this property.

Zone driver properties

Property	Notes
Driver Version	Read-only. The currently running version of the driver.
Driver Status	Read-only. Displays information if there are any issues.
Zone	Which zone of the iZone system this driver controls. Must be set for the driver to do anything; a driver left on <i>Not set</i> is inert on purpose.
Temperature Source	Which temperature to show on the navigators for this zone — for a zone that has no sensor of its own.
Zone Name	Read-only. The name given to the zone on the iZone system, which helps identify which zone this driver controls.
Zone Index	Read-only. The zone number on the iZone system.
Zone Type	Read-only. <code>auto</code> — a zone with its own temperature sensor and setpoint; the thermostat Zone driver suits these. <code>opc1</code> — a simple open/closed zone; use the Zone Button driver. <code>const</code> — a constant zone, meant to stay open so the unit always has somewhere to send air. It still accepts open and close, so the Zone Button driver works for it too; just be aware of why it is set that way before closing it.
Is Master	Read-only. If true, this is the master zone, which can control the setpoint on the main system.
Debug / Debug Level	As on the System driver.

Advanced Properties

Properties

Lua

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

Zone Button driver properties

The same as the Zone driver, less **Temperature Source** — an experience button displays no temperature.

VRF Unit driver properties

Property	Notes
Driver Version	Read-only. The currently running version of the driver.
Driver Status	Read-only. Displays information if there are any issues, including a fault reported by the unit itself.
VRF Unit	Which indoor unit this driver controls, counted in the order the bridge reports them — the same order they appear in on the System driver's Extras page. Must be set for the driver to do anything.
Unit Name	Read-only. The name the unit carries on the iZone system.
Debug / Debug Level	As on the System driver.

Custom programming

The drivers make use of Control4's custom programming to let you activate system functionality from any event. You have access to the HVAC modes, setpoints and fan modes, and on top of that to the extra features of the system.



You access this through Composer's Programming section: select the event on the left-hand side, then select the iZone driver on the right-hand side.

The System driver offers these device-specific commands:

Command	Parameters
Call Favourite	Favourite number, 1–9.
Sleep Timer	0, 30, 60, 90 or 120 minutes. This is the ducted system's sleep timer; VRF units have their own, on the Extras page.
Free Air	on / off. Shown as iSave in Navigator.
Set Schedule	Schedule number 1–9, and on / off.

The Zone drivers expose no device-specific commands of their own; their airflow limits are set from the Extras page.

Troubleshooting

Symptom	What to check
Driver Status never reports a connection	The CB and the controller must be on the same subnet. Confirm the CB ID matches the label on the unit — discovery matches on it.
System Type is blank	The bridge has not been found. Same checks as above.
Fan or mode options are missing	This is normal — the driver only offers what the system reported it supports.
A zone shows no temperature	The zone has no sensor. Set the Zone driver's Temperature Source to another zone, or use the Zone Button driver instead.
A Zone or VRF driver does nothing, and its Driver Status says to set a property	Set its Zone or VRF Unit property. A driver will not guess which one it is.
A zone driver is bound but still shows nothing	Run Print Bound Drivers on the System driver. If it is not listed, its Zone is not set or the connection is not made.
The Add action reports there is nothing to add	The controller has not been found yet. Check CB ID and Driver Status first.

Symptom	What to check
VRF sections do not appear	The bridge did not report VRF in its discovery reply; check System Type .
A VRF setpoint will not accept a half degree	Expected. VRF units move in whole degrees.
Nothing responds after a firmware change	Set API Version to <i>Force v1</i> and see whether control returns; report it either way.

Turn **Debug** to *Print and Log* and **Debug Level** to *Debug* to capture what the driver is doing. Debug turns itself off again after a period, so it cannot be left on by accident.