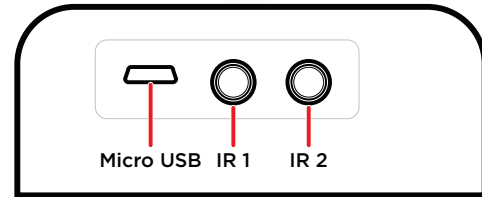


ZigBee IO and Extender Installation Guide



Control4
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Package contents

- C4-Z2IO ZigBee IO and Extender
- Four wall mounting screws
- Four plastic dry wall anchors
- Two IR emitters
- Micro USB power supply



Note: Y IR cables can be used, or IR cables can be spliced together (in parallel, not in series), to increase the number of controlled devices. Be aware that these connected emitters cannot be controlled independently but will all fire simultaneously from the shared IR port. Test to verify that there is no crossover code functionality between devices sharing the same IR port to avoid unwanted side effects.

Requirements

- Composer Pro 2.10.0 or higher

Features

The ZigBee IO and Extender (Z2IO) is a single device that combines the features of:

- Remote relays (up to two)
- Remote contact sensors (up to four)
- Remote thermistors (two)
- Internal contact (internal magnetic reed switch)
- ZigBee (IEEE 802.15.4) extender
- ZigBee-to-IR converters

Any of these inputs can be used to trigger and control automated events—such as sending an e-mail or turning on a cabinet light when its door is opened—throughout the Control4 system.

With this device, you can extend home automation control to the most remote of locations and applications inside or outside the home, reducing the need to run control wires over long distances (or where you can't run any wires at all).

As ZigBee to IR

The two 3.5 mm IR ports allow you to connect up to two standard IR emitters to control any IR-controlled devices, such as TVs, DVRs, and receivers.

When connecting IR emitters, make note of which port each emitter is connected to (labeled "1" and "2").

IR codes sent from the controller to the ZigBee IO and Extender are cached at the device, resulting in faster IR control response times.

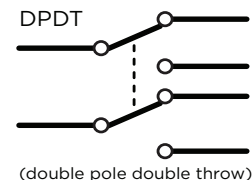
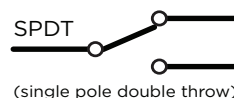
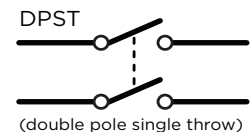
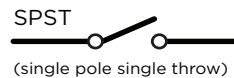
As a contact and relay

The device has an internal contact along one edge that can be used to detect open or closed states when installed with a mounted magnet. Up to four contacts (besides the internal contact) or two additional relays, or a combination of the two, can be used. Each option is outlined below in "Contact and Relay Wiring Options," and after it's physically wired, the correct option must be set on the *Properties* tab as outline further below in the section "IO Options."

As a relay

As a relay, this device provides wireless control of garage door openers, window coverings, fireplaces, and pumps (along with other relay control applications) inside or outside the home. It integrates into Control4 systems as standard relays that can be opened, closed, toggled, or pulsed.

The relay enables wireless control of any device controllable by one or two low-voltage SPST relays or one simulated SPDT/DPDT relay. These functions appear in a Control4 system as relay outputs (relays) in Composer Pro.



As a contact sensor

Depending on the selected IO configuration, up to four external contacts are possible. As a contact sensor, this device allows wireless monitoring of garage doors, gates, windows, mailboxes, doorbells, and pool or spa covers (along with other contact sensor monitoring applications you integrate or devise). These functions appear in a Control4 system as contact sensor inputs, which can trigger home automation events.

The internal contact is a magnetic reed switch. To use this internal contact, the Z2IO should be mounted so that the indentation (along the same edge as the identify button) comes in close proximity to a mounted magnet (not included) in a fully closed state (door is closed). When the door opens, the magnetic connection is lost, and that state change is pushed to the system.

Contact and relay wiring options

There are five wiring options for contacts and relays. After they are physically wired (as explained below), the correct option must be manually selected on the *Properties* tab using the *IO Properties* drop-down box.

		Pins							
		PWR	Cm	T	C4	C3	Cm	C2	C1
Options	1	+	Cm	T	R2 (SPST)	R2 (SPST)	Cm	R1 (SPST)	R1 (SPST)
	2				C4	C3		C2	C1
	3				C2	C1		R1 (SPST)	R1 (SPST)
	4				R2 (SPDT)	R2 (SPDT)		R1 (SPDT)	R1 (SPDT)
	5				R2 (DPST)	R2 (DPST)		R1 (DPST)	R1 (DPST)

R# = Relay, C# = Contact, Cm = Common ground (-), T = Thermistor, SPST = Single pole single throw, SPDT = Single pole double throw, DPST = Double pole single throw

Option 1: Two Relays using R1, R2—Two independent, single pole single throw (SPST) relays. Each relay controls a single circuit.

- Relay 1 is wired to pins C1 and pin C2.
- Relay 2 is wired to pins C3 and pin C4

Option 2: Four Contacts using C1, C2, C3, C4—Four independently sensed circuits.

- Contact 1 is wired to pin C1 and pin Cm (Common).
- Contact 2 is wired to pin C2 and pin Cm (Common).
- Contact 3 is wired to pin C3 and pin Cm (Common).
- Contact 4 is wired to pin C4 and pin Cm (Common)

Option 3: One Relay (SPST) and Two Contacts using R1 and C1, C2.

- Relay 1 is wired to pin C1 and pin C2.
- Contact 1 is wired to pin C3 and pin Cm (Common).
- Contact 2 is wired to pin C4 and pin Cm (Common).

Option 4: One Relay using R1 and R2 (SPDT)—The two relays operate together to simulate a single SPDT (single pole double throw) relay. However, unlike a true SPDT relay, both relays will open during a power failure.

- Relay 1 is wired to pin C1 and pin C2.
- Relay 2 is wired to pin C3 and pin C4.

Option 5: One Relay using R1 and R2 (DPST)—The two relays operate together to simulate a single DPST (double pole single throw configuration) relay. However, unlike a true DPST relay, both relays will open during a power failure.

- Relay 1 is wired to pin C1 and pin C2.
- Relay 2 is wired to pin C3 and pin C4.

As a ZigBee extender

This device acts as a ZigBee mesh extender and router. It is designed to extend the ZigBee network into distant or hard-to-reach areas. The Z2IO provides support for up to 32 nodes in its ZigBee routing table. This is particularly useful in providing ZigBee network extension to a large number of battery-operated, non-routing ZigBee nodes. It can also be used to improve ZigBee signal latency that can occur when ZigBee devices are installed on the fringes of a ZigBee mesh network.



Note: Range and performance varies, depending on variables such as location, building materials, furnishings, and radio interference.

For optimal results, the device should be located within 50 feet of another routing node and located in areas of the project where the mesh may be weak or non-existent. This device should not be placed next to a controller, inside a rack, or on a metal shelf. The ZigBee extender functionality is always on.

As a thermistor and humidistat

The device contains an integrated thermistor and humidistat, as well as a connection for an external thermistor, allowing it to be used almost anywhere to report environmental conditions or to inform the climate control system. The thermistor senses temperatures from 32°F to 104°F (0°C to 40°C), and the humidistat senses humidity from 5% to 90%. The device checks the temperature and humidity every five seconds. If the temperature has changed more than 0.5°F (0.28°C), the device reports the new temperature. If the humidity has changed more than 0.5%, the device reports the new humidity percentage.

Data from the integrated thermistor and humidistat is always available, regardless of the selected IO configuration.



Notes:

- A value of -40° in the Remote Temperature field could indicate either a negative temperature or that no remote thermistor is connected.
- The integrated humidistat will return a zero value after the device is rebooted until the actual humidity value can be reported.
- To display the temperature and/or humidity in Navigator, add the "Temperature Display Driver (OS 2.10+)" to the project and connect the driver's temperature driver to the Z2IO.
- Given the variations in temperature and humidity measurements and environments, it may be necessary to independently test and verify the local and remote temperature and humidity. The properties *Local Temperature Offset*, *Remote Temperature Offset*, and *Local Humidity Offset* can be used for this purpose.

Important safety instructions



Caution! You should install this device in accordance with all national and local electrical codes.



Caution! Improper use or installation of this device can result in loss of and damage to property.



Important: This product is not intended for direct connections to AC mains (120V/220V). Refer to the specifications.



Important: You must operate this device in accordance with the instructions and specifications in this installation guide.



Important: Using this product in any manner other than outlined in this document voids your warranty. Also, Control4 is *not* responsible or otherwise liable in any way for any damage resulting from the misuse of this product. See ctrl4.co/warranty for details.

Specifications

Model number	C4-Z2IO
System requirements	
Control4 OS system requirements	OS version 2.10.0 or greater
Control4 system integration	Each installed ZigBee IO and Extender adds sensor and input connections to the Composer project.
Driver	The ZigBee IO and Extender (C4-Z2IO) is available in the Composer Online Driver Database.
Communication	
Networks supported	Control4 ZigBee Pro mesh networking protocol, based on the IEEE 802.15.4 ZigBee standard
ZigBee data rate	250 kbps
ZigBee frequency range	2.405 - 2.475 GHz
Connections	
Contact sensor input	4 inputs, accepts AWG 16-28, common ground connection.
Relay terminal ratings	0.5A @ 50V, 1A @ 24V or less Max voltage: TBD
External thermistor	1 thermistor input, sold separately. See "Accessories"
Infrared	2 3.5 mm IR ports
Integrated features	
Internal contact	Internal magnetic reed switch Requires external magnet, sold separately
Integrated internal thermistor	Internal thermistor can be used for local temperature sensing: 32°F to 104°F (0°C to 40°C)
Integrated humidistat	Can measure local humidity from 5% to 90%.
Power	
Power consumption	100mA at 12V, fully active
External low-voltage power supply	Micro USB power supply (included) AC/DC 5-24V (optional)
Other	
Available colors	Black (water-based paintable enclosure)
Dimensions (L x W x H)	3.1" (78.7 mm) x 2.6" (65.7 mm) x 1.05" (26.6 mm)
Weight	2.5 oz. (70.9 grams)
Environmental	Temperature: Operational 32°F to 104°F (0°C to 40°C) Storage -20°F to 158°F (-29°C to 70°C) Humidity 5% to 95% non-condensing This device is <i>not</i> waterproof and must be kept out of direct contact with water. The product must <i>not</i> be immersed.
Paintable enclosure	The cover assembly plastics are paintable with any water-based residential paints. <i>Do not clog the cover assembly vent holes with paint.</i>
Accessories	
External thermistor	ZCA-EXT10A, AC-DOTS1-W, AC-PMT51-W

Installing

1 Place the device in a location which ensures the following:

- Easy access to any externally-connected wires
- ZigBee mesh networking efficiency



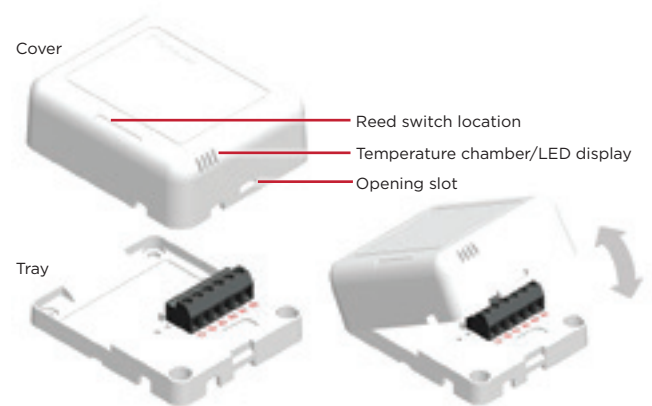
Note: Make sure the device has good ZigBee wireless reception by (1) ensuring it is within range of another ZigBee device and (2) avoiding other electrical equipment that may cause interference with the ZigBee signal (such as cordless telephones that operate on the 2.4 GHz frequency.)

- Avoiding unnecessary exposure to extreme environmental conditions.



IMPORTANT! Do not place the device in direct sunlight.

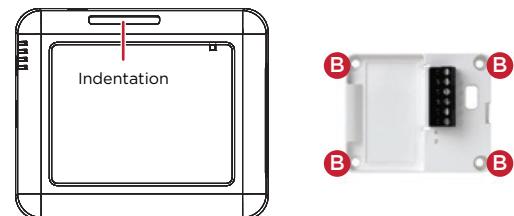
- If an external thermistor is used with the device, place it away from direct sunlight, drafts, doorways, skylights, windows, and exterior walls for best accuracy.
- Detach the tray from the cover by inserting a flat screwdriver into the opening slot in the side of the cover and pushing gently, while at the same time pulling the cover out and away from the tray.



The cover holds the radio logic board (the actual device) and pins, the IR ports, the internal contact, and the USB power connector. The cover attaches to the tray. The tray holds the wiring terminals and is mounted to a wall or flat surface.

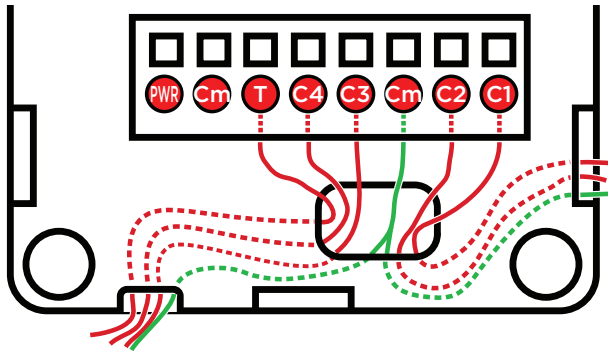
The cover "rocks" into contact with the tray. To separate the two, insert a screwdriver or other flat object into the opening slot on the side of the cover, gently push in and then "rock" it away from the tray.

- Position the tray against the wall or other flat surface.
- If you are using the internal contact, position the device so that the narrow indentation that marks the internal contact (on the long edge of the cover) aligns with the external magnet (not included).



- Mark the locations of the four screw holes on the wall.
- If mounting the device to drywall, remove the tray from the wall and drill four 3/16-inch (4.75 mm) mounting holes at the four screw hole locations (B) previously marked on the wall.

- 8 Thread any relay wires, contact wires, and external thermistor wires from the wall through the openings in the tray and to the terminal block.



Note: The two *Cm* (common/ground) pins are connected and can be used interchangeably.

- 9 Insert and tighten the mounting screws.

Note: You may optionally choose to use robust two-sided tape to mount the tray assembly to the wall or other flat surface, as long as the tape won't prevent the back of the tray from sitting flush against the mounting surface.

- 10 Connect the wires from the tray to the terminals in the cover, matching the proper wires to the target terminal locations. The pin/terminal definitions are defined within Composer Pro. See "Configuring" on the next page. (Pins *Cm* and *PWR* are used for optional external power connections.)

Important! When using multiple external contact sensors, or when using an external contact sensor along with an external thermistor, you **MUST** connect each device to one of the *Cm* pins in addition to the appropriate sensor or thermistor pin to make a proper wiring connection. See the "Sample wiring configurations" section of this document for examples.

- 11 Attach the cover assembly to the tray:

- a Align the side of the cover with the side of the tray, engaging the plastic tabs with the corresponding holes.
- b Rock the cover into place, snapping it to the tray.
- c Press firmly on the bottom center edge of the cover to snap and lock it to the tray assembly.



a. Align the cover edge's two latching tabs with corresponding tab receivers on the tray's edge.



b. Close the cover by rocking it toward the other end of the tray.

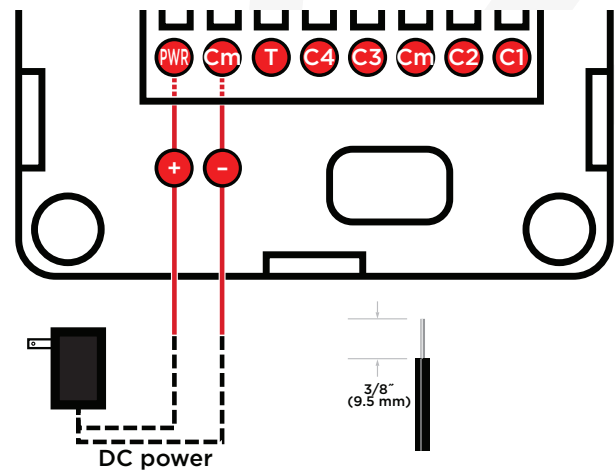


c. Press firmly on the center edge of the cover until it snaps and locks into place with the tray.

- 12 For ZigBee to IR, connect any IR emitters to the two IR ports, then affix the emitter head to the IR window on the device to control (such as a TV).

Connecting alternate DC power

Although a power adapter is included, you may elect to instead connect an alternate 5-24V DC or AC power source to pins *Cm-PWR*. Connect DC positive polarity to pin *PWR*, and negative to pin *Cm*.



Configuring

Connections

Static connections

Some connections in the driver are static in that they are always available regardless of any settings/options. These include the two IR connections, IR Output 1 and IR Output 2, and the internal contact.

Dynamic connections

Other connections in the driver are dynamic in that the connections will appear based on certain options—in particular, the *IO Options* property. If you change to another *IO option*, any connections created in the original *IO option* will be broken.

To configure your device:

- 1 Add the device to your Composer Pro project. When prompted to identify the device, press the ID button on the face of the cover four times. The green LED blinks twice to confirm the ID has been sent to the Control4 system.
- OR -
In Composer Express, add a device into the project, scan for ZigBee devices, then press the ID button on the face of the cover four times.
- 2 In the driver's *Properties* tab, view or configure the settings explained below under "Properties," then click **Set** to the right of the setting after each change.
- 3 Configure each relay's power up state. This is the state you want the relay to adopt after a device reboot. For example, after a power outage (resulting in a device reboot), you may want the garage door to default to closed, the window coverings to be restored to their last known state, and the fireplace to be turned off.



Tip: Two SPST relays can optionally be linked to simulate a single SPDT relay. However, unlike a true SPDT relay, both relays will open during a power failure.

- 4 Add generic contact drivers (such as **Door Contact Sensor**, **Gate**, and **Motion Sensor**) and relay drivers (such as **Blinds**, **Door Lock**, and **Pump**) in *System Design* view, then connect the generic driver to the appropriate connection on the C4-Z2IO device in *Connections* view.
- 5 For programming, use these events:
 - **Online:** Triggers when the device comes online.
 - **Offline:** Triggers when the device goes offline.
 - **Reboot:** Triggers when the device reboots.

Properties

General properties

- **Log Level:** Standard for most drivers, this property allows you to filter which message types display in the *Lua Output* window. Options 0 - 5 correspond to Fatal through Trace levels, increasing in level of verbosity. Options are 0=Fatal, 1=Error, 2=Warning, 3=Info, 4=Debug, and 5=Trace. Default is 1 - Error.
- **Log Mode:** Activates logging of diagnostic information. The log level is set in the above property. Options include *Off*, *Print* (to the window), *Log* (to the Director Log), and *Print and Log* (both). Default is *Off*.
- **Driver Version:** (Read only) Shows the version number of the driver currently in use.
- **Device Status:** (Read only) Shows the current status of the product, whether online or offline. However, in some cases, the device may not report its status immediately, such as when the device is rebooting.
- **Firmware Version:** (Read only) Shows the version number of the firmware currently in use on the device. The firmware will be updated automatically over the air when the Control4 OS is updated and when that update includes a new firmware version for this device.
- **Bootloader Version:** (Read only) Shows the version number of the firmware currently in use on the device. The bootloader can only be updated by Control4, so this property is for support/diagnostic information only.
- **LED Mode:** Determines the behavior of the LED light on the top/front of the product. Options include *Off*, *ZigBee* (which shows the ZigBee status; see "Identification and Button Presses" below), and *IR* (which shows activity when IR signals are sent to the IR ports). Default is *Off*. When the property is set to *Off*, button presses should still temporarily prompt the LED to show the status.

Humidity properties

- **Local Humidity:** (Read only) Shows the relative humidity measured where the device is located. The value is shown as a percentage.
- **Local Humidity Offset:** The humidity sensor provides accuracy of +/- 4% relative humidity. Adjusting the *Local Humidity Offset* can result in increased inaccuracy of relative humidity reporting without using humidity calibration equipment for validation.

Temperature and humidity properties

- **Temperature Scale:** Sets which scale is used to calculate the temperature used in the *Local* and *Remote Temperature* properties described below, and affects only the *Properties* tab's settings. Options include *Fahrenheit* and *Celsius*. Default is *Fahrenheit*.

- **Local Temperature:** (Read only) Shows the most recent reported temperature recorded by the internal thermistor. The scale of the temperature is determined by the *Temperature Scale* property.
- **Local Temperature Offset:**—Modifies the reported local temperature to account for environmental variances. The temperature can be changed downward or upward by a maximum of 20 degrees. The default is 0 (no correction).
- **Remote Temperature:** (Read only) Shows the most recent reported temperature recorded by the remote thermistor. The scale of the temperature is determined by the *Temperature Scale* property.
- **Remote Temperature Offset:**—Modifies the reported remote temperature (the temperature recorded by an external thermistor) to account for environmental variances. (When multiple temperature sensors are located in the same room, you may notice each sensor shows a slightly different reading. This results from normal manufacturing variances in temperature sensors and the device's position/location in the room.) The temperature can be changed downward or upward by a maximum of 20 degrees. The default is 0 (no correction).
- **IO Options:** Tells the device how its eight configuration pins are assigned. The selected option is retained even after a system reboot or update.

IO properties

		Pins							
		PWR	Cm	T	R2		Cm	R1	
Options	1				R2 (SPST)	R2 (SPST)		R1 (SPST)	R1 (SPST)
	2				C4	C3		C2	C1
	3	+	Cm	T	C2	C1		R1 (SPST)	R1 (SPST)
	4				R2 (SPDT)	R2 (SPDT)		R1 (SPDT)	R1 (SPDT)
	5				R2 (DPST)	R2 (DPST)		R1 (DPST)	R1 (DPST)

R# = Relay, C# = Contact, Cm = Common ground (-), T = Thermistor,
SPST = Single pole single throw, SPDT = Single pole double throw,
DPST = Double pole single throw

- **Option 1: R1, R2 (both SPST [single pole single throw]):** (Default) Both relays are single pole single throw, meaning they are independent of each other; or, in other words, each relay controls only one circuit.
- **Option 2: C1, C2, C3, C4:** Four contacts.
- **Option 3: R1 (SPST), C1, C2:** One relay (single pole single throw) and two contacts.
- **Option 4: R1 (SPDT [single pole double throw]):** The two relays operate together to simulate a single SPDT (single pole double throw) relay. However, unlike a true SPDT relay, both relays will open during a power failure.
- **Option 5: R1 (DPST [double pole single throw]):** The two relays operate together to simulate a single DPST (double pole single throw configuration) relay.



Notes:

- The ZigBee extender, IR emitter control, internal contact, internal thermistor, and internal humidistat remain active regardless of the selected IO configuration.
- The selected IO option will change the available connections, so existing connections will be disconnected or deleted.
- The selected IO option determines the available fields in *Contact properties* and *Relay properties*.

Contact properties

- **Contact Internal Status:** (Read only) Shows the status of the static connection for the internal contact.
- **Contact 1-4 Status:** (Read only) Represents the status of the wired contacts if IO Option 1, 3, 4, or 5 is selected.

Relay properties

- **Relay 1 Power Up State and Relay 2 Power Up State:** (Read only) Represents the status of the relays if IO Option 1, 3, 4, or 5 is selected. The options are *Restore Last State*, *Set To OPEN*, and *Set To CLOSED*. The default is *Restore Last State*.
- **Relay 1 Status and Relay 2 Status:** (Read only) Represents the status of the relays if IO Option 1, 3, 4, or 5 is selected.

Actions tab

Buttons located on the *Actions* tab allow you to view version and diagnostic information and force relay actions. (Relay actions will always be shown, regardless of the IO configuration.)

- **Version Information:** This action button will display the versions of the driver's Base Template and Template, as well as the Boot Loader to the *Lua Output* window of the *Lua* tab. The *Log Mode* property does not have to be set to Print to display this information to the window.
- **Diagnostic Information:** This action button will display the following information to the *Lua Output* window of the *Lua* tab (the *Log Mode* property does not have to be set to Print to display this information to the window): device ZigBee MAC address, ZigBee mesh PAN id, Template Version, Base Template Version, Boot Loader Version, ZigBee Node ID.
- **Relay 1 Close and Relay 2 Close:** These action buttons will trigger the corresponding relay to close.
- **Relay 1 Open and Relay 2 Open:** These action buttons will trigger the corresponding relay to open.

Troubleshooting

If the device is not working:

- Reboot the device by disconnecting power, then re-connecting power.
- Check for proper wiring. See the "Wiring Configuration" diagrams.
- Review the log in the driver's Lua tab.
- Restore factory defaults (13 button presses).

Note: Un-identifying a device off the ZigBee mesh will cause it to do a factory reset. A factory reset reverts all relays to the open state, and the settings for Power Up State will revert to *Restore Last State*. The settings are preserved, however, after a power cycle or reboot.

LED diagnostics

The indicated statuses appear during device identification and when the ID button is pressed once.

LED	Description
 [Green] On	Offline/Waiting for Director
 [Yellow] Slow flashing	Scanning
 [Blue] On	Join success
 [Green] Fast flashing	Join success signal strength=good
 [Yellow] Fast flashing	Join success signal strength=adequate
 [Red] Fast flashing	Join success signal strength=risk/low
 [Red] Medium flashing	Join failed (then returns to offline)
 [Green] Slow flashing	Signal strength=good (from Network Tools)
 [Yellow] Slow flashing	Signal strength=adequate (from Network Tools)
 [Red] Slow flashing	Signal strength=risk/low (from Network Tools)

Button sequences

Functions	# of button presses
Identify	4
Reboot/Reset	15
Reset application defaults	9
Leave mesh, restore factory defaults	13
Signal strength flash LEDs	1

Restoring to previous firmware version

- 1 Power off the device (disconnect power).
- 2 While holding down the **ID** button, reconnect power, and continue to press the **ID** button until the LED changes from red to white (about five seconds).
- 3 Release the button. The device will reboot to its previous firmware version in about one minute.

ZigBee Contact Sensor Installation Guide



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Package contents

- C4-Z2C ZigBee Contact Sensor
- Four wall mounting screws
- Four plastic dry wall anchors
- AA batteries (2)

Requirements

- Composer Pro 2.10.0 or higher

Features

The ZigBee Contact Sensor (Z2C) is a single device that combines the features of:

- Remote contact sensors (up to four)
- Remote thermistors (one)
- Internal contact (internal magnetic reed switch)
- Internal thermistor and humidistat

Any of these inputs can be used to trigger and control automated events—such as sending an e-mail or turning on a cabinet light when its door is opened—throughout the Control4 system.

You can position this wireless device anywhere you need contact connections or climate reporting.

As a contact sensor

The device contains five contacts: one internal contact and connections for four wired contacts.

The internal contact is a magnetic reed switch. To use this internal contact, the Z2C should be mounted so that the indentation (along the same edge as the identify button) comes in close proximity to a mounted magnet (not included) in a fully closed state (door is closed). When the door opens, the magnetic connection is lost, and that state change is pushed to the system.

Wiring guide:

Contact 1 -> Pin C1
Contact 2 -> Pin C2
Contact 3 -> Pin C3
Contact 4 -> Pin C4
(All can use either of the Cm pins as Common)

As a thermistor and humidistat

The device contains an integrated thermistor and humidistat, as well as a connection for an external thermistor, allowing it to be used almost anywhere to report environmental conditions or to inform the climate control system. The thermistor senses temperatures from 32°F to 104°F (0°C to 40°C), and the humidistat senses humidity from 5% to 90%. The device checks the temperature and humidity every five minutes. If the temperature has changed more than 0.9°F (0.5°C), the device reports the new temperature and humidity values.



Notes:

- A value of -40° in the *Remote Temperature* field could indicate either a negative temperature or that no remote thermistor is connected.
- The integrated humidistat will return a zero value after the device is rebooted until the actual humidity value can be reported.
- See “Sample wiring configurations” below for an example of an external thermistor connection.
- To display the temperature and/or humidity in Navigator, add the “Temperature Display Driver (OS 2.10+)” to the project and connect the driver’s temperature driver to the Z2C.
- Given the variations in temperature and humidity measurements and environments, it may be necessary to independently test and verify the local and remote temperature and humidity. The properties *Local Temperature Offset*, *Remote Temperature Offset*, and *Local Humidity Offset* can be used for this purpose.

Important safety instructions



Caution! You should install this device in accordance with all national and local electrical codes.



Caution! Improper use or installation of this device can result in loss of and damage to property.



Important: This product is not intended for direct connections to AC mains (120V/220V). Refer to the specifications.



Important: You must operate this device in accordance with the instructions and specifications in this installation guide.



Important: Using this product in any manner other than outlined in this document voids your warranty. Also, Control4 is *not* responsible or otherwise liable in any way for any damage resulting from the misuse of this product. See ctrl4.co/warranty for details.

Specifications

Model number	C4-Z2C
System requirements	
Control4 OS system requirements	OS version 2.10.0 or greater
Control4 system integration	Each installed ZigBee Contact Sensor requires input connections to the Composer project.
Driver	The ZigBee Contact Sensor (C4-Z2C) is available in the Composer Online Driver Database.
Communication	
Networks supported	Control4 ZigBee Pro mesh networking protocol, based on the IEEE 802.15.4 ZigBee standard
ZigBee data rate	250 kbps
ZigBee frequency range	2.405 – 2.475 GHz
Connections	
Contact sensor input	4 inputs, accepts AWG 16-28, common ground connection.
External thermistor	1 thermistor input, sold separately. See "Accessories"
Integrated features	
Internal contact	Internal magnetic reed switch Requires external magnet, sold separately
Integrated internal thermistor	Internal thermistor can be used for local temperature sensing: 32°F to 104°F (0°C to 40°C)
Integrated humidistat	Can measure local humidity from 5% to 90%.
Power	
Power consumption	100mA at 3V, fully active
Power	AA batteries (2), included
Other	
Available colors	Black (water-based paintable enclosure)
Dimensions (L × W × H)	3.1" (78.7 mm) × 2.6" (65.7 mm) × 1.05" (26.6 mm)
Weight	2.5 oz. (70.9 g) without batteries
Environmental	Temperature: Operational 32°F to 104°F (0°C to 40°C) Storage -20°F to 158°F (-29°C to 70°C) Humidity 5% to 95% non-condensing This device is <i>not</i> waterproof and must be kept out of direct contact with water. The product must <i>not</i> be immersed.
Paintable enclosure	The cover assembly plastics are paintable with any water-based residential paints. <i>Do not clog the cover assembly vent holes with paint.</i>
Accessories	
External thermistor	ZCA-EXT10A, AC-DOTS1-W, AC-PMT51-W

Installing

1 Place the device in a location which ensures the following:

- Easy access to any externally-connected wires
- ZigBee mesh networking efficiency



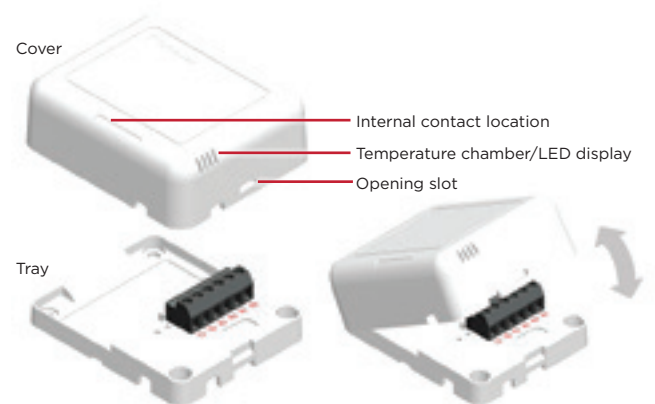
Note: Make sure the device has good ZigBee wireless reception by (1) ensuring it is within range of another ZigBee device and (2) avoiding other electrical equipment that may cause interference with the ZigBee signal (such as cordless telephones that operate on the 2.4 GHz frequency.)

- Avoiding unnecessary exposure to extreme environmental conditions.



IMPORTANT! Do not place the device in direct sunlight.

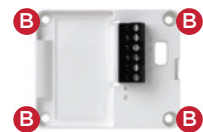
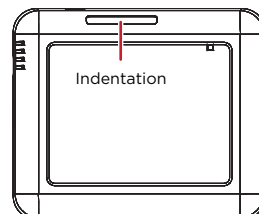
- If an external thermistor is used with the device, place it away from direct sunlight, drafts, doorways, skylights, windows, and exterior walls for best accuracy.
- Detach the tray from the cover by inserting a flat screwdriver into the opening slot in the side of the cover and pushing in gently, while at the same time pulling the cover out and away from the tray.



The cover holds the radio logic board (the actual device) and pins and the internal contact. The cover attaches to the tray. The tray holds the wiring terminals and is mounted to a wall or flat surface.

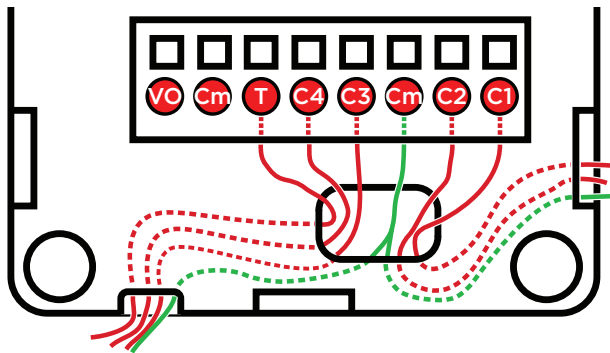
The cover "rocks" into contact with the tray. To separate the two, insert a screwdriver or other flat object into the opening slot on the side of the cover, gently push in and then "rock" it away from the tray.

- Position the tray against the wall or other flat surface.
- If you are using the internal contact, position the device so that the narrow indentation that marks the internal contact (on the long edge of the cover) aligns with the external magnet (not included).



- Mark the locations of the four screw holes on the wall.
- If mounting the device to drywall, remove the tray from the wall and drill four 3/16-inch (4.75 mm) mounting holes at the four screw hole locations (B) previously marked on the wall.

- 8 Thread any contact or thermistor wires from the wall through the openings in the tray and to the terminal block.



Note: The two *Cm* (common/ground) pins are connected and can be used interchangeably.

- 9 Insert and tighten the mounting screws.



Note: You may optionally choose to use robust two-sided tape to mount the tray assembly to the wall or other flat surface, as long as the tape won't prevent the back of the tray from sitting flush against the mounting surface.

- 10 Connect the wires from the tray to the terminals in the cover, matching the proper wires to the target terminal locations.



Important! When using multiple external contact sensors, or when using an external contact sensor along with an external thermistor, you *must* connect each device to one of the Common (*Cm*) pins in addition to the appropriate sensor or thermistor pin to make a proper wiring connection. See the "Sample wiring configurations" section of this document for examples.

- 11 Attach the cover assembly to the tray:

- a Align the side of the cover with the side of the tray, engaging the plastic tabs with the corresponding holes.
- b Rock the cover into place, snapping it to the tray.
- c Press firmly on the bottom center edge of the cover to snap and lock it to the tray assembly.



a. Align the cover edge's two latching tabs with corresponding tabs on the tray's edge.



b. Close the cover by rocking it toward the other end of the tray.



c. Press firmly on the bottom center edge of the cover until it snaps and locks into place with the tray.

Configuring

To configure your device:

- 1 Add the device to your Composer Pro project. When prompted to identify the device, press the **ID** button on the face of the cover four times. The green LED blinks twice to confirm the ID has been sent to the Control4 system.

- OR -

In Composer Express, add a device into the project, scan for ZigBee devices, then press the ID button on the face of the cover four times.

- 2 In the driver's *Properties* tab, view or configure the settings explained below under "Properties," then click **Set** to the right of the setting after each change.
- 3 Add generic contact drivers (such as **Door Contact Sensor**, **Gate**, and **Motion Sensor**) in *System Design* view, then connect the generic driver to the appropriate connection on the C4-Z2C device in *Connections* view.
- 4 For programming, use these events:
 - **Missed Checkin:** Triggers when the device misses a controller check in for the number of times specified in the driver's "Missed Checkin Limit" setting.
 - **Online:** Triggers when the device comes online.
 - **Offline:** Triggers when the device goes offline.
 - **Reboot:** Triggers when the device reboots.

Properties

General properties

- **Log Level:** Standard for most drivers, this property allows you to filter which message types display in the *Lua Output* window. Options 0 - 5 correspond to Fatal through Trace levels, increasing in level of verbosity. Options are 0=Fatal, 1=Error, 2=Warning, 3=Info, 4=Debug, and 5=Trace. Default is 1 - Error.
- **Log Mode:** Activates logging of diagnostic information. The log level is set in the above property. Options include *Off*, *Print* (to the window), *Log* (to the Director Log), and *Print and Log* (both). Default is *Off*.
- **Driver Version:** (Read only) Shows the version number of the driver currently in use.
- **Device Status:** (Read only) Shows the current status of the product, whether online or offline. However, in some cases, the device may not report its status immediately, such as when the device is rebooting.
- **Firmware Version:** (Read only) Shows the version number of the firmware currently in use on the device. The firmware will be updated automatically over the air when the Control4 OS is updated and when that update includes a new firmware version for this device.
- **Bootloader Version:** (Read only) Shows the version number of the firmware currently in use on the device. The bootloader can only be updated by Control4, so this property is for support/diagnostic information only.

Battery properties

- **Battery Level:** Reports the charge level of the battery. When the batteries on a Z2C are low, a low battery alert can be configured using the Z2C's battery level. When the batteries are very low, the LED behavior and temperature and humidity reporting become unreliable.

Humidity properties

- **Local Humidity:** (Read only) Shows the relative humidity measured where the device is located. The value is shown as a percentage.
- **Local Humidity Offset:** The humidity sensor provides accuracy of +/- 4% relative humidity. Adjusting the *Local Humidity Offset* can result in increased inaccuracy of relative humidity reporting without using humidity calibration equipment for validation.

Temperature properties

- **Temperature Scale:** Sets which scale is used to calculate the temperature used in the *Local* and *Remote Temperature* properties described below, and affects only the *Properties* tab's settings. Options include *Fahrenheit* and *Celsius*. Default is *Fahrenheit*.
- **Local Temperature:** (Read only) Shows the most recent reported temperature recorded by the internal thermistor. The scale of the temperature is determined by the *Temperature Scale* property.
- **Local Temperature Offset**—Modifies the reported local temperature to account for environmental variances. The temperature can be changed downward or upward by a maximum of 20 degrees. The default is 0 (no correction).
- **Remote Temperature:** (Read only) Shows the most recent reported temperature recorded by the remote thermistor. The scale of the temperature is determined by the *Temperature Scale* property.
- **Remote Temperature Offset**—Modifies the reported remote temperature (the temperature recorded by an external thermistor) to account for environmental variances. (When multiple temperature sensors are located in the same room, you may notice each sensor shows a slightly different reading. This results from normal manufacturing variances in temperature sensors and the device's position/location in the room.) The temperature can be changed downward or upward by a maximum of 20 degrees. The default is 0 (no correction).

Contacts properties

- **Contact Internal Status:** (Read only) Shows the status of the static connection for the internal contact.
- **Contact 1-4 Status:** (Read only) Represents the status of the wired contacts.

Checkin properties

- **Checkin Interval:** Defines how often the device checks with the controller to see if the controller is requesting information from the device, such as version information, or if the controller is trying to update any settings on the device, such as the check in interval. A check in can also be manually triggered by pressing the button on the Z2C. The check-in interval can be configured to check in with the controller between 10 minutes and 4 hours. The default is 10 minutes. Increasing the check-in interval will increase the battery life of the device.
- **Last Checkin Time:** (Read only) Shows the most recent time the device checked in with the controller.
- **Missed Checkin Limit:** Sets the number of times the checkin is missed before triggering the "Missed Checkin" programming event.

Actions tab

Buttons located on the *Actions* tab allow you to view version and diagnostic information.

- **Version Information:** This action button will display the versions of the driver's Base Template and Template, as well as the Boot Loader to the *Lua Output* window of the *Lua* tab. The *Log Mode* property does not have to be set to Print to display this information to the window.

- **Diagnostic Information:** This action button will display the following information to the *Lua Output* window of the *Lua* tab (the *Log Mode* property does not have to be set to Print to display this information to the window): device ZigBee MAC address, ZigBee mesh PAN id, Template Version, Base Template Version, Boot Loader Version, ZigBee Node ID.

Troubleshooting

If the device is not working:

- Reboot the device by disconnecting power, then re-connecting power.
- Check for proper wiring. See the "Wiring Configuration" diagrams.
- Review the log in the driver's Lua tab.
- Restore factory defaults (13 button presses).

Note: Un-identifying a device off the ZigBee mesh will cause it to do a factory reset. The settings are preserved, however, after a power cycle or reboot.

LED diagnostics

The indicated statuses appear during device identification and when the ID button is pressed once.

LED	Description
 [Green] On	Offline/Waiting for Director
 [Yellow] Slow flashing	Scanning
 [Blue] On	Join success
 [Green] Fast flashing	Join success signal strength=good
 [Yellow] Fast flashing	Join success signal strength=adequate
 [Red] Fast flashing	Join success signal strength=risk/low
 [Red] Medium flashing	Join failed (then returns to offline)
 [Green] Slow flashing	Signal strength=good (from Network Tools)
 [Yellow] Slow flashing	Signal strength=adequate (from Network Tools)
 [Red] Slow flashing	Signal strength=risk/low (from Network Tools)

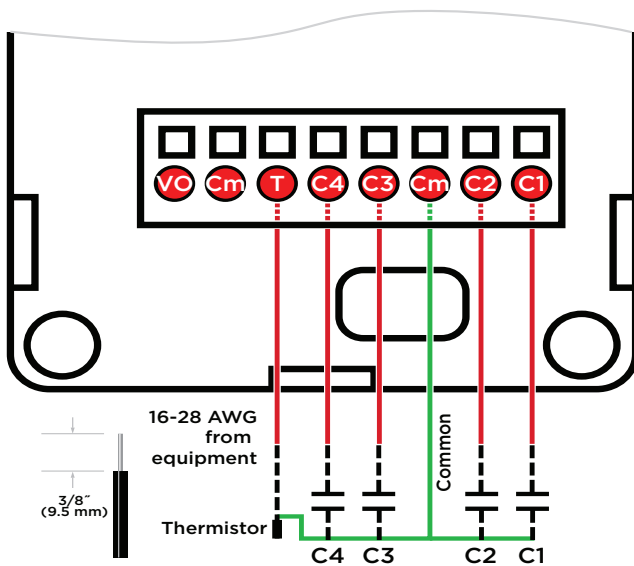
Button sequences

Functions	# of button presses
Identify	4
Reboot/Reset	15
Reset application defaults	9
Leave mesh, restore factory defaults	13
Signal strength flash LEDs	1

Restoring to previous firmware version

- 1 Power off the device (disconnect power).
- 2 While holding down the **ID** button, reconnect power, and continue to press the **ID** button until the LED changes from red to white (about five seconds).
- 3 Release the button. The device will reboot to its previous firmware version in about one minute.

Sample wiring configuration

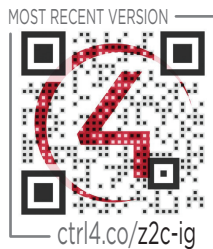


Additional resources

The following resources are available for additional support:

- Control4 Knowledgebase and forums
- Control4 Technical Support
- Control4 website: www.control4.com
- Composer documentation available at ctrl4.co/docs.

For the latest version of this document, open this URL or scan the QR code on a device that can view PDFs.



Regulatory/Safety information

To review Regulatory information for your particular Control4 products, see the information located on the Control4 website at ctrl4.co/reg.

Patent information

Applicable patents are available at ctrl4.co/patents.

Warranty

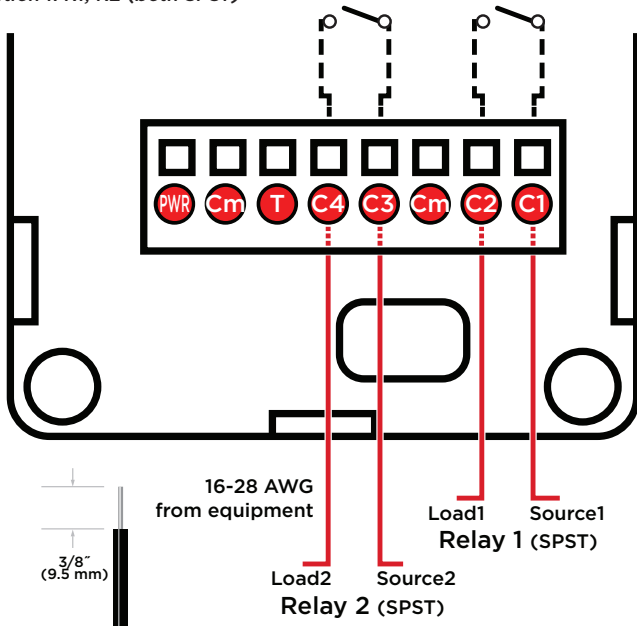
Visit ctrl4.co/warranty for details.

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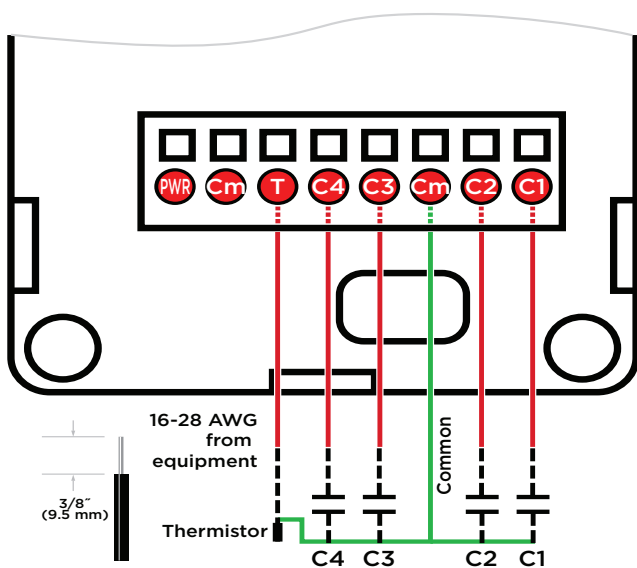
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Sample wiring configurations

Option 1: R1, R2 (both SPST)



Option 2: C1, C2, C3, C4 (including an optional external thermistor)



Additional resources

The following resources are available for additional support:

- Control4 Knowledgebase and forums
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- Control4 website: www.control4.com
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For the latest version of this document, open this URL or scan the QR code on a device that can view PDFs.



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Warranty

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Regulatory Compliance & Safety Information for Control4 Model C4-Z2IO & C4-Z2C

Electrical Safety Advisory **Sécurité électrique consultatif**

Important Safety Instructions

Consignes de sécurité importantes

Read the safety instructions before using this product.

Lisez les consignes de sécurité avant d'utiliser ce produit.

1. Read these instructions.
1. Lisez ces instructions.
2. Keep these instructions.
2. Conservez ces instructions.
3. Heed all warnings.
3. Respectez tous les avertissements.
4. Follow all instructions.
4. Suivez toutes les instructions.
5. Do not use this apparatus near water.
5. Ne pas utiliser cet appareil près de l'eau.
6. Clean only with dry cloth.
6. Nettoyez-le uniquement avec un chiffon sec.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
7. Ne pas bloquer les ouvertures de ventilation. Installer conformément aux instructions du fabricant.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Ne pas installer près de sources de chaleur telles que des radiateurs, registres de chaleur, poêles, ou autres appareils (incluant les amplificateurs) qui produisent de la chaleur.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
9. Ne pas contourner le dispositif de sécurité de la fiche polarisée ou de mise à la terre. Une fiche polarisée possède deux lames dont une plus large que l'autre. Une fiche de terre a deux lames et une troisième broche de terre. La lame large ou la troisième broche est



fournie pour votre sécurité. Si la fiche fournie ne s'adapte pas à votre prise, consultez un électricien pour le remplacement de la prise obsolète.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. Protégez le cordon d'alimentation ne soit piétiné ou pincé, en particulier au niveau des fiches, des prises et au point où il sort de l'appareil.
11. Only use attachments/accessories specified by the manufacturer.
11. Utilisez uniquement des fixations / accessoires spécifiés par le fabricant.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
12. Utilisez uniquement avec le chariot, le socle, le trépied, le support ou la table spécifiés par le fabricant ou vendu avec l'appareil. Lorsque vous utilisez un chariot, soyez prudent lorsque vous déplacez l'ensemble chariot / appareil pour éviter des blessures dues au renversement.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Débranchez cet appareil pendant les orages ou lorsqu'il n'est pas utilisé pendant de longues périodes de temps.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Confiez toutes les réparations à un personnel qualifié. Une réparation est nécessaire lorsque l'appareil a été endommagé de quelque façon que ce soit le cordon d'alimentation ou la fiche est endommagé, du liquide a été renversé ou si des objets sont tombés dans l'appareil, l'appareil a été exposé à la pluie ou à l'humidité, ne fonctionne pas normalement, ou s'il est tombé.
15. This equipment uses AC power which can be subjected to electrical surges, typically lightning transients which are very destructive to customer terminal equipment connected to AC power sources. The warranty for this equipment does not cover damage caused by electrical surge or lightning transients. To reduce the risk of this equipment becoming damaged it is suggested that the customer consider installing a surge arrester.
15. Cet équipement utilise la puissance AC qui peuvent être soumis à des surtensions électriques, la foudre généralement transitoires qui sont très destructives envers les équipements terminaux connectés à des sources d'alimentation CA. La garantie de cet appareil ne couvre pas les dommages causés par les surtensions électriques ou transitoires de foudre. Pour réduire le risque de cet équipement devient endommagé, il est suggéré que le client envisager l'installation d'un limiteur de surtension.
16. To completely disconnect unit power from the AC mains, remove the power cord from the appliance coupler and/or turn off the circuit breaker. To reconnect power, turn on the

circuit breaker following all safety instructions and guidelines. The circuit breaker shall remain readily accessible.

16. Pour débrancher complètement l'alimentation secteur du réseau secteur, retirez le cordon d'alimentation du coupleur de l'appareil et / ou éteignez le disjoncteur. Pour reconnecter l'alimentation, allumez le disjoncteur en suivant toutes les consignes et consignes de sécurité. Le disjoncteur doit être facilement accessible.
17. This product relies on the buildings installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 20A.
17. Ce produit repose sur l'installation des bâtiments pour les courts-circuits (surintensité) de protection. Assurez-vous que le dispositif de protection est assignée ne dépassant pas: 20A.
18. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in fire or electric shock.
18. N'introduisez jamais d'objets d'aucune sorte dans ce produit à travers les fentes du boîtier car ils pourraient toucher des points de tension dangereux ou court-circuiter des pièces qui pourraient entraîner un incendie ou un choc électrique.
19. This product can interfere with electrical equipment such as tape recorders, TV sets, radios, computers and microwave ovens if placed in close proximity.
19. Ce produit peut interférer avec des appareils électriques tels que les magnétophones, téléviseurs, radios, ordinateurs et fours à micro-ondes si placés à proximité.



The lightning flash and arrow head within the triangle is a warning sign alerting you of dangerous voltage inside the product
L'éclair et la flèche dans le triangle est un signe d'alerte pour vous avertir d'une tension dangereuse à l'intérieur du produit



Caution: To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.
Attention: Pour réduire le risque de choc électrique, ne pas retirer le couvercle (ou l'arrière). Aucune pièce réparable par l'utilisateur. Confiez l'entretien à un personnel qualifié.



The exclamation point within the triangle is a warning sign alerting you of important instructions accompanying the product.
Le point d'exclamation dans un triangle est un signe d'avertissement vous signale des instructions importantes accompagnant le produit.

See marking on bottom / back of product
Voir le marquage sur les bas / dos du produit



Warning!: To reduce the risk of electrical shock, do not expose this apparatus to rain or moisture
AVERTISSEMENT! Pour réduire le risque de choc électrique, n'exposez pas cet appareil à la pluie ou à l'humidité.

Save these instructions
Conservez ces instructions



Compliance of this equipment is confirmed by the following logo that is placed on the product ID label that is placed on the bottom of the equipment:

La conformité de cet équipement est confirmée par le logo suivant qui est placé sur l'étiquette d'identification du produit qui est placé au bas de l'équipement:



USA & Canada Compliance

FCC Part 15, Subpart B Unintentional Emissions Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Partie 15, sous-section B Unintentional Déclaration sur les interférences des émissions

Cet équipement a été testé et jugé conforme aux limites établies pour un dispositif numérique de classe B, conformément à la Partie 15 des règlements de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles lorsque l'équipement est utilisé dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie rayonnant fréquence et, s'il n'est pas installé et utilisé conformément aux instructions, il peut causer des interférences nuisibles aux communications radio. Cependant, il n'existe aucune garantie que des interférences ne se produiront pas dans une installation particulière. Si cet équipement provoque des interférences nuisibles à la réception radio ou télévision, ce qui peut être déterminé en mettant l'équipement hors et sous tension, l'utilisateur est encouragé à essayer de corriger l'interférence par une ou plusieurs des mesures suivantes:

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Connecter l'équipement à une prise sur un circuit différent de celui sur lequel le récepteur est branché.
- Consulter le revendeur ou un technicien radio / télévision qualifié pour obtenir de l'aide.



This device complies with part 15 of the FCC rules and Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IMPORTANT! Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT! Tous les changements ou modifications pas expressément approuvés par la partie responsable de la conformité ont pu vider l'autorité de l'utilisateur pour actionner cet équipement.

FCC Part 15, Subpart C / RSS-247 Intentional Emissions Interference Statement

Compliance of this equipment is confirmed by the following certification numbers that are placed on the equipment:

Notice: The term "FCC ID:" and "IC:" before the certification number signifies that FCC and Industry Canada technical specifications were met.

FCC ID: R33C4Z2IO
IC: 7848A-C4Z2C

This equipment must be installed by qualified professionals or contractors in accordance with FCC Part 15.203 & IC RSS-247, Antenna Requirements. Do not use any antenna other than the one provided with the unit.

FCC Partie 15, sous-partie C / RSS-247 Déclaration volontaire des émissions interférences

Conformité de cet appareil est confirmé par les chiffres de certification suivants qui sont placés sur l'équipement:

Avis: Le terme «FCC ID:" et "IC:" devant le numéro de certification signifie que les spécifications techniques de la FCC et d'Industrie Canada ont été respectées.

FCC ID: R33C4Z2IO
IC: 7848A-C4Z2IO

Cet équipement doit être installé par des professionnels qualifiés ou entrepreneurs conformément aux normes FCC partie 15.203 & IC RSS-247, Exigences d'antenne. Ne pas utiliser une antenne autre que celui fourni avec l'appareil.

RF Radiation Exposure Statement

This equipment complies with the FCC/IC radiation exposure limits set fourth for portable transmitting devices operation in an uncontrolled environment. End users must follow the specific operating instructions to satisfy RF exposure compliance.

- The equipment should only be used or installed at locations where there is normally greater than a 20cm separation between the antenna and all persons.
- This transmitter must not be co-located or operation in conjunction with any other antenna or transmitter.



- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Déclaration d'exposition aux radiations RF

Cet équipement est conforme aux limites FCC / IC d'exposition aux rayonnements définies quatrième opération appareils portables transmettre dans un environnement non contrôlé. Les utilisateurs finaux doivent suivre les instructions de fonctionnement spécifiques pour satisfaire la conformité aux expositions RF.

- L'équipement ne doit être utilisé ou installé à des endroits où il est normalement supérieure à une séparation de 20 cm entre l'antenne et toute personne.
- Cet émetteur ne doit pas être co-localisés ou fonctionnement en conjonction avec une autre antenne ou un autre émetteur.
- Tout changement ou modification non expressément approuvé par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser cet équipement.



European Compliance (English)

Conformity of the equipment with the guidelines below is attested by the application of the CE mark.



CE Declaration of Conformity

Manufacturer's Name: CONTROL4 CORPORATION
Manufacturer's Address: 11734 S. ELECTION ROAD SUITE 200
SALT LAKE CITY
UT 84020 USA

EU Representative Name: CONTROL4 EMEA LIMITED
EU Representative Address: UNIT3, GREEN PARK BUSINESS CENTRE
SULTON-ON-THE FOREST
YORK YO61 1ET, UNITED KINGDOM

Product Name(s): ZigBee to IO & ZigBee to Contact
Brand: Control4
Model(s): C4-Z2IO & C4-Z2C

Product Standard(s) to which Conformity of the Council Directive(s) is declared:

EMC - 2014/30/EU "Electromagnetic Compatibility (EMC) Directive":
(Emissions) EN 55032:2012 **(Immunity)** EN 55024:2010 + A1:2015, EN 61000-3-2:2014 & EN 61000-3-3:2013

Safety – 2006/95/EC "Low Voltage Directive (LVD)":
EN 62368-1:2014

Radio - 2014/53/EU Radio Equipment Directive (RED):
EN 300 328 V1.9.1

ErP - 2009/125/EC Energy-related Product Directive.

RoHS - 2011/65/EU Restriction of the Use of certain Hazardous Substances in Electrical and Electronic Equipment (EEE) & WEEE - 2002/96/EC Waste of Electrical and Electronic Equipment (EEE).

We, the undersigned, hereby declare that the equipment specified above conforms to the above directives and standards. Date of Issue: September 7, 2017

Legal Representative

Signature

Roger Midgley
Sr. Regulatory Compliance Engineer



Conformité européenne (French)

Conformité de l'équipement avec les directives ci-dessous est attestée par l'apposition de la marque CE.



Déclaration de conformité CE

Le nom du fabricant: CONTROL4 CORPORATION
Le fabricant Adresse: 11734 S. ÉLECTION Road Suite 200
SALT LAKE CITY
UT 84020 USA

Nom Représentant de l'UE: CONTROL4 EMEA LIMITED
UE représentant Adresse: Unit3, GREEN PARK CENTRE D'AFFAIRES
Sulton-ON-THE FOREST
YORK YO61 1ET, ROYAUME-UNI

Nom (s) de produit: ZigBee to IO & ZigBee to Contact
Marque: Contol4
Modèle (s): C4-Z2IO & C4-Z2C

Produit standard (s) dont la conformité de la directive du Conseil (s) est déclarée:

EMC - 2014/30 / "compatibilité électromagnétique (CEM)" UE:
(Émissions) EN 55032:2012 **(immunité)** EN 55024:2010 + A1:2015, EN 61000-3-2:2014 & EN 61000-3-3:2013

Sécurité - 2006/95 / CE "Directive Basse Tension (DBT)":
EN 62368-1:2014

Radio - 2014/53 / UE directive équipement radio (RED):
EN 300 328 V1.9.1

ErP - 2009/125 / CE liées à l'énergie directive sur les produits.

RoHS - 2011/65 / UE limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques (EEE) et DEEE - 2002/96 / CE Déchets d'équipements électriques et électroniques (EEE).

Nous, soussignés, déclarons que l'équipement indiqué ci-dessus est conforme aux directives et normes ci-dessus. Date de publication 7 septembre 2017

Représentant légal

Signature

Roger Midgley
Ingénieur de conformité réglementaire Sr.



European Compliance (German)

Die Konformität mit den folgenden Richtlinien wird durch die Anwendung des CE-Kennzeichen bestätigt.



CE-Konformitätserklärung

Name des Herstellers:	Control4 CORPORATION
Adresse des Herstellers:	11734 S. WAHL ROAD SUITE 200 SALT LAKE CITY UT 84020 USA
EU-Vertreter Name:	Control4 EMEA LIMITED
EU-Vertreter Adresse:	Unit3, GREEN Park Geschäftszentrum Sulton-ON-THE FOREST YORK YO61 IET, VEREINIGTES KÖNIGREICH
Produkt-Name (n):	ZigBee to IO & ZigBee to Contact
Marke:	Contol4
Modell (e):	C4-Z2IO & C4-Z2C

Produkt-Norm (en), um die Konformität der Richtlinie (n) deklariert ist:

EMC - 2014/30 / EG "Elektromagnetische Verträglichkeit (EMV) Die Richtlinie":
(Emissionen) EN 55032:2012 **(Immunität)** EN 55024:2010 + A1:2015, EN 61000-3-2:2014 & EN 61000-3-3:2013

Sicherheit - 2006/95 / EG "Niederspannungsrichtlinie (LVD)":
EN 62368-1:2014

Radio - 2014/53 / EU über Funkanlagen-Richtlinie (RED):
EN 300 328 V1.9.1

ErP - 2009/125 / EG Energiebezogene Produktrichtlinie.

RoHS - 2011/65 / EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten (EEE) & WEEE - 2002/96 / EG Richtlinie über Elektro- und Elektronikgeräten (EEE).

Wir, die Unterzeichneten, erklären hiermit, dass das oben angegebene Gerät zu den oben genannten Richtlinien und Normen. Ausstellungsdatum: 7. September 2017

Gesetzlicher Vertreter

Stempel, Unterschrift

Roger Midgley
Sr. Regulatory Compliance-Ingenieur



Conformità Europea (Italian)

Conformità del materiale con le linee guida qui sotto è attestata dall'applicazione del marchio CE.



Dichiarazione di conformità CE

Nome del produttore: Control4 CORPORATION
Indirizzo del produttore: 11734 S. ELEZIONI STRADA SUITE 200
SALT LAKE CITY
UT 84020 Stati Uniti d'America

UE Nome Rappresentante: Control4 EMEA LIMITED
UE Indirizzo Rappresentante: Unit3, GREEN PARK BUSINESS CENTRE
Sulton-ON-THE FOREST
YORK YO61 1ET, REGNO UNITO

Nome del prodotto (s): ZigBee to IO & ZigBee to Contact
Marca: Control4
Modello (s): C4-Z2IO & C4-Z2C

Prodotto standard (s) a cui conformità della direttiva del Consiglio (s) è dichiarato:

EMC - 2014/30 / UE "Compatibilità elettromagnetica (EMC)":
(Emissioni) EN 55032:2012 **(immunità)** EN 55024: 2010, EN 301 489-1 v1.9.2 (2011-09), EN 301 489-17 V2.2.1 (2012-09), EN 61000-3-2: 2006 + A1: 2009 + A2: 2009 e EN 61000-3-3: 2008

Sicurezza - 2006/95 / CE "Direttiva bassa tensione (LVD)":
EN 62368-1:2014

Radio - 2014/53 / Direttiva sulle apparecchiature radio dell'UE (RED):
EN 300 328 V1.9.1

ErP - 2009/125 / CE Energy legati direttiva sui prodotti.

RoHS - 2011/65 Limitazione / UE dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche (AEE) e RAEE - 2002/96 / CE sui rifiuti di apparecchiature elettriche ed elettroniche (AEE).

I sottoscritti, dichiariamo che l'apparecchiatura specificata in precedenza è conforme alle direttive e norme di cui sopra. Data di pubblicazione: 7 settembre 2017

Rappresentante legale

Firma

Roger Midgley
Suor Conformità alle normative Ingegnere



Conformidad Europea (Spanish)

La conformidad de los equipos con las siguientes pautas es atestiguado por la aplicación de la marca CE.



Declaración de conformidad CE

Nombre del fabricante:	Control4 CORPORACIÓN
Dirección del fabricante:	11734 S. ELECCIÓN Road Suite 200 SALT LAKE CITY UT 84020 EE.UU.
UE Nombre Representante:	Control4 EMEA LIMITED
Dirección Representante de la UE:	Tema 3., VERDE PARQUE EMPRESARIAL CENTRO Sulton-EN-EL BOSQUE YORK YO61 IET, REINO UNIDO
Nombre (s) del producto:	ZigBee to IO & ZigBee to Contact
Marca:	Contol4
Modelo (s):	C4-Z2IO & C4-Z2C

Producto estándar (s) a la que la conformidad de la Directiva del Consejo (s) se declara:

EMC - 2014/30 / UE "Directiva de compatibilidad electromagnética (EMC)":
(Emisiones) EN 55032:2012 **(inmunidad)** EN 55024: 2010, EN 301 489-1 v1.9.2 (2011-09), EN 301 489-17 V2.2.1 (2012-09), EN 61000-3-2: 2006 + A1: 2009 + A2: 2009 e EN 61000-3-3: 2008

Seguridad - 2006/95 / CE "Directiva de Baja Tensión (LVD)":
EN 62368-1:2014

Radio - 2014/53 / Directiva de Equipos de Radio de la UE (RED):
EN 300 328 V1.9.1

ErP - 2009/125 relacionados con energía / CE Directiva del producto.

RoHS - 2011/65 restricción del uso de ciertas sustancias peligrosas en equipos electrónicos (AEE) y WEEE eléctricos y / UE - 2002/96 / CE de Residuos de Aparatos Eléctricos (AEE) y electrónicos.

Nosotros, los abajo firmantes, declaramos por la presente que el equipo anteriormente mencionado se ajusta a las directrices y estándares anteriores. Fecha de emisión: 7 de septiembre de 2017

Representante legal

Firma

Roger Midgley
Ingeniero Sr. Cumplimiento de la normativa



Conformidade Europeia (Portuguese)

Conformidade do equipamento com as diretrizes abaixo é atestada pela aplicação da marca CE.



Declaração de Conformidade CE

Nome do fabricante:	Control4 CORPORATION
Do fabricante Endereço:	11734 S. ELEIÇÃO ROAD SUITE 200 SALT LAKE CITY UT 84020 EUA
Representante da UE Nome:	Control4 EMEA LIMITED
Representante da UE Endereço:	UNIT3, GREEN PARK CENTRO DE NEGÓCIO Sulton-ON-THE FOREST YO61 IET YORK, REINO UNIDO
Nome (s) produto:	ZigBee to IO & ZigBee to Contact
Marca:	Contol4
Modelo (s):	C4-Z2IO & C4-Z2C

Padrão do produto (s) a que Conformidade da Directiva do Conselho (s) é declarado:

EMC - 2014/30 / UE "Compatibilidade Electromagnética (EMC)":
(Emissões) EN 55032:2012 **(Imunidade)** EN 55024: 2010, EN 301 489-1 v1.9.2 (2011-09), EN 301 489-17 V2.2.1 (2012-09), EN 61000-3-2 : 2006 + A1: 2009 + A2: 2009 e EN 61000-3-3: 2008

Segurança - 2006/95 / CE "Directiva de Baixa Tensão (LVD)":
EN 62368-1:2014

Rádio - 2014/53 / UE Directiva equipamento de rádio (RED):
EN 300 328 v1.9.1

ERP - 2009/125 relacionados Energy-/ CE Directiva do produto.

RoHS - 2011/65 / UE Restrição do Uso de Certas Substâncias Perigosas em Equipamentos Eléctricos e Electrónicos (EEE) e WEEE - 2002/96 / EC de Resíduos de Equipamentos Eléctricos e Electrónicos (EEE).

Nós, abaixo-assinado, declaro que o equipamento especificado acima está em conformidade com as diretrizes e normas acima referidas. Data de Emissão: 7 de setembro de 2017

Representante legal

Assinatura

Roger Midgley
Sr. Engenheiro Conformidade Regulatória



Recycling

Control4 understands that a commitment to the environment is essential for a health life and sustainable growth for future generations. We are committed to supporting the environmental standards, laws, and directives that have been put in place by various communities and countries that deal with concerns for the environment. This commitment is represented by combining technological innovation with sound environmental business decisions.

WEEE Compliance

Control4 is committed to meeting all requirements of the Waste Electrical and Electronic Equipment (WEEE) directive (2012/19/EC). The WEEE directive requires the manufacturers of electrical and electronic equipment who sell in EU countries: (1) label their equipment to notify customers that it needs to be recycled, and (2) provide a way for their products to be appropriately disposed of or recycled at the end of their product lifespan. For collection or recycling of Control4 products, please contact your local Control4 representative or dealer.



About this Document

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