



Infinity© Motorized Shade and Drape Controller Installation Guide

Supported Models:

PC-IZMC-IC-xxxxx : Internal Connection, SHADE or DRAPE
PC-IZMC-EC-xxxxx : External Connection, SHADE or DRAPE

Revision: 1.0

Specifications and Supported Features

This Wireless Shade Motor Controller operates as part of a Control4 Home Automation System to enable intelligent motorized window treatment control. This device installs in a standard wall box using typical wiring standards and communicates with other devices through a wireless RF (radio frequency) network.

Power: 120VAC +/- 10% 60Hz

- 300mW Idle
- 360W Motor running

Supported Load Rating: 120VAC 3AMP MAX motor running,

Operating Temperature: All Load ratings are based on an ambient temperature of 25 degrees Celsius.

Volume: 9.5 Cubic inches

Communications: ZigBee PRO, IEEE 802.15.4 2.4GHz, 15 channel spread spectrum radio

Installation Instructions

Step 1: Turn OFF power by switching off the circuit breaker or removing the fuse and test that the power is off before wiring.

Step 2: Connect device Line voltage leads to power located in junction box at motor location.

Step 3: Connect Motor Power wires as per illustration.

Step 4: Restore circuit power at breaker panel when complete.

Step 5: Confirm motor direction is correct by using the UP/DN buttons on device. If incorrect, change slide switch DIR position.

Step 6: Perform Shade Calibration Routine:

Step 7: JOIN Shade Device to Control4 system, operate shade from user interfaces.

Warnings and Considerations



WARNING! Risk of Electric Shock. Install in accordance with all regional, national and local electric codes.



WARNING! Risk of serious Injury, Death or Property Damage or Loss. Install and use properly – as described in this document – to avoid danger or injury, death, or property damage or loss.



WARNING! Risk of serious Injury, Death or Property Damage or Loss. If you are unsure about any part of these instructions, consult a qualified electrician.



WARNING! Risk of Electric Fire. Use this device only with copper or copper clad wire. Do not use with aluminum wiring. This product has not been approved for use with aluminum wiring.



IMPORTANT! Use or modification of this product in a manner not expressly approved by Performance Concepts voids your warranty. Further, Performance Concepts is NOT liable for any damage incurred with the misuse of this product. See "Limited 3 Year Warranty."



IMPORTANT! The range and performance of the wireless control system is highly dependent on the following: (1) distance between devices; (2) layout of home; (3) walls separating devices; and (4) electrical equipment located near devices.

MOTOR POWER: Connect Motor power cable to terminal as follows.
G - GREEN Ground wire
N - WHITE Neutral wire
UP - RED Motor wire
DN - BLACK Motor wire

MOTOR UP/DOWN BUTTONS:

If Motor Stopped:
Momentary Press and Release,
Will **STEP** motor 1%
Press and Hold for .75 seconds,
Will **MOVE** motor
If Motor Running:
Momentary Press and Release,
Will **STOP** motor

HEART BEAT RED LED: Device health heartbeat:
OFF – Not POWERED
1 second cycle – NORMAL operation

ACTIVITY GREEN LED: Device activity status:
OFF with intermittent Flash ON – NORMAL Operation, communicating.
ON – Initial Power UP
200ms – RESET active
750ms – CALIBRATION active

MOTOR DIRECTION SLIDE SWITCH: Used to correct motor direction commands based on installation configuration.

JOIN BUTTON: This button has multiple functions, depending on the PRESS and HOLD time.

NETWORK JOIN: Press and Release

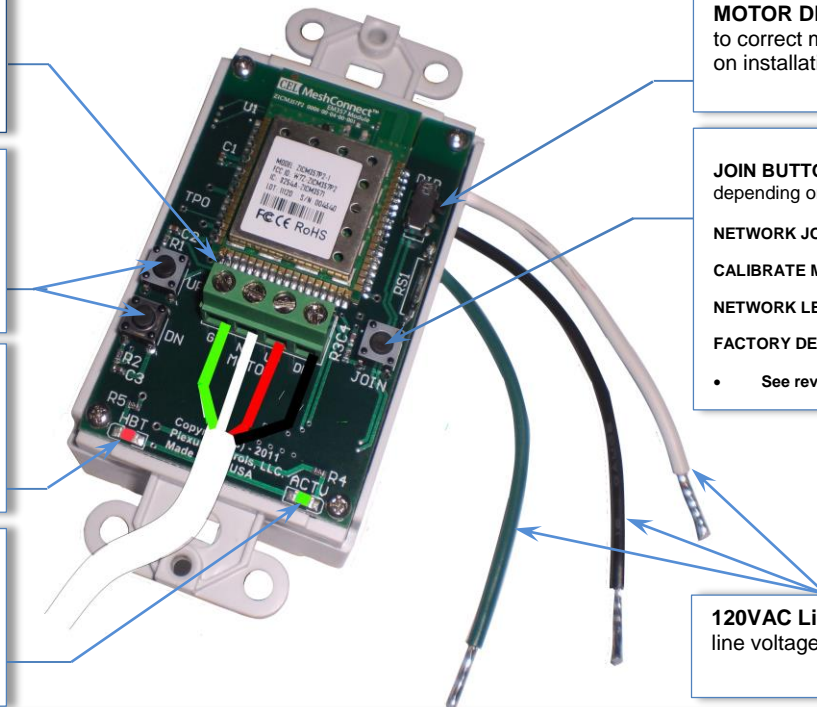
CALIBRATE MOTOR : Press and Hold 3 sec.

NETWORK LEAVE: Press and Hold 6 sec.

FACTORY DEFAULT: Press and Hold 10 sec.

- See reverse side for more details.

120VAC Line: Connect to properly installed line voltage.



IZMC ZigBee PRO SHADE, LIFT and DRAPERY MOTOR CONTROLLER – Operating Instructions

The IZMC controls a Performance Shadings, ZigBee Home Automation (HA) Profile Standard SHADE, LIFT or DRAPE motor. It implements the Control4 BLINDS Proxy v2 and provides full two-way communications with feedback support.

The device has three buttons, Motor UP, DOWN, device JOIN as well as slide switch DIR, used for setup and configuration. The DIR slide switch is used to change motor direction and assures that UP command (button) moves the motor in the UP direction

After proper device installation by qualified electrician, we recommend that the installer first perform a Shade CALIBRATION routine. This routine allows the device to learn motor shade length. These attributes are used to control and provide feedback of shade position. After calibration is complete, the installer will JOIN the device to the Control4 ZigBee Pro Network. This will IDENTIFY and bind the driver to the specific shade device with in the Control4 environment.

MOTOR UP and DOWN BUTTONS: Use these buttons to control shade position.

If Shade CALIBRATED

PRESS and HOLD button to MOVE motor. If motor is MOVING, PRESS and RELEASE will STOP motor.

Otherwise MOTOR moves while held.

JOIN BUTTON: This button has multiple functions, depending on the PRESS and HOLD time.

The installer can initiate and control Network JOIN, CALIBRATE, LEAVE and Factory Default routines.

CALIBRATE: Routine used to learn the ATTRIBUTES of the shade being controlled.

Once CALIBRATE Mode is ACTIVE each subsequent JOIN button press, changes the CALIBRATE MODE States:

CALIBRATE OPEN Mode: Used to adjust and set OPEN limit position.

CALIBRATE CLOSED Mode: Used to adjust and set CLOSED limit position.

CALIBRATE COMPLETE Mode: The device will now RUN the motor to measure the Transition time form CLOSED to OPEN and then OPEN to CLOSE.

NOTICE: Do NOT interrupt the CALIBRATE COMPLETE mode until the shade or drape is back at the CLOSED position.

To Initiate the Motor CALIBRATION Mode to ACTIVE, Press and Hold JOIN for 3 seconds then Release:

The motor will run shade to OPEN Limit position. The GREEN LED will flash fast.(150ms)

NOTICE: If motor starts moving to the CLOSED (Down) position, immediately change DIR Switch Position and allow shade to go to OPEN position
During CALIBRATION Active, installer may use the UP and DOWN buttons to control the motor RAW (hot box) to adjust and set motor physical limits if required.
(See Motor specific instructions on setting limits)

If Motor CALIBRATION Mode is ACTIVE and Current Mode is OPEN Limit Mode,

Then device changes Calibration to CLOSED Limit Mode.

The motor will run shade to the CLOSED limit position.

If Motor CALIBRATION Mode is Active and Current Mode is CLOSED Limit Mode,

Then change Calibration to COMPLETE CALIBRATION Mode.

This will now cause the device to measure the Limits for proper status feedback to Control4.

Measuring process runs shade from CLOSED to OPEN to CLOSED positions.

NOTICE: Do NOT interrupt this process as it may cause erroneous shade data to be stored and the shade will not operate properly.

If interruption occurs, please repeat the CALIBRATION Routine.

JOIN NETWORK:

If Motor CALIBRATION Mode is NOT ACTIVE:

Then a Button Press and Release starts the device network JOIN to Control4 process.

The RED LED will have a rapid flash while the process is active. At this point the device will attempt to find a

Control4 network for up to 4 times. If not JOINED, then GREEN LED will FLASH NORMAL (blink ON if communicating) and RED LED will flash slow (1000ms)

If successful the GREEN LED will go solid ON and blinks OFF when data is being sent or received.

And RED LED will flash NORMAL (700ms)

NOTE: After 3 to 5 seconds, Press and Release the JOIN button one or two additional times to IDENTIFY the device to Control4, this may or may not be required depending on network configuration.

LEAVE NETWORK: Initiates a network LEAVE as per ZigBee PRO standards.

Press and Hold JOIN for 6 or more seconds GREEN LED will flash slow (500ms), and then Release:

FACTORY DEFAULT: Initiates device Factory Default as per ZigBee PRO standard.

Press and Hold JOIN for 10 seconds GREEN LED will turn OFF, and then Release:

NOTE: This will clear the learned OPEN and CLOSE transition times and will need to be recalibrated