15-Amp or 20-Amp 120VAC Switchable Appliance Module Installation Guide

Supported Model

#C4-AM15-120-Z-B 15-Amp Appliance Switch

#C4-AM20-120-Z-B 20-Amp Appliance Switch

Specifications

Power Requirements:	120VAC, 50/60 Hz, 1.7 W
Load Ratings:	Model C4-AM15-120-Z-B: 120VAC, 1800 W Model C4-AM20-120-Z-B: 120VAC, 2400 W Motor: 1 HP
Operating Temperature:	All load ratings are based on an ambient temperature of 25 degrees Celsius.

Description

The 20-Amp Appliance Switch is a device that helps you to limit use of a high power-consuming device, such as a room air conditioner, refrigerator, freezer, or television set during high-peak (most expensive) power conditions.

The Appliance Switch is controlled by a Control4 home automation system using an industry standard radio communications connection (802.15.4, also known as ZigBee™).

The Appliance Switch works with your Control4 home automation system and utility companies to provide you with rate information and rules that you can adjust to help minimize the power consumption of your key appliances during high rate periods. The Appliance Switch switches LED colors to indicate current status and power consumption (as described in Table 5 on page 2). This information is also sent to the Home Controller as a system event. System events can be used in programming either to notify home owners of rate changes or to turn on or off an appliance.

Features

This appliance switch offers the following features:

- Controls a single 120VAC 15-Amp or 20-Amp appliance (depending on model of appliance switch) with not more than a 1 HP Motor.
- Signals through LEDs on the Appliance Switch what conservation level or power rate class you are currently in.
- Signals to you how much power your appliance is comsuming by changing colors on an LED.
- Communicates with a Control4 home automation system.
- Configurable through the Control4 home automation system.
- Provides voltage, current, wattage, power factor, and total power consumption through the Control4 home automation system.

Important Warnings and Information

WARNING! The Switchable Appliance Module is rated for a combined load as listed in the table above; do not plug in devices that exceed these ratings, either alone or in combination.

WARNING! Improper use or installation can cause SERIOUS INJURY, DEATH, or LOSS/DAMAGE OF PROPERTY.

WARNING! Install in accordance with all national, state, and local electrical codes.

WARNING! This product generates heat. The room must have adequate ventilation or the ability to dissipate heat effectively.

WARNING! This product must be grounded in accordance with the National Electrical Code (NEC) requirements.

WARNING! Use this product only in dry locations.

CAUTION! This product is for residential use only.

IMPORTANT! Using this product in a manner other than outlined in this document voids your warranty. Further, Control4 is **not** liable for any damage incurred because of the misuse of this product. See “Limited 2 Year Warranty” on page 2.

Install and Configure the Appliance Switch

The 15-Amp or 20-Amp Appliance Switch controls only a single appliance power load. The following steps guide you through the setup of this appliance switch. Configuring this switch requires that you follow the instructions in your Control4 Composer software to recognize and configure this device.

To install and configure the appliance switch:

1. When choosing a location to plug in the appliance switch, consider the following: (1) Avoid placing it near other household devices that can cause interference, such as microwave ovens or cordless telephones utilizing the 2.4 GHz frequency band; (2) Place within range of other ZigBee devices to facilitate communication on the Control4 system.
2. Plug the appliance switch 3-prong power cord into a wall outlet.
3. Plug the appliances 3-prong power cord into the female power cord of the appliance switch.
4. On a PC connected to the system, start the Composer software provided (Composer 1.6 with the AMI Add-On Pack) to configure the appliance switch for this installation. (Refer to the Composer online help for general instructions on configuring a device.)
   a. In the System Design view, verify that *Wireless Outlet Switch w/ Override* is displayed in the project tree. If not, go to Search tab (Local Database) and select:
      - Device Type: *Other*
      - Manufacturer: *Control4*

      to display the Control4 driver options ERT Meter Bridge and ENERGY_OUTLET (appliance switch), then add ENERGY_OUTLET to the project tree. Once added, this device displays in the tree as Wireless Outlet Switch w/ Override.
   b. In the Connections view, select the Network tab.
   c. In the IP Network Connections list, select Wireless Outlet Switch w/ Override and then click Identify.
   d. Follow the screen prompt to identify this device: At the appliance switch, press the Override buttom 4 times. When successfully identified, a network address displays for this device.

Troubleshooting

If the appliance switch does not power its attached device:

- Ensure all plugs are fully inserted.
- Ensure the device you plugged into the appliance switch works when plugged into a conventional AC wall outlet.
- Ensure the circuit breaker is not turned Off or tripped.
- Verify that the appliance switch is identified in Composer.
- Check Composer setting (“LED-Enabled/Disabled) if at least one LED is not lit.

Reading the LEDs

When an LED is enabled in Composer, the default color scheme is as defined on the device itself (shown in this figure). The same information is also outlined in the following table.

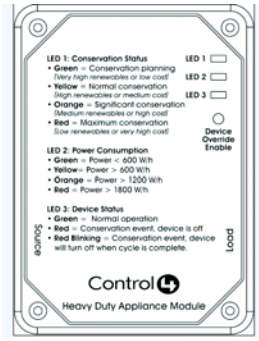

Table 5. LED Color Descriptions

LED Label	LED Status	Description
LED 1: Conservation Status	Green =	Conservation Planning (VeryHigh Renewables/Low Cost)
	Yellow =	Normal Conservation (High Renewables/Medium Cost)
	Orange =	Significant Conservation (Medium Renewables/High Cost)
	Red =	Maximum Conservation (Low Renewables/Very High Cost)
	Blinking Red =	Emergency Demand Reduction Event
LED 2: Power Consumption	Green =	Idle Mode, Current consumption is <600 W/h
	Yellow =	Current consumption is < 600 W/h
	Orange =	Current consumption is >1200 W/h
	Red =	Current consumption is >1800 W/h
LED 3: Device Status	Green =	Normal Operation
	Red =	Conservation Event; Device is Off
	Red Blinking =	Conservation Event; Device will turn off when cycle is complete.
	Black or No Color=	Not communicating with the Control4 home automation system.

Control4 Technical Support

For help on the installation or operation of this product, email or call the Control4 Technical Support Center. Please provide your exact model number. Contact support@control4.com or see the web site www.control4.com.

Care and Cleaning

WARNING! Unplug device before cleaning. Do NOT use any chemical cleaners to clean the switch. Clean surface with a soft damp cloth as needed.

Regulatory Compliance

This product complies with standards established by the following regulatory and test bodies:

- Federal Communications Commission (FCC)
- Industry Canada
- Underwriters Laboratories Inc. (UL)
- Canadian Standards Association (CSA)

FCC

FCC ID: R33C4AM20

This device complies with Part 15 of the FCC Rules. 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.

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 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 a wall outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IMPORTANT! Changes or modifications not expressly approved by Control4 could void the user's authority to operate the equipment.

Industry Canada

This Class B digital apparatus complies with Canada ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

IC: 7848A-C4AM15120

Edison Test Labs.

This product has been tested by ETL and found to comply with:

- UL 916, 3rd Edition, "Energy Management Equipment"
- CSA C22.2 No. 14-95, "Standard for Clock-Operated Switches"

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Limited 2 Year Warranty

Control4 Corporation ("Control4") warrants that at the time of first-consumer sale, this product will be free from defects in material and manufacture. Control4 further warrants that for a period of 2 years (24 months) after initial consumer sale, the product will function in accordance with its specification, provided that it is installed and maintained under normal and proper use. This warranty extends only to products purchased directly from Control4 or an Authorized Control4 Reseller. If the product proves to be defective in material or workmanship during the warranty period, it may be returned to the place of purchase and Control4 will, at its sole option, repair or replace the product with a like product. This warranty provides the consumer purchaser with specific legal rights, which may vary per state or country. For complete warranty information, including details on consumer legal rights as well as warranty exclusions, visit www.control4.com/warranty.

About this Document

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