

Contemporary specification series rotary dimmers.



Select light level with knob; rotate to off

Rotary Dimmer



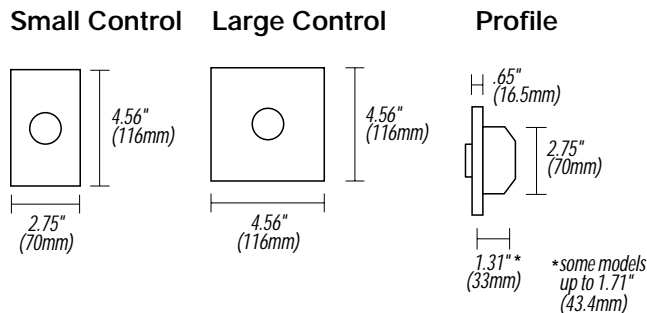
Select light level with knob; press on/off

Preset Dimmer

PRODUCT FAMILY FEATURES

- Durable dimmer in a time-honored rotary style
- For demanding applications up to 2000 watts
- Captive rotary knob

DIMENSIONS



SPECIFICATION SERIES STANDARD FEATURES



- Power-failure memory
 - Captive rotary knob
 - Electrostatic discharge tested
 - Heavy-duty components for surge protection and long product life
 - Voltage compensation
 - Superior RFI suppression
 - Accessible air-gap switch
- Lutron controls are rated at 120VAC, 60Hz unless otherwise noted.

JOB NAME	AREA CONTROLLED
LOCATION	JOB NUMBER
TITLE	PAGE NO.

DIMMERS

Description	Maximum Capacity ¹	Model #
Incandescent		
<i>Rotary On/Off Dimmers</i>		
SMALL CONTROL		
Single pole	600W	C-600-
Single pole	1000W	C-1000-
LARGE CONTROL		
Single pole	1500W	C-1500-
Single pole	2000W	C-2000-
<i>Push On/Off Dimmers</i>		
SMALL CONTROL		
Single pole	600W	C-600P-
Single pole	1000W	C-10P-
3-way	600W	C-603P-
3-way	1000W	C-103P-

Electronic Low Voltage

For control of electronic low-voltage loads, use C-600- or C-600P- with Hi-Power 2•4•6 Dimming Module.

Magnetic Low Voltage

For control of magnetic low-voltage loads, use C-600- or C-600P-with Hi-Power 2•4•6 Dimming Module.

Fluorescent

For control of fluorescent loads, use Lutron® Hi-lume® FDB or Eco-10™ electronic dimming ballasts with C-600- or C-600P- and Hi-Power 2•4•6 Dimming Module. See Lutron Wallbox Lighting Control Catalog P/N 360-178 for lamps type and ballast model numbers.

HI-POWER 2•4•6™ DIMMING MODULES



To increase load capacity up to 30,000W/VA in most popular sources, use one C-600- or C-600P- and add up to five dimming modules. Cannot be used with 0-10VDC ballast.

WALLPLATES

Lutron exclusive single-gang wallplate provided with product. Single-gang replacement plates with knobs sold separately.

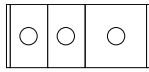
STANDARD COLORS/FINISHES

Matte Finishes (Ships in 3-5 days)

Add color/finish suffix to model number to order.

Example: C-600-**WH**
 WH White
 BE Beige

DERATING/MAXIMUM CAPACITY



No side sections removed
(Full Capacity)

One side section removed
(End Units)

Two side sections removed
(Middle Unit)

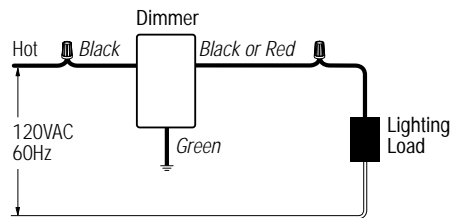
Incandescent Dimmers

No side sections removed (Full Capacity)	One side section removed (End Units)	Two side sections removed (Middle Unit)
600W	600W	500W
1000W	900W	700W
1500W	1250W	1000W
2000W	1800W	1500W

Note: For multi-gang applications with side sections removed, cut faceplate along score mark on the back of the plate.

WIRING DIAGRAMS

Wiring Diagram 1 Single-Pole Wiring



Neutral

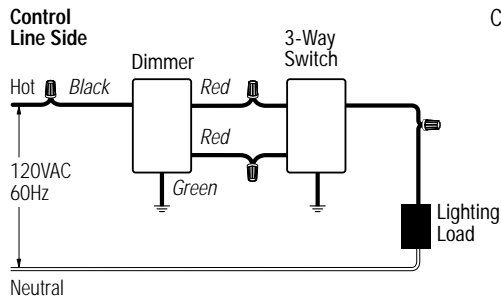
Ground

Wire Connectors

Model

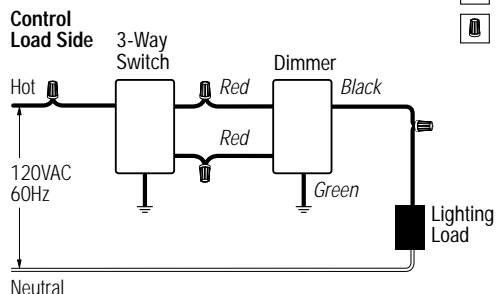
C-600-
C-1000-
C-1500-
C-2000-
C-600P-
C-10P-

Wiring Diagram 2 3-Way Wiring



Neutral

OR



Neutral

Ground

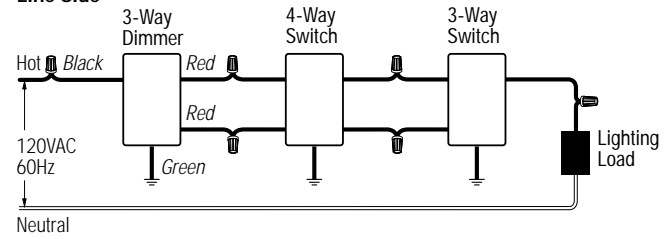
Wire Connectors

Wiring Diagram 3 4-Way Wiring

Model

Control Line Side

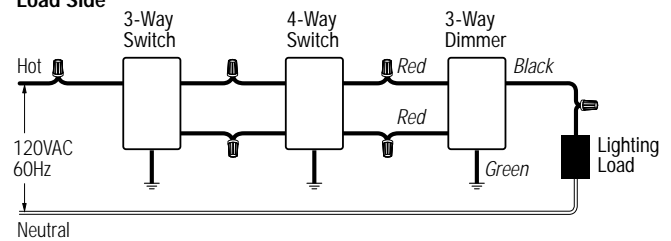
C-603P-
C-103P-



Neutral

Control Load Side

OR



Neutral

Ground

Wire Connectors

CENTURION CONTROLS

PART 1 – GENERAL

1.01 SUMMARY

- A. Scope: Provide, install and test all dimmers as specified herein for the areas indicated on the drawings, specifications, and load schedules.
- B. Related Sections: Section 16580 (Ballasts), Section 16570 (Dimming Systems).

1.02 REFERENCES

- A. UL 20, UL 1472, CSA, ISO 9001

1.03 SYSTEM DESCRIPTION AND OPERATION

- A. Permanently installed, wallbox mounted dimmers

1.04 SUBMITTALS

- A. Submit manufacturer's standard catalog data giving all application, wiring, and installation information on basic components and wallplate kits. Provide test data and/or samples as required to demonstrate conformance with PART 2 of this specification.

1.05 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of 10 years continuous experience in manufacturing wallbox dimming products.
- B. Dimmer controls shall be UL listed and CSA approved specifically for each required load. Manufacturer shall provide file card or certificate upon request. Universal load-type dimmers shall not be acceptable.
- C. Manufacturer shall maintain ISO 9001 certification and provide a copy of the certificate upon request.

1.06 WARRANTY

- A. All devices shall be covered by a minimum one-year warranty.

PART 2 – EQUIPMENT

2.01 ACCEPTABLE MANUFACTURERS

- A. Lutron Electronics Co., Inc.

2.02 EQUIPMENT

- A. Controls Lutron Centurion Style

1. Performance

- a. Dimmers shall provide full-range, continuously variable control of light intensity.
- b. Controls shall provide a rotary knob allowing the light level to be set by the user. "Rotate-to-off" controls shall use the rotary knob to turn the control on and off. "Preset" dimmers shall provide a push on/push off switch integral to the rotary. For preset dimmers, when the lights are on, the rotary knob shall change the light level and when the lights are off, the rotary knob shall preselect the light level the lights will turn on to.
- c. Control on/off function must be accomplished utilizing a mechanical air-gap switch to totally disconnect power from the load during "off" condition, no leakage current shall be present at the fixture(s).
- d. Rotary Knob shall be captured behind wallplate.
- e. Preset dimmers shall be capable of multi-location on and mechanical air-gap off using standard 3-way and 4-way switches.
- f. Controls shall be able to have their visible plastic parts replaced, for color changes in the field, without removing the body of the control from the wall and without requiring special tools.
- g. Within rated capacity, dimmers shall be available for direct control of incandescent loads.

- h. Controls shall be capable of operating at the rated capacity; this includes modified capacities for ganging configurations which require the removal of fins. Operation at rated capacity shall be possible across the full ambient temperature range, without shortening design lifetime.
- i. To ensure a precise color match between all plastic parts, color variation of any matte finish control shall not exceed a delta E of 1, CIE L*a*b* color units, as defined in ASTM E 308-99.
- j. Dimmer shall provide smooth and continuous Square Law dimming curve, for the full knob rotation, on their rated load per The IESNA Lighting Handbook, 9th edition, p. 27-4.
- k. Controls shall meet the applicable requirements of UL 20 and UL 1472 referring to the inclusion of a visible, accessible air-gap off switch and the limited short circuit test.
- l. Controls shall withstand voltage surges of up to 4000V.
- m. Dimmers shall be designed to reduce interference with radio, audio, and video equipment.
- n. Controls shall incorporate power-failure memory. Should power be interrupted and subsequently returned, the lights will come back on to the same levels set prior to the power interruption. Restoration to some other default level is not acceptable.
- o. Controls shall not be susceptible to damage or loss of memory due to static discharge.
- p. Dimmer shall include voltage compensation to compensate light output for variation in the AC line-voltage. Dimmers in which the light output is not held constant with varying AC line-voltage shall not be acceptable.
- q. Controls shall operate in an ambient temperature range of 0°C (32°F) to 40°C (104°F).
- r. 3-Way controls shall wire using conventional 3-way and 4-way wire runs.
- s. Dimmer shall be capable of operating in either 3-way switch location.
- t. Contractors shall install all backboxes with a minimum wallbox depth of 2.5 inches.

2. Incandescent Dimmers

- a. Provide incandescent dimmers for direct control of up to a full 20A lighting circuit, which is derated by 20% to 16 Amps per the NEC.
 - b. Dimmers shall have a high-end of no less than 95% of line voltage.
- ##### 3. Remote dimming modules for high power loads
- a. Where lighting loads exceed the full rated capacity of single dimmers, provide a Centurion incandescent dimmer driving high power modules. High power module and dimmer shall be from the same manufacturer to ensure compatibility.
 - b. High power modules shall be remotely mounted.
 - c. High power module shall be rated and UL listed for control of incandescent, magnetic low voltage, electronic low voltage, fluorescent, and neon/cold cathode loads in increments of 2,000 Watts up to 30,000 Watts.

B. Wallplates Lutron Centurion Style

- 1. Wallplates shall be manufactured from durable polycarbonate plastic with matte finish, and shall attach to the basic components without using exposed hardware or screws.
- 2. Visible parts of dimmers or any wallplate shall exhibit ultraviolet stability when tested with multiple actinic light sources as defined in ASTM D4674-89.

2.03 SOURCE QUALITY CONTROL

A. All dimming controls shall be 100% function tested at the time of manufacture. Statistical sampling plan shall not be acceptable.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Contractor shall furnish all devices (dimmers, accessories, & wallplate kits), labor and other services necessary for the proper installation of the devices as indicated on the drawings and specified herein.
- B. Contractor shall be responsible for derating dimmer capacity if side sections are removed.
- C. Contractor shall run separate neutral wires in 120/208 VAC installations.
- D. Devices shall be installed utilizing manufacturer's recommended application, wiring and installation instructions.
- E. Contractor to provide seamless wallplate covers per specification 2.02 for all devices ganged in a common box. Contractor shall provide barriers within the box where required by code.

3.02 FIELD QUALITY CONTROL

- A. Twenty-four hours a day, seven days a week, global customer service and technical hotline available.
- B. Supplemental information shall be provided by manufacturers Internet site.