Overview
The ER6CD-AU-120 is a phase adaptive line voltage lighting controller that provides forward or reverse phase dimming based on the connected load type. The dimmer makes upgrading to a hybrid lighting system easy, by offering phase-adaptive, line voltage dimming for tungsten, two-wire fluorescent, line-voltage LED, and 120V electronic low-voltage transformer loads. As a lighting controller, it dims lighting loads with received input from linked sensors or switches based on:

- ambient light levels monitored by a wireless photo sensor
- occupancy state monitored by a wireless occupancy sensor
- switch action from a wireless wall switch
- gateway control implementing scheduled or demand response events

The controller will fade lights up or down on a switch ON or OFF event. Closed and open loop dimming control is available for daylight harvesting applications. With only occupancy sensors linked to the controller, the sensor will automate the lights both ON and OFF. Alternately, in vacancy sensor mode the controller will assume manual-ON, auto-OFF operation. A photo-inhibit feature will ignore Partial-ON lighting with occupancy when the natural light level monitored by the light sensor is above the day-lighting set point.

The ER6CD offers central command support to integrate with Building Management Systems gateways. The controller is Range Confirmation® compatible, working with all Echoflex sensors equipped with the Range Confirmation® feature to provide visual feedback of a linked sensors signal strength for optimal sensor placement. Echoflex offers pre-linking and pre-commissioning on all products sold as a system through Echoflex. In addition to this service, Echoflex provides two methods of configuring and verifying controller operation once installed on-site:

1. Use the linked sensors and Simple Tap™ to make quick changes to individual controllers.
2. To access the full menu of configuration parameters, Echoflex’s Garibaldi software is a PC based tool that includes hands-free commissioning.

Features
- Single channel 600 Watt dimmer
- Provides forward or reverse phase dimming based on the connected load type.
- 120 VAC input power
- Line voltage dimming of tungsten lamps, 2-wire fluorescent ballasts, line voltage LED drivers and 120V electronic low-voltage transformer lighting loads
- Occupancy based lighting controls with Partial-ON/OFF or manual ON, auto-OFF using wireless occupancy sensors
- Integrated day-light harvesting control with Photo Inhibit feature
- Range Confirmation® allows optimal placement of linked sensors - (Echoflex sensors with Range Confirmation® feature only)
- Central Command support for BMS gateway control
- Pre-linking and Pre-commissioning available when sold as a system through Echoflex
- Easy installation on electrical junction boxes with 1/2” mounting nipple
- Easy commissioning options available such as Simple Tap™ or our PC based remote commissioning software, Garibaldi
- Doubles as a telegram repeater
- CEC - Title 24 Compliance including demand response, Partial-ON and Partial-Off control

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>902 MHz Model</th>
<th>902 MHz PN</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 Watt Dimmer, Phase Adaptive, 120VAC</td>
<td>ER6CD-AU-120</td>
<td>7189A1410</td>
</tr>
</tbody>
</table>
ER6CD-AU-120

**Radio Frequency**
902 MHz

**Transmission Range**
24 m (80 ft) - commercial office spaces (typical), up to 100 m (330 ft) line of sight

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### Communications

**Radio Frequency**
902 MHz

**Antenna**
Whip

**Transmission Range**
24 m (80 ft) - commercial office spaces (typical), up to 100 m (330 ft) line of sight

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### Hardware Specifications

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>120 VAC @ 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Consumption</td>
<td>4.0 W Idle</td>
</tr>
<tr>
<td>LEDs</td>
<td>Two bi-color green/red LED’s: Status &amp; CLR/LRN</td>
</tr>
<tr>
<td>Inputs</td>
<td>LEARN and CLEAR buttons for sensor assignment</td>
</tr>
</tbody>
</table>

**Output Load Types:**
- Max. 600W load
- Tungsten; 2-wire Fluorescent; Line voltage LED
- Electronic low voltage transformer

**NOTE:** For LED loads including ELV, calculate max. wattage based on the LED driver max. rated output power. (all drivers, lights or fixtures that are dimmable by line voltage triac, derate the ER6CD wattage by 50% to 300W maximum.)

**Do NOT** use with magnetic or step-down transformer loads.

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### Mechanical Specifications

<table>
<thead>
<tr>
<th>Operating Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL: 0 - 50 °C (32 - 122 °F)</td>
</tr>
<tr>
<td>CSA: 0 - 40 °C (32 - 104 °F)</td>
</tr>
</tbody>
</table>

**Relative Humidity**
5% to 95% RH (non-condensing)

**Weight**
255g (9.0oz)

**Dimensions**
89 x 78 x 47 mm (3.5 x 3.1 x 1.9")

**Mounting**
½ " nipple

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### Listings

- CEC Title 24 Compliant
- ETL Recognized Component
- Conforms to UL Standard 508
- Certified to CAN/CSA Std. C22.2 No.14
- UL 2043 Plenum rated

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### Safety

- ETL Recognized Component
- Conforms to UL Standard 508
- Certified to CAN/CSA Std. C22.2 No.14
- UL 2043 Plenum rated

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### Radio Frequency

- FCC Part 15.231 - Remote Control Transmitter
- IC RSS-210

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Range Confirmation is an Echoflex Solutions, Inc. Patented technology | Simple Tap is a trademark of Echoflex Solutions, Inc. Specifications are subject to change without notification.