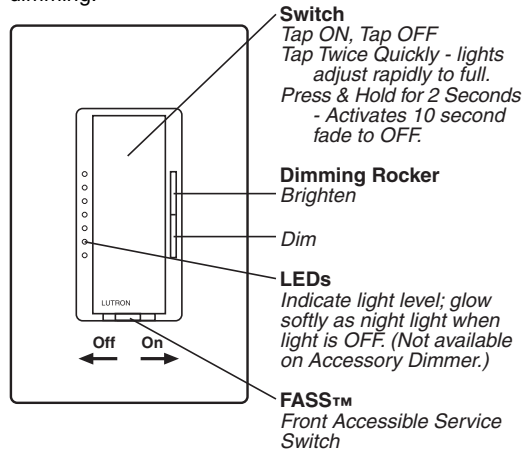


Operation

Important Operational Note: To ensure proper dimming performance and full lamp life, fluorescent lamps should be operated at full intensity for 100 hours prior to dimming.



IMPORTANT NOTICE:

FASS™ - Front Accessible Service Switch - to replace bulb, power may be conveniently removed by sliding FASS™ switch to the left, on both the *Dimmer* and any *Accessory Dimmers*. For any procedure other than routine lamp replacement, power must be disconnected at the main electrical panel.

For detailed instructions on programming your dimmer, refer to the RadioRA® Setup Guide that is included with a RF Signal Repeater.

FCC Information

NOTE: 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 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.

Caution: Changes or modifications not expressly approved by Lutron Electronics Co. could void the user's authority to operate this equipment.

Troubleshooting

Symptom	Possible Cause
Light does not turn on.	<ul style="list-style-type: none">• Front Accessible Service Switch (FASS™) on the dimmers are switched to the left side.• Lamps burned out or not installed properly.• Breaker is OFF or tripped.• Black wire on <i>Dimmer</i> is not directly connected to HOT.
Dimmer does not dim properly or drops out at low end.	<ul style="list-style-type: none">• Lamps not operated at 100 hours prior to dimming.• The dimmer is not wired correctly. See Step 4 for correct wiring.
Lamps flicker when dimmed.	<ul style="list-style-type: none">• Lamps not operated at 100 hours prior to dimming.

Technical Assistance

If you have questions concerning the installation or operation of this product, call the **Lutron Technical Support Center**. Please provide exact model number when calling.
(800) 523-9466 (U.S.A., Canada, and the Caribbean)
Other countries call (610) 282-3800
Fax (610) 282-3090
Visit our web site at www.lutron.com

Limited Warranty

Lutron will, at its option, repair or replace any unit that is defective in materials or manufacture within one year after purchase. For warranty service, return unit to place of purchase or mail to Lutron at 7200 Suter Rd., Coopersburg, PA 18036-1299, postage pre-paid.
THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES, AND THE IMPLIED WARRANTY OF MERCHANTABILITY IS LIMITED TO ONE YEAR FROM PURCHASE. THIS WARRANTY DOES NOT COVER THE COST OF INSTALLATION, REMOVAL OR REINSTALLATION, OR DAMAGE RESULTING FROM MISUSE, ABUSE, OR IMPROPER OR INCORRECT REPAIR, OR DAMAGE FROM IMPROPER WIRING OR INSTALLATION. THIS WARRANTY DOES NOT COVER INCIDENTAL OR CONSEQUENTIAL DAMAGES. LUTRON'S LIABILITY ON ANY CLAIM FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, INSTALLATION, DELIVERY, OR USE OF THE UNIT SHALL NEVER EXCEED THE PURCHASE PRICE OF THE UNIT.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This product may be covered under one or more of the following U.S. patents: 4,835,343; 4,954,768; 5,248,919; 5,399,940; 5,637,930; 5,736,965; 5,798,581; 5,838,226; 5,848,054; 5,905,442; 5,982,103; DES 353,798; DES 378,814; DES 389,461; DES 389,805; DES 395,037; DES 404,013; DES 422,969; DES 428,855; DES 436,579; DES 439,220 and corresponding foreign patents. U.S. and foreign patents pending. Lutron, Claro, and RadioRA are registered trademarks, and FASS is a trademark of Lutron Electronics Co., Inc.
© 2002 Lutron Electronics Co., Inc.

Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299, U.S.A.
Made and printed in the U.S.A. 2/02 P/N CPN-1550 Rev. A

English

P/N CPN-1550

RadioRA®

Wireless Home Lighting Control

Installation Instructions for Single-Location Control

Please Leave for Occupant

Before installation read instructions completely.

Important Notes

- 1. Caution:** To avoid overheating and possible damage to other equipment, do not use to control receptacles, motor-operated or transformer-supplied appliances.
2. Install in accordance with all national and local electrical codes.
3. When no "ground means" exists within the wallbox, then NEC 380-9 exception to (b) allows a dimmer without a ground connection, to be installed as a replacement. For this type of installation, cap or remove the green dimmer ground wire. A dimmer installed under this exception (NEC 380-9 exception to (b)) must be provided with a plastic noncombustible, UL listed wallplate.
4. Do not paint dimmers or wallplates.
5. **Clean with a soft damp cloth only.** Do not use any chemical cleaners.
6. This product requires a neutral wire in the wallbox. If a neutral wire is not present, contact a licensed electrician for installation.
7. Do not use where total load is less than 2, Tu-Wire® ballasts.
8. To ensure proper dimming performance and full lamp life, fluorescent lamps should be operated at full intensity for 100 hours prior to dimming.
9. Use only to control Lutron Tu-Wire® fluorescent dimming ballasts.
10. Do not exceed maximum load rating of dimmers.
11. Operate in ambient temperatures between 0°C (32°F) and 40°C (104°F).
12. Dimmer may feel warm to the touch during normal operation.
13. Recommended wallbox depth is 2 1/2" minimum.

Dimmer for Controlling Lutron Tu-Wire® Fluorescent Dimming Ballasts

RAN-FTU-5A, RBN-FTU-5A

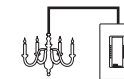
Rated at 120/127VAC, 50/60Hz, 5Amp. maximum total current

- 14.** The range and performance of the RadioRA® System is highly dependent on a variety of complex factors such as:
 - Distance between system components
 - Geometry of the home
 - Construction of walls separating system components
 - Electrical equipment located near system components
- 15.** Do not mix RadioRA® "A" and "B" frequency products within the same system. Products with different frequencies **are not** compatible.

Installation Contents

Single-Location Installation

Installing one RadioRA® *Dimmer* to control light(s) from a single location.



Page 2

Operation

Using the RadioRA® *Dimmer*.



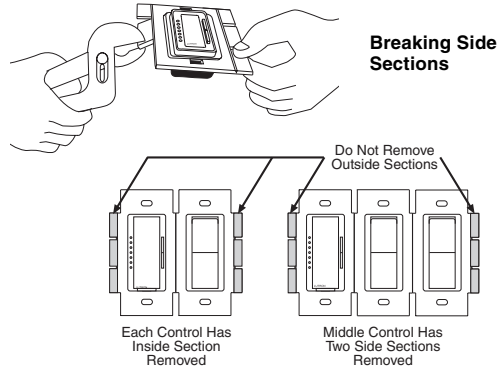
Page 4

LUTRON®

LUTRON®

Multigang Installations

Lutron Claro® wallplates are available in 1 to 6 gang versions. Purchase Claro® multigang plates separately. When combining dimmers in the same wallbox, remove all inner side sections prior to wiring. Using pliers, bend side sections up and down until they break off.

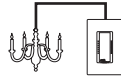


When removing side sections for multigang installations, reduction of the dimmers load capacity is required. See table below.

Model Number	No sides removed	1 side removed	2 sides removed
RAN-FTU-5A RBN-FTU-5A	5A	4A	3.3A

To determine total ballast load, add the line current found on the ballast label for all the ballasts in the circuit. This will indicate the total load for the dimmer.

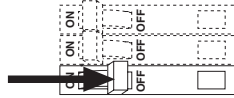
Single-Location Installation



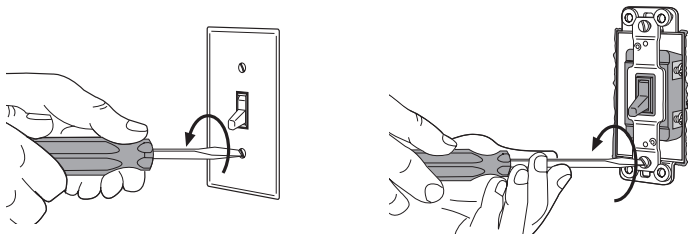
For installations involving more than one dimmer in a wallbox, refer to Multigang Installations above before beginning.

✓ Check off Steps as completed.

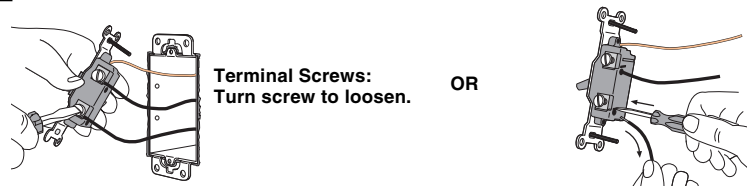
Step 1 Turn power OFF at circuit breaker or remove fuse.



Step 2 Remove wallplate. Pull switch from wall.



Step 3 Disconnect wires.



Terminal Screws:
Turn screw to loosen.

OR

Backwired:
Insert screwdriver.
Pull out wire.

Important Wiring Information

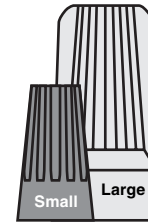
When making wire connections, follow the recommended strip lengths and combinations for the supplied wire connectors. **Note:** Wire connectors provided are suitable for **copper wire only**. For aluminum wire, consult an electrician.

Small:

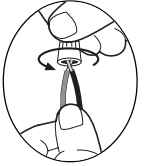
Strip insulation 3/8" for 14 AWG wire
Strip insulation 1/2" for 16 or 18 AWG wire
Use to join one 14 AWG supply wire with one 16 or 18 AWG control wire.

Large:

Strip insulation 1/2" for 10, 12 or 14 AWG wire
Strip insulation 5/8" for 16 or 18 AWG wire
Use to join one or two 12 or 14 AWG supply wires with one 10, 12, 14, 16, or 18 AWG control wire.



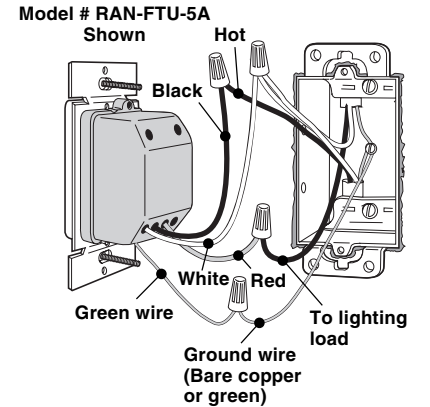
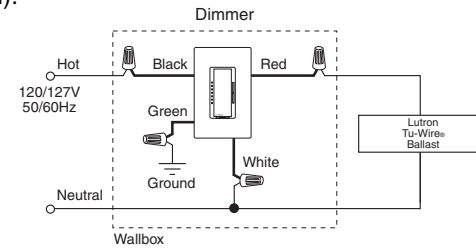
Twist wire
connector tight.
Be sure no bare
wire is exposed.



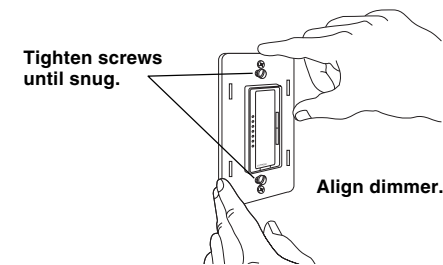
Step 4 Wire the Dimmer.

Using the wire connectors provided:

- Connect the **Dimmer green** ground wire to the ground wire in the wallbox (see Important Note 3).
- Connect the **Dimmer white** wire to the neutral wire in the wallbox.
- Connect the **Dimmer black** wire to Hot (the wire leading to the circuit breaker or fusebox).
- Connect the **Dimmer red** wire to the Load (wire leading to the lighting load).

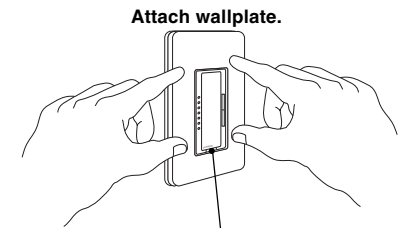


Step 5 Mount and align dimmer. Attach Claro® wallplate (purchased separately).



Tighten screws
until snug.

Align dimmer.



Attach wallplate.

Ensure FASS™
switch is to the right.

Step 6 Turn power ON. See Operation section on next page.

