RadioRA®
Home Dimming System

Product Family Features
• Easy-to-install retrofit lighting control system
• No new wiring needed for installation
• Lutron's innovative radio frequency communication technology provides reliable wireless communication between all system components
• Simple programming does not use a computer
• Optional timeclock for scheduling events relative to sunrise or time of day
• Optional timeclock automates daily routines and gives your home a “lived-in” look – even while you’re away
• Optional IR and RS-232 interfaces allow RadioRA to be controlled by home theater remotes and other automation systems
• Optional interfaces allow simple integration to security systems and to your telephone

Specification Features
• 10-year power-failure memory
• Heavy-duty components for surge protection and long product life

Integration
• Easy integration with Sivoia QED™ shades and draperies, see pg.180 for more information

Always arrive home to the security of a well-lighted home. Use your RadioRA car visor control to turn your house lights on from your car.

Color Palette (For latest color information, visit www.lutron.com)

<table>
<thead>
<tr>
<th>Gloss</th>
<th>WH</th>
<th>IV</th>
<th>AL</th>
<th>LA</th>
<th>GR</th>
<th>BR</th>
<th>BL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satin</td>
<td>SW</td>
<td>BI</td>
<td>ES</td>
<td>TP</td>
<td>MN</td>
<td>BT</td>
<td>LS</td>
</tr>
<tr>
<td></td>
<td>ST</td>
<td>DS</td>
<td>TC</td>
<td>OC</td>
<td>HT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
System Overview

**Sources Controlled Directly:**
- **non-dim:** All Popular Sources
- **Incandescent**
- **Electronic Low Voltage**
- **Magnetic Low Voltage**

**Sources Requiring an Interface:**
- **Neon/Cold Cathode**
- **Fluorescent**

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**Wall-mounted and tabletop master controls** provide total system operation of electric lighting and natural lighting. This operation is made possible with the combination of RadioRA and Sivoia QED™ products.

**Wall-mounted and table lamp dimmers and switches** provide local on/off and dimming control.

**GRAFIK RA™ room lighting controls** provide preset scene control of up to 6 zones of light, which can be controlled locally or by any RadioRA master control in the system.

**Chronos™ system bridge and timeclock** allows two complete RadioRA systems to be linked, providing up to 64 lighting control points.

**RF signal repeaters** ensure reliable RF communication between RadioRA components.

**Optional system enhancements** provide additional control of the system from your car, phone, or home automation system, and automatic control with a timeclock or photocell.

RadioRA components send information to each other using wireless radio-frequency (RF) communication.
## RadioRA® Design Example

<table>
<thead>
<tr>
<th>Design Steps</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Dimmers</strong></td>
<td>Lights typically included in a basic system are exterior, foyer, hallway, family room, and bedroom. This example shows general purpose lighting to create a path from the garage to the other end of the home. Additional lights can be added to the system at any time.</td>
</tr>
<tr>
<td><strong>2 Master Controls</strong></td>
<td>Place a tabletop master control on a nightstand next to the bed to turn all the lights in the home on or off at once. Place a wall-mounted master control by the front door for convenient control as you enter or leave your home. Other common locations are by exterior doors, family rooms and kitchens.</td>
</tr>
<tr>
<td><strong>3 RF Signal Repeater</strong></td>
<td>This home (see example system layout) has a dining room near the center of the home, where one repeater can be placed to cover all devices being installed in the home. It must located near an outlet and is typically hidden, for example, under a china cabinet.</td>
</tr>
<tr>
<td><strong>4 System Enhancements</strong></td>
<td>Place a multi-function entry master control in the garage and use a visor remote control in each car for control of your lights and garage doors. Your security system can be connected to the entry master control, so that your lights will automatically turn on or flash when the alarm is tripped.</td>
</tr>
</tbody>
</table>
Products Used in This Example

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Product Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>RA-6D-WH</td>
<td>Incandescent/Magnetic low voltage Single-/Multi-location dimmers</td>
</tr>
<tr>
<td>2</td>
<td>RA-AD-WH</td>
<td>Accessory dimmers</td>
</tr>
<tr>
<td>1</td>
<td>RALB-5W-RL-WH</td>
<td>Wall-mounted master control</td>
</tr>
<tr>
<td>1</td>
<td>RAMC-10T-RL-WH</td>
<td>Tabletop master control</td>
</tr>
<tr>
<td>2</td>
<td>RA-AD-WH</td>
<td>Accessory dimmers</td>
</tr>
<tr>
<td>1</td>
<td>RA-REP-WH</td>
<td>RF signal repeater</td>
</tr>
<tr>
<td>1</td>
<td>RAMC-MFE-WH</td>
<td>Multi-function entry master control</td>
</tr>
<tr>
<td>1</td>
<td>RA-VCTX-WH</td>
<td>Car visor transmitters</td>
</tr>
</tbody>
</table>

Example System Layout
RadioRA® Product Features

Convenient, one-touch control for all your home’s lighting

From bedside to poolside, in the kitchen or the great room, from the safety and comfort of your car, take control of your lighting with RadioRA.

Experience the warmth and beauty of dimming by creating your own lighting scenes, for the way you live your life.

RadioRA wireless, whole-home lighting control

- Radio Frequency “RF” 2-way communication (between master controls and dimmers)
- Installs easily in new or existing homes (100% retrofit)
- Integrates with other smart home systems (security, home theater, audio, etc.)

Features at a whole different frequency...

- Does not use house wiring for communication (not susceptible to “cross-talk” from household appliances)
- No special or additional wiring required (technology similar to portable phones)
- Expandable – Start with an application package and add controls as your needs change
Dimmers,Accessory Dimmers, Switches,Accessory Switches

Lamp Dimmers

GRAFIK RA™ Lighting Controls and GRAFIK Eye® Interfaces

Wall-Mounted Master Controls

Tabletop Master Controls

Car Visor Controls

Chronos™ System Bridge and Timeclock

RF Signal Repeater

Designer Accessories and Wallplates, pg.76

See pg.163 for more details

Add one to four RF signal repeaters for setup and reliable system communication

Switches, Receptacles, GFCI Receptacles, Multi-Port Frames, Telephone and Cable Jacks, and 1- to 6-Gang Wallplates
### Application Packages

#### Car Visor Starter Package*

**Package includes:**
- RA-SPCL-STR-1-
- (2) Visor Control Transmitters (white only)
- (1) Multi-Function Entry Master Control (white only)
- (1) 10-Button Tabletop Master Control with Raise/Lower (white only)
- (5) 600W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (2) Accessory Dimmers
- (1) RF Signal Repeater (white only)

#### Basic Home Lighting Control Package*

**Package includes:**
- RALB-BASIC-
- (1) 5-Large Button Wall-Mounted Master Control
- (1) 10-Button Tabletop Master Control with Raise/Lower (white only)
- (5) 600W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (2) Accessory Dimmers
- (1) RF Signal Repeater (white only)

#### 3,500 Square-Foot Home Lighting Control Package*

**Package includes:**
- RALB-3500SQFT-
- (1) 5-Large Button Wall-Mounted Master Control
- (1) 10-Button Tabletop Master Control with Raise/Lower (white only)
- (8) 600W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (2) 1000W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (3) Accessory Dimmers
- (1) RF Signal Repeater (white only)
- (2) Visor Control Transmitters (white only)
- (1) Multi-Function Entry Master Control (white only)

### Important Information

- Ships in 48 hrs.
- **Color Palette**
  - **Gloss Finish**
    - Add color suffix to model #
    - Example: RA-SPCL-STR-1-WH
    - **Color:**
      - WH White
      - IV Ivory
      - AL Almond
      - LA Light Almond
    - Colors meet NEMA color standards where standards exist
  - **Satin Finish**
    - Add color suffix to model #
    - Example: RA-SPCL-STR-1-SW
    - **Color:**
      - SW Snow
      - BI Biscuit
      - ES Eggshell
      - TP Taupe
      - MN Midnight
      - BL Blue Mist
      - LS Limestone
      - ST Stone
      - DS Desert Stone
      - TC Terracotta
      - OC Ochre
      - HT Hot

- **Accessories and Wallplates**
  - Coordinating designer accessories and wallplates sold separately, pg.76.

- Controls are 120V 50/60Hz unless noted.

For More Information:
- www.lutron.com/radiora
- Fax-on-Demand 1-800-523-9466

Technical Support • 24 Hours/7 Days • 1-800-523-9466 • www.lutron.com
**Application Packages**

### Home Theater Lighting Control Packages*

**Infrared Package includes:** RA-HT-IR-

- (1) 10-Button Cordless Tabletop Master Control (white only)
- (4) 600W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (1) RF Signal Repeater (white only)
- (1) Infrared Interface with Hand-held Remote Control

**RS-232 Package includes:** RA-HT-RS232-

- (1) 10-Button Cordless Tabletop Master Control (white only)
- (4) 600W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (1) RF Signal Repeater (white only)
- (1) RS-232 Serial Interface

### Chronos Packages*

**Wall-Mounted Master Control** RALB-CHR-W-

**Package includes:**

- (3) 5-Large-Button Wall-Mounted Master Control
- (7) 600W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (3) 1000W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (3) Accessory Dimmers
- (2) Visor Control Transmitters (white only)
- (1) Multi-Function Entry Master Control (white only)
- (1) Chronos Timeclock and System Bridge (white only)

**Mixed Master Control** RALB-CHR-M-

**Package includes:**

- (2) 5-Large-Button Wall-Mounted Master Control
- (1) 10-Button Cordless Tabletop Master Control (white only)
- (7) 600W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (3) 1000W/VA Incandescent/Magnetic Low-Voltage Dimmers
- (3) Accessory Dimmers
- (2) Visor Control Transmitters (white only)
- (1) Multi-Function Entry Master Control (white only)
- (1) Chronos Timeclock and System Bridge (white only)

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**Lighting Controls**

Lighting controls are single-location/multi-location for incandescent and magnetic low-voltage sources.

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**Global Ordering** see pg. 229

**Whole-Home Controls**

**Controls are 120V 50/60Hz unless noted.**

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**For More Information:**

[www.lutron.com/radiora](http://www.lutron.com/radiora)

Fax-on-Demand 1·800·523·9466
**RadioRA®**

Incandescent, Magnetic Low Voltage

### Preset Dimmers

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity*</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-/Multi-Location</td>
<td>600W/VA</td>
<td>RA-6D-</td>
</tr>
<tr>
<td>Single-/Multi-Location</td>
<td>1000W/VA</td>
<td>RA-10D-</td>
</tr>
<tr>
<td>Single-/Multi-Location with Neutral</td>
<td>600W/VA</td>
<td>RA-6ND-</td>
</tr>
</tbody>
</table>

**Products Above**: For multi-location dimming, use one RadioRA dimmer with up to nine RadioRA accessory dimmers, RA-AD-, pg.165. Not for use with mechanical 3-way or 4-way switches. Minimum load for dimmers listed above is 50W/VA, except RA-6ND-, which has a minimum of 10W/VA. Derating required if ganged, pg.103.

- **RA-6D-**: May be used in place of existing model numbers RA-600L-, RA-600LM-, RALV-600L-, or RALV-600LM-.
- **RA-10D-**: May be used in place of existing model numbers RA-1000L-, RA-1000LM-, RALV-1000L-, or RALV-1000LM-.
- **RA-6ND-**: May be used in place of existing model number RAN-600LM-.

### Color Palette

Add color suffix to model 

#### Gloss Finish
- WH White
- GR Gray
- IV Ivory
- BR Brown
- AL Almond
- BL Black
- LA Light Almond

Colors meet NEMA color standards where standards exist

#### Satin Finish
- SW Snow
- LS Limestone
- BI Biscuit
- ST Stone
- ES Eggshell
- DS Desert Stone
- TP Taupe
- TC Terracotta
- MN Midnight
- OC Ochre
- BL Blue Mist
- HT Hot

### Accessories and Wallplates

Coordinating designer accessories and wallplates sold separately, pg.76.

### What’s Included

Control only

### *Maximum Capacities*

For capacities in multi-gang installations, see ganging and derating information, pg.103.

### Single-Gang Wallplate Dimensions

- **W**: 2.94” (75mm)
- **H**: 4.69” (119mm)
- **D**: 0.30” (7.6mm)

Controls are 120V 50/60Hz unless noted.

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**For More Information:**

www.lutron.com/radiora

Fax-on-Demand 1-800-523-9466

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**Technical Support** • 24 Hours/7 Days • 1-800-523-9466 • www.lutron.com
# Dimmers

## Electronic Low Voltage

### Preset Dimmers

- **Description**: Single-/Multi-Location
- **Capacity**: 500W
- **Model**: RA-5NE-

*Products Above:* For multi-location dimming, use one RadioRA dimmer with up to nine RadioRA accessory dimmers, RA-AD-, see below. Not for use with mechanical 3-way or 4-way switches. Minimum load is 40W. Derating required if ganged, pg.103.

*RA-5NE-:* May be used in place of existing model numbers RAELV-500L- or RAELV-500LM-.

### Accessory Dimmers

Provide Multi-Location Dimming from Up to Nine Additional Locations.

- **Accessory Dimmers**: RA-AD-

For multi-location dimming, use up to nine RadioRA accessory dimmers with only one of the following RadioRA dimmers: RA-6D-, RA-10D-, RA-6ND-, or RA-5NE-.

*Product Above:* Not for use with mechanical 3-way or 4-way switches. Maximum traveller wiring run for multi-location applications is 250’ (76.2m). No derating required if ganged.

## Important Information

Ships in 48 hrs.

### Color Palette

- **Add color suffix to model #**
- **Example:** RA-5NE-WH

### Gloss Finish

- **WH** White
- **GR** Gray
- **IV** Ivory
- **BR** Brown
- **AL** Almond
- **BL** Black
- **LA** Light Almond

Colors meet NEMA color standards where standards exist

### Satin Finish

- **SW** Snow
- **BI** Biscuit
- **ES** Eggshell
- **TP** Taupe
- **MN** Midnight
- **BL** Blue Mist
- **LS** Limestone
- **ST** Stone
- **DS** Desert Stone
- **TC** Terracotta
- **OC** Ochre
- **HT** Hot

### Accessories and Wallplates

Coordinating designer accessories and wallplates sold separately, pg.76.

### What’s Included

- **Control only**

### *Maximum Capacities*

For capacities in multigang installations, see ganging and derating information, pg.103.

### Single-Gang Wallplate

- **Dimensions**
  - **W:** 2.94” (75mm)
  - **H:** 4.69” (119mm)
  - **D:** 0.30” (7.6mm)

## For More Information:

- [www.lutron.com/radiora](http://www.lutron.com/radiora)
- Fax-on-Demand 1·800·523·9466
**Switches**

**Product Features**
- Each RadioRA switch controls one zone of lighting, providing local on/off control.
- RadioRA switches can always be used to override master control settings.
- RadioRA multi-location switches use conventional 3-way and 4-way wiring.
- Do not use RadioRA switches to directly control motor loads such as garbage disposals, spas, fans, etc.
- All RadioRA switches must be located within 30’ (9.1m) of an RF signal repeater.

**Description**

<table>
<thead>
<tr>
<th>Maximum Capacity*</th>
<th>Model #</th>
</tr>
</thead>
</table>

**Incandescent, Magnetic Low Voltage, Electronic Low Voltage, Fluorescent, Neon/Cold Cathode, High-Intensity Discharge**

**Switches**

**Product Above:** For multi-location switching, use one RadioRA switch with RadioRA accessory switches, RA-AS-, see below. Requires neutral wire connection. Do not use with mechanical 3-way or 4-way switches. Minimum load is 5W/VA. Derating required if ganged, pg.103.

RA-8ANS-: May be used in place of existing model numbers RAS-8L- or RAS-8LM-.

**Accessory Switches**

**Provide Multi-Location Switching from Up to Nine Additional Locations.**

**Accessory Switches**

For multi-location switching, use up to nine RadioRA accessory switches with only one RadioRA switch: RA-8ANS-.

**Product Above:** Not for use with mechanical 3-way or 4-way switches. Maximum traveller wiring run for multi-location applications is 250’ (76.2m). No derating required if ganged.
### Dimmers with Power Boosters or Interfaces

**Incandescent, Magnetic Low Voltage, Neon/Cold Cathode, Electronic Low Voltage, Fluorescent**

**Preset Dimmers with Power Boosters**

To control incandescent/magnetic low-voltage loads above 1000W, use RA-6ND- with power booster, pg.189.

<table>
<thead>
<tr>
<th>Single-/Multi-Location</th>
<th>Maximum Capacity*</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920W</td>
<td>RA-6ND-</td>
<td></td>
</tr>
</tbody>
</table>

Use with NGRX-PB-WH

**Preset Dimmers with Electronic Low-Voltage Interfaces to Control More Than 500W**

To control electronic low-voltage loads, use RA-6ND- with electronic low-voltage interface, pg.189.

<table>
<thead>
<tr>
<th>Single-/Multi-Location</th>
<th>Maximum Capacity*</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000W</td>
<td>RA-6ND-</td>
<td></td>
</tr>
</tbody>
</table>

Use with ELVI-1000

**Preset Dimmers with Fluorescent Dimming Ballast Interfaces**

To control Lutron Hi-lume® line voltage control electronic dimming ballasts (only), use RA-6ND- with fluorescent dimming ballast interface, pg.189. Please refer to the Lutron Fluorescent Dimming Systems Selection Guide, P/N 366-002, or visit www.lutron.com for more information.

<table>
<thead>
<tr>
<th>Single-/Multi-Location</th>
<th>Maximum Capacity*</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>16A</td>
<td>RA-6ND-</td>
<td>GRX-FDBI-16A-120</td>
</tr>
</tbody>
</table>

**Products Above:** For multi-location dimming, use one RadioRA dimmer (RA-6ND-) with RadioRA accessory dimmers, RA-AD-, pg.165. Dimmers and power boosters/interfaces require a common neutral wire connection; this neutral should not be shared with any other controls. For additional load capacity, use RA-6ND- with Hi-Power 2·4·6™ dimming modules, pg.188. Power boosters and interfaces available in white (WH) only.

---

**Important Information**

Ships in 48 hrs.

**Color Palette**
Add color suffix to model #
Example: RA-6ND- WH

<table>
<thead>
<tr>
<th>Gloss Finish</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>WH White</td>
<td>GR Gray</td>
</tr>
<tr>
<td>IV Ivory</td>
<td>BR Brown</td>
</tr>
<tr>
<td>AL Almond</td>
<td>BL Black</td>
</tr>
<tr>
<td>LA Light Almond</td>
<td></td>
</tr>
</tbody>
</table>

Colors meet NEMA color standards where standards exist

**Satin Finish**

<table>
<thead>
<tr>
<th>Satin Finish</th>
<th>Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW Snow</td>
<td>LS Limestone</td>
</tr>
<tr>
<td>BI Biscuit</td>
<td>ST Stone</td>
</tr>
<tr>
<td>ES Eggshell</td>
<td>DS Desert Stone</td>
</tr>
<tr>
<td>TP Taupe</td>
<td>TC Terracotta</td>
</tr>
<tr>
<td>MN Midnight</td>
<td>OC Ochre</td>
</tr>
<tr>
<td>BL Blue Mist</td>
<td>HT Hot</td>
</tr>
</tbody>
</table>

**Accessories and Wallplates**
Coordinating designer accessories and wallplates sold separately, pg.76.

**What’s Included**

Control only

**Maximum Capacities**
For capacities in multigang installations, see ganging and derating information, pg.103.

**Single-Gang Wallplate Dimensions**

| W: 2.94” (75mm) |
| H: 4.69” (119mm) |
| D: 0.30” (7.6mm) |

Controls are 120V 50/60Hz unless noted.

**For More Information:**

www.lutron.com/radiora
Fax-on-Demand 1-800-523-9466
Lamp Dimmers

Product Features

- Each RadioRA lamp dimmer controls one zone of table or floor lamps in a RadioRA system, providing local on/off and dimming control
- RadioRA lamp dimmers can always be used to override master control settings
- Lamp dimmer cords are 6’ (1.8m) long
- All RadioRA lamp dimmers must be located within 30’ (9.1m) of a RadioRA RF signal repeater

Color Palette

Satin Finish

Add color suffix to model #

Example: RA-3LD-WH

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WH</td>
<td>White</td>
</tr>
<tr>
<td>RP</td>
<td>Royal Plum</td>
</tr>
<tr>
<td>BL</td>
<td>Black</td>
</tr>
</tbody>
</table>

Maximum Capacities

Lamp dimmers are not intended for motor loads or other non-lighting loads.

Lamp Dimmer Dimensions

- W: 2.45” (62mm)
- H: 3.23” (82mm)
- D: 0.96” (25mm)

Controls are 120V 50/60Hz unless noted.

Global Ordering see pg. 229

For More Information:

www.lutron.com/radiora
Fax-on-Demand 1-800-523-9466

For Table or 300W/VA Floor Lamps

Product Above: Lamp dimmers intended only for use with table and floor lamps that do not contain integral dimmers. Minimum load for lamp dimmers is 10W/VA.
GRAFIK RA Lighting Controls and GRAFIK Eye Interfaces

Product Features
- Allows GRAFIK Eye preset lighting controls to be controlled as part of a RadioRA system
- GRAFIK Eye preset lighting scenes can be selected from any RadioRA master control in the system
- Each multi-zone control counts as one local lighting control toward the RadioRA system maximum of 32
- Includes IR receiver for hand-held remote control

Incandescent, Magnetic Low Voltage, Neon/Cold Cathode, Fluorescent with Tu-Wire® Dimming Ballast

GRAFIK RA Controls
3-Zone*: 1500W/VA RA-GRX-3-
Dimensions: W: 7.25" (184mm); H: 4.56" (116mm); D: 2.25" (57mm), depth includes wallplate and backbox. Wallplate depth: 0.35" (9mm). Wallbox size: three-gang, 3.50" (89mm) deep.

4-Zone*: 2000W/VA RA-GRX-4-
Dimensions: W: 8.94" (227mm); H: 4.56" (116mm); D: 2.25" (57mm), depth includes wallplate and backbox. Wallplate depth: 0.35" (9mm). Wallbox size: four-gang, 3.50" (89mm) deep.

6-Zone*: 2000W/VA RA-GRX-6-
Dimensions: W: 8.94" (227mm); H: 4.56" (116mm); D: 2.25" (57mm), depth includes wallplate and backbox. Wallplate depth: 0.35" (9mm). Wallbox size: four-gang, 3.50" (89mm) deep.

* Products Above: Single zone capacity is 800W/6.67A per zone. Combined total of all zones should not exceed maximum capacity.

Use to link GRAFIK Eye preset lighting controls, see pg.110, to a RadioRA system

RadioRA/GRAFIK Eye Interface RA-GRXI-WH
- Connects existing GRAFIK Eye 3000 Series control units to a RadioRA system
- Use one interface per room controlled by a GRAFIK Eye preset lighting control; linking multiple GRAFIK Eye control units in different rooms is not recommended

Product Above: Interface available in white (WH) only.
Dimensions: W: 2.75" (70mm); H: 4.56" (116mm); D: 0.30" (7.6mm)

Important Information

Color Palette
Add color suffix to model #
Examples:
Translucent Cover, Opaque Base: RA-GRX-3- T - WH
Opaque Cover, Opaque Base: RA-GRX-3- A - WH

Cover Options
A Opaque
(Cover and base will match)
T Translucent Black
(Black cover, choice of base color)

Base Colors
See pg.110 for complete color offering and suffixes.

Matte Finishes ships 48 hrs.
Matte Cover Options: A or T

Gloss Finishes ships 4-6 wks.
Gloss Cover Option: A only

Metal Finishes ships 4-6 wks.
Metal Cover Option: T only

Satin Finishes ships 4-6 wks.
Satin Cover Options: A or T

Accessories
Coordinating matte and metal architectural accessories sold separately, pg.34.
Coordinating gloss and satin designer accessories sold separately, pg.76.

Customization
For color matching, engraving, and silk screening, contact Lutron Customer Service.

Controls are 120V
50/60Hz unless noted.

Global Ordering
see pg 229

For More Information:
www.lutron.com/radiora
Fax-on-Demand 1-800-523-9466

To Order/Customer Service • 8am–8pm ET (US/CAN) • 1-888-LUTRON1
Tabletop Master Controls

Product Features
- Control up to 32 RadioRA local lighting controls (expandable to 64 with Chronos system bridge and timeclock) to turn lights on to preset levels or off
- LEDs constantly show house lighting status and provide feedback when button is pressed
- Preprinted labels provided to identify room and scene buttons
- White tabletop master controls are provided with white buttons as shown below, and black tabletop master controls are provided with gray buttons
- All RadioRA master controls must be located within 30’ (9.1m) of an RF signal repeater
- Must be plugged into an outlet:
  - Includes plug-in 9VAC transformer, replacement AC adapter available, order model # T120-9AC-3-WH or # T120-9AC-3-BL; for global ordering information, see pg.229

What’s Included
- Control, AC adapter, wall-mounting bracket, preprinted room/scene labels

<table>
<thead>
<tr>
<th>Tabletop Master Controls</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5-Button Master Controls</strong></td>
<td></td>
</tr>
<tr>
<td>5 Room or Scene Buttons</td>
<td>RAMC-5T-</td>
</tr>
<tr>
<td>with All On and All Off Buttons</td>
<td></td>
</tr>
<tr>
<td>5 Room or Scene Buttons</td>
<td>RAMC-5T-RL-</td>
</tr>
<tr>
<td>with All On, All Off, and Raise/Lower Buttons</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>10-Button Master Controls</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Room or Scene Buttons</td>
<td>RAMC-10T-</td>
</tr>
<tr>
<td>with All On and All Off Buttons</td>
<td></td>
</tr>
<tr>
<td>10 Room or Scene Buttons</td>
<td>RAMC-10T-RL-</td>
</tr>
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<td>with All On, All Off, and Raise/Lower Buttons</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>15-Button Master Controls</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Room or Scene Buttons</td>
<td>RAMC-15T-</td>
</tr>
<tr>
<td>with All On and All Off Buttons</td>
<td></td>
</tr>
<tr>
<td>15 Room or Scene Buttons</td>
<td>RAMC-15T-RL-</td>
</tr>
<tr>
<td>with All On, All Off, and Raise/Lower Buttons</td>
<td></td>
</tr>
</tbody>
</table>

Important Information
- Ships in 48 hrs.
- Color Palette
  - Satin Finish
  - Add color suffix to model #
    - Example: RAMC-5T-WH
    - WH White
    - BL Black

For More Information:
- www.lutron.com/radiora
- Fax-on-Demand 1·800·523·9466

Global Ordering
- see pg.229

Technical Support • 24 Hours/7 Days • 1·800·523·9466 • www.lutron.com
## Cordless Tabletop Master Controls

### Product Features
- Portable control of 32 RadioRA local lighting controls (expandable to 64 with Chronos—system bridge and timeclock) to turn lights on to preset levels or off
- To conserve battery power, unit “sleeps” with LEDs off until a button is pressed to “awaken” the unit; upon awakening, LEDs cycle up and down while retrieving house lighting status; unit then shows house lighting status and provides feedback when a button is pressed
- Preprinted labels provided to identify room and scene buttons
- White tabletop master controls are provided with white buttons as shown below, and black tabletop master controls are provided with gray buttons
- All RadioRA master controls must be located within 30’ (9.1m) of an RF signal repeater

### 10-Button Cordless Master Controls

<table>
<thead>
<tr>
<th>Description</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Room or Scene Buttons</td>
<td>RAMC-10C-</td>
</tr>
<tr>
<td>with All On and All Off Buttons</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Room or Scene Buttons</td>
<td>RAMC-10C-RL-</td>
</tr>
<tr>
<td>with All On, All Off, and Raise/Lower Buttons</td>
<td></td>
</tr>
</tbody>
</table>
# Wall-Mounted Master Controls

## Product Features
- Control up to 32 RadioRA local lighting controls (expandable to 64 with Chronos® system bridge and timeclock) to turn lights on to preset levels or off
- Wall-mounted master controls can be ganged with RadioRA dimmers, switches, and other designer-style controls under a multigang wallplate
- Large-button master controls can be custom engraved by ordering a separate button kit, contact Lutron Customer Service for ordering information
- Slim-button master controls are supplied reprinted labels provided to identify room and scene buttons
- All RadioRA master controls must be located within 30’ (9.1m) of an RF signal repeater

## Large-Button Master Controls

### 5-Button Master Controls
5 Room or Scene Buttons
- with Raise/Lower Buttons

5 Room or Scene Buttons
- with All On and All Off Buttons

*Master controls come with pre-paid engraving certificate.*

### 2-Button Master Controls
2 Room or Scene Buttons

*Master controls come with pre-paid engraving certificate and programming button kit.*

**Products Above:** Requires connection to hot and neutral wires (120 VAC).

**Dimensions:** W: 2.94” (75mm); H: 4.69” (119mm); D: 1.67” (42mm), depth includes wallplate and backbox. Wallbox depth is 0.30” (7.6mm). Wallplate Size: single-gang.

## Large-Button Color Options

<table>
<thead>
<tr>
<th>WH</th>
<th>WH buttons</th>
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<tbody>
<tr>
<td>IV</td>
<td>IV buttons</td>
</tr>
<tr>
<td>AL</td>
<td>AL buttons</td>
</tr>
<tr>
<td>LA</td>
<td>LA buttons</td>
</tr>
<tr>
<td>GR</td>
<td>Light GR buttons</td>
</tr>
<tr>
<td>BR</td>
<td>Light BR buttons</td>
</tr>
<tr>
<td>BL</td>
<td>BL buttons</td>
</tr>
<tr>
<td>HT</td>
<td>TP buttons</td>
</tr>
<tr>
<td>OC</td>
<td>OC buttons</td>
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<td>BT</td>
<td>WH buttons</td>
</tr>
<tr>
<td>TC</td>
<td>TP buttons</td>
</tr>
<tr>
<td>DS</td>
<td>TP buttons</td>
</tr>
<tr>
<td>ST</td>
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</tr>
<tr>
<td>LS</td>
<td>Light GR buttons</td>
</tr>
<tr>
<td>MN</td>
<td>MN buttons</td>
</tr>
<tr>
<td>TP</td>
<td>TP buttons</td>
</tr>
<tr>
<td>ES</td>
<td>ES buttons</td>
</tr>
<tr>
<td>BI</td>
<td>BI buttons</td>
</tr>
<tr>
<td>SW</td>
<td>SW buttons</td>
</tr>
</tbody>
</table>

**Color Palette**
Add color suffix to model #

**Gloss Finish**
- WH White
- IV Ivory
- AL Almond
- LA Light Almond

**Satin Finish**
- SW Snow
- BI Biscuit
- ES Eggshell
- TP Taupe
- MN Midnight
- BL Blue Mist
- ST Stone
- DS Desert Stone
- TC Terracotta
- OC Ochre
- HT Hot

**Accessories and Wallplates**
Coordinating designer accessories and wallplates sold separately, pg. 76.

**What’s Included**
Control and pre-paid engraving certificate

Controls are 120V 50/60Hz unless noted.

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**Technical Support** • 24 Hours/7 Days • 1-800-523-9466 • www.lutron.com
## Wall-Mounted Master Controls

### Slim-Button Master Controls

#### 5-Button Master Controls
- 5 Room or Scene Buttons with All On and All Off Buttons
- 5 Room or Scene Buttons with Raise/Lower Buttons

Products Above: Requires connection to hot and neutral wires (120 VAC). For 24 VAC, contact Lutron Customer Service and request Application Note #41.

**Dimensions:** W: 2.94” (75mm); H: 4.69” (119mm); D: 1.67” (42mm), depth includes wallplate and backbox. Wallplate depth is 0.30” (7.6mm). Wallbox Size: single-gang.

**Model:** RAMC-5W-

**Model:** RAMC-5W-RL-

#### 10-Button Master Controls
- 10 Room or Scene Buttons with All On and All Off Buttons
- 10 Room or Scene Buttons with All On, All Off, Raise/Lower Buttons

Products Above: Requires connection to hot and neutral wires (120 VAC). Requires two-gang designer wallplate, pg. 81. For 24 VAC, contact Lutron Customer Service and request Application Note #41.

**Dimensions:** W: 4.75” (121mm); H: 4.69” (119mm); D: 1.67” (42mm), depth includes wallplate and backbox. Wallplate depth is 0.30” (7.6mm). Wallbox Size: two-gang.

**Model:** RAMC-10W-

**Model:** RAMC-10W-RL-

#### 15-Button Master Controls
- 15 Room or Scene Buttons with All On and All Off Buttons
- 15 Room or Scene Buttons with All On, All Off, Raise/Lower Buttons

Products Above: Requires connection to hot and neutral wires (120 VAC). Requires three-gang designer wallplate, pg. 81. For 24 VAC, contact Lutron Customer Service and request Application Note #41.

**Dimensions:** W: 6.56” (167mm); H: 4.69” (119mm); D: 1.67” (42mm), depth includes wallplate and backbox. Wallplate depth is 0.30” (7.6mm). Wallbox Size: 3-gang.

**Model:** RAMC-15W-

**Model:** RAMC-15W-RL-

---

**Important Information**

- Ships in 48 hrs.
- **Color Palette**
  - Add color suffix to model #
  - Example: RAMC-5W-WH
  - **Gloss Finish**
    - WH White
    - IV Ivory
    - AL Almond
    - LA Light Almond
  - **Satin Finish**
    - SW Snow
    - BI Biscuit
    - ES Eggshell
    - TP Taupe
    - MN Midnight
    - BL Blue Mist
    - BI Biscuit
    - IV Ivory
    - AL Almond
    - LA Light Almond
  - Colors meet NEMA color standards where standards exist

- **Accessories and Wallplates**
  - Coordinating designer accessories and wallplates sold separately, pg. 76.

- **What's Included**
  - Control, preprinted and blank room/scene labels

- Controls are 120V 50/60Hz unless noted.

---

**For More Information:**

[www.lutron.com/radiora](http://www.lutron.com/radiora)  
Fax-on-Demand  1·800·523·9466
### RF Signal Repeaters

**Chronos System Bridge and Timeclock**

- Bridges two RadioRA systems for up to 64 local lighting controls and 24 master controls/interfaces
- Serves as the main RF signal repeater for both systems
- Provides a built-in astronomical timeclock with up to 100 events triggering up to 13 lighting scenes
- Timeclock includes an “away” mode to create a lived-in look when the home is unoccupied
- Includes three contact closure inputs for security systems, photocells, motion sensors, a telephone interface, etc.
- Uses an interactive setup screen for easy configuration of whole-home scenes, timeclock events, and RS-232 device mapping
- Must be located within 60’ (18.2m) of a RadioRA RF signal repeater
- Must be plugged into an outlet:
  - Includes plug-in 18VAC transformer, replacement AC adapter available, order model # T120-18AC-3-WH; for global ordering information, see pg.229

**Dimensions:** W: 11.5” (293mm); H: 7.00” (177mm); D: 1.25” (32mm).

**Chronos System Bridge and Timeclock**

<table>
<thead>
<tr>
<th>Description</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF Signal Repeaters</td>
<td>RA-REP-WH</td>
</tr>
<tr>
<td><strong>Important Information</strong></td>
<td></td>
</tr>
<tr>
<td>Ships in 48 hrs.</td>
<td></td>
</tr>
</tbody>
</table>

**Chronos System Bridge and Timeclock**

- Required for system set-up, diagnostics, and to ensure reliable RF communication between RadioRA components
- All RadioRA controls (except accessory dimmers, accessory switches, and GRAFIK Eye® control units) must be within 30’ (9.1m) of a RadioRA RF signal repeater; in multiple-repeater systems, an RF signal repeater must be within 60’ (18.2m) of another RF signal repeater
- RadioRA RF signal repeaters can be placed in discreet locations such as in closets, cabinets, or under furniture, as long as RadioRA system components are within 30’ (9.1m)
- Must be plugged into an outlet:
  - Includes plug-in 9VAC transformer, replacement AC adapter available, order model # T120-9AC-3-WH; for global ordering information, see pg.229

**Dimensions:** W: 3.57” (91mm); H: 3.23” (82mm); D: 0.96” (25mm).

Controls are 120V 50/60Hz unless noted.
## System Enhancement Controls

### Car Visor Controls

<table>
<thead>
<tr>
<th>Description</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visor Control Transmitter</td>
<td>RA-VCTX-WH</td>
</tr>
<tr>
<td>Multi-Function Entry Master Control</td>
<td>RAMC-MFE-WH</td>
</tr>
</tbody>
</table>

- The multi-function entry master control is required for visor control transmitter functionality.
- Allows remote control of RadioRA lighting controls to turn lights on to preset levels or off.
- Multi-Function Master Control has three low-voltage inputs and two low-voltage outputs:
  - Inputs allow security systems, timeclocks, and telephone interfaces to control the lights.
  - Outputs control garage doors and gates – 150' (45.7m), typical range of visor control transmitter to multi-function entry master control.
- Must be located within 60' (18.2m) of a RadioRA RF signal repeater.
- Must be plugged into an outlet:
  - Includes plug-in 9VAC transformer, replacement AC adapter available, order model # T120-9VAC-3-WH; for global ordering information, see pg.229.

### Infrared Controls

#### Infrared Interface

**RA-IR**

- Requires infrared repeating kit, RA-IR-KIT (below), to receive infrared signal.
- Used to select up to 15 RadioRA lighting scenes, plus all on and all off.
- Receives signal from learnable universal IR remote control to select lighting scenes; Use a GRAFIK Eye™ infrared wireless remote control (GRX-8IT-WH) to teach infrared codes for lighting scenes 1-8 to learnable remotes (for scenes 9-15 contact Lutron Customer Service for special remote).
- Must be plugged into an outlet:
  - Includes plug-in 9VAC transformer, replacement AC adapter available, order model # T120-9VAC-3-BL; for global ordering information, see pg.229.

#### Infrared Repeating Kit

**RA-IR-KIT**

- Kit provides components necessary to receive and forward an infrared (IR) signal to the RadioRA infrared interface (above).
- Includes 1) IR emitter, 2) connecting block, 3) IR receiver, and 4) 9VAC transformer.
- Requires RA-IR to control RadioRA devices.

**Product Above:** Product manufactured by others, resold by Lutron.

---

### Important Information

- Ships in 48 hrs.

**Visor Control Transmitter**

- **Dimensions**
  - W: 3.16” (80mm)
  - H: 1.50” (38mm)
  - D: 0.96” (25mm)

**Multi-Function Entry Master Control**

- **Dimensions**
  - W: 3.57” (91mm)
  - H: 3.23” (82mm)
  - D: 0.96” (25mm)

**Infrared Interface**

- **Dimensions**
  - W: 4.00” (101mm)
  - H: 7.35” (197mm)
  - D: 2.50” (64mm)

Controls are 120V 50/60Hz unless noted.

**Global Ordering**

See pg.229

**For More Information:**

- [www.lutron.com/radiora](http://www.lutron.com/radiora)
- Fax-on-Demand 1·800·523·9466
## System Enhancement Controls

### RS-232 Serial Interface  
**RA-RS232**  
- Two-way communication device for controlling lighting and providing lighting status information to third party integration systems  
- Works with numerous home automation products to integrate lighting into whole-home control systems  
- Allows selection of 15 unique lighting scenes plus all on and all off  
- Allows individual zone control and monitoring of devices  
- Sends and receives pre-defined string commands on serial communication link  
- Provides access to security flash and full-on functions for integration with security systems  
- Must be plugged into an outlet: Includes plug-in 9VAC transformer, replacement AC adapter available, order model # T120-9AC-3-BL; for global ordering information, see pg.229

### Switch Closure Interface  
**RA-SCI**  
- Allows equipment such as RadioRA telephone interfaces, as well as other manufacturers’ photocells, security systems, and additional contact closure devices to control the RadioRA system  
- Accepts up to seven input switch closures (two are dedicated to security functions—flash and full on—and five of the inputs are configurable)  
- Each configurable input can accept a momentary or maintained switch closure  
- Momentary closures can be programmed only to activate a scene  
- Maintained closures can be programmed to activate a scene when closure occurs, and turn the scene off when the closure opens  
- Local RadioRA dimmers, switches, master controls, and GRAFIK Eye® interfaces are “locked out” whenever the security closure is activated and can only be controlled once the security closure is deactivated  
- Must be plugged into an outlet: Includes plug-in 18VAC transformer, replacement AC adapter available, order model # T120-18AC-3-WH; for global ordering information, see pg.229

### Telephone Interface  
**RA-RC-3**  
- Requires the RadioRA Chronos™ system bridge and timeclock, multi-function entry master control, or switch closure interface to control RadioRA system  
- Allows control of a RadioRA system from any touchtone telephone  
- Interface has three outputs that activate three unique lighting scenes; three telephone interfaces can be connected to one telephone line for a total of nine lighting scenes  
- A dedicated telephone line is not required, but is recommended  
- Must be plugged into an outlet  

### Important Information

- Ships in 48 hrs.

### RS-232 Serial and Switch Closure Interface Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>4.00&quot; (101mm)</td>
</tr>
<tr>
<td>H</td>
<td>7.35&quot; (197mm)</td>
</tr>
<tr>
<td>D</td>
<td>2.50&quot; (64mm)</td>
</tr>
</tbody>
</table>

### Telephone Interface Dimensions

<table>
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<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>4.00&quot; (101mm)</td>
</tr>
<tr>
<td>H</td>
<td>3.50&quot; (89mm)</td>
</tr>
<tr>
<td>D</td>
<td>1.75&quot; (44mm)</td>
</tr>
</tbody>
</table>

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**For More Information:**  
www.lutron.com/radiora  
Fax-on-Demand 1-800-523-9466
See below for instructions for ordering complete Application Notes

**Alternate Frequency Systems**

**418MHz and 434MHz Systems Available**

*Where to use 418MHz?*
Use 418MHz systems anywhere in the USA except Manhattan (see where to use 434MHz, below). Unless otherwise specified, all RadioRA components ship at 418MHz.

*Where to use 434MHz, and how to order?*
Lutron developed and listed the 434MHz systems primarily for use outside the United States. Because of a licensed government operator at 418MHz in Manhattan, New York, Lutron recommends all systems designed for Manhattan be specified as 434MHz. Contact Lutron Customer Service to order.

**RadioRA Application Notes**

**Using Fax-On-Demand – 1·800·523·9466**

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<th>Application Note #/Name</th>
<th>Document #</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
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<td>366428</td>
<td>366-428</td>
</tr>
<tr>
<td>#42 Using the RA-DZS-200A/24 timeclock with the RadioRA system</td>
<td>366626</td>
<td>366-626</td>
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<td>#46 Using the RadioRA telephone interface</td>
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<tr>
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<tr>
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<td>367-037</td>
</tr>
<tr>
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<td>367-062</td>
</tr>
<tr>
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<td>367446</td>
<td>367-446</td>
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</tbody>
</table>

The list above contains all of the Application Notes available for a RadioRA system. To receive any or all of these notes, call the Lutron Technical Support Center. Choose either the fax-on-demand option and enter the document number listed, or speak directly with Technical Support and ask for the part number shown.