



P/N 030-891-12

## Universal Electronic Dual Dimmer

**RNDU-252 (Dual Dimmer)**

**RIDU-252 (Dual Dimmer with IR Receiver)**

Rated at: 220–240 V~ 50/60 Hz 50–250 W/VA per dimmer

### Compatible load types:

Incandescent / Halogen 240 V~,  
Magnetic and Electronic Low-Voltage



## Incandescent Electronic Dual Dimmer

**RNDI-252 (Dual Dimmer)**

**RIDI-252 (Dual Dimmer with IR Receiver)**

Rated at: 220–240 V~ 50/60 Hz 50–250 W per dimmer

### Compatible load types:

Incandescent / Halogen 240 V~



## Infrared Wireless Transmitter

**RID-REMOT:** 3 V=== 420 mW



## Important Notes

### Please read before installing.

- The Dual Dimmer cannot be used to replace a dual gang switch controlling light fixtures which are on different circuits – e.g. upstairs/downstairs.** Verify that this is not the case before installing the Dual Dimmer by confirming that **all** lights to be controlled no longer function when **one** MCB is turned off (or **one** fuse is removed).
- Caution:** To avoid overheating and possible damage to other equipment, do not use to control receptacles, fluorescent lighting fixtures, motor-operated or transformer-supplied appliances.
- For new installations, test the circuit with a conventional switch before installing the Dual Dimmer.
- Turn off power at consumer unit (fuse box) and turn off MCB or remove fuse before performing any installation work or maintenance of lighting circuit. Ensure that it is not possible for another person to restore power while you are working.
- Install in accordance with all national and local electrical codes.
- This Dimmer complies with IEC and EN60669-2-1.
- Do not paint Dual Dimmer or Accessory Dimmers.
- Protect Dual Dimmer from dust and dirt when painting or during construction.
- Accessory Dimmers (extension units) are available to enable multi-way switching and dimming at a possible nine other locations. Contact Lutron for details.
- It is possible to use the *Rania* Dual Dimmer with existing 2-way switches **for remote on/off switching only**. Connection and configuration details can be found at [www.lutron.com/rania](http://www.lutron.com/rania). Note that dimming control is only possible from a remote location using the RDSU or RDDU Accessory Dimmer.
- Maximum wire length between the Dual Dimmer and the furthest Accessory Dimmer is 50 m.
- Operate between 0 °C and 40 °C. For indoor use only.
- It is normal for the Dual Dimmer to feel warm to the touch during operation.
- The Dual Dimmer requires a minimum total wattage of 50 W/VA on at least one dimmed circuit. Do not exceed the maximum rating of 250 W/VA per dimmed circuit.
- This Dual Dimmer is overload protected. If the rated wattage is exceeded, power to the load will shut off until the Dual Dimmer cools. If this occurs, reduce the wattage connected to the Dual Dimmer.
- Recommended backbox depth is 35 mm.
- Maximum torque for terminal screws is 0.5 N-m. Recommended torque for mounting screws is 0.2 N-m.
- To ensure the best performance, the mains shall be free of noise; in particular, peak voltages exceeding 425 V, and other high frequency noises.
- Clean with a soft damp cloth only. DO NOT** use any chemical cleaners.
- Use fully loaded electronic or magnetic low voltage transformers for best performance.
- DO NOT** mix magnetic and electronic low voltage transformers on the same dimmed circuit.
- Dimmer may not work with dioded lamps.
- Use only magnetic low voltage transformers with built-in thermal protection.
- For use with compatible electronic low-voltage loads. For an up to date list of compatible transformers, see our web site at [www.lutron.com/rania/elv](http://www.lutron.com/rania/elv).

## Limited Warranty

Lutron EA Ltd. ("Lutron EA") warrants each unit to be free from defects in material and workmanship and to perform under normal use and service. To the extent permitted by law, Lutron EA and Lutron Electronics Co. Inc. ("Lutron") make no warranties or representations as to the units except as set forth herein. This warranty shall run for a period of two years from the date of purchase and Lutron's obligations under this warranty are limited to remedying any defect, replacing any defective part or replacement (at Lutron EA's sole option) and shall be effective only if the defective unit is shipped to Lutron EA postage prepaid within 24 months after purchase of the unit. Repair or replacement of the unit does not affect the expiry date of the warranty. This warranty does not cover damage or deficiencies due to abuse, misuse, inadequate wiring or insulation or use or installation other than in accordance with instructions accompanying the unit.

To the extent permitted by law, neither Lutron EA nor Lutron shall be liable for any other loss or damage including consequential or special loss or damages, loss of profits, loss of income, or loss of contracts arising out of or relating to the supply of the unit or the use of the unit and the purchaser assumes and will hold harmless Lutron EA and Lutron in respect of all such loss or damage. Nothing in this warranty shall have the effect of limiting or excluding Lutron EA's or Lutron's liability for fraud or for death or personal injury resulting from its own negligence, or any other liability, if and to the extent that the same may not be limited or excluded as a matter of law.

**This warranty does not affect the statutory rights of consumer purchasers of this product.**

Although every attempt is made to ensure that catalogue information is accurate and up-to-date, please check with Lutron EA before specifying or purchasing this equipment to confirm availability, exact specifications, and suitability for your application.

These products may be covered under one or more of the following European patents: EP0587878; EP1145603; Chinese patents:

ZL200430090404.1; EC Registered Design Numbers: 000175757; 000248695; 000230578; 000409669; and corresponding patents and design registrations in other countries. Patents pending.

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# LUTRON

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## Operation

### Models:

### RNDU-252, RIDU-252, RNDI-252, RIDI-252

For the RIDU and RIDI model Dual Dimmers, use Lutron infrared hand-held remote controls for programming and recalling lighting scenes, remote dimming, and switching from the palm of your hand.

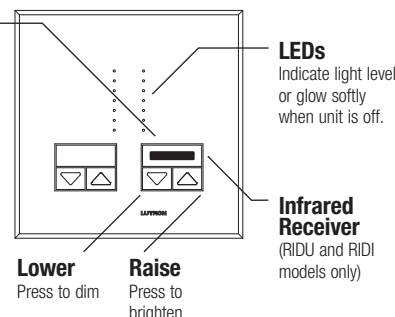
### Tap Button

#### Basic Operation

- **Tap once when unit is off** - Lights brighten smoothly to preset intensity.
- **Tap once when unit is on** - Lights dim smoothly to off.
- **Tap twice quickly** - Lights brighten rapidly to full intensity.

#### Advanced Operation

**Fade to off** - Press and hold to activate delayed fade to off. As tap button is held, LEDs will begin to flash. The first flashing LED represents a 10 second fade to off. Each additional flashing LED represents an additional 10 seconds of delay before lights fade to off (up to 60 seconds).



### Model:

### RID-REMOT

For use with RIDU and RIDI model Dual Dimmers. Point the transmitter at the *Rania* Dual Dimmer(s), then use the buttons as outlined below.

#### ON FULL:

Tap once - lights brighten smoothly to full intensity.

#### OFF:

Tap once: 3 second fade to off  
Press and hold: 10–60 second delayed fade to off.

#### RAISE:

Press to brighten lights

#### LOWER:

Press to dim lights.

#### Right Side dimmer

#### Left Side dimmer

This transmitter is compatible with most learning remote controls. Please see the learning remote control manufacturer's instructions for programming information.

## Advanced Programming

The *Rania* Dimmer allows a number of advanced features to be accessed. These include:

- Locked-in Preset** - Sets the level that the lights always turn on to.
- Fade to ON time** - Set the rate at which the dimmer switches on.
- Fade to Off time** - Set the rate at which the dimmer switches off.

For details on the Advanced Programming options, visit [www.lutron.com/techInfo/InstallGuides/AdvancedProgramming.pdf](http://www.lutron.com/techInfo/InstallGuides/AdvancedProgramming.pdf) or call +44 (0) 207 702 0657.

## Problems

If your Dual Dimmer does not work, check that the light bulb has not failed before contacting Lutron Technical Assistance.

If the left and right hand controls do not control the appropriate lamps as required, swap the wires connected to the 1 and 2 terminals.

If one of the lights works as expected, but the other is affected by both controls, swap the tagged and untagged wire connections.

## Technical Assistance

If you have questions concerning the installation or operation of this product, call **Lutron's Headquarters**. Please provide exact model number when calling.

### Lutron EA LTD

Tel: +44 (0) 207 702 0657

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

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### FREEPHONE:

U.K.:

0800-282107

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900-974452

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10-800-712-1536

Southern China:

10-800-120-1536

Hong Kong:

800-901-849

Singapore:

800-120-4491

Taiwan:

00-801-137-737

Thailand:

001-800-120-665853

## Installation

1

**WARNING:** Turn power OFF at MCB (circuit breaker) or fuse box.

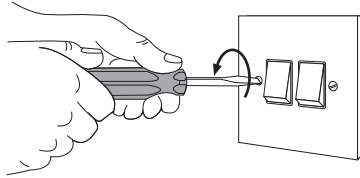
2

**Remove switch mounting screws. Remove switches from wall.**

**Note:** DO NOT disconnect wires from the switch.



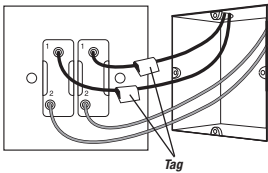
**Caution:** Verify power to each switch is OFF before proceeding.



3

**Tag the wire(s).**

**Single-Location control**



**One switch controlling one light fixture, the other switch controlling another light fixture.**

Each switch will be a 1-way. Each switch will have insulated wires connected to two terminals.

**TAG** the wire(s) connected to terminals labelled 1 or COM for identification during wiring.

**For details of control from two or more locations, refer to the instructions supplied with the Accessory Dimmer or contact Lutron.**

**Note:** Terminal placement may be different on your switch.

### Important Note:

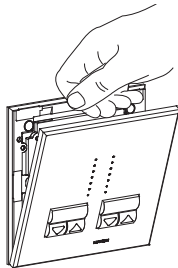
Your wall switch may have two wires attached to the same terminal. Tape these two wires together before disconnecting. Connect these two wires to the same terminal in Step 6.

4

**Disconnect switch wires.**

5

**Prepare Dual Dimmer for installation.**



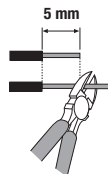
Snap off Front Plate

## Important Wiring Information



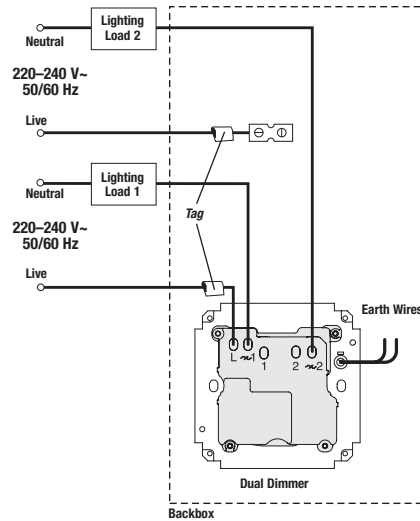
**WARNING:** Permanent damage can be caused by overtightening the terminal screws.

Trim or strip backbox wires to 5 mm. Insert wires fully into the terminals and tighten screws.

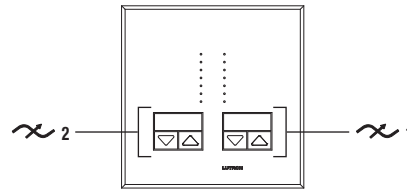


6

**Wiring the controls.**

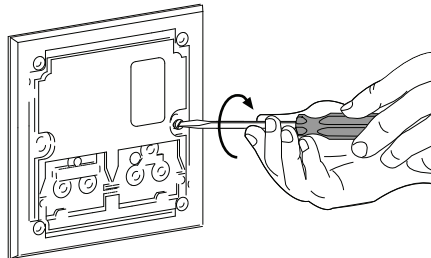


- Connect one of the tagged wires removed from the switch to terminal L on the Dual Dimmer.
- Leave the other tagged wire unconnected. Ensure that it is properly insulated - e.g. by use of an insulated terminal block.
- Connect one of the other remaining wires removed from the switch to the  $\sim$  1 terminal (Right Side dimmer).
- Connect the remaining wire removed from the switch to the  $\sim$  2 terminal (Left Side dimmer).
- Connect any earth wires to the unenclosed terminal on the Dual Dimmer as shown. Alternatively, connect a piece of sleeved earth wire between this terminal and the earth lug in the backbox.



7

**Mount and align Dual Dimmer.**

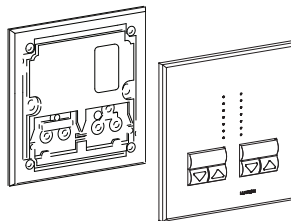


- Secure Dual Dimmer to the backbox using backbox screws.

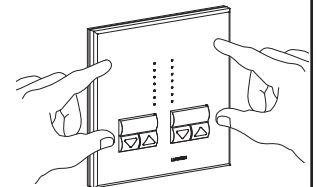
**Caution - Do not pinch wires. Do not overtighten mounting screws.**

8

**Snap on Front Plate.**



Align the Front Plate and the Dual Dimmer



Press corners to ensure all snaps engaged.

9

**Turn power ON at MCB (circuit breaker) or fuse box.**