



Accessory Dimmer (Extension Unit)

RDSU-452: 220-240 V~ 50/60 Hz 450 W/VA max.
Compatible with all Rania® Dimmers and Controls.



Important Notes

Please read before installing.

1. Turn power OFF 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.
2. Install in accordance with all national and local electrical codes.
3. This Dimmer complies with IEC and EN60669-2-1.
4. Do not paint Dimmer or Accessory Dimmers.
5. Only one Rania Dimmer can be connected to each lighting circuit.
6. **Accessory Dimmers cannot be used to control lighting loads directly. They must be used in conjunction with a Rania Dimmer to provide control at one or more alternative locations.**
7. It is possible to connect up to 9 Accessory Dimmers to a Rania Dimmer.
8. Maximum wire length between the Dimmer and the furthest Accessory Dimmer is 50 m.
9. A wallbox with a depth of at least 32 mm is recommended.
10. Operate between 0 °C and 40 °C. For indoor use only.
11. Clean with a soft damp cloth only. **DO NOT** use any chemical cleaners.
12. These instructions refer to wiring configurations commonly found in the UK but some installations differ. Refer to www.lutron.com/rania for further information.
13. If you have difficulty understanding these instructions or do not feel confident about installing the equipment yourself, consult a qualified electrician.

Installation Considerations.

1. Accessory Dimmers are not equipped with the LED indicators found on the Rania Dimmers. Select a location for the Rania where the LED status information will be most beneficial.
2. Accessory Dimmers do not pick up signals from hand held infrared transmitters. Again, when choosing locations, install the Rania where it is best placed to receive signals from the IR handset (where applicable).

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.

This product may be covered under the following European patent: EP0587878; and corresponding patents and design registrations in other countries. Patents pending.

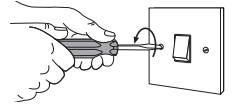
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Installation

1 **WARNING:** Turn power OFF at consumer unit (fuse box) and isolate circuit by switching OFF MCB, or remove fuse.

2 Remove switch mounting screws. Remove switch from wall.

Note: DO NOT disconnect wires from the switch.

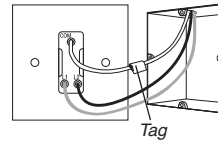


Caution: Verify power to each switch is OFF before proceeding.

3 Tag the wire(s):

Two-Location control

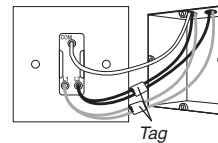
3-Wire



One switch will have three wires connected to three terminals.

Tag the wire connected to the centre terminal (often marked COM) with a piece of electrical tape for later identification.

5-Wire

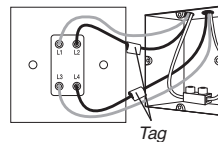


At the second position there will be five wires entering the box. One wire connects to the centre terminal (often marked COM). Another two pairs connect to the remaining terminals (often marked L1 and L2).

Tape the two wires connected to terminal L1 together for later identification. Likewise, tape the two wires connected to terminal L2 together.

Three-Location control or more

6-Wire



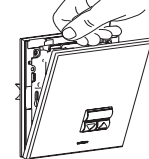
Two of the switches will be as shown above for Two-Location control. Any others will be Intermediate switches.

A total of six wires enter the box. Four wires connect to the switch terminals, while another pair of wires (of the same colour) are joined together in a separate terminal block.

Tag two of the wires of the same colour that connect to the switch. Leave the other pair untagged. Leave the third pair connected together in the terminal block.

4 Disconnect switch wires.

5 Prepare Dimmer for installation.

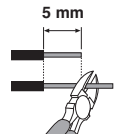


Snap off Front Plate

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.

Notes: Dimmer and Accessory Dimmer do not require an earth connection. Leave earth wires undisturbed or follow your local and national electrical codes with regard to termination of the earth wires in backboxes.

6a - Wiring The Rania Dimmer

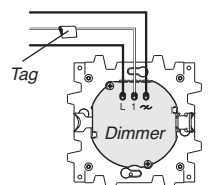
a. 3-Wire Location:

Connect the tagged wire to the centre terminal (marked 1).

Connect the untagged wires to the outer terminals (marked L and N).

(See *Wiring Schematics* Figure 3).

OR



b. 5-Wire Location:

Connect the untagged single wire to the centre terminal (marked 1).

Connect the tagged pairs of wires to the outer terminals (marked L and \sim).

(See *Wiring Schematics* Figure 1).

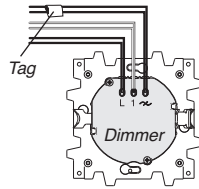
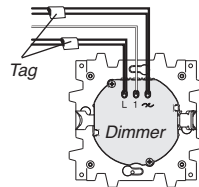
OR

c. 6-Wire Location:

Disconnect the two wires that are joined in the terminal block. Connect them both to the centre terminal (marked 1).

Connect the tagged pair of wires to the outer terminal marked \sim .

(See *Wiring Schematics* Figure 2).



6b - Wiring The Accessory Dimmer

a. 3-Wire Location:

Connect the tagged wire to the centre terminal (marked 1).

Connect one of the untagged wires to the outer terminal marked \downarrow . Leave the other wire unconnected. Ensure that it is properly insulated - e.g. by use of an insulated terminal block.

(See *Wiring Schematics* Figure 6).

OR

b. 5-Wire Location:

Connect the untagged wire to the centre terminal (marked 1).

Connect one of the untagged pairs to the outer terminal marked \downarrow . **DO NOT** connect the other pair of tagged wires to the Accessory Dimmer, but connect them together in an insulated terminal block.

(See *Wiring Schematics* Figure 4).

OR

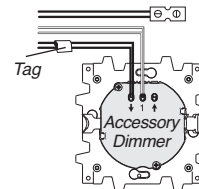
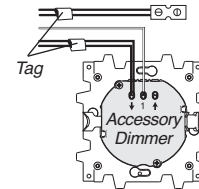
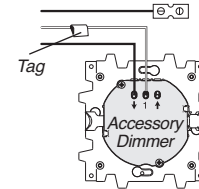
c. 6-Wire Location:

Disconnect the two wires that are joined in the terminal block. Connect them both to the centre terminal of the Accessory Dimmer (marked 1).

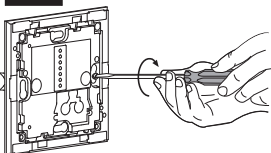
Connect the tagged pair of wires to the outer terminal marked \downarrow .

DO NOT connect the other untagged pair to the Accessory Dimmer, but connect them together in an insulated terminal block.

(See *Wiring Schematics* Figure 5).



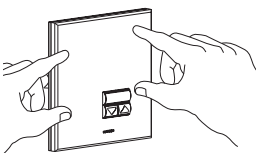
7 Mount and align Dimmer and Accessory Dimmer.



- Mounting claws may be removed (if fitted).
- Secure Dimmer and Accessory Dimmer(s) to the backbox.

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

8 Snap on Front Plate.



- Align the Front Plate with the body.
- Press corners to ensure four snaps engaged.

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.

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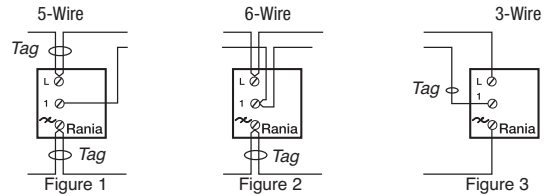
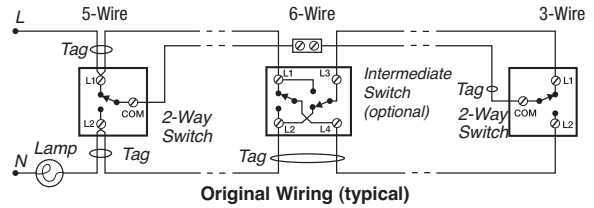
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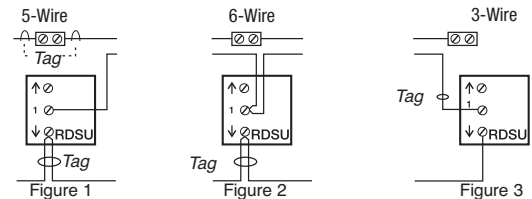
9

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

Wiring Schematics



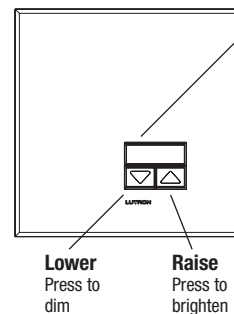
Dimmer Installation



Accessory Dimmer Installation

Operation

Model: **RDSU-452 (Accessory Dimmer)**



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 on the master dimmer 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).

Problems

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