A guide to wallbox dimmers





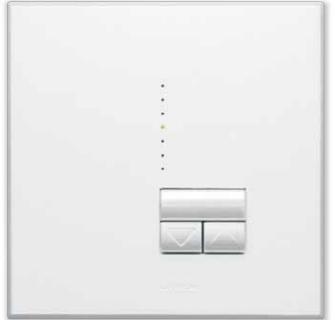








A better quality of light.



Actual size.

A dimmer is a dimmer is a dimmer, right? Actually, no. The quality of lighting controls varies enormously.

Lutron products have always been known for being well designed, manufactured to high standards, 100% tested, reliable and durable to assure your satisfaction. Rania_® dimmer

High standards of design and manufacture mean that many Lutron installations from the late 1960s and '70s are still operating today. And since developing the original dimmer, we now offer the industry's most comprehensive range of lighting control products.



Controlling light, mood and ambience.



At Lutron we understand the many advantages of controllable light better than anyone else. We pioneered the idea of dimming back in 1961, when our founder, Joel Spira, invented the first electronic solid-state dimmer.

Since then, we have introduced many innovations in lighting controls.



Today we have more than 250 patents, and more than 11,000 products shipped to 80 countries.

This commitment to original, ingenious ideas has made Lutron the first choice for many homeowners, lighting designers, engineers and architects.



You'll find Lutron in all kinds of homes around the world – it's become *the* name in lighting controls for private residences.

And you'll also come across Lutron systems in offices, restaurants, hotels, shops, museums, universities and public buildings.



From the Millennium Bridge in Gateshead to the Bank of China's headquarters in Beijing, the Statue of Liberty in New York to the Guggenheim Museum in Bilbao, we're proud to have worked on the most ambitious lighting control projects across the world.

Lutron – lighting to match your mood.

Cosy, romantic effects from the living room to the master bedroom. Cuddling up on the sofa to watch a movie, you want that cinema-style effect – at the touch of a button. And we all know that nothing lights up a romantic moment like soft, subtle lighting.

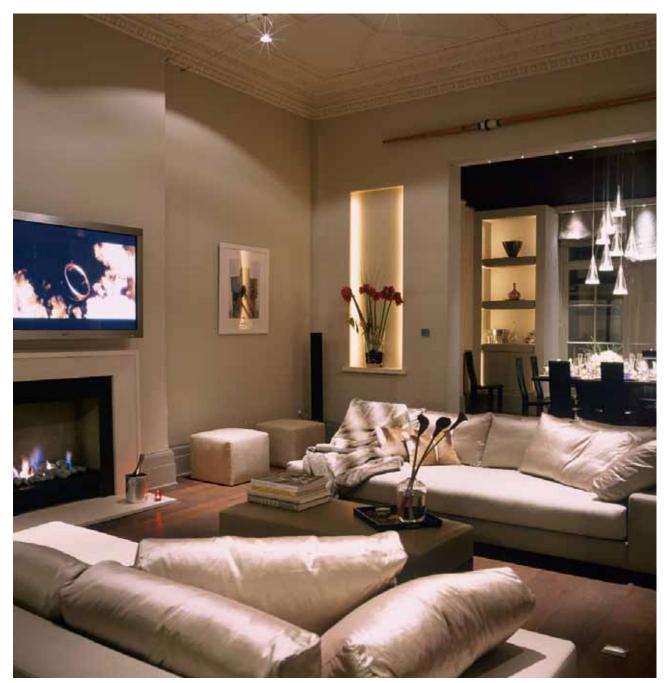
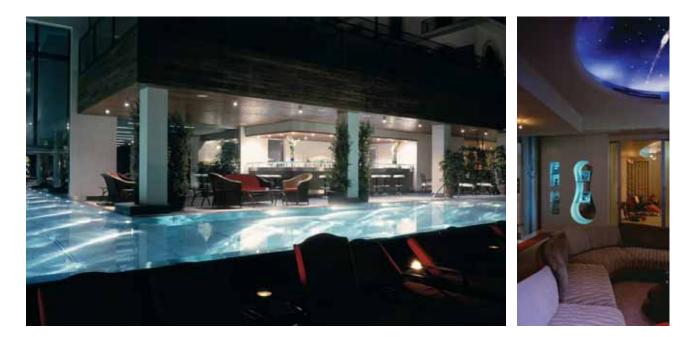


Photo: Permission of Christina Fallah Designs Limited.

Bright lights for every task. Sometimes you need good light carefully directed to the task in hand – whether you're cooking up a stir-fry, writing your presentation or working wonders with an eye pencil. Your lighting can match your own flexibility – with different light levels, for any activity, in the same room.



Dramatic effects for special occasions. Lighting can be quite "theatrical". For example, when you're setting the table for a dinner party, the finishing touch is beautiful lighting. And with controllable lighting, you can pick out a painting, or highlight a favourite *objet d'art*. While outdoors, you can conjure a little magic with lighting for pools and paths.

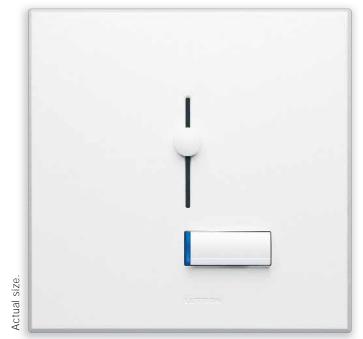


Lutron's latest range.

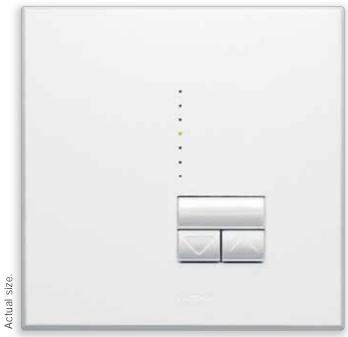
Our stylish new dimmers come in an assortment of colours, finishes and contemporary designs, with co-ordinated accessories and wallplates.

- · New universal dimmer (Rania® range) controls electronic and magnetic low voltage where load is unknown
- · Control incandescent, halogen, low voltage lighting and table lamps
- · Rania available in IR and RF
- · Products available in a range of wattages 250 W - 500 W

Lyneom preset



Rania



Lyneo and Rania range available in these colours





Satin Nickel



Other colours and finishes available upon request.

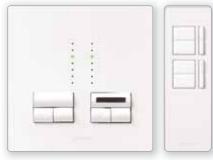
Lyneo preset dual Lyneo slide to off (sto)

Rania dual





Rania IR dual with dual remote

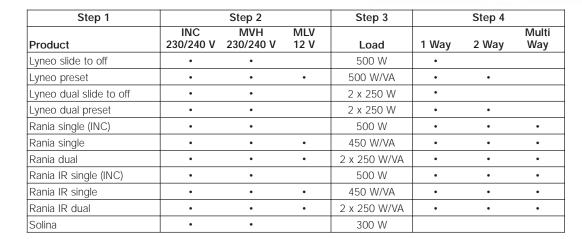


Solina_{TM} table and floor lamp dimmers

Solina available in these colours











Lyneo slide to off dual

Lutron accessories and wallplates.







Intermediate switch 4-way, 250 V / 10 A

Phone/tv jack

Dual switch

2-way, 250 V / 10 A

Lutron offers a comprehensive range of accessories to co-ordinate the finish and colour of power outlets, switches and jacks with your Lutron dimmers. Two Lutron products can also be framed together.

Accessories available for Lyneo™, Rania® and Rania IR.

Accessories

- · Single switch
- · Dual switch
- · Intermediate switch
- · 16 A schuko socket
- 16 A French socket
- 13 A UK switched socket
- Twin UK switched socket
- 10 A Chinese socket
- $\cdot\,$ UK phone jack
- · RJ11 phone jack cat 3
- French phone jack
- RJ45 network jack cat 5
- SAT jack (75 Ohm)
- Triplexer terminated
- · Triplexer intermediate
- $\cdot\,$ 2-port frame (frame only)
- RJ11 connector
- · RJ45 connector cat 5
- RJ45 connector cat 6
- Coax cable connector
- BNC jack
- MT-RJ fibre jack
- SC simplex fibre jack
- LC fibre jack
- ST fibre jack
- · 1 gang frame
- · 2 gang frame
- · 3 gang frame
- Blank faceplate

Design support.

Warranty and service programmes

Warranty. All Lutron products are covered by a 2 year warranty. Service programmes available.

Training seminars

When you attend a training session at Lutron, you make a commitment to staying at the forefront of lighting control technology.

Whether you are new to the industry, or are an established professional, each Lutron seminar will:

- Introduce you to the latest lighting control technologies
- · Help you choose the right product
- Give you all the information you need to best satisfy the requirements of your customers

If you've attended one of our sessions in the past, we look forward to welcoming you back to a new experience. It's important to come back every few years for a refresher course. Lutron's product line is constantly evolving, utilising advances in software and design technologies, and providing your customers with features that bring out the best of every lighting design. Let our staff keep you up-to-date, and help you increase your earning potential. Call us today on 0800 282 107 to reserve your spot on a Lutron seminar, or have a Lutron representative contact you.

We have training facilities at our European headquarters in London, Paris and Berlin.

Design support

Call on Lutron's project management teams to help you design and layout any project, ensuring that the lighting control strategies complement your unique vision, and meet the specific requirements of the latest environmental design criteria, including the LEED Green Building Rating System.

Marketing support

To create demand, generate interest and drive sales, Lutron are supporting the launch of this brand new range of dimmers with a pan-European marketing campaign that includes PR, advertisements in home interest magazines, product brochures and exhibitions.

Customer helpline

If you have any questions about Lutron's products and services please call our helpline on 0800 282 107.

Answers to common questions about dimmers.

How do dimmers save energy?

The triac or FET is the key to dimming, this dimmer component actually turns light on and off very rapidly – 100 times per second. The longer the triac is off, the lower the light output, and the greater the energy savings. Lutron dimmers pay for themselves.

If the lights are being turned on and off, won't the lights seem to be flickering?

No matter how bright or dim, the light level is constant and smooth. The human eye has a built in persistence to see things after they go away. An example of this is in movies where the film is projected on the screen many times a second.

Doesn't turning the lights on and off quickly reduce lamp life?

No. Heat decreases lamp life. By reducing heat, lamp life is increased.

Does dimming affect halogen lamp life?

Yes. Dimming increases incandescent lamp life. Halogen lamps are incandescent lamps with a tungsten filament. Lutron's pilot test data suggests that halogen lamps will have an expected lamp life similar to other incandescent lamps when dimmed.

Why do dimmers get warm, and is this safe?

During normal operation, solid-state dimmers generate heat. A solid-state dimmer is roughly 98% efficient -2% of the power dissipates as heat, causing the dimmer to feel warm to the touch. The closer a dimmer is run to full output and the higher the load (watts) on the dimmer, the warmer it will feel. This is perfectly normal and safe.

Why does my lamp buzz?

Occasionally, you may sometimes notice that a lamp is buzzing. This is caused by the lamp filament vibrating as the dimmer rapidly switches the lamp on and off. Lamp buzz is generally noisiest at the mid-range (50%) dimming level. If this happens, use rough service lamps (sometimes called garage door opener lamps), physically smaller lamps, or lower wattage lamps.

Why do my lights flash or suddenly change levels?

You may be experiencing a common neutral interaction. Common neutral interaction is cross talk between dimmers that share the same neutral wire. This may cause the lights to flicker, flash or suddenly change intensity. When solid-state dimmers are operating, voltage spikes occur and are transmitted onto the neutral wire.

How can I minimise radio frequency interference?

Radio Frequency Interference (RFI) occurs when solid-state dimmers emit noise that interferes with AM radios and audio equipment. Every Lutron dimmer includes radio frequency interference suppression circuitry. Additional filtering may be required in some applications. In instances where interference does occur, Lutron recommends the following:

- Ensure there is 2m (6') between the dimmer and audio equipment
- Place the dimmer on a separate circuit than the audio equipment
- $\cdot\,$ Run dimmer wiring in its own metal conduit
- Purchase an in-line filter for the audio equipment
- Use an electronic low-voltage dimmer for incandescent loads

Can using dimmers save money?

Dimmers save energy and increase the life of your lamps so they are friendlier to the environment and to your pocket.

Dimming	Saves electricity	Lamps last longer
10%	10%	2 times longer
25%	20%	4 times longer
50%	40%	20 times longer
75%	60%	>20 times longer

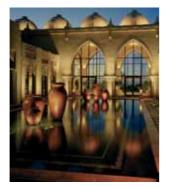


If you have a question, please call the Lutron customer helpline.



Lighting up the world.

At Lutron we have a passion for our product. And we have the enthusiasm of pioneers on the subject of lighting control. That's why we always like to share images and stories of our most ambitious projects – to inspire you to realise your dreams.





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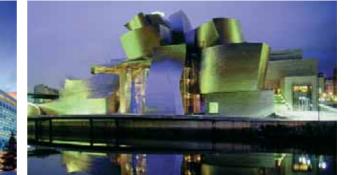
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