



2-in-1 LED Dimmer With RF Wireless Touchpad

Model # DIM2IN1-RFUC

The Armcast Lighting 2-in-1 LED Dimmer with RF Wireless Touchpad provides remote switching and dimming for low voltage LED lighting. It works through walls and doors up to 100 ft. away. Using radio frequency (RF) technology, it eliminates the need to run wires from the LED lighting to the remote switch location, and is useful in projects where installing new cabling can be difficult. With this model, use either the rotary knob dimmer receiver or the remote touchpad for 2-way switching and brightness control.

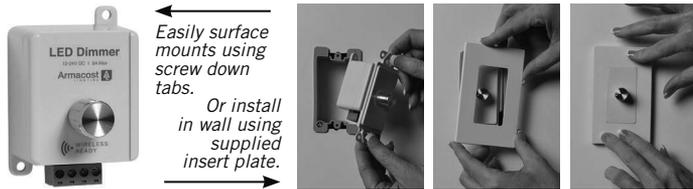


Dimmer Receiver
Wireless Transmitter
PATENT PENDING

Features RF pairing technology for expandability and multi-zone lighting control. One wireless remote touchpad can be paired to control and synchronize multiple dimmer receivers in the same area, or multiple touchpad/receiver sets can control different zones of lighting in the same area, each using a unique frequency code, without cross interference.

Includes rotary knob dimmer (receiver unit), designer-style wireless touchpad (transmitter), optional designer insert plate and hardware, mounting screws and drywall anchors. Also includes one 12V alkaline battery (27A) for transmitter.

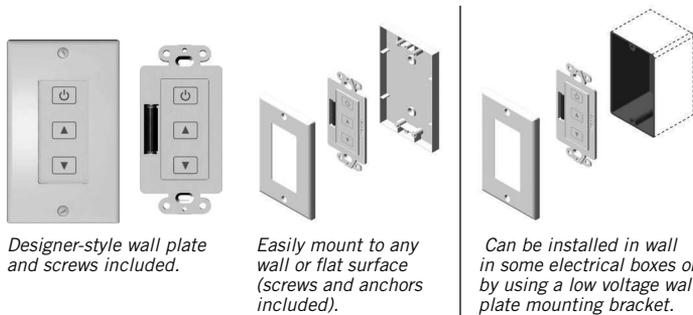
Both the rotary knob dimmer receiver and wireless touchpad can be surface mounted to any wall or installed in any standard switch box.



Easily surface mounts using screw down tabs.
Or install in wall using supplied insert plate.

WIRELESS TOUCHPAD TRANSMITTER INSTALLATION

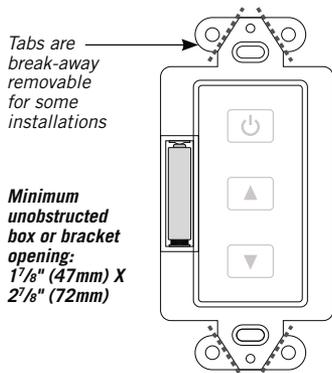
Surface mount touchpad transmitter or install in wall.



Designer-style wall plate and screws included.

Easily mount to any wall or flat surface (screws and anchors included).

Can be installed in wall in some electrical boxes or by using a low voltage wall plate mounting bracket.



Tabs are break-away removable for some installations

Minimum unobstructed box or bracket opening:
1 1/8" (47mm) X
2 7/8" (72mm)

Touchpad may not fit some smaller electrical boxes. See minimum size dimensions and choose an appropriate electrical box or mounting bracket.

Some installations may require the removal of tabs as shown, simply break away with wire cutters.

Note: Compatible with some, but not all, switch plates made by other manufacturers.

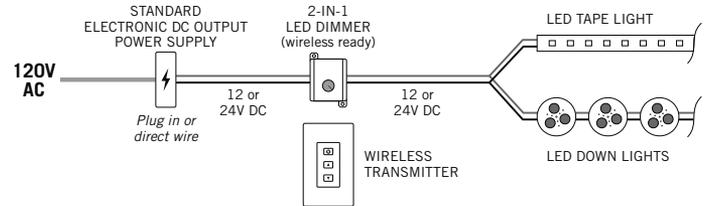


Typical Low Voltage Wall Plate Mounting Bracket

WIRING AND CONNECTING

- For use only with 12V DC or 24V DC low voltage single color LED lighting. Do not connect this device to 120V AC current.
- Do not connect more than one dimmer to a power supply in the same circuit. Doing so will cause the LED lights to flicker.

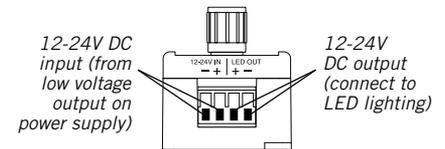
The dimmer receiver unit can be connected anywhere between your low voltage power supply and your LED lighting.



When used in an RV or boat interior application, dimmer can be direct wired to on-board 12V or 24V vehicle battery.

Be sure to maintain + / - polarity. Red wires are + (positive) black wires are - (negative).

Low voltage wires from the power supply connect to the left side or 12-24V input as indicated on the green terminal block. Wires that go to the LED lighting connect to the right side of the terminal block.



Maintain +/- polarity

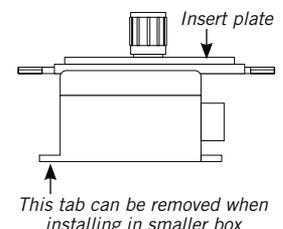
Failure to observe polarity may damage the dimmer and void the warranty.

IMPORTANT

- Use only with 12V or 24V DC constant voltage electronic power supplies. Not compatible with magnetic power supplies or low voltage power supplies with AC output.
- All wiring must be in accordance with national and local electrical codes, low voltage Class 2 circuit. If you are unclear as to how to install and wire this product, contact a qualified electrician.
- Do not exceed 8 amp load (96 watts when used with 12V LEDs or 192 watts when used with 24V LEDs).
- Use only insulated staples or plastic ties to secure cords and wires. Route and secure wires so they will not be pinched or damaged.
- For wire runs inside of walls, use certified CL2 or better cabling and appropriate mounting hardware.
- Do not install Class 2 low voltage wiring in the same runs as AC main power. If AC and low voltage wires cross, keep them at 90-degree angles.
- Units are for dry location only; if used outdoors, keep in a dry location.
- Wireless function may not operate properly in close-to-freezing weather.

To convert dimmer receiver unit for in-wall installation

Carefully remove rotary knob and install insert plate on top of dimmer as shown. Secure with washer and hex nut. Dimmer can now be mounted into standard switch box. Finish by installing designer-style switch cover plate (sold separately at most home improvement stores). Remove green quick connect terminal block for easier wire routing. Route wires with terminal block then snap terminal block back into dimmer.



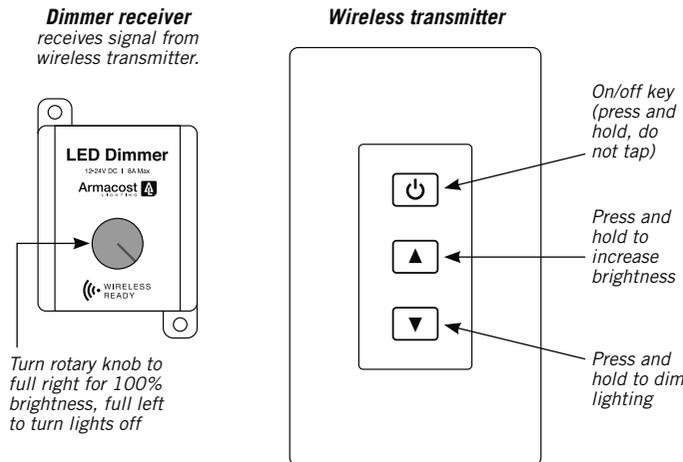
This tab can be removed when installing in smaller box

For better LED brightness, keep voltage drop to a minimum

Voltage drop is a natural occurrence in all low voltage lighting systems. It only becomes undesirable if you notice the brightness in one area of your lighting is objectionably different than another area. As a practical approach to installing LED lights, test your lighting prior to final installation. If voltage drop appears to be a concern, use shorter lengths of DC power feed wires or switch to a thicker gauge wire (lower AWG number). For an online voltage drop calculator, visit armcastlighting.com/installation.

OPERATION

After switching on the power supply, simply turn the dimmer receiver's rotary knob to full right to turn on lights to full brightness. Once the battery is installed the wireless touchpad is factory paired to the dimmer receiver and will be fully functional. Pressing the touchpad keys will take control of the receiver unit. Likewise, turning the rotary knob on the dimmer receiver will override and take control back from the touchpad.

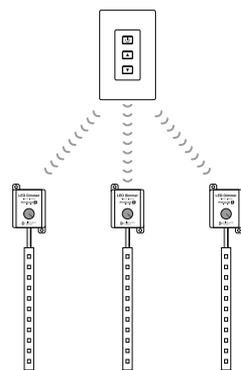


In the event of a power outage, once power is restored to your LED lighting, the brightness will be at the level where the rotary knob on the receiver unit was last set, not the last setting on the wireless touchpad. This is also true if the lights are switched off by turning off the power supply.

PAIRING AND MULTI-ZONE LIGHTING

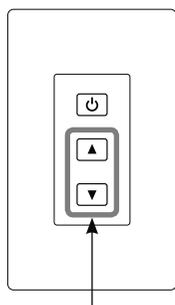
If you purchase multiple 2-in-1 LED Dimmers with RF Wireless Touchpad (Model # DIM2IN1-RFUC), each unit will come programmed with a unique frequency code, each RF dimmer can independently control different sets of LED lighting in the same area without any cross interference.

However, depending on the lighting layout, and to reduce the need for extra wiring, it can be advantageous to have the units on the same frequency code to control multiple sets of lighting in the same area all at once. This is called "pairing".



Pairing additional dimmer receivers is simple

1. Connect the wireless ready dimmer receiver unit that is to be paired to a power supply and LED lighting. Ensure the dimmer and LED lights operate properly. Have the wireless touchpad in close range to the receiver, 10 feet or closer for pairing.
2. Disconnect power to the dimmer by unplugging or switching off the power supply. Leave off for at least 5 seconds. You can also disconnect power by pulling out the green block connector on the dimmer.
3. To pair, restore power to the power supply and dimmer and within 2 seconds press the brightness up and brightness down keys simultaneously.



To test, press the on/off key of the wireless touchpad to confirm that it can control the receiver. If not, repeat the process.

To add or pair more receivers, repeat the same process with additional receivers. The transmitter will pass its unique code to multiple receivers.

To synchronize multiple receivers, so that all lights turn on/off and dim in unison to one transmitter, simply manually turn off all receivers with each rotary knob. Then press the power on key of the remote touchpad. All lights should turn on at the same time.

Note: you can also "un-pair" the dimmers by following the process above but press the power on and brightness up keys instead.

IMPORTANT: Do not press any key on the transmitter repeatedly or too quickly or the receivers will lose synchronization and fail to operate in unison. Also, for effective synchronization, all receivers must be within range of the single wireless touchpad.

If you would like to purchase additional dimmer receivers or wireless touchpads, visit the retailer where you made your purchase or armacostlighting.com.

TROUBLESHOOTING

LED tape light strip does not light/flickers, or dimmer is not dimming.

Make sure the LED power supply and dimmer is turned on and receiving power.

Confirm you have maintained correct polarity (+ to + and - to -) when joining LED strips as well as when connecting wires to the dimmer and to the power supply.

Confirm that the wires to the left input side of the LED dimmer are coming from the power supply, and not the LED lighting.

Check to be sure all tape light connections and any switch or dimmer connections from the power supply to the LED tape light are secure.

Try re-seating the wires that go into the dimmer's green terminal block, tighten screws securely. Consider testing with a multimeter to ensure light strip is receiving power.

The wireless touchpad does not work.

Be sure the touchpad is in range of your receiver. Try moving the touchpad closer to the receiver. The dimmer is a radio frequency (RF) device and, as such, the range of the wireless remote control is dependent on many factors. Actual operational distance will vary based on walls and line of sight obstructions, and other nearby electronic devices.

Be sure your battery has a charge. To check battery, press the on/off button in a dark room/location. When pressed, you should see a red LED indicator light glowing from behind the surface of the touchpad. If you do not see this glowing red light, replace the battery (Alkaline 27A 12V). A battery will last from 6 months up to 3 years, depending on usage.

The receiver may need to be paired again with your transmitter.

If your dimmer receiver is functioning properly, and you know your transmitter battery is fresh, yet the transmitter will not control your lighting, please revisit the pairing instructions at left.

SPECIFICATIONS

Input voltage.....	12V-24V DC
Output current.....	.8A
Max load with 12V DC lighting.....	96 watts
Max load with 24V DC lighting.....	192 watts
Working temperature (receiver only, non wireless)	5 to 130°F (-15 to 55°C)
Working temperature (using wireless function).....	40 to 130°F (4 to 55°C)
Wireless working frequency.....	433.92Mhz
Listings	CE, RoHS, FCC, CSA
Transmitter battery.....	Alkaline 27A 12V
FCC ID	NWKHF10008
Country of origin.....	China

Limited 1-year warranty. This product is for dry location use only. Improper installation, improper powering, abuse, or failure to use this device for its intended purpose will void warranty. Proof of purchase is required for all returns. Questions? Email support@armacostlighting.com.



This item is a Radio Frequency Device (RF), and as such the range of the remote control is dependent on many factors. Actual operational distance will vary based on walls and line of sight obstructions, and other nearby electronic devices.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.



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