

BASIC OPERATING INSTRUCTIONS

Lightning Switch®

*Install Switches in a fraction of the time
...at a fraction of the cost*

(North America version)

First determine what kind of Transmitter & Receiver you have



Continental



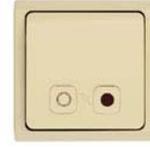
Decorative
Narrow



Decorative
Wide



Decorative



Continental

Toggle Transmitter

This Transmitter sends a "Toggle" or "Change State" command.
If the light is "Off", it will turn "On."
If the light is already "On", it will turn off.

Master Transmitter

This Transmitter sends an "On" command with the left button
and an "Off" code with the right button.
If the light is already "On" when the left button is pressed,
the light will stay "On."
This is the Transmitter to use if you are controlling several Receivers
simultaneously, or if you cannot see the light that you are turning "On".



Decorative



Continental



Double Toggle Transmitter

This Transmitter can send two unique "Toggle"
or "Change State" commands.
It can control two separate devices.
Use the left button for one device
and the right button for the other device.
For best results, be sure to press any
Multifunction Transmitter at the spot shown.

In addition to the two styles – Decorative and continental - Transmitters also come in two sizes: Small and Large.
The choice of size is strictly cosmetic, so you can choose whichever style and size best suits your needs.



Small Narrow
Toggle



Large Narrow
Toggle



Small Double
Toggle



Large Double
Toggle

Lightning Receivers come in Wire-In and Plug-In versions



Wire-In Receiver
RMW120 P4 (or P3)



Plug-In Receiver
RMP120P5 (or P4)

All Lightning Switch 120 Volt Receivers with Product Numbers P3 or higher (e.g., RMP120P3, P4, or P5 – or - RMW120P3 or P4) can handle up to 15 Amps (1800 Watts maximum!)

Earlier models could only handle 500Watts, but all new Receivers can handle 15 Amps/1800Watts

Step 1: Power the Receiver(s)

- **Plug the Plug-In Receiver into any 110/120 Volt outlet.**
(for 110/120 Volt Wire-in Receivers, wire the Receiver into any 110/120 Volt electrical box.)
(for 12 Volt Wire-in Receivers, wire the Receiver into any 12-14 Volt DC electrical supply.)
For Wire-In Receivers, please follow the installation instructions provided with the Receiver.

The Red Light will glow for a few seconds to confirm that the outlet is powered.

Note: A Receiver will not respond to any Transmitter, until the Receiver "Learns" the code of that Transmitter.

Step 2: Train the Receiver(s) to respond to your Transmitter(s)

Before a Receiver will respond to commands from a Transmitter, it must be "trained" to respond to the Transmitter.

- *Wait 5 seconds after the red LED goes out, then **Press and release the "Learn" button on the Receiver.***
The Green Light will glow for a few seconds, during which the Receiver is in "Learning" mode.

- **While the Green Light is glowing, press the Transmitter button.**
The Green Light on the Receiver will go out when it has "Learned" the code of the Transmitter.

Note: If the green LED flickers but stays on, this means that this Receiver has already learned the ID code this Transmitter.

The Receiver has "Learned" that Transmitter's unique code and will now respond to that Transmitter.

Note: A Receiver can "Learn" to respond to 40 different Transmitters.
After the initial installation, the Red Light will glow whenever the Receiver is "ON".

Note: If you have a **Double Toggle** or **Master Transmitter**, train the **FIRST** Receiver by pushing the **Right Function Button**... and then train the **Second** Receiver by pushing the **Left Function Button**.
For any Transmitter with two buttons, it is important to press on the correct spot as shown.



More Information

How to "Erase" a Transmitter's code from a Receiver's memory

- 1.) **Press and release the "Erase" button on the Receiver.**
The Yellow Light on the Receiver will glow for a few seconds, during which the Receiver is in "Erase" mode.
- 2.) **While the Yellow Light is glowing, press the Transmitter button.**
The Yellow Light on the Receiver will go out when it has "Erased" the code of the Transmitter.
The Receiver will no longer respond to that Transmitter. Note: If the Transmitter ID Code you are trying to erase is not in the Receiver's memory, the yellow LED will blink off and then turn on until it times out. This is your notice that this Transmitter ID Code has already been erased from this Receiver.

How to "Erase" ALL Transmitter codes from a Receiver's memory

- 1.) **Press and hold down the "Learn" and "Erase" buttons at the same time – for about 5 seconds.**
The Green and Yellow indicator Lights will glow – and then will both begin to blink together.
- 2.) **After the Green and Yellow Lights start blinking, release the "Learn" and "Erase" buttons.**
The Green and Yellow indicator Lights will continue to blink.
- 3.) **While the Green and Yellow Lights continue to blink, again press the "Learn" and "Erase" buttons at the same time. Hold them down until the two Lights stop blinking and go out.**
The Receiver's memory has been completely "Erased".

Special Features

(Optional) Adjustable Timer

If the Timer feature is implemented, the Receiver will turn itself "Off" after a set period of time.

The factory default position is NOT to use the Timer feature.

If you want to use the Timer option, you need to go into "Timer Set-Up" mode as follows:

- Press *and hold* the "Erase" button for ~3 seconds until the yellow LED stays "On". You will now be in "Set-Up" mode. After you release the "Erase" button, the green LED will blink to tell you the present setting. (see the chart below to interpret the blinking green LED)
- If you want to change the Timer settings, press *and release* the "Erase" button to increment to the next higher setting on the chart below. You must press the "Erase" button within 10 seconds. *If you do not press any other buttons within 10 seconds, the Receiver will return to normal operating mode.*
- Each time you press *and release* the "Erase" button while in "Set-Up" mode, the Receiver will change to the next setting on the chart and then the green LED will blink to indicate the present status. Repeat this process as needed to get to the desired time "On" setting. When you reach the maximum time delay, the next press of the "Erase" button will turn the Timer feature off. Pressing the "Erase" button once more will start the process over.
- Once you have reached the desired time delay, press *and hold* the "Erase" button until the yellow LED turns off.
- To return to the factory default (no Timer) at any point while in "Set-Up" mode, press *and release* the "Learn" button. The green LED will blink rapidly for 5 seconds indicating that the Timer Function is disabled.

Adjustable Timer	
Time ON	Green LED Blink Cycle
0.5 sec	2 short blinks
1 sec	1 long blink
3 sec	1 long blink & 2 short blinks
1 min	2 long blinks
2 min	2 long blinks & 2 short blinks
10 min	3 long blinks
30 min	3 long blinks & 2 short blinks
1 hour	4 long blinks
4 hours	4 long blinks & 2 short blinks
Timer Function Disabled	Fast blinks for 5 seconds

Note: You must choose from among the available time delays shown on the chart. You cannot set your own time delay.

Virtual Latching

If the power supply is interrupted, The Receiver can be set to return to one of two states when power is restored:

1. Virtual Latching ON: When Power is restored, the Receiver will return to the status that it was in when the power was interrupted. This is similar to what happens to a lamp when your power goes off in a thunderstorm. When power is restored, the lamp will return to whatever state it was in before the power loss. If it was "On" before the power loss, it will turn back "On" after power is restored. ***This is the factory default setting.***
2. Virtual Latching OFF: When power is restored, the Receiver will stay "Off" until it is commanded to turn "On" by a Transmitter. This is a safety and convenience feature. If your lamps are controlled by a Receiver with Virtual Latching OFF, when the power is restored at 3 AM, your lights (motors, etc) will not come back on until you turn them on with a Transmitter.
 - To set the Virtual Latching Function, press *and hold* both the "Learn" and "Erase" buttons for ~4 seconds until the green and yellow LED's start to blink together for 3 seconds. (similar to "Erase All")
 - To turn Virtual Latching ON, while both the green and yellow LED's are still blinking, release both buttons, then press *and hold* the "Learn" button until the red LED comes on. The red LED will stay on for about 3 seconds. This will set Virtual Latching "ON". If you do not press any other buttons within 3 seconds, the Receiver will return to normal operating mode.
 - To turn Virtual Latching OFF, while both the green and yellow LED's are still blinking, release both buttons, then press *and hold* the "Erase" button until the red LED blinks. The red LED will blink for about 3 seconds. This will set Virtual Latching "OFF". If you do not press any other buttons within 3 seconds, the Receiver will return to normal operating mode.

Manual Override

If you lose or break your Transmitter, the Receiver can still be turned "On" and "Off" manually.

- To turn the Receiver "ON", just turn the power supply "On" three times and "Off" twice by unplugging the Receiver or by using a circuit breaker. To implement this feature, turn the power "ON" at the circuit breaker or plug in the Receiver. The red LED will glow for 5 seconds. You must wait until the red LED turns off, then turn the power "OFF" within the next 5 seconds. Wait for more than 1 second, then turn the power "ON" once more. The red LED will glow for 5 seconds again. You must wait until the red LED turns off, then turn the power "OFF" within the next 5 seconds. Wait for more than 1 second, then turn the power "ON" for the third time, and the Receiver will turn "ON". The timing restrictions are designed to prevent accidentally going into "Manual Override" mode during a lightning storm, when your power supply can flicker off and on.
 - Simple Recap: After turning the power ON, wait 6 seconds, then turn it OFF; After 2 seconds, turn it ON a second time; wait 6 seconds, then turn it "OFF"; wait 2 seconds, then finally turn it "ON" a third time. At this time, Manual Override will be implemented *and the Receiver will not respond to any Transmitters.*
 - To make this work, the power must be turned "OFF" within a 5-10 sec window after it is turned "ON," and it must be turned "ON" within 1-5 seconds after it is turned off.
 - **The easy way to remember this is to turn it "ON," wait 6 seconds, turn it "OFF," wait 2 seconds, and repeat.**
- While in Manual Override mode, to turn the Receiver "OFF", just turn the power supply "Off".
- To return to normal operating mode, just turn the power "Off" to the Receiver, wait more than ten seconds, and turn it back "On". So long as you do not cycle it off and on three times as described above, the Receiver will be in normal operating mode and will now respond again to Transmitters.

Adjusting Receiver Sensitivity for P4 & P5 Version Receivers (not P3 versions)

When the Wire-In Receiver is shipped to you, it will be pre-set to the default "standard" sensitivity level, which is designed to achieve the greatest range possible, while responding only to your commands. Under certain high-noise RF conditions, the Receiver may experience an unwanted "Turn-On", or an unwanted "Turn-Off". This is very unlikely; but should this ever occur to you, you can tighten the sensitivity for the RF section to prevent this. This will eliminate any chance that the Receiver may respond to random noise. As a consequence, tightening the sensitivity will cause a minor decrease in effective range.

If you ever experience an unwanted turn-on, you can switch to a tighter sensitivity level by simply pressing the "Learn" button 4 times in rapid succession. (tap-tap-tap-tap, with no delay) The "Learn" LED will then blink 4 times to show you that your command has been accepted. If at any time you decide to return the Receiver to the factory default "standard" sensitivity, just press the "Erase" button 4 times in rapid succession. (tap-tap-tap-tap, with no delay) The "Erase" LED will then blink 4 times to show you that your command has been accepted. You can switch between these two levels of sensitivity at any time. Again, it is unlikely that you will ever need this feature, but it is there for you if you do need it.

TRANSMITTER INSTALLATION

Transmitters

Lightning® Transmitters can be:

- installed on any generally flat surface, using the double-stick tape that is provided; or
- installed on a wall, etc., using the mounting screws that are provided with each Transmitter (for Small Plate Transmitters, the Transmitter Plate must be removed so that you can screw the Transmitter Base on the wall using the screw holes in the Base); or
- used as portable remote controls – carried in your pocket, purse, in your car, etc.; or
- left on a tabletop or in a drawer.

Removing/ Changing Transmitter Plates

The Transmitter "Plate" is the white/ivory/brown rectangular plastic piece that surrounds the Transmitter Button.

The Transmitter Base is the black or gray plastic piece with the Transmitter Button mounted on one side.

Hold the Transmitter so that the silver colored square is at the upper right corner.

To remove a Transmitter from a Plate:

Using your hands as shown in the photo, flex or bow the top of the Plate slightly and push the upper edge of the Transmitter Base so that it pops out of the upper part of the Plate.

To insert a Transmitter into a Plate:

Insert the lower edge of the Transmitter Base into the Plate at an angle as shown in the photo. Be sure that the lower edge is fully seated, as shown. Then, using your hands as shown, flex or bow the top of the Plate slightly, and press the upper edge of the Transmitter Base into the upper part of the Plate. It will "snap" into place.

Note that both the Large and Small Plates are symmetric - they each have two "sides" and a top and bottom edge. Either of the curved edges of the Plate can be the top or bottom. The two sides of the Plate with near vertical walls are the left and right sides.

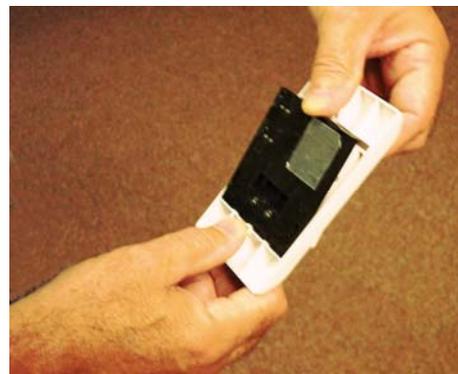
The Transmitter itself has a top and a bottom. The Lightning® logo is at the bottom right corner of the Transmitter Base.



Small Plate Transmitter



Large Plate Transmitter



Changing the Plate on a Transmitter
(Large Plate Transmitter Shown)

For the Latest Information on Lightning® Products, including Frequently Asked Questions and detailed instructions for specific installation situations, please visit

www.LightningSwitch.com™ or E-Mail Feedback@LightningSwitch.com

Or Call Toll-Free 1-888-MY-SWITCH (888-697-9482) →9 AM-6 PM, Eastern Time, M-F

Mounting Transmitters

On wood or hard plaster walls:

Remove the Plate from the Transmitter Base and mark the locations of the four holes with a pencil. Drill pilot holes for the screws using a 3/32" (soft materials) or 1/8" (hard materials) drill bit.

Remove one side of the paper backing from the double-stick tape provided with your Transmitter, carefully align it with the Transmitter, and press it onto the back of the Transmitter. **Do not remove the backing paper from the double-stick tape on the side that faces away from the Transmitter (the side that faces the wall).** When used in conjunction with the mounting hardware, the double-stick tape acts as a spacer to separate the Transmitter base from the surface of the wall.

Screw the Transmitter firmly to the wall with the four mounting screws that are supplied in the kit. It is important to mount the Transmitter firmly.

Re-install the Plate onto the Base of the Transmitter. To do this, first press the Plate over the lower edge of the Transmitter Base, then press the top of the Plate onto the top of the Transmitter Base.

On hollow sheet rock walls:

Remove the Plate from the Transmitter and mark the locations of the four holes with a pencil. Drill pilot holes for the screws using a 1/4" drill bit.

Remove one side of the paper backing from the double-stick tape provided with your Transmitter, carefully align it with the Transmitter, and press it onto the back of the Transmitter. **Do not remove the backing paper from the double-stick tape on the side that faces away from the Transmitter (the side that faces the wall).** When used in conjunction with the mounting hardware, the double-stick tape acts as a spacer to separate the Transmitter base from the surface of the wall.

Press the plastic screw anchors that were supplied in the kit into the four holes. Then screw the Transmitter firmly to the wall using the screws provided. It is important to mount the Transmitter firmly.

Re-install the Plate onto the Base of the mounted Transmitter. To do this, first press the Plate over the lower edge of the Transmitter Base, then press the top of the Plate onto the top of the Transmitter Base.

On glass or marble walls:

Each Transmitter kit contains extra-strong double-stick tape that's been pre-cut to fit the Transmitter Base.

Remove one side of the paper backing from the double-stick tape, carefully align it with the Transmitter, and press it onto the back of the Transmitter. Now remove the other paper backing from the double-stick tape and press it firmly onto the wall. The double-stick tape is very strong; make sure you have it where you want it before you press it in place.

Mounting Large Plate Transmitters:

Over a junction box:

Lightning®'s Large Plate Transmitters are designed to cover any single-gang junction box, where you would remove a common wired switch that you want to replace with the Lightning® system. To convert a simple overhead lamp with only a single existing wall switch to a 3-way or 4-way switch:

First cut off the electrical power at the circuit breaker or fuse box.

Then remove the switch cover plate, pull the mechanical switch out of the box and remove the two wires from the switch. Use a wire nut (not supplied) to permanently connect these two wires together. This will allow power to flow to the junction box over the lamp. If there is also a green (ground) wire, re-connect it to the frame of the junction box, if the box is made out of metal, and to any other ground wires in the box. If the box is made out of plastic, simply cap off the green ground wire with a wire nut. If there are more than two wires connected to the switch, you have a more complex installation and you should consult an electrician.

Now (if the Lightning® Transmitter is not already assembled) install the Lightning® Transmitter Base into a Large Plate, then screw the Plate onto the junction box using the two machine screws with colored heads that were provided in the Large Plate kit. Use the machine screws to mount to a junction box, and use pointed screws to mount on a blank wall.

On a blank wall:

You can also mount a large-plate transmitter directly on a wall. Mount the base as described above, then use two painted (pointed) screws and two anchors to mount the plate to the wall.



Lifetime Piezo Power Limited Warranty

Lightning Switch® products are warranted by PulseSwitch Systems, LC against the failure of the Lightning® power-generating piezoelectric element for the lifetime of the original purchaser.

10 Year Limited Warranty

Lightning Switch® products are also warranted by PulseSwitch Systems, LC to be free of other defects in materials and workmanship at the time of sale within 10 years of the delivery of the product.

Warranty Limitations and Instructions

Our obligation under these warranties is limited to, at our sole option, the repair, replacement or refund of the original purchase price of any product proved to be defective within 10 years from the date of delivery. The defective product must be returned to us by the purchaser and must be accompanied with the original proof of purchase.

These limited warranties do not cover damage from any neglect, misuse, contamination, alteration, accident or abnormal conditions of operation or handling, including failures caused by use outside of the product's specifications, or normal wear and tear of mechanical components. This warranty covers the original purchaser only and is not transferable. This warranty is valid only in the U.S.A. and Canada.

THESE WARRANTIES ARE MADE IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE ARE SPECIFICALLY EXCLUDED. Neither seller nor manufacturer shall be liable for any other injury, loss or damage, whether direct or consequential, arising out of the use of, or the inability to use the product. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith. The foregoing may not be altered except by an agreement signed by officers of the seller and manufacturer. PulseSwitch Systems, LC's maximum financial liability under these warranties can be no greater than the defective product's original purchase price.

Any defective product must be returned before these warranties can be honored. All returns must be accompanied by proof of purchase (original receipt or transaction record) and a written statement setting forth the name, address, and daytime telephone number of the owner, together with a brief description of any claimed defects and the circumstances of failure. Parts or product for which replacement or refund is made shall become the property of PulseSwitch Systems, LC. PulseSwitch Systems, LC shall use reasonable efforts to repair or replace any Lightning Switch® product covered by this limited warranty within thirty days of receipt. In the event repair or replacement shall require more than thirty days, PulseSwitch Systems, LC shall notify the customer accordingly. PulseSwitch Systems, LC reserves the right to replace any product that has been discontinued from its product line with a new product of comparable value and function. Since some states do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you. If a court or other decision-maker of competent jurisdiction holds any provision of these warranties invalid or unenforceable, such holding will not affect the validity or enforceability of any other provision.

Defective products and accompanying documentation must be returned to: Warranty Department, PulseSwitch Systems, LC, 427 W. 35th Street, Norfolk, Virginia 23508

Prevent Unsafe Acts!

The most common unsafe acts include using tools or equipment too close to energized parts, intentionally using tools that are obviously defective or unsafe, and failing to shut off electrical equipment for repairs, servicing or inspections.

Don't be a victim of unsafe acts. If you are not knowledgeable or think you are unqualified to work on an electrical installation or repair, do not attempt to do so. Hire a qualified expert such as an electrical contractor and obtain the proper building permits for the work to be done.

- Disconnect power for inspections, servicing or changing accessories.
- Before use, inspect all electrical equipment and electrical outlets. Check cords, plugs and outlets for defects. Use only equipment that is in good condition. Never use equipment that you know is damaged, because no shortcut is worth electrical shock.
- Don't use electrical equipment when your hands are wet or any part of you is touching water. If you must work in damp areas, use a ground fault circuit interrupter (GFCI). Remember that it's best to keep water and electricity far apart.
- Make sure all electrical equipment is properly grounded, and plug power tools into grounded outlets installed with GFCIs. Grounding is one of the most important safety measures you can take whenever you work with electricity. If faulty circuits or equipment allow current leakage, electricity will flow to the ground along the path of least resistance. Grounding ensures you don't become that path by providing an alternate route to the ground. Check ground connections regularly for tightness.
- Keep clear of energized parts. Be aware of the conductive materials and tools around you, and keep them far from sources of electricity. Remember, steel wool, metallic cleaning cloths and some chemical solutions are conductive.
- If you must work with energized parts and lockout/tagout is not possible, always use protective equipment, such as rubber gloves, sleeves, blankets and mats, or nonconducting tools rated for the voltage of the parts. Make sure this equipment is maintained so that it does its job.
- When operating electrical equipment, start and end from "off." Make sure the power switch is off before plugging in equipment. When you are finished, turn the equipment off before unplugging it to protect yourself and the next user.
- Don't kink, cut or crush any electrical cord. Never carry equipment by its cord.
- If equipment has a three-prong plug, use a three-slot outlet or extension cord. Never modify three prongs to fit two slots by removing the third prong. Use an adapter instead, making sure that the metal grounding piece on the adapter is connected to a grounded object, such as the screw on the receptacle cover plate.
- Don't strain equipment. Service equipment regularly and repair or replace as needed.

For the Latest Information on Lightning® Products, including Frequently Asked Questions and detailed instructions for specific installation situations, please visit

www.LightningSwitch.com[™]

E-Mail Feedback@LightningSwitch.com

Toll-Free 1-888-MY-SWITCH (888-697-9482)

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