

## Catalog Number(s) • Numéro(s) de Catalogue • Les Numéros de Catalogue: RRW600U, RRW600UV2

Country of Origin: Made in China • Pays d'origine: Fabriqué en Chine • País de origen: Hecho en China



RRW600U

### READ AND SAVE THESE INSTRUCTIONS

To be installed by a certified electrician or other qualified person.

**WARNING** – To prevent severe shock or electrocution, always turn poweroff at the service panel before installing this product, working on the circuit, or changing a lamp.

#### CAUTION

- Do not connect this product to a power source other than 120VAC, 60Hz.
- Use copper wire only.

#### Specifications

Load.....Single Pole or 3 Way  
 Time Delay .....Adjustable from 30 seconds to 20 minutes  
 (Default delay setting is 5 minutes)

Environment .....Indoor Use Only

#### Tools Needed

Insulated Screwdriver, Wire Strippers

### LIRE ET CONSERVER CES INSTRUCTIONS

Doit être installé par un électricien certifié ou une autre personne qualifiée.

**AVERTISSEMENT** – Pour éviter tout choc électrique ou une électrocution, toujours couper l'électricité au niveau du panneau d'alimentation avant d'installer cette unité, de travailler sur le circuit électrique ou de changer une lampe.

#### AVERTISSEMENT

- Ne brancher ce produit qu'à une source d'alimentation de 120 V c.a., 60 Hz.
- N'utiliser que des fils en cuivre.

#### Spécifications

Charge.....Unipolaire ou à 3 voies  
 Temporisation.....30 secondes à 20 minutes  
 (Le délai par défaut est de 5 minutes.)

Environnement.....Utilisation en intérieur uniquement

#### Outils nécessaires

Tournevis isolé, dénudeurs de fil

### LEA Y CONSERVE ESTAS INSTRUCCIONES

Para ser instalado por un electricista certificado o persona competente.

**ADVERTENCIA** – Para evitar descargas eléctricas serias o electrocución, antes de instalar, trabajar en el circuito o cambiar una lámpara de este atenuador apague siempre el suministro eléctrico en el panel de servicio.

#### PRECAUCIÓN

- No conecte este producto a una fuente de alimentación que no sea de 120 V AC, 60Hz.
- Use solamente cables de cobre.

#### Especificaciones

Carga.....Polo único o de 3 vías  
 Tiempo de demora.....30 segundos a 20 minutos  
 (El tiempo de retraso predeterminado es de 5 minutos)

Entorno.....Solo uso en interiores

#### Herramientas necesarias

Destornillador aislado, pelacables

### DESCRIPTION AND OPERATION

The RRW600U occupancy and vacancy sensor is designed to replace a standard light or fan switch and are suitable for use in new construction or retrofit/replacement applications. The sensor uses passive infrared technology to sense human motion in a space and turn the light OFF when the room is vacant. It is ideal for applications in a home where there is a direct line of sight from the sensor to the room, including bedrooms and family/living rooms.

#### Occupancy Mode:

The load will automatically come ON when motion is detected, and turn OFF automatically, at the desired time delay, if no motion is detected (default delay of 5 minutes unless manually change). If the load is manually turned OFF, and motion is detected within 30 seconds, the load will remain OFF until no motion has been detected for 30 seconds. It can then automatically turn ON again once it detects motion. The RRW600U allows the load to be turned ON manually as well, and turn OFF automatically at the desired time delay, if no motion is detected.

#### Vacancy Mode:

In this mode, the load is required to be turned ON manually, and will turn OFF at the desired time delay, if no motion is detected. If motion is detected within 30 seconds after it automatically turns OFF, the RRW600U automatically turns the load back ON.

### USER SETTINGS

Table 1 – Time Delay Setting

Setting	Status	From User (Input to the device)	LED or LOAD State (Acknowledgement from the device)	Result
Time Delay Adjustment Mode – To change the amount of time before the sensor switch turns off after last movement	Initiate	With the load ON or OFF, hold down the ON/OFF button for 10 seconds then release	LED will blink 5 times and then turn off	Enters Time Delay Adjustment Mode
		Push down the ON/OFF button first time	LED flashes quickly two times per 1.5s.	Set the time delay to 5 Minutes
	Activate & Save Time Delay	Push down the ON/OFF button second time	LED flashes quickly three times per 1.5s.	Set the time delay to 10 Minutes
		Push down the ON/OFF button third time	LED flashes quickly four times per 1.5s.	Set the time delay to 15 Minutes
		Push down the ON/OFF button fourth time	LED flashes quickly five times ON per 1.5s.	Set the time delay to 20 Minutes
Exit	Push down the ON/OFF button fifth time	LED flashes quickly one time per 1.5s.	Set the time delay to 30 Seconds	
	Hold down the ON/OFF button for 10 seconds then release	LED will blink 5 times and then turn off	Manual Exit Time Delay Adjustment Mode	

Table 2 – RRW600U Occupancy/Vacancy Mode Adjustment

Setting	Status	From User (Input to the device)	LED or LOAD State (Acknowledgement from the device)	Result
Working Mode Setting: to Change between Occupancy Mode (Auto on) and Vacancy Mode (Manual On)	Initiate	With the load ON or OFF, hold down the ON/OFF button for 15 seconds then release	LED will blink 5 times and then turn off	Enters Working Mode Setting Mode
		Push down the ON/OFF button first time	LED flashes quickly two times ON per 1s.	Set the Working Mode to vacancy sensor
	Activate	Push down the ON/OFF button second time	LED flashes quickly one time ON per 1s.	Set the Working Mode to occupancy sensor
		Hold down the ON/OFF button for 15 seconds then release	LED will blink 5 times and then turn off	Save/Exit Working Mode Setting Mode

The RRW600U has an onboard indicator LED located at the top of the unit. This indicator is used to show when motion is detected. The LED is also used while programming the RRW600U and indicates STATUS during power up. The LED is further used to indicate a malfunctioning unit. Both Occupancy and Vacancy Modes can be programmed/selected to function with or without the LED indicator if preferred by the user.

Table 3 – Status LED Enable/Disable

Setting	Status	From User (Input to the device)	LED or LOAD State (Acknowledgement from the device)	Result
Enable and disable the status LED indicator	When the LED is Enabled	With the load ON or OFF, hold down the ON/OFF button for 25 seconds	LED will blink 5 times and then turn off	LED will Disable: locator light will be in an "On State" when the load is off and will not blink when motion is detected; the locator light will be in an "Off State" when the load is on and will not blink when motion is detected.
	When the LED is Disabled	With the load ON or OFF, hold down the ON/OFF button for 25 seconds	LED will blink 5 times and then turn off	LED will Enable: locator light will be in an "On State" when the load is off and will not blink when motion is detected; the locator light will be in an "Off State" when the load is on and will blink when motion is detected.

### COVERAGE AREA

The RRW600U has a maximum coverage range of 180 degrees and a coverage area of 600 square feet (56 square meters). The sensor must have a clear and unobstructed view of the coverage area. Objects blocking the sensor's lens may prevent detection thereby causing the light to turn off even though someone is in the area.

**Windows, glass doors, and other transparent barriers will obstruct the sensor's view and prevent detection.**

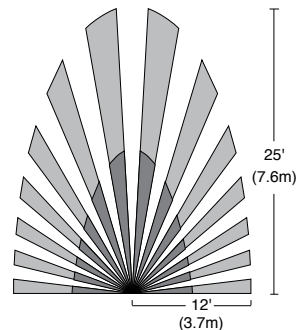


Figure 1: Sensor Coverage Area  
 Figure 1 : Zone de portée du détecteur  
 Figura 1: Área de cobertura del sensor

### INSTALLATION & WIRING

#### 1. Prepare the switch box.

After the power is turned off at the circuit breaker box, remove the existing wall plate and mounting screws. Pull the old switch out from the wall box.

#### 2. Identify the type of circuit.

##### Single Pole

In a Single Pole Circuit (see Figure 2), two single wires connect to two screws on the existing switch. A ground wire may also be present and connected to a ground terminal on the old switch.

##### 3-Way

In a 3-way circuit (see Figure 3), there will be [2 runners and 1 common] for both switches involved.

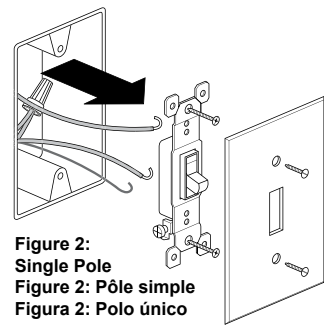


Figure 2: Single Pole  
 Figure 2: Pôle simple  
 Figura 2: Polo único

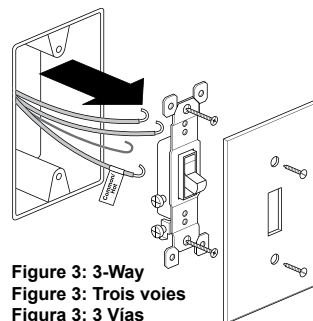


Figure 3: 3-Way  
 Figure 3: Trois voies  
 Figura 3: 3 Vías

**CAUTION For your safety:** Connecting a proper ground to the sensor provides protection against electrical shock in the event of certain fault conditions. If a proper ground is not available, consult with a qualified electrician before continuing installation.

#### 3. Prepare the Wires.

Tag the wires currently connected to the existing switch, so that they can be identified later. Disconnect the wires. Make sure the insulation is stripped off the wires to expose their copper cores to the length indicated by the "Strip Gauge," in Figure 3a.

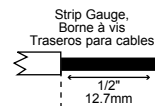


Figure 3a: Wire Stripping  
 Figure 3a : Dénudage des fils  
 Figura 3a: Pelado de cables

#### 4. Wire the sensor.

##### 1-pole configuration:

Twist existing wires together with the wire leads on the RRW600U sensor as indicated below. Cap them securely using the wire nuts provided. See Figure 4.

- Connect the green or non-insulated (copper) GROUND wire from the circuit to the green ground terminal on the RRW600U. Make sure there is a solid ground connection.

- If neutral is available in the box, connect to the Blue and White striped (signal) wire on the RRW600U. In cases of retrofit or replacement where no neutral is present, connect the signal wire to ground.

- Connect the power wire from the circuit (HOT) to the black wire on the RRW600U.
- Connect the power wire to the lamp or fan (LOAD) to the red wire on the RRW600U.

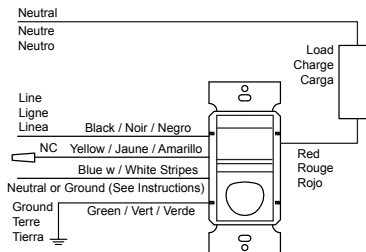


Figure 4: Single Pole Configuration  
 Figure 4 : Configuration unipolaire  
 Figura 4: Configuración del polo único

##### Multilocation configuration (using existing companion 3-way switch): see Figure 5.

- Connect the green or non-insulated (copper) GROUND wire from the circuit to the green ground terminal on the RRW600U. Make sure there is a solid ground connection.
- If neutral is available in the box, connect to the Blue and White striped (signal) wire on the RRW600U. In cases of retrofit or replacement where no neutral is present, connect the signal wire to ground.
- Connect the power wire from the circuit (HOT) to the black wire on the RRW600U.
- Connect the power wire to the lamp or fan (LOAD) to the red wire on the RRW600U.
- Connect one of the runner wires to the yellow wire of the RRW600U.
- For the companion switch, connect the chosen runner wire (presently hooked up to the yellow wire of the RRW600U) to the common of the 3-way companion mechanical switch.
- Connect one of the poles of the companion 3-way switch to ground.
- For the remaining pole of the companion 3-way switch, do not connect to anything, but still cap off with a wire nut.

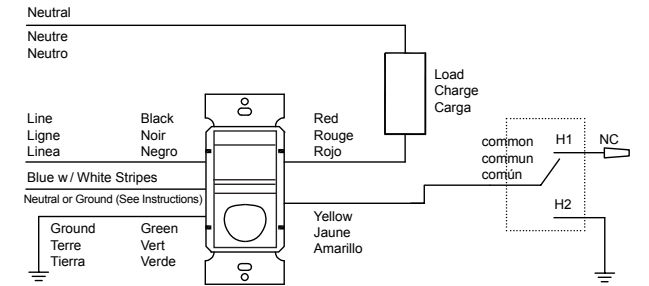


Figure 5: 3-Way Configuration / Figure 5 : Configuration à 3 voies  
 Figura 5: Configuración de 3 vías

**Multilocation configuration (using up to 5 units, maximum wire length of 100 ft between companion unit and unit connected to the load): see Figure 6.**

- Connect the green or non-insulated (copper) GROUND wire from the circuit to the green ground terminal on the RRW600U. Make sure there is a solid ground connection.
- If neutral is available in the box, connect to the Blue and White striped (signal) wire on the RRW600U. In cases of retrofit or replacement where no neutral is present, connect the signal wire to ground.
- Connect the power wire from the circuit (HOT) to the black wire on the RRW600U.
- Connect the power wire to the lamp or fan (LOAD) to the red wire on the RRW600U.
- Connect one of the runner wires to the yellow wire of the RRW600U.
- For the companion RRW600U, connect the chosen runner wire (presently hooked up to the yellow wire of the 1st RRW600U) to the yellow wire of the companion RRW600U.
- Repeat for additional RRW600U units.

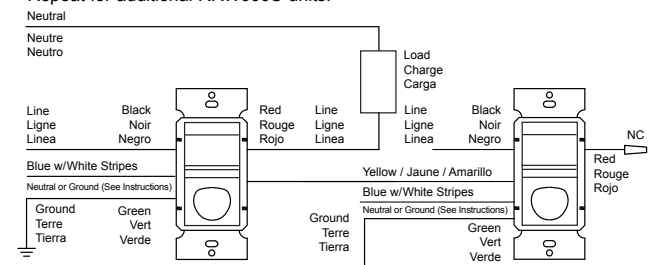


Figure 6: Multilocation Configuration  
 Figure 6 : Configuration à plusieurs emplacements  
 Figura 6: Configuración de ubicación múltiple

- Put the RRW600U in the wall box. Position the lens above the ON/OFF button (lens at top, button at bottom). Secure it to the wall box with the screws provided.
- Make any necessary adjustments. See the SENSOR ADJUSTMENT section for information.
- Attach the new cover plate.
- Restore power to the circuit. Turn on the breaker or replace the fuse.

### INITIAL POWER UP DELAY

There is an initial warm-up (about 1 minute) and calibration period the first time power is applied to the unit and after the load is replaced. The warm-up sequence also occurs as a result of a power failure, and any time power to the unit is cycled.

### CHANGING THE COLOR OF THE UNIT

- Remove the wallplate.
- Firmly grasp the edges of the front cover directly below the lens where it says "open." Push in one side first until it pops out, then the other side. Remove front cover from the unit (see Figure 7).
- Take the new color front cover, place the top peg in first then snap in each side one at a time (see Figure 9).

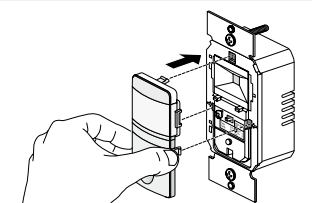


Figure 9: Replace Front Cover  
 Figure 9 : Remplacement de la protection avant  
 Figura 9: Reemplaza la cubierta frontal

### TROUBLESHOOTING

#### Status LED is enabled but not blinking and the load will not turn ON:

- Check the circuit breaker to be sure it is functioning.
- Check to make sure that the device is properly grounded. This device will not function if it is not grounded.

#### Load will not turn ON:

- Press ON/OFF button. The load should turn ON. If not:
- Check the light bulb and/or motor switch on the fan mechanism.
  - Turn OFF power to the circuit then check wire connections.
  - For further assistance call 800.223.4185 for technical support.

#### Load will not turn OFF:

Note: The time delay can be set from 30 seconds to 20 minutes. Ensure that the time delay is set to the desired delay and that there is no movement within the sensor's view for that time period.

- To quickly test the unit for proper operation, turn the time delay to minimum and move out of the sensor's view. Lights should turn off after 30 seconds.
- Press the ON/OFF button. If load does not turn off, turn off power to the circuit then check wire connections.
- For further assistance call 800.223.4185 for technical support.

