

# UPM

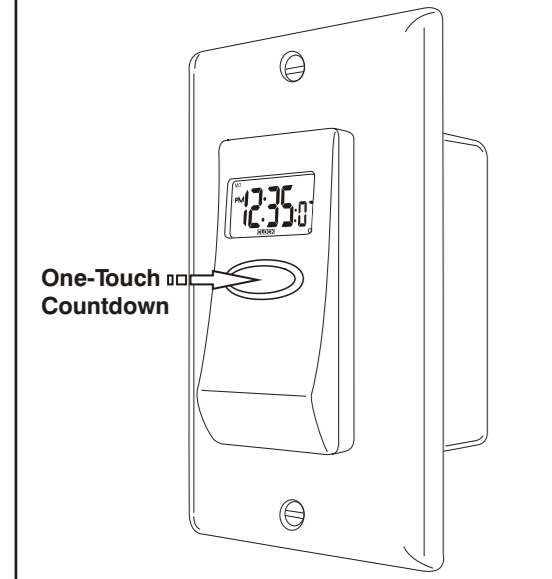
## PROGRAMMABLE WALL SWITCH TIMER ETW190

### OWNER'S MANUAL

Congratulations on your purchase of a UPM timer. Please take the time to read and understand this manual so you can begin to enjoy the convenience and energy saving benefits this product has to offer.

### FEATURES

- 20 ON settings / 20 OFF settings
- Programs can be set to operate on a specific day, Monday to Friday, Monday to Saturday, Saturday and Sunday, or everyday of the week
- Countdown timer - "One-Touch Countdown"
- 3 random functions
- 12/24 hour clock
- Incandescent lighting only - Maximum load: 500W
- Single pole installation



One-Touch Countdown

### CAUTION!

**TO AVOID FIRE, SHOCK, OR DEATH, SHUT OFF POWER SUPPLY AT THE CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING.**

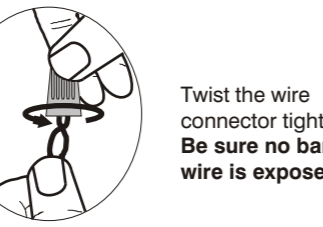
- This timer switch is for use with Incandescent/Halogen (120V) lighting applications **ONLY**. It must **NOT** be used to control receptacles, fluorescent lighting, motor-driven appliances or transformer supplied appliances.
- For single pole use only. Cannot be used as part of a 3-way circuit.
- This timer switch must **NOT** be used on loads exceeding 500W.
- Move the **Main ON / Main OFF** slide switch to the **Main OFF** position when replacing bulbs.
- Handle installation with caution to prevent any risk of electrical shock that could cause serious injury or death. If you are not sure about any part of the given instructions, consult a qualified electrician.
- All wiring must comply with applicable codes and regulations.

### IMPORTANT WIRING INFORMATION

The wire connectors provided are for **copper wire only**. For aluminum wire, consult an electrician.

- Use the supplied (small) wire connectors with the following wiring sizes. Note proper insulation strip lengths.
- SMALL:**  
\* Use to join one 14 AWG supply wire with one black timer switch wire. Strip insulation 3/8" for 14 AWG supply wire. Strip insulation 1/2" for timer switch wire.
- For installations with 10 or 12 AWG supply wires, or where multiple supply wires exist, a larger size wire connector should be used; noting the wire strip lengths below. (Available at your local hardware store)
- LARGE:**  
Strip insulation 1/2" for 10 or 12 AWG supply wires. Strip insulation 5/8" for timer switch wire.

Twist the wire connector tight. Be sure no bare wire is exposed.

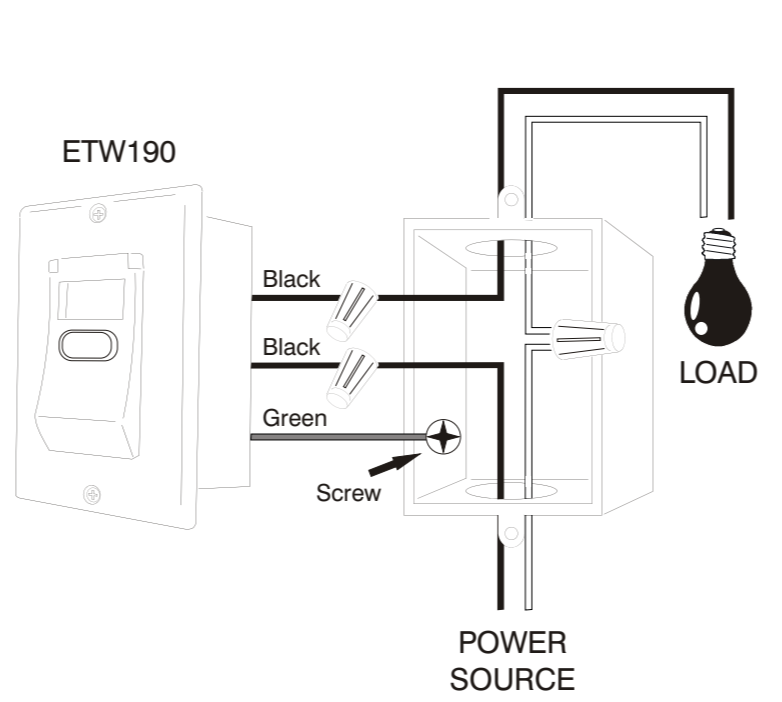


### INSTALLATION

**IMPORTANT: TO AVOID FIRE, SHOCK, OR DEATH, SHUT OFF POWER SUPPLY AT THE CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING.**

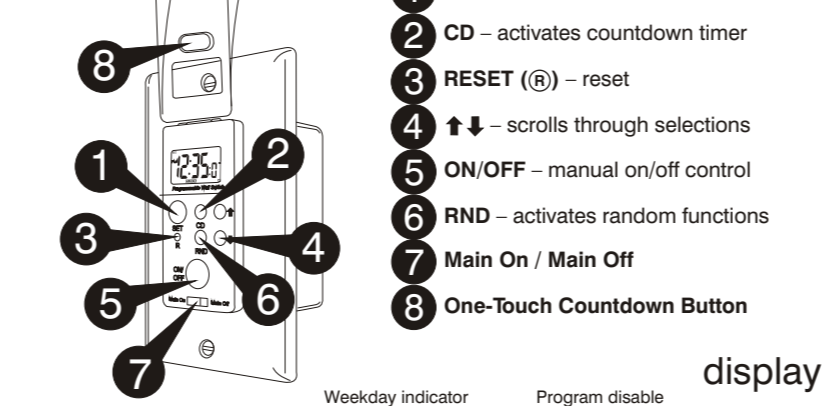
- Remove existing switch and identify the wires in the wall box.
- Take the new timer and move the **Main On / Main Off** slide switch to the **Main Off** position.
- Using the supplied wire connectors, securely fasten the wires on the timer to the wires in the wall box according to diagram.
  - Connect either one of the **black** wires from the timer to the **hot** supply wire(s) in the wall box.
  - Connect the other **black** wire from the timer to the **hot** wire in the wall box coming from the light fixture.
  - For proper grounding, connect the **green** (ground) wire on the timer to the ground "screw" found inside the wall box.
- Mount timer into the wall box carefully.
- Restore power supply at the circuit breaker or fuse.
- Move the **Main On / Main Off** slide switch to the **Main On** position.

### INSTALLATION DIAGRAM



### GETTING STARTED

button placements



### CLOCK SETTING

For proper operation, ensure the clock is set to the correct time.

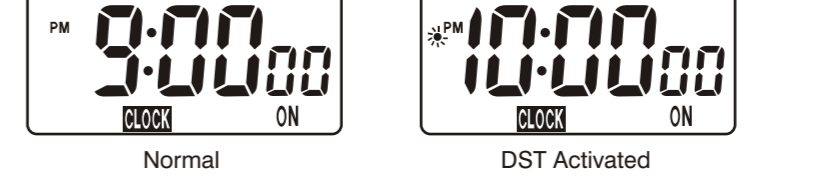
Before proceeding with the clock setting and programming for the first time, press the **RESET** (R) key.

- Press the **SET** key to begin the clock setting. The **SET** symbol will appear.
- Select the current day using the (1) or (2) key.
- Press the **SET** key.
- Select the current hour using the (1) or (2) key.
- To toggle between 12 or 24 hour format, press the **RND** key during clock setting. If you are using the 12 hour format and you are setting an afternoon or evening time, ensure that the **PM** symbol appears on the left.
- Press the **SET** key.
- Select the current minute using the (1) or (2) key.
- Press the **SET** key.
- Set the seconds to zero by pressing either the (1) or (2) key.
- Press the **SET** key to finish the clock setting.

### DAYLIGHT SAVING TIME (DST)

To activate the Daylight Saving Time (DST) function, press and hold both the (1) and (2) keys together for 3 seconds in the clock mode (CLOCK). When the DST function is activated, a solid sun symbol (☀) will appear on the LCD screen and the time will have advanced by one hour.

To de-activate the DST function, press and hold both the (1) and (2) keys again for 3 seconds in the clock mode (CLOCK). The sun symbol (☀) will disappear and the time will go back by one hour.



### MEMORY BACKUP

This timer is equipped with a built-in rechargeable battery. The internal battery serves to protect the time and program settings in the case of a power failure. NOTE: For a new installation, it may take several days for the internal battery to become fully charged. Sometimes, with a new timer, the LCD screen may even appear blank or dim upon a complete installation. This may be the result of a fully discharged internal battery. To correct this problem, first make sure that the Main On / Main Off switch is to the Main On position. Then leave the timer installed as it is for several hours (it may take overnight) and afterwards press the **RESET** (R) key. The LCD screen should return to normal operation.

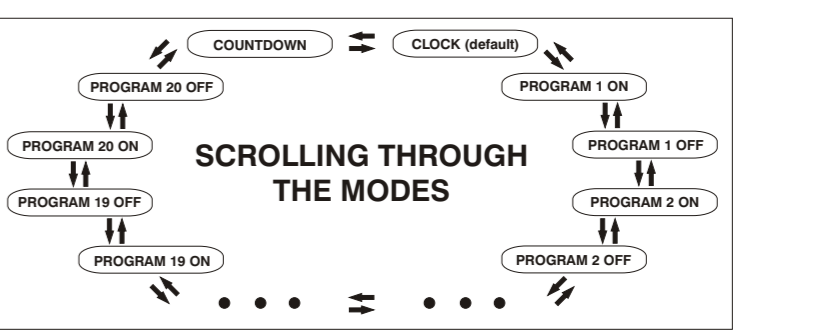
### SCROLLING THROUGH THE MODES

There are 3 primary modes with this timer.

- **CLOCK MODE**
- **PROGRAM MODE**
- **COUNTDOWN MODE**

**NOTE: The PROGRAM MODE consists of 20 programs.** Each program has a pair of settings: an **ON** setting and an **OFF** setting. In total, there are 20 ON settings and 20 OFF settings.

The modes are arranged in a circular pattern. Use the (1) or (2) key to scroll through the different modes and programs.



**QUICK-RETURN TO THE CLOCK MODE**  
At any particular mode, if you wish to return to the clock mode immediately, you may do so by pressing both the (1) and (2) keys together and release. This brings the display directly back to the clock mode. Or, if no key is pressed within one minute, the display will also automatically default itself back to the clock mode.

### PROGRAM SETTING

This timer is a programmable switch that will automatically turn your lights ON and OFF based on your specified times. You can program up to 20 programs (20 ON settings and 20 OFF settings).

Programs can be set to operate on:

- a specific day (MO, TU, WE, TH, FR, SA or SU);
- Monday through Friday (MO TU WE TH FR);
- Monday through Saturday (MO TU WE TH FR SA);
- Saturday and Sunday (SA SU); or
- everyday from Monday through Sunday (MO TU WE TH FR SA SU)

**IMPORTANT: In order for a program to work, both the ON and the OFF settings must be set.**

**How to set a program**  
Example: **Turn ON at 5:15 pm OFF at 10:45 pm everyday, seven days a week.**

- From the clock mode (CLOCK), press the (1) key once to go to the **ON** setting of PROGRAM 1.
- Press the **SET** key to begin the program setting.
- The **SET** symbol will appear and the days (MO TU WE TH FR SA SU) will be blinking. Select the desired day or days of operation by pressing the (1) or (2) key.

**NOTE: Your choice of days are - a specific day, Monday through Friday, Monday through Saturday, Saturday and Sunday, or everyday of the week.**

### PROGRAM SETTING

**EXAMPLE:** For everyday, select (MO TU WE TH FR SA SU)

- Press the **SET** key.
- Select the hour using the (1) or (2) key.
- EXAMPLE:** Select 5 pm (if clock is set on the 12 hour format); or select 17 hours (if clock is set on the 24 hour format).
- Press the **SET** key.
- Select the minute using the (1) or (2) key.
- EXAMPLE:** Select 15 minutes
- Press the **SET** key to finish the **ON** setting of PROGRAM 1.
- You should now proceed to set the OFF setting of PROGRAM 1.**
- After you finished with the ON setting, press the (1) key to go to the OFF setting of PROGRAM 1.
- Press the **SET** key.

### PROGRAM SETTING

The days of operation as selected in the **ON** setting will re-appear. Confirm, or change if necessary using the (1) or (2) key.

- Press the **SET** key.
  - Select the hour using the (1) or (2) key.
  - EXAMPLE:** Select 10 pm (if clock is set on the 12 hour format); or select 22 hours (if clock is set on the 24 hour format).
  - Press the **SET** key.
  - Select the minute using the (1) or (2) key.
  - EXAMPLE:** Select 45 minutes
  - Press the **SET** key to finish the **OFF** setting of PROGRAM 1.
- NOTE:** The display will automatically revert back to the clock mode after one minute, or you can use the (1) or (2) key to scroll to the clock mode after one minute, or you can use the (1) or (2) key to scroll to the clock mode after one minute, or you can use the (1) or (2) key to scroll to the clock mode after one minute.
- You have now completed the ON and OFF setting of PROGRAM 1. To set more programs, repeat the above procedures using the available program slots (PROGRAMS 2 to 20).**

### PROGRAM DISABLE

This timer allows you to disable any particular program, or if you have more than one program set, you can disable all of them at once using the **master disable** function.

When a program is disabled, the time settings are stored in memory so that when you re-enable the programs, the timer will resume with the same programs as before.

#### SINGLE PROGRAM DISABLE

To disable a single program, select the program of choice by using the (1) or (2) key.

- Select the OFF setting of the same program by using the (1) or (2) key.
  - Press the **SET** key.
  - The **SET** symbol will appear and the day(s) will be blinking.
  - Press the **SET** key to disable the program. An **X** symbol will appear to indicate that the particular setting has been disabled.
  - Press the **SET** key to finish the **OFF** setting of PROGRAM 1.
- NOTE:** The display will automatically revert back to the clock mode after one minute, or you can use the (1) or (2) key to scroll to the clock mode after one minute, or you can use the (1) or (2) key to scroll to the clock mode after one minute.
- You have now completed the ON and OFF setting of PROGRAM 1. To set more programs, repeat the above procedures using the available program slots (PROGRAMS 2 to 20).**

### PROGRAM DISABLE

If this was the ON setting that was disabled, now proceed to disable the OFF setting of the same program to completely disable that particular program; or if you had disabled the OFF setting first, now go to the ON setting.

To perform the **master disable**, go to the clock mode (CLOCK) by using the (1) or (2) key.

- Press the **SET** key.
- The **SET** symbol will appear and the day will be blinking.
- Press the **SET** key to disable the program. An **X** symbol will appear to indicate that all programs have been disabled.
- Press the **SET** key 3 times to exit.
- You have now successfully disabled ALL programs.**
- To re-enable the particular program, repeat the above steps. The **X** symbol will disappear indicating that all the programs have been re-enabled (returned to normal).
- Press the **SET** key 3 times to exit.

### PROGRAM DISABLE

If you have more than one program set, and you wish to disable all of them at once, you can do so by using the **master disable** function.

- To perform the **master disable**, go to the clock mode (CLOCK) by using the (1) or (2) key.
- Press the **SET** key.
- The **SET** symbol will appear and the day will be blinking.
- Press the **SET** key to disable the program. An **X** symbol will appear to indicate that all programs have been disabled.
- Press the **SET** key 4 times to exit.
- You have now successfully disabled ALL programs.**
- To re-enable the programs, repeat the above steps. The **X** symbol will disappear indicating that all the programs have been re-enabled (returned to normal).
- Press the **SET** key 3 times to exit.

### COUNTDOWN TIMER

The countdown timer works like an hour-glass. You can set a specific duration and once the countdown is activated, the time will begin to count gradually down to zero. The countdown can start either in the ON or OFF position.

#### EXAMPLES OF USE:

- For instance, set the lights to stay ON for 25 minutes (or any other duration as desired), and automatically turn OFF after that.
- Or, set it so that the lights stays OFF for 40 minutes, for example, and automatically turn ON after that.

**NOTE:** When the countdown timer is activated, all other programs and random functions are disabled. The duration can be set from one second up to 23 hours 59 minutes 59 seconds.

- From the clock mode (CLOCK), press the (1) key once to go to the countdown mode (CD).
- Press the **SET** key to begin setting.
- The **SET** symbol will appear and **ON** or **OFF** indicator will be blinking. Select the desired position by using the (1) or (2) key.
- Press the **SET** key 4 times to exit.
- You have now successfully disabled ALL programs.**
- To re-enable the programs, repeat the above steps. The **X** symbol will disappear indicating that all the programs have been re-enabled (returned to normal).
- Press the **SET** key.

### COUNTDOWN TIMER

Select the hour (duration) using the (1) or (2) key.

- Press the **SET** key.
- Select the minute (duration) using the (1) or (2) key.
- Press the **SET** key.
- Select the second (duration) using the (1) or (2) key.
- Press the **SET** key to complete the countdown setup.

**EXAMPLE:** This shows the countdown duration set for 1 hour 45 minutes 30 seconds, starting from the OFF position.

- To **START** the countdown timer, press the (CD) key. Once activated, in the countdown mode (CD), the duration time will begin counting down.

If you move onto any other mode, such as the clock mode (CLOCK) or program mode (PROGRAM), you will notice that the CD symbol will be blinking. NOTE: The CD symbol will disappear once the countdown timer has stopped.

- The countdown timer will automatically **STOP** once the time reaches zero. NOTE: The duration time will automatically be set back to its preset value.
- To **STOP** the countdown timer before the duration time ends, press either the (ON) or (OFF) key. The duration time will automatically be set back to its preset value.

### RANDOM FUNCTION

The random function serves as a security feature that allows you to have your lights turn ON and OFF randomly. The random lighting effectively provides a lived-in (at-home) look, acting as a deterrent.

- There are 3 types of random functions that you can choose with this timer:
- **SHORT RANDOM** - this mode will cycle your lights ON and OFF for 1 to 2 hour cycles.
- **LONG RANDOM** - this mode will cycle your lights ON and OFF for 2 to 3 hour cycles.
- **PROGRAM RANDOM** - this mode allows you to set the specific day(s) and time of day (i.e. in the evenings only between 6 pm and 11 pm, Monday to Friday) for the random function to operate. The programmable random will run on 1 to 2 hour cycles.

**NOTE:** When the random function is activated, all other programs and countdown timer are disabled.

#### How to activate or de-activate the SHORT random?

- In the clock mode (CLOCK), press the (RND) key to activate the SHORT random. Once activated, the RND symbol will be blinking.

#### How to activate or de-activate the LONG random?

- In the countdown mode (CD), press the (RND) key to activate the LONG random. Once activated, the L-RND symbol will be blinking.
- The random function can be de-activated by pressing the (RND) key again or the (ON) key. The RND symbol will disappear once the random function is de-activated.
- The random function can be de-activated by pressing the (RND) key again or the (ON) key. The L-RND symbol will disappear once the random function is de-activated.

### RANDOM FUNCTION

#### How to set the time period for the PROGRAMMABLE random?

- From the clock mode (CLOCK), press the (1) key three times to go to the ON setting of PROGRAM 20.
- IMPORTANT: The PROGRAM RANDOM will only work when set on PROGRAM 20.**

#### How to activate or de-activate the PROGRAM random?

- Set up the ON-time as you would with a regular program ON setting. Refer to PROGRAM SETTING.
- EXAMPLE:** This shows the ON-time is set for 6 pm from Monday to Friday.
- Press the (1) key to proceed with setting up the OFF-time.
- Set up the OFF-time as you would with a regular program OFF setting. Refer to PROGRAM SETTING.
- EXAMPLE:** This shows the OFF-time is set for 11 pm from Monday to Friday.

#### How to activate or de-activate the PROGRAM random?

- In the PROGRAM 20 mode (either in the ON or OFF setting), press the (RND) key to activate the PROGRAM random. Once activated, the RND symbol will appear and remain solid (not blinking) on the LCD screen.
  - In the PROGRAM 20 mode (either in the ON or OFF setting), press the (RND) key to activate the PROGRAM random. Once activated, the RND symbol will appear and remain solid (not blinking) on the LCD screen.
- The random function can be de-activated by pressing the (RND) key again or the (ON) key. The RND symbol will disappear once the random function is de-activated.

### MANUAL ON/OFF

To manually turn the power ON or OFF press the (ON) key or the timer switch cover. You can use this at any time to temporarily override the current programming schedule. The ON or OFF symbol will be blinking. The timer will resume with its normal programs at the next scheduled program time.

### TROUBLESHOOTING

| problem  | solution   |
|--|--|
| LCD screen appears blank, dim or faded upon a complete installation of the timer switch. | Make sure the <b>Main On / Main Off</b> slide switch is to the <b>Main On</b> position. If the light turns on, but the LCD screen remains blank or dim, it may be that the internal battery has become fully discharged. To correct this problem, leave the timer switch installed as it is for several hours (it may take overnight) and then press the <b>RESET</b> (R) key. This should be ample time for the internal battery to recharge itself and resume normal LCD screen operation. |
| LCD screen seems "frozen". Function keys will not respond.                               | Press the <b>RESET</b> (R) key to reset the timer.   |
| Programs do not execute at the specified times.  | Ensure that the random function or countdown timer is not activated. Check programs - ensure that you have not accidentally programmed in unwanted settings into the other program slots available. If you do find unwanted settings, you may disable them using the single program disable method. Or, if it is easier, press the <b>RESET</b> (R) key to reset the timer, then set the clock and the correct programs again.   |
| Programs do not execute at all.  | Ensure that the programs are not disabled. Refer to PROGRAM DISABLE.   |

### TECHNICAL SPECIFICATIONS

Programs: 20 programs (with 20 ON settings and 20 OFF settings)  
Ratings: 120V AC  
Maximum Load: 500W - Single pole installation  
Minimum switching time: 1 minute  
Technical Support: 1-888-468-6876