



Time Switch

<http://waterheatertimer.org/GE-timers-and-manuals.html>

APPLICATION

The GE Time Switches (56922, 15087, 15207) are universal, electromechanical time switches which can be field configured for various power supply voltages. The voltage options include 120VAC, 208/240VAC and 277VAC – all within the same unit! Selection of the desired supply voltage is easily achieved by positioning dipswitches on the printed circuit board assembly (consult Dipswitches Configuration on back). The mechanism is mounted in a NEMA indoor or outdoor enclosure and is intended for the control of lighting, heating, air conditioning, pumps, motors, or general electrical circuits in residential, commercial, industrial and agricultural facilities.

SPECIFICATIONS

Input Voltage: 120 VAC, 208/240 VAC, or 277 VAC in all units based upon dipswitch configuration.

15087	NEMA 3R	Indoor & Outdoor	BM-A301US5-O2
15207	NEMA 1	Indoor	BM-A301US5-I2
56922	NEMA 1	Indoor	BM-A301US5-I2
15132	NEMA 3R	Indoor & Outdoor	EM-A301US9-O2

Switch Rating: DPDT Models

Normally Open Contacts

- 40A Resistive, 120-277Vac.
- 30A General Purpose, 120-277Vac.
- 20A Resistive, 30Vdc
- 1 HP, 120Vac ; 2HP, 240Vac ;
- 20A Ballast, 120-277Vac.
- 15A Tungsten, 120Vac
- 5.4A Tungsten, 208-277Vac.
- 800VA, Pilot Duty, 120Vac.
- 720VA, Pilot Duty, 240-277Vac.
- TV-5, 120Vac

Normally Closed Contacts

- 30A Resistive, 120-277Vac
- 15A General Purpose, 120-277Vac
- 15A Resistive, 30Vdc
- 20A Ballast, 120-277Vac
- 1/4HP, 120Vac; 1/2HP, 208-240Vac.
- 290VA, Pilot, 120Vac.
- 360VA, Pilot, 208-240Vac.

NOTE: If loads are connected to both NC and NO contacts, both contacts are decorated to 67% of the above values.

ENVIRONMENTAL RATINGS

Ambient Temperature: -40F to 130F
Humidity: 0-95% RH, Non-condensing

WIRING CONNECTIONS

Screw clamp terminals for up to 2 AWG #8 wires per position. For supply connections, use 8AWG or larger wires suitable for at least 105° C. Use copper conductors only.

Lights

Power LED (Orange) – Light illuminates when power is applied to the timer

Status LED (Green) – Light illuminates when power is applied to load.



⚠ WARNING

Risk of electric shock

- Shut off power at fuse box or circuit breaker box before installation

Risk of fire

- Do not use to control receptacle outlets
- Do not exceed electrical ratings
- Use copper wire only with this device



Included Hardware

QTY	Hardware
3	M4 Anchors 1" Long
3	M4 Screws 1" Long
2	8 AWG Jumpers for 240V AC
2	10 AWG Jumpers for 120V AC
1	Wire Nut (For Ground Wires)

INSTALLATION

CAUTION: Before wiring or servicing, power to this time switch and the equipment it controls must be turned off. Turning off the time switch only will not prevent a shock hazard. Replace cover plate within housing before supplying power to time switch. If you are not comfortable installing this device please contact a licensed electrician. Before installing this product read all instructions carefully.

Removing Knockout

1. Select knockouts to be used. Remove the inner 1/2" knockout by inserting a flathead screwdriver on the inner most ring and carefully punching the knockout loose. Remove slug. If the 3/4" knockout is required, remove the outer ring with pliers after removing the 1/2" knockout. Smooth edges with a knife if necessary.

Please refer to Quick Start Guide for Examples and More Details.

Mounting of the Time Switch Box

NOTE - Before mounting be sure to remove knockouts for the wires, (see Quick Start Guide)

1. In order to mount the box you will need the 3 supplied anchors and 3 supplied screws from the hardware list above. (Anchors included are designed for mounting on sheetrock.)
2. Using the box as a template, mark with a pencil where the three pilot holes will be drilled.

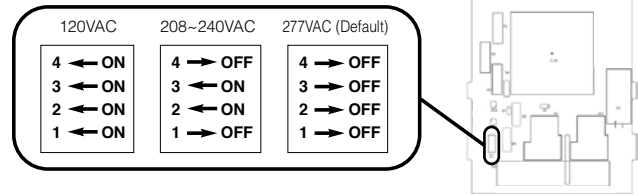
- Using the appropriate drill bit size, drill the pilot holes (Note that if drilling into wood or metal a specialized drill bit may be needed.)
See Drill Diagram.

Drill Diagram

Material	Drill Bit Size	Anchors Needed?
Soft Wood	5/64"	No
Hard Wood	3/32"	No
Metal	5/64"	No
Sheetrock	3/16"	Yes

- For sheetrock; use a hammer to gently tap the anchors into the pilot holes.
- Place the box up to the pilot holes or anchors and insert the screws accordingly.

- Determine the input voltage which will be applied to the timer. (120V AC, 208-240V AC, or 277V AC)
- Set the DIP Switch according to the diagram below:
- Reinstall interior cover panel. Opposite of step 1.



Wiring the Device to the Timer

NOTE - For outdoor installation (model GE15087), rain tight or wet location conduit hubs that comply with requirements of UL 514B (standard for fittings for conduit and outlet boxes) must be used.

- Remove 2 screws retaining the interior cover panel and remove the panel.
- Refer to Figure 1 and wiring diagrams to determine appropriate placement of wires. It is the responsibility of the installer to ensure that all applicable National and Local code requirements are met. If you are unsure of these requirements, contact a licensed electrician immediately.
Please refer to Quick Start Guide for Examples and More Details.
- GROUNDING: This enclosure is of plastic construction and does not require a ground connection. This enclosure does not provide grounding between conduits. When using non-metallic conduit or cable, connect the ground wires of all cables together with the provided wire nut. When metallic conduit is used; as the grounding connection, use grounding type bushing and a jumper wire between each conduit.

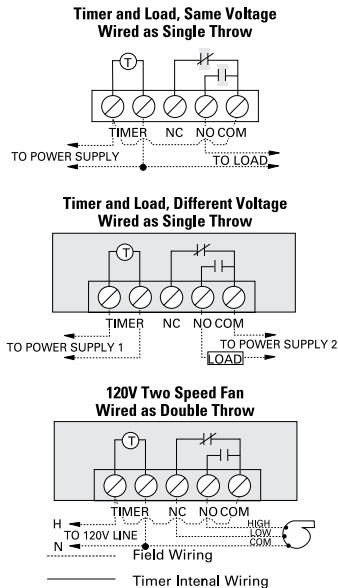
Dipswitch Configuration

WARNING: Failure to properly configure the dipswitch will result in damage to the unit and void any warranty! Before installing and wiring the GE Time Switch, proper configuration must be selected. Unit is shipped with DIP Switches set for 277VAC Input Voltage. Also, do not check circuits by "sparking" wires to terminals. Damage to timer may result.

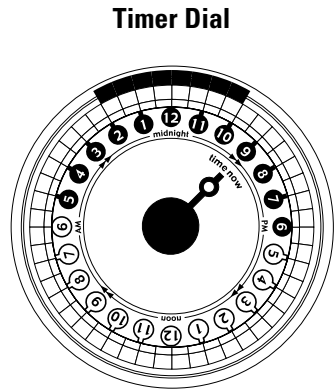
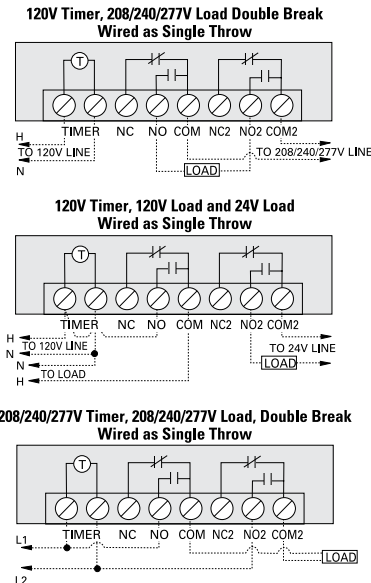
Figure 1

MINIMUM COPPER WIRE SIZE (AWG)	MAX. LOAD (AMP)	MIN. INSULATION TEMP(°C)
14	15	60
12	20	60
10	30	60
8	40	105

Typical Wiring Diagrams—SPDT



Typical Wiring Diagrams—DPDT



Shows timer set to turn device ON at 10 PM and OFF at 2 AM. Notice ALL segments between 10 PM and 2 AM have been pushed out. Current time is 9:00 PM.

OPERATING INSTRUCTIONS:

When the Time Switch is installed and power applied, the timer's dial will turn clockwise maintaining time. The pointer on the face of the dial points to the current time

- Locate the segments around on the outer edge of the timer's dial. These segments, each representing 30 minutes, can be pushed down and away from the edge of the dial (try using the tip of a pen or pencil). Conversely, segments that have been pushed down can be easily pushed back up by hand. Be sure all segments are pushed up before programming. Select a time period (or periods) you want the device turned on, then push down ALL the segments that fall on or within that time period. For example, to have the timer turn a device on at 10PM and off at 2AM, push down the segments representing 10PM and 2AM, and ALL the segments in between. You may need to turn the dial clockwise to access the desired segments.
- Rotate the timer's dial clockwise until the pointer on the face of the dial points to the current time of day. Note: Nighttime hours (from 6:30 PM to 6:30 AM) are highlighted with a grey background.
- Set master switch to the TIMER position.
- To override timer program and control output load manually:
 - set master switch to OFF (center position) to turn load OFF
 - set master switch to ON (bottom position) to turn load ON
- This is a Timer Control and should not be used for power disconnect. Turn power off at main panel before servicing this switch or the equipment it controls.

In case of power failure, reset the time of day as explained in step 2.