

# DIGITAL BOX TIMER INSTRUCTIONS

## Installation Instructions:

**Note:** For outdoor locations, rain-tight or wet location conduit hubs that comply with requirements of UL 514B Conduit, Tubing, and Cable Fittings, must be used.

1. Open door by releasing the spring latch.
2. Remove the interior protective cover by loosening two screws holding on the middle of the board. (see Figure 1)
3. Select knockouts to be used. Remove the inner 1/2" knockout by inserting a screwdriver in the slot and carefully punch the knockout loose. Remove slug. If 3/4" knockout is required, remove the outer ring with pliers after removing the 1/2" knockout. Smooth edge with knife, if necessary.
4. Place the enclosure in the desired mounting location and mark a mounting hole. Start by placing a screw on top and attaching enclosure over keyhole.
5. Wire in accordance with National and Local Codes (see wiring diagrams) (Figure 3)
6. Grounding: Terminate all ground wires to ground lug on the bottom of enclosure. (see Figure 2)
7. Replace interior protective cover.

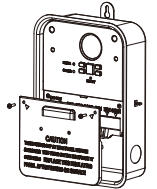


Figure 1

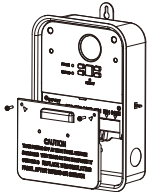


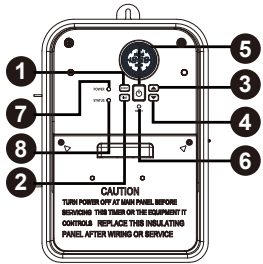
Figure 2

## Notice:

1. Always close the door after use.
2. Use Copper Conductors Only.
3. Press the RESET button using an insulated tool such as pins and toothpicks.

## Button Layout:

Before initial use, charging the internal battery at least 30 minutes. After the screen displays, the unit is ready for programming.



1. EVENT - Press to set the program.
2. TIME - Press to set the current time.
3. - Press to increase time.
4. - Press to decrease time.
5. Override - Press to override the current output.
6. RESET - Reset all the functions.
7. POWER - Power indicator light indicates if the Digital Box Timer is turned ON or OFF.
8. STATUS - Status light indicates the output ON.

## Electrical Ratings:

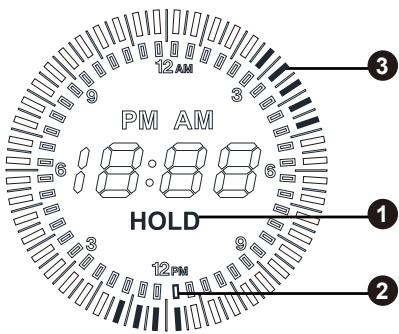
N.O. Contacts:

- 40A Resistive, 120~277VAC
- 1HP, 16A FLA, 96A LRA, 120VAC
- 2HP, 10A FLA, 60A LRA, 277VAC
- 30A Ballast, 120VAC
- 20A Ballast, 277VAC
- 1.5A Tungsten, 120VAC
- 30A Resistive, 28VDC

N.C. Contacts:

- 30A Resistive, 120~277VAC
- 1HP, 16A FLA, 96A LRA, 120VAC
- 2HP, 12A FLA, 72A LRA, 240VAC
- 2A Tungsten, 120VAC
- 10A Ballast, 120VAC
- 10A Ballast, 277VAC
- 20A Ballast, 28VDC

## Display Layout:



1. HOLD: To hold the current load status
2. Cursor: Indicate the current time
3. Load Cursor: Indicate the program on or off

## Setting The Current Time

1. Hold down the button for 5 seconds, the display will show 12:00, then press or button to set the program on time, press the button to make the load cursor to be solid when the cursor flashes on your desired on time, each load cursor means 30 minute.



- \* Remark: the time without solid cursor means the event output off, the time with solid cursor means the output ON.

## Manual Override

1. Press and hold the button for 5 seconds until the display shows HOLD, it will hold the current load status. If cancel the hold function, press the button again to delete the HOLD word.



## Setting The Current Time

When using the timer for the first time, insert a thin non-conducting object (like a wooden tooth pick) into the RESET hold to reset timer.

1. Press the button to enter the hour setting. Press button + or - to adjust the number from 12AM-11AM to 12PM-11PM.. Pay close attention on the AM / PM display when setting hour.



2. Press the button again to set the minutes. Press button or to adjust the number from 00 to 59.



3. When finish the setting, press the button to return to the standby display.



## Safety Information:

### WARNING - Risk of Fire or Electric Shock

1. Read instructions thoroughly before installation and preserve for future reference.
2. To avoid fire, shock, or death, turn off power at circuit breaker and test that power is off before wiring.
3. Disconnect power at the circuit breaker or disconnect switch before beginning installation or servicing.
4. More than one circuit breaker or disconnect switch may be required to de-energize the equipment before servicing.
5. Wire in accordance with national and local electrical code requirements.

**Wiring Connections:** Screw box lug terminals. Up to one #8 AWG Wire.

## Environmental Ratings:

Operating Temperature Range: -40°F to 131°F (-40°C to 55°C) Operating Humidity: 0 - 95% RH non-condensing.

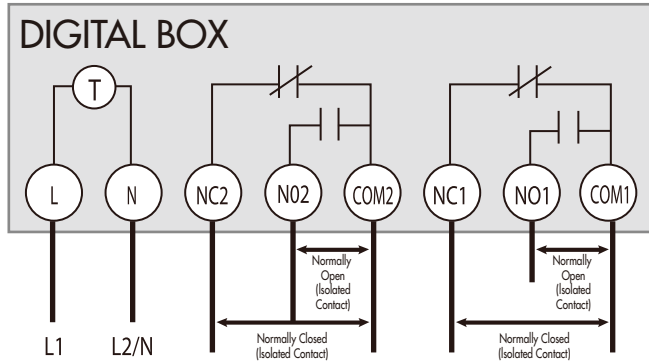
## Application

Digital Box Timer is capable of field configured for diverse power supply voltages. The voltage options include 120VAC, 208/240VAC and 277VAC. The mechanism is mounted in a UL TYPE 3R outdoor enclosure and not only has been designed for the control of lighting, heating, air conditioning, pumps, motors, also general electrical circuits in residential, commercial, industrial and agricultural facilities are suited for this instrument. (see wiring diagrams)

## Battery Powered Reserve

In case of power failure, the built-in nickel-metal hydride battery maintains the time around 90 days. During power outage relays are de-energized.

**Digital Box Timer Terminal Designations:**  
**DIGITAL BOX TIMER TERMINAL DESIGNATIONS**



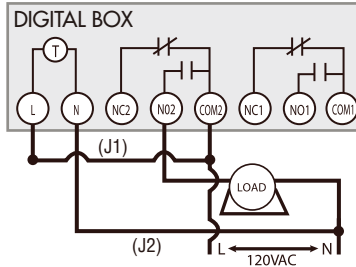
L = Line | N = Neutral | NO = Normally Open | NC = Normally Closed  
 COM = Common Terminal | J = Jumper Wire | T = Timer

**DIGITAL BOX TYPICAL APPLICATION WIRING DIAGRAMS**

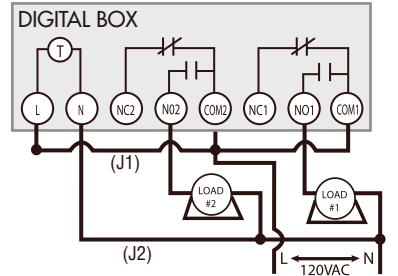
Note: Digital Box is capable of being configured for 120VAC, 240VAC or 277VAC.

\*J1 & J2 are 16 AWG jumper wire for the timer power supply.

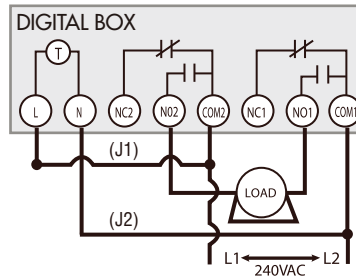
**120VAC Application Controlling One 120VAC Load**



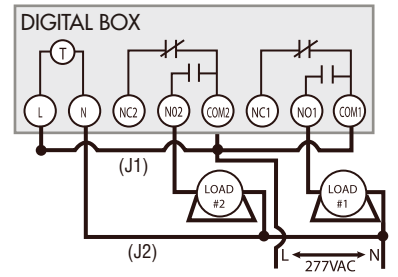
**120VAC Application Controlling Two 120VAC Load**



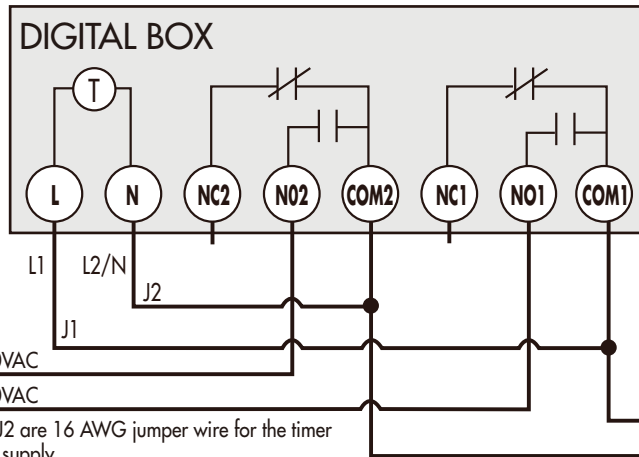
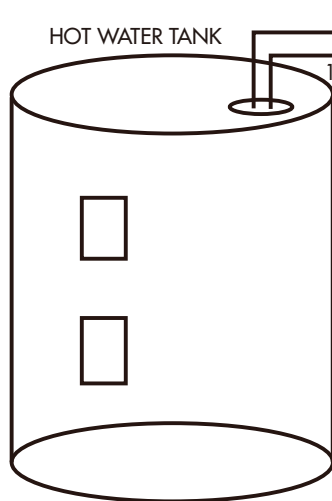
**240VAC Application Controlling One 240VAC Load**



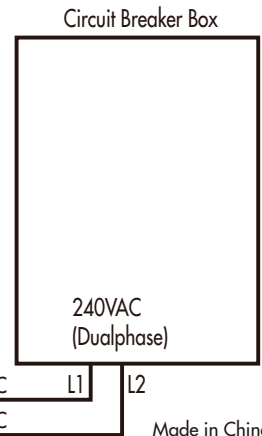
**277VAC Application Controlling Two 277VAC Load**



**HOT WATER HEATER TYPICAL WIRING DIAGRAM**



\*J1 & J2 are 16 AWG jumper wire for the timer power supply.



Made in China