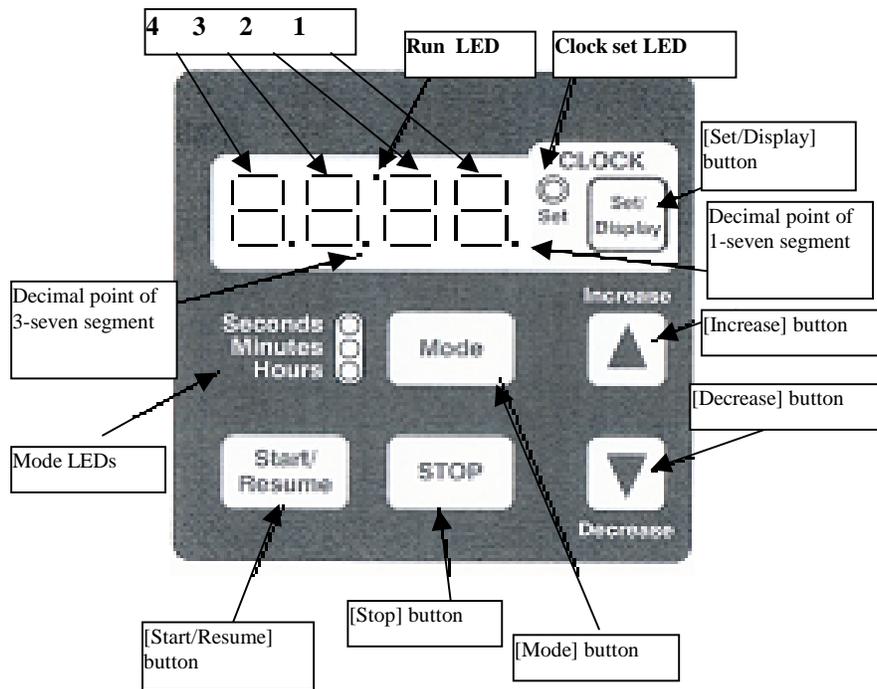


MODEL 650 USER GUIDE
Incorporated electronic control
Micro-Disconnection
NEMA type number enclosure: 1.

Minimum operating time is 2 seconds, maximum 99 minutes 59 seconds.



Hooking the Unit up Electrically

1. In an upright position and looking at the backside, the two ¼" quick connects on the left side terminations are for the 120 or 240 VAC power input. When power is applied, the unit has to be activated by pressing the [Mode] button or the [Set/Display] button on the timer.
2. The two right side .125" quick connect terminals are for a door interlock connection. These come with a bridge across the two terminations. If this feature is being used please remove the bridge. The timer will not function if this bridge is not in place or you have an open door contact.
3. The remaining two center ¼" quick connect terminals are for the SPST- Normally Open contact relay. Please note the relay contacts are rated at 15 amps, ½ HP at 120 VAC and 10 amps, ¾ HP at 240 VAC.

Functionally Using the Timer

1. After applying an appropriate AC to the power input terminals, the display will be blank and the beeper will beep for ¼ second giving the user notification that the timer is now activated. The units' default is in Minute [Mode].
2. **Setting Time of Day** - Push and hold the button [SET/DISPLAY] for 1 second, the unit will default the time to 12:00am and enter the 'Clock Set' mode. While in this mode, buttons [MODE], [STOP] & [START/RESUME] are disabled and the clock set LED will be turned ON. The user now can set the time by pressing and holding either [INCREASE] or [DECREASE] button until the desired time is achieved. If you do not wish to set the time of day, skip step number 3.

The clock mode is a 12-hour with an am/pm display element. When the clock is being displayed and the clock is in the pm time frame, the decimal point of number 1-seven segment will be ON. Once the user has achieved the proper clock value, they need to exit the clock set mode by pressing and holding the button [SET/DISPLAY] for 1 second. After the 1 second, the beeper will beep for 1 second giving the user notification that the mode is now exited. Once the clock is set, the display will go blank and the clock set LED will turn OFF.

If the clock has been set and the user presses the button [SET/DISPLAY] for less than 1 second, the display will show the current time for a 5 second period and revert back to what was previously on the display.

3. **Setting Interval Timer** - In modes 1 – 3, the device functions as a simple countdown timer. When you set the value, press the button [START/RESUME]. When the value reaches 0, the relay is turned OFF and the beeper beeps 6 sets of 2 (250ms) beeps.

Repeat Feature- the timer will remember the last time set. If you desire to change the setting from the original setting, press start switch to recall previous setting then input new setting.

To enter one of the 3 countdown modes, press and hold the button [MODE] for 1 second. Holding down this button the mode will switch every 2 seconds. Each time the mode switches, the appropriate LED of mode LEDs will be turned ON and the value displayed will change to the modes default value. An audible ¼ beep will also be heard.

Mode 1 0 – 99 second: DEFAULT DISPLAY = 01
Mode 2 0 – 99 minute: DEFAULT DISPLAY = 00.00
Mode 3 0 – 99 hour: DEFAULT DISPLAY = 00.00

Once the countdown value has been set, you can now start the timer by pressing the button [START/RESUME]. The relay is turned ON. While the timer is counting down the user can stop the event by pressing the button [STOP]. The current countdown value will remain on the display. If you want to resume the session you just need to press the start button again. Counting will proceed from the point where stopped. During this operation, the run LED is blinked at once a second.

Once the timer has counted down to 0 and stopped, you can execute the same session (time value) by pressing the [START/RESUME] button again. This will recall the timer value and display it. At this point, you have two options. The first being the ability to change the value by using the [INCREASE] or [DECREASE] buttons and the second being the ability to use the same value and starting the event again by pressing the [START/RESUME] button.

Mounting: Panel thickness allowed with retention with mounting clips - 12.7 mm maximum thickness (0.5 inch)
Console cutout 66 x 66 mm

It can easily be attached by means of the supplied fastening sliders (accessory 61874-OA): insert the two fastening sliders into the dovetail-type guide notches on the left and right hand sides of the timer housing so that their two arms point to the front. Push the fastening sliders forward until the two arms make a close contact with the console and hold the timer housing in position. The fastening sliders snap audibly into the guide notches of the timer housing.