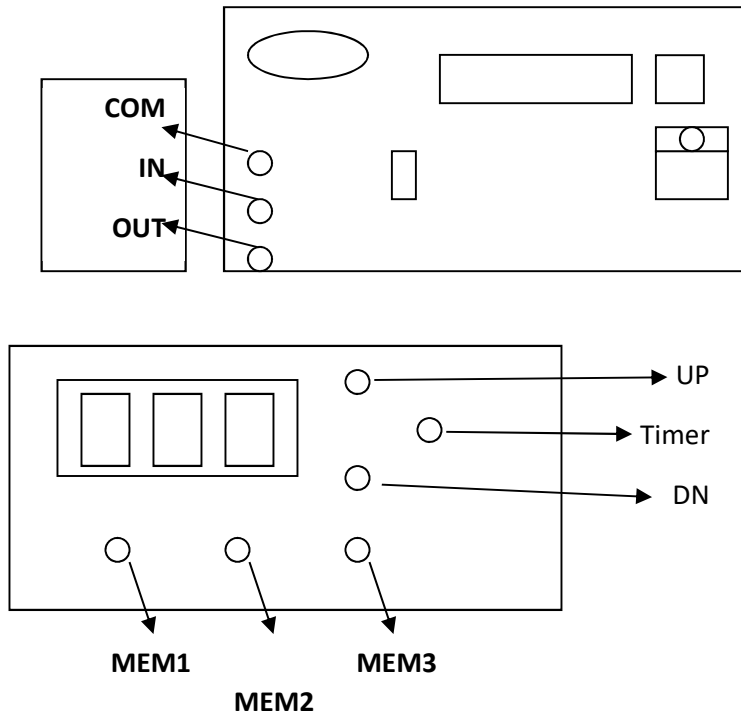


Wiring:



Description:

This dimmer can reduce the effective voltage. The input voltage should be 240VAC or 120VAC (Depends on the model). The dimmer can divide the input voltage to maximum 100 steps (it is adjustable).

The maximum power of the dimmer with the existing triac is 200w for more power you need to change the triac and use a good heatsink.

This dimmer is made for resistive loads like filaments, lamps, etc. using dimmer for inductive motors is not a good idea however, you can use it for universal motors (motors with commutator).

How to use:

If you connect the dimmer board to power, you'll see a 2 digit number on the screen that can be changed by up/dn keys. This number is the percentage of the output power. If you attach a lamp to the output, you'll see the lamp brightness changes by changing the dimmer value.

The number of the steps is set to 99 by default. But it can be changed in the settings menu.

PreSets:

The 3 buttons below the display are the preset buttons. To set a value to each memory, set the desired dimmer value by using the UP/DN keys and then hold one of the preset button until the display blinks. The dimmer value will be stored in that preset memory. Now whenever you press the same preset button, the dimmer will be set to the Preset value and the display will show the value.

Timer:

This dimmer has a maximum 90 minutes sleep timer. That can shut down the dimmer when the set time is elapsed.

If you press the timer button, you'll see “- -” on the screen. This means the timer is inactive.

You can set the timer value from 10 minutes to 90 minutes by pressing the timer key again.

Each press increases the timer value by 10 minutes. The timer value will go to zero by pressing the timer key after 90 and the “- -” will be show up on the display which means timer inactivated.

If you leave system for a few seconds after you set the time, the system will go back to the dimmer display.

NOTE: you can immediately turn the dimmer off by holding the timer key for 2 seconds anytime.

Settings:

There are several items that can be set by the user depends on the usage like Minimum and Maximum output power, Dimmer maximum steps, etc

1 – Minimum output power:

Unplug the power from the board, hold the presets 1 and 3 and plug the power while you are holding the buttons. The number on the display will be the minimum output. Now you can change the minimum value by using UP/DN keys. Meanwhile you will be able to see the output power if there is anything attached to the output of the dimmer.

2 – Maximum output power:

Unplug the power from the board, hold the presets 1 and 2 and plug the power while you are holding the buttons. The number on the display will be the maximum output. Now you can change the maximum value by using UP/DN keys. Meanwhile you will be able to see the output power if there is anything attached to the output of the dimmer.

NOTE: MAXIMUM VALUE MUST BE ALWAYS GREATER THAN MINIMUM VALUE

3 – Number of the Dimmer steps:

Unplug the power from the board, hold the presets 2 and 3 and plug the power while you are holding the buttons. The number on the display will be the dimmer steps. Now you can change the dimmer steps value by using UP/DN keys.

For example, you set the Minimum power to 10 and Maximum power to 20 and the Steps to 30. That means the dimmer will split the range to 30 steps. So the dimmer value zero means the output is off, dimmer value 1 means the output will be 10 and on dimmer value 30, the output is 20.

3 – Starter:

Unplug the power from the board, hold the timer button and plug the power while you are holding the button. The number on the display will be the dimmer's starter value. Now you can change the value by using UP/DN keys. The value can be from 0 to 99. Each step is 10 milliseconds and zero means no starter.

The starter is useful when you want to drive a motor with the dimmer. You set the minimum dimmer power. The set minimum power is enough to keep the motor running but if you stop the motor and set the dimmer to the minimum value the power is not enough to start the motor so you need to push the motor just to start moving and then reduce the power to minimum. This starter system will do that for you.

For example, if you set the starter value to 20, whenever you start the dimmer, the output will jump to maximum for $20 \times 10\text{ms} = 200\text{ms}$ and then it goes back to the current dimmer value.