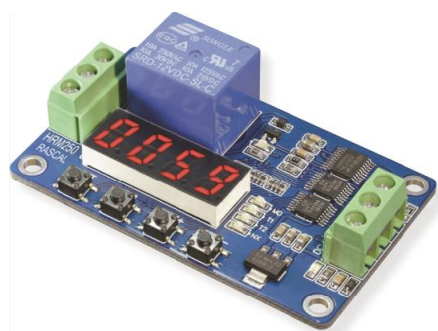


HRM250 - Quick Start Guide



This versatile relay module has two independent timers built in to it so it can be set up to switch the relay contacts on and off in a variety of ways. With each timer being adjustable for 0.005s up to 270hrs.

A built in LED display allows the user to set up the device to the function they require.

Full Instruction Manual



<https://systemq.com/PDF/manual/xHRM250.pdf>

The HRM250 has a non-volatile memory so once set up if the power is removed it will remember its settings. The HRM250 really has 10 main functions but 8 of these 10 functions can be imitated in two different ways.

You can either start the function by applying power to the HRM250 or start the function by applying a trigger voltage to it with power permanently applied to the HRM250.

1. **Power up** - Delay switch on
2. **Power up** - Delay switch on
3. **Power up** - Delay switch on followed by delay switch on
4. **Power up** - Delay switch off followed by delay switch on
5. **Power up** - Continuous loop starting with relay off then on
6. **Power up** - Continuous loop starting with relay on then off
7. **Power up** - Set number of "N" loops starting with relay off then on
8. **Power up** - Set number of "N" loops starting with relay on then off
9. **Toggle mode** - Trigger input toggles output
10. **Mimic mode** - Relay energizes whenever input trigger present
11. **Positive trigger** - Delay switch on
12. **Positive trigger** - Delay switch off
13. **Positive trigger** - Delay switch on followed by delay switch off
14. **Positive trigger** - Delay switch off followed by delay switch on
15. **Positive trigger** - Continuous loop starting with relay off then on
16. **Positive trigger** - Continuous loop starting with relay on then off
17. **Positive trigger** - Set number of "N" loops starting with relay off then on
18. **Positive trigger** - Set number of "N" loops starting with relay on then off

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You can either start the function by applying power to the HRM250 or start the function by applying a trigger voltage to it with power permanently applied to the HRM250.

The first 1-8 functions are triggered when you actually Power up the device, i.e. apply 12V to it. These are 8 different timing functions.

Functions 9 and 10 are "toggle" and "mimic" functions where the relay toggles or mimics a trigger input to it. For functions 9 & 10 the HRM250 needs power permanently applied to it.

When using a trigger input it needs to be a "positive trigger" this means the trigger signal is between 8 and 12V usually it will be at the supply voltage of 12V

Buttons

There are 4 buttons:

SET
SWI
NUM +
NUM -

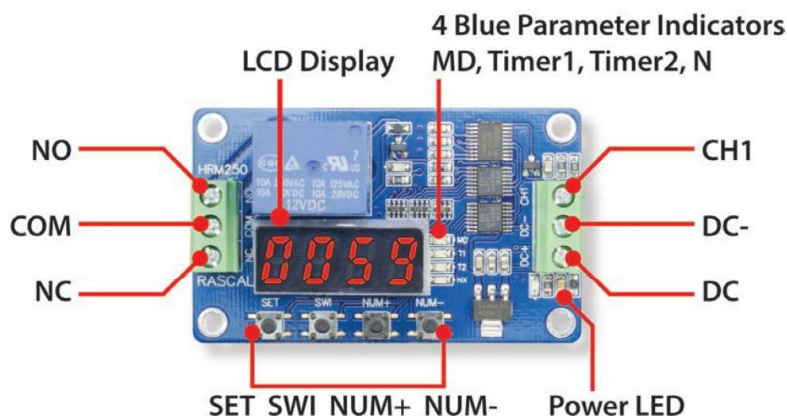
They all have short and long presses:

Short presses

are less than 1 second long

Long presses

are more than 1 second long



Operating modes

- Normal Operation
- Parameter view
- Parameter setting

LED display

- Used to set or view the timing parameters

N Functions

Functions 01-06

- LED display indicates the "time multiplier" for Timer1 and Timer2
- Time base varies from 00 to 99 - 00 = .005 second time multiplier (for very fine timing)
- 01 = 1 second time multiplier
- 99 = 99 second time multiplier
- First two LED digits indicate time multiplier for Timer1
- Second two LED digits indicate time multiplier for Timer2

LED indicators

4 blue parameter indicators:

MD: Active program function (01 to 18)

On = Timing stopped

Flashing = Timing function has completed

Timer1: Timer one - 1 to 9999 seconds

On = Displays current Timer1 value

Flashing = Timer1 is counting Timer2:

Timer two - 1 to 9999 seconds

On = Displays current Timer2 value

Flashing = Timer2 is counting

N: Varies for each function. See N Function opposite

On = Displays current N value

1 red power on indicator

1 blue relay active indicator

Relays	1
Input Voltage	12V DC
Output Relay(s)	240V AC 10A
Timers	2 (Built-in)
Delay	0.0005s - 270hrs
Display	LED (Built-in)
Dimensions	40 x 65mm

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