

YEYY

# NTC THERMISTER



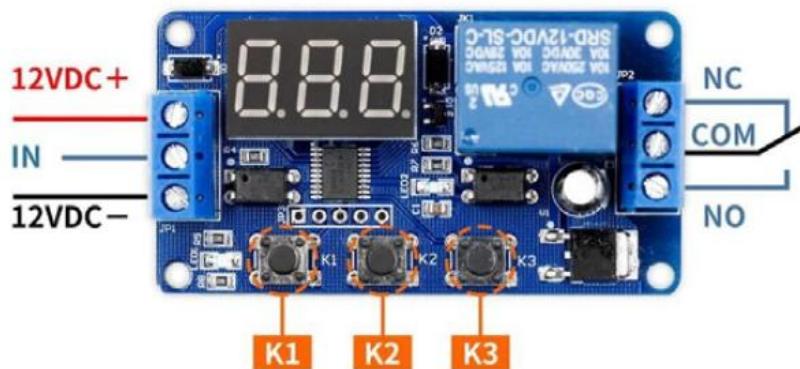
## PROGRAMMABLE TIMER RELAY MODULE

12VDC

250VAC 10A

### SPECIFICATIONS

RELAY TYPE	ELECTROMECHANICALLY
RELAYS / CHANNELS	ONE
INPUT / CONTROL VOLTAGE	12VDC (9 TO 12VDC)
MAX SWITCHING CAPACITY	10A 30VDC / 10A 250VDC
INPUT CONTROL	TTL (5V LOGIC)
TIMER	999 SECONDS MAX
RESOLUTION	2 SECONDS
DIMENSIONS	56 x 33 x 12mm



**K1** — Function selection key  
**K2 K3** — Time adjustment keys

## LIST OF FUNCTION MODES / PROGRAMS

### **P-11: Jog / Momentary**

- When a signal is given, the relay turns ON (pulls in).
- When the signal disappears, the relay turns OFF.

### **P-12: Self-lock / Latching**

- Give one signal → relay turns ON.
- Give another signal → relay turns OFF.

### **P-13: Timed ON (trigger ignored during delay)**

- Give a signal → relay turns ON for time **A**, then stops automatically.
- Any trigger during the delay time is invalid.

### **P-14: Timed ON (retrigger restarts timing)**

- Give a signal → relay turns ON for time **A**, then stops automatically.
- Trigger again during delay → timing restarts.

### **P-15: Timed ON (retrigger adds time)**

- Give a signal → relay turns ON for time **A**, then stops automatically.
- Trigger again during delay → time is accumulated (added).

### **P-16: Timed ON (trigger resets)**

- Give a signal → relay turns ON for time **A**, then stops automatically.
- Trigger during delay → resets.

### **P-17: Delay OFF with hold function**

- Give a signal → relay turns ON.
- After input signal disconnects, it starts timing **A**, then turns OFF.
- If signal is given again during delay, output remains ON and timing stops.

### **P-18: Power-on ON then timed OFF**

- After power is applied, relay turns ON immediately.
- After delay **A**, relay turns OFF.
- Stays OFF until power is applied again.

### **P-21: Delay ON**

- Give a signal → after delay **A**, relay turns ON.

### **P-22: Signal must stay ON for A seconds**

- Give a continuous signal → after **A**, relay turns ON.
- When signal disappears → relay turns OFF.

### **P-23: Signal must stay OFF for A seconds**

- After signal disappears for **A**, relay turns ON.
- If signal appears → relay turns OFF.

### **P-24: Delay ON and delay OFF**

- Signal present → after **A**, relay turns ON.
- Signal disappears → after **A**, relay turns OFF.

### **P-25: Repeat timing ON/OFF based on signal**

- Signal present → after **A**, relay turns ON.
- Signal present again for **A** → relay turns OFF.

### **P-26: Pulse timed operation**

- Signal present → relay ON for **A**, then stops.
- Signal disappears → relay ON again for **A**, then stops.

### **P-27: Pulse detection mode**

- If pulse signal is detected → relay does NOT work.
- If no pulse signal → relay turns ON after delay **A**.

### **P-28: Power-on delay ON**

- After power is applied → delay **A**, then relay turns ON.
- Relay stays ON until power is cut.

### **P-31: Cycle timer (A ON / B OFF loop)**

- After power is applied → relay ON for **A**, OFF for **B**.
- Repeats infinitely until power is cut.

Continues :

**P-32: Signal-controlled P-31 loop**

- When signal is present → starts **P-31 infinite cycle**.
- When signal disappears → stops the cycle.

**P-33: Toggle P-31 loop**

- Give one signal → starts **P-31 infinite cycle**.
- Give another signal → stops the cycle.

**P-34: Power-on delay ON then timed OFF**

- After power is applied → delay **A**, relay turns ON.
- Relay stays ON for **B**, then turns OFF.

**P-35: Signal delay ON then timed OFF**

- When signal is present → delay **A**, relay turns ON.
- Relay stays ON for **B**, then turns OFF.

**P-36: Signal delay ON, output stops when signal removed**

- When signal is present → delay **A**, relay turns ON for **B**, then turns OFF.
- If signal disappears → timing is cleared and stops.

**P-37: Timed ON with lockout**

- When signal is present → relay turns ON for **A**, then stops automatically.
- After stopping, it waits **B** time.
- During the total **A+B** time, trigger signals are invalid.

**P-38: Repeat ON after OFF delay**

- When signal is present → relay turns ON for **A**, then stops.
- After stopping, it counts **B** time.
- Then relay turns ON again for **A**, then stops.

**P-41: Trigger on signal removal**

- No action when signal is present.
- When signal disappears → output starts, after delay **A** it turns OFF.

**P-42: Signal removed → delay then output**

- When signal disappears → delay **A**, output starts.
- Output runs for **B**, then ends.

**P-43: Signal removed for A seconds → output**

- When signal disappears → after **A**, output starts.
- Output runs for **B**, then ends.

**P-44: Power-on cycle (start/stop loop)**

- After power is applied → output starts for **A**, stops for **B**.
- Repeats cycle, then ends after set number of cycles.

**P-45: Signal-triggered cycle repetition**

- No action on power-on.
- Give a signal → output runs **A**, stops **B**, cycles for set number of times, then stops.
- Give another signal → repeats again.

**P-46: Counted signals → latch output**

- After signal is received **A times**, relay output turns ON and stays ON.

**P-47: Counted signals → timed output**

- After signal is received **A times**, output starts and runs for **B**, then stops.

**P-48: Fast signal counting (within C seconds)**

- Within **C seconds**, if signals are received continuously up to **A times**, output starts and runs for **B**, then stops.

CONTINUES

## PROGRAMMING PROCEDURES / FUNCTION SETTING

### Button Setting Instructions

When powered on, the display shows “----”, meaning it has entered standby mode.

#### Function Setting

##### Press K1 the first time:

- Must be held for more than **1 second** to be valid (prevents accidental triggering).
- Display shows: **P-11**
- **K2** adjusts **hours mode**
- **K3 / K4** adjust the **function**

##### Press K1 the second time:

- Screen shows: **A001**
- **K2 / K3** adjust the **first time value A**
- **K4** adjusts the **decimal point position** (time unit)

##### Press K1 the third time:

- Screen shows: **B001**
- **K2 / K3** adjust the **second time value B**
- **K4** adjusts the **decimal point position** (time unit)

##### Press K1 the fourth time:

- Screen shows “----” meaning it returns to standby mode.  
In standby mode, press **K4** to permanently turn the display **ON/OFF** (low-power mode switching)

### Decimal Point / Time Unit Explanation

**x.xx** (decimal in hundredths)

- Timing range: **0.01 sec ~ 9.99 sec**

**xx.x** (decimal in tenths)

- Timing range: **0.1 sec ~ 99.9 sec**

**xxx** (no decimal point)

- Timing range: **1 sec ~ 999 sec**

**xxx.** (decimal at the end = minutes mode)

- Timing range: **1 minute ~ 999 minutes**