### DH48J digital counter manual

DH48S adopt advanced IC and digital tube, can replace H7CN or such function products. With advantage of beautiful appearance, wide delay time range, high accuracy, low power consumption, long life, big contact rating, used for automatic control.

# Model description

DH48J: can be input by electromagnetic relay, limit switch, etc, with reset function;

DH48JA: can be input by proximity sensor, photoelectric sensor, etc;

DH48J-11A: can be input by electromagnetic relay, limit switch, proximity sensor, photoelectric sensor, etc, with reset function, no-power memory can remain 10 year.

#### Features

1. Power supply tolerance: 85-110% rated voltage

2. AC: 110V, 220V, 380V

3. DC: 12V, 24V

4. Counting range: 1-9999 x1/x10/x100 multiple

5. Contact rating: 5A@220Vac, 5A@30Vdc(Resistance)

6. Mechanical life: ≥10<sup>7</sup>
7. Electrical life: ≥10<sup>5</sup>

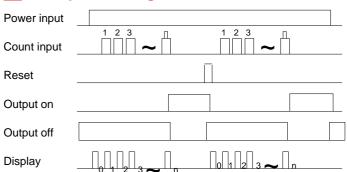
8. Power consumption: ≤5W

9. Operating temperature: -10°C to 50°C

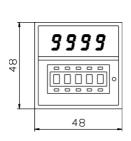
10. Operating humidity: 95% RH max, non-condensing

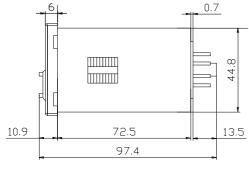
11. Above sea level: <2000m</li>12. Max. counting speed: 30 cps13. Min. counting pulse: 15ms

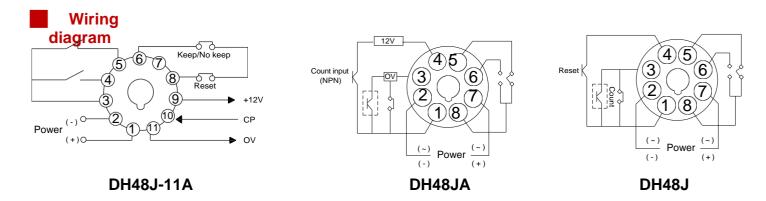
# Sequence diagram



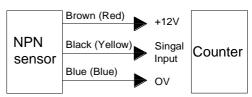
# Dimensions (Unit: mm)







# NPN type sensor input for DH48J-11A, DH48JA



# Use description

- 1. Preset multiple first, then press reset button, or disconnect the power more than 0.5 seconds then turn on the power, so that complete preset. (If the multiple is x10, it means input 10 input signal, display digital increase 1).
- 2. In a strong current environment, if the reset and signal wires are long, please use a shielded wire.
- 3. DH48J-11A, DH48JA 12V DC power output can be used for sensor supply, current is < 30mA.
- 4. When the DH48J-11A's 6 and 7 terminals switch on, it mean not keep memory, otherwise mean keep.
- 5. When the count reaches to preset number, the relay contact transposition, stop counting.
- 6. It is forbidden to add external voltage to reset, counting and memory terminals.
- 7. Can be customized.

### **DH48S digital timer manual**

DH48S adopt advanced IC and digital tube, can replace H5CN or such function products. With advantage of beautiful appearance, wide delay time range, high accuracy, low power consumption, long life, big contact rating, used for automatic control.

### **Model description**

DH48S-1Z:

Delay SPDT, with reset, pause function;

DH48S-2Z:

Delay DPDT;

DH48S-2ZH

Delay SPDT and instantaneous SPDT

#### **Features**

1. Power supply tolerance: 85-110% rated voltage

2. AC: 110V, 220V, 380V

3. DC: 12V, 24V

4. Repeat accuracy:  $\leq 0.3\% \pm 0.05$ s

5. Contact rating: 3A@250Vac, 5A@28Vdc(Resistance)

6. Mechanical life: ≥10<sup>7</sup>
7. Electrical life: ≥10<sup>7</sup>

8. Power consumption: ≤5W

9. Operating temperature: -10°C to 50°C

10. Operating humidity: 95% RH max, non-condensing

### Delay range(set by panel dial switch)

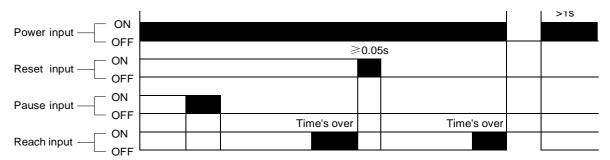
#### **DH48S**

Switch value	Delay range
Н	1M-99H99M
М	1S-99M99S
S	0.015-99.995

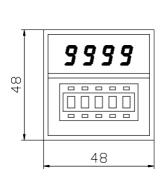
#### DH48SA

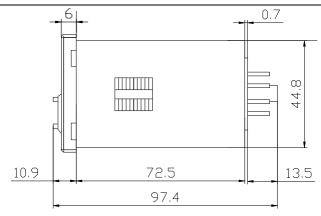
	,
Switch value	Delay range
M S	1S-99M99S
нм	1M-99H99M
0.01S	0.01S-99.99S
0.1S	0.1S-999.9S
S	1S-9999S
М	1M-9999M
10S	10S-99990S
0.1M	0.1M-999.9M
0.1H	1H999.9H
Н	1H-9999H

### Sequence diagram



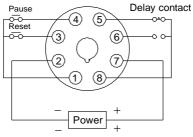
Dimensions (Unit: mm)



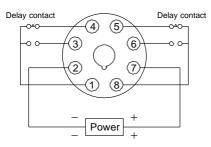


Note: Perforation dimension 45.5x45.5 mm

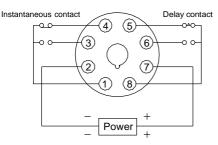
#### Wiring diagram







DH48S-S-2Z, DH48S-2Z



DH48S-2ZH

### Use description

- 1. Set delay time first, then switch on electric power.
- 2. After delay time set, should cover the protective hat, to avoid to press the dial switch then timer action.
- 3. If the load current is big, should be used with contactor.
- 4. When switch on ①③ terminal, the contact position will reset, when switch off, the time will begin with zero, can use this function to achieve Off-delay function (DH48S-2Z don't have this function).
- 5. Use pause function as a counter: (DH48S-2Z don't have this function), when switch on ①④ terminal, the time is pause, display hold, when switch off, the time continue.
- 6. Reset and pause wire, please use shield wire.
- 7. Forbid add voltage to pause or reset terminal.
- 8. The use circumstance should be without causticity, dust, rain, frost, oil mist.
- 9. Note: This product can full display, hidden zero, count, countdown.