



H5CLR / ASY- 4DR

MULTI-FUNCTION DIGITAL TIMER

User's Manual

RESTRICTIONS ON USE

When using this product in applications that require particular safety or when using this product in important facilities, please pay attention to the safety of the overall system and equipment. Install fail-safe mechanisms, perform redundancy checks and periodic inspections and adopt other appropriate safety measures when it is necessary. This product is rated at Class II □.

SAFETY PRECAUTION

This manual uses the following symbols to ensure safe operation of this timer.

- WARNING** Warnings are indicated when mishandling this product might result in death or serious injury to user.
- CAUTION** Cautions are indicated when mishandling this product might result in minor injury to the user, or only physical damage to the timer.

WARNING

- Note this incorrect wiring of this product can damage it and lead to other hazards. Make sure the product has been correctly wired before turning the power ON.
- Before wiring, or removing / mounting the product, be sure to turn the power OFF. Failure to do so might cause electric shock.
- Do not touch electrically charged parts such as the power terminals. Doing so might cause electric shock.
- Do not disassemble the product. Doing so might cause electric shock or faulty operation.

CAUTION

- Use the product within the operating ranges recommended in the specification (temperature, humidity, voltage, shock, mounting direction, atmosphere and etc.). Failure to do so might cause fire or faulty operation.
- Firmly tighten the wires to the socket. Insufficient tightening of the wires to the socket might cause fire.

SPECIFICATIONS

Operating voltage	AC/DC(V): 12-48 or 100-240
Allowable operating voltage range	85 ~ 110% of rated operating voltage
Rated frequency	50 / 60Hz
Contact rating	250VAC 5A (Resistive load)
Reset time	MAX 0.1s
Life	Approx. 2.5VA
Power consumption	Mechanical : 5,000,000 times / Electrical : 100,000 times
Ambient temperature	-10 ~ +50°C (without condensation & freezing)
Ambient humidity	MAX 85%RH (without condensation)
Altitude	MAX 2000m
Weight	Approx. 120g(H5CLR) / 150g(ASY-4DR)

NAMES AND FUNCTIONS OF FACEPLATE

LEDs

- RUN: Timing indicator
- OUT: Control output indicator
- K/P: Key protection indicator
- RESET: Reset indicator
- START: Start indicator
- GATE: Gate indicator
- h: Time unit display (Hour)
- m: Time unit display (Minute)
- s: Time unit display (Second)

key :
Reset the output or save the value of setting.(after save than back to the operation mode)

Upper display
Display PV values (current time, etc.) or setup items.

Lower display
Display SV values (set time, etc.) and other parameter values.

□ key :
Performing arithmetic shift operations and switches the display. Hold down for at least 3 seconds to enter setting modes.

▲▼ key :
Used for incrementing or decrementing numeric values.

SETTING PROCEDURE

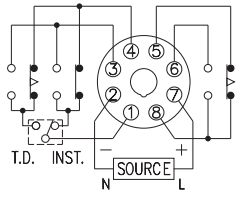
<p>Reset</p> <p>POWER ON or RESET</p>	<p>Switch to input setting mode</p> <p>(1) Normal ▲ + 3s</p> <p>(2) In self cut-off and setting time below 3s RESET → RESET + ▲ → ▲ + 3s</p>	<p>Switch ON / OFF Key protection</p> <p>▲ + ▼ + 3s</p>	<p>Switch to the next mode</p> <p>◀</p>	<p>Save and back to the operation mode</p> <p>RESET</p>
<p>1.TIME RANGE</p> <p>1-1 9.999s 1-5 999.9m 1-9 99m59s 1-2 99.99s 1-6 9999m 1-A 99h59m 1-3 999.9s 1-7 999.9h 1-4 9999s 1-B 9999h</p>	<p>2.UP / DOWN MODE</p> <p>2-1 Count up 2-2 Count down</p>	<p>3.OUTPUT MODE</p> <p>3-1 Mode A 3-5 Mode B 3-9 Mode D 3-2 Mode A1 3-6 Mode B1 3-A Mode E 3-3 Mode A2 3-7 Mode B2 3-b Mode F 3-4 Mode A3 3-B Mode C 3-C Mode A5</p> <p>See Timing Chart. Only A,B,C Mode on H5CLR-8, ASY-4DR □</p>		
<p>4.OUTPUT TIME</p> <p>4-1 Hold-99999.9S</p> <p>※ Not functional on MODE C,D,E and F</p>	<p>5.INPUT SIGNAL TIME</p> <p>5-1 20ms 5-2 1ms</p> <p>※ Not available for ASY-4DR □ and H5CLR-8</p>	<p>6.KEY PROTECTION LEVEL</p> <p>6-1 Lock function key ▲ 6-2 Lock reset key RESET 6-3 Lock preset value key ▲▼ 6-4 Lock all key</p>		
<p>7.OUTPUT CONTACT</p> <p>7-1 2C 7-2 1A1C</p> <p>※ Available on H5CLR-8F-11 and ASY-4DR □ type only</p>	<p>8.NPN/PNP INPUT MODE</p> <p>8-1 nPn 8-2 PnP</p> <p>H5CLR : 8-1 NPN, Common = 0V H5CLR : 8-2 PNP, Common = +V</p> <p>※ Not available for ASY-4DR □ and H5CLR-8</p>			

DIMENSION(mm)

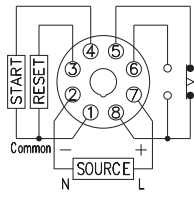
<p>H5CLR</p>	<p>H5CLR + Y-50 + US-08</p>
<p>ASY-4DRN / ASY-4DRGN</p>	<p>ASY-4DRY / ASY-4DRGY + US-08</p>

CONNECTION

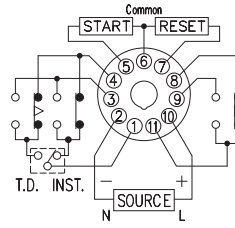
H5CLR-8 & ASY-4DR



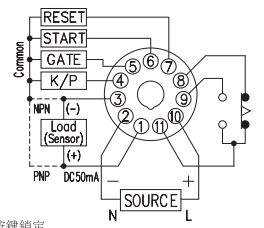
H5CLR-8G & ASY-4DRG



H5CLR-11



H5CLR-11M

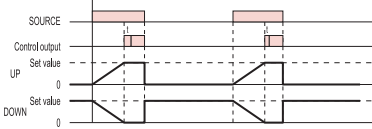


K/P : 按鍵鎖定

TIMING CHART (Output mode)

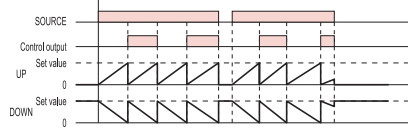
H5CLR-8 & ASY-4DR

A : Signal ON delay 1 (Timer resets when power comes ON.)



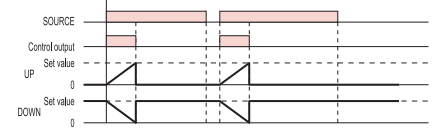
The control output is controlled using a sustained or one-shot time period.

B : Repeat cycle 1 (Timer resets when power comes ON.)



The status of the control output is reversed when time is up (OFF at start).

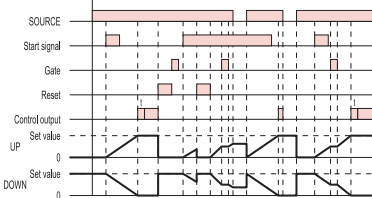
E : Interval (Timer resets when power comes ON.)



The timer is reset when the time is up.

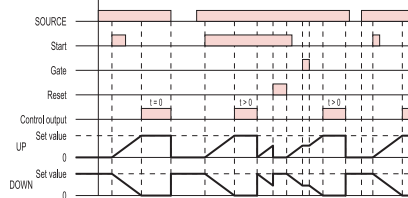
H5CLR-8G & ASY-4DRG & H5CLR-11 & H5CLR-11M

A : Signal ON delay 1 (Timer resets when power comes ON.)



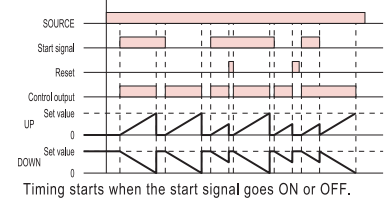
Timing starts when the start signal goes ON. *Note 1
The control output is controlled using a sustained or one-shot time period.

A-5 : Signal ON delay 3 (Timer resets when power comes ON.)



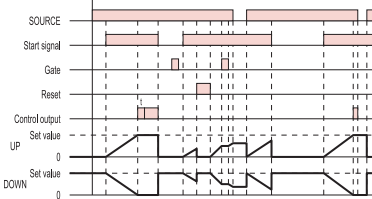
Timing starts when the start signal goes ON. *Note 1
The status of the control output is reversed when time is up (OFF at start).

C : Signal ON/OFF delay (Timer resets when power comes ON.)



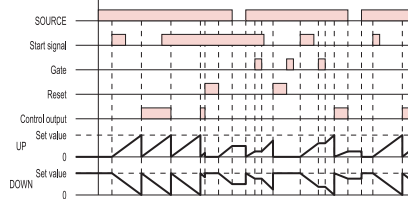
Timing starts when the start signal goes ON or OFF.
The status of the control output is ON when the start signal goes ON or OFF.

A-1 : Signal ON delay 2 (Timer resets when power comes ON.)



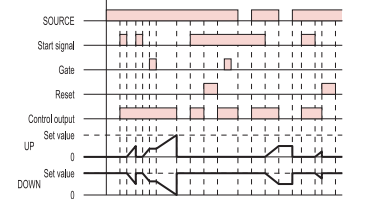
Timing starts when the start signal goes ON, and is reset when the start signal goes OFF. *Note 1
The control output is controlled using a sustained or one-shot time period.

B : Repeat cycle 1 (Timer resets when power comes ON.)



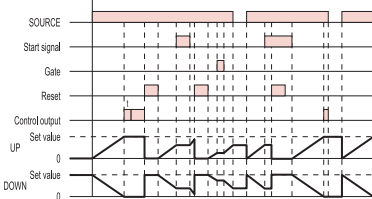
Timing starts when the start signal goes ON. *Note 1
The status of the control output is reversed when time is up (OFF at start).

D : Signal OFF delay (Timer resets when power comes ON.)



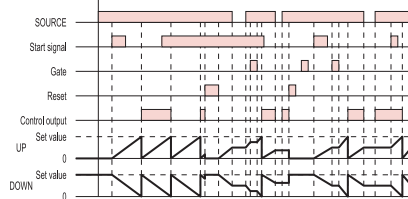
The control output is ON when the start signal is ON (except when the power is OFF or the reset is ON).
The timer is reset when the time is up.

A-2 : Power ON delay 1 (Timer resets when power comes ON.)



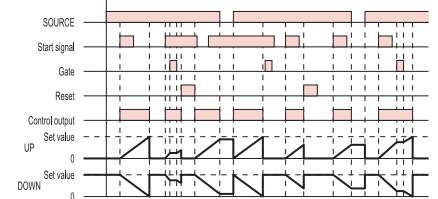
Timing starts when the reset input goes OFF.
The start signal disables the timing function (i.e., same function as the gate input).
The control output is controlled using a sustained or one-shot time period.

B-1 : Repeat cycle 2 (Timer dose not reset when power comes ON.)



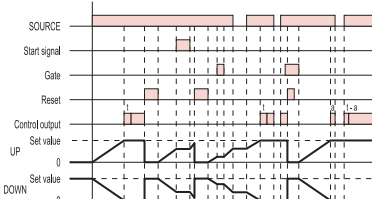
Timing starts when the start signal goes ON. *Note 1
The status of the control output is reversed when time is up (OFF at start).

E : Interval (Timer resets when power comes ON.)



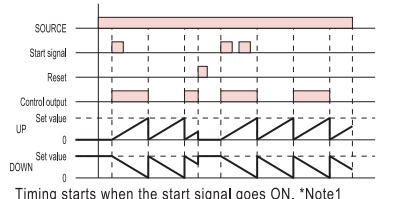
Timing starts when the start signal comes ON. *Note 1
The control output is reset when time is up.

A-3 : Power ON delay 2 (Timer dose not reset when power comes ON.)



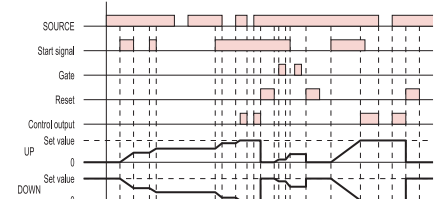
Timing starts when the reset input goes OFF.
The start signal disables the timing function (i.e., same function as the gate input).
The control output is controlled using a sustained or one-shot time period.

B-2 : Repeat cycle ON start (Timer resets when power comes ON.)



Timing starts when the start signal goes ON. *Note 1
The status of the control output is reversed when time is up (OFF at start).

F : Cumulative (Timer does not reset when power comes ON.)



Start signal enables timing (timing is stopped when the start signal is OFF or when the power is OFF).
A sustained control output is used.
*Note 1. While the start signal is ON, the timer starts when power comes ON or when the reset input goes OFF.