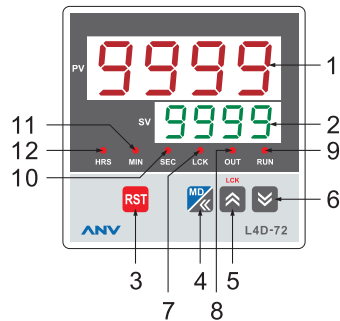


MULTI-FUNCTION DIGITAL TIMER

MANUAL

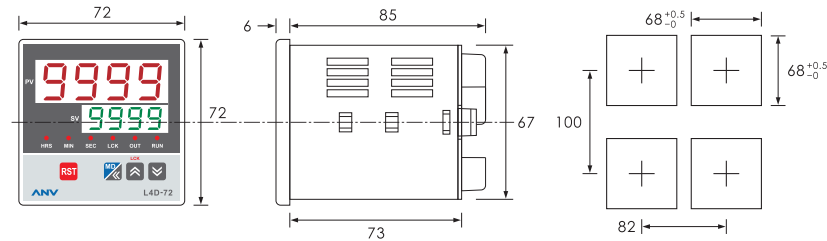
L4D-72

■ FRONT PART



SYMBOL		NAME	FUNCTION
1	PV	Present Value	Display of present value
2	SV	Set Value	Display of set value
3	RST	Reset Key / Set Key	Reset Key : Press this key to restart Set Key : When setup is complete, press this key to save
4	MD/ ⏮	Mode Key / Left Key	Enter the program mode & Shift left
5	⏭	Select Key / Increase Key / Lock Key	Select Key: Select function Increase Key: Increase value Lock Key: Hold this key more than 3 seconds to lock or unlock
6	⏮	Select Key / Decrease Key	Select Key : Select function Decrease Key : Decrease value
7	LCK	Lock Key Lamp	Key lock indication
8	OUT	Indicator Operation	Time up indication
9	RUN	Timing Indicator	Timing state is flicker
10	SEC	SEC Indicator Lamp	The time unit is seconds
11	MIN	MIN Indicator Lamp	The time unit is minutes
12	HRS	HRS Indicator Lamp	The time unit is hours

DIMENSIONS



■ SPECIFICATIONS & CHARACTERISTICS

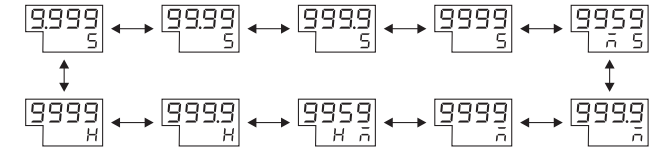
MODEL		L4D-72
CONTROL OUTPUT		1A 1C or 2C 7+11 Reset input 7+12 Start input 7+13 Gate input 7+14 Key Protect input 7+6 12VDC output
DIMENSION (mm)		72H X 72W X 91D
RATED VOLTAGE		12~60VDC/AC, 100~240VAC 50/60Hz
OPERATING VOLTAGE		90 ~ 110 % of rated voltage
CONTACT CAPACITY		NO: 5A 250VAC resistive load, NC:5A 250VAC resistive load
EXTERNAL RESET		○
EXTERNAL GATE		○
EXTERNAL START		○
EXTERNAL KEY PROTECT		○
MEMORY FUNCTION		○
OUTPUT 12VDC		○
INDICATOR OPERATING		Time up indication
RESET METHOD		Power reset , External reset
RESET TIME		Power reset : 0.3sec, External reset : 0.02sec
ACCURACY	REPEAT ERROR	Power ON start : $\pm 0.05\%$ $\pm 0.1\text{sec}$ Signal start : $\pm 0.01\%$ $\pm 0.05\text{sec}$
	SETTING ERROR	
	VOLTAGE ERROR	
	TEMPERATURE ERROR	
LIFE	MECHANICAL	5 X 10 ⁶ times
	ELECTRICAL	10 ⁵ times
CONSUMED POWER		Max. 3VA
AMBIENT TEMPERATURE		-10℃~+55℃
AMBIENT HUMIDITY		45~85%RH
WEIGHT		Approx. 197g

CHANGE OF SETTING VALUE

Setting without pressing any key over 10 seconds will automatically save and return to RUN mode.

TIME RANGE

Press key 3 seconds into the time function mode.



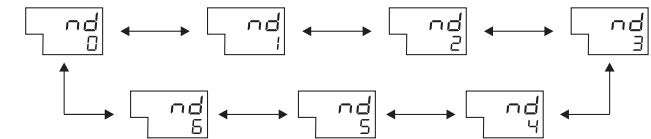
Time range	SV Display	PV Display
0.001s~9.999s	5	9999
0.01s~99.99s	5	9999
0.1s~999.9s	5	9999
1s~9999s	5	9999
1s~99m59s	h 5	9959

Time range	SV Display	PV Display
0.1m~999.9m	h	9999
1m~9999m	h	9999
1m~99h59m	H h	9959
0.1h~999.9h	H	9999
1h~9999h	H	9999

Press  key save the settings and change to TIMING mode or press  key save the settings and return to RUN mode.

TIMING MODE

Press or Cyclic selection. Detailed functional see timing charts.

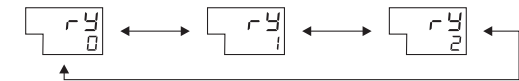


nd/0=Power on timing,Relay output when the PV value equal to SV value.
nd/1=Long trigger timing.
nd/2=Short trigger timing.
nd/3=Long trigger timing,after release trigger button will be reset.
nd/4=Long trigger timing,timing or time up release trigger button will be reset.
nd/5=Release the trigger button start timer.
nd/6=Press or release trigger button both timing.

Press  key save the settings and change to RELAY OUTPUT mode or press  key save the settings and return to RUN mode.

RELAY OUTPUT MODE

Press  or  Cyclic selection.



ry/0=Positive action. (NC→NO)
ry/1=Reverse action. (NO→NC)
ry/2=Trigger action. (NC→NO→NC) (at nd/0 mode is invalid.)

Press  key save the settings and change to UP/DOWN mode or press  key save the settings and return to RUN mode.

UP / DOWN MODE

Press  or  Cyclic selection.

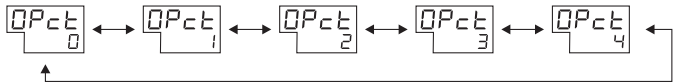


ud/up=Increase timing.
ud/do=Decrease timing.

Press key save the settings and change to OUTPUT CONTROL mode or press  key save the settings and return RUN mode.

OUTPUT CONTROL MODE

Press or Cyclic selection. ▶ Detailed functional see timing charts.



- Opct/0=Time up RELAY output. PV value = SV value.
- Opct/1=Time up RELAY output. Wait for reset delay time up then RELAY release, PV value is returned to the initial value.
- Opct/2=Time up RELAY output. Wait for reset delay time up then RELAY release, PV value is returned to the initial value and restart timing. GATE is available.
- Opct/3=Time up RELAY output and PV value is returned to the initial value. Wait for reset delay time up then RELAY release and restart timing. GATE is available.
- Opct/4=Time up RELAY output and restart timing, time up RELAY release and restart timing.

Press to enter RELAY delay time setting.

Press to change RELAY delay time digit.

Press to select digital 0~9.(Time range:0.1S~999.9S)

Press key save the settings and change to MEMORY mode or press key save the settings and return to RUN mode.

Note: Opct/1 is invalid, if use nd/4 mode. Opct/2, Opct/3 is only valid in nd/4 mode.

MEMORY MODE

Press or Cyclic selection.



- c/no=Without power failure memory function.
- c/ye=With power failure memory function.

Press key save the settings and change to CONTACT OUTPUT mode or press key save the settings and return to RUN mode.

CONTACT OUTPUT MODE

Press or Cyclic selection.



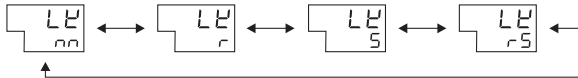
- ryAb/2c=Time relay:2
- ryAb/1c=Time relay:1, Instantaneous : 1

Press key save the settings and change to KEY LOCK mode or press key save the settings and return to RUN mode.

KEY LOCK MODE

Press or Cyclic selection.

The standby state hold down key 3 seconds to lock key or unlock.

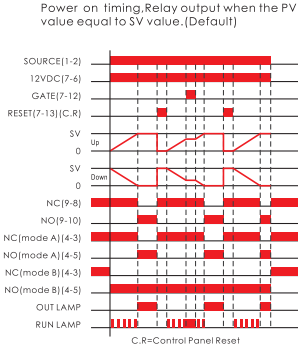


- LK/nn =No lock.
- LK/r =Lock the reset key.
- LK/S =Shift left key.
- LK/rS =Reset key and shift left key.

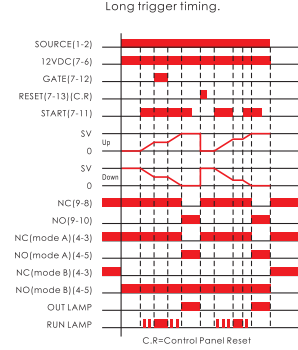
Press key save the settings and change to TIME RANGE mode or press key save the settings and return to RUN mode.

TIMING CHARTS

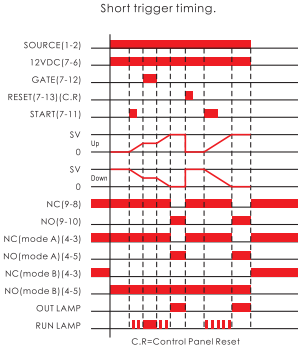
nd/0 + Opct/0



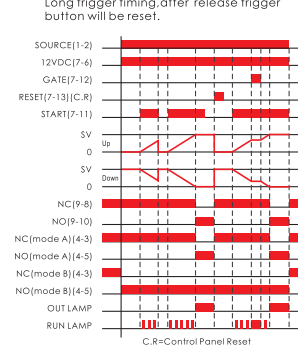
nd/1 + Opct/0



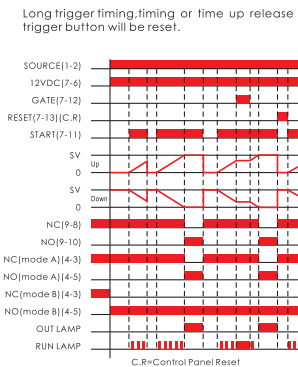
nd/2 + Opct/0



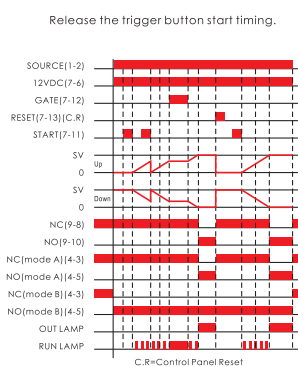
nd/3 + Opct/0



nd/4 + Opct/0

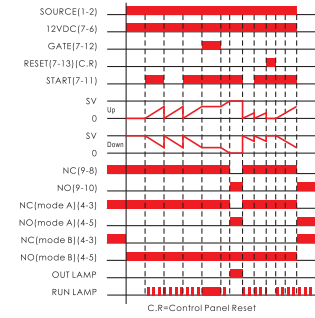


nd/5 + Opct/0



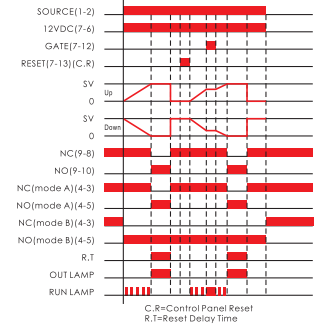
nd/6 + Opct/0

Press or release trigger button both restart timing.



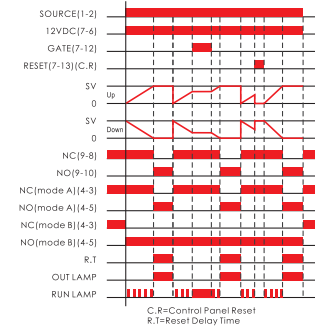
nd/0 + Opct/1

Power on timing,Time up RELAY output. Wait for reset delay time up then RELAY release, PV value is returned to the initial value.



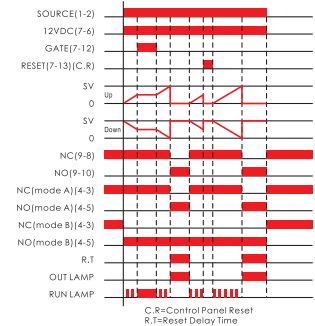
nd/0 + Opct/2

Power on timing,Time up RELAY output, Wait for reset delay time up then RELAY release, PV value is returned to the initial value and restart timing.



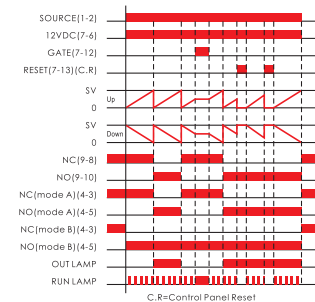
nd/0 + Opct/3

Power on timing,Time up RELAY output and PV value is returned to the initial value. Wait for reset delay time up then RELAY release and restart timing.

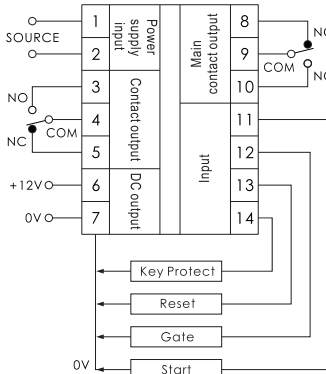


nd/0 + Opct/4

Flicker relay.



CONNECTION DIAGRAMS



Main contact output : Time limit
Contact output : Time limit (mode A) or Instantaneous (mode B)