

Analog timer

HANYOUNG NUX

# TF62N/TF62D INSTRUCTION MANUAL

HANYOUNGNUX CO.,LTD

1381-3, Juan-Dong, Nam-Gu Incheon, Korea TEL: (82-32)876-4697

PT. HANYOUNG ELECTRONIC INDONESIA

Jl. cempaka blok F16, No.02 Delta Silicon II Cikarang Bekasi Indonesia TEL: 62-21-8911-8120~4

## Safety information

Alerts declared in the manual are classified to Danger, Warning and Caution by their criticality

<b>⚠ DANGER</b>	DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury
<b>⚠ WARNING</b>	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury
<b>⚠ CAUTION</b>	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury

### ⚠ Danger

Do not touch or connect any undesirable conductive part to input/output terminal since there is a possibility of electric shock.

### ⚠ Warning

- Please install an appropriate protective circuit on the outside if malfunction, an incorrect operation or failure of the product may be a cause of leading to a serious accident and plan for preventing accidents.
- After mounting the product onto a panel, please use a socket dedicated to the product when connecting with other units and do not turn on the power until completing wiring to prevent electric shock.
- Please turn off the power when mounting/dismounting of the product. This is a cause of electric shock, malfunction, or failure.
- If the product is used with methods other than specified by the manufacturer, then it may lead to injury or property damage.
- In order to use this product properly and safely, we recommend periodic maintenance.
- The warranty of this product (including accessories) is 1 year only when it is used for the purpose it was intended under normal condition.

### ⚠ Caution

- Please do not set "Time" to "0". This can be a cause of malfunction. Also, there could be a time difference in timer operation. Please use it after confirming the time difference.
- Please set or change "Time Range" in the dip switch while the timer is OFF. If the "Time Range" has been changed to other value during the operation, please turn off the timer and turn it back on.
- Since this is not explosion-proof structure, please use in a place where corrosive gas (such as harmful gas, ammonia, etc.), combustible or explosive gas does not occur.
- Please use in a place where there is no direct vibration and a large physical impact to the product.
- Please use in a place where there is no water, oil, chemicals, steam, dust, salt, iron or others
- Please avoid using in a place where excessive amounts of inductive interference or electrostatic and magnetic noise occur.
- Please avoid using in a place where heat accumulation occurs due to direct sunlight or radiant heat.
- Please use in a place where the elevation is below 2,000 m.
- Please make sure to inspect the product if exposed to water since there is a possibility of electric leakage or a risk of fire.
- If there is a lot of noise from the power line, installing an insulated transformer or a noise filter is recommended.
- When the power is being supplied there should be a preparation time for the contact output. Please use a delay relay together when it is used as a signal on the outside of interlock circuit or others.

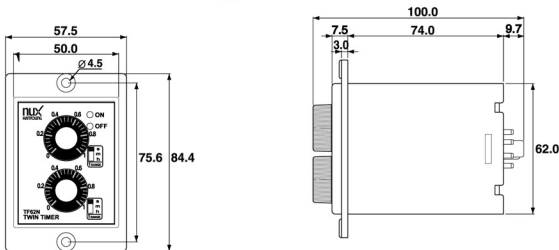
## Suffix code

Model	Code	Description
	□ - □ □ □	Analog timer
Dimension	TF62N	Twin Timer 57.5(W) × 84.4(H) mm
	TF62D	Dual Timer 57.5(W) × 84.4(H) mm
Mounting structure	P	Panel type
	E	Exposure type
Time range (set with dip witch)	01	1 sec / 1 min / 1 hour
	03	3 sec / 3 min / 3 hour
	06	6 sec / 6 min / 6 hour
	10	10 sec / 10 min / 10 hour
	30	30 sec / 30 min / 30 hour
Control output	D	Time - limit 1c (For TF62N)
	F	Time - limit 2c (For TF62D)

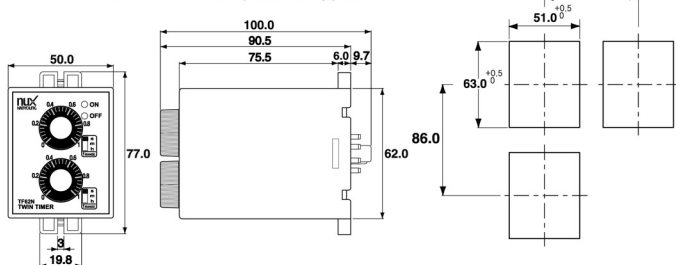
## Appearance and Panel cutout

[Unit : mm]

### ■ TF62NP / TF62DP (Panel type)

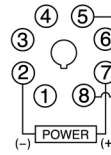


### ■ TF62NE / TF62DE (Exposure type)

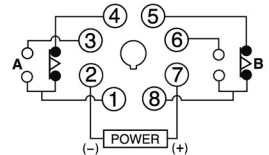


## Connection diagram

### ■ D type (Time - limit 1c)



### ■ F type (Time - limit 2c)



## Specification

Model	TF62N (Twin Timer)	TF62D (Dual Timer)
Power supply voltage	24 - 240 V a.c 50 - 60 Hz, 24 - 240 V d.c	
Allowable Voltage	Power supply voltage ± 10%	
Power consumption	4.5 VA max (240 V a.c 60 Hz), approx. 1.5 W max (24 V d.c)	
Power reset time	0.1 s max	
Time range	※Refer to suffix code	
Time difference	Repeat error	±0.3 % max (percentage of full scale)
	Setting error	±5 % max (percentage of full scale)
Control output	Output mode	FLICKER (ON Start) / DUAL (ON-A Start)
	Contact composition	D type (Time - limit 1c) / F type (Time - limit 2c)
Contact capacity	250 V a.c 3 A resistive load	
Relay life span	Mechanical : 10 million times min / Electrical : 100 thousand times min	
Dielectric strength	2000 V a.c 60 Hz for 1 min (Between two different current carrying parts)	
Noise immunity	±2 kV (between power terminal, pulse width ±1μs, square wave noise by noise simulator)	
Insulation resistance	100 MΩ min (500 V d.c)	
Vibration resistance (durability)	10 - 55 Hz (for 1 min), amplitude 0.5 mm, for 3 direction for 2 hr	
Shock resistance (durability)	300 % for each 3 direction for 3 times	
Operating ambient temperature	-10 ~ 50 °C (without condensation)	
Operating ambient humidity	30 ~ 85 % R.H.	
Storage temperature	-20 ~ 65 °C	
Certification	CE	-

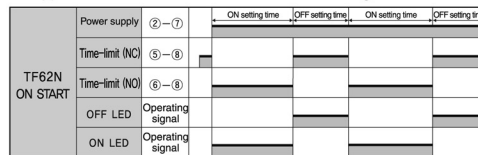
## Part name and function

TF62N	Function	Contents
	① Flicker-ON output indicating LED	In case of Flicker-ON, LED is ON at the same time when operating time-limit output.
	② Flicker-OFF output indicating LED	In case of Flicker-ON, LED is ON at the same time when stopping time-limit output.
	③ Flicker-ON time display	It is used to set operating time of time-limit output in the Flicker-ON mode. Setup time could be changed during operation of timer.
	④ Flicker-ON time unit setup switch	It is consisted of Hour (h), Minute (m), Second (s). You can set and use ON time unit what you need. (When Power is OFF)
	⑤ Flicker-OFF time display	It is used to set stopping time of time-limit output in the Flicker-ON mode. Setup time could be changed during operation of timer.
	⑥ Flicker-OFF time unit setup switch	It is consisted of Hour(h), Minute(m), Second(s). User can set his own Flicker-OFF time unit (Available to change it when Power is OFF)

TF62D	Function	Contents
	① Dual-B ON output indicating LED	In case of Dual function, LED is ON at the same time when operating B output.
	② Dual-A ON output indicating LED	In case of Dual function, LED is ON at the same time when operating A output.
	③ Dual A/B OFF output indicating LED	In case of Dual function, LED is ON at the same time when stopping A output or B output.
	④ Setup time display of Dual A/B ON	It is used together with knob to set ON operation time setup of A output and B output. Setup time could be changed during operation of timer.
	⑤ Time unit setup switch of Dual A/B ON	It is consisted of Hour(h), Minute(m), Second(s). It is used to set ON time unit of A output and B output. (Available to change it when Power is OFF)
	⑥ Setup time display of Dual A/B OFF	It is used to set OFF operation time setup of A output and B output. Setup time could be changed during operation of timer.
	⑦ Time unit setup switch of Dual A/B OFF	It is consisted of Hour(h), Minute(m), Second(s). It is used to set OFF time unit of A output and B output. (Available to change it when Power is OFF)

## Output operation

### ■ D type (Time - limit 1c) - Individual setting of ON / OFF time



### ■ F type (Time - limit 2c) - Same ON setup time will be applied to the output A and B

