

Analog Timer

T38N,T48N,T57N,T57FN,TF62N

INSTRUCTION MANUAL

We appreciate you for purchasing HanYoung NUX Co.,Ltd product. Before using the product you have purchased, check to make sure that it is exactly what you ordered. Then, please use it following the instructions below.

MAIN PRODUCTS

- DIGITAL : Temperature Controller, Counter, Timer,Speedmeter, Tachometer, Panel Meter, Recorder
- SENSOR : Proximity Sensor/Photo Electric Sensor, Rotary Encoder, Optical Fiber Sensor, Pressure Sensor
- ANALOG : Timer, Temperature Controller

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HANYOUNG NUX



■ Safety information

Before you use, read safety precautions carefully, and use this product properly. The precautions described in this manual contains important contents related with safety; therefore, please follow the instructions accordingly. The precautions are composed of DANGER, WARNING and CAUTION.

⚠ DANGER

Do not touch or contact the input/output terminals because they may cause electric shock.

⚠ WARNING

1. If there is a possibility of an accident caused by errors or malfunctions of this product, install external protection circuit to prevent the accident.
2. This product does not contain an electric switch or fuse, so the user needs to install a separate electric switch or fuse externally. (Fuse rating : 250 V 0.5 A)
3. To prevent defection or malfunction of this product, supply proper power voltage in accordance with the rating.
4. To prevent electric shock or devise malfunction of this product, do not supply the power until the wiring is completed.
5. Since this product is not designed with explosion-protective structure, do not use it at any place with flammable or explosive gas.
6. Do not decompose, modify, revise or repair this product. This may cause malfunction, electric shock or fire.
7. Reassemble this product while the power is off. Otherwise, it may cause malfunction or electric shock.
8. It you use the product with methods other than specified by the manufacturer, there may be bodily injuries or property damages.
9. Due to the danger of electric shock, use this product installed onto a panel while an electric current is applied.

⚠ CAUTION


1. The contents of this manual may be changed without prior notification.
2. Before using the product you have purchased, check to make sure that it is exactly what you ordered.
3. Check to make sure that there is no damage or abnormality of the product during delivery.
4. Do not use this product with time setting “0”
5. Change setting time in condition of “Power OFF”. If change setting time in condition of “Power On”, reset should be done.
6. Do not use this product at any place with corrosive(especially noxious gas or ammonia) or flammable gas.
7. Do not use this product at any place with direct vibration or impact.
8. Do not use this product at any place with liquid, oil, medical substances, dust, salt or iron contents. (Pollution level 1 or 2)
9. Do not polish this product with substances such as alcohol or benzene.
10. Do not use this product at any place with excessive induction trouble, static electricity or magnetic noise.
11. Do not use this product at any place with possible thermal accumulation due to direct sunlight or heat radiation.
12. Install this product at place under 2,000m in altitude.
13. When the product gets wet, the inspection is essential because there is danger of an electric leakage or fire.

14. If there is excessive noise from the power supply, using insulating transformer and noise filter is recommended. The noise filter must be attached to a panel grounded, and the wire between the filter output side and power supply terminal must be as short as possible.
15. If gauge cables are arranged too closely, the effect on noise may occur.
16. Do not connect anything to the unused terminals.
17. After checking polarity of terminal, connect wires at the correct position.
18. When this product is connected to a panel, use a circuit breaker or switch approved with IEC847-1 or IEC947-3.
19. Install the circuit breaker or switch at near place for convenient use.
20. Write down on a label that the operation of circuit breaker or switch disconnects the power since the devise is installed.
21. For the continuous and safe use of this product, the periodical maintenance is recommended.
22. Some parts of this product have limited life span, and others are changed by their usage.
23. The warranty period for this product including parts is one year if this product is properly used.
24. When the power is on, the preparation period of contact output is required. In case of use for signals of external interlock circuit, use with a delay relay.

■ Ordering Information

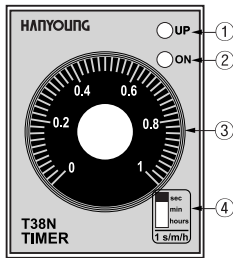
Model	Code	Description
Model	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Analog Timer
	T38N	40.5(W) × 50.5(H)mm (Applied to adapter for panel)
	T48N	48.0(W) × 48.0(H)mm
	T57N	·E· Size - 50.0(W) × 62.0(H)mm ·P· Size - 57.5(W) × 84.5(H)mm
	T57FN	
	TF62N	
Fixture type	E	Exposure type
	P	Panel type
Maximum time	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
	60	60 sec / 60 min / 60 hour
	12H	12 hour / 24 hour / 48 hour (except T57FN/TF62N)
Control output	A	On-delay 1c+Constant 1a (For T38N / T48N / T57N )
	B	On-delay 1c+Constant 1c (For T38N / T48N / T57N )
	C	Constant 2c (For T38N / T48N / T57N)
	D	Constant 1c (For T57FN / TF62N )

■ Ordering Information

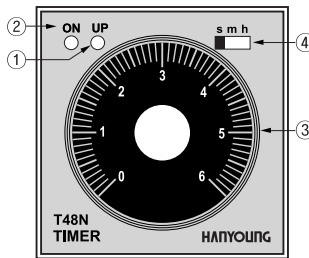
M O D E L	Exposure type(E)	T38N-01/03/06/10/30/60/12H-A T38N-01/03/06/10/30/60/12H-B T38N-01/03/06/10/30/60/12H-C	T48N-01/03/06/10/30/60/12H-A T48N-01/03/06/10/30/60/12H-B T48N-01/03/06/10/30/60/12H-C	T57NE-01/03/06/10/30/60/12H-A T57NE-01/03/06/10/30/60/12H-B T57NE-01/03/06/10/30/60/12H-C T57NP-01/03/06/10/30/60/12H-A T57NP-01/03/06/10/30/60/12H-B T57NP-01/03/06/10/30/60/12H-C	T57FNE-01/03 /06/10/30/60-D	TF62NE-01/03 /06/10/30/60-D	
	Panel type (P)				T57FNP-01/03 /06/10/30/60-D	TF62NP-01/03 /06/10/30/60-D	
Function		POWER ON DELAY TIMER				FLICKER TIMER	TWIN TIMER
Size	Exposure type(E) Panel type(P)	40.5(W) ×50.5(H)	48.0(W) ×48.0(H)	50.0(W) ×62.0(H) 57.5(W) ×84.5(H)			
Power supply		24-240 V a.c 50/60Hz, 24-240 V d.c ( ± 10 %)					
Power Consumption		Max. 4.5 V A (at 240 V a.c 60 Hz ), Max. 1.5 W (at 24 V d.c )					
Return time		Max. 100 ms					
M a x i m u m	01	0.01 ~ 1 s / 0.01 ~ 1 m / 0.01 ~ 1 h					
	03	0.01 ~ 3 s / 0.01 ~ 3 m / 0.01 ~ 3 h					
	06	0.01 ~ 6 s / 0.01 ~ 6 m / 0.01 ~ 6 h					
	10	0.01 ~ 10 s / 0.01 ~ 10 m / 0.01 ~ 10 h					
	30	0.01 ~ 30 s / 0.01 ~ 30 m / 0.01 ~ 30 h					
	60	0.01 ~ 60 s / 0.01 ~ 60 m / 0.01 ~ 60 h					
	12H	0.01 ~ 12 h / 0.01 ~ 24 h / 0.01~ 48 h (For 24 hours `×2` and for 48 hours `×4` )				None	
Accuracy	Repeat error	Max. ± 0.3 % (ratio of Max. scale)					
	Setting error	Max. ± 5 % (ratio of Max. scale)					
	Voltage error	Max. ± 0.5 %					
	Temperature error	Max. ± 2 %					
Control output	Output mode	POWER ON DELAY				FLICKER(OFF Start)	FLICKER(ON Start)
	Contact construction	A type (On-delay 1c + Constant contact 1a) / B type (On-delay 1c + Constant contact 1c) / C type(On-delay 2c)				D type (On-delay 1c)	
	Capacity	250 V a.c 3 A Resistive load					
Life span of relay		Mechanical : 10 million times / Electrical : 100,000 times					
Dielectric strength		2000 V a.c 50/60 Hz for 1 minute					
Noise		± 2 kV					
Insulation resistance		Min. 100 MΩ(500 V d.c mega standard)					
Vibration	Durability	10-55 Hz (cycle 1 minute), Double amplitude 0.5 mm for 2h.					
	Malfunction	10-55 Hz (cycle 1 minute), Double amplitude 0.5 mm for 10m.					
Shock	Durability	300 ms (30 G) X · Y · Z each direction 3 times					
	Malfunction	100 ms (10 G) X · Y · Z each direction 3 times					
Ambient temperature		-10 ~ 55 ℃ Without freezing					
Storage temperature		-25 ~ 65 ℃ Without freezing					
Ambient humidity		30 ~ 85 % R.H.					
Certification		 approval(T48N Series)					

■ Front Facia

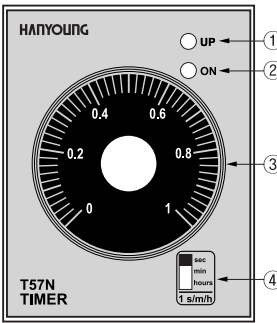
■ T38N



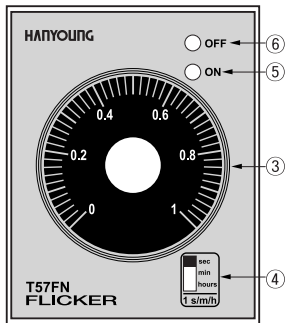
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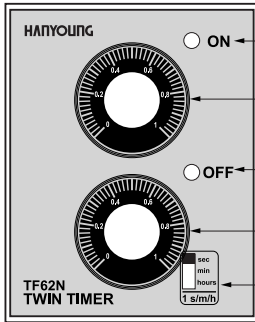
■ T57N



■ T57FN



■ TF62N



1	Output indication
2	Power supply indication
3	Knob for time setting
4	Switch for time unit
5	Indication of ON condition of flicker output
6	Indication of OFF condition of flicker output
7	Knob for setting ON time of flicker output
8	Knob for setting OFF time of flicker output

