

Autonics



## MULTI FUNCTION TIMER

## AT8N SERIES

## M A N U A L

Thank you very much for selecting Autonics products.  
For your safety, please read the following before using.

## ■ Caution for your safety

\*Please keep these instructions and review them before using this unit.

\*Please observe the cautions that follow:

**⚠ Warning** Serious injury may result if instructions are not followed.

**⚠ Caution** Product may be damaged, or injury may result if instructions are not followed.

\*The following is an explanation of the symbols used in the operation manual.

**⚠ Caution:** Injury or danger may occur under special conditions.

## ⚠ Warning

1. In case of using this unit with machineries(Nuclear power control, medical equipment, vehicle, train, airplane, combustion apparatus, entertainment or safety device etc), it is required to install fail-safe device, or contact us.

It may cause a fire, human injury or property loss.

2. Install the unit on a panel.

It may give an electric shock.

3. Do not connect, inspect or repair when power is on.

It may give an electric shock.

4. Do not disassemble the case. Please contact us if it is required.

It may cause an electric shock or a fire.

## ⚠ Caution

1. This unit shall not be used outdoors.

It might shorten the life cycle of the product or give an electric shock.

2. Please observe the rated specifications.

It might shorten the life cycle of the product and cause a fire.

3. Do not use beyond of the rated switching capacity of Relay contact.

It may cause insulation failure, contact melt, contact failure, relay broken and fire etc.

4. In cleaning unit, do not use water or an oil-based detergent and use dry towels.

It may cause an electric shock or a fire.

5. Do not use this unit in place where there are flammable or explosive gas, humidity, direct ray of the light, radiant heat, vibration and impact etc.

It may cause a fire or an explosion.

6. Do not inflow dust or wire dregs into the unit.

It may cause a fire or a malfunction.

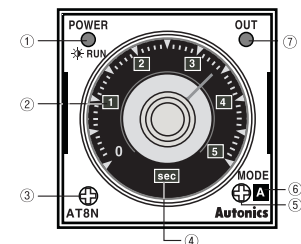
## ■ Ordering information

AT 8 N -

Power supply	100~240VAC/24~240VDC
	1 12VDC
Output	2 24VAC/DC
	N Time limit contact 2c or time limit contact 1c with instantaneous contact 1c by selecting output operation mode.
Plug Type	8 8 Pin
Item	AT Analog Timer

※8 Pin socket(PG-08, PS-08) : Sold separately

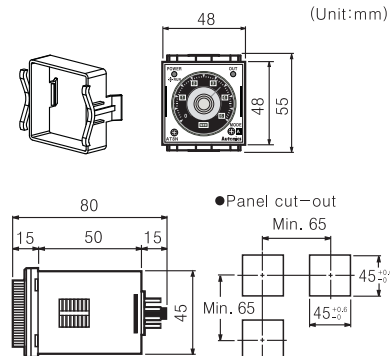
## ■ Front panel identification



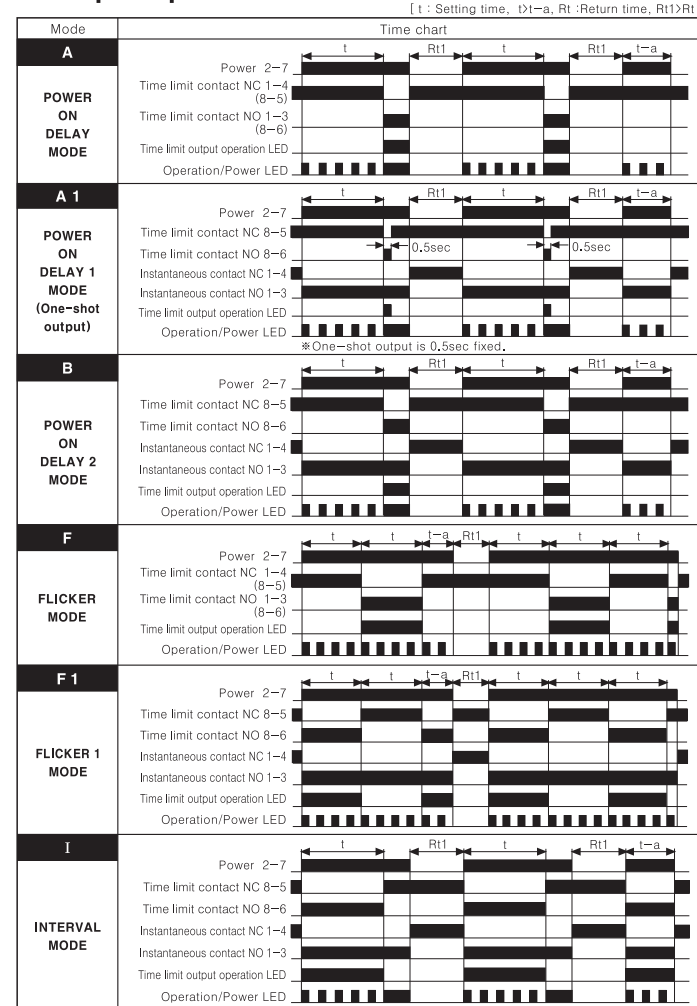
- ① Operation/Power LED (Timer operation:Flicker, Timer stop:LED ON)
- ② Time range display
- ③ Time range selector
- ④ Time unit(sec, min, hour, 10h)
- ⑤ Operation mode selector
  - A : Power ON Delay
  - A1 : Power ON Delay 1
  - B : Power ON Delay 2
  - F : Flicker
  - F1 : Flicker 1
  - I : Interval
- ⑥ Operation mode display(A, A1, B, F, F1, I)
- ⑦ Output LED

※ The above specifications are subject to change and some models may be discontinued without notice.

## ■ Dimensions



## ■ Output operation mode



※When using F, F1 output operation modes, if the time is set too short, the output may not work properly due to contact output response time. Please set the time at least over 100ms.

## ■ Time specifications

Time range	Time unit	Time setting range
0.5	sec	0.05~0.5 sec
1.0		0.1~1.0 sec
5		0.5~5 sec
10		1~10 sec
0.5	min	0.05~0.5 min
1.0		0.1~1.0 min
5		0.5~5 min
10		1~10 min
0.5	hour	0.05~0.5 hour
1.0		0.1~1.0 hour
5		0.5~5 hour
10		1~10 hour
0.5	10h	0.5~5 hour
1.0		1~10 hour
5		5~50 hour
10		10~100 hour

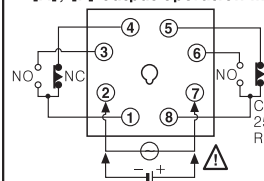
## ■ Specifications

Model			AT8N-□
Control time setting range			0.05 sec ~ 100 hour
Power supply			• 100~240VAC 50/60Hz, 24~240VDC (Universal) • 24VAC 50/60Hz, 24VDC (Universal) • 12VDC
Allowable voltage range			90 to 110% of rated voltage
Power consumption			• 100~240VAC : 4.3VA, 24~240VDC : 2W • 24VAC : 4.5VA, 24VDC : 2W • 12VDC : 1.5W
Return time			Max. 100ms
Control output	Contact	Type	Time limit DPDT (2c) or Instantaneous SPDT(1c)+Time limit SPDT(1c) selectable according to output operation mode
		Capacity	
Relay life cycle	Mechanical	Min. 10,000,000 operations	
	Electrical	Min. 100,000 operations (at 250VAC 5A resistive load)	
Repeat error		Max. ±0.2% ±10ms	
Setting error		Max. ±5% ±50ms	
Voltage error		Max. ±0.5%	
Temperature error		Max. ±2%	
Insulation resistance		100MΩ (at 500VDC megger)	
Dielectric strength		2000VAC 50/60Hz for 1 minute(Between all terminals and case)	
Environment		-10 ~ 55℃, Storage temperature: -25 ~ 65℃	
-ment Ambient humidity		35 ~ 85%RH, Storage humidity: 35 ~ 85%RH	
Unit weight		Approx. 90g	

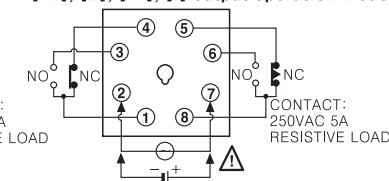
※Environment resistance is rated at no freezing or condensation.

## ■ Connections

●[A], [F] output operation mode



●[A1], [B], [F1], [I] output operation mode



## ■ Caution for using

1. Please connect DC power input after checking polarity of power.

2. In case of 12VDC model, isolated and limited voltage/current or Class2 source should be provided for power supply.

3. When supply the power to the Timer, connection shown in Figure 1 might cause malfunction due to leakage current through R and C. Please connect R and C as shown in Figure 2 to prevent malfunction.

4. It might cause malfunction if changing the setting time, time range or operation mode during operating unit. Please change the setting time, time range or operation mode after cut the power off.

5. Do not use this unit at below places.

- ①Place where there are severe vibration or impact.
- ②Place where strong alkalis or acids are used.
- ③Place where there are direct ray of the sun
- ④Place where strong magnetic field or electric noise are generated.

6. Installation environment

- ①It shall be used indoor
- ②Altitude Max. 2000m
- ③Pollution Degree 2
- ④Installation Category II

※It may cause malfunction if above instructions are not followed.

## ■ Major products

- Photoelectric sensors
- Fiber optic sensors
- Door sensors
- Door side sensors
- Area sensors
- Proximity sensors
- Pressure sensors
- Rotary encoders
- Connector/Sockets
- Switching mode power supplies
- Control switches/Lamps/Buzzers
- I/O Terminal Blocks & Cables
- Stepper motors/drivers/motion controllers
- Graphic/Logic panels
- Field network devices
- Laser marking system(Fiber, CO<sub>2</sub>, Nd:YAG)
- Laser welding/soldering system
- Temperature controllers
- Temperature/Humidity transducers
- SSR/Power controllers
- Counters
- Timers
- Panel meters
- Tachometer/Pulse(Rate)/meters
- Display units
- Sensor controllers

**Autonics Corporation**  
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■ HEAD QUARTERS:  
18, Bansong-ro 513beon-gil, Haundae-gu, Busan, Korea  
■ OVERSEAS SALES:  
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TEL: 82-32-610-2730 / FAX: 82-32-329-0728  
■ E-mail: sales@autonics.com

EP-KE-02-053A