



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.

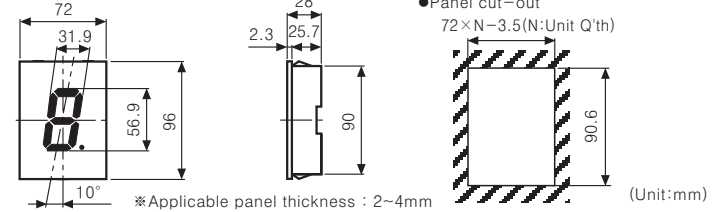
### Warning

- In case of using this unit with machineries(Nuclear power control, medical equipment, vehicle, train, airplane, combustion apparatus, entertainment or safety device etc), it requires installing fail-safe device, or contact us for information on type required. It may result in serious damage, fire or human injury.
- Do not repair or checkup when power on. It may give an electric shock.

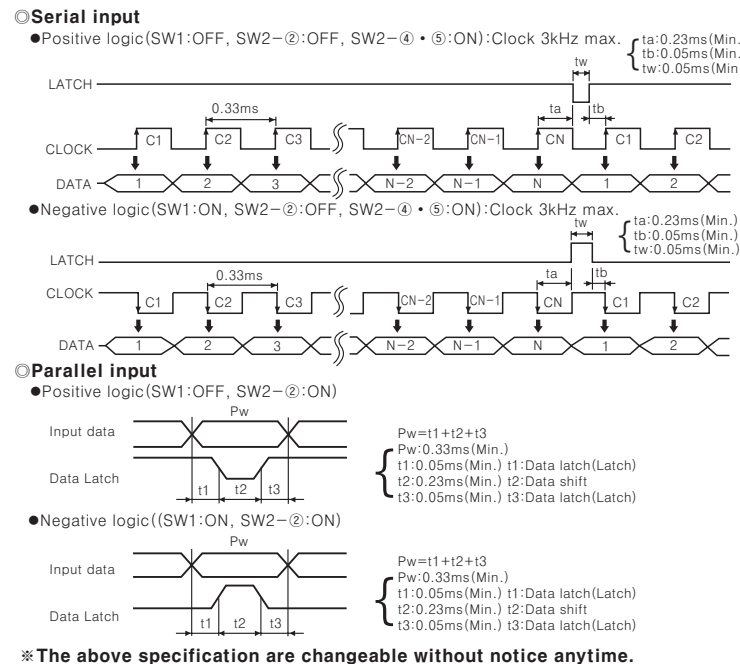
### Caution

- This unit shall not be used outdoors. It might shorten the life cycle of the product or give an electric shock.
- Please observe specification rating. It might shorten the life cycle of the product and cause a fire.
- In cleaning the unit, do not use water or an oil-based detergent. It might cause an electric shock or fire that will result in damage to the product.
- Do not use this unit at place where there are flammable or explosive gas, humidity, direct ray of the sun, radiant heat, vibration, impact etc. It may cause explosion.
- Do not inflow dust or wire dregs into inside of this unit. It may cause a fire or mechanical trouble.

### Dimensions



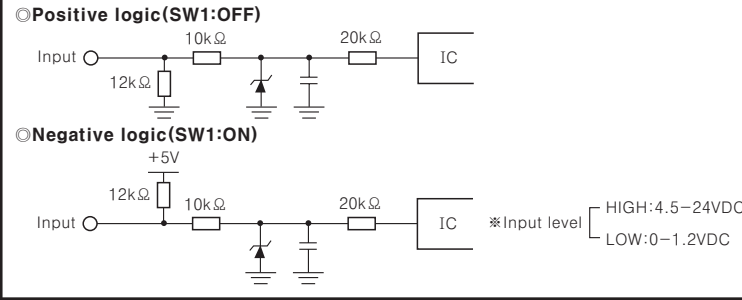
### Input timing



### Specifications

Model	D1SC-N
Indication	Red(7 Segment)
Power supply	12~24VDC
Allowable operation voltage	90 to 110% rated voltage
Current consumption	Max. 70mA
Max. clock speed	Max. 3kHz[When duty rate is 1:1(ON:OFF)]
Input logic	Selectable positive or negative logic by slide switch
Input impedance	12kΩ
Input level	[High]: 4.5~24VDC, [Low]: 0~1.2VDC
Insulation resistance	100MΩ Min.(at 500VDC)
Noise strength	The square wave noise by simulator(pulse width:1μs) ±300V between power terminals, ±300V between input terminals
Ambient temperature	0 to 60°C (at non-freezing status)
Storage temperature	-10 to 85°C (at non-freezing status)
Ambient humidity	35 ~ 85%RH
Weight	Approx. 100g

### Input circuit

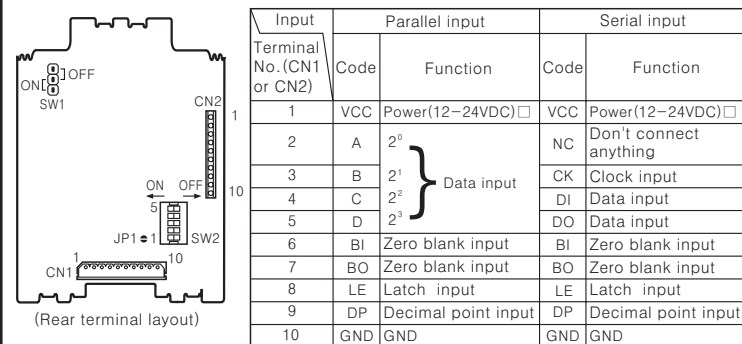


### Input data chart

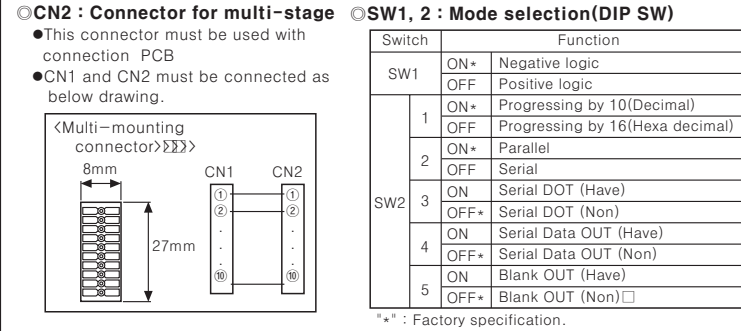
Indication				Negative input					Positive input				
Minus		7 Segment		D	C	B	A	LATCH	D	C	B	A	LATCH
Hexa decimal	Decimal	Hexa decimal	Decimal										
Blank	Blank	0	0	H	H	H	H	H	L	L	L	L	L
Blank	Blank	1	1	H	H	L	H	H	L	L	L	H	L
**	-	2	2	H	H	L	H	H	L	L	H	L	L
-	-	3	3	H	H	L	L	H	L	L	H	H	L
-	-	4	4	H	L	H	H	H	L	H	L	L	L
-	-	5	5	H	L	H	L	H	L	H	L	H	L
-	-	6	6	H	L	L	H	H	L	H	H	L	L
Blank	Blank	7	7	H	L	L	L	H	L	H	H	H	L
-	-	8	8	L	H	H	H	H	L	L	L	L	L
-	-	9	9	L	H	H	L	H	H	L	H	L	L
-	Blank	A	Blank	L	H	L	H	H	H	L	H	L	L
-	Blank	b	Blank	L	H	L	L	H	H	L	H	H	L
-	Blank	c	Blank	L	L	H	L	H	H	H	L	H	L
-	Blank	d	Blank	L	L	H	L	H	H	H	L	H	L
-	Blank	e	Blank	L	L	L	H	H	H	H	H	L	L
-	Blank	f	Blank	L	L	L	L	H	H	H	H	H	L
HOLD	HOLD	X	X	X	X	X	L	X	X	X	X	X	H

\*"X": Don't care, \*\* -: Minus indication  
\*In case of indicating minus(-), JP1 must be OFF

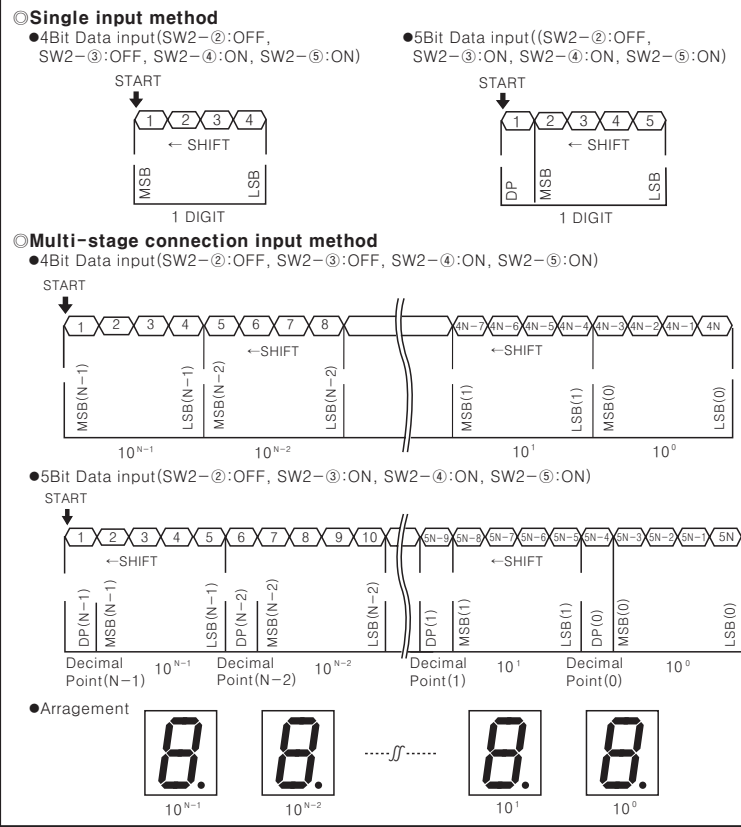
### Terminal layout and Function



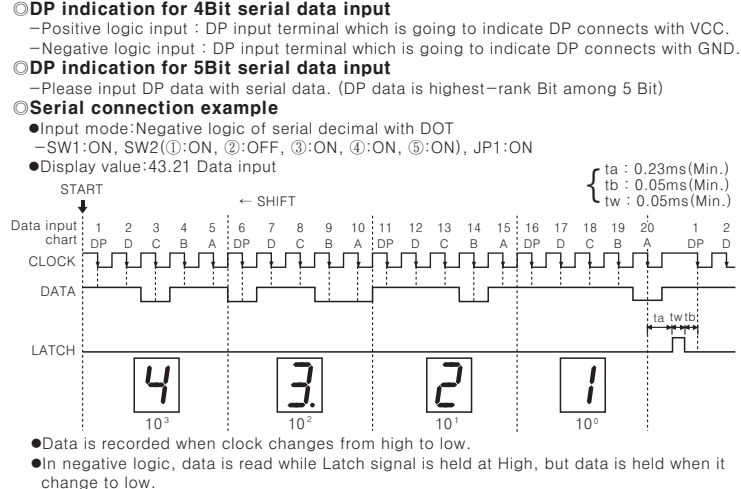
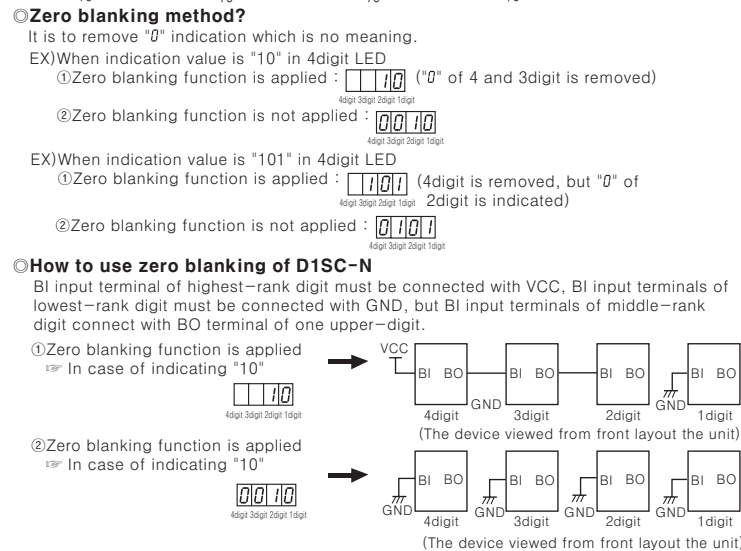
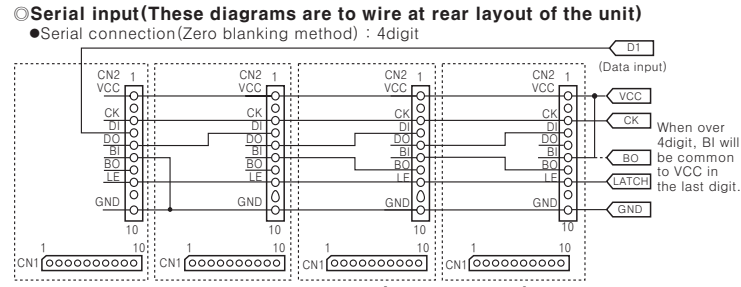
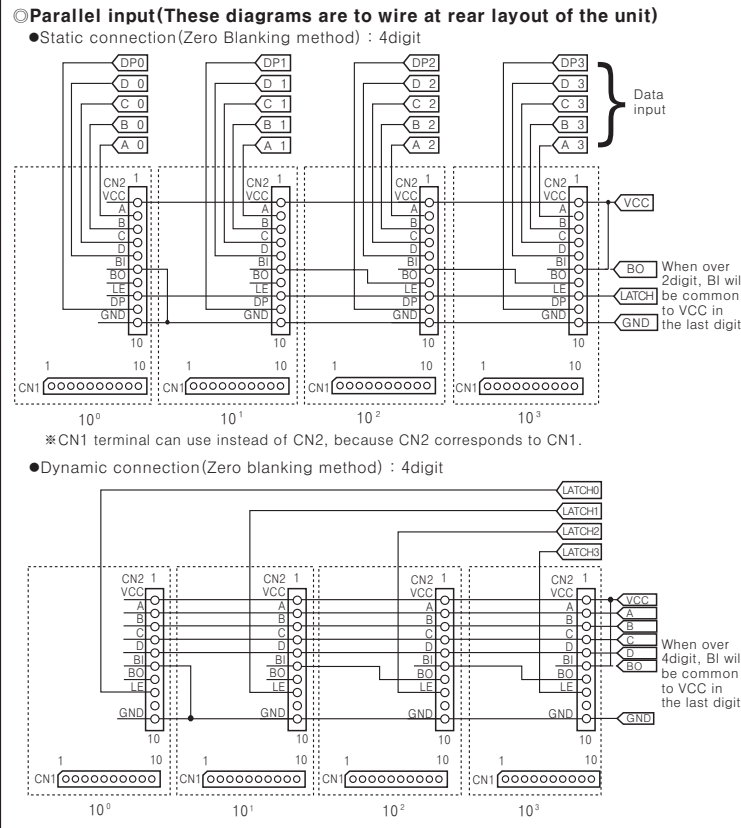
- Connector specification(CN1)**
- Connector maker: Korea Morex.
  - Housing: 5264-10
  - Header: 5264-10A(Straight)
  - Terminal: 5263(PBT)
  - Using cable specification
  - AWG #22 ~ 28(Cable diameter: φ1.9mm Max.)
  - Shedding length of wire cover: 2.4 ~ 2.9mm



### Data input method for serial



### Multi-stage connection method



### Caution for using

- It must be mounted on panel. It may give an electric shock.
  - Input signal line
    - Shorten the cable distance between the sensor and this product.
    - Please shielded wire for input signal needed to be long.
    - Please wire input signal line separated from power line.
  - Dielectric or insulation test of control panel, when this unit is installed on it
    - Separate the unit from control panel circuit.
    - Short circuit all terminals of the unit.
  - Do not use this unit at below places.
    - Place where there are severe vibration or impact.
    - Place where strong alkalis or acids are used.
    - Place where there are direct ray of the sun
    - Place where machineries has strong magnet field or electric noise are used near by.
  - The model is designed to use under the following environment conditions:
    - It shall be used indoor
    - Altitude Max. 2000m.
    - Pollution Degree 2.
    - Installation Category II.
- \*It may cause malfunction if above instructions are not followed.

### Main product

- COUNTER
- TIMER
- TEMPERATURE CONTROLLER
- PANEL METER
- TACHO/LINE SPEED/PULSE METER
- DISPLAY UNIT
- PROXIMITY SENSOR
- PHOTOELECTRIC SENSOR
- FIBER OPTIC SENSOR
- PRESSURE SENSOR
- ROTARY ENCODER
- SENSOR CONTROLLER
- POWER CONTROLLER
- STEPPING MOTOR & DRIVER & CONTROLLER
- LASER MARKING SYSTEM(CO<sub>2</sub>, Nd:YAG)

**Autonics Corporation**  
http://www.autonics.com

**Satisfiable Partner For Factory Automation**

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