# **B6MA Series** INSTRUCTION MANUAL

TCD210165AA

**Autonics** 

Thank you for choosing our Autonics product.

Read and understand the instruction manual and manual thoroughly before using the product.

For your safety, read and follow the below safety considerations before using. For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

Keep this instruction manual in a place where you can find easily. The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice. Follow Autonics website for the latest information.

## Safety Considerations

- Observe all 'Safety Considerations' for safe and proper operation to avoid hazards.
- $\Lambda$  symbol indicates caution due to special circumstances in which hazards may occur.

**Warning** Failure to follow instructions may result in serious injury or death.

#### 01. Do not use the unit outdoors.

- Failure to follow this instruction may result in shorten the life cycle of the unit 02. Use the unit within the rated specifications.
- Failure to follow this instruction may result in fire or product damage. 03. When connecting the power input, use AWG 26-16 (0.30 to 1.25 mm<sup>2</sup>)cable and tighten the terminal screw with a tightening torque of 0.4 to 0.6 N.m. Failure to follow this instruction may result in fire or malfunction due to contact failure

#### 04. Check 'Connections' before wiring.

Failure to follow this instruction may result in electric shock or fire. 05. Use dry cloth to clean the unit, and do not use water or organic solvent. Failure to follow this instruction may result in electric shock or fire.

▲ Caution Failure to follow instructions may result in injury or product damage.

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#### **Cautions during Use**

- Follow instructions in 'Cautions during Use'. Otherwise, It may cause unexpected accidents.
- 12 24 VDC == power supply should be insulated and limited voltage/current or Class 2, SELV power supply device.
- Keep away from high voltage lines or power lines to prevent inductive noise. In case installing power line and input signal line closely, use line filter or varistor at power line and shielded wire at input signal line. Do not use near the equipment which generates strong magnetic force or high frequency noise.
- This unit may be used in the following environments.
- Indoors (in the environment condition rated in 'Specifications') - Altitude max. 2,000 m
- Pollution degree 2
- Installation category II

# Ordering Information

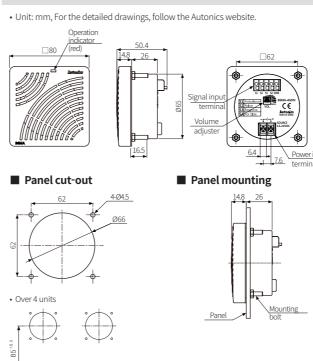
This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

B6MA	-	4	G	0	2	
• Power suppl	у			<li>Input</li>	t	
D: 12 -24 VDC== L: 110 - 240 VAC~ 50/60 Hz				N: NPN open collector P: PNP open collector		

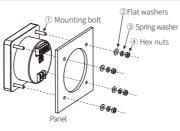
#### Specifications

Model	B6MA-4GD	B6MA-4GL		
Power supply	12 - 24 VDC==	110 - 220 VAC~ 50/60 Hz		
Allowable voltage range	90 to 110% of power supply			
Power consumption	$\leq$ 3 W	$\leq$ 5 VA		
Input	NPN open collector / PNP open collector model			
Sound pressure	Max. 105±10%dB (0.1 m), Max. 95±10%dB (1 m)			
Channels	4 channels			
Melody type	Terminal input: 4 types (ambulance, police, ringtone, for elise)			
Insulation resistance	$\geq$ 1,000 M $\Omega$ (500VDC== megger, between all terminals and case)			
Dielectric strength	500 VAC $\sim$ 50/60 Hz for 1 min (between all terminals and case)	2,000 VAC $\sim$ 50/60 Hz for 1 min (between all terminals and case)		
Vibration	0.75 mm amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours			
Shock	500 m/s <sup>2</sup> (≈ 50 G) In each X, Y, Z direction for 3 times			
Ambient temperature	-10 to 55 °C, storage: -20 to 65 °C (no freezing or condensation)			
Ambient humidity	35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)			
Protection structure	IP65 (front, IEC standard)			
Material	PC			
Tightening torque for power input terminal	0.4 to 0.6 N m			
Tightening torque for nut on panel moutning	0.7 to 0.8 N m			
Accessories	Flat washers: 4, Spring washers: 4, Hex nuts: 4			
Approval	CEER			
Unit weight (packaged)	≈ 130 g (≈ 170 g)			

### Dimensions



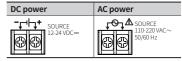




- 1. Insert ① mounting bolts of the unit to the panel mounting
  - holes. 2. Assemble ② flat washers, ③ spring washers, and tighten ④ hex nuts to fix the unit on the panel.

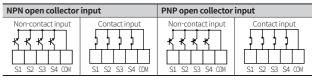


# Power input terminal



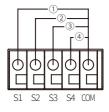
### Signal input terminal

• Do not supply the power to the signal input terminals. Failure to follow this instruction may result in input circuit damage or malfunction of the unit.



# Setting Melody Type

- Connect the COM terminal and the desired melody type terminal using the crimp terminals.
- For the melodies samples, follow the Autonics website.



No.	Terminal	Melody	
1	COM - S1	Ambulance	
2	COM - S2	Police	
3	COM - S3	Ringtone	
4	COM - S4	For Elise	

#### **Crimp Terminal Specifications**

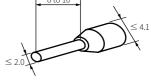
- Unit: mm, Use the crimp terminal of follow shape.
- AWG 22-16 (0.30 to 1.25 mm<sup>2</sup>)

## Power input crimp terminal



Round crimp terminal

Fork crimp terminal Signal input crimp terminal



Pen hole terminal