

Autonics

## Melody Buzzer B6MA SERIES



M A N U A L



Thank you for choosing our Autonics product.  
Please read the following safety considerations before use.

### ■ Safety Considerations

※Please observe all safety considerations for safe and proper product operation to avoid hazards.

※Safety considerations are categorized as follows.

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

**⚠Caution** Failure to follow these instructions may result in personal injury or product damage.

※The symbols used on the product and instruction manual represent the following

⚠ symbol represents caution due to special circumstances in which hazards may occur.

#### ⚠ Warning

1. **Fail-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss.** (e.g. nuclear power control, medical equipment, ships, vehicles, railways, aircraft, combustion apparatus, safety equipment, crime/disaster prevention devices, etc.)  
Failure to follow this instruction may result in personal injury, fire, or economic loss.

2. **DC power shall be insulated voltage.**

Failure to follow this instruction may result in electric shock.

3. **Do not disassemble or modify the unit. Please contact us if necessary.**

Failure to follow this instruction may result in fire, electric shock.

4. **Do not use the unit close to the ear.**

Failure to follow this instruction may result in hearing loss.

#### ⚠ Caution

1. **Do not use the unit outdoors.**

Failure to follow this instruction may result in shorten the life cycle of the unit, or electric shock.

2. **Use the unit within the rated specifications.**

Failure to follow this instruction may result in shorten the life cycle of the unit, or fire.

3. **Do not apply AC power to the DC product and observe the rated specifications.**

Failure to follow this instruction may result in product damage.

4. **Do not use water or oil-based detergent when cleaning the unit. Use dry cloth to clean the unit.**

Failure to follow this instruction may result in fire or electric shock.

5. **Do not use the unit where flammable or explosive gas, humidity, direct sunlight, radiant heat, vibration, or impact may be present.**

Failure to follow this instruction may result in product damage or malfunction of the unit.

### ■ Ordering Information

B 6 MA - 4 G D N

Input	N	NPN open collector input
	P	PNP open collector input
Power supply	D	12-24VDC
	L	110-220VAC 50/60Hz
Case color	G	Gray
No. of channels	4	4 channels
Product name	MA	Melody alarm
Mounting hole	6	Ø66
Item	B	Buzzer

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

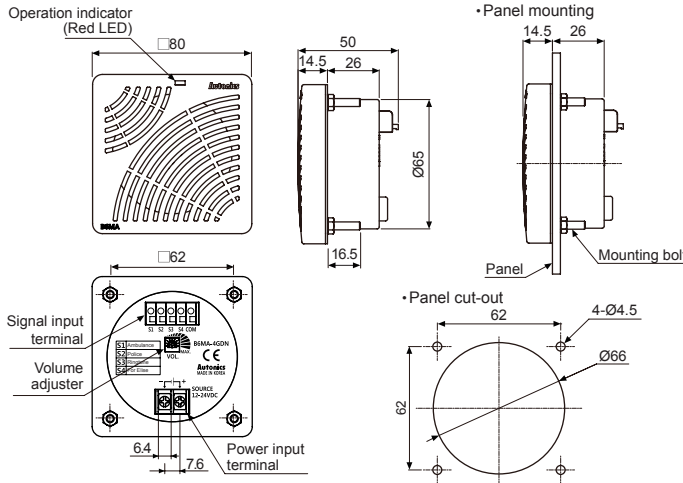
### ■ Specifications

Model	B6MA-4GD	B6MA-4GL
Power supply	12-24VDC	110-220VAC 50/60Hz
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	Max. 3W	Max. 5W
Input type	NPN open collector, PNP open collector	
Sound pressure	Max. 105db(0.1m), Max. 95dB(1m)	
No. of channels	4 channels	
Melody type	Terminal input: 4 types(ambulance, police, ringtone, for elise)	
Insulation resistance	Min. 1,000MΩ(at 500VDC megger between all terminals and case)	
Dielectric strength	500VAC 50/60Hz for 1 min. (between all terminals and case)	2000VAC 50/60Hz for 1 min. (between all terminals and case)
Vibration	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours	
Shock	500m/s <sup>2</sup> (approx. 50G) in each X, Y, Z direction for 3 times	
Environ ment	Ambient temperature -10 to 55°C, storage: -20 to 65°C	
Ambient humidity	35 to 85%RH, storage: 35 to 85%RH	
Protection	IP65(front, IEC standards)	
Material	PC	
Screw tightening torque for power input terminals	0.4 to 0.6N·m	
Nut tightening torque for panel mounting	0.7 to 0.8N·m	
Accessory	Flat washer 4EA, Spring washer 4EA, Hex nut 4EA	
Approval	CE	
Weight <sup>※1</sup>	Approx. 170g(approx. 130g)	

※1: The weight includes packaging. The weight in parentheses is for unit only.

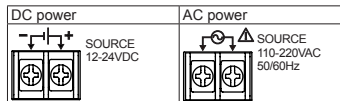
※Environment resistance is rated at no freezing or condensation.

### ■ Dimensions

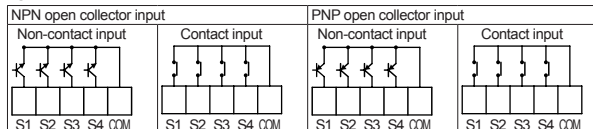


### ■ Connections

#### • Power input terminal

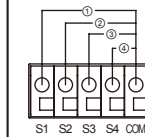


#### • Signal input terminal



※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.

### ■ How To Select Melody Type



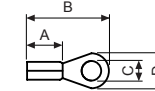
No.	Terminals	Melody type
①	COM-S1	Ambulance
②	COM-S2	Police
③	COM-S3	Ringtone
④	COM-S4	For Elise

Connect the COM terminal and the desired melody type terminal using the crimp terminals.

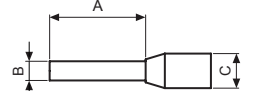
※You may sample the melodies at [www.autonics.com](http://www.autonics.com).

### ■ Applicable Crimp Terminals

#### • Power input crimp terminals

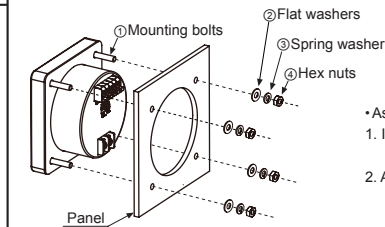


#### • Signal input crimp terminals



		A	B	C	D	Applicable wires
Power input crimp terminal	Forked	Min. 4.1	Max. 16.0	Min. 3.0	Max. 5.9	AWG 22-16 (0.30 to 1.25mm <sup>2</sup> )
	Round	Min. 4.1	Max. 16.0	Min. 3.0	Max. 5.9	
Signal input crimp terminal	End Sleeve (Ferrule Terminal) crimp terminal	8.0 to 10.0	Max. 2.0	Max. 4.1	—	

### ■ Installation



#### • Assembly sequence

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

### ■ Caution During Use

1. Use this unit at the rated temperature and humidity range.
2. Do not tighten nuts with excessive power.
3. Please check the voltage changes of power source in order not to exceed the rated power input.
4. Use AWG22-16(0.3 to 1.25mm<sup>2</sup>) wire and applicable crimp terminals to the terminal block.
5. Do not use the unit in the following environments
  - ① Environments with high vibration or shock
  - ② Environments with strong alkalis or acids
  - ③ Environments with exposure to direct sunlight
  - ④ Near machinery which produce strong magnetic force or electric noise
6. This unit may be used in the following environments.
  - ① It shall be used indoor
  - ② Altitude up to 2,000m
  - ③ Pollution degree 2
  - ④ Installation category II

※Failure to follow these instructions may result in product damage.

### ■ 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., 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**  
<http://www.autonics.com>

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■ **HEADQUARTERS:**  
18, Bansong-ro 513beon-gil, Haeundae-gu, Busan, Korea  
■ **OVERSEAS SALES:**  
#402-404, Bucheon Techno Park, 655, Pyeongcheon-ro, Wonmi-gu, Bucheon, Gyeonggi-do, Korea  
TEL: 82-32-610-2730 / FAX: 82-32-329-0728  
■ **E-mail:** [sales@autonics.com](mailto:sales@autonics.com)

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