

# Melody Buzzers



## B6MA Series PRODUCT MANUAL

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

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Features

- 4 different melodies (ambulance, police siren, phone ring, Für Elise)
- Check operation status with operation indicator (red LED)
- End sleeves (ferrule terminal) provide simple wiring
- Power supply : 12-24 VDC, 110-220 VAC 50/60 Hz
- Max volume : up to 95 dB (at 1 m), \*105 dB (at 0.1 m)
- Installation diameter : Ø 66 mm
- Installation method : screw-on method
- IP65 protection structure (IEC standard, front-plate only)

### Safety Considerations

- Observe all 'Safety Considerations' for safe and proper operation to avoid hazards.
- ⚠ 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**

-

①

②

③

④

### ① Channels

4: 4 channels

### ② Case color

G: Gray

### ③ Power supply

D: 12 - 24 VDC=  
L: 110 - 240 VAC ~ 50/60 Hz

### ④ Input

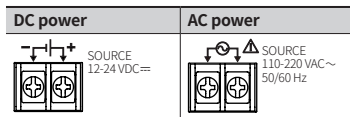
N: NPN open collector  
P: PNP open collector

## Product Components

- Product
- Instruction manual
- Flat washer × 4, Spring washer × 4, Nut × 4

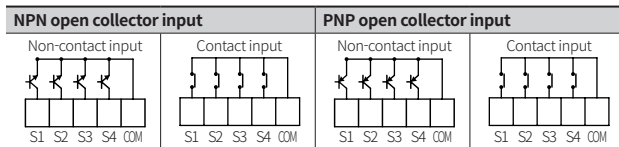
## Connections

### Power input terminal



### Signal input terminal

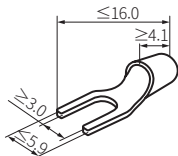
- Do not supply the power to the signal input terminals. Failure to follow this instruction may result in input circuit damage or malfunction of the unit.



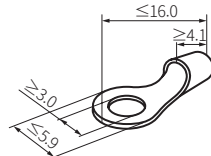
## Crimp Terminal Specifications

- 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

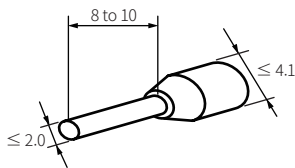


Fork crimp terminal



Round crimp terminal

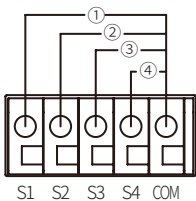
### Signal input crimp terminal



Pen hole terminal

## 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.



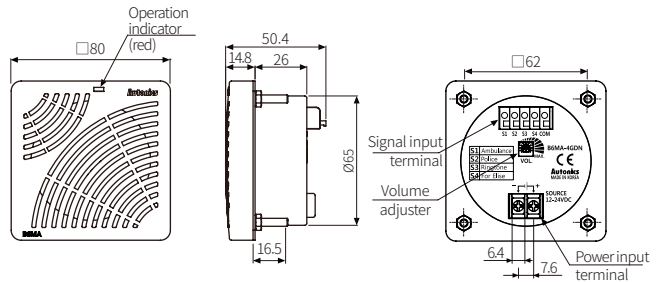
No.	Terminal	Melody
①	COM - S1	Ambulance
②	COM - S2	Police
③	COM - S3	Ringtone
④	COM - S4	For Elise

## Specifications

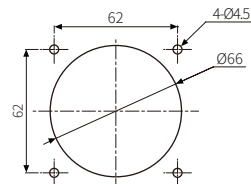
Model	B6MA-4GD□	B6MA-4GL□
Power supply	12 - 24 VDC= -	110 - 220 VAC ~ 50/60 Hz
Permissible voltage range	90 to 110 % of rated voltage	
Power consumption	≤ 3 W	≤ 5 VA
Input	NPN open collector / PNP open collector model	
Sound pressure	Max. 105±10%dB (0.1 m), Max. 95±10%dB (1 m)	
Channels	4 channels	
Melody type	Terminal input: 4 types (ambulance, police, ringtone, for elise)	
Insulation resistance	≥ 1,000 MΩ (500VDC= megger, between all terminals and case)	
Dielectric strength	Between the charging part and the case: 500 VAC ~ 50/60 Hz for 1 min	Between the charging part and the case: 2,000 VAC ~ 50/60 Hz for 1 min
Vibration	0.75 mm amplitude at frequency of 10 to 55 Hz 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 mounting	0.7 to 0.8 N m	
Certification	CE ㉿ ㉿ ㉿	
Unit weight (packaged)	≈ 130 g (≈ 170 g)	

## Dimensions

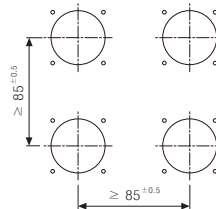
- Unit: mm, For the detailed drawings, follow the Autonics website.



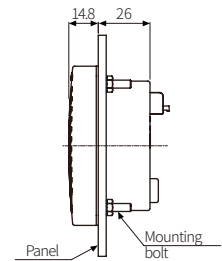
### Panel cut-out



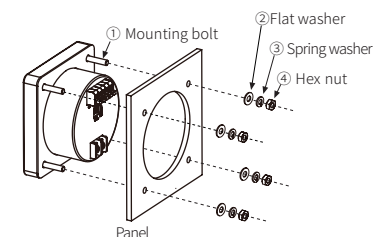
- Over 4 units



### Panel mounting



## Panel Mounting



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.