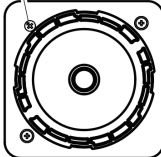


SPECIFICATIONS

[General Specifications]

Product Name		Audible Alarm	
Model		BD-M1□-□	BD-M2-□
Rated Voltage		12 to 24V DC	100 to 240V AC (50/60Hz)
Operating Voltage Range		10.8 to 26.4V DC	90 to 250V AC (50/60Hz)
Rated Current Consumption	Max.	240mA	80mA
	Conditions	Volume at maximum, built-in sound"Rapid Hi-Low"	
Rated Power Consumption	Typ.	2.2W at 12V DC, 2.4W at 24V DC	2.9W
	Conditions	Volume at maximum, built-in sound"Rapid Hi-Low"	
	Max.	2.8W at 12V DC, 3.1W at 24V DC	3.8W
	Conditions	Volume at maximum, built-in sound"Rapid Hi-Low"	
Standby Power	Max.	0.4W	0.8W
Inrush Current	Power Input	1A / 4ms or less	22A / 2ms or less
	Conditions	Ambient Temperature 25°C, 24V DC, Cold Start	Ambient Temperature 25°C, 240V AC, Cold Start
	Signal Input	N/A	
Operating Ambient Temperature		-20°C to + 55°C	
Operating Ambient Humidity		Less than 85% (No condensation)	
Storage Ambient Temperature		-30°C to + 65°C	
Storage Ambient Humidity		Less than 85% (No condensation)	
Mounting Location		Indoor & Outdoor Use ※Prolonged exposure to direct sunlight or strong ultraviolet radiation may affect product specifications.	
Mounting Direction	Volume		Volume
			
	Upright		Sideways
	Inverted		
		※ When the front cover is removed, you can check Upright, Inverted & Sideways.	
Protection Rating		IP65 (IEC 60529)	
Environmental Condition		Upright, Inverted & Sideways ※Only the front side of the product from the mounting surface	
Vibration Resistance		45m/s ²	20m/s ²
Environmental Condition		Upright, Inverted & Sideways	
Insulation Resistance		More than 1MΩ at 500VDC between live part and non-current carrying metallic part	
Withstand Voltage		500VAC applied for 1min between live part and non-current carrying metallic part without breaking insulation	1500VAC applied for 1min between live part and non-current carrying metallic part without breaking insulation
Sound Pressure Level (Typ.)		98dB	
Environmental Condition		Volume at maximum, built-in sound"Sweep sound" Measurement Conditions: The product is mounted at the center of a 300 mm × 300 mm board, and measurements are taken 1 m in front of the product surface. The sound pressure level may vary depending on the playback content and the operating environment.	
Mass (Tolerance ±10%)		0.14kg	0.16kg
Outer Dimensions		Refer to the Outer Dimension Drawing	

Drawing No.	Rev.	Page
BD-M1N-W18	A	2/5

Model	BD-M1□-□	BD-M2-□
Conformity Standards	UL464A	
	CSA-C22.2 No.205	
	EN61000-6-8, EN61000-6-4, EN61000-6-2	
	EN12895	-
	-	EN 60947-5-1
	EN IEC 63000	
	FCC Part15 Subpart B Class A	
	ICES-003 Class A	
	KS C 9610-6-4 Class A,KS C 9610-6-2	
Remarks	Conforms to the CE requirements	
	Conforms to the UKCA requirements	
	UL Recognized Component(File No.S24210)	

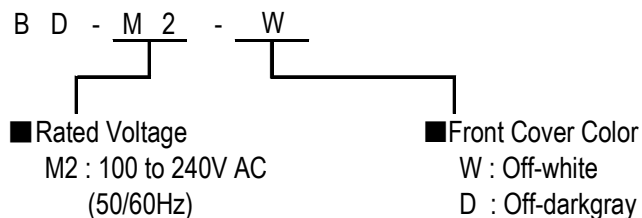
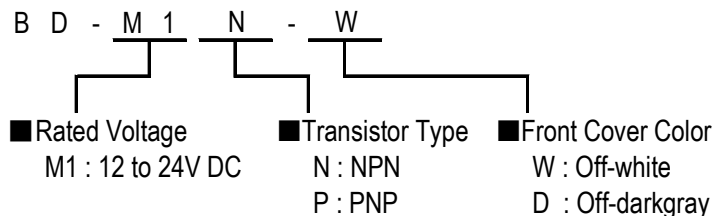
[Performance Specification]

Volume control	Volume Adjust: 0 to maximam	
CH Input method	Bit Input (Max. 4 sounds)	
Audio Startup Time	M1	190ms or less after the signal input is activated 350ms or less after power supply input is activated
	M2	190ms or less after the signal input is activated 470ms or less after power supply input is activated

[Signal Input Specifications]

Model	BD-M1N-□	BD-M1P-□	BD-M2-□
Input Method	Level hold input (Sound is played while COM terminal and CH terminal are short-circuited.)		
Channel Priority	CH4>CH3>CH2>CH1		
Signal Input Voltage	N/A	Same as Input Voltage	N/A
Open Circuit Voltage	Same as Input Voltage	N/A	12V DC
Input Current	5mA±1mA		

[Model Number Configuration]



※ For the M2 model, only NPN transistors are supported.

PATLITE Corporation

[About sound]

Bit input table

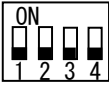
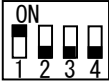
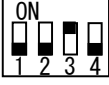
Sound	CH1	CH2	CH3	CH4
Beep	●	-	-	-
Stutter	-	●	-	-
Bell	-	-	●	-
Yelp	-	-	-	●

The factory default setting is configured according to the bit input table (Group A in the “Sound List” shown below).

● indicates the ON state.

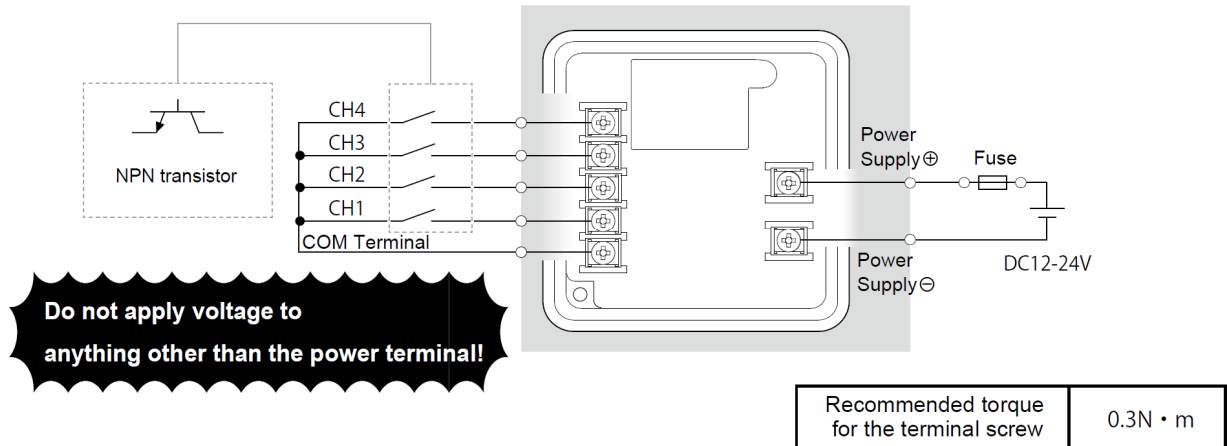
Sound List

Switching setting switches 1 to 3 changes the group.

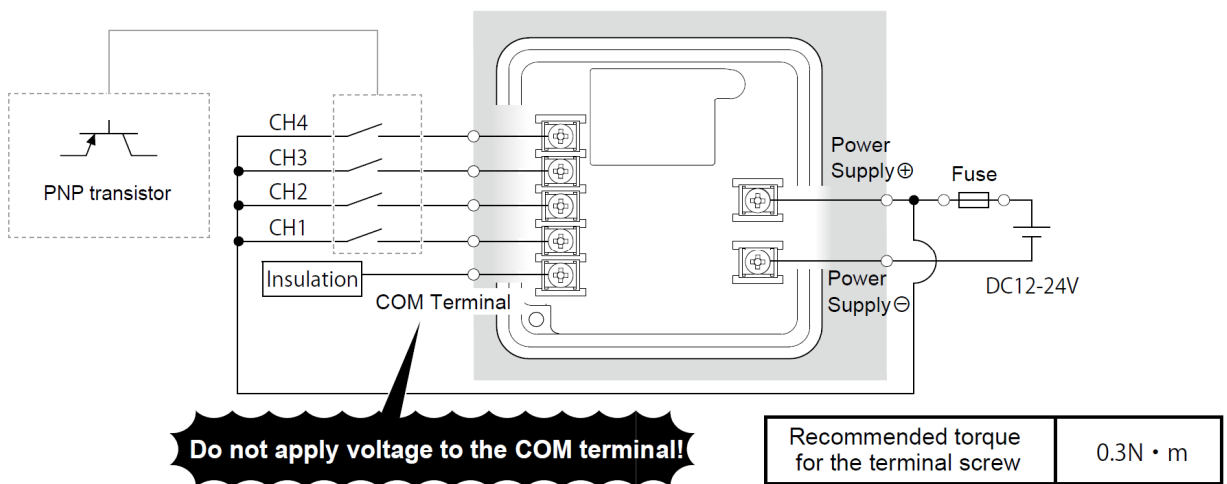
Group	Setting Switches	CH1	CH2	CH3	CH4
A (factory default setting)		Beep	Stutter	Bell	Yelp
B		Rapid Hi-Low	Melody Chime	Synthesized Piano	Synthesized Bell
C		Stutter + Bell	Sweep Sound	Chime	Call Sign
D		Fur Elise	Maiden's Prayer	Bach Minuet in Gmaj	Annie Laurie
E		London Bridge is falling down	Hol-Di-Li-Dia	Mary had a little Lamb	Camptown Races
F		Cuckoo	Village Blacksmith	On the Avignon Bridge	The Entertainer
G		Amaryllis	Symphony No.40	Quiet Lakeside	Mountain Musician
H		Spanish Romance	Canon	Grandfather's Clock	Ave Maria

[Wiring Diagram]

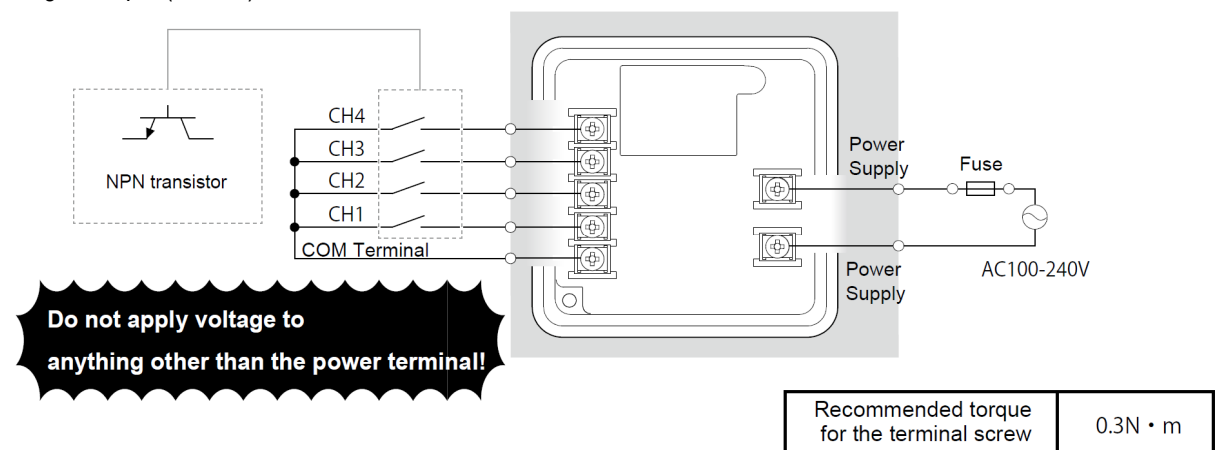
Wiring Example (BD-M1N)



Wiring Example (BD-M1P)

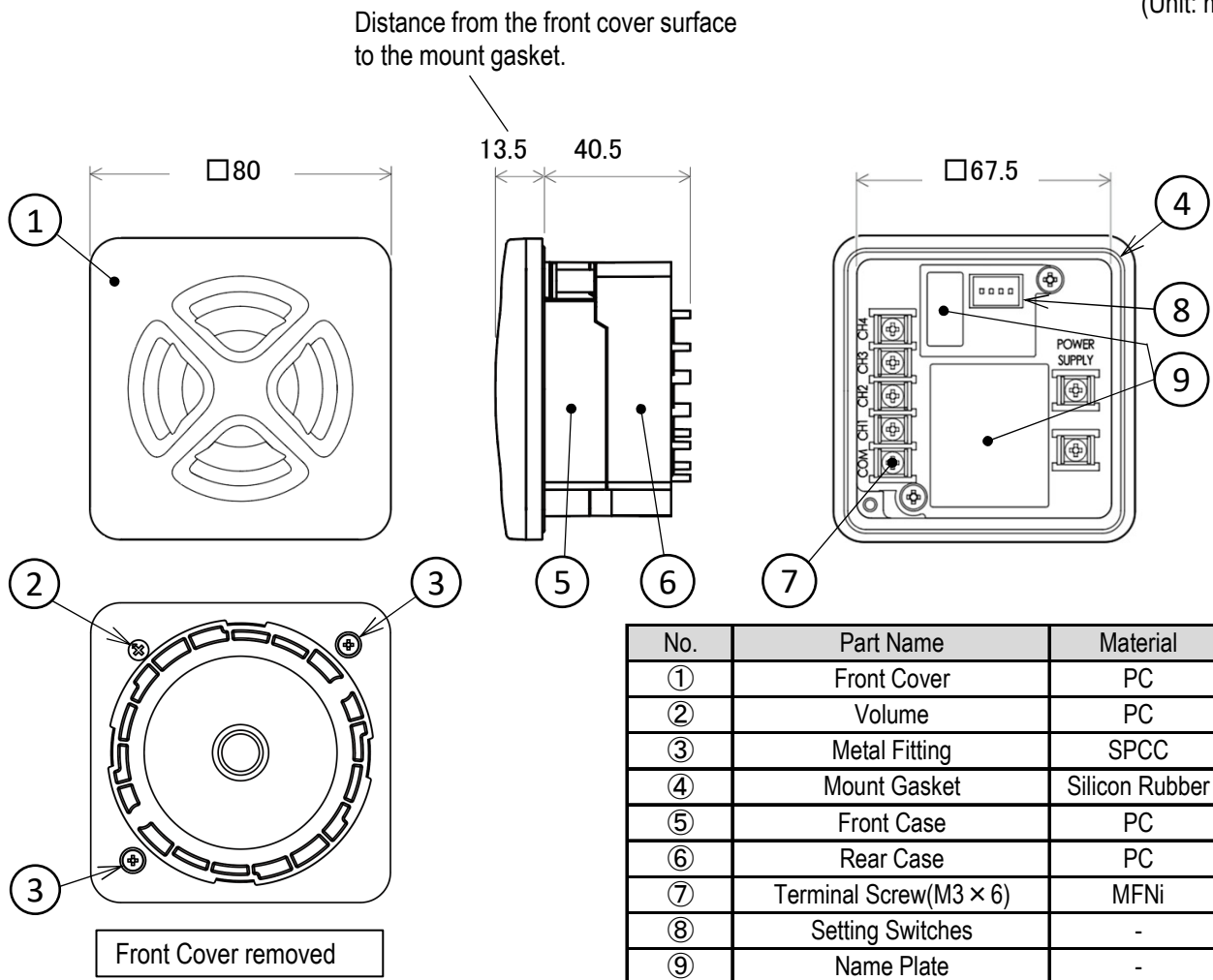


Wiring Example (BD-M2)



[Outer Dimensions]

(Unit: mm)



[Mounting Dimensions]

(Unit: mm)

