

Audible Alarm

BM

Wall-mounted
(D type)



Φ 30 mm	CE (24V DC)	RoHS 10	IP30	IP34 (D type only)	Indoor/Outdoor Use	Upright/Sideways/Inverted* Mounting	Ambient Temperature -10°C~+60°C	75-90dB
2 Alarm Sounds	2 Inputs	* Indoor Only						

Model Number Configuration

BM-220D

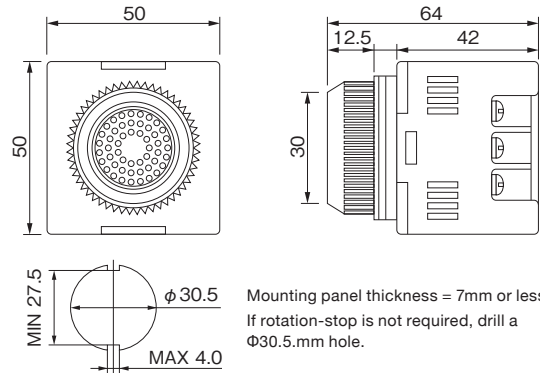
①

②

① Rated Voltage
202 = 24V AC/DC
210 = 100V AC
220 = 220V AC

② Specification
Blank = Standard Type
H = High Volume Type
D = Drip-proof Type

Dimensions (mm)



Product List

Model Number	Rated Voltage	Specifications	Power Consumption	Mass
BM-202	24V AC/DC	Standard	0.4W	0.12kg
BM-210	100V AC	Standard	2.5W	0.12kg
BM-220	220V AC	Standard	3.5W	0.12kg
BM-202H	24V AC/DC	High Volume Type	0.4W	0.13kg
BM-210H	100V AC	High Volume Type	2.5W	0.13kg
BM-220H	220V AC	High Volume Type	3.5W	0.14kg
BM-202D	24V AC/DC	Drip-proof Type	0.4W	0.14kg
BM-210D	100V AC	Drip-proof Type	2.5W	0.15kg
BM-220D	220V AC	Drip-proof Type	3.5W	0.15kg

Sound Specification

Alarm Sound	Rapid Hi-Lo (CH1), Stutter (CH2)
Volume Control	Not adjustable

Slim MP3 Voice Annunciator

BSV/BSV-L

75 mm	CE	RoHS 10	UL	FCC	IP54 (Panel Mounting)	Indoor/Outdoor Use	Upright/Sideways*/Inverted* Mounting	Ambient Temperature -10°C~+50°C
87dB	63 Alarm Sounds	Playback Length 520 seconds (BSV-L)	bit / binary 4/15 Inputs					



-D (Dark gray)

-W (Off White)



Panel-mounted



Wall-mounted



SD card slot



Full-scale

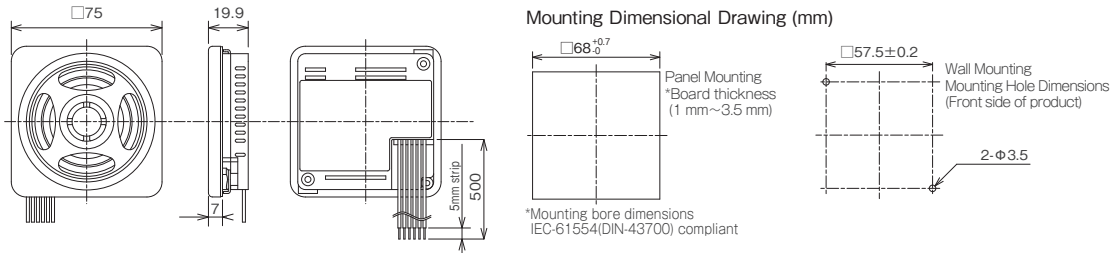
Model Number Configuration

BSV-24NLM-W

- ①
- ②
- ③
- ④

- | | | | |
|---|--|---|---|
| ① Supported Transistors
N = NPN
P = PNP | ② Recording Time
L = 520 seconds
None = 63 seconds | ③ Pre-recorded Message
None = None (15 built-in sounds)
M = Shipped with customer-specified message | ④ Cover Color
W = Off White
D = Dark Gray
S = Silver |
|---|--|---|---|

Dimensions (mm)



Product List

Model Number	Rated Voltage	Supported Transistors	Recording Time	Pre-recorded Message	Cover Color	Power Consumption	Mass
BSV-24N(L)-W/D/S	12 - 24V DC	NPN	63 seconds/520 seconds	None	Off-white, Dark Gray, Silver	3.5W	0.1kg
BSV-24P(L)-W/D/S	12 - 24V DC	PNP	63 seconds/520 seconds	None	Off-white, Dark Gray, Silver	3.5W	0.1kg
BSV-24N(L)M-W/D/S	12 - 24V DC	NPN	63 seconds/520 seconds	Yes	Off-white, Dark Gray, Silver	3.5W	0.1kg
BSV-24P(L)M-W/D/S	12 - 24V DC	PNP	63 seconds/520 seconds	Yes	Off-white, Dark Gray, Silver	3.5W	0.1kg

Sound Specification

Volume Control	Rotating knob
Sound File Format	MP3 (Bit rate: 32 kbps, 64kbps)

Optional Parts

For details refer to P. 99 to P. 104

Product Description	Model Number
SD card (2GB)	SDV-2GP

Alarm Sound Selection Chart

Maximum 15-message playback (BSV-M type)

15 built-in standard alarm sounds (BSV type)

Contains 15 standard alarm sounds.

No.1	No.2	No.3	No.4	No.5
Chime	Beep	Stutter	Bell	Yelp
Rapid Hi-Lo	Melody Chime	Synthesized Piano	Synthesized Bell	Stutter & Bell
Synthesized Melody	Call Sign	Inverted Reveille x3	Galactic Motor	Two Tone

Note:

- Changing or adding messages will delete all standard alarms and MP3 data in the main unit's memory.
- Changing operation modes requires an SD card (SDV-2GP, sold separately).
- Operation is not guaranteed when using other types of SD cards.
- Change input mode to binary in order to access all 15 sounds.

Operation Modes

Modes			
A	Bit input and normal playback	C	Bit input and hold playback
E	Binary input and normal playback	G	Binary input and hold playback
B	Playback prioritizing bit input and subsequent input	D	Bit input and memory playback
F	Playback prioritizing binary input and subsequent input	H	Binary input and memory playback

BSV/BSV-L

LAN / USB / PoE / Wireless

Signal Tower

Beacons

Cube Tower

Audible Alarms and MP3 Voice and MP3 Voice Annunciators

Hybrid Signaling Devices

LED Illumination

Explosion Proof

Optional Parts

Audible Alarm

BD-A

80 mm	CE (DC Type)	RoHS 10	UL (DC Type)	FCC	IP54	Indoor/Outdoor Use
Upright/Sideways/Inverted Mounting	Ambient Temperature -20°C~+55°C	90dB	32 Alarm Sounds	4 Inputs		



-J (Light gray)

-K (Dark gray)

Model Number Configuration

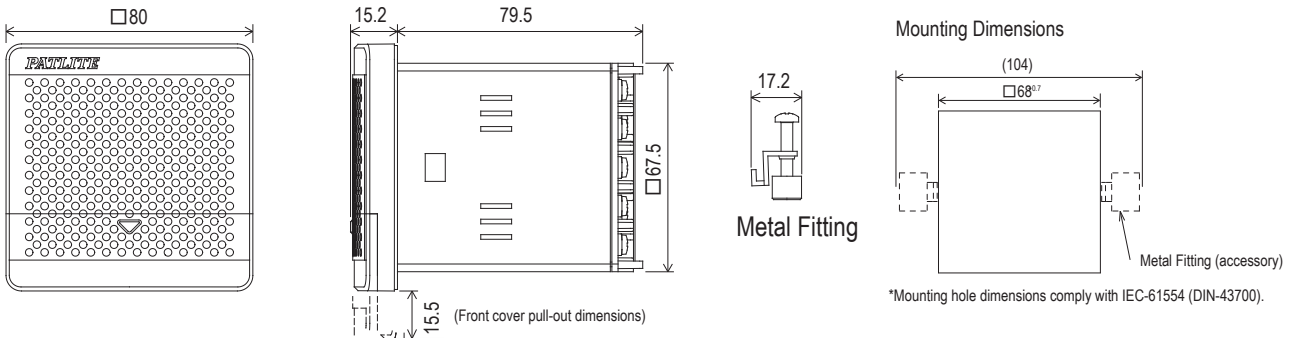
BD-24AA-J

① ② ③

① Rated Voltage 24 = 12 - 24V DC 100 = 100/220V AC	② Alarm Type* A = Type A C = Type C D = Type D E = Type E	③ Body Color - Front J = Light Gray K = Dark Gray
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* Please refer to the Sound Selection Chart on page 84 for alarm details.

Dimensions (mm)



Product List

Model Number	Rated Voltage	Alarm Type	Body Color - Front	Power Consumption	Mass
BD-24A □ -J/K	12 - 24V DC	A/C/D/E	Light Gray, Dark Gray	4.0W	0.16kg
BD-100A □ -J/K	100/220V AC	A/C/D/E	Light Gray, Dark Gray	5.0W	0.18kg

Other Specifications

Supported Transistors	NPN
Volume Control	Rotating knob

Optional Parts

For details refer to P. 99 to P. 104

Product Description	Model Number
SD card (2GB)	SDV-2GP

MP3 Voice Annunciator for Panel Mounting

BDV



80 mm	CE (DC Type)	RoHS 10	IP54	Indoor/Outdoor Use
Upright/Sideways/Inverted Mounting	Ambient Temperature -10°C→+50°C	87dB	Playback Length 63.5 seconds	bit / binary 4 / 15 Inputs

* Indoors for sideways and inverted directions.



BDV

LAN / USB / PoE / Wireless

Signal Tower

Beacons

Cube Tower

Audible Alarms and MP3 Voice Annunciators

Hybrid Signaling Devices

LED Illumination

Explosion Proof

Optional Parts

Model Number Configuration

BDV-15JF-J

① ②

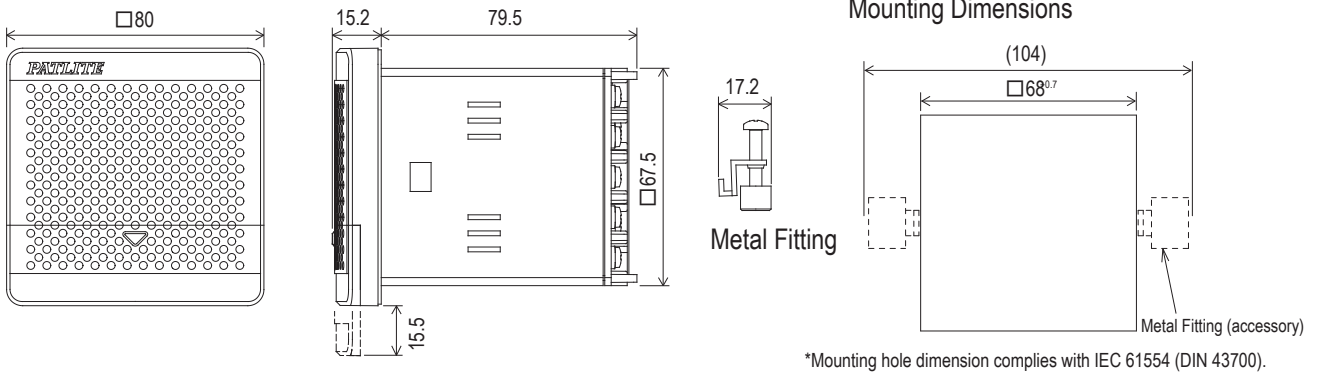
① Rated Voltage ② Body Color - Front
 J = 12 - 24V DC J = Light Gray
 K = 100 / 220V AC K = Dark Gray

Optional Parts

For details refer to P. 99 to P. 104

Product Description	Model Number
SD card (2GB)	SDV-2GP

Dimensions (mm)



*Mounting hole dimension complies with IEC 61554 (DIN 43700).

Product List

Model Number	Rated Voltage	Body Color - Front	Power Consumption	Mass
BDV-15JF-J/K	12 - 24V DC	Light Gray, Dark Gray	4W	0.22kg
BDV-15KF-J/K	100 / 220V AC	Light Gray, Dark Gray	5W	0.34kg

Other Specifications

Supported Transistors	NPN
Sound File Format	MP3 data (Bit rate: 64 kbps/Sample rate: 44.1kHz)

Audible Alarm

BK

□120 mm	CE (DC Type)	RoHS 10	IP54	Indoor/Outdoor Use
Upright/Sideways/Inverted* Mounting	Ambient Temperature -20°C~+50°C	95dB	32 Alarm Sounds	bit/binary 8/32 Inputs

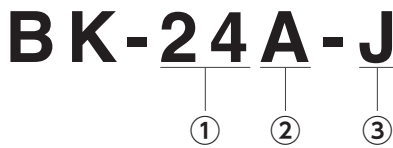
* Indoor Only



-J (Light gray)

-K (Dark gray)

Model Number Configuration

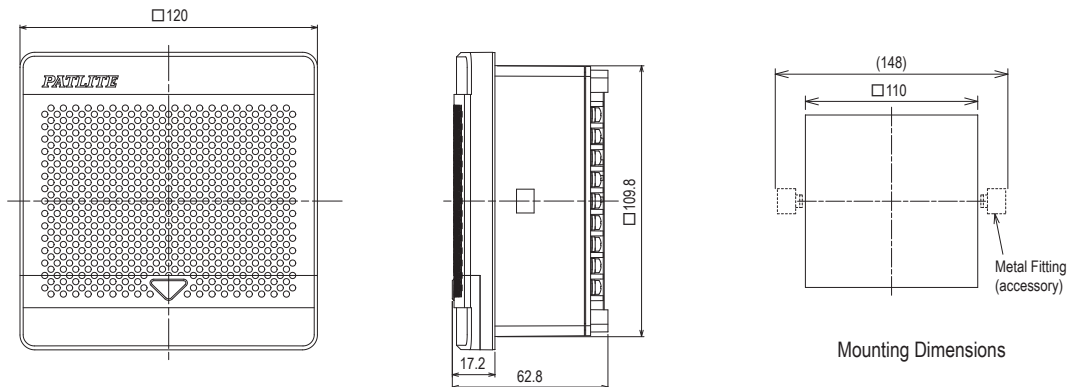


- | | | |
|---|---|---|
| ① Rated Voltage
24 = 12 - 24V DC
100 = 100V AC
220 = 220V AC | ② Alarm Type*
A = Type A
C = Type C
D = Type D
E = Type E | ③ Colors
J = Light Gray
K = Dark Gray |
|---|---|---|

The following custom specifications are available.
● PNP open collector specifications

* Please refer to the Sound Selection Chart on page 84 for alarm details.

Dimensions (mm)



Product List

Model Number	Rated Voltage	Alarm Type	Color	Power Consumption	Mass
BK-24 □ -J/K	12 - 24V DC	A/C/D/E	Light Gray, Dark Gray	12W	0.35kg
BK-100 □ -J/K	100V AC	A/C/D/E	Light Gray, Dark Gray	10W	0.53kg
BK-220 □ -J/K	220V AC	A/C/D/E	Light Gray, Dark Gray	11W	0.53kg

Other Specifications

Supported Transistors	NPN
Volume Control	Rotating knob

Optional Parts

For details refer to P. 99 to P. 104

Product Description	Model Number
Mounting bracket	BK-001 (2 fixed seals attached)
Mounting bracket	BK-002-J
Mounting bracket	BK-002-K
SD card (2GB)	SDV-2GP

* BK-001 can be used to install the product with □130mm mounting holes from older models.

MP3 Voice Annunciator for Panel Mount

BKV



120 mm	CE (DC Type)	RoHS 10	IP54	Indoor/Outdoor Use
Upright/Sideways/Inverted* Mounting	Ambient Temperature -10°C~+50°C	95dB	Playback Length 63 seconds	bit/binary 5/31 Inputs

* Indoor Only



-J (Light gray)



-K (Dark gray)

BKV

LAN / USB / PoE / Wireless

Signal Tower

Beacons

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Audible Alarms and MP3 Voice Annunciators

Hybrid Signaling Devices

LED Illumination

Explosion Proof

Optional Parts

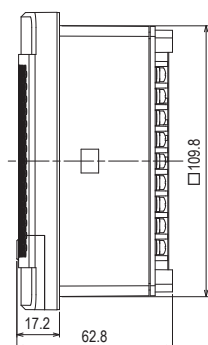
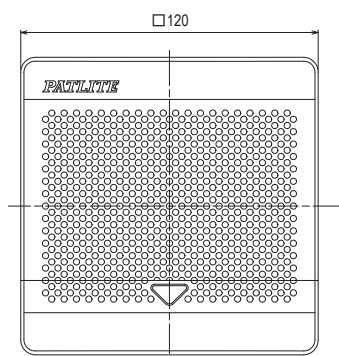
Model Number Configuration

BKV-31JF-J

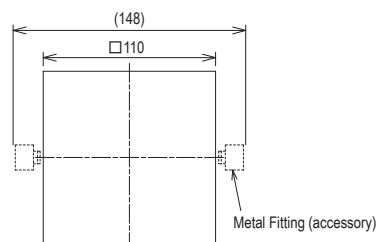
① ②

① Rated Voltage J = 12 - 24V DC K = 100V AC Q = 220V AC	② Colors J = Light Gray K = Dark Gray
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Dimensions (mm)



Mounting Dimensions



Product List

Model Number	Rated Voltage	Color	Power Consumption	Mass
BKV-31JF-J/K	12-24V DC	Light Gray, Dark Gray	9W	0.35kg
BKV-31KF-J/K	100V AC	Light Gray, Dark Gray	10W	0.53kg
BKV-31QF-J/K	220V AC	Light Gray, Dark Gray	10W	0.53kg

Other Specifications

Supported Transistors	NPN
Volume Control	Rotating knob
Sound file	MP3 (Bit rate: 64 kbps/Sample rate: 44.1kHz)

Optional Parts

For details refer to P. 99 to P. 104

Product Description	Model Number
Mounting bracket	BK-001 (2 fixed seals attached)
Mounting bracket	BK-002-J
Mounting bracket	BK-002-K
SD card (2GB)	SDV-2GP

Audible Alarm Horn

EHS



CE (DC Type)	RoHS 10	UL	FCC	KC	IP65	Indoor/Outdoor Use	Upright/Sideways/Inverted Mounting
Ambient Temperature -20°C~+50°C	110dB	32 Alarm Sounds	bit/binary 8/32 Inputs				

Model Number Configuration

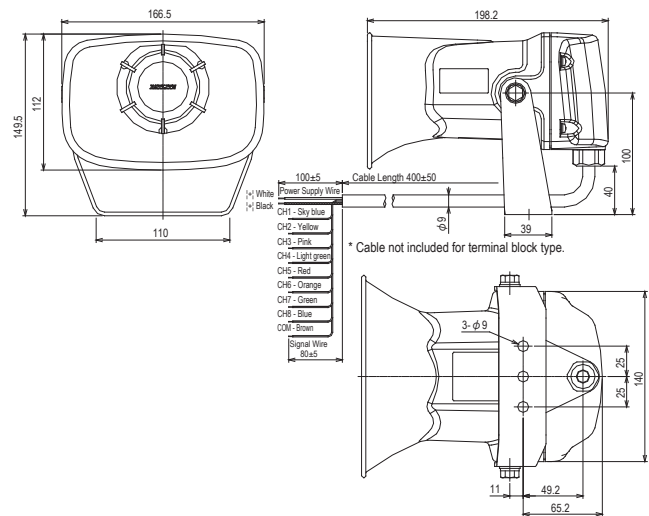
EHS - M1HA



① Rated Voltage M1 = 12 - 24V DC M2 = 100 - 240V AC M3 = 12 - 48V DC (mountable in vehicle) Note: M3 Specifications H: Cable type only	② Wiring Method H = Cable T = Terminal Block	③ Alarm Type* A = Type A C = Type C D = Type D E = Type E
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* Please refer to the Sound Selection Chart on page 84 for alarm details.

Dimensions (mm)



Product List

Model Number	Rated Voltage	Wiring Method	Alarm Type	Power Consumption	Mass
EHS-M1H □	12 - 24V DC	Cable	A/C/D/E	7.6W	1.25kg
EHS-M1T □	12 - 24V DC	Terminal Block	A/C/D/E	7.6W	1.25kg
EHS-M2H □	100V - 240V AC	Cable	A/C/D/E	7.3W	1.25kg
EHS-M2T □	100V - 240V AC	Terminal Block	A/C/D/E	7.3W	1.25kg
EHS-M3H □	12 - 48V DC	Cable	A/C/D/E	5.5W	1.25kg

Other Specifications

Supported Transistors	M1:NPN/PNP M2/M3:NPN
Volume Control	Rotating knob

Optional Parts

For details refer to P. 99 to P. 104

Product Description	Model Number
SD card (2GB)	SDV-2GP

MP3 Voice Annunciator Horn

EHV



- CE
(DC Type)
- RoHS
10
- UL
(Excluding M3)
- FCC
(Excluding M3)
- KC
(Excluding M3)
- IP65
- Indoor/
Outdoor
Use
- Upright/
Sideways/
Inverted
Mounting
- Ambient
Temperature
-20°C~+50°C

- 110dB
- 63
Alarm
Sounds
- Playback
Length
220
seconds
- bit / binary
8 / 63
Inputs

*MP3 is 105dB

Note: Sound reduction feature can be specified at the time of order or by using Patlite's Playlist Editor 2.

Model Number Configuration

EHV-M1HFM

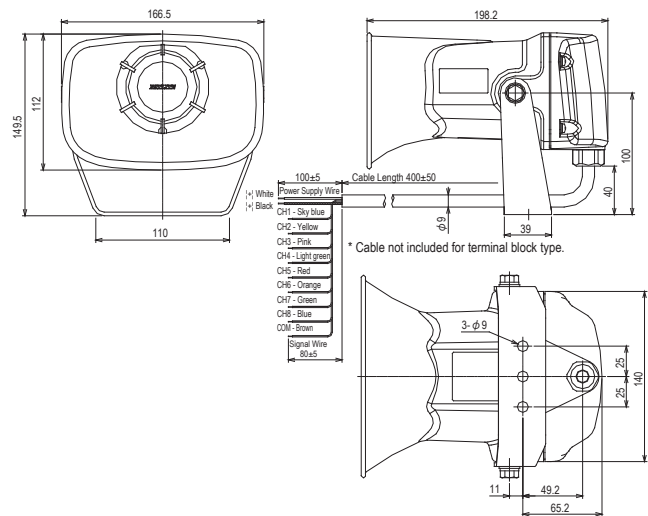
- ①
- ②
- ③
- ④

- ① Rated Voltage
M1 = 12 - 24V DC
M2 = 100 - 240V AC
M3 = 12 - 48V DC
(mountable in vehicle)
- ② Wiring Method
H = Cable
T = Terminal Block
- ③ Alarm Type*
F = Type F
G = Type G
- ④ Pre-recorded Message
None = None
M = Shipped with customer specified message

Note: M3 Specifications
H: Cable type only

*See sound charts on page 86 for sound details.

Dimensions (mm)



Product List

Model Number	Rated Voltage	Wiring Method	Alarm Type	Pre-recorded Message	Power Consumption	Mass
EHV-M1H □	12 - 24V DC	Cable	F/G	None	8.0W	1.25kg
EHV-M1T □	12 - 24V DC	Terminal Block	F/G	None	8.0W	1.25kg
EHV-M2H □	100~240V AC	Cable	F/G	None	7.9W	1.25kg
EHV-M2T □	100~240V AC	Terminal Block	F/G	None	7.9W	1.25kg
EHV-M1H □ M	12 - 24V DC	Cable	F/G	Yes	8.0W	1.25kg
EHV-M1T □ M	12 - 24V DC	Terminal Block	F/G	Yes	8.0W	1.25kg
EHV-M2H □ M	100~240V AC	Cable	F/G	Yes	7.9W	1.25kg
EHV-M2T □ M	100~240V AC	Terminal Block	F/G	Yes	7.9W	1.25kg
EHV-M3H □	12-48V DC	Cable	F/G	None	6.1W	1.25kg
EHV-M3H □ M	12-48V DC	Cable	F/G	Yes	6.1W	1.25kg

Other Specifications

Supported Transistors (NPN / PNP)	M1: NPN/PNP, M2/M3: NPN
Volume Control	Rotating knob or by program (-10 dB, -20 dB, -30 dB)
Sound File Format	MP3 data (Bit rate: 32 kbps, 64 kbps, 128 kbps/Sample rate: 44.1kHz)

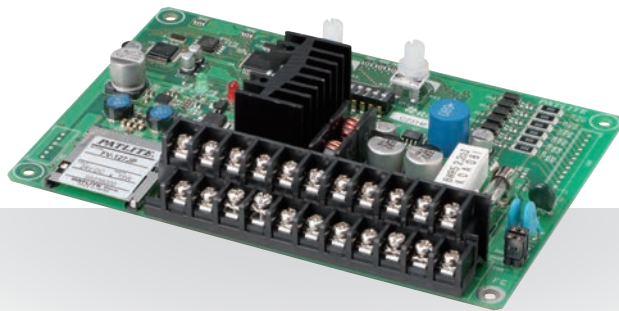
Optional Parts

For details refer to P. 99 to P. 104

Product Description	Model Number
SD card (2GB)	SDV-2GP

MP3 File Playback Circuit Board

FV-127JP



- RoHS 10
- Ambient Temperature -10°C~+50°C
- Playback Length 8 min
- Playback Length 240 min (with SD card)
- bit / binary 7/127 Inputs



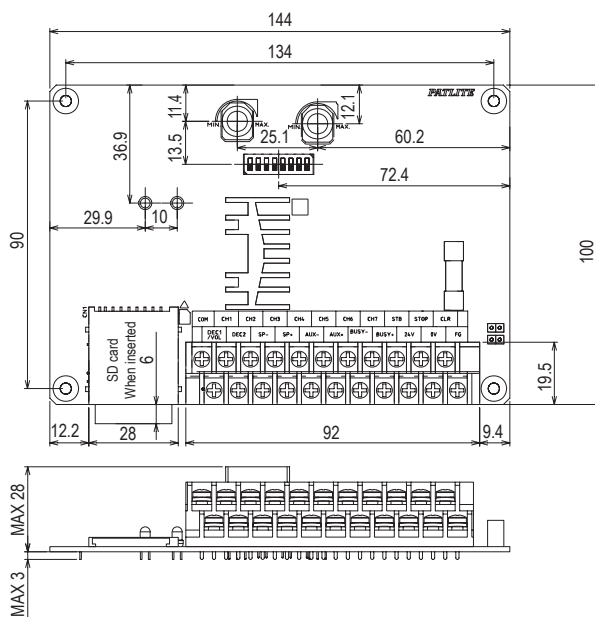
Model Number Configuration

FV-127JP

- ①
- ②
- ③

① Maximum Number of Messages 127 = 127 messages
 ② Rated Voltage J = 24V DC
 ③ P = Printed circuit board type

Dimensions (mm)



Product List

Model Number	Rated Voltage	Power Consumption	Mass
FV-127JP	24V DC	15W	0.16kg

Other Specifications

Supported Transistors	NPN
Volume Control	Rotating knob
Sound File Format	MP3 data (Bit rate: 32 k bps, 64kbps, 128 kbps/Sample rate: 44.1kHz)

Optional Parts

For details refer to P. 99 to P. 104

Product Description	Model Number
Speaker (2W 8Ω)	SPB-2E-W
Speaker (5W 8Ω)	SPB-5E
Speaker (5W 8Ω)	SPW-5E
Speaker (5W 8Ω)	SPL-5E
Horn Speaker (10W, 8Ω)	SPH-10EA
SD card (2GB)	SDV-2GP

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Audible Alarms and MP3 Voice Announcers

Hybrid Signaling Devices

LED Illumination

Explosion Proof

Optional Parts



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Audible Alarms
and MP3 Voice
Annunciators

Hybrid Signaling
Devices

LED Illumination

Explosion Proof

Optional Parts