# MD SERIES — EXTERNAL BATTERY BOX

- External battery box.
- Simple construction for easy opening and closing.
- MD-006P box can be used with battery holder (see page SN • MP • BH211-1 ~ SN • MP • BH211-4).
- ⊕ ⊖ markings are available to avoid incorrect placement of the battery.
- Battery dimensions may vary depending on country and brand.

  Use optional battery cushion sponge to preventing rattling.

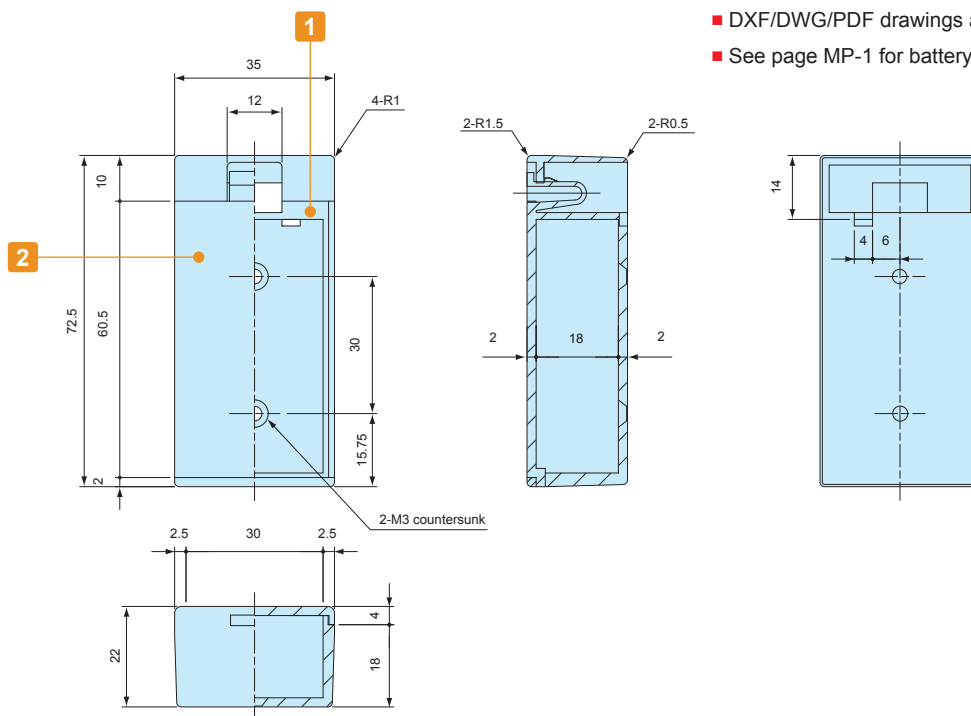| Technical Data |
| --- |
| Operating temperature: -10°C ~ +60°C |

Accessories (Optional parts)
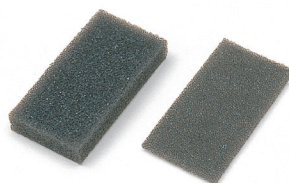
Battery cushion sponge SCM series
See page BH9V-2 • SCM-1

MD dimensions

MD-006P

- DXF/DWG/PDF drawings available on our website.
- See page MP-1 for battery snap information.

Components (MD-006P)

No.	Part name	Material	Color
1	Box	ABS UL94V-0	Black • Light gray
2	Cover	ABS UL94V-0	Black • Light gray
-	Battery snap (MP-ILN)	ABS UL94HB • PVC + Copper wire (UL1007 AWG26)	Black • Red/Black

Components (MD-2 • MD-4)

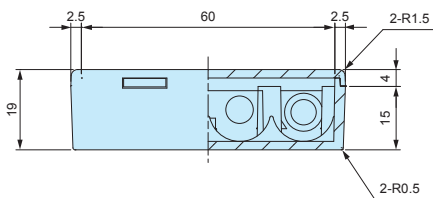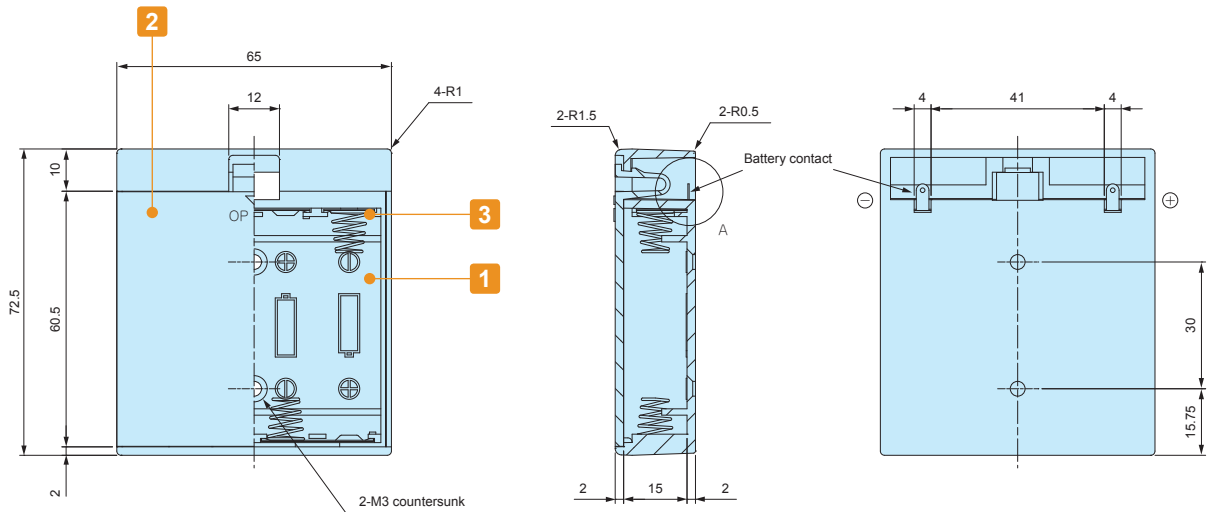| No.	Part name	Material	Color
1	Box	ABS UL94V-0	Black • Light gray
2	Cover	ABS UL94V-0	Black • Light gray
3	Battery contact (IT-3 models)	Brass t = 0.3 • Steel wire Φ0.6	Nickel plated

MD-2

MD-2

2-M3 countersunk

A (Enlarged)

Battery contact
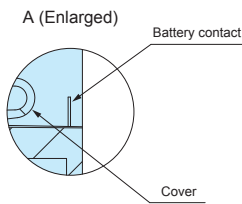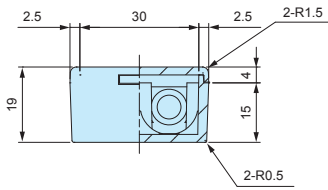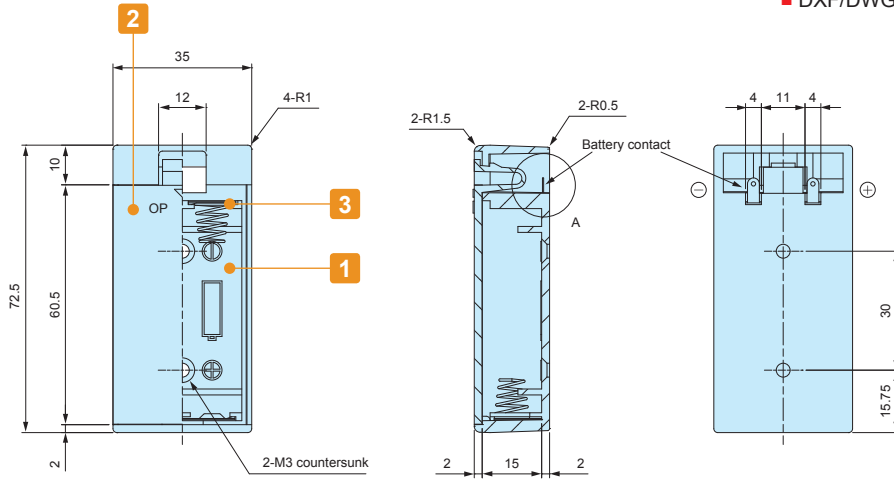
Cover

Remove cover when soldering to prevent it from being deformed by heat.

MD-4

2-M3 countersunk

Product no. / Feature

Product no.		Matching battery	Weight (g)	Suitable cushion sponge
● **Black**	○ **Light gray**			
MD-006PB	MD-006PG	9V x 1	24	SCM-1
MD-2B	MD-2G	AA x 2	22	SCM-1
MD-4B	MD-4G	AA x 4	38	SCM-1

MD–2

BH-9V-2 | 9V BATTERY HOLDER

■ DXF/DWG/PDF drawings available on our website.
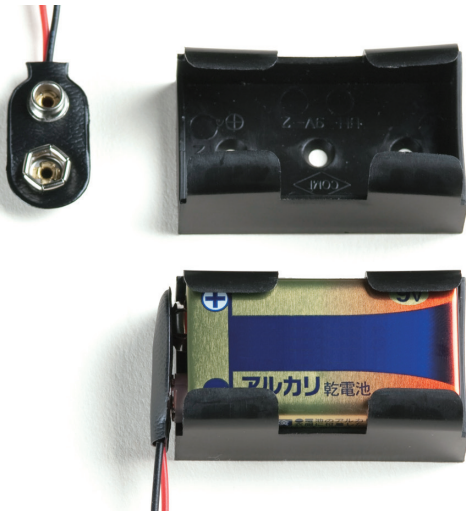
Holder
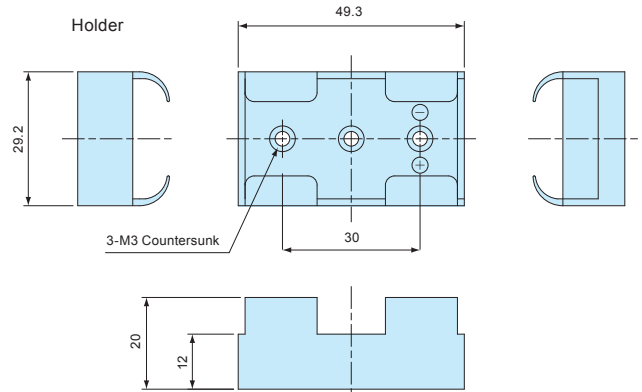
Battery snap

■ 9V battery holder
■ Battery snap comes with holder.

Technical Data
Operating temperature: -10°C ~ +60°C

3-M3 Countersunk

RED ⊕
BLACK ⊖
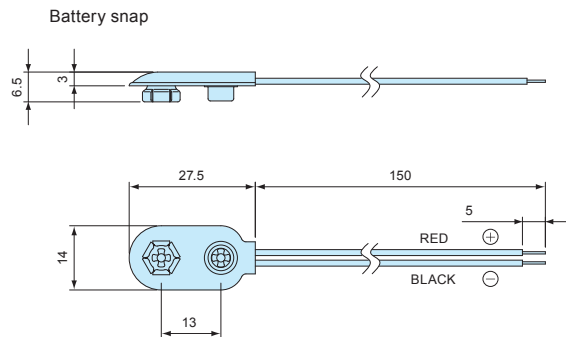
Components

Holder material	Holder color	Lead wire	Contact material	Battery snap cover	Contact surface finish
PP	Black	UL1007 AWG26 L=150	Brass	PVC	Nickel plated

Product no. / Feature

Product no.	Battery	Battery snap (included)	Weight (g)	Pack of
BH-9V-2	9V x 1	MP-1SN	6.8	1

SCM SERIES | BATTERY CUSHION SPONGE
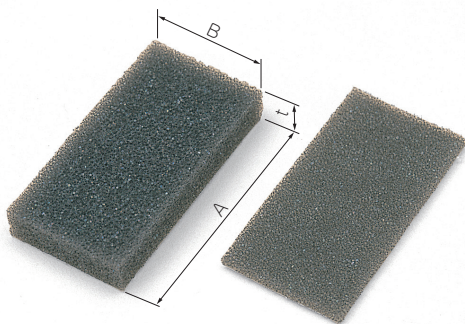
■ Flame resistant moltoprene sponge with adhesive on the back side.
■ Use to prevent battery from rattling inside the holder.

■ Material : Moltoprene (UL94HF-1)

Suitable battery holder

Product no.	Suitable battery holder
SCM-1	MD-2, MD-4, MD-006P, LD-2, LD-3, LD-4, LDN-2, LDN-3, LDN-4
SCM-2	LD-006P, LDN-006P
SCM-3	MD-006P

Product no. / Dimensions

Product no.	A	B	t	Pack of
SCM-1	50	25	2	10
SCM-2	50	25	4	10
SCM-3	50	25	7.5	10
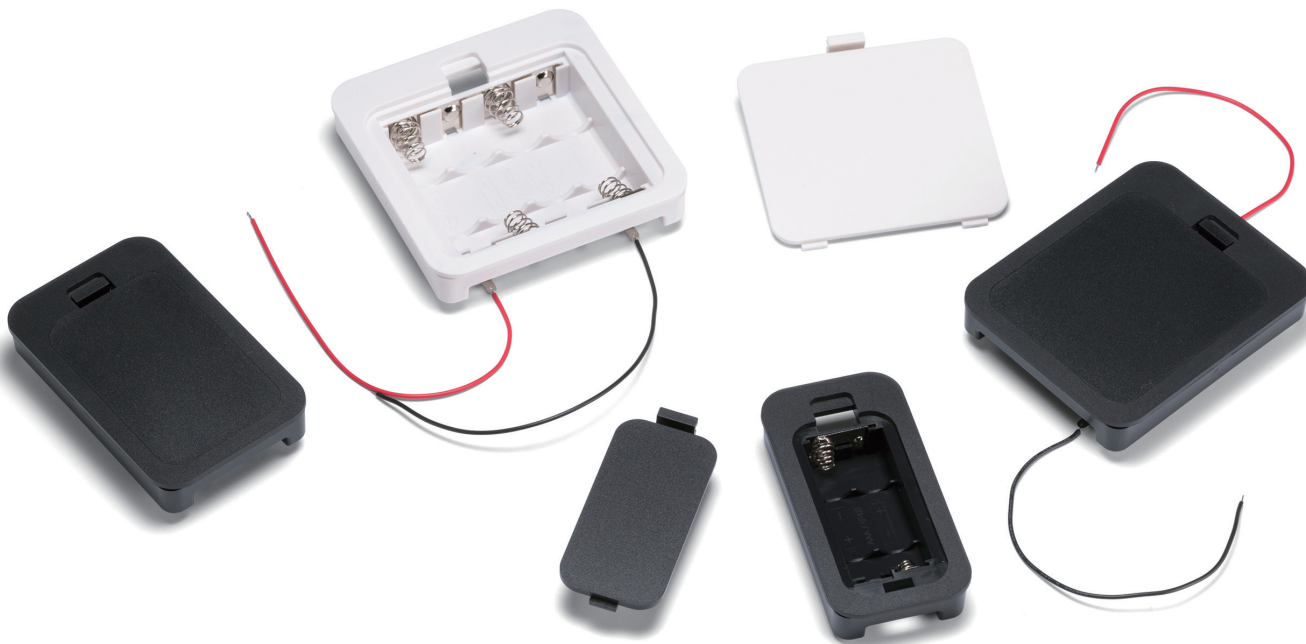
Technical Data

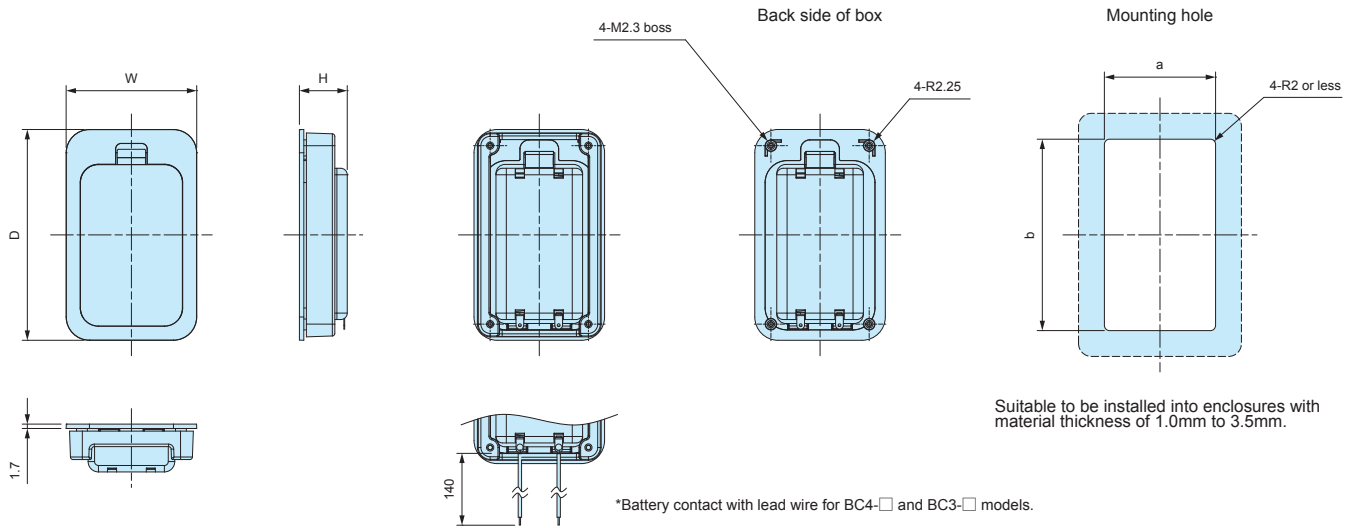Operating temperature: -10°C ~ +60°C

Mount Example
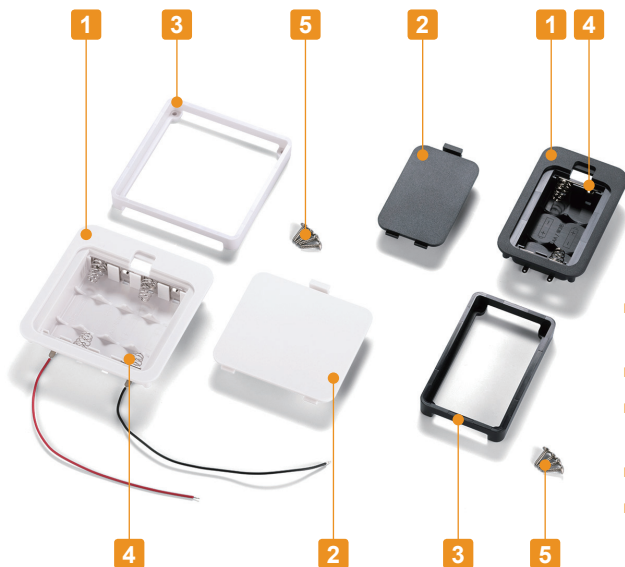
- Suitable to be installed into enclosures with material thickness of 1.0mm to 3.5mm.
- Cover can be opened/closed without any tool for easy battery replacement.
- 5 different battery layouts are available as AA x 2, AA x 3, AA x 4, AAA x 2 and AAA x4. Each layout comes in 2 models: with lead-wire, and without lead-wire.
- $\oplus \ominus$ markings prevents incorrect placement of battery.
- The dimensions of alkaline or manganese batteries may vary depending on country and brand. Use optional battery cushion sponge to preventing rattling.

Components

No.	Part name	Pcs	Material	Color / Finish
1	Box	1	ABS UL94V-0	Black • Off-white
2	Cover	1	ABS UL94V-0	Black • Off-white
3	Frame	1	ABS UL94V-0	Black • Off-white
4	Battery contact Lead wire (BC-L models)	1 set	Battery contact : Brass & steel wire Lead wire : PVC + Copper wire (UL1007 AWG26)	Nickel plated Black • Red
5	Self tapping screw	4	Steel	Nickel plated

BC dimensions

- Detailed DXF/DWG/PDF drawings available online.
- The shape and position of battery contacts vary by models.

Back side of box

4-M2.3 boss

4-R2.25

Mounting hole

4-R2 or less

Suitable to be installed into enclosures with material thickness of 1.0mm to 3.5mm.

*Battery contact with lead wire for BC4-□ and BC3-□ models.

Type: Without Lead Wire

Product no. / Dimensions

Product no.		Dimensions					Battery layout	Weight (g)
● Black	● Off-white	W	H	D	a	b		
BC4-2-B	BC4-2-W	40	14.8	78.5	32.5	71	*AAA x 2	24.5
BC4-4-B	BC4-4-W	62	14.8	78.5	54.5	71	*AAA x 4	34.5
BC3-2-B	BC3-2-W	50.5	18.5	81.5	43	74	*AA x 2	31.5
BC3-3-B	BC3-3-W	65.5	18.5	81.5	58	74	*AA x 3	39
BC3-4-B	BC3-4-W	80.5	18.5	81.5	73	74	*AA x 4	46

*Alkaline or manganese batteries

Type: With Lead Wire

Product no. / Dimensions

| Product no.		Dimensions					Battery layout	Weight (g)
● Black	● Off-white	W	H	D	a	b		
BC4-2L-B	BC4-2L-W	40	14.8	78.5	32.5	71	*AAA x 2	25.5
BC4-4L-B	BC4-4L-W	62	14.8	78.5	54.5	71	*AAA x 4	35.5
BC3-2L-B	BC3-2L-W	50.5	18.5	81.5	43	74	*AA x 2	32.5
BC3-3L-B	BC3-3L-W	65.5	18.5	81.5	58	74	*AA x 3	40
BC3-4L-B	BC3-4L-W	80.5	18.5	81.5	73	74	*AA x 4	47

*Alkaline or manganese batteries

How to mount on the enclosures

- Insert battery box into the milled hole first, and fit the frame on the back side. Once mounted, secure the frame with screws.
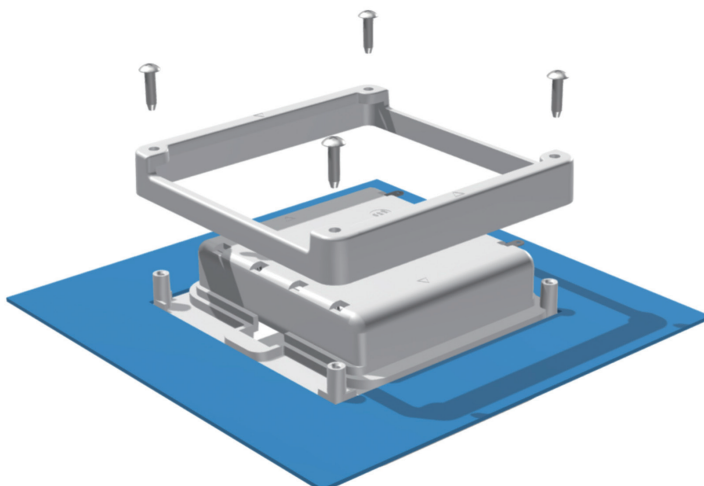

- For BC3-4□ models, ▷ markings are shown on the frame. Install by matching the markings.

BC–2
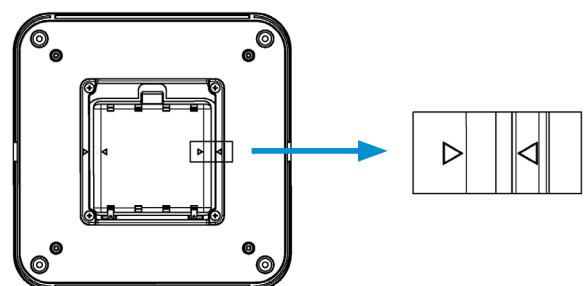
Parallel connection on BC series battery box

■ BC-3 ☐ models can be modified into a parallel connection setting. See below illustration for further details.

■ IT-3 series optional battery contacts are available for modification. (See website for more information)

■ Use caution when installing or replacing the terminals to avoid the damage to the plastic.

■ Parallel connection modification is available as a customization order.
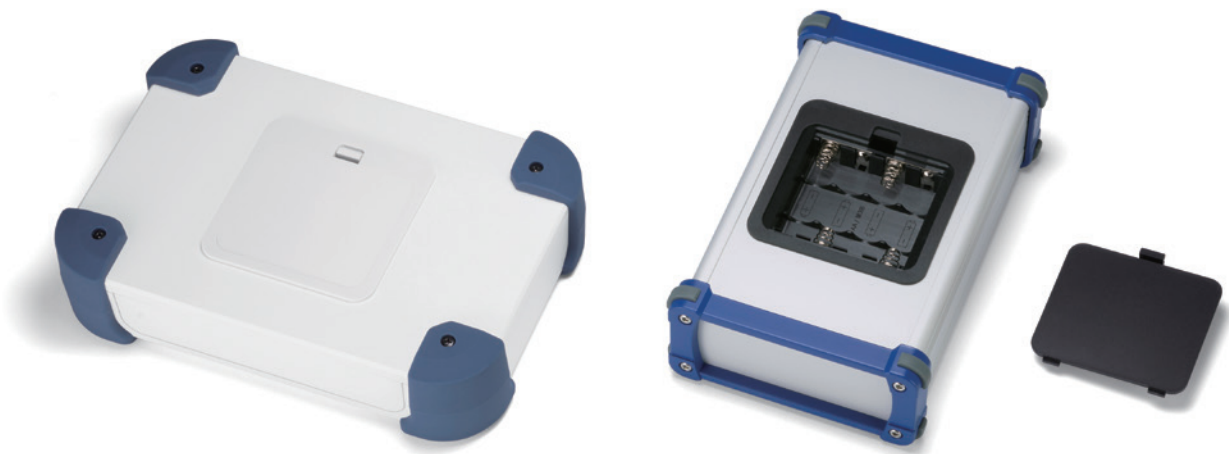
Modification Example
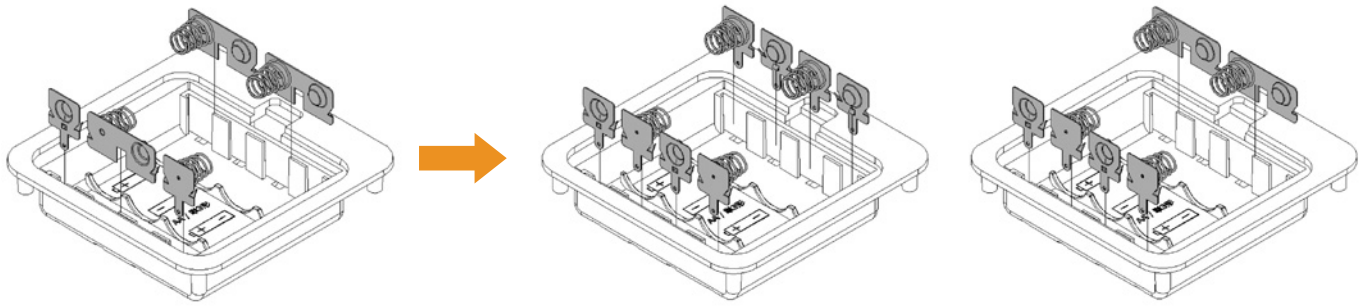
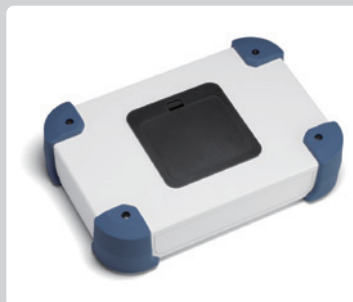Series Connection (Standard) Parallel Connection (4 batteries) Parallel Connection (2 batteries x 2)

Mount Example

■ BC battery boxes can also be mounted on aluminum enclosures.

Customization Available

For more information, contact us here:

Online form: https://www.takachi-enclosure.com/custom/form_custom
E-mail : sales@takachi-el.co.jp