



Since 1992

2020-2021

# Electrical Parts for Marine, RV & Caravan



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Taiwan HQ - Sales, RD & Production Line



JINGTONG - Factory in Ningbo, China



# YIH SEAN

Enterprise Co., Ltd.



## Company Introduction

### Overview

For almost 40 years, YIH SEAN Enterprise Co., Ltd. (part of the Lyric Shin Group) has been providing electrical parts for automotive, RVs, camping cars and marine markets. Today YIH SEAN has become a veteran manufacturer producing cigarette lighter plugs, sockets, fuse blocks, bus bars, switch panels, and other electrical products under the YIS Marine Brand, serving more than 200 customers around the world.

Based in Taiwan, we have a strong base in Product Design and Engineering, Manufacturing, Quality Control and Customer Service. Our R&D team has been rewarded more than 24 patents in the past 5 years and all of our products have been carefully designed, tested and certificated before mass production. We have a rigid quality control system throughout our manufacturing process and are verified as an ISO 9001 certified company since 2002. Our great customer services include instant claim handling, product and packaging customization service, artwork assistance, consulting and educations.

Cooperating with our solely owned subsidiary factory in Ningbo, China, we are able to reduce manufacturing costs and to ship our products from either China or Taiwan factory. Following the business trending of the e-commerce, we now also provide product sales in small volume and more customization options.

Our goal is to continue providing fine quality products and top service to our clients in the industrial switch as well as the car / marine electrical products industry. YIS Marine would be your best choice for electrical parts in the marine/automotive market.

### YIS JT Lyric Shin Group Profiles

- 40 years of experience. (Group Year of Foundation: 1981)
- Serve 200+ customers worldwide
- Number of employees: 110+ across Taiwan HQ & China Facility
- Main target markets : Industrial, Marine/Yacht Industry.
- ISO9001 Certified since 2002 (19 years in a row)



### YIS LYRIC SHIN - Switch Experts

### YIS SEAN (YIS Marine) – Electrical Parts for Marine



Push Button Switches



Water-proof marine switches



Foot pedal (Music) switches



Switch panels



Fuse blocks



12/24V Accessories



Industrial Switch



Reed alarm switches



Audio Switch Box



DC LED light



Battery Switch



Fuse

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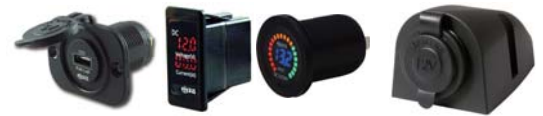
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### Marine Grade Switches

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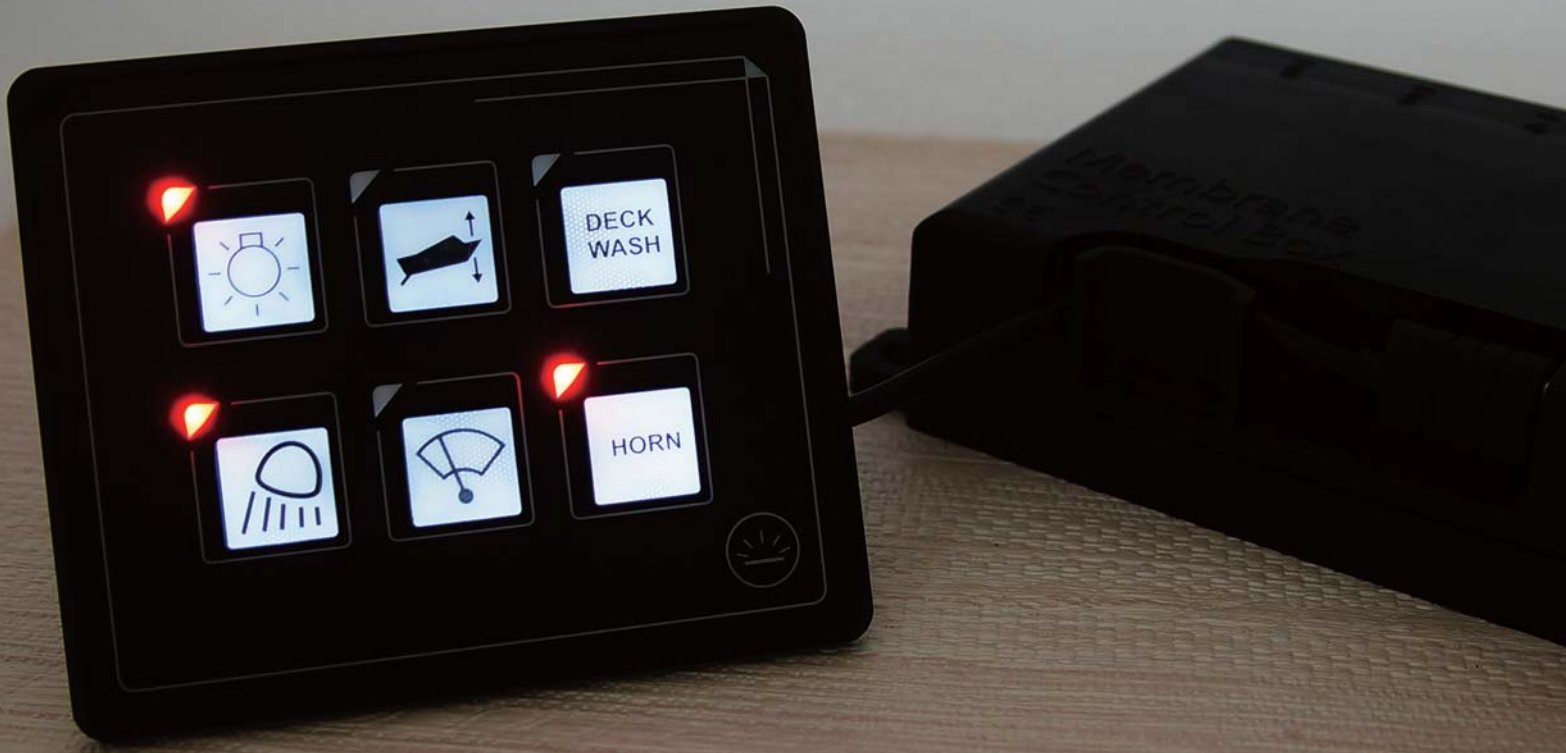
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# Switch Panels

## Water-resistant Switch Panels

New Digital Membrane Touch Control Panels

C-7 Aluminum Water-resistant Switch Panel

C-7 Curved Water-resistant Switch Panel

SP3331 1 Gang Curved Switch Panel Series

Carbon Fiber Switch Panel

Modern Design Toggle Switch Panel

## Power Distribution Panels

Wave Design Switch Panel

## Other Switch Panels

# New Digital Membrane Touch Control Panels (2019- 4<sup>th</sup> Gen)

Lower Cost, Better Stability and More Functions

New Product PATENTED TW



Mobile App only available for SP5110A

## Description

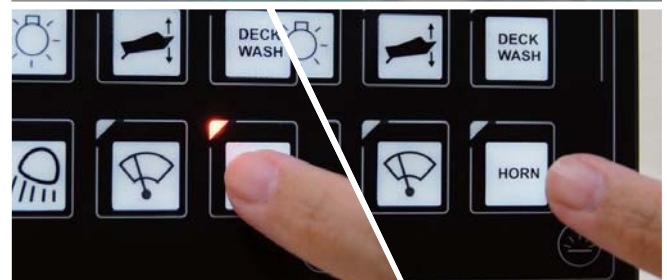
This popular membrane panel series just got even better! With the incorporation of new digital IC, these panels are now more reliable, cheaper and with some more advanced features like reduced standby current, compact micro-USB cable connection, momentary button programmable for any button. You can even use your iPhone or Android App to control the membrane control box via Bluetooth (SP5110A).

## Features

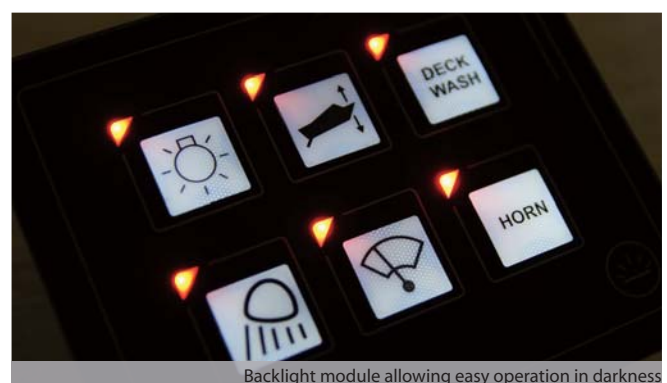
- Ultra Compact panel size (60% smaller than traditional panels)
- Easy to install – no mounting depth, minimum hole drilling (13.0 x 8.5mm)
- Use compact, ready accessible micro-USB cable, end user can replace cables of any desirable length
- Flexible wiring – Control Relay Box installed 1m away from the touch panel
- IP67 - Protected even under temporary water immersion (Panel only)
- ON-indication LED / 10A Self-resettable fuse for each branch
- Backlight module allowing easy operation in darkness
- Programmable momentary button – ALL buttons can be programmed to be momentary (ideal for horn or wiper applications)
- 60pcs Assorted Graphic and Text labels stickers set included



Incorporated digital IC allowing great cost reduction



Programmable momentary button on all buttons.



Backlight module allowing easy operation in darkness



Wireless control via Bluetooth on App (SP5110A only)

### Additional Features for SP5110A (App Compatible Version)

- App remote control on cellphone (Android / iOS) via Bluetooth
- Customizable labels, panel styles, background in the virtual panel
- Battery Voltage Level monitor and Low Voltage Warning Alarm
- Pairs up to 4 different control boxes and easily switching between boxes
- App memorizes label and panel styles of paired boxes after switching between boxes



## Specifications

- Faceplate | PET membrane touch panel
- Circuit Protection | Built-in Resettable Fuse (PPTC)
- Switch Ratings | 10A per branch
- Panel Rating | Max Cumulative Amp: 35A(6P) / 60A (10P)
- Voltage Rating | DC 9 - 15V (12V Model) / DC 11 - 30V (12-24V Model)
- Notes | CE IP67 (Panel Only) RED Directive (2014/53/EU)
- Patented

## Product Series

SP5106 / SP5106D(6P)



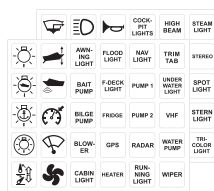
6P Membrane Panel



6P Remote Control Box



Micro USB Cable (1m)



60pcs Label Stickers

SP5110 / SP5110D / SP5110A (10P)



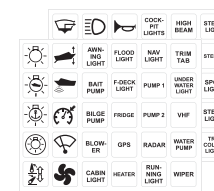
10P Membrane Panel



10P Remote Control Box



Micro USB Cable (1m)



60pcs Label Stickers

Product ID	Positions	Touch Panel (W x H)	Panel Cut-out(W x L)	Control Box (L x W x H)	Note
SP5106	6	91 x 75 mm	ø15 mm (13 x 8.5 mm)	136 x 90 x 32 mm	12V Only
SP5106D	6	91 x 75 mm	ø15 mm (13 x 8.5 mm)	136 x 90 x 32 mm	Dual Voltage (12 - 24V)
SP5110D	10	130 x 75 mm	ø15 mm (13 x 8.5 mm)	214 x 95 x 29 mm	Dual Voltage (12 - 24V)
SP5110A	10	130 x 75 mm	ø15 mm (13 x 8.5 mm)	214 x 95 x 29 mm	App Compatible Version / Dual Voltage

## Accessories

SP-51-EP20A



### Membrane Touch Panel 20A Expansion Kit

This Expansion Kit allows end users to expand current rating of single branch to 20A without disassembling the control box. This Kit works for all SP51xx models. Instructions manual included.

# C-7 Aluminum Water-resistant Switch Panel

Upgraded IP66 switch panel design with backlight for labels



## Description

Coming with the C-7 sealed rocker switches, these switch panels can withstand even severer weather conditions than the C-6 *Water-resistant Switch Panel*. SP32xx series are the only aluminum switch panels in the market with backlight modules for labels.

## Features

- New modern and compact panel design (15% smaller than SP30xx series)
- Backlight modules for labels, allowing easy operation in darkness
- IP66—protect against strong water jets
- Push-reset circuit breakers with rubber boots
- Illuminated (LED) C-7 rocker switches with dual voltage rating (12V / 24V)
- Watertight mounting gasket included
- Square shaped label stickers (30pcs) allow vertical or horizontal installation

## Specifications

- Faceplate | 0.1"(2.54mm) Coated Aluminum Alloy
- Circuit Protection | Circuit Breakers
- Switch Ratings | 20A @ DC 12V / 10A @ DC 24V (Dual Voltage)
- Panel Rating | Maximum Cumulative Amp: 45A, 45A x 2 (8P)\*
- Notes | IP66 **CE**

\* Max possible Amperage for each panel is determined by the lower of total switches ratings or the Max Cumulative Amperage listed above.



YIS exclusive backlight modules



IP66 rated



4-way installations





## Product Series



SP3216P



SP3218P



SP3234P



SP3254P



SP3274P



SP3226P



SP3228P



SP3244P



SP3264P



SP3284P

Product ID	Positions	Color	Circuit Protection	Product Dimension (W x H x D)	Panel Cut-out (W x L)	Note
SP3216P	6	Dark Gray	Circuit Breakers	114 x 191 x 75 mm	96 x 166 mm	
SP3218P	8	Dark Gray	Circuit Breakers	114 x 238 x 75 mm	96 x 217 mm	
SP3234P	4	Dark Gray	Circuit Breakers	114 x 191 x 75 mm	96 x 166 mm	with USB Charger & Cig. Lighter Socket
SP3254P	4	Dark Gray	Circuit Breakers	114 x 191 x 75 mm	96 x 166 mm	with Battery Gauge & Cig. Lighter Socket
SP3274P	4	Dark Gray	Circuit Breakers	114 x 191 x 75 mm	96 x 166 mm	with Battery Gauge & USB Charger
SP3226P	6	White	Circuit Breakers	114 x 191 x 75 mm	96 x 166 mm	
SP3228P	8	White	Circuit Breakers	114 x 238 x 75 mm	96 x 217 mm	
SP3244P	4	White	Circuit Breakers	114 x 191 x 75 mm	96 x 166 mm	with USB Charger & Cig. Lighter Socket
SP3264P	4	White	Circuit Breakers	114 x 191 x 75 mm	96 x 166 mm	with Battery Gauge & Cig. Lighter Socket
SP3284P	4	White	Circuit Breakers	114 x 191 x 75 mm	96 x 166 mm	with Battery Gauge & USB Charger

## Accessories

### C-7231RS-H1W



#### Illuminated(LED) Rocker Car Switch

DC 12V 20A  
DC 24V 10A  
SPST ON-OFF

### AS235



#### USB Charger Socket (2 Ports)

Marine Grade with cap  
DC 5V 3.4A

### AS212



#### Marine Grade Power Outlet

Marine Grade with cap  
DC 9-36V, 20A

### AS234



#### USB Charger Socket (2 Ports)

Marine Grade with cap  
DC 5V 3.1A  
DC 5V 4.8A



#### Any 1-1/8" Sockets

See page 64 for more.

# C-7 Curved Water-resistant Switch Panel

Upgraded streamline switch panel design with backlight for labels



## Description

Coming with the C-7 sealed rocker switches, these switch panels are one of our most weather-proof switch panel series. The modular mini panels allow consumers to build switch panels with their own customized features. With modern curved faceplate design and new backlit label features, these panels are stylish, high performance switch panels with complete features.

## Features

- New modern curved and compact panel design (15% smaller than SP30xx series)
- Mini modular panels allow free combinations at consumers' side
- Backlight modules for labels, allowing easy operation in darkness
- IP66—protect against strong water jets
- Push-reset circuit breakers with rubber boots
- Illuminated (LED) C-7 rocker switches with dual voltage rating (12V / 24V)
- Watertight mounting gasket included
- Square shaped label stickers (30pcs) allow vertical or horizontal installation



Backlight modules for label stickers



Vertical or horizontal Installations



Mini modular panels allow freedom for customized panels



Water-resistant (IP66)



## Specifications

- Faceplate | Curved shaped plastic (ASA)
- Circuit Protection | Circuit Breakers
- Switch Ratings | 20A @ DC 12V / 10A @ DC 24V (Dual Voltage)
- Panel Rating | Maximum Cumulative Amp: 45A\*
- Notes | IP66

\* Max possible Amperage for each panel is determined by the lower of total switches ratings or the Max Cumulative Amperage listed above.

## Product Series



SP3314P



SP3316P



SP3320XX



SP3331XX

Product ID	Positions	Color	Circuit Protection	Product Dimension (W x H x D)	Panel Cut-out (W x L)	Note
SP3314P	4	Black	Circuit Breakers	114 x 133 x 75 mm	101 x 120 mm	
SP3316P	6	Black	Circuit Breakers	114 x 188 x 75 mm	101 x 166 mm	
SP3320XX	-	Black	Circuit Breakers	114 x 58 x 56 mm	105 x 45 mm	2 Gang Mini Socket Panel*
SP3331XX	1	Black	-	114 x 54 x 75mm	103 x 42 mm	1P Switch Panel for special purposes

\* See table below for available sockets combinations

Socket options for SP3320XX	
Product ID	Socket Mounted
SP3320PP	AS212 x2
SP3320PU	AS212 + AS233
SP3320PV	AS212 + AS234
SP3320PG	AS212 + SP-BG1
SP3320XX	Any combination of two

SP3331 Series	
Product ID	Socket Mounted
SP3331BP	Bilge Pump Switch Panel
SP3331BA	Bilge Pump Switch Panel with Alarm
SP3331DW	Deck Wash Control Panel
SP3331WC	Windlass Control Panel

\* See page 8 for more details of SP3331 Series

## Accessories

**C-7231RS-H1W**

**Illuminated(LED) Rocker Car Switch**

DC 12V 20A  
DC 24V 10A  
SPST ON-OFF

**AS235**

**USB Charger Socket (2 Ports)**

Marine Grade with cap  
DC 5V 3.4A

**AS212**

**Marine Grade Power Outlet**

Marine Grade with cap  
DC 9-36V, 20A

**AS234**

**USB Charger Socket (2 Ports)**

Marine Grade with cap  
DC 5V 3.1A  
DC 5V 4.8A

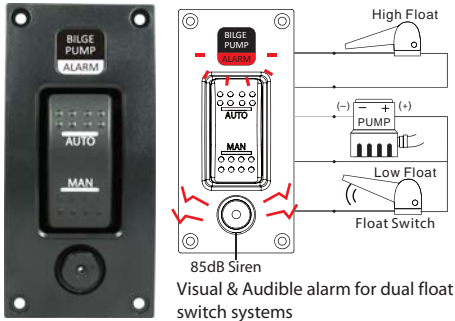
**Any 1-1/8" Sockets**

See page 64 for more.

# SP3331 1 Gang Curved Switch Panel Series

## Bilge Pump Switch Panel with Alarm

SP3331BA ON-OFF-ON  
 SP3331BAM ON-OFF-(ON)



## Features

- Modern design bilge pump panel with visual and audible alarm (85dB Siren)
- Activates alarms and starts pump automatically when water reaches 2nd (high) float switch
- IP67 C-7 Sealed Switch and water-resistant Siren
- Backlight label module allowing easy recognition in darkness
- Fit perfectly with SP33 series regular panels

## Specifications

- Faceplate | Curved shaped plastic (ASA)
- Dimensions | 114 x 54 x 75mm
- Circuit Protection | Pre-installed ATP Fuse 20A
- Switch Function | ON-OFF-ON(SP3331BA) / ON-OFF-(ON)(SP3331BAM)
- Switch Rating | 20A @ DC 12V
- Notes | IP66

## Curved Design Single Branch (1P) Switch Panel

SP3331XX



SP3331ST



SP3331DT



SP3331DW



SP3331WC



SP3331BP

## Features

- Blank 1P panel that goes well with other SP33 series panels
- C-7 sealed IP67 switch with dual (12-24V) voltage rating
- Backlight label module allowing easy recognition in darkness
- 5 pcs assorted label stickers included
- Various Switch functions available

## Specifications

- Faceplate | Curved shaped plastic (ASA)
- Dimensions | 114 x 54 x 75mm
- Circuit Protection | Circuit Breaker 20A
- Switch Function | See Table
- Switch Rating | 20A @ DC 12V / 10A @ DC 24V (Dual Voltage)
- Notes | IP66

### Blank Panels

Product ID	Type	Switch Function	Note
SP3331ST	SPST	ON-OFF	Blank panel with 5pcs label stickers
SP3331STM	SPST	(ON)-OFF	Blank panel with 5pcs label stickers
SP3331DT	SPDT	ON-OFF-ON	Blank panel with 5pcs label stickers
SP3331DTM	SPDT	(ON)-OFF-ON	Blank panel with 5pcs label stickers
SP3331DTM2	SPDT	(ON)-OFF-(ON)	Blank panel with 5pcs label stickers

### Functional Panels

Product ID	Type	Switch Function	Note
SP3331DW	SPDT	ON-OFF	Deck Wash Panel
SP3331WC	SPDT	(ON)-OFF-(ON)	Windlass Control Panel
SP3331BP	SPDT	ON-OFF-ON	Standard Bilge Pump Panel
SP3331BPM	SPDT	ON-OFF-(ON)	Standard Bilge Pump Panel

## Label Stickers for SP32 / 33 Series SP33-ST1



- 30pcs assorted Water-proof PC membrane label stickers
- Designed for SP32 / SP33 backlight modules
- Customizable to local languages or applications

## Curved Water-resistant USB Panel SP331USB



### Features

- Double port USB charger (AS235) fully compatible with latest iPad, iPhone and smartphones
- Backlight label module allowing easy recognition in darkness
- Fit perfectly with SP33 series regular panels

### Specifications

- Faceplate | Curved shaped plastic (ASA)
- Dimensions | 114 x 54 x 75mm
- Circuit Protection | Circuit Breaker 5A
- Input | DC 12-24V
- Output | DC 5V 3.4A
- Notes | IP66

## Curved Water-resistant Voltage Meter Panel SP3331VM – Voltage Meter Panel SP3331DM – Dual (Voltage & Current) Meter Panel



SP3331VM

SP3331DM

### Features

- Digital meters with 3 LED displays (SP-BG4 / SP-BG5)
- Backlight label module allowing easy recognition in darkness
- Fit perfectly with SP33 series regular panels

### Specifications

- Faceplate | Curved shaped plastic (ASA)
- Dimensions | 114 x 54 x 75mm
- Input Range | DC 2.5V – 30V (SP3331VM) / DC 4.5V – 30V, 0 – 15A (SP3331DM)
- Notes | IP66



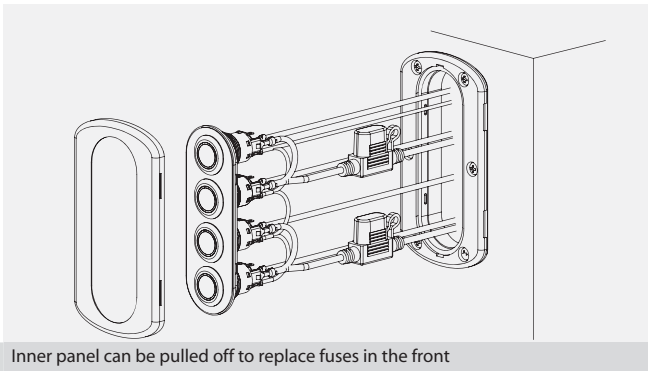
# Premium Series Slimline Switch Panel

with Polished Stainless Bezel and 20A Push Button Switches

New Product



SP6004    SP6004B    SP6006    SP6006B



Inner panel can be pulled off to replace fuses in the front

## Description

Looking for some elegant and premium panel with powerful outputs? Meet these new carbon fiber / stainless steel hybrid panel with market leading 20A stainless steel push button switches. Carefully design with screw-hidden polished bezel, backlight labels on the button and 3D carbon fiber panel finish, this is the most elegant panel in YIS lineup.

## Features

- Elegant Carbon Fiber Vinyl film with vivid 3D texture
- Ultra Compact Panel Size / mounting holes compatible BEP's Contour Panel Series
- Screw hidden design with polished stainless steel 304 bezel
- 20A Anti-Vandal Stainless Steel Push Button Switches with backlight labels
- Easy fuse-replacing design - fuse holder retractable from the front (Patent Pending)
- 40 pcs assorted label stickers included
- IP66 – Protected against powerful water jets from all directions (when mounted)
- Water-tight gasket included

Product ID	Positions	Circuit Protection	Product Dimension (W x H x D)	Panel Cut-out (W x L)	Note
SP6004	4	ATP Fuses	64 x 120 x 105 mm	32x 101 mm	Red LED Backlight
SP6006	6	ATP Fuses	64 x 169 x 105 mm	32 x 150 mm	Red LED Backlight
SP6004B	4	ATP Fuses	64 x 120 x 105 mm	32x 101 mm	Blue LED Backlight
SP6006B	6	ATP Fuses	64 x 169 x 105 mm	32 x 150 mm	Blue LED Backlight

## Specifications

- Faceplate | Plastic with Carbon Fiber Vinyl Film
- Outer Frame | Stainless Steel 304
- Circuit Protection | in-line 15A ATP fuses pre-installed (per 2 branches)
- Switch Rating | 20A @ DC 12V
- Panel Rating | Max Cumulative Amp: 25A per 2 branches
- Notes | IP66

\* Max possible Amperage for each panel is determined by the lower of total switches ratings or the Max Cumulative Amperage listed above.

## Accessories

**PB4511**

**Push-Button Switch**

.....

DC 12V 20A  
DC 24V 10A  
SPST ON-OFF

**BF353**

**In-Line ATP Fuse Holders**

.....

DC 12V/24V 1-30A

\* This product is under development, all specifications and features are subject to change. Contact sales for final specs.

# Modern Design Toggle Switch Panel



Compact economical toggle switch panel with fuse protection



SP2116



SP2125P



SP2125U



SP2125G



SP2123X



SP2136



SP2145P



SP2145U



SP2145G



SP2143X

Gray Panel	White Panel	Positions	Circuit Protection	Product Dimension (W x H x D)	Panel Cut-out (W x L)	Note
SP2116	SP2136	6	ATP Fuses	107 x 95 x 45 mm	87 x 78 mm	
SP2125P	SP2145P	5	ATP Fuses	107 x 95 x 60 mm	87 x 78 mm	with Cig. Lighter Socket
SP2125U/V	SP2145U/V	5	ATP Fuses	107 x 95 x 60 mm	87 x 78 mm	USB Charger (U: 1Port V:2Port)
SP2125G	SP2145G	5	ATP Fuses	107 x 95 x 45 mm	87 x 78 mm	with Digital Battery Gauge
SP2123P	SP2143P	3	ATP Fuses	107 x 95 x 60 mm	87 x 78 mm	with Cig. Lighter Socket
SP2123U/V	SP2143U/V	3	ATP Fuses	107 x 95 x 60 mm	87 x 78 mm	USB Charger (U: 1Port V:2Port)
SP2123G	SP2143G	3	ATP Fuses	107 x 95 x 45 mm	87 x 78 mm	with Digital Battery Gauge

## Features

- Compact panel size
- Unique trendy faceplate design (two colors available: Dark Gray /White)
- Heavy duty metal toggle switches with water-resistant PVC boot
- Water-tight mounting gasket included
- LED indication when device turned ON
- 28pcs assorted label stickers included
- IP66 – Protected against powerful water jets from all directions (when mounted)
- Spray-proof in-line ATP/ATC fuse holders with fuses pre-installed



IP66 rated – protected against power jets



LED indication when switched on

## Specifications

- Faceplate | Sleek Design Plastic (ABS)
- Circuit Protection | In-line 15A ATP fuses pre-installed (per 2 branches)
- Switch Ratings | 15A @ DC 12V / 10A @ DC 24V (Dual Voltage)
- Panel Rating | Max Cumulative Amp: 25A per 2 branches\*
- Notes | IP66

\* Max possible Amperage for each panel is determined by the lower of total switches ratings or the Max Cumulative Amperage listed above.



compact Size - 40% Smaller than SP2016F

Watch Intro Video on Youtube



# Wave Design Switch Panel

Economical switch panels with circuit breakers

PATENTED TW

Best Seller



SP1214P

SP1216P

SP1218P

SP1220XX

SP12XXPW

(Anti-Splash version for all models)

Product ID	Positions	Circuit Protection	Product Dimension (W x H x D)	Panel Cut-out (W x L)	Note
SP1214P	4	Circuit Breakers	100 x 110 x 45 mm	77 x 97.5 mm	
SP1216P	6	Circuit Breakers	100 x 160 x 45 mm	77 x 148 mm	
SP1218P	8	Circuit Breakers	100 x 210 x 45mm	77 x 198 mm	
SP1220XX	-	-	100 x 54 x 56mm	82.5 x 38 mm	2 gang mini socket panel

※ Anti-splash version with rubber boots for switches and circuit breakers are now available for all models above.

Socket options for SP1220XX	
Product ID	Socket Mounted
SP1220PP	AS212 x2
SP1220PU	AS212 + AS233
SP1220PV	AS212 + AS234
SP1220PG	AS212 + SP-BG1
SP1220XX	Any combination of two



unique, patented wave faceplate design

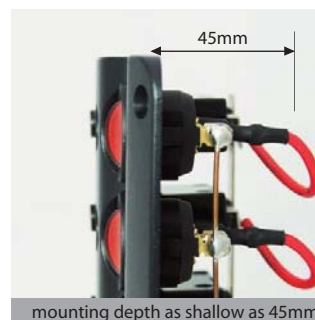
## Features

- 12V DC illuminated (LED) rocker switches
- Pre-wired with resettable circuit breakers
- Ultra shallow mounting depth (~45mm)
- 28 assorted label stickers included

## Specifications

- Faceplate | Wave shaped plastic (ABS)
- Circuit Protection | Circuit breakers
- Switch Ratings | 10A @ DC 12V
- Panel Rating | Maximum Cumulative Amp: 35A\*
- Note | **CE**
- Patented in Taiwan | D155080(TW)

\* Max possible Amperage for each panel is determined by the lower of total switches ratings or the Max Cumulative Amperage listed above.



mounting depth as shallow as 45mm



anti-splash version available



# Other Switch Panels

## The New Classic Rocker Switch Panel (Redesign 2015)



SP1113F



SP1123F



SP1116F



SP1126F



SP1116P



SP1126P



SP1051

### Features

- Classic coated aluminum panel design
- LED illuminated rocker switches
- Pop-out fuse holders with 10A fuse per branch pre-installed (fuse models)
- Circuit Breaker version available for all models
- 20pcs assorted label stickers
- Square shaped stickers allowing vertical or horizontal installation

### Specifications

- Faceplate | 1.25mm Coated Aluminum
- Circuit Protection | Fuse / Circuit Breakers
- Switch Ratings | 10A @ DC 12V
- Panel Rating | Maximum Cumulative Amp: 35A\*
- Notes | **CE**

\* Max possible Amperage for each panel is determined by the lower of total switches ratings or the Max Cumulative Amperage listed above.

Product ID	Circuit Protection	Dimension (W x H x D)	Panel Cut-out (W x L)
SP1113F	Fuses	117 x 97 x 70 mm	70 x 65 mm
SP1116F	Fuses	117 x 167 x 70 mm	70 x 130 mm
SP1123F	Fuses	117 x 97 x 70 mm	70 x 65 mm
SP1126F	Fuses	117 x 167 x 70 mm	70 x 130 mm
SP1116P	Circuit Breakers	117 x 167 x 70 mm	95 x 125 mm
SP1126P	Circuit Breakers	117 x 167 x 70 mm	95 x 125 mm
SP1051	-	83 x 64 x 50 mm	65 x 50 mm

✳️ Anti-splash version with covers for switches available

## Bakelite Toggle Switch Panels with Fuses



SP2013F



SP2016F

### Features

- Classic toggle switch
- Fuse holders with 5A fuses pre-installed
- Optional anti-splash PVC boots available

### Specifications

- Faceplate | Bakelite
- Circuit Protection | Fuses
- Switch Ratings | DC 12V / 24V
- Panel Rating | Maximum Cumulative Amp: 15A
- Notes | **CE**

Product ID	Dimensions (W x H x D)	Panel Cut-out(W x L)
SP2013F	114 x 92 x 35 mm	90 x 75 mm
SP2016F	114 x 161 x 35 mm	90 x 140 mm

## Windlass Controlling Panel with LED SP2211



Product ID	Dimensions (W x H x D)	Panel Cut-out(W x L)
SP2211	52 x 76 x 35 mm	40 x 45 mm

### Features

- Momentary (ON)-OFF-(ON) Toggle Switch with PVC Boot
- Red Lamp Indicator

### Specifications

- Faceplate | Aluminum Plate
- Circuit Protection | -
- Switch Ratings | DC 12V
- Panel Rating | 15A @ DC 12V
- Notes | **CE**

## 3-Way Bilge Pump Switch Panel SP2221AF/BF



- SP2221AF : ON-OFF-ON Bilge Pump Switch Panel with Fuse (AUTO-OFF-AUTO)
- SP2221BF : ON-OFF-(ON) Bilge Pump Switch Panel with Fuse (AUTO-OFF-MANUAL)

Product ID	Dimensions (W x H x D)	Panel Cut-out(W x L)
SP2221AF/BF	90 x 50 x 45 mm	75 x 38 mm

### Features

- 3-Way toggle switch (ON-OFF-ON) with LED indication
- Fuse holders with pre-installed fuses
- Optional anti-splash PVC boots available

### Specifications

- Faceplate | Plastic (ABS)
- Circuit Protection | Fuse
- Switch Ratings | DC 12V
- Panel Rating | Maximum Cumulative Amp:5A
- Notes | **CE**

## C-7 Streamline Water-resistant Switch Panel



SP3114P

SP3116P

Product ID	Dimensions (W x H x D)	Panel Cut-out(W x L)
SP3114P	133 x 121 x 75 mm	97 x 101 mm
SP3116P	133 x 173 x 75 mm	97 x 153 mm



### Features

- Unique streamline faceplate design
- IP66– protect against strong water jets from all directions (when mounted)
- Push-reset circuit breakers with rubber boots
- Illuminated (LED) C-7 rocker switches with dual voltage rating (12V / 24V)
- Watertight mounting gasket included
- 30 pcs assorted label set included

### Specifications

- Faceplate | Streamline shaped plastic (ABS)
- Circuit Protection | Circuit Breakers
- Switch Ratings | 20A @ DC 12V / 10A @ DC 24V (Dual Voltage)
- Panel Rating | Maximum Cumulative Amp:45A\*
- Notes | IP66 **CE**

\* Max possible Amperage for each panel is determined by the lower of total switches ratings or the Max Cumulative Amperage listed above.

## C-6 Water-resistant Switch Panel



SP3013F



SP3013P



SP3016F



SP3016P



SP3023F



SP3023P



SP3033F



SP3033P

## Features

- IP55– protect against water jets from all directions (when mounted)
- Both circuit breaker and fuse versions available
- Illuminated water-resistant C-6 rocker switches
- Watertight mounting gasket included
- 30 pcs assorted label set included

## Specifications

- Faceplate | 0.1”(2.54mm) Coated Aluminum Alloy
- Circuit Protection | Fuse/Circuit Breaker
- Switch Ratings | 16A @ DC 12V
- Panel Rating | Maximum Cumulative Amp : 35A\*
- Notes | IP55 **CE**

\* Max possible Amperage for each panel is determined by the lower of total switches ratings or the Max Cumulative Amperage listed above.

Product ID	Circuit Protection	Dimension (W x H x D)	Panel Cut-out (W x L)	Note
SP3013F	Fuses	134 x 95 x 75 mm	75 x 75 mm	
SP3013P	Circuit Breakers	134 x 95 x 75 mm	80 x 75 mm	
SP3016F	Fuses	134 x 190 x 75 mm	75 x 166 mm	
SP3016P	Circuit Breakers	134 x 190 x 75 mm	80 x 166 mm	
SP3023F	Fuses	134 x 190 x 80 mm	75 x 158 mm	with DIN Socket, Cig. Lighter Socket with Retainer and Battery Gauge
SP3023P	Circuit Breakers	134 x 190 x 80 mm	80 x 158 mm	with DIN Socket, Cig. Lighter Socket with Retainer and Battery Gauge
SP3033F	Fuses	134 x 190 x 80 mm	75 x 155 mm	with Cig. Lighter Socket and Battery Gauge
SP3033P	Circuit Breakers	134 x 190 x 80 mm	80 x 155 mm	with Cig. Lighter Socket and Battery Gauge

## Ignition Switch Panel

SP4010 / SP4011

New Product



## Features





- LED ON Indicator
- 2 Keys included

## Specifications

- Faceplate | Nylon 66
- Circuit Protection | -
- Switch Ratings | DC 12V
- Panel Rating | 10 A


Product ID	Dimensions (W x H x D)	Panel Cut-out (W x L)
SP4010	69 x 69 x 45mm	φ40mm
SP4011	69 x 69 x 45mm	φ40mm



## SP Series Selection Guide

Product	SP5106 / SP5106D 	SP5110D / SP5110A <span style="color: red; font-weight: bold;">New</span> 	SP3216P / SP3226P 	SP3218P / SP3228P 
Page no.	P.3	P.3	P.5	P.5
Positions	6P	10P	6P	8P
Faceplate	PET membrane touch panel	PET membrane touch panel	2.54mm Coated Aluminum	2.54mm Coated Aluminum
Circuit Protection	Built-in Resettable Fuse	Built-in Resettable Fuse	Circuit breakers	Circuit breakers
Switch Rating	DC 12V 10A	DC 12V 10A	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A
Panel Rating	35A	60A	45A	45Ax2
IP Rating	IP67 (Panel Only)	IP67 (Panel Only)	IP66	IP66
Dimensions (W x H x D)	ø15 mm (13 x 8.5 mm)	ø15 mm (13 x 8.5 mm)	114x191x75 mm	114x238x75 mm
Note	SP5106: 12V only SP5106D: 12V/24V	SP5110D: 12V/24V SP5110A: App Control Ver.		





Product	SP3234P / SP3244P 	SP3254P / SP3264P 	SP3274P / SP3284P 	SP3314P 
Page no.	P.5	P.5	P.5	P.7
Positions	4P	4P	4P	4P
Faceplate	2.54mm Coated Aluminum	2.54mm Coated Aluminum	2.54mm Coated Aluminum	Curved shaped plastic (ASA)
Circuit Protection	Circuit breakers	Circuit breakers	Circuit breakers	Circuit breakers
Switch Rating	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A
Panel Rating	45A	45A	45A	45A
IP Rating	IP66	IP66	IP66	IP66
Dimensions (W x H x D)	114x191x75 mm	114x191x75 mm	114x191x75 mm	114x133x75 mm
Note	with USB Charger and Cig. Lighter Socket	with Battery Gauge and Cig. Lighter Socket	with Battery Gauge and USB Charger	





Product	SP3316P 	SP3320XX 	SP3331ST 	SP3331DT 
Page no.	P.7	P.7	P.8	P.8
Positions	6P	-	1P	1P
Faceplate	Curved shaped plastic (ASA)	Curved shaped plastic (ASA)	Curved shaped plastic (ASA)	Curved shaped plastic (ASA)
Circuit Protection	Circuit breakers	-	Circuit Breaker 20A	Circuit Breaker 20A
Switch Rating	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A
Panel Rating	45A	-	-	-
IP Rating	IP66	IP66	IP66	IP66
Dimensions (W x H x D)	114x191x75 mm	114x58x56 mm	114x54x75 mm	114x54x75 mm
Note		Sockets options: page 64		

Product	SP3331DW	SP3331WC	SP3331BP	SP3331BA
				
Page no.	P.8	P.8	P.8	P.8
Positions	1P	1P	1P	1P
Faceplate	Curved shaped plastic (ASA)	Curved shaped plastic (ASA)	Curved shaped plastic (ASA)	Curved shaped plastic (ASA)
Circuit Protection	Circuit Breaker 20A	Circuit Breaker 20A	Circuit Breaker 20A	Pre-installed ATP Fuse 20A
Switch Rating	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A
Panel Rating	-	-	-	-
IP Rating	IP66	IP66	IP66	IP66
Dimensions (W x H x D)	114x54x75 mm	114x54x75 mm	114x54x75 mm	114x54x75 mm
Note				





Product	SP3331USB	SP3331VM	SP3331DM	SP6004 <span style="color: red;">New</span>
				
Page no.	P.9	P.9	P.9	P.10
Positions	1P	1P	1P	4P
Faceplate	Curved shaped plastic (ASA)	Curved shaped plastic (ASA)	Curved shaped plastic (ASA)	Plastic with Carbon Fiber Vinyl Film
Circuit Protection	Circuit Breaker 5A	-	-	ATP Fuses
Switch Rating	-	DC 2.5V – 30V	DC 4.5V – 30V, 0 – 15A	DC 12V 20A
Panel Rating	-	-	-	25A per 2 branches
IP Rating	IP66	IP66	IP66	IP66
Dimensions (W x H x D)	114x54x75 mm	114x54x75 mm	114x54x75 mm	64x120x105 mm
Note				

Product	SP6006 / SP6006B <span style="color: red;">New</span>	SP2116 / SP2136	SP2125X / SP2145X	SP2123X / SP2143X
				
Page no.	P.10	P.11	P.11	P.11
Positions	6P	6P	5P	3P
Faceplate	Plastic with Carbon Fiber Vinyl Film	Sleek Design plastic (ABS)	Sleek Design plastic (ABS)	Sleek Design plastic (ABS)
Circuit Protection	ATP Fuses	ATP Fuses	ATP Fuses	ATP Fuses
Switch Rating	DC 12V 20A	DC 12V 15A / DC 24V 10A	DC 12V 15A / DC 24V 10A	DC 12V 15A / DC 24V 10A
Panel Rating	25A per 2 branches	25A per 2 branches	25A per 2 branches	25A per 2 branches
IP Rating	IP66	IP66	IP66	IP66
Dimensions (W x H x D)	64x169x105 mm	107x95x45 mm	107x95x60 mm	107x95x60 mm
Note			X = P: Cig. Light Socket X = U/V: USB Charger Socket X = G: Digital Voltage Meter	X = P: Cig. Light Socket X = U/V: USB Charger Socket X = G: Digital Voltage Meter

Product	SP1214P 	SP1216P 	SP1218P 	SP1220XX 
Page no.	P.12	P.12	P.12	P.12
Positions	4P	6P	8P	-
Faceplate	Wave shaped plastic (ABS)	Wave shaped plastic (ABS)	Wave shaped plastic (ABS)	Wave shaped plastic (ABS)
Circuit Protection	Circuit breakers	Circuit breakers	Circuit breakers	-
Switch Rating	DC 12V 10A	DC 12V 10A	DC 12V 10A	-
Panel Rating	35A	35A	35A	-
IP Rating	-	-	-	-
Dimensions (W x H x D)	100x110x45 mm	100x160x45 mm	100x210x45 mm	100x54x56 mm
Note				2 gang mini socket panel

Product	SP1113F / SP1123F 	SP1116F / SP1126F 	SP1116P / SP1126P 	SP1051 
Page no.	P.13	P.13	P.13	P.13
Positions	3P	6P	6P	-
Faceplate	1.2mm Coated Aluminum	1.2mm Coated Aluminum	1.2mm Coated Aluminum	1.2mm Coated Aluminum
Circuit Protection	Fuses	Fuses	Circuit breakers	-
Switch Rating	DC 12V 10A	DC 12V 10A	DC 12V 10A	DC 12V 10A
Panel Rating	20A	20A	20A	20A
IP Rating	-	-	-	-
Dimensions (W x H x D)	117x97x70 mm	117x167x70 mm	117x167x70 mm	85x64x50 mm
Note				Battery Test Gauge panel with switch

Product	SP2013F 	SP2016F 	SP2211 	SP2221AF/BF 
Page no.	P.13	P.13	P.14	P.14
Positions	3P	6P	1P	1P
Faceplate	Bakelite	Bakelite	Aluminum Plate	Plastic (ABS)
Circuit Protection	Fuses	Fuses	-	Fuses
Switch Rating	DC 12V / 24V	DC 12V / 24V	DC 12V	DC 12V
Panel Rating	15A	15A	15A	5A
IP Rating	-	-	-	-
Dimensions (W x H x D)	114x92x35 mm	114x161x35 mm	52x76x35 mm	90x50x45 mm
Note				

Product	SP3114P 	SP3116P 	SP3013F 	SP3013P 
Page no.	P.14	P.14	P.15	P.15
Positions	4P	6P	3P	3P
Faceplate	Streamline Shaped plastic (ABS)	Streamline Shaped plastic (ABS)	2.54mm Coated Aluminum	2.54mm Coated Aluminum
Circuit Protection	Circuit breakers	Circuit breakers	Fuses	Circuit breakers
Switch Rating	DC 12V 20A / DC 24V 10A	DC 12V 20A / DC 24V 10A	DC 12V 16A	DC 12V 16A
Panel Rating	45A	45A	35A	35A
IP Rating	IP66	IP66	IP55	IP55
Dimensions (W x H x D)	133x121x75 mm	133x173x75 mm	134x95x75 mm	134x95x75 mm
Note				

Product	SP3016F 	SP3016P 	SP3023F 	SP3023P 
Page no.	P.15	P.15	P.15	P.15
Positions	6P	6P	3P	3P
Faceplate	2.54mm Coated Aluminum	2.54mm Coated Aluminum	2.54mm Coated Aluminum	2.54mm Coated Aluminum
Circuit Protection	Fuses	Circuit breakers	Fuses	Circuit breakers
Switch Rating	DC 12V 16A	DC 12V 16A	DC 12V 16A	DC 12V 16A
Panel Rating	35A	35A	35A	35A
IP Rating	IP55	IP55	IP55	IP55
Dimensions (W x H x D)	134x190x75 mm	134x190x75 mm	134x190x80 mm	134x190x80 mm
Note			with DIN Socket, Cig. Lighter Socket with Retainer and Battery Gauge	with DIN Socket, Cig. Lighter Socket with Retainer and Battery Gauge

Product	SP3033F 	SP3033P 	SP4010 / SP4011 <span style="color: red; font-weight: bold;">New</span> 
Page no.	P.15	P.15	P.15
Positions	3P	3P	-
Faceplate	2.54mm Coated Aluminum	2.54mm Coated Aluminum	Nylon 66
Circuit Protection	Fuses	Circuit breakers	-
Switch Rating	DC 12V 16A	DC 12V 16A	DC 12V
Panel Rating	35A	35A	10A
IP Rating	IP55	IP55	-
Dimensions (W x H x D)	134x190x80 mm	134x190x80 mm	69x69x45 mm
Note	with Cig. Lighter Socket and Battery Gauge	with Cig. Lighter Socket and Battery Gauge	



# Power Management

## Battery Management

Digital Voltage Sensitive Relay (DVSR) / Automatic Charging Relay  
BP-Series Compact Battery Switches (Metric Threading)  
BM-Series Main Battery Switches (Imperial Threading)

## Circuit Protections

Modular Design Blade (ATP/ATO/ATC) Fuse Blocks  
Multi-use Compact Modular Design Blade Fuse Blocks  
Compact Design Independent Source Blade Fuse Blocks  
Modern Design Glass-tube AGC Fuse Blocks Series  
CLB / CMB Circuit Breaker Boxes  
Heavy-Duty Modular Design Fuse Block & Bus Bars  
Classic Fuse Block & Bus Bars  
Fuses (Glass-tube Fuses / Automotive Blade Fuses & Other Fuses)  
Circuit Breakers  
Fuse Holders

## Connectors & Buses

Heavy-Duty Bus Bars (Imperial Threading)  
Marine Grade Bus Bars (Metric Threading)  
Heavy-Duty Terminal Studs  
Terminal Blocks



# Battery Management

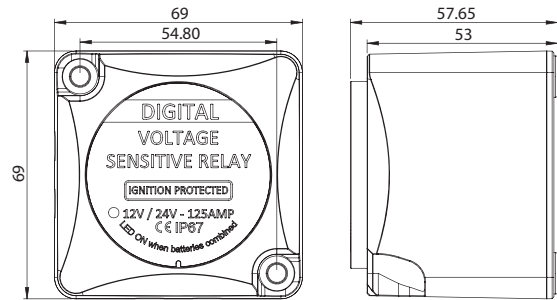
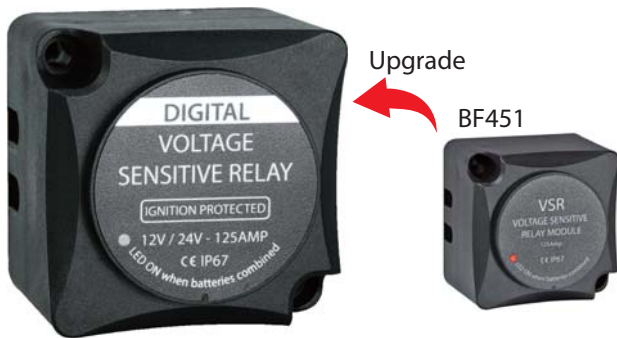
Watch Intro Video on Youtube



New Product IGNITION PROTECTED

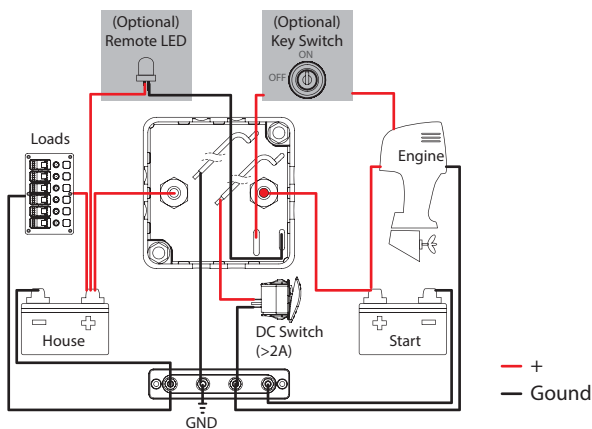
## Digital Voltage Sensitive Relay (DVSR) / Automatic Charging Relay

BF452



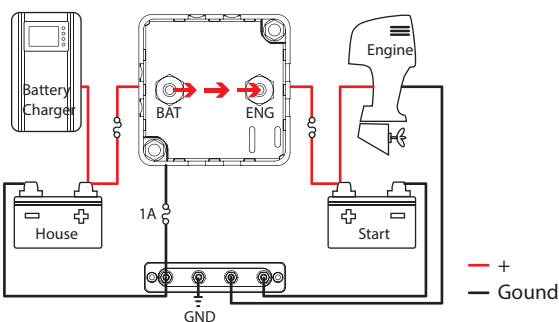
VSR (Voltage Sensitive Relay) or ACR (Automatic Charging Relay) are automatically controlled switches that allow two batteries to be combined when charging, and to be isolated when not charging and current is draining from one of the batteries. When used with battery switches, VSR helps to reserve a fully charged battery at all time, avoid the dead battery and possibility of towing on the sea. D-VSR is an upgraded Digital version of VSR with enhanced features like 12/24V system support, dual-port sensing, much lower standby power consumption and better reliability.

### Wiring Example for BF452 D-VSR



※ Wiring Diagrams are for reference only, consult professionals for wiring suits your needs.

### Wiring Example for D-VSR with Battery Charger



Dual Port Sensing allows Battery Charger charging to Start Battery when engine is off.

## Features

- Automatically combines two batteries when charging and isolates the two batteries when not charging
- DC 12/24V input auto ranging
- Sensing voltage from either battery bank
- No voltage drops comparing to battery isolator diodes (0.6V)
- Dimensions fits BF43x Fuse Box Series and Battery Switch, matching mainstream products in market (BEP style)
- Robust Glass Fiber reinforced Nylon enclosure
- Built-in LED indication (ON when VSR engages)
- Port for remote LED indicating VSR status (LED not included)
- Surface or panel mount options provides flexibility when installing
- Optional Storage Mode allows zero power consumption when engine is off

## Specifications

- Nominal Voltage | DC 12V / 24V Auto Detect
- Combine / Open Voltage | DC 13.3V / 12.8V @ 12V  
DC 26.6V / 25.6V @ 24V
- Continuous Current Rating | 125A
- Intermittent Current Rating | 140A
- Power Consumption | 3mA (Standby) / 270mA (Engage) / 0mA (Storage Mode)
- Note | CE IP67

### D-VSR with Cable Kit for 2<sup>nd</sup> Battery BF452KIT



This Kit provides all the necessary cables, accessories and D-VSR that you need to install the secondary battery. Customer installing this for the first time will find it convenient to have the cables ready in single package.



## BP-Series Compact Battery Switches (Metric Threading)

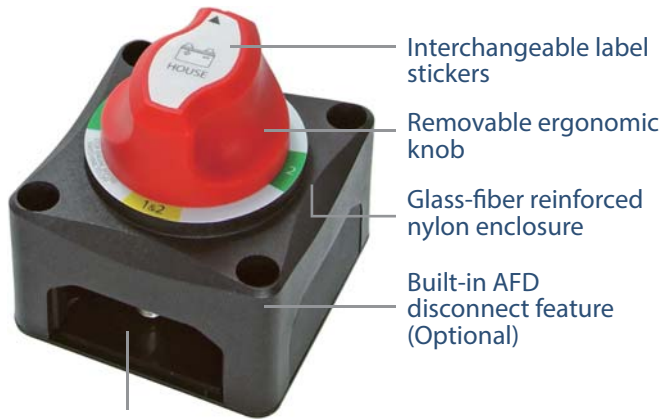


### Battery Main Switch (On-Off)

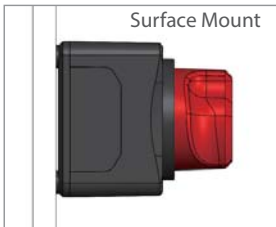
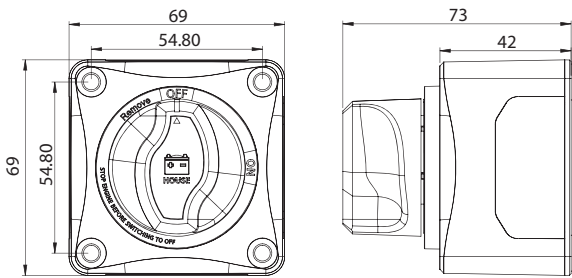
BF441 / BF441A (with AFD)

### Battery Selector Switch (1-2-Both-Off)

BF442 / BF442A (with AFD)

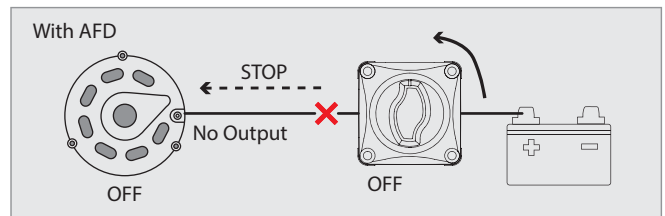
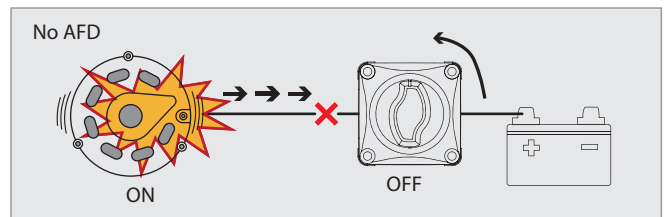


Removable windows on 4 sides



## Features

- Unique ergonomic and aesthetic knob design
- Knobs removable for isolation / safety
- Smallest battery switch with AFD (Alternator Field Disconnect) feature in market (BF441A, BF442A)
- Dimensions fits Heavy Duty Modular Fuse Box Series (BF43x)
- Robust Glass Fiber reinforced Nylon enclosure
- Removable windows for unobstructed wiring
- Compact size matching mainstream products in market (BEP style)
- Surface or panel mount options provides flexibility when installing
- Patented in Taiwan(D183413), China(ZL201730358133.0)
- Meet Ignition Protection Standard (ISO8846 / SAE J1171), suitable for use in marine engine room and fuel tank spaces.



## Product Series



BF441



BF441A



BF442



BF442A

BF441 / BF441A

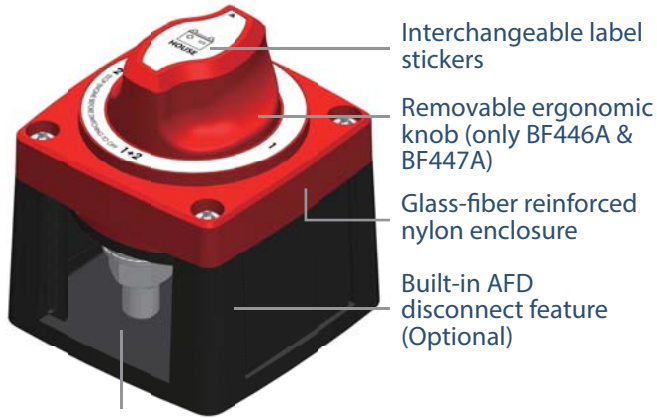
BF442 / BF442A

Product ID	Function	Voltage Rating (Max)	Stud Size	Cranking Rating (10Secs)	Intermittent Rating (5 mins)	Continuous Rating (1hr)	Note
BF441	ON-OFF	48V	M10	1250A	455A	275A	-
BF441A	ON-OFF	48V	M10	1250A	455A	275A	with AFD
BF442	1-2-Both-Off	48V	M8	1000A	300A	200A	-
BF442A	1-2-Both-Off	48V	M8	1000A	300A	200A	with AFD

# BM-Series Main Battery Switches (Imperial Threading)

New Product    IGNITION PROTECTED    PATENTED Pending

- BF446/BF446A **Battery Main Switch (A: with AFD) (ON-OFF)**
- BF447/BF447A **Battery Selector Switch (A: with AFD) (1-2-Both-OFF)**
- BF448 **Dual Circuit Battery Switch (2-OFF-1-ON)**
- BF448P **Dual Circuit Plus Battery Switch (2-OFF-1-ON-PARALLEL)**



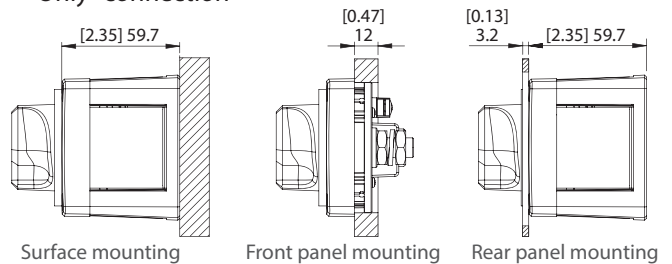
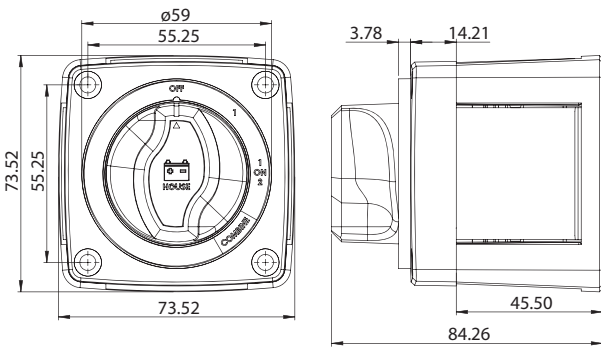
Removable windows on 3 sides

## Features

- Unique ergonomic and aesthetic knob design
- Knobs removable for isolation / safety (BF446/BF447 only)
- AFD (Alternator Field Disconnect) feature provides extra safety protection (BF446/BF447 only)
- Dimensions fits popular BlueSea's M-series battery switches
- Robust Glass Fiber reinforced Nylon enclosure
- Removable windows for unobstructed wiring
- 3 mounting options: Surface mount, front panel mount and rear panel mount
- Meet Ignition Protection Standard (ISO8846 / SAE J1171), suitable for use in marine engine room and fuel tank spaces

### (BF448 Dual Circuit Plus)

- Dual circuit control with parallel option (BF448P)
- Patent pending design allows convenient "1 Only" & "2 Only" connection



## Product Series



Product ID	Function	Voltage Rating (Max)	Stud Size	Cranking Rating(30s)	Intermittent Rating (5 mins)	Continuous Rating (1hr)	Note
BF446	ON-OFF	48V	3/8"-16	900A	500A	300A	-
BF446A	ON-OFF	48V	3/8"-16	900A	500A	300A	with AFD
BF447	1-2-Both-OFF	32V	3/8"-16	900A	500A	300A	-
BF447A	1-2-Both-OFF	32V	3/8"-16	900A	500A	300A	with AFD
BF448	OFF-1-Both	32V	3/8"-16	675A	450A	300A	Dual Circuit
BF448P	OFF-1-Both-PARALLEL	32V	3/8"-16	675A	450A	300A	Dual Circuit with Parallel option

# Circuit Protections

## Modular Design Blade (ATP/ATO/ATC) Fuse Blocks

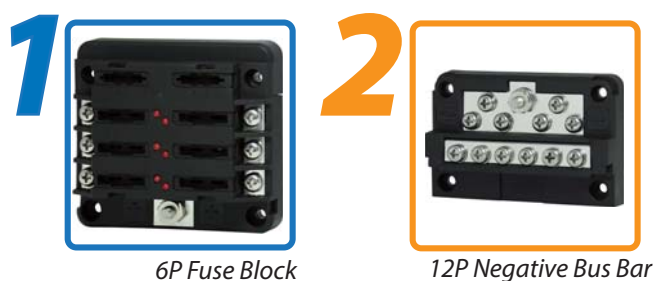
Best Seller PATENTED TW,CH

The BF27x series are compact and solid blade fuse blocks designed for 24-hour circuits. The fuse blocks come with blown fuse indication LEDs, clear cover with recessed areas for label stickers and are available in two versions with different terminals (screw or quick terminals).

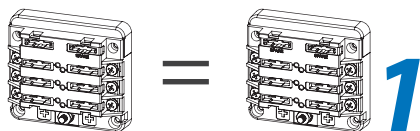


### Two Modules for all

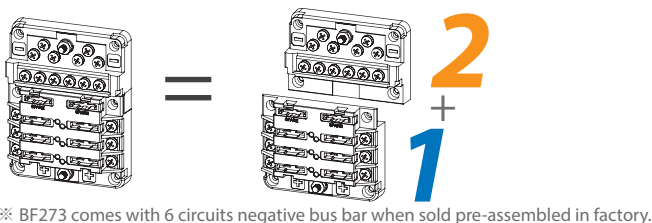
YIS Marine exclusive modular design – two basic modules can be combined into 4 popular fuse blocks (and more depending on specific needs). The assembly is very simple and can be done by consumers alone (instruction manual included). This not only gives consumers flexibility to expand their current fuse block, but also allows retailers to save precious shelf space in the store.



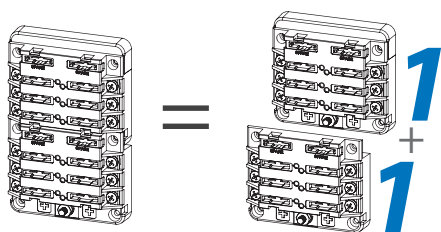
### BF271 6P Fuse Block



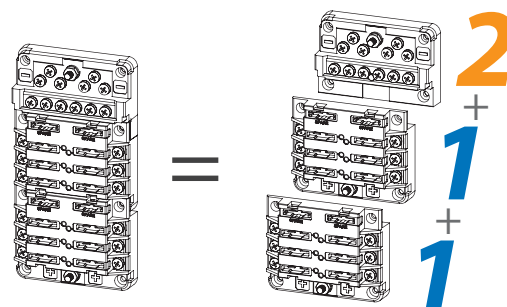
### BF273 6P Fuse Block with Negative Bus Bar



### BF274 12P Fuse Block



### BF275 12P Fuse Block with Negative Bus Bar



Series Intro on Youtube



New 2 in 1 Models Intro



YIS Fuse Block vs Competition



## New Compact 2 in 1 model

New Product



BF276 2-in-1 Fuse Block in one piece



BF273=BF271+BF272 (Modular Design)

- More compact and cost-effective model when you need negative bus bar pre-combined
- Size reduced by 19%, significant cost reduction
- Same design language with all same great features

## Series Features

- Accepts Automotive Blade Fuses (ATP/ATC/ATO)
- Modular Design saves shelf space (2 items can be combined into 4 models)
- Transparent cover with recessed area for label stickers
- 60 pieces assorted label stickers set included
- Storage for 2 spare fuses (for each 6P block)
- LED indication of blown fuses

## Specifications

- Voltage Rating | DC 32V Max
- Amp Rating per Branch | 30A (Screw Terminals) / 20A (Quick Terminals)
- Max Cumulative Amp | 100A per block
- Terminal Stud Size | M5 (3/16")
- Screw Size | M4 (5/32") (BF27x Only)
- Note | Patented in Taiwan(M490103) & China(ZL201420495842.4)

## Product Series

### Basic modules

The two basic module that can be combined into 4 models at end user's end



BF271 / BF281 (6P Fuse Blocks)



BF272 / BF282 (12P Negative Bus Bar)

### Combined Models New

Cost-effective combined Fuse Blocks with Negative Bus bar



BF276 / BF286 (6P fuse block + Neg. bus bar)

BF277 / BF287 (12P fuse block + Neg. bus bar)

BF278 / BF288 (12P fuse blocks)

Product ID	Terminals	Circuits	Negative Bus Bar	Product Dimensions (W x L x H)	Note
BF271	Screws (M4)	6	-	86 x 78 x 41 mm	6P Fuse block module
BF281	Quick (0.250")	6	-	86 x 78 x 41 mm	6P Fuse block module
BF272	Screws (M4)	-	12 Circuits	86 x 57 x 41 mm	12P Neg. bus bar module
BF282	Quick (0.250")	-	12 Circuits	86 x 57 x 41 mm	12P Neg. bus bar module
BF276	Screws (M4)	6	6 Circuits	85 x 93 x 36 mm	One-piece fuse block + neg. bus bar
BF286	Quick (0.250")	6	6 Circuits	85 x 93 x 36 mm	One-piece fuse block + neg. bus bar
BF277	Screws (M4)	12	12 Circuits	85 x 132 x 36 mm	One-piece fuse block + neg. bus bar
BF287	Quick (0.250")	12	12 Circuits	85 x 132 x 36 mm	One-piece fuse block + neg. bus bar
BF278	Screws (M4)	12	-	85 x 132 x 36 mm	One-piece fuse block
BF288	Quick (0.250")	12	-	85 x 132 x 36 mm	One-piece fuse block

※ All models can also be sold without covers or without blown fuse indicating LEDs.

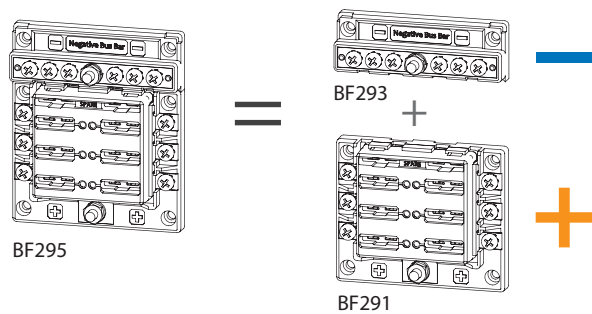
# Multi-use Compact Modular Design Blade Fuse Blocks

PATENTED TW,CH **New Product**

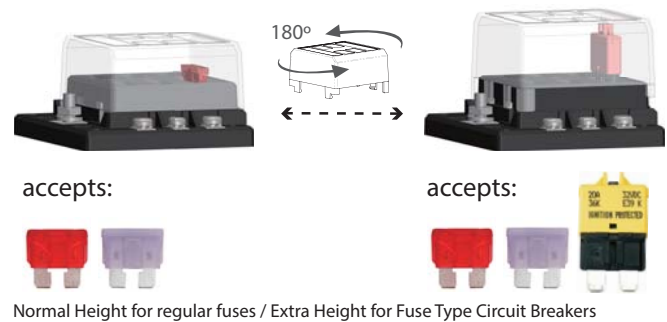
The BF29x series is more compact and economical version of the popular BF27x series. It not only keeps BF27x series signature positive / negative modular design and LED fuse blown indication, but also equipped with new features like circuit breaker type fuse support (with patent pending cover design). The patent pending cover design allows shipping and packaging in compact size while expanding the cover height when required by reversing the cover 180 degrees. BF29x is suitable not only in marine but also in the car/caravan market as a lower-cost alternative to BF27 series.



## Signature Positive / Negative Modular Design



## Patent pending dual-use cover design:



## Features

- Accepts standard (ATP/ATC/ATO) blade fuses
- Modular positive and negative bus bar design
- Transparent cover with recessed area for label stickers
- 60 pieces assorted label stickers set included
- Storage for 2 spare fuses
- LED indication of blown fuses

## Specifications

- Voltage Rating | DC 32V Max
- Amp Rating per Branch | 30A (Screw Terminals) / 20A (Quick Terminals)
- Max Cumulative Amp | 100A per block
- Terminal Stud Size | M5 (3/16")
- Screw Size | M4 (5/32") (BF29x Only)
- Note | Patented in Taiwan(M591252) & China(ZL 2020 2 0206415.5)



## Product Series



BF291 / BF291Q



BF293



BF295 / BF295Q



BF292 / BF292Q



BF294 / BF294Q



BF296 / BF296Q

Product ID	Terminals	Circuits	Negative Bus Bar	Product Dimensions (W x L x H)	Note
BF291	Screws (M4)	6	-	85 x 72 x 40 mm	-
BF292	Screws (M4)	12	-	85 x 117 x 40 mm	-
BF293	Screws (M4)	-	6 Circuits	85 x 29.75 x 30.9 mm	Negative Bus Bar Module (6P)
BF294	Screws (M4)	-	12 Circuits	85 x 29.75 x 30.9 mm	Negative Bus Bar Module (12P)
BF295	Screws (M4)	6	6 Circuits	85 x 100 x 40 mm	Pre-assembled fuse block w/ bus bar
BF296	Screws (M4)	12	12 Circuits	85 x 145 x 40 mm	Pre-assembled fuse block w/ bus bar
BF291Q	Quick (0.250")	6	-	85 x 72 x 40 mm	-
BF292Q	Quick (0.250")	12	-	85 x 117 x 40 mm	-
BF294Q	Quick (0.250")	-	12 Circuits	85 x 29.75 x 25.2 mm	Negative Bus Bar Module (12P)*
BF295Q	Quick (0.250")	6	12 Circuits	85 x 100 x 40 mm	Pre-assembled fuse block w/ bus bar
BF296Q	Quick (0.250")	12	12 Circuits	85 x 145 x 40 mm	Pre-assembled fuse block w/ bus bar

\*Quick terminal negative bus bar (BF294Q) comes without cover due to its upward terminal design; use screw terminal version (BF294) if cover is required.

Watch Intro Video on Youtube



# Compact Design Independent Source Blade Fuse Blocks

New Product

BF279 / BF289

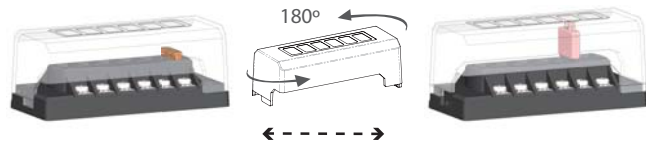
Patent pending Dual-height cover



Recessed area for label stickers

LED indication of blown fuses

Patent pending dual-use cover design



accepts:



Normal Height for regular fuses

accepts:



Extra Height for Fuse Type Circuit Breakers

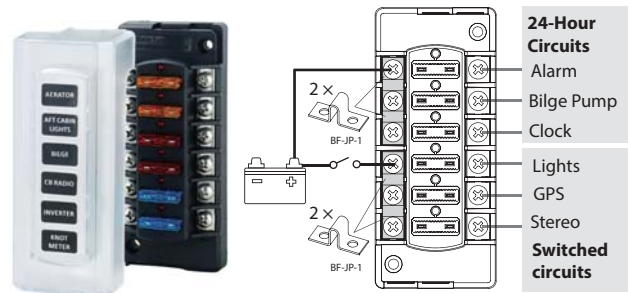
## Features

- Ultra compact size 6 way independent source fuse block
- Can be used for switched circuits and 24-hour circuits in the same block
- Accepts standard (ATP/ATC/ATO) blade fuses
- Patent pending cover design supports circuit breaker type fuses with extra height
- Transparent cover with recessed area for label stickers
- 60 pieces assorted label stickers set included
- LED indication of blown fuses

## Specifications

- Voltage Rating | DC 32V Max
- Amp Rating per Branch | 30A (BF279) / 20A (BF289)
- Max Cumulative Amp | 40A per jumper circuit group
- Screw Size | M4 (5/32") (BF279)
- Note |

## BF279/BF289 Independent Source Fuse Block



Can be flexibly divided into 24 hour circuits and switched circuits  
\* Jumpers are only available for Screw Terminals version (BF279)

## Product Series

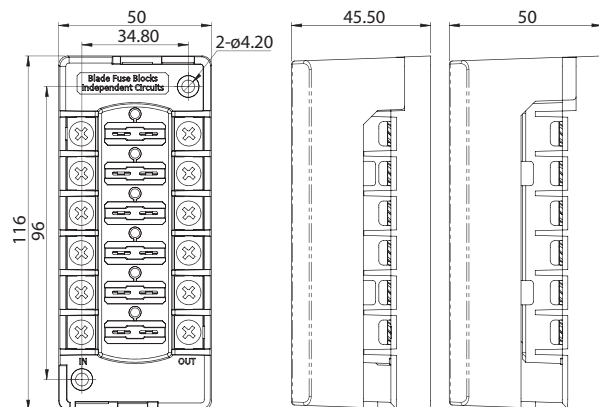


BF279 6P Screw Terminals

BF289 6P Quick Terminals



BF-JP-1 Jumper for BF279



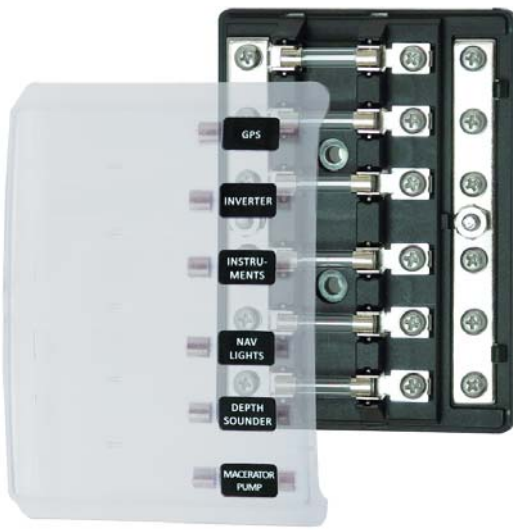




PATENTED  
TW,CH

## Modern Design Glass-tube AGC Fuse Blocks Series

BF210 / BF211 / BF212



BF210-6



BF211-6



BF212-6

### Features

- LED indication of blown fuses
- Redesigned fuse clips hold fuses firmly and steadily
- Transparent cover with recessed area for label stickers and storage for 6 spare fuses
- 60 pieces label stickers included

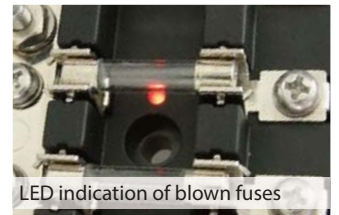
### Specifications

- Base Material | PBT, glass fiber reinforced
- Max Operating Voltage | 32V
- Amp Rating per Branch | 30A
- Max Cumulative Amp | 100A per block
- Screw Size | M4 (5/32")
- Terminal Stud Size | M5 (3/16")
- Note | Patented in Taiwan(D182308) & China(ZL201630425859.7)

\* M4 screw is comparable to #8-32 screws and M5 stud is comparable to #10-32 Studs.



Storage for spare fuses

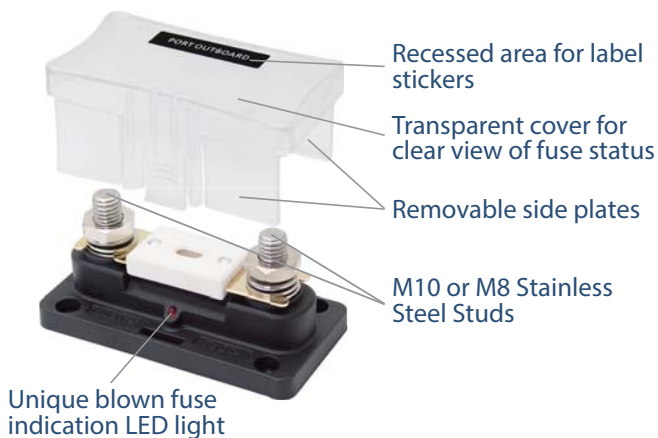


LED indication of blown fuses

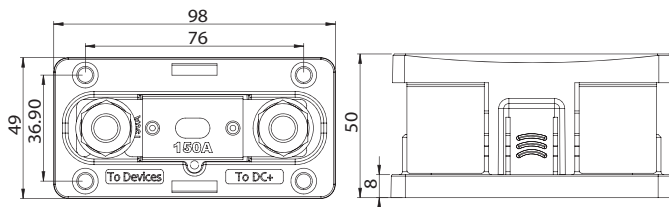
Product ID	Circuits	Positive Source	Negative Bus Bar	Product Dimensions	Note
BF210-6	6	Common Source	6 Circuits	129 x 91 mm	Common Source Fuse Block with Negative Bus Bar
BF211-6	6	Common Source	-	129 x 91 mm	Common Source Fuse Block
BF212-6	6	Independent Source	-	129 x 91 mm	Independent Source Fuse Block

### Compact ANL Fuse Holder

BF461 / BF461-M8 New



Unique blown fuse indication LED light



### Features

- Accepts 35-300A ANL Fuses (not included)
- Compact size 49 x 98 x 50 (W x L x H) mm (including cover)
- Transparent cover for clear view of fuse status
- Cover with recessed area for label stickers (5 pcs assorted label stickers included)
- Bendable / removable side plates for flexible wiring
- Unique blown fuse indication LED light

### Specifications

- Max Operation Voltage | DC 32V
- Max Continuous Current | 35-300A (fuse dependent)
- Terminal Stud Size | 2 x M10( 3/8") (BF461)  
2 x M8( 5/16") (BF461-M8)

Watch Intro Video on Youtube

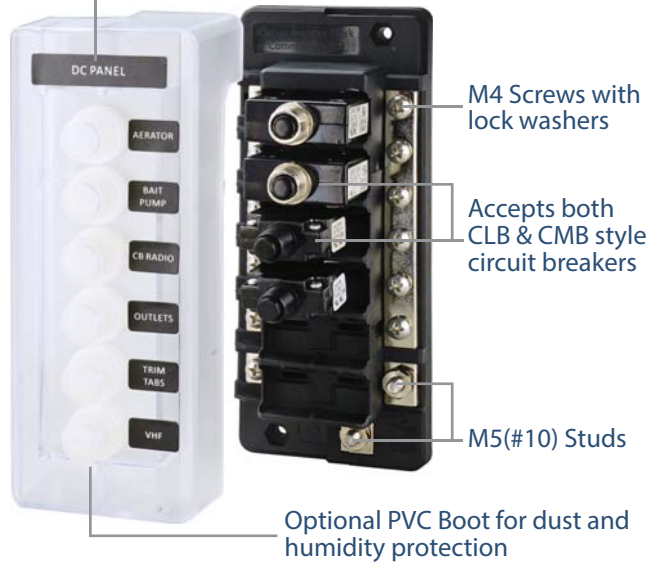


## CLB / CMB Circuit Breaker Boxes

New Product

BF221I(B) 6P Independent Source (B: with PVC Boot)  
 BF221C(B) 6P Common Source with Neg. Bus Bar (B: with PVC Boot)

Recessed area for label stickers



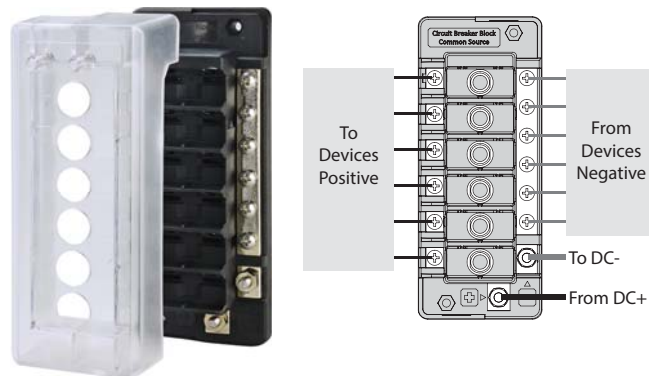
### Features

- Install circuit breakers as easy as blade fuses
- Accepts both CLB & CMB circuit breakers
- 100A Positive Bus Bar with M5 (#10) Studs
- M4 (#8) screw terminals accepts ring terminals
- Transparent cover with recessed area for label stickers
- 60 pieces assorted label stickers set included
- Optional push button waterproof boots can be installed on cover

### Specifications

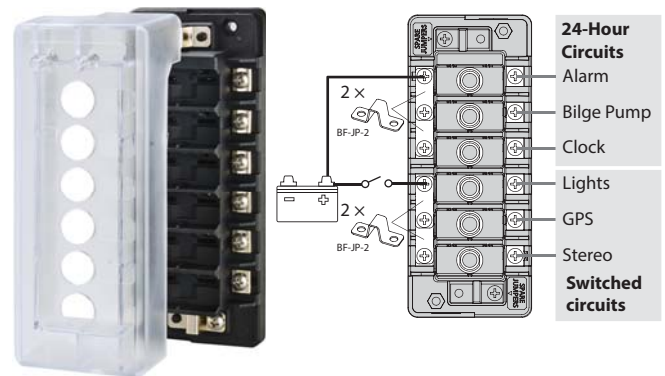
- Voltage Rating | DC 32V Max
- Amp Rating per Branch | 30A
- Max Cumulative Amp | 100A per block
- Terminal Stud Size | M5 (3/16")
- Screw Size | M4 (5/32")
- Dimensions | 65.5 x 160 x 56 mm  
65.5 x 160 x 73 mm (with PVC Boot)
- Note |

BF221C(B) 6P Common Source with Neg. Bus Bar (B: with PVC Boot)



One positive feed in, six protected output to devices

BF221I(B) 6P Independent Source (B: with PVC Boot)



Can be flexibly divided into 24 hour circuits and switched circuits

## Related Products

**CB-P100**

**Push Reset Circuit Breaker**  
 DC 12V/24V  
 3-50A

**CB-P200**

**Mini Size Push Reset Circuit Breaker**  
 DC 12V/24V  
 3-50A

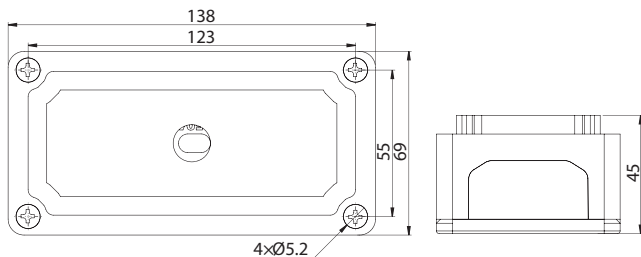
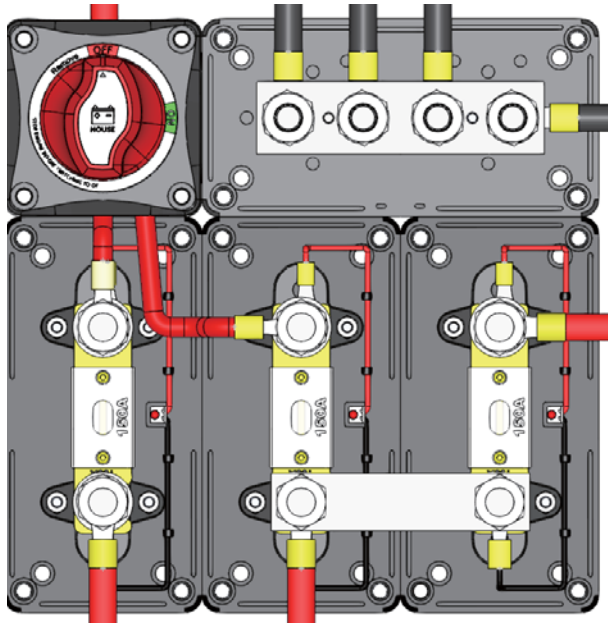
**BF-JP-2**

**Fuse Block Jumpers**  
 Tin-Plated Brass  
 for use with BF221X



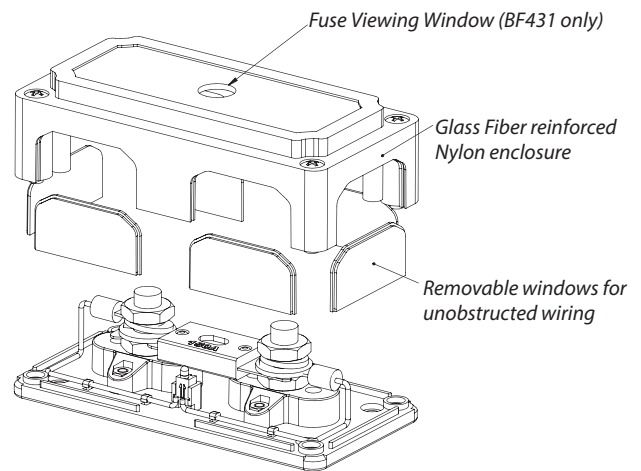
## Heavy-Duty Modular Design Fuse Block & Bus Bars

Module box design for clean, neat and easy wiring configurations



### Features

- Module box design for easy wiring configurations
- Robust Glass Fiber reinforced Nylon enclosure
- All models are of the same dimensions (see below)
- 6 removable windows at 4 directions
- Blank write-on space on the top allows easy labeling
- Complete product line including fuse blocks, bus bars and terminal studs



### Module Design ANL Fuse Box

BF431 Heavy-duty Modular Design ANL Fuse Box

BF431S Heavy Duty ANL Fuse Box with Additional Cable Connection Studs



BF431

- Withstands high currents between 100-300A ANL Fuses (not included)
- Open window on the top for clear vision of blown fuse
- LED indication of blown fuse condition (turns on when fuse blows)



BF431S

- Additional studs with heavy duty oxygen-free copper bus bar
- Withstands high currents up to 750A ANL Fuses (not included)
- Open window on the top for clear vision of blown fuse
- LED indication of blown fuse condition (turns on when fuse blows)

### Specifications

- Max Operating Voltage | DC 32V
- Max Continuous Amp | 35-300A (determined by fuse)
- Terminal Stud Size | 2 x M10 (3/8")

### Specifications

- Bus Material | Oxygen-free Copper, Nickel plated
- Max Operating Voltage | DC 32V
- Max Continuous Amp | 35-750A (determined by fuse)
- Terminal Stud Size | 4 x M10 (3/8")

### Heavy Duty Bus Bar Box

BF432 / BF432-M8 Heavy-Duty Module Design Bus Bar Box with 4 Terminal Studs



- Highest amperage rated bus bar (300A) with M10 terminal studs (also available in M8)
- Blank write-on space on the top allows easy labeling for each branch

### Specifications

- Bus Material | Brass, Nickel plated
- Max Operating Voltage | DC 48V
- Max Continuous Amp | 300A
- Terminal Stud Size | 4 x M10 (3/8") (BF432) / 4x M8 (5/16") (BF432-M8)

### Heavy Duty Bus Bar Box

BF433 Heavy-Duty Module Design Bus Bar Box with 2 x M10 Terminal Studs & 6 x M5 Screws



- Highest amperage rated bus bar (300A) with M10 terminal studs
- Blank write-on space on the top allows easy labeling for each branch

### Specifications

- Bus Material | Brass, Nickel plated
- Max Operating Voltage | DC 48V
- Max Continuous Amp | 300A
- Terminal Stud Size | 2 x M10 (3/8")
- Screw Size | 6 x M5 (3/16")

### Heavy Duty Dual Bus Bar Box

BF434 Heavy-Duty Modular Design Dual Bus Bars with Connecting Link



- Dual Bus Bar with removable connecting link
- Nickel plated brass bus bar allowing current up to 100A
- Blank write-on space on the top allows easy labeling for each branch

### Specifications

- Bus Material | Brass, Nickel plated
- Max Operating Voltage | DC 48V
- Max Continuous Amp | 100A
- Terminal Stud Size | 4 x M6 (1/4")
- Screw Size | 12 x M4 (5/32")

### 4 Way Heavy-Duty Terminal Studs Box

BF435 Heavy-Duty Modular Design Terminal Studs with Insulation Partition



- Allow terminating of heavy-duty cables for one or more connections (each terminal)
- Removable insulation partition included
- Heavy duty terminal studs (up to M10), allowing current up to 200A (rating determined by wires connected)
- Terminal Studs available in M8 or M10 (Default: M10)
- Blank write-on space on the top allows easy labeling for each branch

### Specifications

- Max Operating Voltage | DC 48V
- Max Amp per circuit | Determined by wires connected
- Terminal Stud Size | 4 x M10 (3/8")

## Classic Fuse Block & Bus Bars

### Common Source AGC Fuse Blocks

BF201(2P-12P)



Dimensions	
Product ID	Dimensions (H x W)
BF201-2P	57 x 31 mm
BF201-4P	57 x 62 mm
BF201-6P	57 x 93 mm
BF201-8P	57 x 126 mm
BF201-10P	57 x 157 mm
BF201-12P	57 x 188 mm

### Specifications

- Base Material | ABS + Glass Fiber
- Clip Material | Brass
- Max Operating Voltage | DC 32V
- Max Amp per circuit | 20A
- Max Cumulative Amp | 60A
- Screw Size | M5 x P0.8 x 6

### Reinforced Nylon Base Glass-tube AGC Fuse Blocks

BF202 / BF205 / BF206 (4P, 6P, 8P)



Product ID	BF202	BF206	BF205
Description	Common Source Fuse Block with Negative Bus	Common Source Fuse Block	Independent Source Fuse Block
Positive Source	Common Source	Common Source	Independent Source
Negative Bus Bar	Yes	None	None
Max Cumulative Amp	80A	50A	-
Dimensions (L x W)			
4P	84 x 76 mm	62 x 76 mm	62 x 76 mm
6P	84 x 114 mm	62 x 114 mm	62 x 114 mm
8P	84 x 152 mm	62 x 152 mm	62 x 152 mm

### Specifications

- Base Material | Nylon, Glass Fiber reinforced
- Clip Material | Brass
- Max Operating Voltage | DC 32V
- Max Amp per circuit | 20A
- Max Cumulative Amp | See each model
- Screw Size | No.8-32 x 1/4

## Bus Bars

### Dual Bus Bars

BF204(4P-8P)



Dimensions	
Product ID	Dimensions (H x W)
BF204-4P	38 x 76 mm
BF204-6P	38 x 114 mm
BF204-8P	38 x 152 mm

### Specifications

- Base Material | Nylon, Glass Fiber reinforced
- Bus Material | Brass
- Max Operating Voltage | DC 32V
- Max Cumulative Amp | 60A for each bus
- Screw Size | No.8-32x1/4

### Large Current Bus Bar

BF207 (10P)



### Specifications

- Base Material | PBT, Glass Fiber reinforced
- Bus Material | Copper, Brass-plated
- Max Operating Voltage | DC 48V
- Max Cumulative Amp | 150A
- Screw Size | No.8-32 x 1/4
- Terminal Stud Size | M6 x 25mm
- Dimensions (L x W) | 146 x 31.5mm

## Fuses (Glass-tube Fuses / Automotive Blade Fuses & Other Fuses)

AGC / ATE Fuses | American standard size 0.25"x 1.25"(6.3 x 32.0mm) glass-tube fuses



**AGC(3AG) Fuses**  
Fast-acting glass-tube fuses

Specifications	
Dimension	Φ6.3 x 32.0mm
Cap Material	Nickel-plated Brass
Max. Voltage	DC 32V, AC 125V/250V
Amps	0.5A, 1A, 1.5A, 2A, 2.5A, 3A, 4A, 5A, 6A, 7.5A, 10A, 15A, 20A, 25A, 30A, 35A
Note	RoHS Compliant



**ATE Fuses**  
Slow-blow glass-tube fuses

Specifications	
Dimension	Φ6.3 x 32.0mm
Cap Material	Nickel-plated Brass
Max. Voltage	AC 250V
Amps	0.1A – 20A
Note	RoHS Compliant

JMC / JTG Fuses | Japanese standard size 6.3 x 30mm glass-tube fuses



**JMC Fuses**  
Fast-acting glass-tube fuses

Specifications	
Dimension	Φ6.3 x 30.0mm
Cap Material	Nickel-plated Brass
Max. Voltage	DC 32V, AC 250V
Amps	0.1A-30A
Note	RoHS Compliant



**JTG Fuses**  
Slow-blow glass-tube fuses

Specifications	
Dimension	Φ6.3 x 30.0mm
Cap Material	Nickel-plated Brass
Max. Voltage	AC 250V
Amps	0.1A-30A
Note	RoHS Compliant

GMA / GTE Fuses | Mini size glass-tube fuses (5 x 20mm)



**GMA Fuses**  
Mini-size fast-acting glass-tube fuses

Specifications	
Dimension	Φ5.0 x 20.0mm
Cap Material	Nickel-plated Brass
Max. Voltage	AC 250V
Amps	0.1A-20A
Note	RoHS Compliant UL, CSA for 10A and less



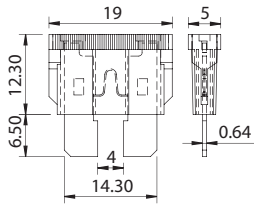
**GTE Fuses**  
Mini-size slow-blow glass-tube fuses

Specifications	
Dimension	Φ5.0 x 20.0mm
Cap Material	Nickel-plated Brass
Max. Voltage	AC 250V
Amps	0.1A-10A
Note	RoHS Compliant

### ATP/ ATO/ATC – Standard Blade Fuses



- Voltage Rating: DC 32V
- Transparent body for easy indication of blown fuse

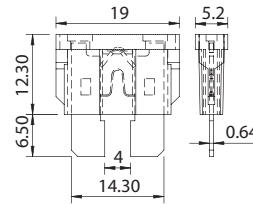


Product ID	Amps	Color Coding
F-ATP-1A	1 A	Black
F-ATP-2A	2 A	Gray
F-ATP-3A	3 A	Violet
F-ATP-4A	4 A	Pink
F-ATP-5A	5 A	Tan
F-ATP-7.5A	7.5 A	Brown
F-ATP-10A	10 A	Red
F-ATP-15A	15 A	Lt. Blue
F-ATP-20A	20 A	Yellow
F-ATP-25A	25 A	Natural
F-ATP-30A	30 A	Lt. Green

### ATP/ ATO/ATC Fuses – Standard Blade Fuses with Blown Indication Lamp



- Voltage Rating: DC 32V
- Transparent body for easy indication of blown fuse
- Indicating lamp lights up when fuse is blown



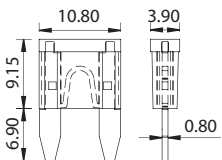
Product ID	Amps	Color Coding
F-ATPL-3A	3 A	Violet
F-ATPL-4A	4 A	Pink
F-ATPL-5A	5 A	Tan
F-ATPL-7.5A	7.5 A	Brown
F-ATPL-10A	10 A	Red
F-ATPL-15A	15 A	Lt. Blue
F-ATPL-20A	20 A	Yellow
F-ATPL-25A	25 A	Natural
F-ATPL-30A	30 A	Lt. Green



### ASP/ATM/Mini – Mini Blade Fuses



- Compact size
- Voltage Rating: DC 32V
- Transparent body for easy indication of blown fuse

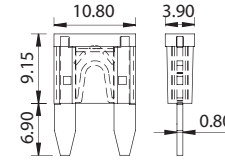


Product ID	Amps	Color Coding
F-ATM-2A	2 A	Gray
F-ATM-3A	3 A	Violet
F-ATM-4A	4 A	Pink
F-ATM-5A	5 A	Tan
F-ATM-7.5A	7.5 A	Brown
F-ATM-10A	10 A	Red
F-ATM-15A	15 A	Lt. Blue
F-ATM-20A	20 A	Yellow
F-ATM-25A	25 A	Natural
F-ATM-30A	30 A	Lt. Green

### ASP/ATM/Mini – Mini Blade Fuses with Blown Indication Lamp



- Compact size
- Voltage Rating: DC 32V
- Transparent body for easy indication of blown fuse
- Indicating lamp lights up when fuse is blown



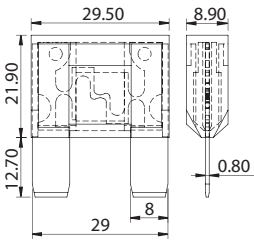
Product ID	Amps	Color Coding
F-ATML-3A	3 A	Violet
F-ATML-4A	4 A	Pink
F-ATML-5A	5 A	Tan
F-ATML-7.5A	7.5 A	Brown
F-ATML-10A	10 A	Red
F-ATML-15A	15 A	Lt. Blue
F-ATML-20A	20 A	Yellow
F-ATML-25A	25 A	Natural
F-ATML-30A	30 A	Lt. Green



Watch Intro Video on Youtube



## MAXI / ATX – Heavy-duty Blade Fuses



- Heavy-duty blade fuse protects circuits up to 80A
- Voltage Rating: DC 32V
- Transparent body for easy indication of blown fuse
- Optional gold plated terminals available

Product ID	Amps	Color Coding
F-ATX-20A	20 A	Yellow
F-ATX-30A	30 A	Green
F-ATX-40A	40 A	Orange
F-ATX-50A	50 A	Red
F-ATX-60A	60 A	Blue
F-ATX-70A	70 A	Tan
F-ATX-80A	80 A	Natural

## Dual-Purpose Fuse Tester/Puller F-FT-1

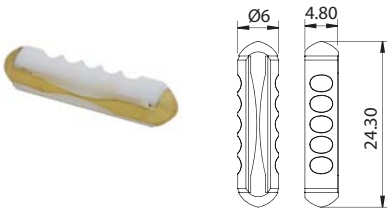


- Indicating Green LED for easy identification of blown fuse in fuse box
- Adjustable probe pitch allowing test on fuses of different sizes: MAXI, ATO/ATC, ATM
- Fuse puller for easy removal of blown fuse



## Other Fuses

### GBC Fuses– European Style Bakelite Fuses

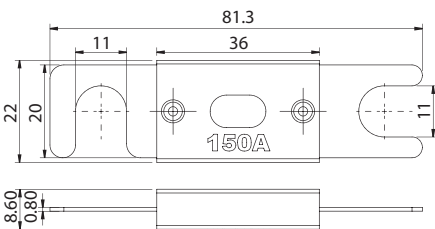


- $\Phi 6.0 \times 25.0 \text{mm}$
- Voltage Rating: DC 32V

Product ID	Amps	Color Coding
F-GBC-5A	5 A	Yellow
F-GBC-8A	8 A	White
F-GBC-16A	16 A	Red
F-GBC-20A	20 A	Ivory
F-GBC-25A	25 A	Blue
F-GBC-30A	30 A	Green

### ANL Fuses– Fuses for high amperage applications

**IGNITION  
PROTECTED**



- Body Material: See Below
- Metal Element: Brass, Gold Plated
- Voltage: 32V DC
- Ignition Protected (ISO8846) model available at extra cost

Electrical characteristics	
% of Amp. Rating	Blowtime
100% Rating	4 Hours, Minimum
150% Rating	60 Sec., Minimum
200% Rating	15 Sec., Minimum

Product ID	Amps	Body Material
F-ANL-35A	35A	Nylon + Glass Fiber
F-ANL-50A	50 A	Nylon + Glass Fiber
F-ANL-70A	70 A	Nylon + Glass Fiber
F-ANL-100A	100 A	Ceramic
F-ANL-150A	150 A	Ceramic
F-ANL-200A	200 A	Ceramic
F-ANL-250A	250 A	Ceramic
F-ANL-300A	300 A	Ceramic
F-ANL-350A	350 A	Ceramic
F-ANL-400A	400 A	Ceramic

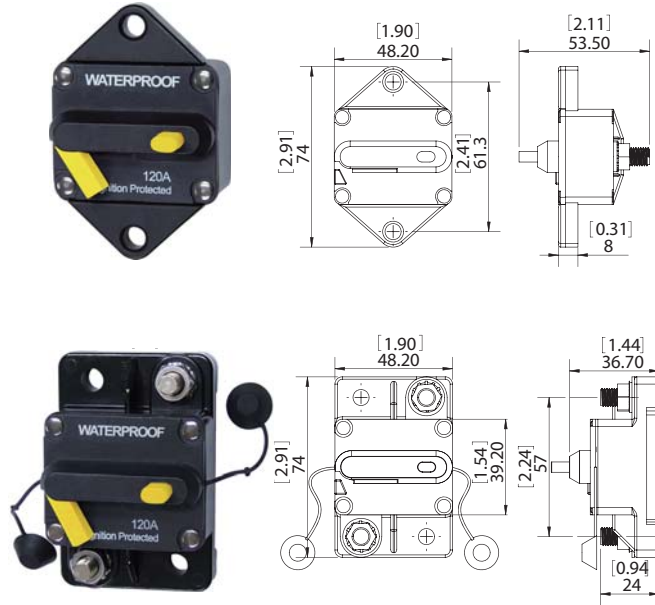


# Circuit Breakers

## Single Pole Thermal Circuit Breaker

CB-E95/E98 Manual Reset

CB-E96/E99 Switchable Reset (Manual ON-OFF)



## Features

- Trip-free safety design – cannot be closed after trip
- IP67 – Protection even under temporary water immersion
- Visible reset lever indicating open condition
- Manual OPEN button to manually isolate the circuit (CB-E96 / E99 Only)
- Available in surface mount or panel mount models
- Ignition protected – safe for use in engine compartment

## Specifications

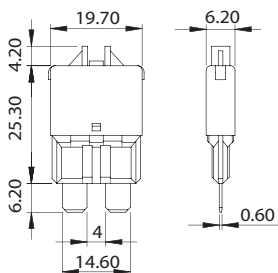
- Interrupting Capacity (AIC) | 3,000A @ DC 48V
- Voltage Rating | DC 48V Max
- Current Rating | DC 25 – 150A
- Terminal Studs | 1/4" – 28
- Note | **CE** SAE J1625 / ABYC E-11 / SAE J1171 / UL 1500 / IP67



Product ID	CB-E95	CB-E96	CB-E98	CB-E99
Mounting	Panel Mount	Panel Mount	Surface Mount	Surface Mount
Function Type	Manual Reset	Switchable Reset	Manual Reset	Switchable Reset

## ATC Fuse Type Circuit Breaker

CB-E39



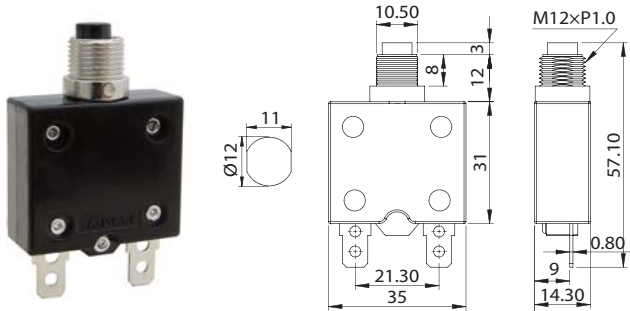
## Features

- Low profile design
- Thermal Type Circuit breaker with Manual Reset button
- Compatible with ATC fuse blocks

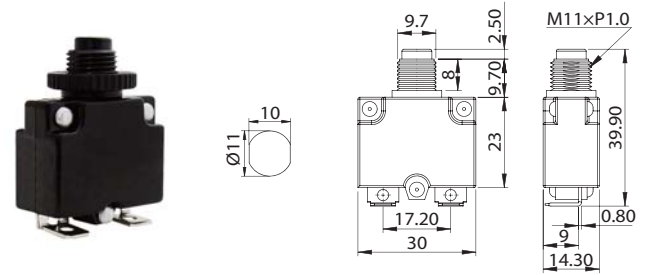
## Specifications

- Interrupting Capacity (AIC) | 2,000A @ DC 28V
- Voltage Rating | DC 28V Max
- Current Rating | DC 5 – 30A
- Note | SAEJ 553 / SAEJ 1171 / UL1500 / ISO8846

## Push Reset Circuit Breaker CB-P100



## Mini Size Push Reset Circuit Breaker CB-P200



## Specifications

- Voltage Rating | DC 50V, AC 125V/250V
- Amps | 3A-50A
- Dielectric Strength | AC 1500V/1 Minute
- Interrupting Capacity | 1000A @125VAC, 2000A @250VAC
- Insulation Resistance | > 100 MΩ
- Note | Approval: 3-30A 125/250V AC

## Specifications

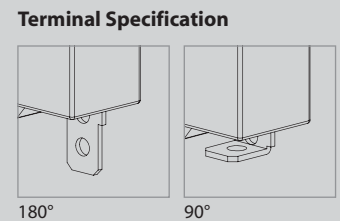
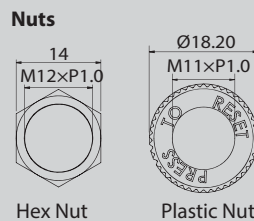
- Voltage Rating | DC 50V, AC 125V/250V
- Amps | 3A-20A
- Dielectric Strength | AC 1500V/1 Minute
- Interrupting Capacity | 1000A @125VAC, 1000A @250VAC
- Insulation Resistance | > 100 MΩ
- Note | Approval: 3-15A 125/250V AC

## Coding Guide for Circuit Breakers with Accessories

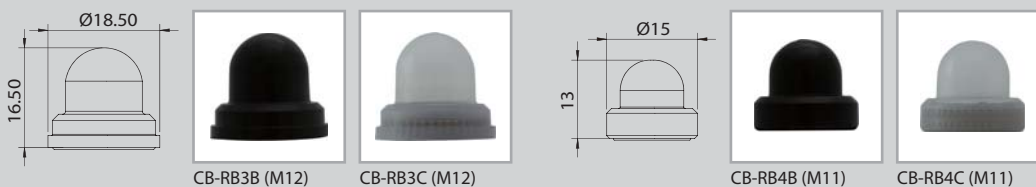
**CB-P100**□□□□ - □□A - □□  
 (1) (2) (3) (4) (5) (6) (7)

(1) Model #	(2) Bushing	(3) Nuts	(4) Nameplate	(5) Terminal	(6) Current Rating
P100 Standard	H Metal M11x1.0	H Hex Nut	None	180°	□□ A □□ Amp
P200 Mini-sized	L Metal M12x1.0 (CB-P100 only) P Plastic M11x1.0 (CB-P200 only)	P Plastic Nut (CB-P200 only)	W with nameplate	F 90°	

(7) Rubber Boot	
Shape	Color
None	B Black
3 Type 1	C Clear
4 Type 2	



### Rubber Boots



# Fuse Holders

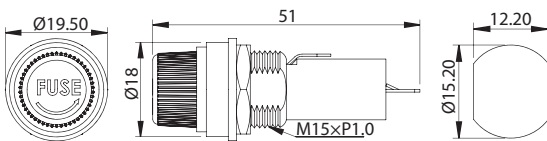
for AGC/JMC fuses



## Panel Mount Fuse Holder with Screw Cap BF101



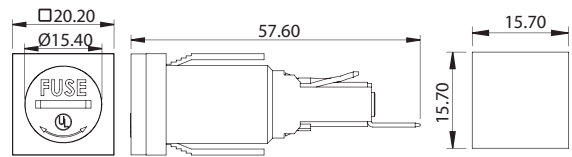
- For 6.3 x 32mm (AGC or ATE) or 6.3 x 30mm (JMC or JTG) fuses
- Bakelite body
- Water-resistant screw cap
- Solder terminal



## Square Panel Mount Fuse Holder with Slotted Bayonet Cap BF105



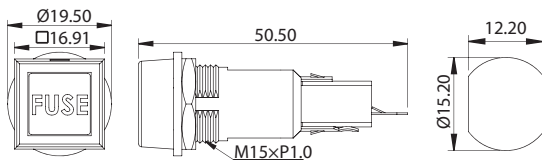
- For 6.3 x 32mm (AGC or ATE) or 6.3 x 30mm (JMC or JTG) fuses
- Bakelite body
- Slotted bayonet cap
- 0.250" Quick Connect Terminal



## Square Panel Mount Fuse Holder with Push-in Cap BF103



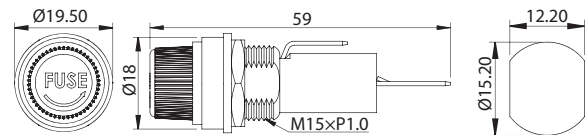
- For 6.3x 32mm (AGC or ATE) or 6.3 x 30mm (JMC or JTG) fuses
- Bakelite body
- Push-in cap available in red or white
- Solder terminal



## Panel Mount Fuse Holder with Screw Cap BF110



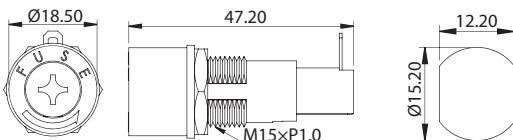
- For 6.3 x 32mm (AGC or ATE) or 6.3 x 30mm (JMC or JTG) fuses
- Bakelite body
- Water-resistant screw cap
- 0.250" Quick Connect Terminal



## Panel Mount Fuse Holder with Screw Cap BF104



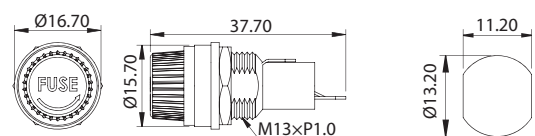
- For 6.3 x 32mm (AGC or ATE) or 6.3 x 30mm (JMC or JTG) fuses
- Bakelite body
- Screw cap with Phillips drive
- Solder terminal



## Panel Mount Fuse Holder with Screw Cap BF102



- For 5 x 20mm (GMA or GTE) fuses
- Bakelite body
- Water-resistant screw cap
- Solder terminal



## Coding Guide for pre-wired in-line fuse holders

**BF-301** - □ - □ □ □ # - □ □ □"

(1) (2) (3) (4)

(1) Wire Leads	(2) Wire Spec	(3) Wire Gauge	(4) Wire Length
- Unwired	A UL1007	22# AWG	XX" length in inches
L Loop Lead	B UL1015		
C Cut			
S Semi-stripped			
T Tinned (stripped)			

for AGC/JMC fuses



### In-Line Fuse Holder for AGC/JMC Fuses BF309



- For 6.3 x 32mm (AGC/ATE) or 6.3 x 30mm (JMC/JTG) fuses
- Amperage rating: Max 30A
- Wire Gauge: #14-#18 AWG

### In-Line Fuse Holder for AGC/JMC Fuses BF301



- For 6.3 x 32mm (AGC or ATE) or 6.3 x 30mm (JMC or JTG) fuses
- Wire Gauge : #16-#22 AWG

### Water-resistant In-Line Fuse Holder for AGC/JMC Fuses BF308



- For 6.3 x 32mm (AGC/ATE) or 6.3 x 30mm (JMC/JTG) fuses
- Wire Gauge: #16-#18
- Water-resistant (for #16-#18 AWG wires only)

### In-Line Fuse Holder with 3-pin connector (pre-wired) BF304



### In-Line Fuse Holder with 2-pin connector (pre-wired) BF305



### In-Line Fuse Holder for AGC/JMC Fuses BF302



- For 6.3 x 32mm (AGC/ATE) or 6.3 x 30mm (JMC/JTG) fuses
- Bakelite body
- Wire Gauge: #10-#22 AWG

### BF301 with 3-pin connector (pre-wired)

### BF301 with 2-pin connector (pre-wired) - BF305A : Standard Type - BF305B : Mini Type

for GMA fuses



### In-Line Fuse Holder for AGC/JMC Fuses BF310



- For 6.3 x 32mm (AGC/ATE) or 6.3 x 30mm (JMC/JTG) fuses
- Wire Gauge: #14-#20 AWG

### In-Line Fuse Holder for GMA/GTE Fuses BF303



- For 5 x 20mm (GMA/GTE) fuses
- Wire Gauge: #16-#22 AWG

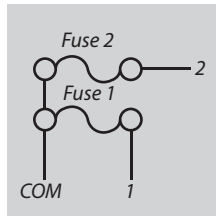
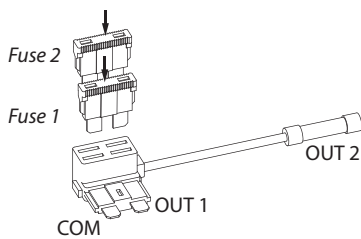
### Add-A-Circuit In-line Fuse Holders

BF357 - for ATP/ATC/ATO Fuses  
BF357S - for ATM Fuses

New Product



- Add a second protected circuit easily
- 2P fuse holder (1 common source input, 2 outputs)
- Wire Gauge: #14 - #18 (Default: #18/ 4" long)
- Amperage Rating: Max 30A



Wiring Diagram

### Water-resistant In-Line Fuse Holder for Automotive Fuses

BF353



- Water-resistant with cap
- Molded wiring for better sealing
- Available in 3 different sizes

Product Series			
Product ID	Compatible Fuses	Wire Gauge	Amp Rating
BF353S	ATM/ASP	#12-#16	30A
BF353	ATP/ATC/ATO	#10-#18	30A
BF353L	MAXI/ATX	#4 - #6	80A

### Water-resistant In-Line Fuse Holder for ATP/ATC/ATO Fuses

BF351



- For ATP/ATC/ATO automotive fuses
- Amperage rating: Max 30A
- Wire Gauge: #10-#18 AWG
- Molded wiring for better sealing
- Water-resistant

### Water-resistant In-Line Fuse Holder for ATP/ATC/ATO Fuses

BF354



- For ATP/ATC/ATO automotive fuses
- Available in blue or red
- Amperage rating: Max 20A
- Wire Gauge: #14-#18 AWG

### In-Line Fuse Holder for ATP/ATC/ATO Fuses

BF352



- For ATP/ATC/ATO automotive fuses
- Amperage rating: Max 20A
- Wire Gauge: #10-#18 AWG
- Cap with see-thru window for clear view of blown fuses
- Holder for spare fuse or for mounting of multiple fuse holders

### In-Line Fuse Holder for ATP/ATC/ATO and ATM Fuses

BF356



- Concave shape allowing clear view of blown fuses
- Molded wiring for better sealing

Product Series			
Product ID	Compatible Fuses	Wire Gauge	Amp Rating
BF356S	ATM/ASP	#12-#20	30A
BF356	ATP/ATC/ATO	#10-#18	30A

### In-Line Fuse Holder for ATP/ATC/ATO Fuses

BF355



- For ATP/ATC/ATO automotive fuses
- Low cost model
- Amperage rating: Max 20A
- Wire Gauge: #14-#18 AWG

# Connectors & Buses

## Heavy-Duty Bus Bars (Imperial Threading - Upgraded 2020)

New Product

- Imperial threading screws and studs for US market
- Optional insulation cover
- Tin-plated copper bus allowing large current (100A up)
- Stainless steel screws and studs provide great anti-corrosion ability on board
- Upgraded design with Serrated Flange Nuts encourages correct installation of ring terminals
- Can be customized in Metric Threading with MoQ

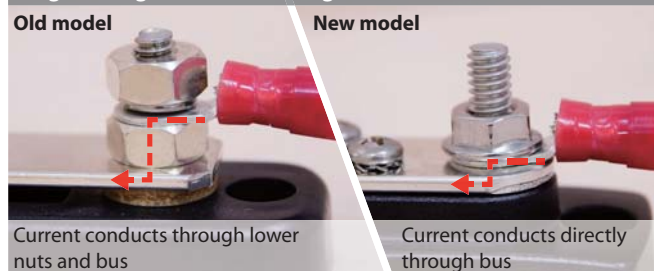
Product ID	Studs	Screws	Rating
BF471	2 x 3/16"-24	5 x #8-32	100A
BF472	4 x 3/16"-24	-	100A
BF473	2 x 1/4"-20	10 x #8-32	150A
BF474	4 x 1/4"-20	-	150A
BF475	2 x 1/4"-20	20 x #8-32	150A
BF476	6 x 1/4"-20	-	150A
BF477	2 x 1/4"-20	12 x #8-32	150A
BF478	4 x 5/16"-18	-	250A
BF479	6 x 5/16"-18	-	250A
BF480	2 x 5/16"-18	12 x #10-24	250A
BF481	4 x 3/8"-16	-	600A
BF482	8 x 3/8"-16	-	600A

## Specifications

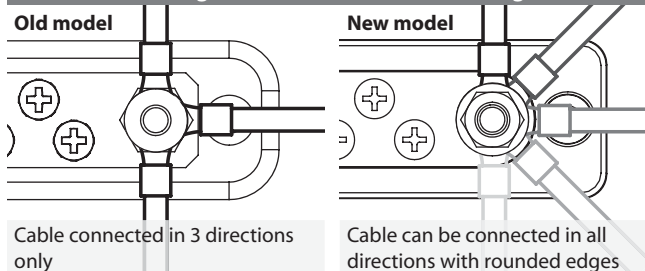
- Voltage Rating | DC 48V Max
- Studs and Screws | Stainless Steel
- Bus Bar | Tin-Plated Copper

### Upgrades from old models

Single Flanged Nut encourages correct installations

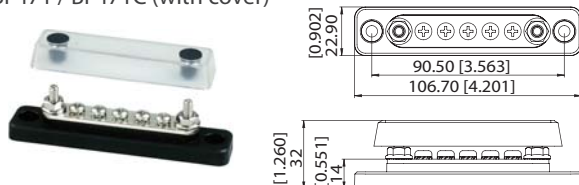


Rounded bus edge allows more flexible wiring

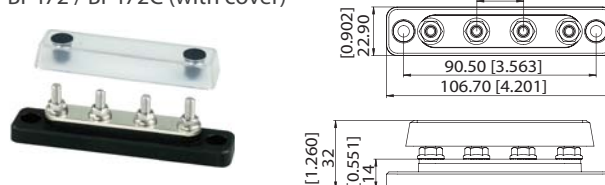


### Mini Bus Bars (100A)

BF471 / BF471C (with cover)



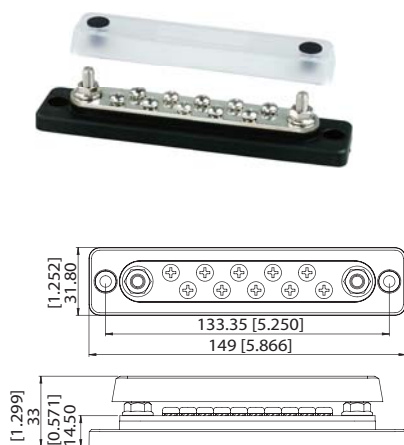
BF472 / BF472C (with cover)



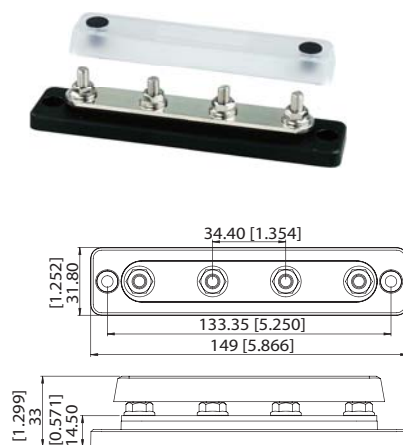
### Common Bus Bars (150A)

Standard 150A bus bar with sturdy design

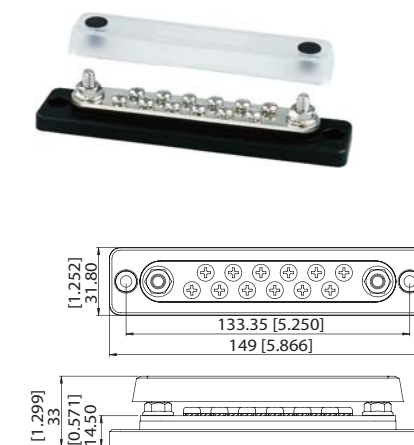
BF473 / BF473C (with cover)



BF474 / BF474C (with cover)

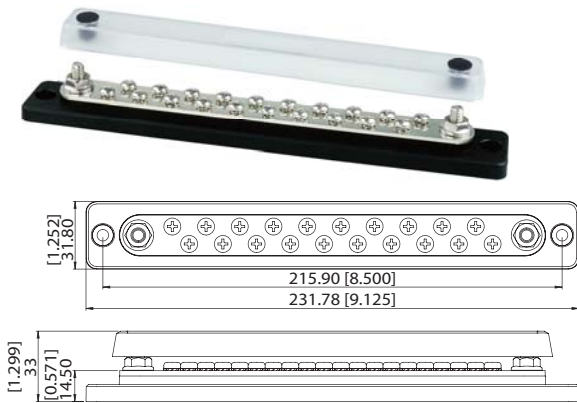


BF477 / BF477C (with cover)

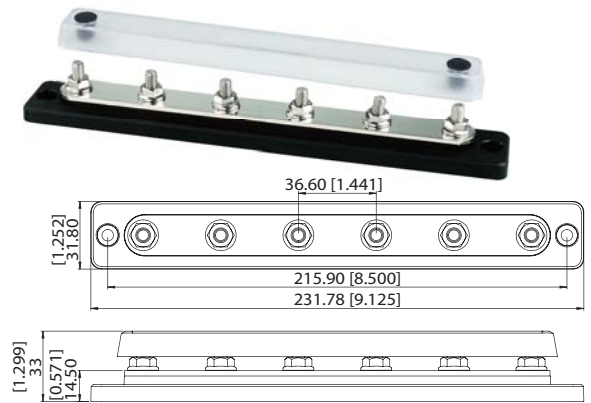




BF475 / BF475C (with cover)



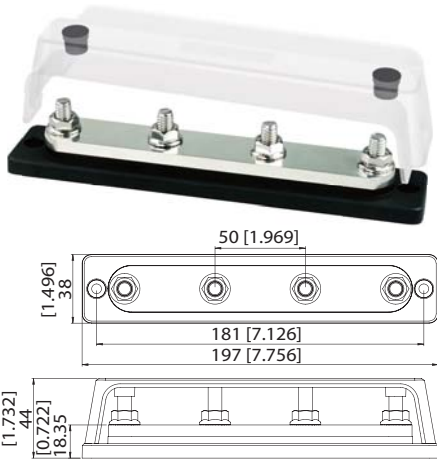
BF476 / BF476C (with cover)



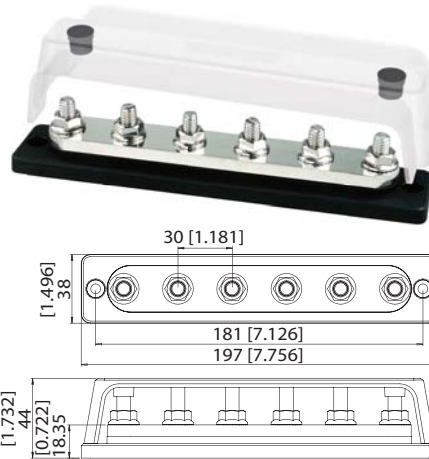
### MaxiPower Bus Bar (250A)

Heavy Duty copper bus bars carry current up to 250A

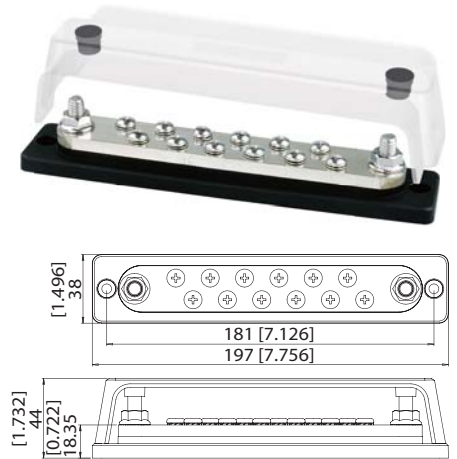
BF478  
BF478C (with Cover)



BF479  
BF479C (with Cover)



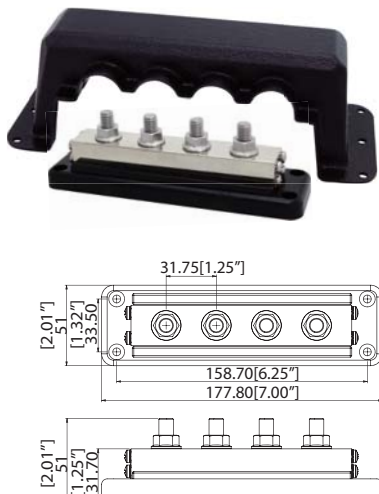
BF480  
BF480C (with Cover)



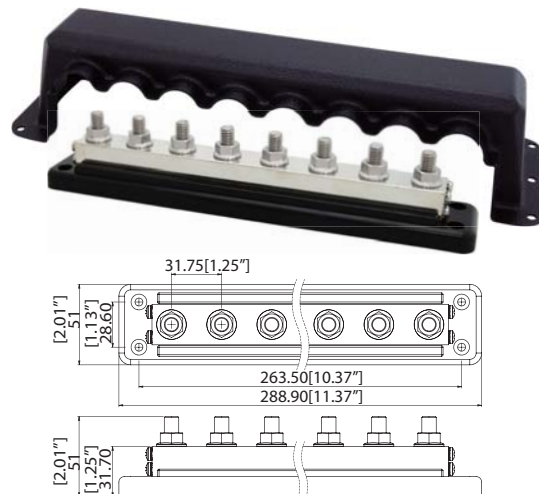
### Ultra Power Bus Bar (600A)

Bus bars with very large current up to 600A

BF481  
BF481C (with Cover)



BF482  
BF482C (with Cover)



## Marine Grade Bus Bars (Metric Threading)



- Metric threading screws and studs
- Glass fiber reinforced Nylon base ensures great mechanical strength and durability
- Optional transparent insulating cover with recessed area for label stickers
- Tin-plated copper bus allowing current up to 150A
- Stainless steel studs and screws provide great anti-corrosion ability on board
- Insulated base ensures no leakage to metal hulls

### Upgrades from old models

Transparent cover for all models



Insulated base ensures no leakage to metal hulls



New compact base for single bus bars



Bus height differentials allow cable output from the same side (BF427)



### Single Bus Bars

Compact size bus bars with ample 150A capacity

BF421-6P / BF425-6P

BF421C-6P / BF425C-6P (with cover)



BF421-12P / BF425-12P

BF421C-12P / BF425C-12P (with cover)



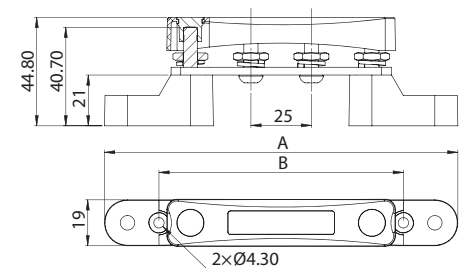
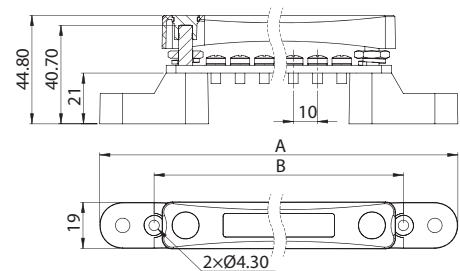
BF423-4P

BF423C-4P (with cover)



BF423-6P

BF423C-6P (with cover)



Product ID	Studs	Screws	A. Length (mm)	B. Mounting Centers (mm)	Rating	Bus Material
BF421-6P	2 x M6 (1/4")	6 x M4 (5/32")	146	101	100A	Brass
BF421-12P	2 x M6 (1/4")	12 x M4 (5/32")	206	161	100A	Brass
BF425-6P	2 x M6 (1/4")	6 x M4 (5/32")	146	101	150A	Copper
BF425-12P	2 x M6 (1/4")	12 x M4 (5/32")	206	161	150A	Copper
BF423-4P	4 x M6 (1/4")	-	146	101	100A	Brass
BF423-6P	6 x M6 (1/4")	-	206	161	100A	Brass





### Common Bus Bars

Standard common bus bars with 10 or 22 terminals

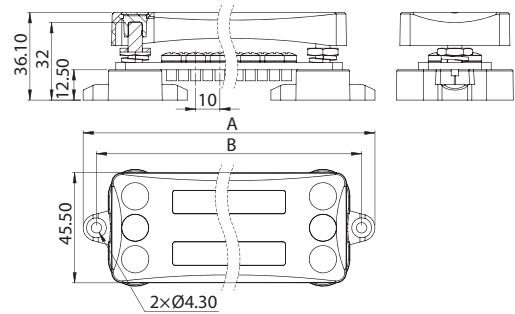
BF424-10P

BF424C-10P (with cover)



BF424-22P

BF424C-22P (with cover)



Product ID	Studs	Screws	A. Length (mm)	B. Mounting Centers (mm)	Rating
BF424-10P	2 x M6 (1/4")	10 x M4 (5/32")	118	107	150A
BF424-22P	2 x M6 (1/4")	22 x M4 (5/32")	178	167	150A

### Dual Bus Bars

Dual bus bars with removable connecting link

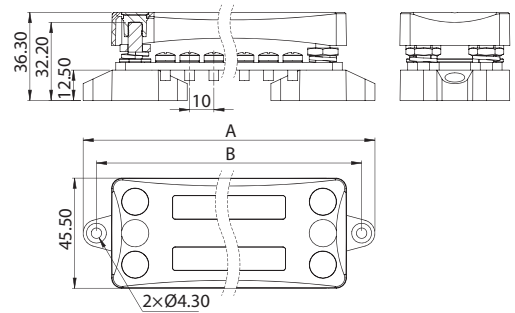
BF422-6P / BF426-6P

BF422C-6P / BF426C-6P (with cover)



BF422-12P / BF426-12P

BF422C-12P / BF426C-12P (with cover)



Product ID	Studs	Screws	A. Length (mm)	B. Mounting Centers (mm)	Rating per bus	Bus Material
BF422-6P	Dual 2 x M6 (1/4")	Dual 6 x M4 (5/32")	118	107	100A	Brass
BF422-12P	Dual 2 x M6 (1/4")	Dual 12 x M4 (5/32")	178	167	100A	Brass
BF426-6P	Dual 2 x M6 (1/4")	Dual 6 x M4 (5/32")	118	107	150A	Copper
BF426-12P	Dual 2 x M6 (1/4")	Dual 12 x M4 (5/32")	178	167	150A	Copper

### "2-Steps" Dual Bus Bar

Bus bars with different heights allowing more flexible wiring

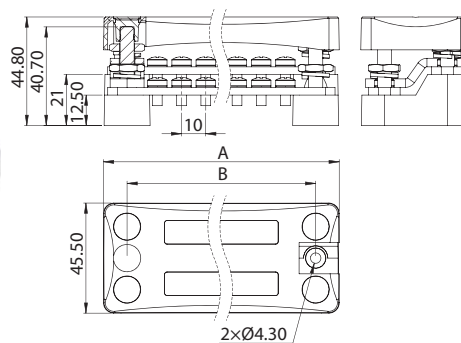
BF427-6P

BF427C-6P (with cover)



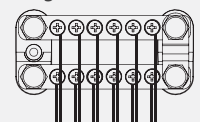
BF427-12P

BF427C-12P (with cover)

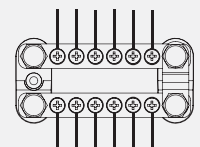


#### Wire Output Options:

Single side



Double Side



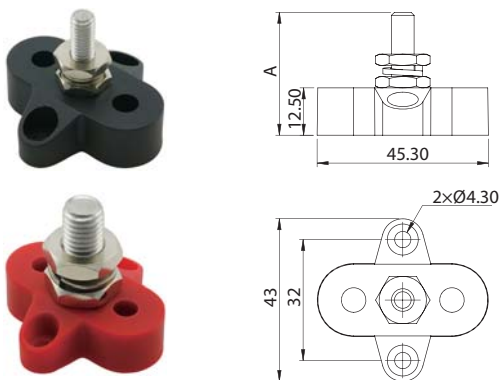
Product ID	Studs	Screws	A. Length (mm)	B. Mounting Centers (mm)	Rating per Bus
BF427-6P	Dual 2 x M6 (1/4")	Dual 6 x M4 (5/32")	94	75	150A
BF427-12P	Dual 2 x M6 (1/4")	Dual 12 x M4 (5/32")	154	135	150A

## Heavy-Duty Terminal Studs

- Allow terminating of heavy-duty cables for one or more connections
- Red or Black colors allowing easy and clear color coding for wiring
- Glass Fiber reinforced Nylon base ensures great mechanical strength and durability
- Heavy duty terminal studs (up to M10)
- Insulated base ensures no leakage to metal hulls (New Feature)

### Single Terminal Studs

BF411



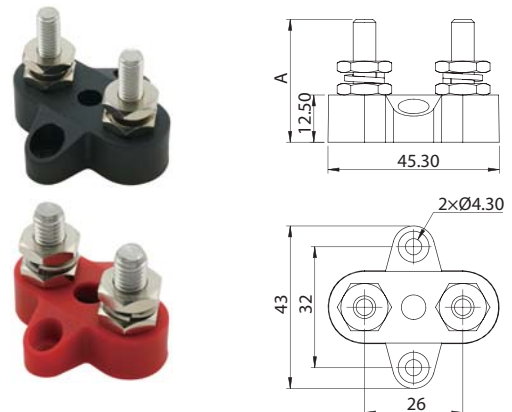
Product ID	Stud Size	A. Height (mm)
BF411-M6 / BF411R-M6	2 x M6 (1/4")	32.5
BF411-M8 / BF411R-M8	2 x M8 (5/16")	32.5
BF411-M10 / BF411R-M10	2 x M10 (3/8")	37.5

## Specifications

- Max Operating Voltage | DC 48V
- Max Amp per circuit | Determined by wires connected
- Terminal Stud Size | See each model

### Dual Terminal Studs

BF412

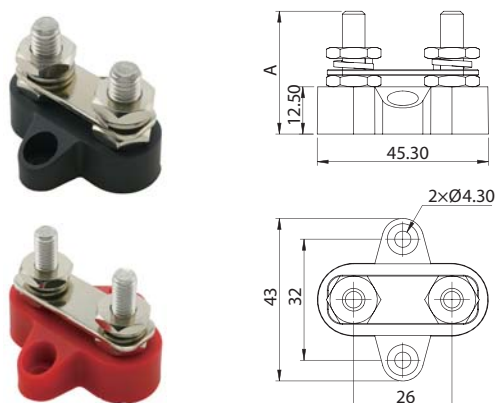


- Dual Terminal Studs with options of different studs sizes

Product ID	Stud Size	A. Height (mm)
BF412-M6 / BF412R-M6	2 x M6 (1/4")	32.5
BF412-M8 / BF412R-M8	2 x M8 (5/16")	32.5

### Dual Terminal Studs with Connecting Link

BF413

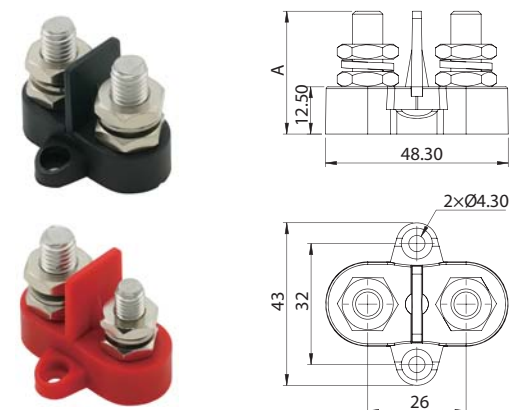


- Dual Terminal Studs with options of different studs sizes
- Removable Connecting Link withstands current up to 80A

Product ID	Stud Size	A. Height (mm)
BF413-M6 / BF413R-M6	2 x M6 (1/4")	32.5
BF413-M8 / BF413R-M8	2 x M8 (5/16")	32.5

### Dual Terminal Studs with Isolating Plate

BF414



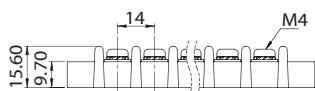
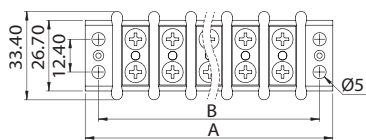
- Dual Terminal Studs with options of different studs sizes
- Removable isolating plate

Product ID	Stud Size	A. Height (mm)
BF414-M8 / BF414R-M8	2 x M8 (5/16")	32.5
BF414-M10 / BF414R-M10	2 x M10 (3/8")	37.5
BF414-M8M10 / BF414R-M8M10	1 x M8 (5/16") + 1 x M10 (3/8")	37.5

## Terminal Blocks

### Independent Source Terminal Blocks 30A

BF401-XXP



BF-JP-3

Jumpers for BF401

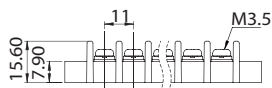
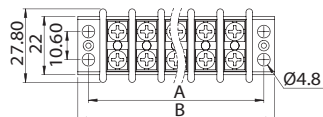


- Maximum Voltage | 600V AC/DC
- Continuous Rating | 30A
- Base Material | UL 94 V0, Nylon
- Bus Material | Nickel-Plated Brass
- Mounting Screw | M5 (#10)
- Screw Material | Stainless Steel
- Terminal Screws | M4 with exterior gear Washer

Product ID	Circuits	A. Length(mm)	B. Mounting Centers(mm)
BF401-2P	2	52	42
BF401-4P	4	80	70
BF401-6P	6	108	98
BF401-8P	8	136	126
BF401-10P	10	164	154
BF401-12P	12	192	182

### Independent Source Terminal Blocks 20A

BF402-XXP



BF-JP-4

Jumpers for BF402



- Maximum Voltage | 300V AC/DC
- Continuous Rating | 20A
- Base Material | UL 94 V0, Nylon
- Bus Material | Nickel-Plated Brass
- Mounting Screw | M3.5 (#6)
- Screw Material | Steel / Nickel Plated
- Terminal Screws | M3.5
- Wire Terminal Size | M3 (#6)

Product ID	Circuits	A. Length(mm)	B. Mounting Centers(mm)
BF402-2P	2	41	33
BF402-4P	4	63	55
BF402-6P	6	85	77
BF402-8P	8	107	99
BF402-10P	10	129	121
BF402-12P	12	151	143



# 12 / 24V Accessories

## Power Plugs and Sockets

- Cigarette Lighter Plugs
- Cigarette Lighter Sockets
- Other Plugs & Sockets

## 12V-24V Accessories

- Battery Gauges
- Marine Grade USB Charger Sockets
- CurvMount Surface Mount Sockets
- CurvMount Handle Bar Mount Sockets
- The 1-1/8" Sockets and Accessories Family

## Automotive Electrical Accessories

# Cigarette Lighter Plugs

## Normal Cigarette Lighter Plugs

with AGC/JMC Fuses



### Bakelite Cigarette Lighter Plug with Fuse AP101



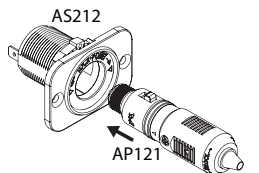
- Replaceable AGC/JMC Fuses
- Heat-resistant Bakelite body
- Heavy-duty (20A) model available
- Designed for Size A ( $\varnothing 21.0\text{mm}$ ) Sockets
- Amp Rating : Standard Model: 5A / Enhanced Model: 20A
- CE

### Illuminated Cigarette Lighter Plug with Fuse AP109

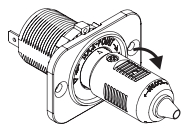


- Replaceable AGC/JMC Fuses
- Illuminated shielding
- Heavy-duty (20A) model available
- Designed for both Size A ( $\varnothing 21.0\text{mm}$ ) & Size B ( $\varnothing 22.0\text{mm}$ ) Sockets
- Amp Rating : Standard Model: 5A / Enhanced Model: 20A
- CE

### Marine Grade Locking Cigarette Lighter Plug with Fuse AP121A (with LED) / AP121B (without LED)



① Insert AP121 with the negative terminal on the top



② Twist AP121 by 90° until locked. Twist again to unlock

- Replaceable AGC Fuses
- Sturdy, solid design and assembly
- Flame retardant Nylon (glass fiber reinforced) body
- Twist-and-Lock capability when used with AS212
- Rubber ring for better stability and sealing when plugged
- LED power indicator (AP121A only)
- Designed for both Size A ( $\varnothing 21.0\text{mm}$ ) & Size B ( $\varnothing 22.0\text{mm}$ ) Sockets
- Amp Rating : Standard Model: 5A / Enhanced Model: 20A
- CE

### Bakelite Cigarette Lighter Plug with Fuse AP110



- Replaceable AGC/JMC Fuses
- Heat-resistant Bakelite body
- Heavy-duty (20A) model available
- Designed for both Size A ( $\varnothing 21.0\text{mm}$ ) & Size B ( $\varnothing 22.0\text{mm}$ ) Sockets
- Amp Rating : Standard Model: 5A / Enhanced Model: 20A
- CE

### Cigarette Lighter Plug with Fuse AP127



- Replaceable AGC/JMC Fuses
- Designed for Size A ( $\varnothing 21.0\text{mm}$ ) Sockets
- Amp Rating : 3A
- CE

### Cigarette Lighter Plug with Fuse AP113



- Replaceable AGC Fuses
- Designed for both Size A ( $\varnothing 21.0\text{mm}$ ) & Size B ( $\varnothing 22.0\text{mm}$ ) Sockets
- Amp Rating : 10A
- CE

### Cigarette Lighter Plug with Fuse AP131



- Replaceable AGC/JMC Fuses
- Wire leads from the side
- Designed for Size A ( $\varnothing 21.0\text{mm}$ ) Sockets
- Amp Rating : 5A
- CE

### Cigarette Lighter Plug with Fuse AP129



- Modern sleek design
- Replaceable AGC/JMC Fuses
- LED power indicator
- Latching collar that latches onto retainers in cigarette sockets
- Designed for both Size A ( $\varnothing 21.0\text{mm}$ ) & Size B ( $\varnothing 22.0\text{mm}$ ) Sockets
- Amp Rating : 5A
- CE

### Deluxe Cigarette Lighter Plug with LED (Fused)

AP111A (with LED)  
AP111B (without LED)

Best Seller



- Replaceable AGC/JMC Fuses
- Sturdy, solid design and assembly
- LED power indicator (AP111A only)
- Heavy-duty (20A) model available
- Best Seller
- Designed for both Size A (φ21.0mm) & Size B (φ22.0mm) Sockets
- Amp Rating : See below
- CE

### Coding Guide for AP111 Customizations:

As our No.1 seller in AP series, AP111 can be customized to meet every customer's requirement, please use the following table to pick one AP111 that fits your requirement most :

AP111□ - □ - □□A  
(1) (2) (3)

(1) LED indicator	(2) Body Material	(3) Amp Rating
A with LED	A ABS	- 5 Amps
B without LED	N Nylon, Glass Fiber reinforced	10A 10 Amps
	P PBT, Glass Fiber reinforced (UL94V-0)	15A 15 Amps 20A 20 Amps



AP111B



AP111A-N-20A

Best Selling Models				
Product ID	Body Material	Terminals Finish	Amp Rating	Note
AP111A-A	ABS	Nickel plated	5A	Standard Model with LED
AP111B-A	ABS	Nickel plated	5A	Standard Model without LED
AP111A-N-10A	Nylon, Glass Fiber reinforced	Nickel plated	10A	Robust body material with LED
AP111A-N-20A	Nylon, Glass Fiber reinforced	Gold plated	20A	Heavy-duty (20A) model with LED
AP111A-P-20A	PBT, Glass Fiber reinforced (UL94V-0)	Gold plated	20A	Heavy-duty 20A with UL94V-0 flame retardant body material and LED

Pre-wired AP111\*



AP111A-2S1-12FT



AP111A-1P3-18#-6FT

\* AP111 can also be sold pre-wired, see page 55 for available options

### Deluxe Cigarette Lighter Plug with LED (Fused)

AP112A (with LED) / AP112B (without LED)

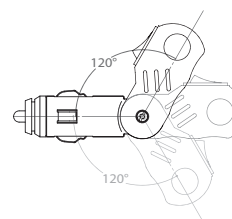


- Replaceable AGC/JMC Fuses
- Sturdy, solid design and assembly
- Robust Nylon (glass fiber reinforced) body
- LED power indicator (AP112A only)
- Designed for both Size A (φ 21.0mm) & Size B (φ22.0mm) Sockets
- Amp Rating : Standard Model: 5A / Enhanced Model: 20A
- CE

### Bendable Car Cigarette Plug with Switch and Fuse

AP120

PATENTED TW



- Replaceable AGC/JMC Fuses
- Bendable with multiple angle positions (±60°)
- Built-in On-Off Switch
- LED power indicator
- Latching collar that latches onto retainers in cigarette lighter sockets
- Designed for both Size A (φ 21.0mm) & Size B (φ22.0mm) Sockets
- Amp Rating : 10A
- Patented :TW No. P-053789
- CE

with GMA Fuses



### Mini Size Cigarette Lighter Plug with Fuse AP102



- Replaceable GMA Fuse
- Compact size
- Designed for both Size A ( $\varnothing$  21.0mm) & Size B ( $\varnothing$ 22.0mm) Sockets
- Amp Rating : 10A
- CE

### Mini Size Cigarette Lighter Plug to DC Jack Adapter AP105



- Replaceable GMA Fuse
- Output : DC Jack 3.5 x 1.3mm
- Compact size
- Designed for Size A ( $\varnothing$ 21.0mm) Sockets
- Amp Rating : 5A
- CE

### Mini Size Cigarette Lighter Plug with Fuse AP107



- Replaceable GMA Fuse
- Compact size
- Designed for both Size A ( $\varnothing$  21.0mm) & Size B ( $\varnothing$ 22.0mm) Sockets
- Amp Rating : Standard Model: 5A / Enhanced Model: 10A
- CE

### Cigarette Lighter Plug with Fuse AP119



- Replaceable GMA Fuses
- Heat-resistant Bakelite head
- Designed for both Size A ( $\varnothing$  21.0mm) & Size B ( $\varnothing$ 22.0mm) Sockets
- Amp Rating: 5A
- CE

### Cigarette Lighter Plug with LED Switch (Fused) AP130



- Replaceable GMA Fuses
- Illuminated push-button switch
- Wire leads from the side
- Designed for Size A ( $\varnothing$ 21.0mm) Sockets
- Amp Rating : 3A
- CE

Unfused

### Bakelite Cigarette Lighter Plug AP103



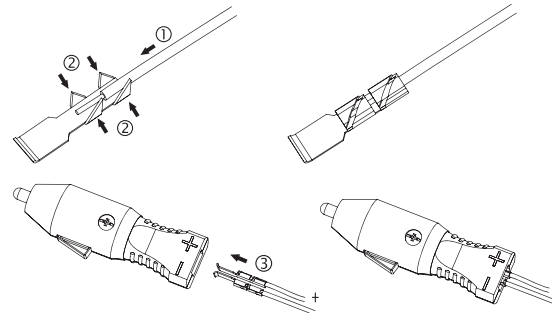
- Unfused
- Heat-resistant Bakelite body
- Designed for both Size A ( $\varnothing$  21.0mm) & Size B ( $\varnothing$ 22.0mm) Sockets
- Amp Rating : 10A
- CE

### Cigarette Lighter Plug with Quick Insert-and-Lock Terminals AP106



- Unfused
- "Insert-and-Lock" terminals allowing quick wire assembly (as illustrated)
- Designed for Size A ( $\varnothing$ 21.0mm) Sockets
- Amp Rating : 10A
- CE

Assembly Illustration of Quick Terminals :



### Cigarette Lighter Plug AP108



- Unfused
- Heat-resistant Bakelite head
- Designed for both Size A ( $\varnothing$  21.0mm) & Size B ( $\varnothing$ 22.0mm) Sockets
- Amp Rating : 10A
- CE

## Specialty Cigarette Lighter Plugs

### Cigarette Lighter Plug Transformer (12V to 8V / 9V) AP104A (DC 12V to 8V) / AP104B (DC12V to 9V)



- Replaceable AGC/JMC Fuses
- Converts DC 12V to 8V (AP104A) or DC 12V to 9V (AP104B)
- Output : DC Jack 3.5 x 1.3mm
- Designed for both Size A (φ 21.0mm) & Size B (φ22.0mm) Sockets
- Amp Rating : 1A
- CE

### Car Fragrance Diffuser AP114 / AP115 (with Switch)



- Fragrance Diffuser for cars
- LED power indicator
- On-Off Switch (AP115 only)
- Designed for both Size A (φ21.0mm)& Size B (φ 22.0mm) Sockets
- CE



### Battery Analyzer (Cigarette Plug Voltage Meter) AP125



- Voltage meter for DC 12V batteries
- Plug designed for both Size A (φ21.0mm) & Size B (φ 22.0mm) Sockets
- CE

### Cigarette Lighter USB Charger AP133



- DC 5V USB Charger
- LED power indicator
- Designed for both Size A (φ21.0mm) & Size B (φ 22.0mm) Sockets
- Amp Rating : AP133-1A : 1A  
AP133-2A : 2A
- CE

## Cigarette Lighter Socket Splitters

### Three Way Cigarette Lighter Sockets Splitter with Fuse AP116



- 1 x Cig. Lighter Socket with retainer and 2 x DC Outlets
- 3 feet extension cord
- LED power indicator
- Replaceable AGC/JMC Fuses
- Plug designed for both Size A (φ21.0mm) & Size B (φ 22.0mm) Sockets
- Wall-mount fixing panel included
- Amp Rating : 10A
- CE

### Dual Port Cigarette Lighter Sockets Splitter with Fuse AP117



- Replaceable AGC Fuses
- 1 to 2 Cigarette Socket Adapter
- LED power indicator
- Plug designed for both Size A (φ21.0mm) & Size B (φ 22.0mm) Sockets
- Amp Rating : 10A
- CE

### Three Way Cigarette Lighter Sockets Splitter (Unfused) AP118




- 1 x Cig. Lighter Socket and 2 x DC Outlets
- 3 feet extension cord
- LED power indicator
- Plug designed for both Size A (φ21.0mm) & Size B (φ 22.0mm) Sockets
- Wall-mount fixing panel included
- Amp Rating : 10A
- CE






## AP Series Selection Guide

Product	AP101 	AP109 	AP110 	AP112A 	AP112B 
Page no.	P.49	P.49	P.49	P.50	P.50
Fuse	AGC/JMC	AGC/JMC	AGC/JMC	AGC/JMC	AGC/JMC
Indicating LED		●		●	
Size A (Ø21mm)	●	●	●	●	●
Size B (Ø22mm)		●	●	●	●
Rating	5A/20A	5A/20A	5A/20A	5A/20A	5A/20A
Note	Bakelite body	Illuminated Shielding	Bakelite body		



Product	AP113 	AP120 	AP111A 	AP111B 	AP121A 
Page no.	P.49	P.50	P.50	P.50	P.49
Fuse	AGC/JMC	AGC/JMC	AGC/JMC	AGC/JMC	AGC/JMC
Indicating LED		●	●		●
Size A (Ø21mm)	●	●	●	●	●
Size B (Ø22mm)	●	●	●	●	●
Rating	10A	10A	5-20A	5-20A	5A/10A
Note		Bendable with switch	Top Seller	Top Seller	Locks with AS212

Product	AP121B 	AP127 	AP129 	AP131 	AP102 
Page no.	P.49	P.49	P.49	P.49	P.51
Fuse	AGC/JMC	AGC/JMC	AGC/JMC	AGC/JMC	GMA
Indicating LED			●		
Size A (Ø21mm)	●	●	●	●	●
Size B (Ø22mm)	●		●		●
Rating	5A-20A	3A	5A	5A	10A
Note	Locks with AS212		With latching collar	Wire leads from side	

Product	AP105 	AP107 	AP119 	AP130 	AP106 
Page no.	P.51	P.51	P.51	P.51	P.51
Fuse	GMA	GMA	GMA	GMA	Unfused
Indicating LED				●	
Size A (Ø21mm)	●	●	●	●	●
Size B (Ø22mm)		●	●		
Rating	5A	5A/10A	5A	3A	10A
Note				With illuminated switch	Quick assembly terminals

Product	AP103	AP108	AP116	AP117	AP118
					
Page no.	P.51	P.51	P.52	P.52	P.52
Fuse	Unfused	Unfused	AGC/JMC	AGC/JMC	Unfused
Indicating LED			●	●	●
Size A (Ø21mm)	●	●	●	●	●
Size B (Ø22mm)	●	●	●	●	●
Rating	10A	10A	10A	10A	10A
Note			Three way splitter	Dual port splitter	Three way splitter

Product	AP104A	AP104B	AP114	AP115	AP125
					
Page no.	P.52	P.52	P.52	P.52	P.52
Fuse	AGC/JMC	AGC/JMC	-	-	-
Indicating LED			●	●	
Size A (Ø21mm)	●	●	●	●	●
Size B (Ø22mm)	●	●	●	●	●
Rating	1A	1A	-	-	-
Note	12V to 8V transformer	12V to 9V transformer	Fragrance Diffuser	Fragrance Diffuser with switch	Battery Gauge

Product	AP133	AP124	AP122
			
Page no.	P.52	P.59	P.59
Fuse	-	GBC or AGC/JMC	-
Indicating LED	●		
Size A (Ø21mm)	●	●	
Size B (Ø22mm)	●	●	
Rating	1A/2A	16A	-
Note	12V-5V USB	Universal DIN/Cig. Plug	Engel Plug

## Wiring for AP Series

Most of our AP products can be sold pre-wired, please refer to the following coding table for ordering details:

### Coding Guide for pre-wired AP Cigarette Lighter Plugs

AP111□□ □□ - □□# - □□"

(1) (2) (3) (4)

(1) Cord Types		(2) Lead Process		(3) Wire Gauge		(4) Wire Length	
1	Straight Cord – 2C	C	Cut	□□#	AWG #	□□"	Length in inches
2	Coil Cord (Ribbon)	T	Tinned/Stripped	□□mm	Φ in mm (for cord type 3 & 4 only)	□□cm	Length in cm
3	Round Cord (choose one below)	Q	0.250"Female Quick Connect Terminal			□□'	Length in feet
3A	Double Conductors	P	DC Plug (180°) (choose one below)			□□m	Length in meters
3B	Single Shielded						
4	Coil Cord/ Round (choose one below)	P1	2.1 x 5.5mm				
4A	Double Conductors	P2	2.5 x 5.5mm				
4B	Single Shielded	P3	1.3 x 3.5mm				
5	Electronic Cord (choose one below)	P4	3 x 6.3mm				
5A	UL1015	R	DC Plug (90°) (choose one below)				
5B	UL1007	R1	2.1 x 5.5mm				
6	Internal Hook-up (2 x 0.75mm)	R2	2.5 x 5.5mm				
		R3	1.3 x 3.5mm				
		R4	3 x 6.3mm				
		S	Cigarette Lighter Socket (choose one below)				
		S1	AS201(Assembled)				
		S2	AS208(Molded)				
		J	DC Jack (choose one below)				
		J1	2.1 x 5.5mm				
		J2	2.5 x 5.5mm				

#### Cord Types



Straight Cord – 2C



Coil Cord



Round Cord



Coil Cord/ Round



Electronic Cord



Internal Hook-up

#### Lead Process



Cut



Tinned/Stripped



0.250"Female  
Quick Connect  
Terminal



DC Plug (180°)



DC Plug (90°)



Cigarette Lighter Sockets



AS208



DC Jack

## Car Cigarette Lighters

### Car Cigarette Lighter Head with Guard AL301



- Cigarette Lighter with long handle

### Car Cigarette Lighter Head with Guard AL302



- Cigarette Lighter with short handle

### Compass Knob Car Cigarette Lighter Head with Guard AL303



- Cigarette Lighter with Compass Knob handle

### Chrome Knob Car Cigarette Lighter Head with Guard AL304



- Cigarette Lighter with chrome plated handle

### Car Cigarette Lighter Set AL305



- 1 x Cigarette Lighter Head (AL301)
- 1 x Cigarette Lighter Socket with Retainer (AS202)
- Wiring cable included

### Illuminated Cigarette Lighter AL306



- 1 x Cigarette Lighter Head (AL301)
- 1 x Cigarette Lighter Socket with Retainer (AS202)
- Illuminated cigarette lighter socket
- Wiring cable included

## Automotive Antenna Plugs & Sockets

### Car Radio Antenna Plug Screw Type AT101



- Solder type with screw-on enclosure

### Car Radio Antenna Plug AT102



- Solder type without enclosure (covered with heat shrink tube)

### Car Radio Antenna Plug to TV Aerial (PAL) Female Adapter AT104



- Car Radio Antenna male to PAL female

### Car Radio Antenna Socket Screw Type AT201



- Car Radio Antenna male to PAL female

### Car Radio Antenna Socket to TV Aerial (PAL) Plug Adapter (Right Angled) AT204



- Car Radio Antenna Female to PAL Male
- Right Angled (90 degrees)

# Cigarette Lighter Sockets

## Normal Cigarette Lighter Sockets

### Panel Mount Cigarette Lighter Socket and Retainer AS202



- Metal case withstands high temperature
- Ceramic base with retaining spring
- Various customization options available (see below)
- Panel mount (screw type)
- Amp Rating : 20A

### Coding Guide for AS202 with Accessories

AS202 comes with a variety of terminal configurations and accessories , please use the following table to pick one AS202 that fits your requirement most :

AS202□ - □ - □□  
(1) (2) (3) (4)

#### (1) Terminals

- B Bullet Terminal (Φ=4mm)
- R Screw Nuts for Ring Terminals
- Q Quick Connect Terminal
- S Solder Terminal

#### (2) Mounting Panels

- A Mounting Panel Type A
- B Mounting Panel Type B
- C Mounting Panel Type C
- D Mounting Panel Type D
- E Mounting Panel Type E

#### Terminals



Bullet Terminal (Φ=4)



Screw Nuts for Ring Terminal



0.250" Quick Connect Terminal



Solder Terminal

#### Accessories



AS-RC1  
Cover cap for AS202 and AS204



AS-IR1  
Illumination Ring for AS202

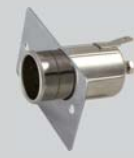
#### Mounting Panels



Type A  
L-shaped



Type B  
Small plate



Type C  
Small plate/half mount



Type D  
Large panel



Type E  
Large panel/half mount

### Panel Mount Cigarette Lighter Socket and Retainer AS204



- Metal case withstands high temperature
- Ceramic base with retaining spring
- Optional Rubber Cap (AS-RC1) available
- Panel mount (screw type)
- Amp Rating : 20A

### In-Line Cigarette Lighter Socket AS201



- DC Power Outlet
- In-Line socket with solder terminals
- Optional cover cap available
- Amp Rating : 10A
- For Wire Gauge : #16-#22 AWG

### In-Line Cigarette Lighter Socket AS208



- DC Power Outlet
- Molded wiring for better sealing
- Amp Rating : 10A
- For Wire Gauge : #18-#22 AWG

### Panel Mount Cigarette Lighter Socket AS217



- Economical DC Power Outlet
- Push-in panel mounting
- Anti-splash cap
- Bullet Terminal (Φ=4mm)
- Amp Rating : 10A

## Marine Grade Cigarette Lighter Power Socket AS212

Best  
Seller



- DC Power Outlet
- Panel mount and anti-splash cap available (see below)
- Flame retardant Nylon (glass fiber reinforced) enclosure
- Twist-and-Lock capability when used with AP121 (page 49)
- 0.250" Quick Connect Terminals
- Illuminated bottom plate for easy recognition at night (AS212L only)
- Rating : DC 9-36V 20A

### Coding Guide for AS212 with Accessories

As our No.1 seller in AS series, AS212 comes with a variety of accessories that meet every customer's requirement, please use the following table to pick one AS212 that fits your requirement most:

AS212□□ - □  
(1) (2) (3)

(1) Bottom Plate	(2) Mounting & Fixing Nuts	(3) Cap Labels
Standard	A Flat Panel Screw Nut	A Type A : Marine 12V
L Illuminated	B Flat Panel Quick Nut	B Type B : 12V
K Half-threaded Body	C L-Shaped Panel Screw Nut	
M Half-threaded & Illuminated	D L-Shaped Panel Quick Nut	
	E - Screw Nut	
	F - Quick Nut	



AS212 with illuminated bottom plate

#### Mounting Panels



AS-PL-1

**Flat Panel**  
Flat panel for flush mount



AS-PL-2

**L-shaped panel**  
Mounting Panel for 90° installation

#### Fixing Nuts



AS-NT-1

**Screw Nut**

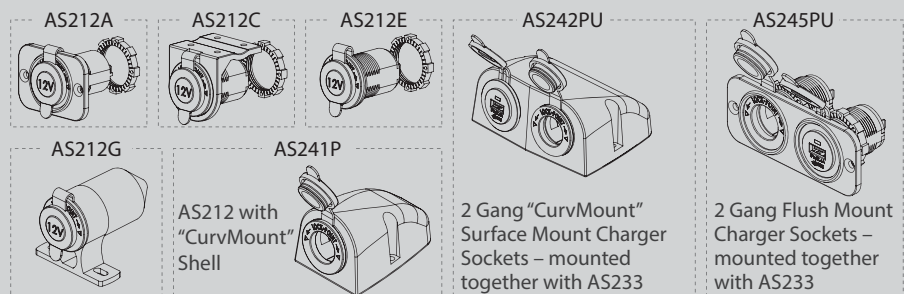


AS-NT-2

**Quick Nut**  
Fixing AS212 quickly

#### Mounting Options

AS212 can be mounted with several options (flush or surface mount) and accessories. See below for possible options.



※ See page 67 for further information about the AS24X CurvMount Series.

## Surface Mount Marine Grade Cigarette Lighter Socket AS212G



- Surface-mount allowing easy installation on any surface (no hole cut-out needed)
- Equipped with the best-selling AS212
- Pre-wired with 6" #16 AWG wire
- Dust and water-resistant cap
- Surface-mount mounting screws included
- UV stabilized PVC boot for better protection against water and dust from the bottom

## Cigarette Lighter Socket with Panel and Rubber Cap AS215



- Economical DC Power Outlet
- Panel and rubber cap included
- 0.250" Quick Connect Terminals
- Amp Rating : 15A

# Other Plugs & Sockets

## DIN Plugs & Sockets

### Universal DIN / Cigarette Lighter Plug

AP124



- Replaceable GBC Fuses
- Bayonet-catch DIN to Cigarette Lighter Plug adapter
- Designed for both Size A ( $\varnothing$  21.0mm) & Size B ( $\varnothing$ 22.0mm) Cigarette Sockets
- Amp Rating : 16A



### Panel Mount DIN Socket with Anti-splash Cap

AS213



- Robust Nylon (glass fiber reinforced) enclosure
- Anti-splash cap
- Panel mount with fixing screw nuts
- 0.250" Quick Connect Terminals
- Amp Rating : 15A

### In-Line DIN Socket with Anti-splash Cap

AS214



- Flame retardant Nylon (glass fiber reinforced) enclosure
- Anti-splash cap
- 0.250" Quick Connect Terminals
- Amp Rating : 15A

### DIN Plugs & Sockets

DIN sockets, also known as Hella sockets , BMW sockets , Triumph sockets and Powerlet sockets , are connectors that are more suited to motorcycle use for its compact size , robust design and more secure and reliable connection than cigarette lighter sockets .

### 1-1/8" DIN/Merit Socket

AS216



- Standardized 1-1/8" cut-out (see page 70 for mounting accessories)
- Flame retardant Nylon (glass fiber reinforced) enclosure
- Water-proof PVC Cap (IP66)
- Panel mount with fixing screw nuts
- 0.250" Quick Connect Terminals
- Amp Rating : 15A

### Deluxe Panel Mount DIN Socket with Anti-splash Cap

AS210



- Robust, elegant anodized aluminum body
- Spring-loaded dust-proof, anti-splash cap
- Panel mount with fixing screw nuts
- 0.250" Quick Connect Terminals
- Amp Rating : 15A

## Engel Plug & Socket

### 1-1/8" Engel Socket

AS218



- Standardized 1-1/8" cut-out (see page 70 for mounting accessories)
- Designed for Engel type sockets
- Water-proof PVC Cap (IP66)
- Flame retardant Nylon (glass fiber reinforced) enclosure
- 0.250" Quick Connect Terminal
- LED indication for easy identification at night
- Rating: DC 12V 15A / DC 24V 7.5A



Front View

### Engel Plug

AP122



- Securing shroud that screws into Engel Type Sockets
- Easy to assemble solder-free screw-terminals for cable connection
- Rating DC 0-36V 15A

# 12V-24V Accessories

## Battery Gauges

PATENTED  
TW,CH



SP-BGX Series are compact size, self-powered DC battery gauges. The patented see-through uni-body housing leaves no opening in the front, allowing low profile outlook and excellent protection against dust, moisture, and vibration. The series includes a voltmeter, an ammeter and a voltage / current dual meter and are available in either wire output or .250" quick terminals (with suffix "T"). These battery gauges are made for either standard 1-1/8" cut-out with several mounting accessories (see page 70) or for popular Contura style switch mounting holes.



IP67: protection against temporary water immersion



Two Output Options: Wire & Quick Terminals



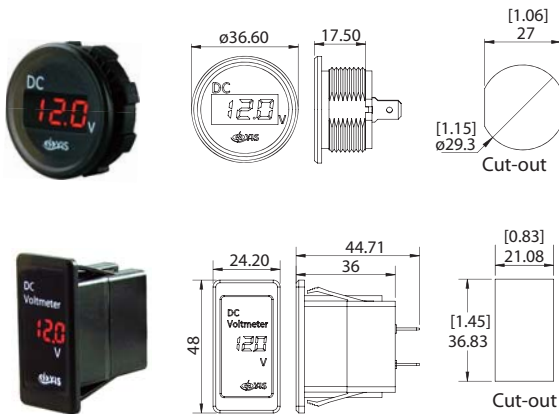
Patented see-through display design

### Digital Voltmeter

SP-BG1 (with wire output) / SP-BG1T (with Quick Connector Terminals)

### Digital Voltmeter – Switch Mount

SP-BG4



## Features

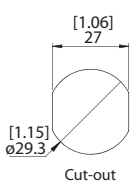
- Compact Size with 3 digits LED display
- Self-powered from measuring DC voltage
- Floating decimal point for better resolution below 10V
- Completely sealed design with no opening (IP67)
- Reversed polarity input protection

## Specifications

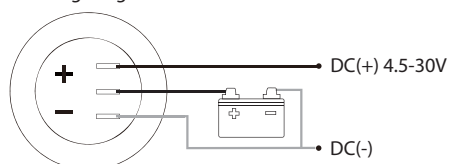
- Voltage Range | DC 2.50-30V
- Current Consumption | <30mA
- Sampling Rate | 5 readings/s
- Resolution | 0.01V (<10V) / 0.1V (>10V)
- Note |  $\text{CE}$  IP67 Patented

### Digital Voltmeter up to 100V

SP-BG1-100V



#### Wiring Diagram



## Features

- Compact Size with 3 digits LED display
- Measuring large voltage range from 0 - 100V
- Completely sealed design with no opening (IP67)
- Reversed polarity input protection

## Specifications

- Measure Voltage Range | DC 0-100V
- Powering Voltage Range | DC 4.5-30V
- Current Consumption | <30mA
- Sampling Rate | 5 readings/s
- Resolution | 0.1V
- Note |  $\text{CE}$  IP67 Patented

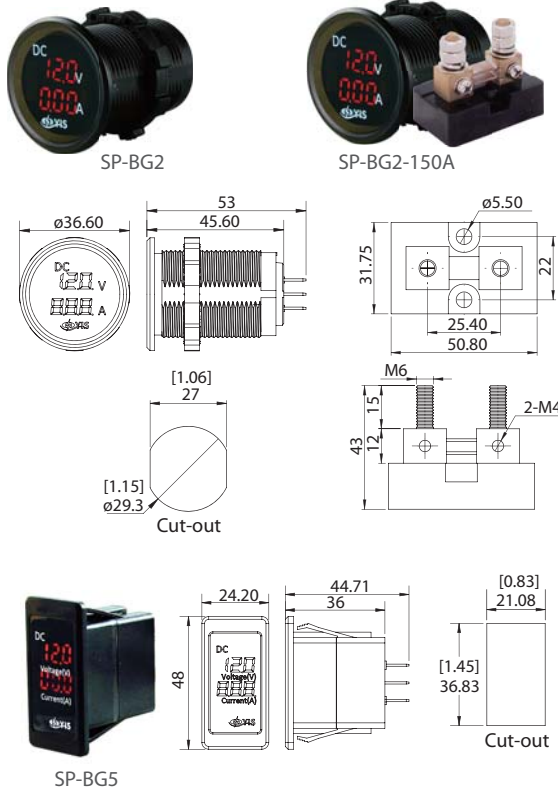


## Digital Voltage & Current Dual-meter

SP-BG2 / SP-BG2-150A

## Digital Voltage & Current Dual-meter – Switch Mount

SP-BG5



## Features

- Compact Voltage & Current 2 in 1 meter
- Digital 3 digits LED displays
- Self-powered from measuring DC voltage
- Floating decimal point for better resolution
- Completely sealed design with no opening (IP67)
- Reversed polarity input protection

### Additional Features for SP-BG2-150A

- Includes 500 Amp shunt
- Measuring large amperage range from 0 – 150A

## Specifications

### SP-BG2 / SP-BG5

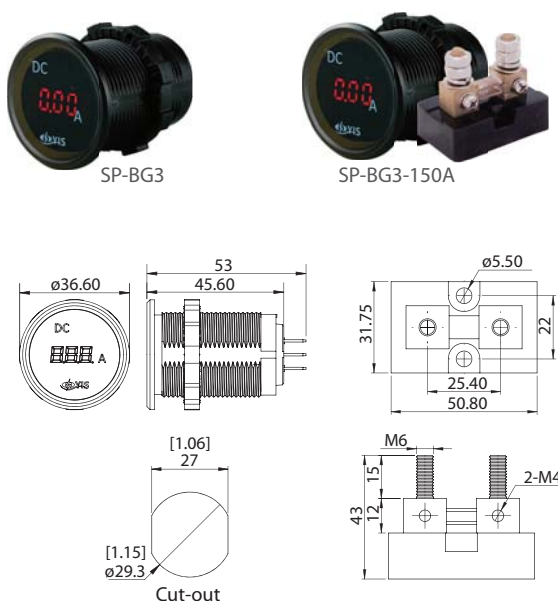
- Voltage Range | DC 4.5-30V
- Amperage Range | DC 0-15A
- Amperage Tolerance | > 10A:  $\pm 0.5A$ , <10A  $\pm 0.17A$
- Note |  $\text{CE}$  IP67 Patented

### SP-BG2-150A

- Voltage Range | DC 4.5-30V
- Amperage Range | DC 0-150A
- Amperage Tolerance |  $\pm 2\%$
- Shunt Type | 50mV
- Note |  $\text{CE}$  IP67 Patented

## Digital Ammeter

SP-BG3 / SP-BG3-150A



## Features

- Compact Size with 3 digits LED display
- Self-powered from measuring DC voltage
- Floating decimal point for better resolution
- Completely sealed design with no opening (IP67)

### Additional Features for SP-BG3-150A

- Includes 500 Amp shunt
- Measuring large amperage range from 0 – 150A

## Specifications

- Voltage Rating | DC 4.5-30V
- Amperage Range | DC 0-15A
- Amperage Tolerance | > 10A:  $\pm 0.5A$ , <10A  $\pm 0.17A$
- Note |  $\text{CE}$  IP67 Patented

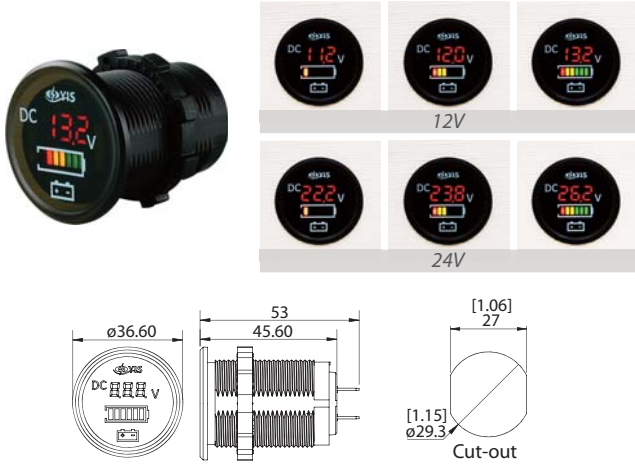
### SP-BG3-150A

- Voltage Range | DC 4.5-30V
- Amperage Range | DC 0-150A
- Amperage Tolerance |  $\pm 2\%$
- Shunt Type | 50mV
- Note |  $\text{CE}$  IP67 Patented

Watch Intro Video on Youtube



## Digital Voltmeter with Battery Level Display SP-BG6



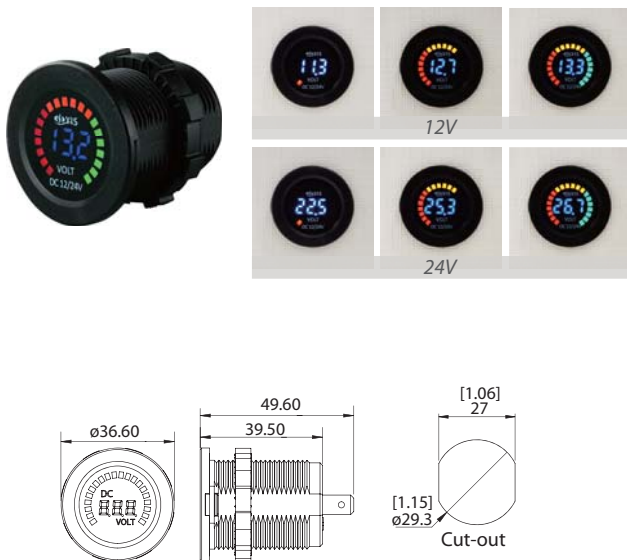
## Features

- Compact Size with 3 digital LED display
- Easily recognizable Battery Status LEDs
- 12 / 24V systems auto detect (compatible to both systems)
- Completely sealed with no opening (IP67)
- Reverse polarity input protection
- Self-powered from measuring DC voltage

## Specifications

- Voltage Rating | 5 – 30V (12/24V Auto Detect)
- Refresh Rate | 100ms
- Note |  $\text{CE}$  IP67 Patented

## Digital Voltmeter with Rainbow Battery Level Display SP-BG7



## Features

- Compact Size with 3 digital LED display
- Easily recognizable Battery Status LEDs
- 12 / 24V systems auto detect (compatible to both systems)
- Reverse polarity input protection
- Self-powered from measuring DC voltage
- Low-voltage alarm when volt is lower than 11V in 12V mode, 22V in 24V mode

## Specifications

- Voltage Rating | 7 – 30V (12/24V Auto Detect)
- Refresh Rate | 100ms
- Low Voltage Alarm | 11.0V (@12V mode) / 22.0V (@24V mode)
- Note |  $\text{CE}$

## Marine Grade USB Charger Sockets



**New Product** **Best Seller**

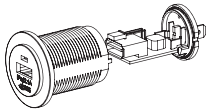
Specially designed water-tight PVC Cap (IP66)



Standard 1-1/8" Socket Size

LED Power Indication

Enhanced One-piece water-resistant design

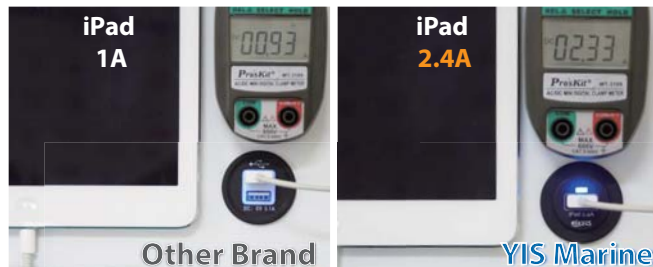


Sophisticated circuit design

AS23x series are quality-built, powerful and compact USB Charger sockets for marine or RV applications. Built with sophisticated circuit, these chargers not just allow fast full-speed charging to your latest iPhones/iPads, but also protect your devices with features like overheat, reverse-polarity protection, EMC suppression, and more. Thanks to its specially designed PVC cap and unique uni-body design, this series is IP66 rated and is suitable for Marine and other applications.

### Series Features

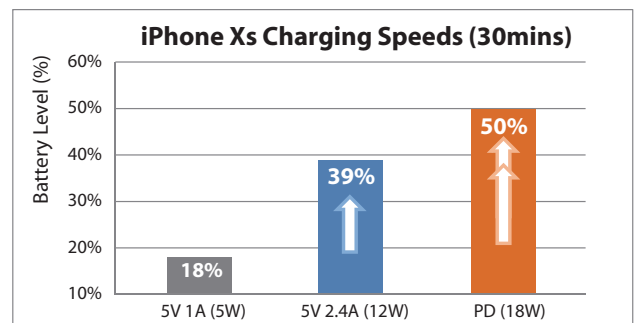
- Input: DC12/24V (Dual Voltage)
- LED Power Indication
- Short circuit / Overheat protection / Reverse polarity protection
- Enhanced uni-body water-resistant design with unique water-tight cap (IP65 for AS237/AS238, IP66 for others - when sealed)
- Standardized 1-1/8" cut-out (See page 70 for accessories)
- Fits in existing C-7 or Contura style switch mounting holes (AS235)
- Flame retardant Nylon (glass fiber reinforced) enclosure
- CE FC



Full Compatibility- fast charges like AC chargers

## Charge Compatibility & Fast Charging

As built-in batteries for cellphone become bigger and bigger, charging speed becomes more important for end users. While QC (Quick Charge) protocol has been in the market for years, they are only compatible with Qualcomm based android phones. The newly developed PD (Power Delivery) protocol, however, is compatible with both Android, iPhones, iPads and even laptops, and is deemed as the future of fast charging. PD chargers would typically charge your iPhone or Android phones from 0% to 50% within half hour.



Charging Speed of iPhone Xs by different chargers in 30 mins

### Compatibility chart of Fast-Charging technologies

Protocol	Charger Socket	Compatible with	YIS Charger Model
Apple 2.4A 	 USB TYPE A	iPhones / iPads / Most Androids	All models except AS237
Quick Charge (QC)	 USB TYPE A USB TYPE C	ONLY Qualcomm based Androids	AS237 AS238
Power Delivery (PD) <b>USB PD</b>	 USB TYPE C	iPhone 8 / X or later (2017) iPad Air 3 or later Most Androids since 2018	AS237 AS238

PD USB-C Chargers



Series Intro Video



## Product Series

### PD (Power Delivery) USB Type-C Chargers New

AS238 PD 45W USB 1A+1C Charger



- Type A port - 5V 2.4A compatible with most smartphones in market
- Type C port - PD 45W compatible with latest PD devices in market (iPhones/iPads/Android/Nintendo Switch)
- Fast charges your iPhone / Android phones from 0% to 50% within 30 mins
- Also charges ultrabooks, Macbooks & Macbook Air (after 2018) in 20V mode

\* 20V/2.25A mode is only achievable when input > 20V

AS237



- Powerful 45W (20V/2.25A) PD charging
- Compatible with latest PD devices in market (iPhones/iPads/Android/Nintendo Switch)
- Fast charges your iPhone / Android phones from 0% to 50% within 30 mins
- Also charges ultrabooks, Macbooks & Macbook Air (after 2018) in 20V mode

\* 20V/2.25A mode is only achievable when input > 20V

### Patented Color Changing Technology (Amber - Fast Charging)



### PD 20V Charging Charges Laptops / Ultrabooks

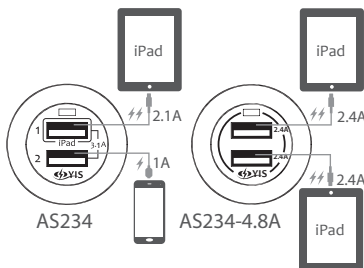


### Double Port USB Chargers New

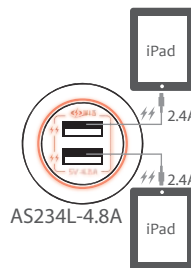
AS234 / AS234L New



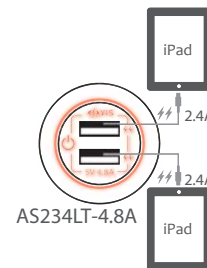
AS234



AS234L



AS234LT-4.8A



#### AS234-3.1A Lower Price

- Best Cost-Performance value
- Best-selling item with solid performance and competitive price

#### AS234(L)-4.8A

- Two port 2.4A large current charger
- Charges 2 iPads at full speed at the same time



Backlight LED label effect

#### AS234LT-4.8A New

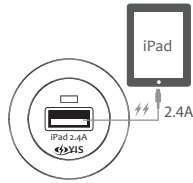
- Two port 2.4A large current charger
- Touch button to turn off charger when not in use



Low profile TOUCH ON-OFF button

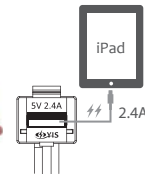
## Single Port USB Chargers

AS233



- Single Port 2.4A USB Charger (12W)
- Fast charges iPad /iPhone and Android devices

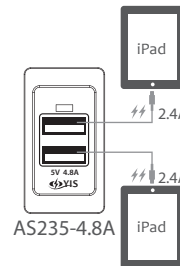
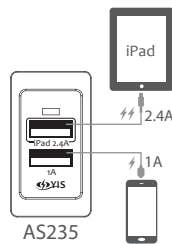
AS236



- Snap-in Keystone Charger Socket for Decora Style wallplate (RJ-45 Keystone hole)
- Single Port 2.4A USB Charger (12W)
- Fast charges iPad /iPhone and Android devices



AS235



**AS235-3.4A**

- Fits C-7 or countra Style switch mounting hole
- 2.4A port fast charges iPad /iPhone and Android devices

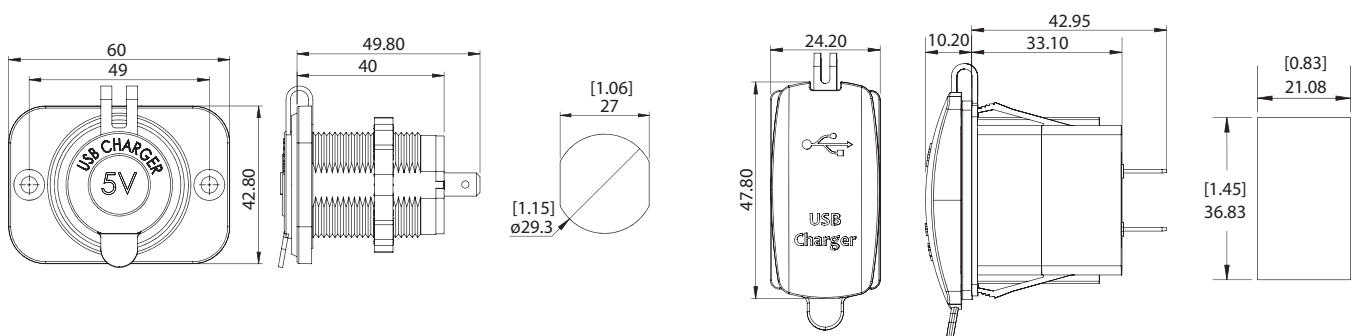
**AS235-4.8A** New

- Two port 2.4A large current charger
- Charges 2 iPads at full speed

Model#	Sockets	Amp. Rating	Power	Note
AS233	USB (A) x 1	2.4A	12W	-
AS236	USB (A) x 1	2.4A	12W	Designed for Keystone Sockets
AS234-3.1A	USB (A) x 2	2.1A+1A	15W	Newly developed low cost model (2019)
AS234 AS234L	USB (A) x 2	2.4A+1A	17W	To be replaced by AS234-4.8A and AS234-3.1A
AS234-4.8A AS234L-4.8A	USB (A) x 2	2.4A+2.4A	24W	4.8A large current model <span style="color: red;">New</span>
AS235	USB (A) x 2	2.4A+1A	17W	-
AS235-4.8A	USB (A) x 2	2.4A+2.4A	24W	4.8A large current model <span style="color: red;">New</span>
AS237	USB (C) x 1	5V 3A/ 9V 3A/ 12V 3A/ 15V 2.25A/ 20V 2.25A (PD 45W Max.)	45W	Power Delivery (PD) 3.0 <span style="color: red;">New</span> Also charges ultrabook, Macbook & Macbook Air (after 2018)*
AS238	USB (A) x 1 USB (C) x 1	(A)5V2.4A (C)5V 3A/9V3A/ 12V 3A/ 15V 2.25A/ 20V 2.25A (PD 45W Max.)	45W	Power Delivery (PD) 3.0 <span style="color: red;">New</span> USB-C Also charges ultrabook, Macbook & Macbook Air (after 2018)*

\*Charging ultrabook, Macbook & Macbook Air (after 2018) requires 20V mode, which is only achievable when input > 20V

## Product Dimensions



Watch Intro Video on Youtube



## Cigarette Lighter Outlet Extension Box

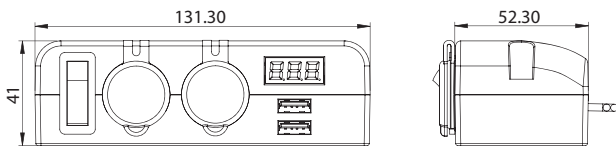
AS901 2-Way Cigarette Lighter Outlet Box with dual USB & Digital Voltage Meter

AS902 3 Port Cigarette Lighter Outlet Box

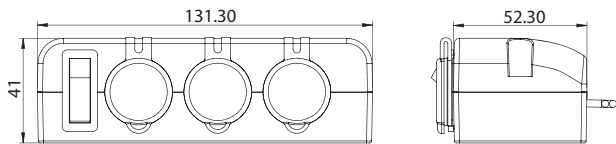
New  
Product



AS901



AS902



These cigarette lighter outlet box come with 2 or 3 ways standard cig. outlet. Advanced model AS901 comes also with 2 port USB charger and Voltmeter. Both model come with a convenient illuminated rocker switch style circuit breaker, providing not only 16A protection but also an easy way to control multiple devices at the same time.

Suitable for 12V and 24V DC power source. Come with 3 feet of wires with circuit break protection. Mounting accessories included.

## Specifications

- Rating | DC 12 / 24V 16A
- Cable | 18AWG / Black & Red Wires / Length 3 ft
- Built-in Circuit Breaker Switch (16A)

### USB (AS901)

- Input DC 12/24V
- Output: DC 5V 3.1A Max (2.1A + 1A)

### Digital Voltage Meter (AS901)

- Voltage Range | DC 2.50~30V
- Current Consumption | <30mA
- Sampling Rate | 5 readings/s
- Resolution | 0.01V (input <10V) / 0.1V (input >10V)



Switch Type Circuit Breaker (16A)

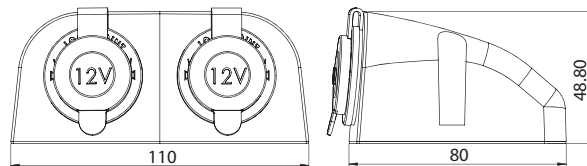
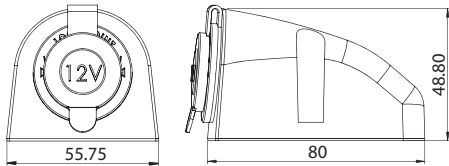
## CurvMount Surface Mount Sockets

AS241

AS241W

AS242

AS242W



The CurvMount cases are fully covered surface mount cases designed for the 1-1/8" socket family. These cases are made of UV-stabilized plastic with water-tight gaskets and water-resistant caps, making them perfect for use with RV, caravans and yachts. They are easy to install and can be mounted vertically, horizontally or even underneath a dash.

### Features

- Surface-mount allowing easy installation on any surface (no hole cut-out needed)
- UV-stabilized enclosure material
- Water-tight gasket & water-resistant rubber cap included
- Robust Nylon (glass fiber reinforced) enclosure

## Popular CurvMount Models

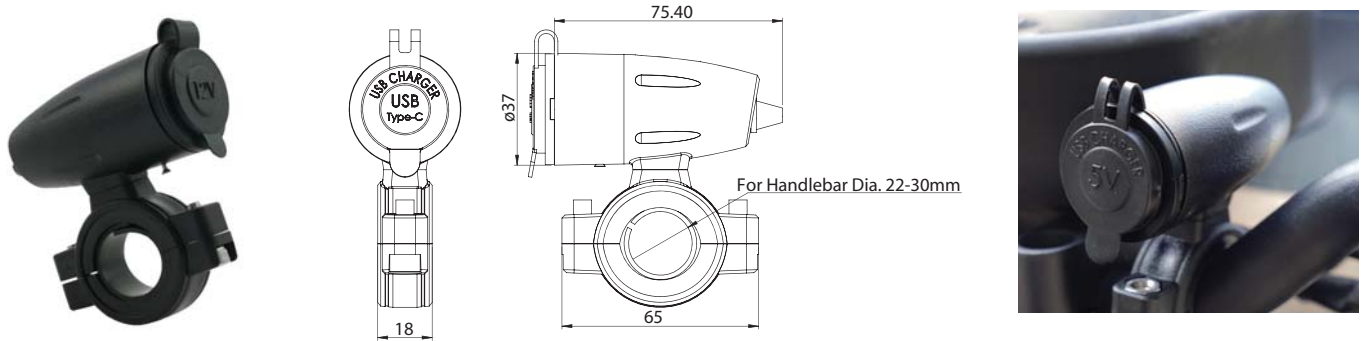
Model	Socket
AS241P	Power Outlet
AS241U	1 Port USB Charger
AS241V	2 Port USB Charger
AS241D	Din/Merit Socket
AS241E	Engel Socket
AS241G	Digital Voltmeter
AS241M	Digital Voltage /Current Dual Meter

Model	Socket
AS242PP	Power Outlet + Power Outlet
AS242PU	Power Outlet + 1 Port USB Charger
AS242PV	Power Outlet + 2 Port USB Charger
AS242PD	Power Outlet + Din/Merit Socket
AS242PE	Power Outlet + Engel Socket
AS242VG	2 Port USB Charger + Digital Voltmeter
AS242XX	Any Socket from 1-1/8" family + Any Socket from 1-1/8" family

# CurvMount Handle Bar Mount Sockets

New Product

AS251



## Features

- Suitable for all of our 1-1/8" sockets (See options below) UV-stabilized enclosure material
- Compatible with most motobike handlebar in the market (diameter: 0.8" -1.18")
- UV-stabilized enclosure material
- Water-tight gasket & water-resistant rubber cap included
- Robust Nylon (glass fiber reinforced) enclosure

## Popular CurvMount Models

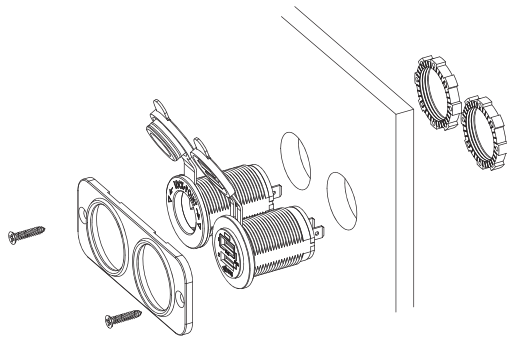
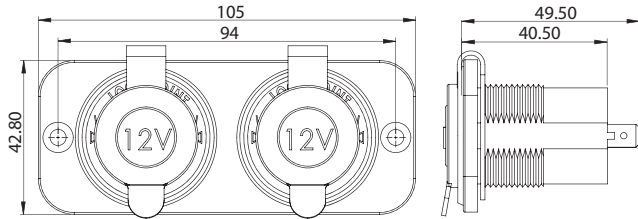
Model	Socket	Model	Socket
AS251P	Power Outlet	AS251E	Engel Socket
AS251U	1 Port USB Charger	AS251D	Din/Merit Socket
AS251V	2 Port USB Charger	AS251G	Digital Voltmeter
AS251Y	1 Port USB Type C Charger	AS251M	Digital Voltage /Current Dual Meter





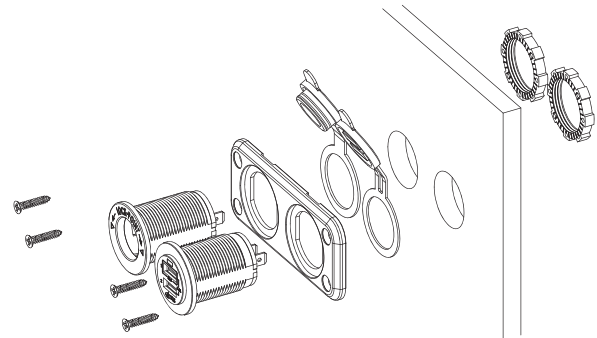
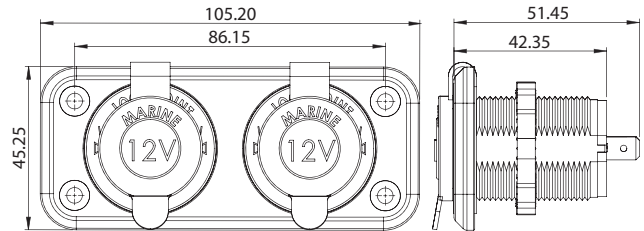
## Flush Mount Panel for 1-1/8" Sockets

AS245



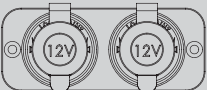
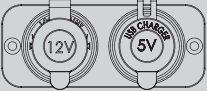
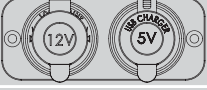
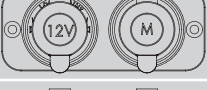



BF245: Decorative Panel mounted in front of sockets

AS246



BF246: Panel mounted in back of sockets

## Flush Mount Models

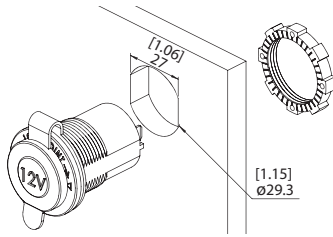
Model	Socket
AS245PP 	Power Outlet + Power Outlet
AS245PU 	Power Outlet + 1 Port USB Charger
AS245PV 	Power Outlet + 2 Port USB Charger
AS245PD 	Power Outlet + Din/Merit Socket
AS245PE 	Power Outlet + Engel Socket
AS245VG 	2 Port USB Charger + Digital Voltmeter
AS245XX 	Any Socket from 1-1/8" family + Any Socket from 1-1/8" family



## Features







- Flush Mount Panel – available in 1 gang or 2 gang
- UV-stabilized material
- Robust Nylon (glass fiber reinforced) material







## The 1-1/8" Sockets and Accessories Family



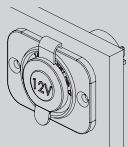
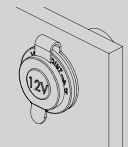
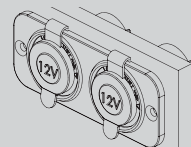
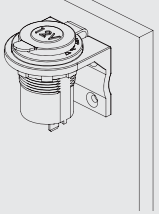
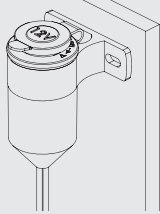
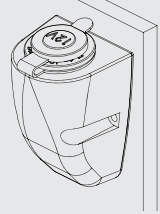
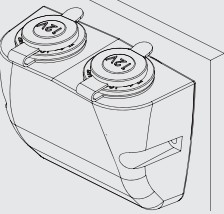
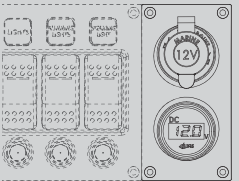
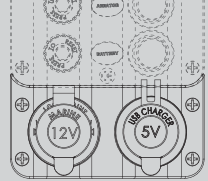
We all love to add a little bit more gadgets to our boats every now and then. That is why YIS Marine keeps introducing new sockets and accessories with standardized mounting dimension (the 1-1/8" system). All of these accessories come with the same threads and design language, and fit in the same panel cut-out, allowing them to fit each other perfectly when mounted together. See this page for coding and ordering guides

### Product Codes

Product Code	Model #	Name
P 	AS212	Marine Grade Power Outlet (See page 58)
E 	AS218	Engel Socket (See 59)
D 	AS216	Din/Merit Socket (See page 59)
U 	AS233	1 Port USB Charger (See page 64)
V 	AS234	High Current 2 Port USB Charger (See page 64)
Y 	AS237	PD 45W USB Type C Charger (See page 64)

Product Code	Model #	Name
G 	SP-BG1	Battery Gauge (Voltmeter) (See page 60)
M 	SP-BG2	2 in 1 Battery Gauge (See page 61)
C 	SP-BG3	Digital Current Meter (See page 61)
B 	SP-BG6	Battery Level Voltage Meter (See page 62)
R 	SP-BG7	Digital Voltmeter with Rainbow Battery Level Display (See page 62)
Z 	AS238	PD 45W USB 1A+1C Charger (See page 64)

### Mounting Options

Flush Mount	 <b>Flat Panel:</b> Model # + Suffix "-A" (ex. AS212-A)	 <b>Socket only:</b> Model #+ Suffix "-E" (ex. AS212-E)	 <b>2 Gang Flat Panel:</b> AS245 + Product Codes (See page 69)	
Surface Mount	 <b>L-Panel:</b> Model #+ Suffix "-C" (ex. AS212-C)	 <b>Rocket Case:</b> Model #+ Suffix "-G" (ex. AS212-G)	 <b>1 Gang "CurvMount" Case:</b> AS241 + Product Code (See page 67)	 <b>2 Gang "CurvMount" Case:</b> AS242 + Product Codes (See page 67)
Switch Panels	 <b>Curved Panel Series</b> SP3320 + Prod. Codes (See page 7)		 <b>Wave Panel Series</b> SP1220 + Prod. Codes (See page 12)	

Watch Intro Video on Youtube



## Solar Ventilator for Marine, Caravans and Motorhomes SV001

New  
Product

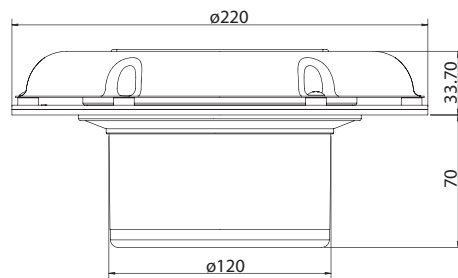
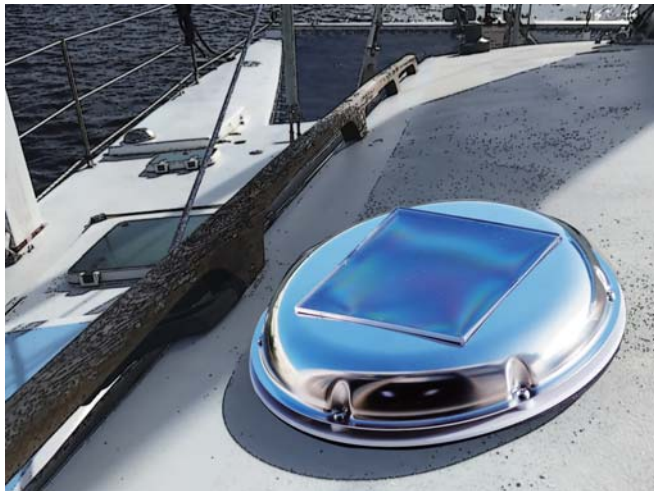


### Features

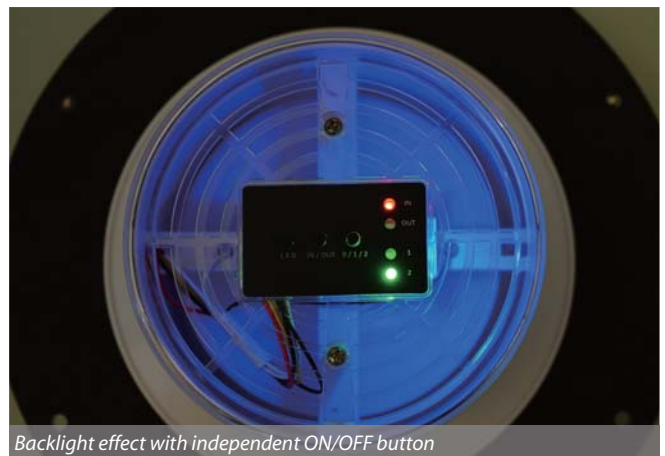
- Low profile stainless steel solar vent for boats, caravans and motorhomes
- Fully automatic operation powered by solar energy with a solar panel and rechargeable Li-ion battery
- Built-in Battery - no external power or wiring required
- Modern digital switching design with options of exhaust/intake direction and 2 different fan speed (0/OFF - 1/Weak - 2/Strong))
- Optional LED Backlight effect with ON/OFF button

### Specifications

- Solar cell capacity | Max. 1.8w / 3V / 600mA
- Fan motor operation voltage | DC 3V
- Battery | NiMH LSD AA, 1.2 V, 2400 mAh
- Capacity | Up to 25 m<sup>3</sup> air/h at full effect



Modern digital switch design



Backlight effect with independent ON/OFF button

# Automotive Electrical Accessories

## Car Battery Clips Accessories

### Lead Acid Battery Clip with Cable AE601-10



- Battery clip for lead acid battery
- UL2468 cord (8" bare wire)

### Battery Clamp to Cigarette Lighter Socket (Coil Cord) AE602-25



- Battery clamps for car batteries
- Coil Cord: 0.12/30, 12 feet
- In-line cigarette lighter socket

### Lead Acid Battery Clip with Coaxial DC Power Plug AE601-13



- Battery clip for lead acid battery
- UL2468 cord (8")
- In-line Molded DC Plug
  - Type A: ID 2.1mm OD 5.5mm
  - Type B: ID 2.5mm OD 5.5mm

### Customized battery clips accessories AE60X



- Customizable wire and end processes (See p.9 for wiring options)
- You choice of battery clips or clamps (see below)

### Lead Acid Battery Clip with Cigarette Lighter Socket AE601-15



- Battery clip for lead acid battery
- UL2468 cord (8")
- In-line cigarette lighter socket

### Universal Dry Cell Battery Tester AE603



- Easy to use, portable battery tester
- Universal tester for dry cells(D,C, AA, AAA), 9V (Transistor) batteries, and button cells
- Voltage Range: 0-2V (for dry cells & button cells) / 0-9V (for 9V batteries)

### Battery Clamp to Cigarette Lighter Socket (Straight Cord) AE602-15



- Battery clamps for car batteries
- Cable Spec: SPT-1, 18AWG, 1 feet
- In-line cigarette lighter socket

#### Available Battery Clips / Clamps:

<p><u>DC308</u></p> <p>20A / 65mm</p>	<p><u>DC309</u></p> <p>10A / 53mm</p>	<p><u>DC310</u></p> <p>30A / 75mm</p>
<p><u>DC312</u></p> <p>30A / 75mm</p>	<p><u>DC313</u></p> <p>15A / 51mm</p>	<p><u>DC314</u></p> <p>30A / 70mm</p>

## Molded Trailer Connectors

### Molded Flat Trailer Connector Pair - 2 Poles with Cable AM701



- 1 x male & 1 x female trailer connector set
- 2 contacts male & female
- Cable width: 18AWG
- Customizable cable length
- Moisture-proof molded design
- Connectors with grip for tight and secure connection
- Connectors available in pair, or separately

### Molded Stacked Trailer Connector Pair - 5 Poles with Cable AM704



- 1 x male & 1 x female trailer connector set
- 5 contacts male & female
- Cable width: 18AWG
- Customizable cable length
- Moisture-proof molded design
- Connectors with grip for tight and secure connection
- Connectors available in pair, or separately

### Molded Flat Trailer Connector Pair - 3 Poles with Cable AM702



- 1 x male & 1 x female trailer connector set
- 3 contacts male & female
- Cable width: 18AWG
- Customizable cable length
- Moisture-proof molded design
- Connectors with grip for tight and secure connection
- Connectors available in pair, or separately

### Molded Stacked Trailer Connector Pair - 6 Poles with Cable AM705



- 1 x male & 1 x female trailer connector set
- 6 contacts male & female
- Cable width: 18AWG
- Customizable cable length
- Moisture-proof molded design
- Connectors with grip for tight and secure connection
- Connectors available in pair, or separately

### Molded Flat Trailer Connector Pair - 4 Poles with Cable AM703



- 1 x male & 1 x female trailer connector set
- 4 contacts male & female
- Cable width: 18AWG
- Customizable cable length
- Moisture-proof molded design
- Connectors with grip for tight and secure connection
- Connectors available in pair, or separately



# Marine Grade Switch

Water-resistant Sealed Rocker Switches (C-7 Series)

Water-resistant Rocker Switches (C-6 Series)

Marine Toggle Switch with Plastic Handle Bar

Heavy Duty Brass Toggle Switch Series

Large Current (20A) Anti-Vandal Stainless Steel Push-Button Switch with LED Ring

Anti-Vandal Stainless Steel Push-Button Switch with LED Ring

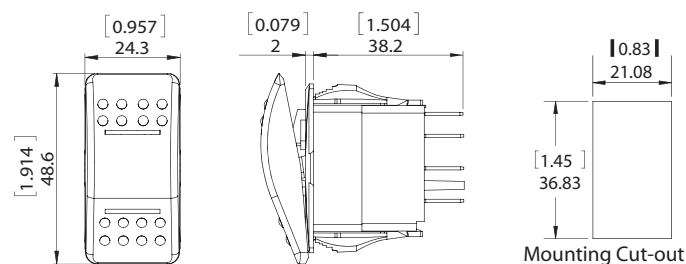
Starter Push-Button Switch

# Marine Grade Switches

Weather-proof switches specially designed for outdoor environments

## IP67 Water-resistant Sealed Rocker Switch C-7 Series

PATENTED  
TW,CH



Product Series		
Product ID	Type	Switch Function
C-7124	SPST	(ON)-OFF
C-7137	SPDT	(ON)-OFF-(ON)
C-7144	DPST	(ON)-OFF
C-7167	DPDT	(ON)-OFF-(ON)
C-7231R	SPST	ON-OFF
C-7251R	DPST	ON-OFF
C-7243RR	SPDT	ON-OFF-ON
C-7273RR	DPDT	ON-OFF-ON
C-7246RR	SPDT	(ON)-OFF-ON
C-7276RR	DPDT	(ON)-OFF-ON
C-7272RR	DPDT	ON-ON

※ Product ID are for Switch Body only, for full switch with actuators, add suffix like "-H1W" (see Website)



## Features

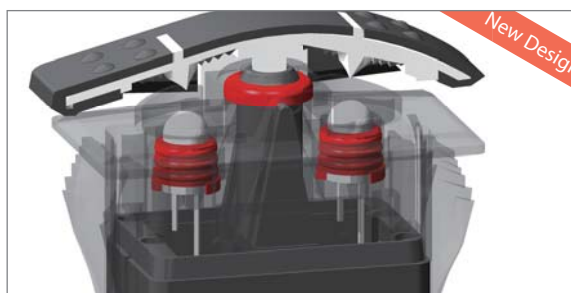
- Fit popular Contura style switch mounting
- Interchangeable actuators with various options
- Available in customized switch function, illuminating and other configurations
- LED illuminated (DC12V/ 24V dual voltage)
- 6C Terminals (0.250" Quick Connect Terminals)
- IP67: Water proof even under temporary water immersion
- Exclusive advanced water-tight sealing design (Patented)



IP67 Water proof even under temporary water immersion

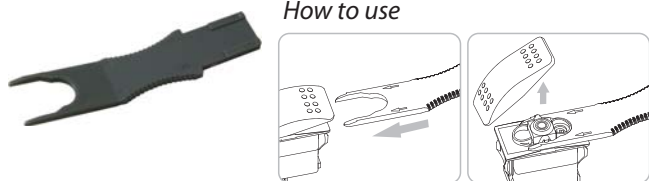
## Specifications

- Rating | DC 12V 20A 24V 10A
- Electrical Life | 20,000~50,000 switch function dependent
- Note | IP67 Patented in TW CH



Advanced water-tight sealing design (Patented)

## Actuator Removal Tool for C-7 Switches C7-RM-1




- Used to change C-7 switch actuators
- Anti-slip grip design

## Hole Cover C7-HC-1



**Actuator for C-7 Switch**  
C7A-XXX


※ Check coding guide online:   
[http://tiny.cc/C7\\_Actuator](http://tiny.cc/C7_Actuator)



- Available stand-alone without switch body
- Available in various colors, lens configurations and printing options
- Lens color available in white, red, amber, green and blue
- Customizable silkscreen printing or label stickers on square lens available

**Laser Etched Contour C-7 Actuator**  
C-7251XYS ON-OFF  
C-7254XYS (ON)-OFF

PATENTED  
TW,CH

※ Check full patterns online:   
[http://tiny.cc/C-7\\_Laser\\_Actuators](http://tiny.cc/C-7_Laser_Actuators)



- Premium feeling and backlight effects
  - YIS exclusive trendy actuator shape (Patented)
  - Laser etching technology allowing even very complicated patterns
  - Illuminates on both symbol and label (label illumination configurable to be always on or power indication)
  - 100% customizable with low MoQ
- ※ X Stands for Symbol illumination LED color, and Y for Label LED Color (X is ON only when switch is ON; Y is configurable externally.)

**Mounting Panel for C-7 Series**  
C7-PA-1 (End Frame)  
C7-PA-2 (Middle Frame)



- Allows mounting of multiple switches together
- Cascade as many switches as you like
- Push-in installations

**Label Stickers for C-7 Switch with square lens**  
C7-ST-1



- 60 pcs assorted label stickers
- For use with Actuators with white square lens C7A-H3W
- Sold separately

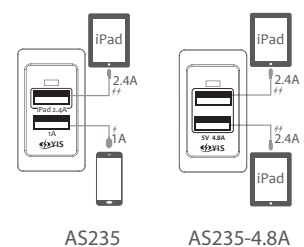


**Digital Battery Gauges – Switch Mount**  
SP-BG4 Digital Voltmeter  
SP-BG5 Digital Voltage & Current Dual-meter



※ Fit popular Contura style switch mounting (See page 56-57)

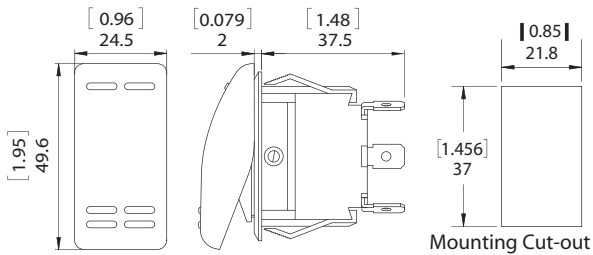
**High Power 2 Port USB Charger – Switch Mount**  
AS235 (2.4A + 1A)  
AS235-4.8A (2.4A + 2.4A)



※ Fit popular Contura style switch mounting (See page 60)



## IP55 Water-resistant Rocker Switch C-61/C-62 Series



Product Series		
Product ID	Type	Switch Function
C-6124P	SPST	(ON)-OFF
C-6136P	SPDT	(ON)-OFF-ON
C-6137P	SPDT	(ON)-OFF-(ON)
C-6144P	DPST	(ON)-OFF
C-6166P	DPDT	(ON)-OFF-ON
C-6167P	DPDT	(ON)-OFF-(ON)
C-6231P	SPST	ON-OFF
C-6253P	SPDT	ON-OFF-ON

## Features

- Robust design to withstand outdoor environments
- Easy-to-press, stylish curved actuator design
- Available in various switch functions and illuminating configurations
- PC Terminals (0.250" Quick Connect Terminals) or Screw Terminals
- LEDs or Lamps available for illuminated C-62 series
- IP55 : Water projected in jets from any direction shall have no harmful effects

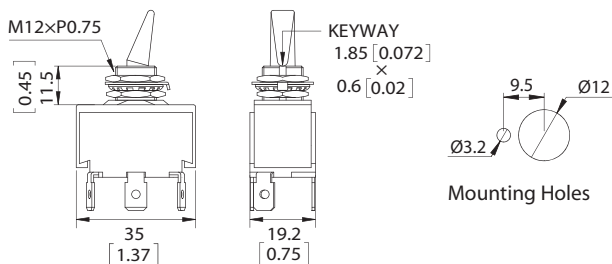
## Specifications

- Rating | DC 12V 16A 24V 10A
- Electrical Life | 20,000 make and break cycles at full load

## Mounting Panel for C-6 Series



## Toggle Switch C-65/C-66 Series



## Features

- Available in various switch functions, illuminating and other configurations
- Current rating up to 16A (@12V DC)
- Self-illuminating handle bar (C-66 only)
- Heat-resistant bakelite switch body
- Available in PC (Quick) Terminals or Screw Terminals
- Hidden color lens allowing up to three different illuminating colors (for illuminated C-66 series)

## Specifications

- Rating | DC 12V 16A 24V 10A
- Electrical Life | 20,000 make and break cycles at full load

Product Series		
Product ID	Type	Switch Function
C-6521P	SPST	ON-OFF
C-6524P	SPST	(ON)-OFF
C-6537P	SPDT	(ON)-OFF-(ON)
C-6631P ☀	SPST	ON-OFF
C-6634P ☀	SPST	(ON)-OFF
C-6647P ☀	SPDT	(ON)-OFF-(ON)

### Rubber Boot C6-RB-2



- Water-proof, dust proof rubber boot
- Screw Nuts: M12
- Available in clear/black color

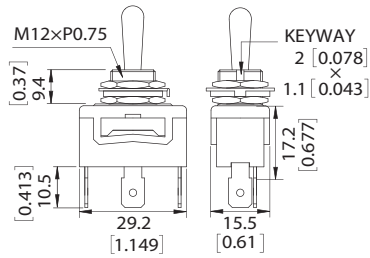
C6653L-CRG: Tri-color illuminated switch ON-OFF-ON



### Heavy-Duty Toggle Switch T-13 Series



T-1325P / T-1327P



### Features

- Current rating up to 15A (@12V DC)
- Robust and durable toggle design
- Available in PC (Quick) Terminals or Screw Terminals
- Series-specific nameplates and rubber boot available
- Short Body design saves mounting space (for T-1331 series)

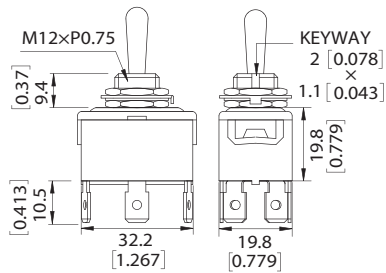
### Specifications

- Rating | DC 12V 15 A 24V 10A
- Electrical Life | 50,000 make and break cycles at full load

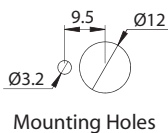
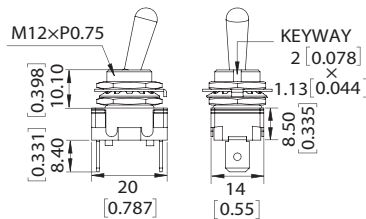
Product Series		
Product ID	Type	Switch Function
T-1325P	SPST	ON-OFF
T-1325PM	SPST	(ON)-OFF
T-1327P	SPDT	ON-OFF-ON
T-1327PM1	SPDT	(ON)-OFF-ON
T-1327PM2	SPDT	(ON)-OFF-(ON)
T-1330P	DPDT	ON-OFF-ON
T-1331P	SPST	ON-OFF
T-1331PM	SPST	(ON)-OFF



T-1330P



T-1331P



### Rubber Boot T-RB-3



- Water-proof, dust proof rubber boot
- Screw Nuts: M12
- Available in clear/black color

Watch Intro Video on Youtube



## Large Current (20A) Anti-Vandal Stainless Steel Push-Button Switch with LED Ring

PB-44xx Series - with LED light ring  
PB-45xx Series - with backlight labels

PATENTED  
US, TW, CH

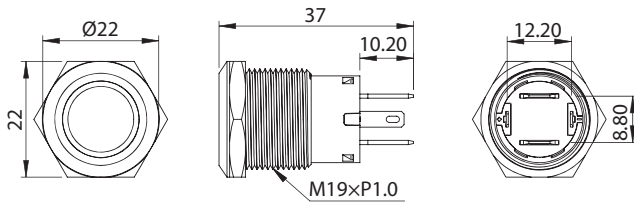


PB4411TB

PB4411TR

PB4511TB

PB4511TR



Product Series		
Product ID	Voltage Rating	Switch Function
PB-4411TL-X	DC 12V	ON-OFF (Latching)
PB-4511TL-X		
PB-4411T-X	DC 12V	(ON)-OFF (Momentary)
PB-4511T-X		
PB-4411TL-X-24V	DC 24V	ON-OFF (Latching)
PB-4511TL-X-24V		
PB-4411T-X-24V	DC 24V	(ON)-OFF (Momentary)
PB-4511T-X-24V		

※ X Stands for Symbol illumination LED color.  
R : Red / B : Blue / W : White / G : Green

## Features

- Market-leading 20A Capability (No more relays!)
- Same compact size as mainstream anti-vandal switches in market (PB-42 Series)
- Durable CNC Stainless Steel (SS316) housing
- 0.250" Quick connect terminals
- LED light rings configurable to be push-on (power indication) or always on (back lighting)
- IP67 – protected even under temporary water immersion

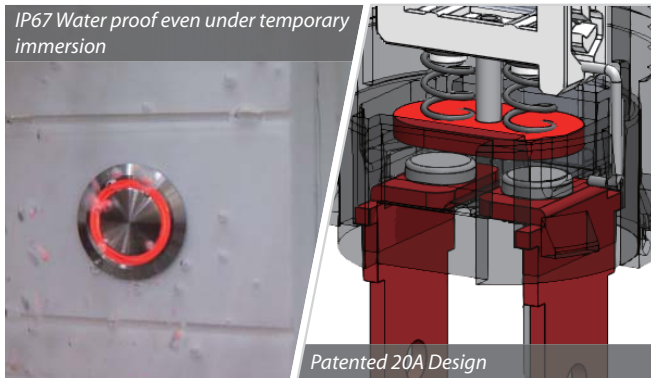
### Additional Features for PB45xx

- Backlight button version
- 5 pcs PC membrane label stickers included
- Additional 40pcs assorted label stickers sold separately (PB-ST-1)



5 pcs labels included with PB45xx series

IP67 Water proof even under temporary immersion



## Label stickers for PB45xx Series

PB-ST-1



- 40 pcs assorted label sticker
- Scratch resistant, water-proof PC membrane material
- Customized version also possible
- Back printing for better durability

## Cable set pre-assembled for PB44/PB45xx Series

PB-CA-1



PB-CA-1-24V



- Cable set pre-assembled in factory or included as accessories
- Jumper cable allowing configuration of LED Ring to be "Push ON" or "Always ON"
- UL1015 18AWG capable of carrying 20A current
- 24V Negative cable kit allows 12V switch to be applied on 24V applications
- Cable length: 250mm (Customizable)

## Specifications

- Rating | DC 12V 20A / DC 24V 10A
- Electrical Life | > 20,000 cycles
- Operation Temperature | -20°C ~ +55°C
- Note | Patented in Taiwan(M558458) & China(ZL2018202565058) & USA(US10297404B1)



## Anti-Vandal Stainless Steel Push-Button Switch with LED Ring

PB-42xx Series



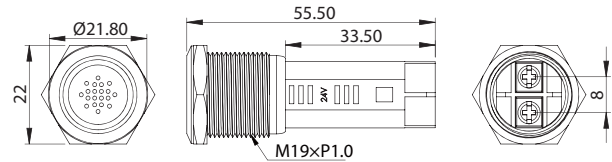
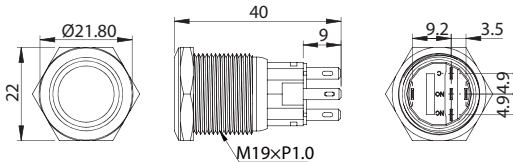
PB-4212T-B



PB-4212T-R



PB-BZ-1R



Product Series			
Product ID	Voltage Rating	LED Color	Switch Function
PB-4212TL-R	DC 12V	Red	ON-OFF (Latching)
PB-4212T-R	DC 12V	Red	(ON)-OFF (Momentary)
PB-4212TL-B	DC 12V	Blue	ON-OFF (Latching)
PB-4212T-B	DC 12V	Blue	(ON)-OFF (Momentary)
PB-4212TL-R-24V	DC 24V	Red	ON-OFF (Latching)
PB-4212T-R-24V	DC 24V	Red	(ON)-OFF (Momentary)
PB-4212TL-B-24V	DC 24V	Blue	ON-OFF (Latching)
PB-4212T-B-24V	DC 24V	Blue	(ON)-OFF (Momentary)
PB-BZ-1R	DC 12V	Red/flashing	Buzzer

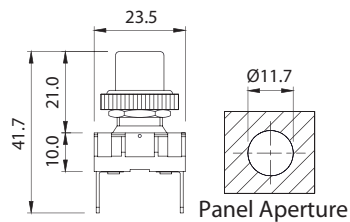
- Up to Double Pole NO/NC/COM Terminals (5 or 8 Terminals)
- Durable stainless steel housing and button
- LED light rings configurable to be push-on (power indication) or always on (back lighting).
- IP67 – protected against even under temporary water immersion (IP50 for the Buzzer PB-BZ-1R)

## Specifications

- Rating | DC 12V 5A / DC 24V 5A
- Electrical Life | > 50,000 cycles
- Operation Temperature | -20°C ~ +55°C

## Starter Push-Button Switch

PB-4071



Panel Aperture

## Features

- Quick terminal blades
- High current push button switch
- Water-resistant cap available
- Rating: AC 125V 15A / 240V 10A

## Rubber Boot

PB-RB-1





# LED Lights for Boats

YIS Marine LED Lights for Boats

WaveLED Marine LED Lights Series

WaveLED Reading Light Series

LED Courtesy Lights

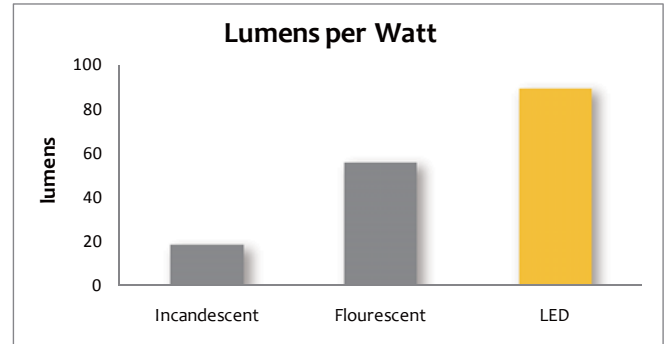
# YIS Marine LED Lights for Boats

## Next Generation of Marine Lighting

LED is the next generation of lighting. With its lower power consumption, vibration-proof and better durability comparing to traditional halogen lights, the LED lights are an ideal solution on the board. The performance of LED lights, however, is based heavily on their electronic circuit design, which is very different from traditional luminaire using incandescent lights. With more than 20 years of expertise in automotive electronics designing and manufacturing, YIS Marine is able to provide high performance LED light products with competitive costs.

### Low Power Consumption

Low power consumption means longer cruising time on the sea. As of 2015, the latest LED technology can generate around 80-100 lumens per watt, while the traditional incandescent lights generate less than 20 lumens per watt. In fact, EU has banned use of incandescent lights since 2012, and planned to ban the halogen lights due to their low lighting efficiency.



### Life & Durability



Typically LED's has a lifespan for about 20,000 – 50,000 hours, more than 20 times of that of an incandescent light. LED also has no filaments to break, and thus are very vibration proof. Most of YIS Marine lights are built in one part without replaceable lamps, and some outdoor models are fully sealed to ensure great durability against moisture and shocks.

### Electronic Circuit Design



Electrical systems on the boats are very complex and sophisticated systems. DC power supply on board can vary from 10 – 15V under different circumstances (for a 12V system). That's why almost all of our LED lights come with Constant-Current technology that keeps the LED output stable despite the input voltage variation. As radio communication is crucial on the boats, all of our LED lights also have EMI suppression design and approved by the EU standards  $\text{CE}$ .

### Cost

The cost of LED has been dropping consistently each year. This, combining with its steady growth in lighting efficiency, makes LED lights become more and more suitable to replace traditional incandescent lights used on the boat. YIS Marine re-design LED lights on board by removing or modifying parts that were necessary for halogen lights but no longer needed for LED lights. By designing lights exclusively for the LED technology, we are able to build cost-effective LED lights with much better performance than traditional halogen lights.

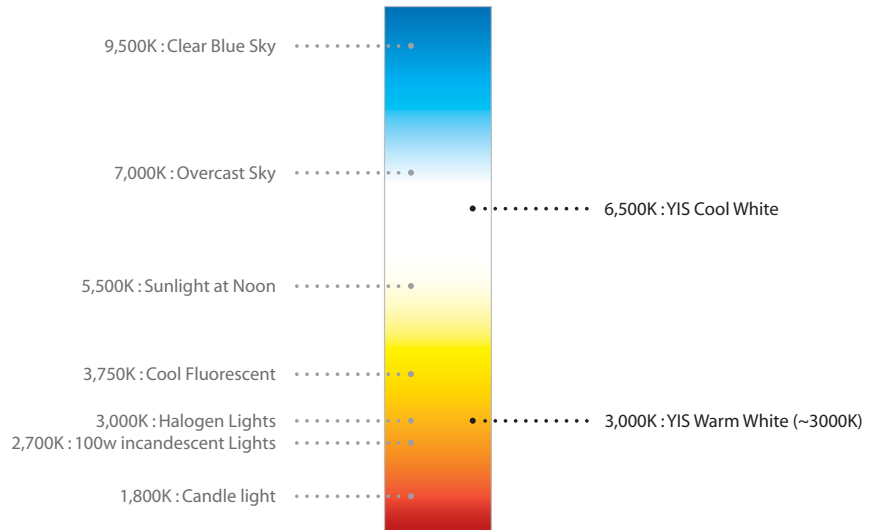
## LED Terminologies

LED is the next generation of lighting. With its lower power consumption, no heat radiation and better durability comparing to traditional halogen lights, the LED lights are an ideal solution on the board. Here is some of the important terminologies of LED lights:

### Color Temperature (Unit: K (Kelvin))

Color temperature is conventionally stated in Kelvin (K), the unit of absolute temperature. The color temperature is the temperature that makes an ideal black body radiator radiate comparable hue as the light source.

Usually, color temperatures over 5,200K are called cool colors, color temperature below 3500K are called warm colors.



### Luminous Flux (Unit: lm(lumens) )

The total amount of light emitted from a lamp. The higher lumen is, the more intense the light output. Luminous Flux does not vary with distances.

### Illuminance (Unit: Lux )

Illuminance is the total luminous flux falling on a surface. It shows the intensity of the incident light. Mathematically,

$$\text{Illuminance (Lux)} = \text{Lumens (lm)} / \text{area(m}^2\text{)}$$

where area is the illuminated area of the light source. The farther the surface are away from the source, the larger the area would be, and hence the smaller illuminance, while the Luminous Flux remains the same.

Example:

If a light fixture with 100 lumens lights up an area of 1 square meter, the Illuminance would be 100 lux. If, however, the same fixture lights up 10 square meters (at a farther place), the illuminance would be reduced to only 10 lux.

## Types of LEDs

### SMD LEDs (Surface Mounted Devices)



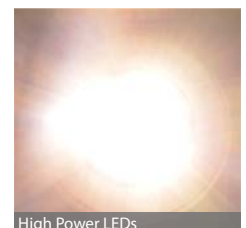
SMD LEDs are bright and economical LEDs that are mounted on PC Boards and hence are easy for mass production. With the SMD LED becoming brighter and brighter, they have become mainstream of marine lights.



### High Power LEDs



High power LEDs use from 1 watts to as much as 500 watts in a single package and thus has the ability to provide unparalleled brightness within limited area comparing to SMD LEDs. The heat dissipation issue is an important factor in designing High-Power LED lights. YIS Marine utilizes all-aluminum LED holders/enclosures for our High Power LED product lines.



Watch Intro Video on Youtube



# WaveLED Marine LED Lights Series

Unique Marine Wave-shaped LED Lights from YIS

## WaveLED Ceiling Light

LC004W

### WaveLED Ceiling Light - Dual Color

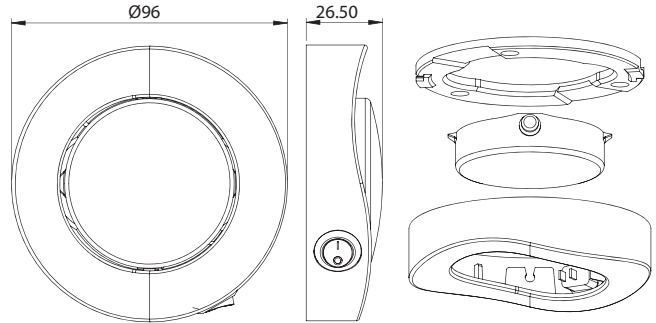
LC004WB / LC004WR



LC004W-W



LC004WB-S / LC004WR-S (Dual Color)



## Features

- Unique wave shape enclosure design
- Easy-to-install bayonet latch design
- Matte surface allows soft and smooth light output
- Completely sealed LED Module
- Built-in ON-OFF switch
- Adjustable light angle
- Constant-Current technology design ideal for marine lighting
- DC 12V-24V dual voltage rating
- 2 different enclosure colors available

### Additional Features for LC004WB/LC004WR

- White/Blue or White/Red dual light color
- Cost-effective built-in ON-OFF-ON switch

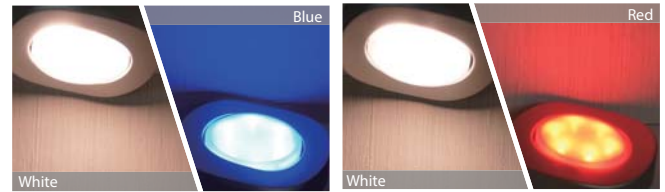
## Specifications

- Lighting Source | SMD LED x 6 (120lm)
- Color Temperature | 2900-3200K (Warm White)
- Voltage Rating | DC 12-30V
- Power Consumption | 1.5W
- Note |

### Dual Color LC004WB / LC004WR

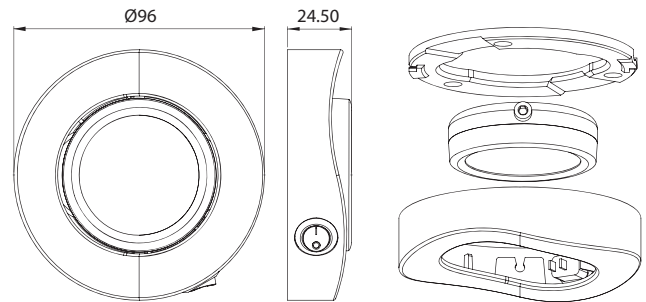
LC004WB

LC004WR



## WaveLED Ceiling Light / Spotlight with High Power LED

LC003-3x1W



## Features

- Unique wave shape enclosure design
- Easy-to-install bayonet latch design
- Specially designed optical lens provide bright and focused spot light
- 3 x 1 Watt super bright High Power LED
- Built-in ON-OFF switch
- Adjustable light angle
- DC 12V-24V dual voltage rating

## Specifications

- Lighting Source | High Power LED (1W) x 3
- Color Temperature | 3000-3300K (Warm White)
- Voltage Rating | DC 12-30V
- Power Consumption | 3.24W
- Note |

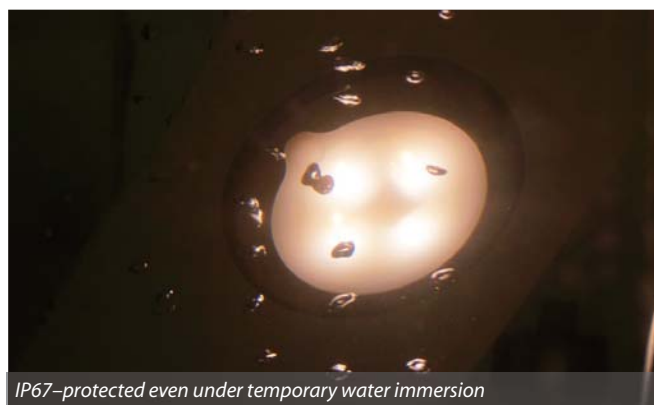
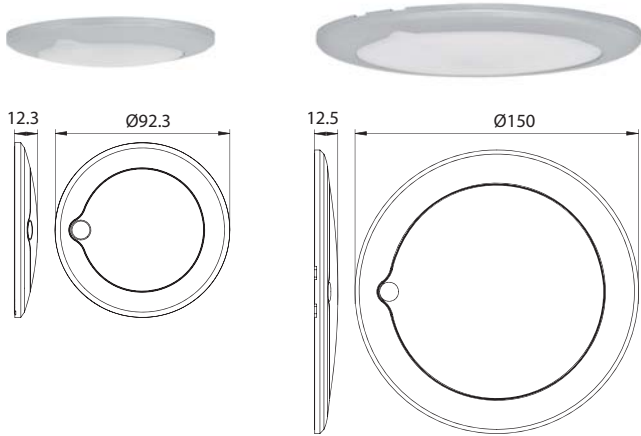




## DishLED Dimmable Ceiling Light with Touch Button

LC005-95

LC005-150



**LC005** are ultra-thin ceiling lights with dimmable function and a low profile touch button. They have the same un-intrusive like outlook as the recessed light fixtures yet are also as easy to install as any other surface mount ceiling lights. It can be turned on/off or dimmed linearly with a simple touch, and the memory function allows it to memorize previous brightness level when turned back on. The cut-off memory feature allows multiple DishLEDs to be controlled centrally by a single switch. The completely sealed design made it perfect for use in marine applications (IP67).

## Features

- Ultra-thin surface mount (only 12mm in thickness)
- Low profile touch button
- Linear (non-stop) dimming allowing brightness adjustment to any desirable level (10-100%)
- Memory feature – remembering previous brightness level when turned back on
- Power cut-off memory feature allowing central control of several DishLED lights
- Constant-current technology design ideal for marine lighting
- Completely sealed (IP67) – protected even under temporary water immersion

## Specifications

### LC005-95

- Light Source | Super Bright SMD LED x 4 (200lm)
- Color Temperature | 3000 – 3300K (Warm White)
- Voltage Rating | DC 9 – 30V (Multi-volt)
- Power Consumption | 2.4W
- Note | IP67 **CE**

### LC005-150

- Light Source | Super Bright SMD LED x 12 (400lm)
- Color Temperature | 3000 – 3300K (Warm White)
- Voltage Rating | DC 9 – 30V (Multi-volt)
- Power Consumption | 4.5W
- Note | IP67 **CE**

Watch Intro Video on Youtube



# WaveLED Marine Reading Light Series

Cost-effective Reading Lights with Trendy Design



## Description

The WaveLED reading light series are modern design, good performance and cost-effective LED reading lights. While High Power LED version provides unparalleled focused light output, the SMD version can provide wider angle and smoother output with much lower cost. There is also a dimmable SMD LED version with touch button. With economical plastic housing, built-in switches, and its easy-to-install feature, this series is ideal for sale in the aftermarket.

## Features

- Unique wave shaped base design
- New screw-free easy-to-install bayonet catch design
- Built in switch for easy wiring
- Adjustable light angle
- 3 Versions available: high power LED, cost-effective SMD LED, and dimmable touch button version



## 3 Versions of WaveLED reading lights



### High Power LED with Condenser Lens

High power LED provides unparalleled brightness through the ultra clear condenser lens, the high power LED version can light up as far as 5 meters away, suitable for reading or spotlight applications.

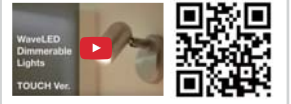
### SMD LEDs with matte lens

SMD LED version is a wide angle, lower cost alternative. This version is also more suitable for reading at a closer range.



### Dimmable SMD LED version with TOUCH button

SMD LED version with additional dimming feature and water-resistant touch button design.



## WaveLED Reading Light

LR001-1W

## WaveLED Reading Light (SMD Version)

LR001-SMD

## WaveLED Dimmable Reading Light with Touch Button

LR001-TOUCH



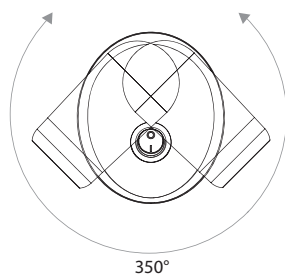
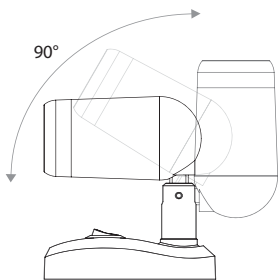
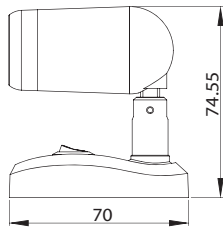
LR001-1W



LR001-SMD



LR001-TOUCH



## Features

- Compact size with powerful output
- New screw-free bayonet catch wave base design
- 350° rotatable horizontally and 90° vertically leaving no blind spot
- Constant-Current technology design ideal for marine lighting
- Dual Voltage rating for both 12V & 24V systems

### Additional Feature for LR001-TOUCH

- Linear (non-step) dimming allowing brightness adjustment to any desirable level
- Memory feature - remembering previous brightness level when turned back on
- Low profile touch button design

## Specifications

### LR001-1W(High Power LED)

- Lighting Source | High Power LED (1W) x 1 with condenser lens
- Color Temperature | 3000-3300K (Warm White)
- Voltage Rating | DC 9-30V
- Power Consumption | 1.32W
- Note | **CE**

### LR001-SMD / LR001-TOUCH

- Lighting Source | 8 super bright SMD LED (160lm)
- Color Temperature | 2900-3200K (Warm White)
- Voltage Rating | DC 10-30V
- Power Consumption | 1.68W
- Note | **CE**

## WaveLED Gooseneck Reading Light

LR011-1W-130 / LR011-1W-330

## WaveLED Gooseneck Reading Light (SMD Version)

LR011-SMD-130 / LR011-SMD-330

## WaveLED Dimmable Gooseneck Reading Light with Touch Button

LR011-TOUCH-130 / LR011-TOUCH-330



LR011-1W-130



LR011-1W-330



LR011-SMD-130



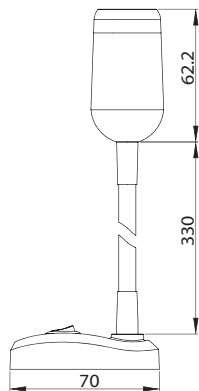
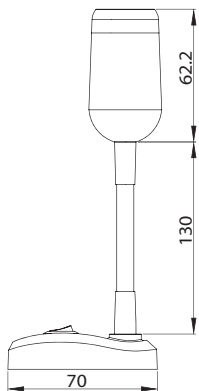
LR011-SMD-330



LR011-TOUCH-130



LR011-TOUCH-330



## Features

- Compact size with powerful output
- New screw-free bayonet catch wave base design
- Bendable gooseneck allows more freedom of light positions
- Constant-Current technology design ideal for marine lighting
- Dual Voltage rating for both 12V & 24V systems

### Additional Features for LR011-TOUCH

- Linear (non-step) dimming allowing brightness adjustment to any desirable level
- Memory feature – remembering previous brightness level when turned back on
- Low profile touch button design

## Specifications

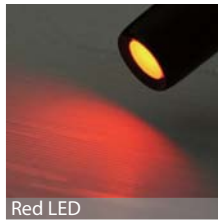
### LR011-1W(High Power LED)

- Lighting Source | High Power LED (1W) x with condenser lens
- Color Temperature | 3000-3300K (Warm White)
- Voltage Rating | DC 9-30V
- Power Consumption | 1.32W
- Note |

### LR011-SMD / LR011-TOUCH

- Lighting Source | 8 super bright SMD LED (160lm)
- Color Temperature | 2900-3200K (Warm White)
- Voltage Rating | DC 10-30V
- Power Consumption | 1.68W
- Note |

**WaveLED Dual Color Chart Reading Light**  
LR012-330



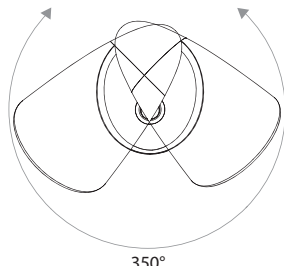
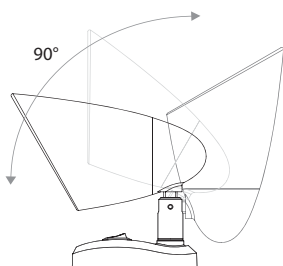
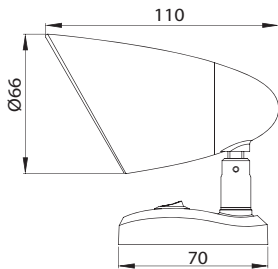
**Features**

- New screw-free bayonet catch wave base design
- Dual Light Colors: Bright white light for daytime; Red LED light for night vision
- Built-in ON-OFF-ON switch
- Bendable gooseneck allows more freedom of light positions
- Constant-Current technology design ideal for marine lighting
- Dual Voltage rating for both 12V & 24V systems

**Specifications**

- Lighting Source | White: 8 super bright SMD LED (160lm) / 1 Red 5050 SMD LED
- Color Temperature | 6500K (White)
- Voltage Rating | DC 12V-30V
- Power Consumption | 1.56W
- Note | **CE**

**WaveLED Cabin / Reading Light**  
LR002



**Features**

- New screw-free bayonet catch wave base design
- Economical, light weight PolyCarbonate shielding
- Replaceable G4 LED bulbs
- Built-in ON-OFF switch
- 350° rotatable horizontally and 90° vertically leaving no blind spot

**Specifications**

- Lighting Source | G4 LED Bulbs 2W (200-230lm)
- Color Temperature | 2800-3200K (Warm White)
- Voltage Rating | DC 10 - 30V
- Current Consumption | 2W
- Note | **CE**

**Replaceable G4 LED Bulbs for LR002**  
LR-G4-2W



Watch Intro Video on Youtube



## LED Reading Light with USB Charging Socket

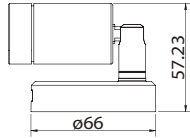
LR003

LR013-130

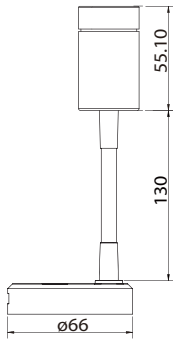
LR013-330



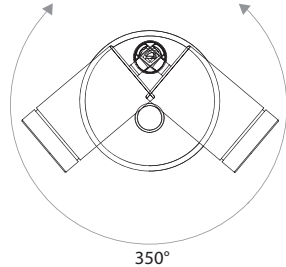
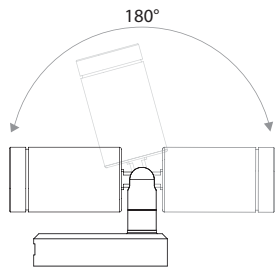
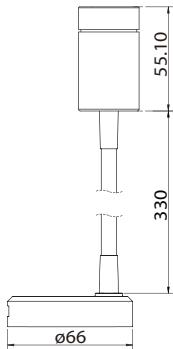
LR003



LR013-130



LR013-330



## Features

- Chrome plated plastic housing for premium feeling with low cost
- Compact size with powerful output
- Convenient 1 port 2.4A USB Charge socket on base (Compatible with latest iPad)
- Screw-free bayonet catch base design
- Low profile touch button design
- Constant-Current technology design ideal for marine lighting
- Dual voltage rating for both 12V & 24V system

## Specifications

- Lighting Source | 4 x super bright SMD LED (160lm)
- Color Temperature | 3000 - 3300K (Warm White)
- Voltage Range | DC 10V - 30V
- Power Consumption | 1.68W (USB not charging) 15.5W Max (USB Charging)
- Note | **CE**



Convenient USB Charging Port on Light Base

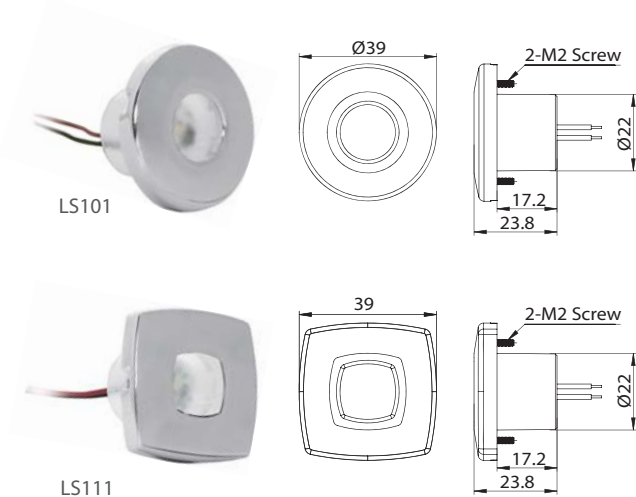
\* This product is under development, all specifications and features are subject to change. Contact sales for final specs.

# Marine LED Courtesy Lights

## LED Step Lights / Courtesy Light with Stainless Steel Faceplate

LS101(Round)


LS111(Square)

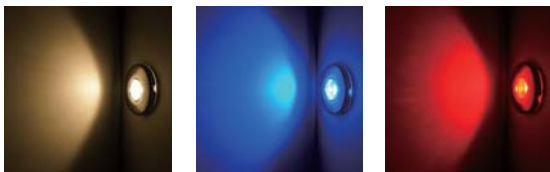


## Features

- Polished marine grade stainless steel (SAE 316) faceplate
- Completely sealed – completely waterproof even undertemporary water immersion (IP67)
- Compact size and easy to install
- Matte Surface allowing soft and smooth light output
- LED Colors available in Warm White, Blue, Red

## Specifications

- Lighting Source | SMD LED
- Voltage Rating | DC 12V
- Power Consumption | 0.25W
- Note | IP67 



LS101W

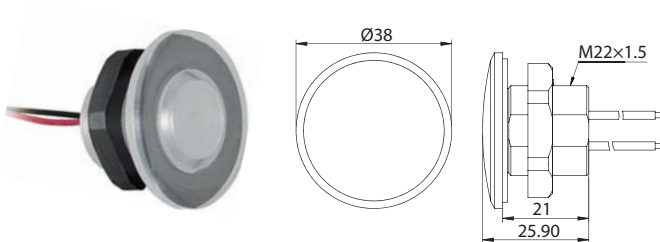
LS101B

LS101R

## Economical LED Step Lights / Courtesy Light

LS102


Best Seller

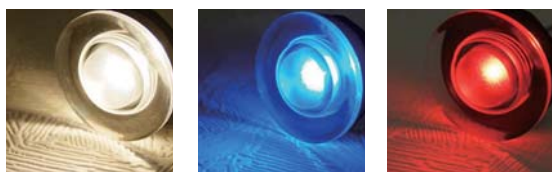


## Features

- Completely sealed – completely waterproof even undertemporary water immersion (IP67)
- Compact size and easy to install
- Matte Surface allowing soft and smooth light output
- LED Colors available in Warm White, Blue, Red
- Also applicable as live well bait tank light

## Specifications

- Lighting Source | SMD LED
- Voltage Rating | DC 12V
- Power Consumption | 0.25W
- Note | IP67 



LS102W

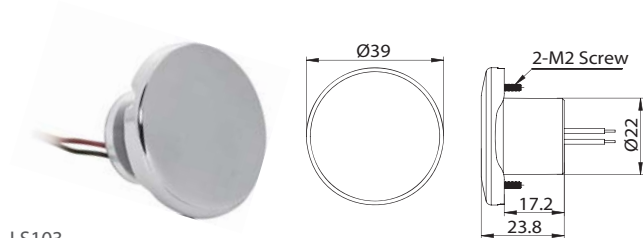
LS102B

LS102R

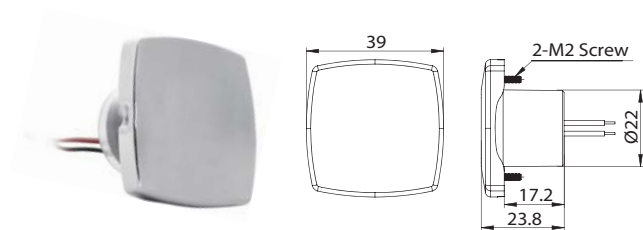
## LED Step Light / Courtesy Light with Single or Double Light Rays

LS103 (Round)

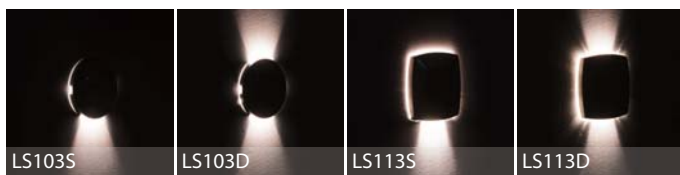
LS113 (Square)



LS103



LS113



LS103S

LS103D

LS113S

LS113D

## Features

- Polished marine grade stainless steel (SAE 316) faceplate
- Single or Double light rays provides elegant illumination
- Completely sealed – completely waterproof even undertemporary water immersion (IP67)
- Compact size and easy to install
- Available in warm white or cold white color
- Dual voltage rating for both 12V & 24V systems

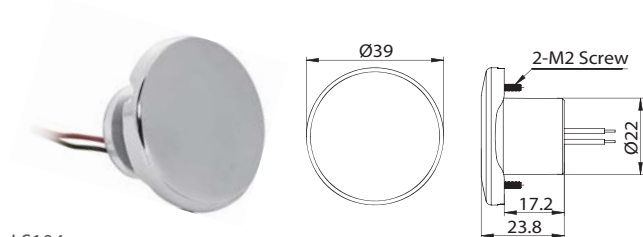
## Specifications

- Lighting Source | SMD LED
- Color Temperature | 2900-3200K(Warm White) / 6500K (Cold White)
- Voltage Rating | DC 10-30V
- Power Consumption | 0.24W(Single Ray) / 0.36W (Double Ray)
- Note | IP67

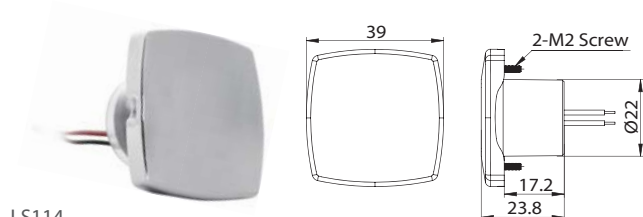
## LED Step Light / Courtesy Light with Light Ring

LS104 (Round)

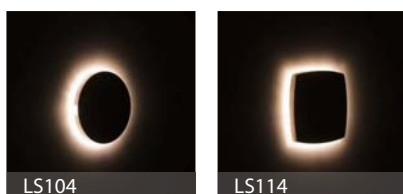
LS114 (Square)



LS104



LS114



LS104

LS114

## Features

- Polished marine grade stainless steel (SAE 316) faceplate
- Sun eclipse like light ring effects
- Completely sealed – completely waterproof even undertemporary water immersion (IP67)
- Compact size and easy to install
- Available in warm white or cold white color

## Specifications

- Lighting Source | SMD LED
- Voltage Rating | DC 12V
- Power Consumption | 0.25W
- Note | IP67



# Blister Package for Retail Display



Almost all of YIS Marine's quality products come with blister package ready for retail display. Designed for the aftermarket, our blister package typically includes customizable label stickers, instruction manual and installation accessories, everything consumers need to install the products themselves. All blisters packages are made in Taiwan with good quality that matches the products within them.

In addition to supplying our quality products, we also provide marketing support like blister card design, instruction manual or even support for customer's catalogue design. Customer's logo or blister cards are also possible.

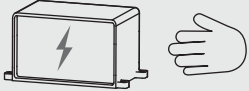
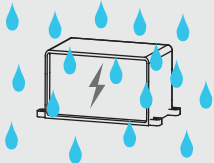

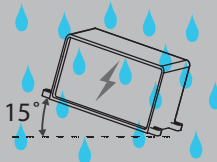
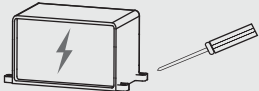
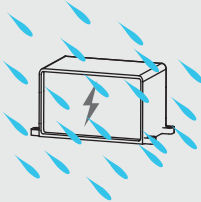
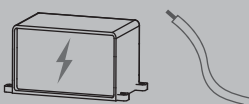
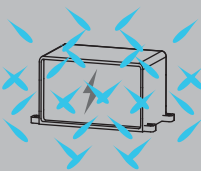
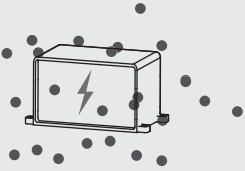
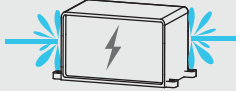
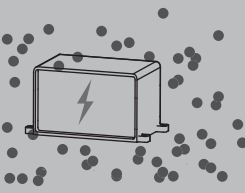
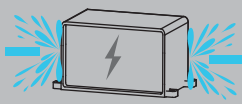
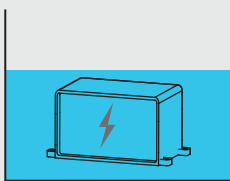
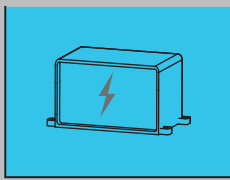


Typical contents of products in YIS Marine switch panel package

# Appendix: IP Rating Guide

The IP (Ingress Protection) Rating refers to the different levels of protection a product provides against foreign objects (such as fingers, tools, wires and dust) and water ingress.

IP    
(1) (2)

(1) Protection Against Solids		(2) Protection Against Water	
1	 <p>Protected against solid objects greater than 50mm, such as a hand.</p>	1	 <p>Protected against vertically falling drops of water. Limited ingress permitted.</p>
2	 <p>Protected against solid objects greater than 12.5mm, such as a finger.</p>	2	 <p>Protected against vertically falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.</p>
3	 <p>Protected against solid objects greater than 2.5mm, such as a screwdriver.</p>	3	 <p>Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted.</p>
4	 <p>Protected against solid objects greater than 1.0mm, such as a wire.</p>	4	 <p>Protected from water splashed from any direction. Limited ingress permitted.</p>
5	 <p>Dust Protected: Limited ingress of dust permitted. Dust ingress should not affect the function of the equipment.</p>	5	 <p>Protected against jets of water. Limited ingress permitted.</p>
6	 <p>Dust Tight: No ingress of dust.</p>	6	 <p>Protected from powerful water jets from any direction. Limited water ingress permitted.</p>
		7	 <p>Protected against the effects of temporary immersion (30 mins) in water between 15cm to 1m.</p>
		8	 <p>Protected against the effects of long period immersion in water under pressure.</p>

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