

Battery Management

BATTERY ISOLATION

Surepower Industries

- Eliminates multi-battery drain when two or more battery banks are in a charging system
- Solid-state electronics
- Each battery discharges and charges according to its own needs
- Multiple battery banks
- Systems 6-48 volts



BI SERIES

Item Number	Amps	Input	Banks	Price
BI2402	240	1	2	\$289.98
BI702	70	1	2	\$59.13
BI703	70	1	3	\$100.00
BI2702	70	2	2	\$132.92
BI2703	70	2	3	\$164.86
BI1202	120	1	2	\$101.86
BI1203	120	1	3	\$132.45
BI3203	120	2	3	\$290.95
BI1603	160	1	3	\$220.33
BI3002	300	1	2	\$851.30
BI3003	300	1	3	\$1,163.30

Newmar

- Enables installation of a seamless, redundant power system for critical electronic loads
- Selects the higher voltage of two isolated DC power sources and routes power to the load
- In case of a fault or fail the second source will automatically supply the load with no transfer delay, operation continuous uninterrupted
- Easy installation
- Rugged rust proof anodized aluminum case



APS-70

Item Number	Dimensions in " (mm) HxWxD	Amps	Voltage DC	Banks	Price
Auto Power Selector					
APS-70	3.25(82.55) x 4.50(114.30) x 3.10(78.74)	70	6-50	2	\$123.00
APS-160	9.00(228.60) x 4.50(114.30) x 3.10(78.74)	160	6-50	2	\$337.00

List pricing in catalog is subject to change without notice.

Mastervolt

Battery Watch

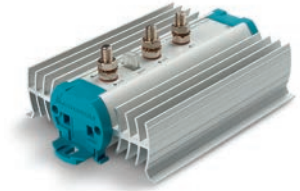
- Switches off loads when batteries are nearly empty
- LED lights provide clear read out
- Undervoltage can be set using DIP switches
- Corrosion proof material with aluminum heat sinks
- Electronic components are encased in synthetic materials
- Charges 2 or 3 batteries at high capacity
- LED displays whether the input power is active or not

Battery Mate

- Compatible with any type of alternator/battery charger
- Negligible voltage loss between alternator and battery
- Corrosion proof material with aluminum heat sinks
- Electronic components are encased in synthetic materials
- Charges 2 or 3 batteries at high capacity
- LED displays whether the input power is active or not



BATTERY WATCH



BATTERY MATE

Item Number	Max Load	Input Volts	Switch off 12V	Switch off 24V	Dimensions in " (mm) HxWxD	Price
Battery Watch						
83200150	150A	8-32VDC	9-12VDC	18-24 VDC	6.25(157.75) x 5.5(139.70) x 3.1(78.74)	\$254.15
Item Number	Max Output/Charger	Max Output/Alternator	Bank Amount	Dimensions in " (mm) HxWxD	Price	
Battery Mate						
83116025	120A	160A	2	8.1(205.74) x 5.5(139.70) x 3.1(78.74)	\$340.67	
83116035	120A	160A	3	8.1(205.74) x 5.5(139.70) x 3.1(78.74)	\$381.77	
83125035	200A	250A	3	8.1(205.74) x 5.5(139.70) x 3.1(78.74)	\$412.05	

Balmar

- Provides current and voltage controlled output to your starting battery, during house battery charge
- Programmable for 12 or 24 volt operation or four battery systems
- Provides up to 30 amps of smart charging power
- Automatically responds by isolating the starting battery ensuring that there is no accidental discharge of the starting battery
- The DDC is a solid state battery combiner
- Auto/manual control
- Start battery temperature sensing available with the MC-TS-B sensor cable



DDC

Item Number	Amps	Volts	Program Sets	Dimensions in " (mm) HxWxD	Price
DDC-12/24	30	12/24	GEL, AGM, STD. FLD., FDC	4.8(121.92) x 3.2(81.28) x 1.5(38.10)	\$324.00

Battery Management

CHARGE RELAYS

Blue Sea Systems

SI ACR

- Senses charging on two battery banks
- Start isolation allows temporary isolation of house loads from engine circuit during engine cranking to protect sensitive electronics from sags and spikes
- Integrated LED Indicators status
- CE marked, ISO 8846
- UL 1500 and SAE J1171
- IP67

ML Series

- 500 amps magnetic latching (bi-stable) relay automatically combines batteries during charging and isolates batteries when discharging and starting engines
- Dual sensing, senses charging on two battery banks
- LED output to remotely indicate when batteries are combined isolated, in voltage lockout, in start or engine isolation (requires optional LED)
- Silver alloy contacts provide high reliability for switching live loads
- Manual override knob provides an added level of safety allowing control with or without power and offering locked off capability for servicing
- CE Marked, ISO 8846 and SAE J1171
- IP67
- Manual override control provides an added level of safety.



7610



7622



9160

Item Number	IC Rating	Under Voltage Lockout 12/24	Combine Relay 12/24 (30 sec.)	Open Relay 12/24 (30 sec.)	Price
SI ACR					
7610	120A Continuous, 210A Intermittent	9.5VDC/ 19VDC	13.6VDC/ 27.2VDC	12.75VDC/ 25.50VDC	\$121.90
ML Series					
7622	12VDC	9.6VDC	13.5VDC	12.75VDC	\$291.99
7623	24VDC	19.2VDC	27.0VDC	25.5VDC	\$291.99
Item Number	Description				Price
9160	Tin plated copper link bus, for paralleling ML battery switches and charging relay 500A continuous rating				\$17.69

Mini ACR

- Senses charging on two battery banks
- LED indicates ACR status
- CE marked, ISO 8846, SAE J1171
- UL 1500
- IP67, up to 1 meter for 30 minutes
- 12/24V

Add-A-Battery

- Compact
- Automatically share a single source of charging between two batteries
- Protects the start battery from house loads that can lead to discharge
- Designed for alternators up to 65 amps



7601



7649

Item Number	IC Rating	Under Voltage Lockout	Combine Relay	Open Relay	Price
Mini ACR					
7601	65A Continuous, 115A Intermittent	9.5-19.0VDC	13.6-27.2VDC	12.75-25.5VDC	\$83.99
Item Number	Description				Price
Add-A-Battery Kit					
7649	Contains M-Series Dual Circuit Plus battery switch and the 65A Mini ACR with start isolation				\$137.99

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BEP

- Safely charge two or more independent battery banks from one charge source such as an alternator or battery charger
- Charges engine starting batteries before combining auxiliary bank for charging
- Protects start batteries from becoming flattened by domestic loads
- Isolates electronics from harmful electrical surges from starter motors
- Simple to install 3 wire connection leaves alternator wiring intact
- No volts drop vs diode isolators
- Ignition protected
- Multi voltage, auto selects between 12 and 24 volts DC operation



710-140A

Item Number	Integration Point	Disconnect Point	Continuous Rating	Price
710-140A	13.2 VDC	12-7 VDC	140A	\$158.08

Newmar Battery Integrator

- Enables charging of two separate banks without voltage drop, yet maintains 100% isolation at all other times
- Heavy duty silver plated contactor, continuous duty rated
- Easy three wire hook up for two bank systems (BATT +, BATT +, Ground)
- Terminal for optional wiring of remote light indicating when battery banks are integrated
- Terminals: 5/16" copper alloy stud
- 12 volts 100 amps with ignition protection
- Optional internal connection can be wired for key starter or manual over ride switch tying battery banks together for extra boost during engine start



BI-100

Item Number	Integration Point	Disconnect Point	Max Current	Peak Current	Price
BI-100	13.2VDC/ 26.4VDC	12.8VDC/ 25.6VDC	100/200	400/600	\$173.00
BI-200	13.2VDC	12.8VDC	200	600	\$307.00
BI-24-100	26.4VDC	25.6VDC	100	400	\$189.00

Newmar

DC Energy Monitor

- Waterproof and suitable for installation above deck area
- Meter, touchpad and surrounding bezel are fully waterproof and the ABS housing is UV stabilized
- Displays volts, amps, energy used, and remaining time for 12 or 24 volt systems up to 500 amps and up to 3000 amp hours
- Monitors up to three separate banks

- One bank may be programmed for these functions: Monitor charge/discharge amperage, total energy monitor can be set for amp hours or percent of charge, high/low voltage alarm, plus alarm set point for low amp hours remaining
- 500 amps shunt included
- DCE outputs NMEA 0183
- Power supply 9.5 to 33.0 volts DC
- Display: 4 digit LCD, 5 levels of back lighting



DCE

Item Number	Dimensions in " (mm) HxWxD	Price
DCE	3.61(91.69) x 2.5(63.50) x 4.1(104.14)	\$473.10

Images are representative of products listed and may not be actual product.

Battery Management

BATTERY MONITORS + NOISE FILTERS

Victron

- High resolution 10 milliamps (0.01a) with shunt
- Low current consumption: 1mA
- Separate front bezel for square or round appearance
- Rear or front mounting
- Includes 10 meter 6 core UTP with RJ12 connectors and cable fuse +connection
- The BMV-700 Series also displays state of charge, time to go, and power consumption in watts.
- BMV-702 additional features additional input to measure voltage (of a second battery), temperature or midpoint voltage,

and corresponding alarm and relay settings.

- Information displayed: battery voltage, battery charge/discharge current, amp hours consumed, state of charge, time to go at the current rate of discharge
- Visual and audible alarm: over voltage, under voltage, battery discharge
- Programmable alarm or generator start relay
- The BMV-702 features an additional input which can be programmed to measure the voltage (of a second battery).

- Monitors battery status
- Constantly measures the battery voltage, battery current, and temperature
- Calculates the state of charge of your battery
- Must be used in conjunction with either VE. Net Panel (VPN) or VE. Net Blue Power Panel (BPP)
- All electrical connections are to the quick connect PCB on the current shunt.



BMV-700



VBC00300000

Item Number	Voltage Range	Dimensions in " (mm) WxH	Input Voltage Range	Shunt	Price
Battery Monitor					
BMV-702	6.5-95VDC	2.0(50.80) x 1.2(30.48)	6.5-95VDC	500A/50mV	\$210.00
BMV-700	6.5-95VDC	2.0(50.80) x 1.2(30.48)	9-90VDC	500A/ 50mV	\$169.00

Item Number	Price
VE. Net Battery Controller	
VBC00300000	\$270.00

Mastervolt

- Three battery sets, service (full), starter, and bowthruster
- Read out for voltage, current, amp hours, time remaining indication, and battery capacity in %
- The built in microprocessor calculates the remaining capacity and stores historic data
- Not compatible with the Masterbus



70403163

Item Number	Voltage Range	Dimensions in " (mm) WxH	Amp Range	Shunt	Price
70403163	7-35VDC	4.7(119.38) x 2.63(66.80)	0-500	500A/ 50mV	\$476.11

Newmar

- Heavy duty aluminum construction
- Operates on 6-48 volts DC systems
- Integral mounting flanges for secure installation
- Nickel plated brass and stud connectors
- Color coded wire leads to make in-line installation easy
- Can be used singularly or in combination to attenuate conducted line noise, either at the affected equipment or at the noise source



PC-10 & PC-25

Item Number	Filtered Frequency Rating	Amps	Dimensions in " (cm) HxWxD	Installation Location	Price
PC-10	Audio-200MHz.	10	1.25(3.18) x 4.25(10.80) x 3(7.62)	@ (+) and (-) Power Leads	\$71.81
PC-25	Audio-200MHz.	25	2(5.08) x 4.25(10.80) x 3(7.62)	@ (+) and (-) Power Leads	\$108.00

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Blue Sea Systems

M-Series

- Ic continuous rating: 300 amps per circuit
- Dimension: 2.825"(72mm)W x 3.850"(98mm)H
- Mounting centers: 2.176"(55mm)
- Terminal stud size: 3/8"-16 (M10)
- Ignition protected: UL 1500 & SAE J1171
- Ingress protection: IP66
- ISO 8846
- ABYC Certified



MINI X4



TWO POSITION



FOUR POSITION

Item Number	Switch Type	Operation	Max Volts (5 min.)	I100 Cranking (30 sec.)	I60 Cranking	Price
M-Series						
6006	Single Circuit- On/Off	Switches a single battery to a single load group	48	1500A	775A	\$35.39
6007	Selector- 4 Position	Switches isolated battery banks to all loads or combines battery banks to all loads	32	1500A	775A	\$47.29
6010	Dual Circuit	Simultaneously switches between two isolated battery banks	32	1000A	650A	\$58.99
6011	Dual Circuit Plus	Simultaneously switches two isolated battery banks or combines battery banks to all loads	32	1000A	650A	\$58.99

E-Series

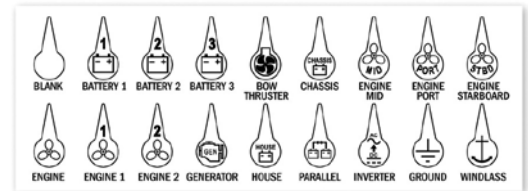
- Ic continuous rating: 350 amps per circuit
- Dimensions: 3.850"(98mm)W x 3.850"(98mm)H
- Mounting centers: 3"(76mm)
- Terminal stud: 3/8"-16 (M10)
- Ignition protected: UL 1500 & SAE J1171
- Ingress protection: IP66
- Work with most standard Perko & Guest battery switch hole patterns
- ID circuit label kit sold separately (7902)
- Accepts up to 4/0 AWG cable
- Case design allows surface, rear, or front panel mounting options
- ABYC Certified
- Includes AFD (alternator field disconnect) which protects the diodes in the alternator in the event of the switch being turned to OFF position while the engine is running



FOUR POSITION



DUAL CIRCUIT



7902

Item Number	Switch Type	Operation	Max Volts (1 min.)	I100 Cranking (30 sec.)	I300 Intermittent (5 min.)	AFD	Price
E-Series							
9003e	Single Circuit- On/Off	Switches a single battery to a single load group	48	1200	600A	—	\$59.99
9004e	Single Circuit- On/Off	Switches a single battery to a single load group	48	1200	600A	Yes	\$74.99
11001	Selector - 3 Position	Switches battery banks to all loads	32	1200	600A	Yes	\$62.99
9001e	Selector - 4 Position	Switches isolated battery banks to all loads or combines battery banks to all loads	32	1200	600A	—	\$56.99
5510e	Dual Circuit	Simultaneously switches between two isolated battery banks	32	700	525A	—	\$71.99
5511e	Dual Circuit Plus	Simultaneously switches two isolated battery banks or combines battery banks to all loads	32	700	525A	—	\$71.99

Item Number	Description	Price
7902	Icon circuit identification label kit m, e, HD Series switches	\$7.39

Battery Management

BATTERY SWITCHES

Blue Sea Systems (Continued)

HD-Series

- Dimensions: 3.850"(98mm)W x 3.850"(98mm)H
- Mounting centers: 3"(76mm)
- Terminal stud: 1/2" (M12)
- Ignition protected: UL 1500 & SAE J1171
- Ingress protection: IP66
- ABYC Certified
- Fits most Perko and Guest low amperage battery switch hole patterns
- Case design allows surface, rear, or front panel mounting
- CE marked, ISO 8846
- Includes AFD (alternator field disconnect) which protects the diodes in the alternator in the event of the switch being turned to OFF position while the engine is running



HEAVY DUTY X2



HEAVY DUTY X4

Item Number	Switch Type	Operation	I100 Cranking (10 sec.)	I60 Cranking (1 min.)	I300 Intermittent (5 min.)	AFD	Ic Continuous Rating	Price
3000	Single Circuit- On/Off	Switches a single battery to a single load group	2750A	1325A	900A	-	600A	\$116.99
3001	Single Circuit- On/Off	Switches a single battery to a single load group	2750A	1325A	900A	Yes	600A	\$133.99
11003	Selector- 3 Position	Switches battery banks to all loads	2750A	1150A	700A	Yes	500A	\$123.37
3002	Selector- 4 Position	Switches isolated battery banks to all loads or combines battery banks to all loads	2750A	1150A	700A	-	500A	\$121.99
3003	Selector- 4 Position	Switches isolated battery banks to all loads or combines battery banks to all loads	2750A	1150A	700A	Yes	500A	\$138.99

ML-Series

- 500 amp magnetic latching remote battery switch allows high amp switching under load, manually or from a remote location
- Bi-Stable ML coil function
- Manual override knob provides added level of safety allowing control with or without power and offering LOCKED OFF capability for service
- Auto releasing versions can be controlled with SPST or SPDT switch for applications where a normally open relay is desired
- Current rating dependent on wire size, call for detailed information
- Ignition protected: UL 1500 & SAE J1171
- Ingress protection: IP66
- Silver alloy contact
- Terminal stud: 7/8"(22mm)
- Includes control switch item #2145: SPDT (ON)-OFF-(ON)
- CE marked, ISO 8846 protected



7620B



7700

Item Number	Coil Volts DC	Contact Circuit Voltage	Multi Station Switching Capabilities	Price
7700	12	16	Yes w/ manual control	\$252.99
7701	12	32	Yes w/o manual control	\$234.99
7702	24	16	Yes w/ manual control	\$234.99
7703	24	32	Yes w/o manual control	\$252.99
7713	12	16	Yes w/ manual control	\$291.99
7620B	12	16	No manual override knob	\$300.15

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Marinco

Pro Installer

- Dimensions LxWxH in " (mm): 3.85(98) x 3.85(98) x 3.62(92)
- Removable knob allows isolation during servicing
- Pro Installer can be mounted: surface, rear panel, or front panel
- 3 removable side place for protection
- Innovative nut retention allows use of metric or imperial fasteners



PRO INSTALLER

PRO INSTALLER EZ

Item Number	Continuous A DC	Intermittent A DC	Cranking A DC	Operation	Stud	EZ Mount Price	Pro Installer Price
To order EZ mount use suffix (EZ) with item number							
770	400	600	1500	On/Off	2x (3/8 / 10mm)	\$73.63	\$68.15
770-DP	2x 400	2x 600	2x 1500	On/Off (2 Pole)	4x (3/8 /10mm)	\$97.65	\$89.43
771-S	400	600	1500	1-2-Both-Off	3x (3/8 /10mm)	\$79.18	\$72.55
771-SFD	400	600	1500	1-2-Both-Off	3x (3/8 /10mm)	N/A	\$80.30
772-DBC	2x 400	2x 600	2x 1500	1, 1/2, Parallel, Off (2 Pole)	4x (3/8 /10mm)	\$99.18	\$94.43

Guest

Battery Selector

- Polycarbonate case
- Surface mount
- For use with 6, 12, 24, or 36 volts systems
- Cable lug: 1/2"



BATTERY SELECTOR

Item Number	Continuous Amp	Momentary Amps	Operation	Dimensions in " (mm) HxWxD	Price
2102	230	345	On/Off	5.5(139.70) x 2.63(66.80)	\$83.03

Diesel Battery Switch

- Polycarbonate case
- For use with 6, 12, 24, or 36 volts systems
- Built with heavy duty copper sweep contacts
- Features alternator field disconnect (AFD)



SELECTOR SWITCH
OEM BLACK



ON/OFF SWITCH
OEM BLACK

Item Number	Continuous Amp	Momentary Amps	Type	Operation	Price
2303A	450	800	Heavy Duty	On/Off	\$287.85
2304A	600	1000	Extra Duty	On/Off	\$296.38
2300A	360	600	Selector Switch	1, 1&2, 2, Off	\$211.65

Battery Management

BATTERY SWITCHES

BEP

Heavy Duty

- Well suited for large vessels
- Uses patented contour locking systems
- RoHS Compliant
- ABYC Certified



720

Item Number	Dimensions in " (mm) LxWxH	Continuous Rating (1Hr.)	Intermittent Rating (5min.)	Cranking Rating (10sec.)	Operation	Stud Size	Price
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Heavy Duty

720	4(102) x 4(102) x 3.5(89)	600A DC	800A DC	2500A DC	On/Off	1/2(12) x 2	\$117.10
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Contour Series

- Removable side plates on four sides for access up to 1/0 cable
- Can either be surface mounted or recess mounted by cutting 2.1"(52mm) hole
- Control knob cannot be removed unless switching in a 45 degree counter clockwise position
- Uses patented contour locking system
- ABYC Certified
- Ignition protected
- RoHS compliant
- 48VDC max



701



701-PM



701-S



701-MD

Item Number	Dimensions in " (mm) LxWxH	Continuous Rating (1Hr.)	Intermittent Rating (5min.)	Cranking Rating (10sec.)	Operation	Stud Size	Style	Price
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Contour

701	2.75(69.9) x 2.75(69.9) x 3(76.2)	275A DC	455A DC	1250A DC	On/Off	3/8(10) x 2	Standard	\$41.23
701-PM	2.75(69.9) x 2.75(69.9) x 3(76.2)	275A DC	455A DC	1250A DC	On/Off	3/8(10) x 2	Panel Mount	\$36.13
701-S	2.75(69.9) x 2.75(69.9) x 3(76.2)	200A DC	455A DC	1250A DC	1-2-Both-Off	3/8(10) x 2	Compact	\$53.73
701-MD	3(76.2) x 3(76.2) x 3.9(99.1)	275A DC	455A DC	1250A DC	Motorized On/ Off	3/8(10) x 2	Standard	\$248.63

Easy Fit

- Easily removable ring will allow for panel thicknesses up to 3/4"(19mm)
- Control knob cannot be removed unless switching in a 45 degree counter clockwise position
- Can be surface mounted offering a unique style
- Can easily be retrofitted in place of most European post and lever type switches
- ABYC Certified
- Ignition protected
- RoHS compliant



700

Item Number	Dimensions in " (mm) LxWxH	Continuous Rating	Intermittent Rating	Cranking Rating	Operation	Stud Size	Price
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Easy Fit

700	2.75(69.9) x 2.75(69.9) x 3(76.2)	275A DC	455A DC	1250A DC	On/Off	3/8(10) x 2	\$47.88
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Battery Distribution Clusters

- Combines BEP battery switches and VSR's completely buses and pre-wired internally
- RoHS Compliant



717-140A-DVSR



719-140A-DVSR

Item Number	Dimensions in " (mm) LxW	Engine	Battery Banks	Price
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Battery Distribution Clusters

717-140A-DVSR	5.4(137.2) x 8.1(205.7)	Twin outboard	3	\$488.73
719-140A-DVSR	8.1(205.7) x 8.1(205.7)	Triple outboard	4	\$710.80

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Hella Marine

- Removable key in OFF position
- Current interrupting
- VDA compliant



PLASTIC



HEAVY DUTY

Item Number	Material	12/24 Amp	Max. Load 12V/24V (10 sec.)	Price
87181	Plastic	100/50	1000A/500A	\$26.67
62471	Steel key and plate	200/100	2500A/1000A	\$77.78

Item Number	Description	Price
Accessories		
87185	Spare key for battery master switch #87181	\$8.89

Cole Hersee

- Suitable for 6-36 volts DC Systems
- Mounting stems: brass 3/4" (19.1mm) #16 thread
- Terminals: two 3/8" (9.5mm) diameter studs
- Silver laminated contact (M-284-01)
- UL 707B approved and CE Listed



DISCONNECT SWITCH

Item Number	Positions	Intermittent Rating	Continuous Ratings	Price
M-284-01	Off-On	800A	175A	\$84.99

Battery Management

BATTERY SWITCH PANELS

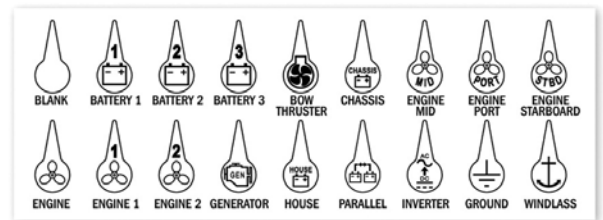
Blue Sea Systems Accessories



9160

Item Number	Description	Price
Accessories Blue Seas Systems		
9160	Tin plated copper link bus, for paralleling ML battery switches and charging relay 500A continuous rating	\$17.69

- Reinforced, waterproof labels
- Used on M-Series, E-Series and HD- Series Battery Switches



7902

Item Number	Description	Price
7902	ICON Circuit Identification Label Kit for Blue Seas m,e,HD Series	\$7.39

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