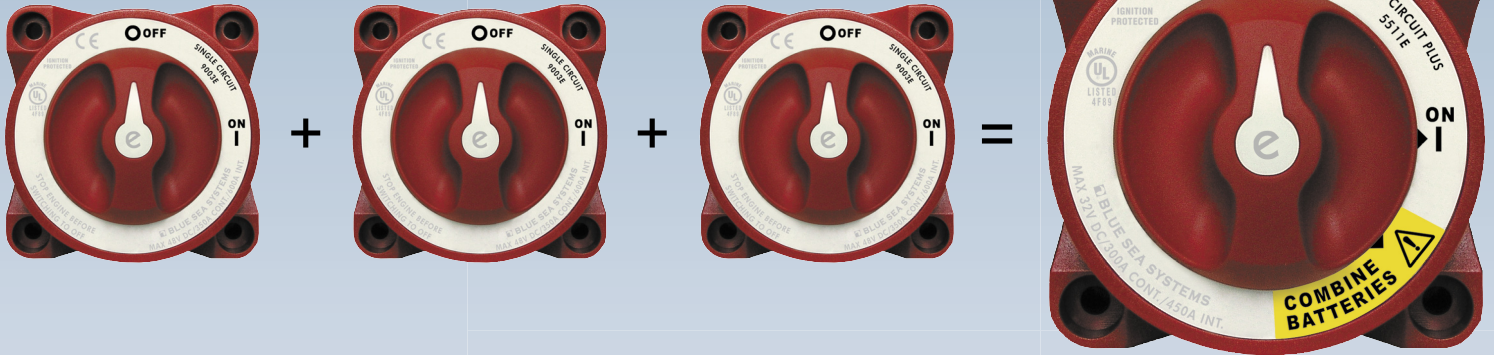


# Dual Circuit Plus™ Battery Switches

The Power of THREE Switches in ONE



## Dual Circuit Plus™ Battery Switch Advantages:

1. Simple ON/OFF switching in NORMAL operation (with an ACR or isolator installed)
2. Normal "ON" position isolates Start and House circuits to:
  - reduce the chance of fully discharging both batteries
  - protect electronics from engine starting sags and spikes
3. The "Combine Batteries" position parallels two battery banks in the event of a low Start battery

PN	Description	Weight Lb (Kg)
6011	m-Series, Dual Circuit Plus™ Battery Switch	0.80 (0.36)
5511E	e-Series, Dual Circuit Plus™ Battery Switch	1.27 (0.57)

## Specifications

Inrush Rating: 2.5 sec.\*  
 Cranking Rating: 100 sec.\*  
 Intermittent Rating: 5 min. (UL 1107)  
 Continuous Rating: (UL 1107)  
 Terminal Stud, Tin-Plated Copper  
 Torque  
 Cable Size to Meet Ratings\*\*  
 Maximum Voltage Rating  
 Cable Clearance For 4/0 Cables  
 Case Material  
 CE marked

### m-Series 6011

1,200 Amperes DC  
 600 Amperes DC  
 450 Amperes DC  
 300 Amperes DC  
 3/8"-16 (M10)  
 120 in-lbs.  
 4/0 AWG (95mm<sup>2</sup>)  
 32 Volts DC  
 1.12" (25.4mm)  
 Reinforced Polycarbonate

### e-Series 5511E

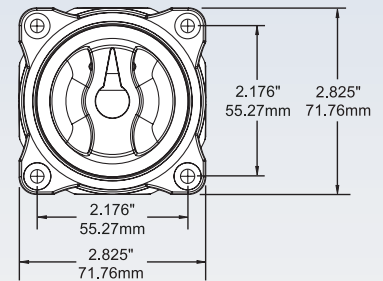
1,500 Amperes DC  
 700 Amperes DC  
 525 Amperes DC  
 300 Amperes DC  
 3/8"-16 (M10)  
 140 in-lbs.  
 4/0 AWG (95mm<sup>2</sup>)  
 32 Volts DC  
 1.10" (28.0mm)  
 Reinforced Polycarbonate

## Agency Specifications

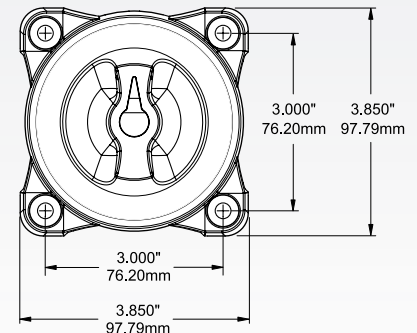
- UL Listed - UL 1107 electric power switches (pending testing)
- Ignition Protected - Meets UL 1500 and SAE J1171 external ignition protection requirements
- \* See [www.blueseasystems.com](http://www.blueseasystems.com) for Blue Sea Systems Engine Starting Standard
- \*\* Reducing cable sizes will reduce current ratings



## m-Series Dimensions



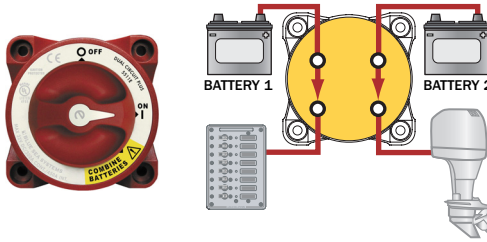
## e-Series Dimensions



# Dual Circuit Plus™ Battery Switch

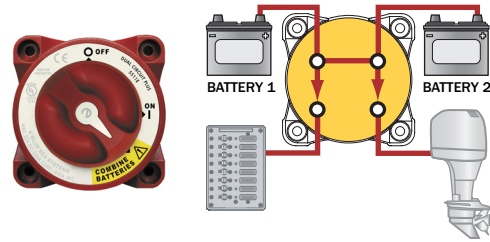
## Switch Set to "ON"

Batteries isolated - Current flow from both House and Start batteries



## Switch Set to "COMBINE BATTERIES" ⚠ SEE BELOW

Batteries combined - Current flow from both House and Start batteries



### Dual Circuit Plus™ Battery Switch Advantages:

- 1) Simple ON/OFF switching in NORMAL operation (with an ACR or isolator installed)
- 2) Normal "ON" position isolates Start and House circuits to:
  - reduce the chance of fully discharging both batteries
  - protect electronics from engine starting sags and spikes
- 3) The "Combine Batteries" position parallels two battery banks in the event of a low Start battery

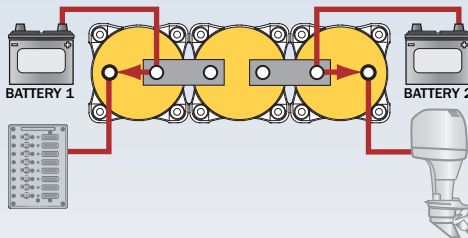
## Compare with the alternatives

### Multiple SINGLE CIRCUIT ON/OFF Battery Switches



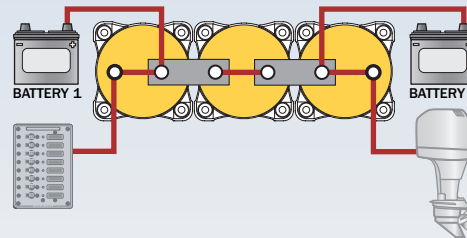
#### Battery 1 Switch Set to "ON" Battery 2 Switch Set to "ON"

Current flow from Battery 1 to House circuit and Battery 2 to Start circuit



#### Battery 1 Switch Set to "ON" ⚠ SEE BELOW Battery 2 Switch Set to "ON"

Emergency Parallel Battery Switch Set to "ON"  
Batteries combined - Current flow from both House and Start batteries



### Single Circuit ON/OFF Disadvantages

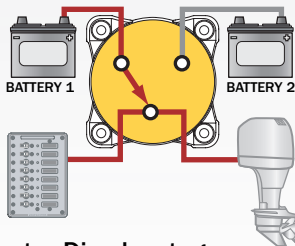
- 1) Most expensive option
- 2) Requires more space
- 3) Not intuitive to operate - user must operate 3 switches
- 4) Wiring and switch interconnection complexity

### SELECTOR Battery Switch



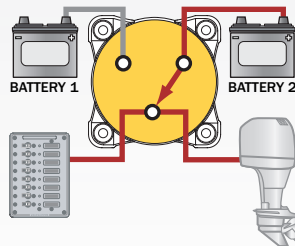
#### Switch Set to "1"

Current flow from Battery 1 to both House and Start circuits



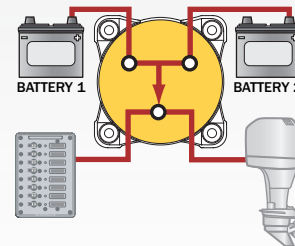
#### Switch Set to "2"

Current flow from Battery 2 to both House and Start circuits



#### Switch Set to "1+2" ⚠ SEE BELOW

Batteries combined - Current flow from both House and Start batteries



### Selector Disadvantages

- 1) Not intuitive to operate
- 2) "1+2" position parallels batteries increasing the chance of fully discharging both batteries
- 3) "1+2" position parallels Engine and House circuits exposing electronics to sags and spikes caused by engine starting