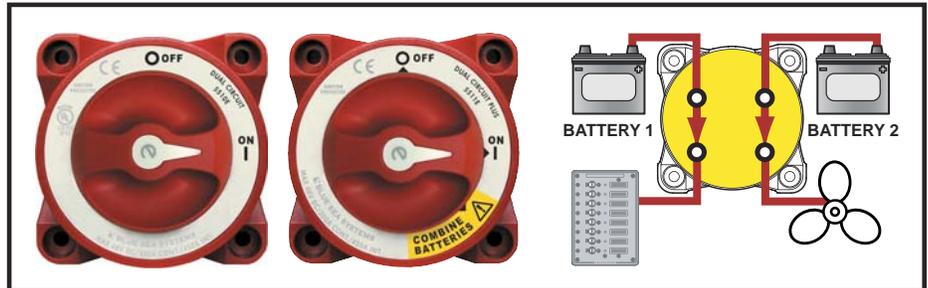


Application Brief - Dual Circuit™ Switch

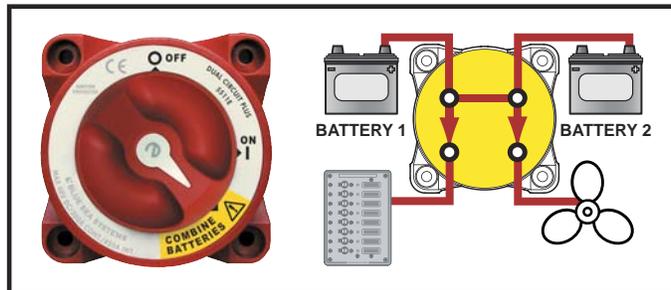
Blue Sea Systems' Dual Circuit™ Battery Switch

The Dual Circuit™ Battery Switch simplifies multi-bank battery switching with a single ON/OFF switch. It eliminates the confusion surrounding the traditional four-position selector battery switch. The Dual Circuit™ Battery Switch is available with a COMBINE BATTERIES position (Dual CircuitPlus™) and without (Dual Circuit™).

When the Dual Circuit™ Battery Switches are set to ON, current flows from the Start battery to the Start circuit, and from the House battery to the House circuits.



When the Dual Circuit Plus™ is set to COMBINE BATTERIES, current flows from both House and Start batteries to House and Start circuits. The COMBINE BATTERIES function offers the ability to combine the two battery banks in the event of a low Start battery.



There are several advantages to Blue Sea Systems' dual switching technology:

- Simple ON/OFF switching—The Dual Circuit™ Battery Switch makes it possible to switch two battery banks simultaneously with one simple ON/OFF switch.
- Isolated Start and House circuits—The Dual Circuit™ Battery Switch:
 - Reduces the chance of fully discharging both batteries
 - Protects house electronics from engine starting sags and spikes
 - Protects engine electronics controls from stray house line noise

Dual Circuit Plus™ solves several battery management problems by isolating House and Start circuits:

- The Dual Circuit Plus™ makes it possible to connect and charge both batteries when the alternator is charging *if* the user sets the switch to the COMBINE BATTERIES position. If the batteries are not combined, the House battery is not being charged.
- The Dual Circuit™ Battery Switch solves the problem of not having a fully charged battery bank in reserve *if* the user sets the switch to ON when the engine is not running. Automatically charging both batteries continues to remain a problem.

The reality is that boaters forget to reset their battery switches every time they stop or start their engines or they simply forget how to properly set the switch for the correct operating mode. Furthermore, today's boaters want and expect the greatest possible degree of automatic operation from their boats. The solution is to use Blue Sea Systems' CL-Series BatteryLink™ ACR. When combined with the Dual Circuit™ Battery Switch, the BatteryLink™ fully automates the sharing of charge sources between two batteries.