

## Application Brief - Parallel DC Main Distribution System

It can be a big advantage to have two banks of batteries on board to make sure the engine starting battery isn't drained by use for house power. There are many devices that will allow both banks of batteries to be charged while keeping them isolated. A parallel DC main distribution system is the best way to provide a cross connect when necessary while maintaining isolation between the two banks.

The simplest method to accomplish this is with a parallel panel for the DC main distribution system. This provides a reliable method to keep the starting circuit isolated from the house circuit, yet provides an emergency cross connect circuit to start the engine from the house battery bank should the need arise. Additional benefits of this arrangement are simplified battery switch operation and protection of electronics from engine starting surges. The diagram below illustrates a sample parallel panel circuit using the Blue Sea Systems 8080 panel.

