

Installation of Low Voltage Disconnect on Refrigerator Circuit using Blue Sea part number M-LVD.

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Overview

I like cold beer on the boat so I leave my refrigerator on when I'm connected to shore power. More than once I have run down my house bank because I lost dock power. I just bought a new set of 4Ds. Most of the loads on the boat are very minor except for the refrigerator. I decided to install a low voltage disconnect between the refrigerator circuit breaker and the refrigerator. With this in place, the refrigerator will shut off after the voltage level hits 12.1V and will not switch on again until the voltage recovers to approx. 13v (not sure).

The lvd comes with an override switch but I did not rig it. The default disconnect voltage is 12.1 which is perfect. Considering that you get voltage drop on power on of large appliances.

Here is the wiring schematic

<http://assets.blueseas.com/files/resources/instructions/980016770.pdf>

Notice I did not run the fuse between the ground wire.

Also read this article on wire termination.

http://www.pbase.com/mainecruising/wire_termination

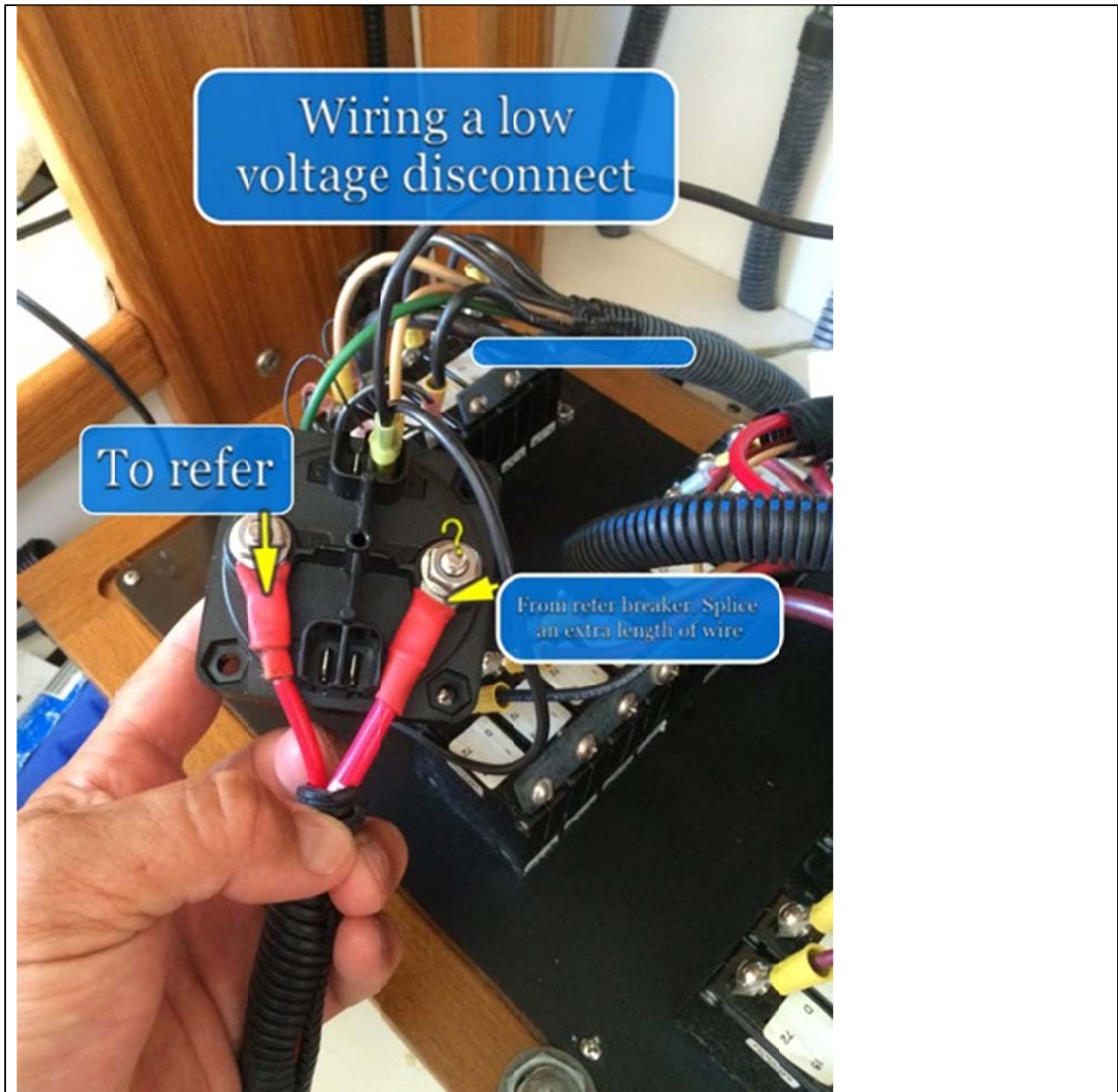
Get your wiring stuff here:

<http://www.genuinedealz.com/>

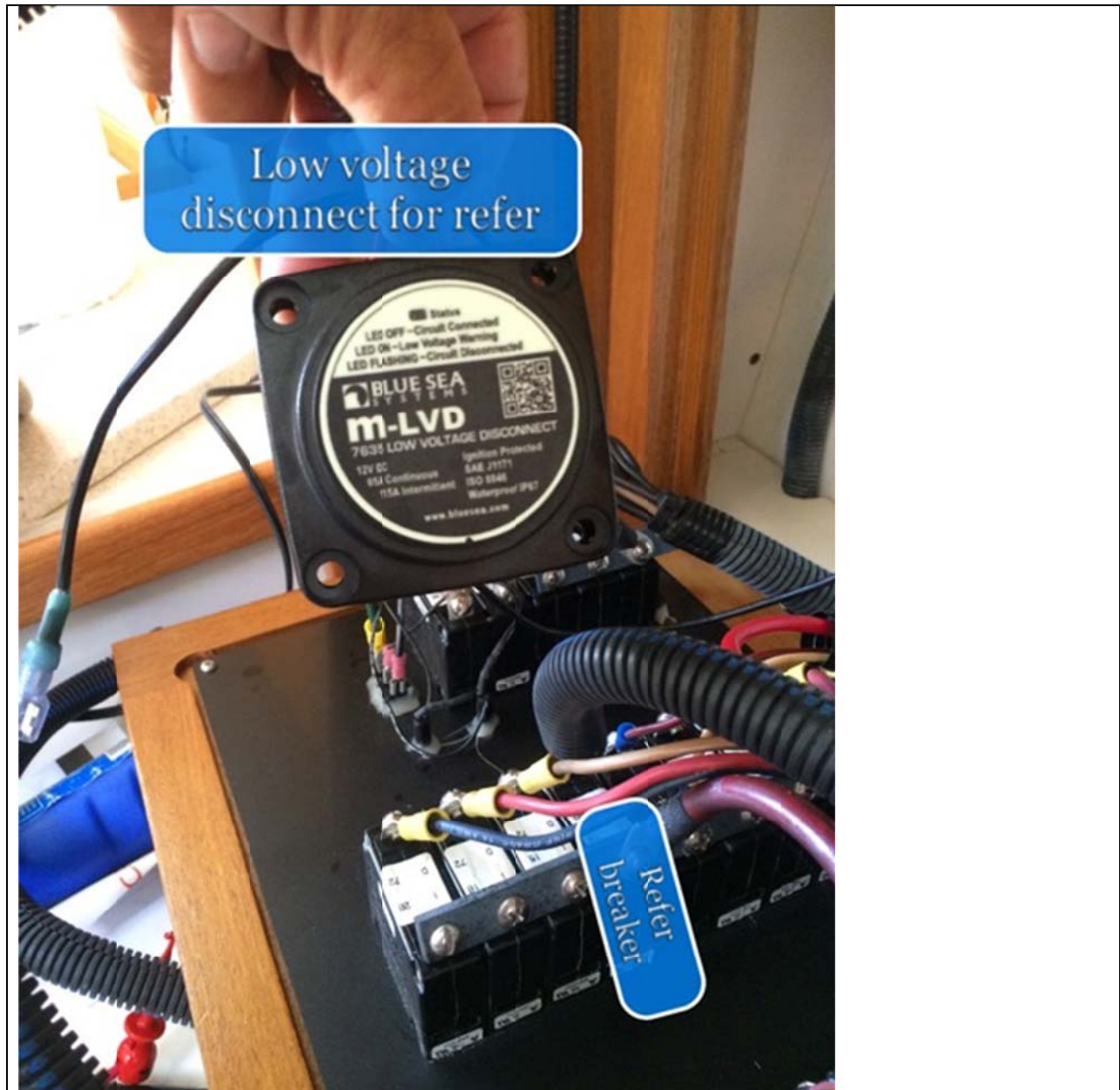
Steps:

1. Purchase the m-LVD Blue Sea Systems pn 7635. Purchased on Amazon cost \$73.82.
2. Open electrical panel and locate wire attached to the breaker running the refrigerator unscrew wire and crimp on an extra length of wire so input to can run through split loom to corner of electrical panel cabinet where lvd module will be placed. Next crimp on a ring terminal to lvd input. Use adhesive shrink tubing and connectors. Notice I bumped up the wire awg. It can't hurt to do this. Connect to the A terminal of the LVD
3. Now extend the wire to the refrigerator the same way you extended the wire to the breaker. Connect to the B terminal of the LVD
4. Connect a black #10 wire to the ground buss inside the electrical panel with a fork terminal on one in and a lug terminal on the other.

5. Power up the refrigerator breaker and watch the light blind on the lvd and then go out followed by a small click sound.
6. Label your refrigerator breaker with a 12.1 lvd label so you remember.



Back of module input goes to A Output goes to B. Just connect the ground to the ground buss. Use split loom to run the input and output wires routing to corner of pannel



View of breaker and split loom I'm using to route cable. Notice status LED to indicate the state of the device



It just fits in the corner of the panel. Then tie wrap it down.