Remote Battery Switch and Solenoid Switch Specifications

- Cranking Rating: 10 sec, 2500A DC
- Intermittent Rating: 5 min, See Table Below
- Continuous Rating: See Table Below
- Amperage Operating Current: 100 mA when changing state
- Voltage Maximum Operating: 32V DC Max.
- Live Current Switching: 300A@12V DC—10,000 Cycles
- Mechanical Endurance: 100,000 Cycles
- Control Circuit Voltage: 10.1 to 16.5V (12V models), 20.2 to 32.9V (24V models)
- Terminal Stud Size: 3/8"-16
- Maximum Terminal Stud Torque: 140 in-lb (15.5 Nm)
- Ring Terminals Size: 3/8", M10
- Terminal Ring Diameter Clearance: 1.12" (28.4mm)

Harness Connector: (select models)
- Deutsch DTM Series DTM 06-6S
- Mating Part Requirements: (see LADD Industries www.laddinc.com)
- Receptacle Shell: DTM-04-6P*
- Wedgelock: WM-6P
- Terminal Pins: 1060-20-0122†
- Sealing Plugs: 0413-204-2005†
- Hand Crimp Tooling: DTT-20-0†
- Remote Control Switch (sold separately): Momentary SPDT (ON)-OFF-(ON) or two momentary push button switches, 100mA rating Min.

Regulatory:
- Meets ISO 8846 and SAE J1171 external ignition protection requirements, Rated IP66
- * Special modifications are available depending on customer requirements. No polarization on standard product.
- † Quantity depends on optional wire connections. The total number of pins and sealing plugs is 6.
- ‡ Required for hand assembly of wires and terminal pins.

<table>
<thead>
<tr>
<th>Wire Size</th>
<th>Intermittent Rating 5 min.</th>
<th>Continuous Rating</th>
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</thead>
<tbody>
<tr>
<td>2/0</td>
<td>400 Amps</td>
<td>225 Amps</td>
</tr>
<tr>
<td>4/0</td>
<td>400 Amps</td>
<td>300 Amps</td>
</tr>
<tr>
<td>2x (4/0)</td>
<td>700 Amps</td>
<td>500 Amps</td>
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</table>

Remote Battery Switch

<table>
<thead>
<tr>
<th>PN</th>
<th>Termination</th>
<th>Manual Control</th>
<th>Control Circuit</th>
</tr>
</thead>
<tbody>
<tr>
<td>7700B</td>
<td>Tinned Wires</td>
<td>Yes</td>
<td>12V DC</td>
</tr>
<tr>
<td>7700100B</td>
<td>Deutsch Connector</td>
<td>Yes</td>
<td>12V DC</td>
</tr>
<tr>
<td>7702B</td>
<td>Tinned Wires</td>
<td>Yes</td>
<td>24V DC</td>
</tr>
<tr>
<td>7702100B</td>
<td>Deutsch Connector</td>
<td>Yes</td>
<td>24V DC</td>
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Solenoid Switch

<table>
<thead>
<tr>
<th>PN</th>
<th>Termination</th>
<th>Manual Control</th>
<th>Control Circuit</th>
</tr>
</thead>
<tbody>
<tr>
<td>7701B</td>
<td>Tinned Wires</td>
<td>No</td>
<td>12V DC</td>
</tr>
<tr>
<td>770100B</td>
<td>Deutsch Connector</td>
<td>No</td>
<td>12V DC</td>
</tr>
<tr>
<td>7703B</td>
<td>Tinned Wires</td>
<td>No</td>
<td>24V DC</td>
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<tr>
<td>7703100B</td>
<td>Deutsch Connector</td>
<td>No</td>
<td>24V DC</td>
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</tbody>
</table>

Overview of Application

The ML-Series Remote Battery Switch/Solenoid Switch provides high-current carrying and switching under load. The Remote Battery Switch/Solenoid Switch is installed close to the battery banks. A single pole double throw (SPDT) Control Switch Panel, or two momentary push button switches (sold separately), operate the Remote Battery Switch/Solenoid Switch. Control Switches are installed in a convenient location near other electrical controls or companionway (see illustrations on reverse).

The Manual Control Override Knob provides (Remote Battery Switch Only):
- an added level of safety that allows manual ON-OFF control with or without power
- LOCK OFF for servicing the electrical system

Remote Operation. A momentary (SPDT) (ON)-OFF-(ON) control switch or two momentary push button switches (sold separately) can provide cross connect and/or battery isolation. The control switch should be mounted in a convenient location near helm controls to allow for quick access.

| To connect battery bank to load, or combine battery banks | Momentarily depress control switch actuator to "ON". Optional remote LED indicates closed connection.‡ |
| To disconnect battery bank from load, or isolate battery banks that are connected | Momentarily depress control switch actuator to "OFF".* |

Emergency Manual Control Override Operations (Remote Battery Switch Only)

| To connect battery bank to load, or combine battery banks | With Override Knob in (REMOTE position), push button until latched (Push to Latch On). |
| To disconnect battery bank from load, or isolate battery banks that are connected | Rotate Override Knob to right to release button from Latch On mode (button pops up). Rotate Override Knob to left (REMOTE position). |
| To prevent remote operation | Rotate Override Knob to right (LOCK OFF position). |
| To secure for servicing | With Override Knob in (LOCK OFF position), pass cable tie through hole. |

* If the Control Switch is held ON or OFF for 5 seconds, the internal coil protection will engage and the Remote Battery Switch/Solenoid Switch will not respond to further remote input for approximately 10 seconds.
**Installation Instructions**

**Mounting**
Install as close as possible to battery bank. To avoid corrosion to connecting wires and terminals, mount in a dry and protected location. Avoid mounting directly above vented lead acid batteries so that the Remote Battery Switch/Solenoid Switch is not exposed to corrosive gasses expelled from the batteries.

**High Current Primary Circuit Connections** (stud terminals A and B)
For help selecting the appropriate wire size and circuit protection rating, go to www.bluesea.com and click the Circuit Wizard quick link.

**NOTE:** Stud terminals A and B are interchangeable. The load can be connected to A or B; the battery bank can be connected to A or B.

To connect high current circuit wires:
1. Connect the battery bank to one of the stud terminals marked A or B.
2. Connect the load to the other stud terminal marked B or A.
3. Torque the high current terminal stud nuts to 140 in-lbs (15.5 N•m) maximum.

**NOTE:** If switching an inverter, windlass, bow thruster, etc., the circuit wires must have circuit protection to comply with ABYC guidelines. Wires used for engine starting do not require circuit protection.

**Control Circuit Connections** (wires contained in the wire harness)
**NOTE:** The Remote Battery Switch/Solenoid Switch is designed to be controlled by a momentary SPDT switch, or two momentary push button switches. Use 16 AWG wire for the Control Circuit.

To connect DC power to the Remote Battery Switch/Solenoid Switch Control Circuit:
1. Connect the red wire through a 10A (min) circuit protection device to DC+. The power source should be a direct connection to the battery.
2. Connect the black wire to DC ground.

To connect a momentary SPDT Control Switch: (sold separately)
1. Connect the common load terminal of the Control Switch through a 2A (min) circuit protection device to DC+. Use a 24-hour power source (connected directly to the battery.)
2. Connect the brown wire to the CLOSE side of the Control Switch.
3. Connect the orange wire to the OPEN side of the Control Switch.

**Optional Remote Indicator Connection:** (sold separately)
Use Blue Sea Systems LED 8033 (amber), 8171 (red), or 8172 (green). Install in a convenient location close to Control Switch.

To connect a remote LED indicator:
1. Connect the red wire of the LED to a circuit protected positive source.
2. Connect the yellow wire of the LED to the yellow wire of the Remote Battery Switch/Solenoid Switch Tinned Wire Termination (PNs 7700B, 7702B, 7701B, and 7703B) or the LED output of the Deutch DTM Connector Termination (PNs 7700100B, 7702100B, 7701100B, and 7703100B)

**Guarantee**
Any Blue Sea Systems product with which a customer is not satisfied may be returned for a refund or replacement at any time.