Troubleshooting Guide - StartBox (MPSR24 Shown)

Did You Know?
A pump start relay can be signaled by a float switch.

**Note:** Start/Stop signals include, but not limited to, float switches, HOA’s, timers etc.

**Note:** The StartBox & SmartBox troubleshooting guides do not apply to 2-wire decoder systems.

Call Munro technical support for any questions relating to this product. Toll Free: 1.800.942.4270

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**Installation - Operation - Parts**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Line Voltage</th>
<th>Control Voltage</th>
<th>External Risk*</th>
<th>External Packaged Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPSR110</td>
<td>110 VAC</td>
<td>110 VAC</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>MPSR110A</td>
<td>24 VAC</td>
<td>Safe</td>
<td>N/A</td>
<td>Pump Up Float Control</td>
</tr>
<tr>
<td>MPSR110AU</td>
<td>24 VAC</td>
<td>Safe</td>
<td>N/A</td>
<td>Pump Down Float Control</td>
</tr>
<tr>
<td>MPSR110AD</td>
<td>24 VAC</td>
<td>Safe</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>MPSR220</td>
<td>220 VAC</td>
<td>24 VAC</td>
<td>Safe</td>
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<td>Safe</td>
<td>N/A</td>
<td>Pump Up Float Control</td>
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<tr>
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<td>24 VAC</td>
<td>Safe</td>
<td>N/A</td>
<td>Pump Down Float Control</td>
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<tr>
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<td>24 VAC</td>
<td>Safe</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>MPSR24</td>
<td>110/220 VAC</td>
<td>24 VAC</td>
<td>Safe</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Instead of using line voltage for power supply, external components are energized by a much lower, safer 24 VAC. Caution should always be used when dealing with electricity.

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1.800.942.4270
www.munropump.com
Typical StartBox Installation

**NOTE**

Refer to specific wiring diagram located on inside cover of enclosure.

**Step 1**

Turn Breaker "On"

- Never work with electrical wiring on a live circuit.

**WARNING**

**Step 2**

Wire Lawn Controller

- Locate the Master Valve (mv) and Common (com) inside Lawn Controller.
- Wire MV to BLACK wire lead in StartBox, secure with wire nuts.
- Wire COM to WHITE wire lead in StartBox, secure with wire nuts.

**Step 3**

Wire Relay to Pump

- Refer to wiring diagram on motor plate for proper voltage and wire placement.
- Refer to NEC wire cable chart for proper size of wire. Undersized wire can affect pump performance.

**Step 4**

Wire Power Supply

- Run power supply wires from breaker box (110 v or 220 v).
- Attach GREEN grounding wire. (Always use power service ground.)
- Attach BLACK HOT to L2 on relay.
- Attach WHITE Neutral (110 v) / second HOT (220 v) to L1 on relay.

**Step 5**

Turn Breaker "Off"

- Never work with electrical wiring on a live circuit.

**Step 6**

Wire Lawn Controller

- Locate the Master Valve (mv) and Common (com) inside Lawn Controller.
- Wire MV to BLACK wire lead in StartBox, secure with wire nuts.
- Wire COM to WHITE wire lead in StartBox, secure with wire nuts.

- Refer to wiring diagram on inside of control box lid.

**WARNING**

DO NOT ATTEMPT TO REWIRE OR ALTER WIRING IN THE STARTBOX OR WARRANTY WILL BE VOIDED.

**EFFECTIVE JANUARY, 2002. FOR MODELS BUILT PRIOR TO JANUARY, 2002, CONTACT MANUFACTURER FOR INSTRUCTIONS.**