



**Troubleshooting Guide**

Symptom	Possible Cause	Solution
Lights are always OFF – there is no glow at the lamp ends, and no flashing.	<ul style="list-style-type: none"> <li>• Power is OFF.</li> <li>• System miswired.</li> <li>• Wrong line voltage was applied.</li> <li>• No Dimmed Hot signal.</li> <li>• Fixture has Instant Start sockets.</li> <li>• Control is OFF.</li> </ul>	<p>Verify breaker and wall switch are ON.</p> <p>Check system wiring, connection of socket wires.</p> <p>Check system voltage vs. ballast rating.</p> <p>Check system wiring, measure voltages.</p> <p>Change sockets to Rapid Start sockets</p> <p>Turn the dimmer ON.</p>
Lights are always OFF (or locked at Low End) – but there is a glow at the end of the lamp.	<ul style="list-style-type: none"> <li>• Wrong lamp type for the ballast installed.</li> <li>• System miswired.</li> <li>• Poor or no connection to sockets or lamp pins.</li> <li>• Lamps are too far from a grounded surface.</li> </ul>	<p>Verify ballast's lamp type matches lamp.</p> <p>Check for proper ballast-to-socket wiring – particularly the Yellow and/or Blue w/White stripe wires. These wires must be wired in parallel to two lamps (in one side, out the same side to the next lamp), not in series.</p> <p>Check for proper connection of wires to the sockets and lamp pins to sockets.</p> <p>Check for proper grounding of the fixture, and proper space between the ground plane and the lamp (1/2" ± 1/4").</p>
Lights ON to Low End and will not go any higher in intensity.	<ul style="list-style-type: none"> <li>• System miswired.</li> <li>• Wrong lamp type for the ballast installed.</li> </ul>	<p>Check for proper ballast-to-socket wiring—particularly the Yellow and/or Blue w/ White wires. All socket wiring must have wires from the ballast going to each side of the socket—not both wires to one side.</p> <p>Check that the Dimmed Hot signal varies as shown on the Voltage Map (page 21).</p> <p>Verify ballast's lamp type matches lamp.</p>
Lights always stay ON full with little or no dimming.	<ul style="list-style-type: none"> <li>• System miswired.</li> <li>• Magnetic dimming ballasts connected on the same switch leg.</li> </ul>	<p>Check that the Dimmed Hot signal is present as shown on the Voltage Map (page 21).</p> <p>Check for Dimmed Hot and Hot swapped.</p> <p>Remove the magnetic dimming ballast(s) from the switch leg.</p>



# BALLAST GUIDE ■ Trouble Shooting



Symptom	Possible Cause	Solution
Lights go to full, but not all the way to minimum.	<ul style="list-style-type: none"> <li>• Ballasts not properly grounded.</li> <li>• Wrong lamp type for the ballast installed.</li> <li>• Lamps are too old.</li> </ul>	<p>Check that the fixture is properly grounded and that a ground plane is 1/2" ±1/4" away from the lamp.</p> <p>Verify ballast's lamp type matches lamp.</p> <p>Relamp the entire fixture.</p>
Black lamp ends or premature lamp failure.	<ul style="list-style-type: none"> <li>• Poor connections.</li> <li>• Ballast to Socket wires too long.</li> <li>• Lamps were not kept at full intensity for 100 hours before dimming.</li> </ul>	<p>Check for proper connection of wires to the sockets and lamp pins to sockets.</p> <p>Shorten the amount of wire between ballast and sockets—total length shall not exceed specified limits (see page 15). This is critical on the Yellow and the Blue with White stripe wires since the length of the wires between sockets is part of the total length.</p> <p>Relamp the entire fixture and leave them at full intensity for 100 hours before dimming.</p>
Lights flicker or drop out at Low End.	<ul style="list-style-type: none"> <li>• Lamps were not kept at full intensity for 100 hours before dimming.</li> <li>• Defective or damaged lamps.</li> <li>• Lamps are too close to a grounded surface.</li> </ul>	<p>Keep the lamps at full intensity for 100 hours.</p> <p>Replace with new lamps or exchange lamps from a known good fixture.</p> <p>Check that the ground plane is 1/2" ±1/4" away from the lamp.</p>
Lights are flashing or strobing.	<ul style="list-style-type: none"> <li>• Wrong lamp type or voltage for ballast installed.</li> <li>• System miswired.</li> </ul>	<p>Verify the ballast's lamp type and voltage are correct.</p> <p>Check for Hot and Dimmed Hot swapped, socket wiring correct.</p>
Lamps are not at the same light level.	<ul style="list-style-type: none"> <li>• Ballast to socket wires different lengths.</li> <li>• Distance from the lamp to a grounded surface is different.</li> <li>• Mixture of lamp ages or manufacturers.</li> </ul>	<p>Different lengths will cause imbalance (for instance, 3 feet of Red wire and 6 feet of Blue wire). Add wire as needed—but do not exceed specified limits (see page 15).</p> <p>Check that the grounded metal is 1/2" ±1/4" away from the lamp. All lamps in a fixture should have the same distance in order to have the same intensity.</p> <p>Check that all the lamps are the same exact type – both manufacturer and color.</p>
Ballasts buzz or hum.	<ul style="list-style-type: none"> <li>• System miswired.</li> <li>• Wrong lamp type for ballast installed.</li> <li>• Insecurely mounted ballast.</li> </ul>	<p>Check for interchanged Hot, Dimmed Hot, and Neutral wires.</p> <p>Verify the ballast's lamp type and voltage are correct.</p> <p>Tighten the mounting screws after checking for foreign material behind the ballast.</p>

For More Information...
.....See Voltage Map (Page 21)

