

## SuperDim® System troubleshooting

**Note: All wiring must be completed in compliance with national and local electric codes. Caution!!! : Disconnect power before servicing ballasts or lighting fixtures**

Symptom	Possible Reason	Step to take
1 Ballasts and modules not responding to wall control	Control May not be powered.	Check Line, Neutral and ground connections
	Control wires disconnected.	Check & fix control wire connections
	Wrong control unit	Check control specification. Use only 0-10V control
	Shorted Control wires.	Check & fix control wire connections
	Control wires at one or more devices may be cross-wired.	Check & fix control wire connections
2 All fixtures stuck at full bright	Control wires disconnected.	Check and fix the control wiring
	Wrong control unit	Check control specification. Use only 0-10V control
	Incorrect ballast	Use only SuperDim analog dimming ballasts.
	Non-Dimming ballast.	Check and replace with correct unit.
3 All fixtures stuck at full dim	Shorted Control wires.	Check & fix control wire connections
	Control wires at one or more devices may be cross-wired.	
4 Lamps flicker at low light levels	Two ballasts operating on exact same frequency	Wait five minutes for ballast self-adjustment.
	Long lead lengths.	Limit lead lengths as short as possible
	Leads bundled.	Limit lead lengths as short as possible
	Lamps too cold (low room ambient).	Wait until lamps warm up
	New lamps.	Burn lamps at full bright for at least 12 hours
	Ballasts not properly grounded.	Check fixture wiring. Check grounding point for proper contact.
	Fixture not properly grounded.	
	Lamp too close or far from the ground fixture surface.	Spacing between the ground plane and linear lamp must be between 1/8"-1/2 " for linear fluorescent..
5 Lamps flash and turned OFF	Bad Lamps.	Replace lamps
	Shunted sockets (Instant start socket with shorted terminals)	Check and replace lamp sockets
	Incorrect ballast.	Check and replace with correct unit.
	Wrong lamps.	Check device specification and use correct lamps.
	Wrong fixture wiring.	Check and correct wiring
6 Lamps never turned on	Ballasts or modules not powered.	Check device power wiring, circuit breakers etc
	Bad Lamps.	Replace lamps
	Shunted sockets (Instant start socket with shorted terminals)	Check and replace lamp sockets
	Incorrect ballast.	Check and replace with correct unit.
	Wrong lamps.	Check device specification and use correct lamps.
7 Intermittent operation of SuperDim system	Wrong fixture wiring.	Check and correct wiring
	Loose connection with control or power wiring.	Check and fix the wiring
8 Lamp ends turned black or frequent lamp failure	Wrong Fixture wiring or shunted sockets.	Check and fix the problem
	Incorrect ballast.	Check and replace with correct unit.
	Wrong lamps	Check device specification and use correct lamp
	Wrong fixture wiring.	Check and correct wiring

**Additional Troubleshooting Techniques:** In some cases the troubleshooting methods outlined above may not lead to a quick detection and resolution of the problem. In this case it is often beneficial to perform one or more of the following tasks.

**Divide and troubleshoot the system.**

If a large system of SuperDim® ballasts has an apparent malfunction, but the specific component or location of the malfunction is unknown, the system can be divided somewhere near the center of the control circuit. If the malfunction persists on one side but not the other, further separations may help determine the actual failure site.

**Bypass installed control wires:** If the source of a malfunction cannot be assigned to a ballast or to the wires connecting it to the control system, disconnect the installed control wiring and connect a known good control device using visible, external control wires.

**Ballast substitution:** After performing all steps mentioned above, if still any of the luminaires doesn't respond then replace it with a known good unit and try again.

**Control substitution:** After performing all these troubleshooting technique, if none of the lighting devices in the SuperDim loop is responding to the control device then replace the existing control device with a known good unit.

**For further assistance or ordering information contact Universal lighting technologies @ 1-800-BALLAST or visit our website at <http://www.universalballast.com>**