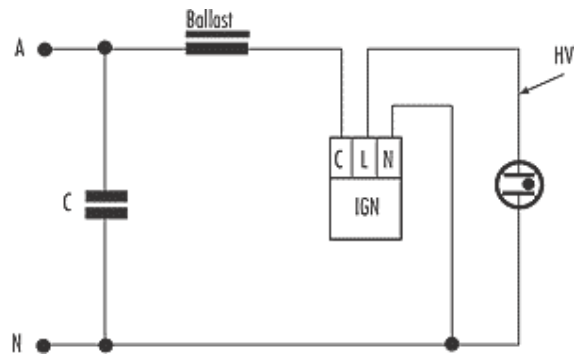


Troubleshooting



HID Lamp Circuit

**Metal Halide (MH)
and High Pressure Sodium (HPS)
and series reactor ballast with
superimposed-pulse ignitor circuit.**

Regular planned maintenance helps assure the best life and performance from a lighting installation.

This program should include a number of factors such as luminaire cleaning (reflector, lens, body, surrounds), lamp evaluation/replacement (spot versus bulk), operating periods, aiming and on-going suitability of product for application.

Changes in and around an installation may also require a reappraisal of the lighting system (eg aiming, lamp types etc.).

Only qualified technical personnel should carry out maintenance in accordance with relevant local codes and standards.

Remote control gear should only be housed and operated in suitability sized and ventilated cubicals or rooms so that appropriate ambient temperatures are achieved.



A well sized and ventilated remote control gear room for a large floodlighting installation

The operation of ballasts, capacitors, ignitors and associated cabling in unsuited or elevated temperatures will lead to premature failure.

Please refer to page iv for additional ballast and control gear information.

Symptom	Possible Fault	Test and Remedy
lamp intact but will not light	Failed lamp	Try another lamp.
	Supply fault	Check supply volts and circuit fuse.
	Wiring fault	Check (1) for loose connections and correct connections to ignitor. (2) that the insulation of cable between ballast or ignitor and lamp is sound. Look for signs of breakdown due to ignitor high voltage pulses. (3) that the cable length between ignitor and lamp is within limits specified.
	Ignitor fault	Check with ignitor tester or remove ignitor and try another
	Ballast fault	Disconnect ignitor. Check for mains volts at ballast output terminal. Try substitute ballast.
Low light output	Low lamp power	Check supply voltage is correct. Check correct compatible ballast is in use.
	Failing lamp	Try another lamp.

Light output unstable or fluctuating	Wiring	Check circuit is correctly wired, that all connections are tight and lamp is making contact in holder.
	Unsuitable fitting	Check that fitting is recommended for the lamp. eg. high pressure sodium lamp voltage may rise and cause extinction.
	Failing lamp	Replace lamp.

HID Lamp check list

	No Power to Fitting	End of Lamp Life	Lamp Loose in Holder	Improper Wiring	Incorrect Voltage	Incorrect Ballast	Lamp position	Faulty Lamp/Typ	Hot Lamp
Will not start	■	■	■	■	■	■	■	■	■
Short life								■	
Cycling					■	■		■	
Low light output		■		■	■	■		■	

Outdoor HID Luminaire

Lamp Problem	Steps for checking
on continuously	2
cycling	1 3 2
dim burning	1 6 3 5 7
will not start	1 2 3 4 5 6 7 8

1. Visual • Rating label description matches lamp type, wattage label and line voltage
2. PE Cell • Aimed wrong direction • Not functioning
3. Lamp • White powder area • Outer jacket staining • Arc tube blackening or broken • Broken from weld • Wrong lamp type or wattage
4. Ignitor • Leads on tight • Secure in socket
5. Wiring • Loose, Broken, Burned • Socket leads or tab broken • Wired per wiring diagram
6. Capacitor • Bulged case • Leaking
7. Ballast • Discoloured coil • Burned coil • Shorted terminals on coil
8. Luminaire • Animals or birds nest • Broken parts