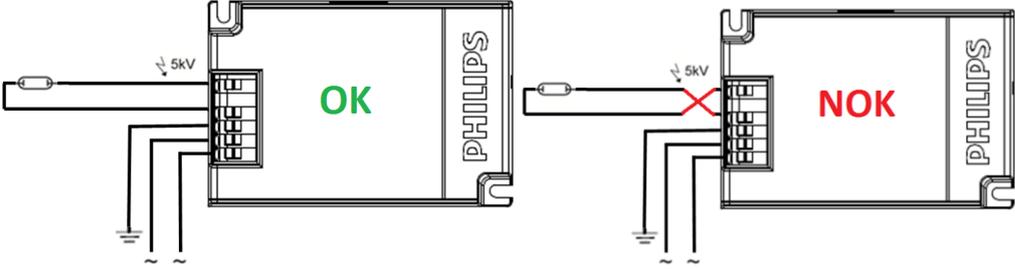




Service Notification

Philips HID Aspiravision Independent driver

Date:	August 2014
From:	Philips Lighting BG LS&E
Subject:	Potential Philips HID Aspiravision independent driver miswiring in the application.
Description	<p>There is a possibility that the “hot” and “cold” lamp wiring between the plug&play GST 18i3 connector-equipped electronic driver and a separate independent luminaire is incorrect. This wrong polarization may compromise the performance of such a lighting system. See figure 1 and 2 below.</p> <div style="text-align: center;">  <p>Fig. 1: correct wiring Fig. 2: incorrect wiring</p> </div> <p>This configuration may be created inadvertently during individual lamp driver replacement.</p> <p>The wrong polarization does not require immediate remediation. However, it is highly recommended to carry out a wiring check during regular maintenance activities, e.g. if a driver needs to be replaced.</p> <p>This document describes step by step how to identify applicable installations and which necessary corrective actions need to be carried out to safeguard performance.</p>
Definitions:	<p>“Hot” wire: wire between driver and luminaire that carries up to 5kV voltage towards earth during lamp ignition and lamp end-of-life situations.</p> <p>“Cold” wire: wire between driver and luminaire that carries ordinary mains voltage towards earth.</p> <p>GST 18i3 connector: special plug & play connector, allowing for easy connection of a separate luminaire to a driver by means of cable connectors.</p>



Approach:	Following steps need to be taken for identification and remediation when replacing a driver: Step 1: identify Philips driver by code number (I0NC) Step 2: verify driver GST 18i3 lamp connector key position Step 3: inspect “hot” lamp wire position Step 4: correct where necessary by swapping
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Step 1: identify Philips driver by I0-digit code number (I0NC)

-Wiring check applies to the following Philips drivers as shown in fig. 3.

Philips Aspiravision HID-AV C 35/C CDM with I0NC: 9137 006 469

Philips Aspiravision HID-AV C 70/C CDM with I0NC: 9137 006 479



Fig. 3

-Does the driver code in the installation match with one of the I0NC codes shown above?

No? → no further action required.

Yes? → proceed to **step 2**.

Step 2: verify driver GST 18i3 lamp connector key position

The driver lamp connector comes in two varieties; see fig, 4, 5 and 6.

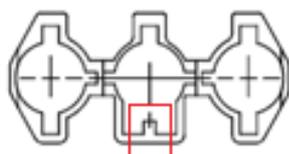


Fig. 3: Variety I

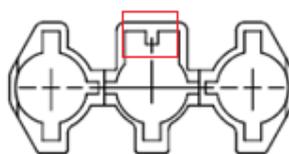


Fig. 4: Variety II



Fig. 6: Picture of variety I and variety II



Is the key position (notch in red square) in the middle lamp connector contact of the old driver identical to that of the new driver?

If notches have identical positions → no further action required.

If notches have different positions → proceed to **step 3**.

Step 3: inspect “hot” lamp wire position

The “hot” lamp wire between driver and luminaire can be identified by opening up the cable connector and visual inspection of the insulation thickness. The “hot” lamp wire normally has a brown or white color and has a thicker reinforced insulation compared to the neutral and protective earth wire since it has to withstand high ignition voltage.

See fig. 7 and 8. The ‘hot’ lamp wire *always* has to be connected to the “hot” driver terminal.

A few examples of “hot” lamp wires:



Fig. 7: Brown lamp wire = “hot”



Fig. 8: Brown and thicker white wire = “hot”

In figure 9 is shown an example of incorrect lamp - driver wiring. The reinforced “hot” lamp wire (brown) is connected to the “cold” driver terminal while the thinner “cold” wire (blue) is connected to the “hot” driver terminal.

If reinforced wire is connected to “hot” driver terminal → no further action required; end of inspection.

If reinforced wire is connected to “cold” driver terminal → proceed to **step 4**



 = “hot” driver terminal



Fig. 9: Example of incorrect lamp – driver wiring: reinforced brown wire is connected to the “cold” driver terminal

Step 4: wiring correction

If after driver replacement the reinforced wire is connected to the “cold” driver terminal then the wiring needs to be corrected. Correction has to be done by swapping the “hot” and “cold” lamp wires so that the “hot” wire is connected to the “hot” driver terminal. This will restore the correct polarization as shown in figure 1.

END