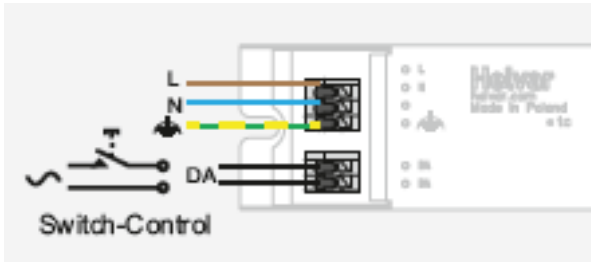


User guide: Switch-Control for drivers and ballasts

COMMON FEATURES FOR ALL HELVAR DALI DRIVERS AND BALLASTS

Connection and loading of Switch-Control



Picture 1: Connection of the Switch-Control

Switch-Control operates by connecting the mains voltage to the DALI input terminals. Therefore please ensure that all the components connected in this line are mains rated and protected according to all applicable safety requirements. The support of DALI operation is disabled for the time of Switch-Control operation and re-enabled with a mains reset.

The maximum number of drivers per switch is 20. Ensure all drivers and other loads are connected to the same mains phase.

The maximum wire length from the switch to the driver is 25 m. The wire length can be extended to 200 m by connecting a capacitor (1 μ F, 275 V) across the Switch-Control input.

Switch-Control for dimming the light intensity

Switch-Control pressed for 100-350 ms	Short press (ON/OFF function); toggle operation between ON and OFF, At switch ON the light returns to the previous level before OFF;
Switch-Control pressed for longer than 450 ms	Press and Hold (Fade UP/DOWN); after switch ON the first dimming direction is always to dim down; if you press and hold from OFF the light goes to min level and starts fading up; the dimming direction is always changed when Switch-Control is released.

The Switch-Control fade is using DALI commands UP and DOWN with a fixed fade rate of 5 sec from min level to max level.

Reset of Switch-Control

Due to differences in the cable-inductances of individual luminaires the intensity of the various drivers might occasionally go out of sequence with time. To synchronize carry out following sequence:

Press and hold the Switch-Control until all lights are ON. Then Switch all lights OFF with a **short press**. Finally **press and hold** to bring all lights back into synchronisation again (long press – short press – long press).

You can as an alternative synchronisation procedure carry out a power reset. Switching the mains OFF and ON will perform a total reset of the drivers, that go into the default factory setting providing “power on to last level “ is not activated.

Setting Power on to last level with Switch-Control

Following sequence will either **activate or deactivate** “Power on to last level” functionality:

- 1x long switch (20- 25 sec.)
- 3x short switch (100-350 ms)
- 1x long switch (20- 25 sec.)

Approximately a 2 seconds delay is allowed between the switches.

When **activating** the light must be **switched ON**

When **deactivating** the light must be **switched OFF**

Note: Power On to last level cannot be set by Switch-Control in the iC drivers, this must be done with a DALI command



INTELLIGENT COLOUR



THE SIMPLEST CONTROL OF TUNABLE WHITE IN A SINGLE LUMINAIRE

The traditional “retrievable switch” solutions provides features such as switching the light ON/OFF or dimming the light intensity UP/DOWN. Helvar’s iC drivers are additionally capable of tuning the colour temperature with one single Switch-Control unit, such as a simple rocker switch.

Note 1: Switch-Control in LL60/2-E-DA-iC and LL35/2-E-DA-iC drivers is only allowed to be used in Class I luminaires

Note 2: Dynamic drivers do not allow for Switch-Control operation

Switch-Control for the control of Colour Temperature

The control of Colour temperature is initiated with a press and hold of the light level up to the maximum, holding it at full intensity. After 6 seconds on full intensity the CCT jumps to the utmost cold white value starting to change towards the warm, changing between cold and warm until Switch-Control is released. The new colour temperature is set at the value of releasing the Switch-Control. Next time the Switch-Control is activated the colour temperature stays at set level and the intensity can normally be dimmed again from full intensity level.

In below Table 1 an example of the colour temperature control with an illustration can be found

Switch-Control actions	Effect on light
1 st Press and hold	Fades down the light intensity (T1)
2 nd Press and hold	Light intensity goes to max level. After 6 sec. CCT jumps to cold white starting to toggle between cold and warm white (T2) Releasing the Switch-Control sets the new colour temperature (T3)
3 rd Press and hold	Fades down the light intensity with the new colour temperature setting (T4)

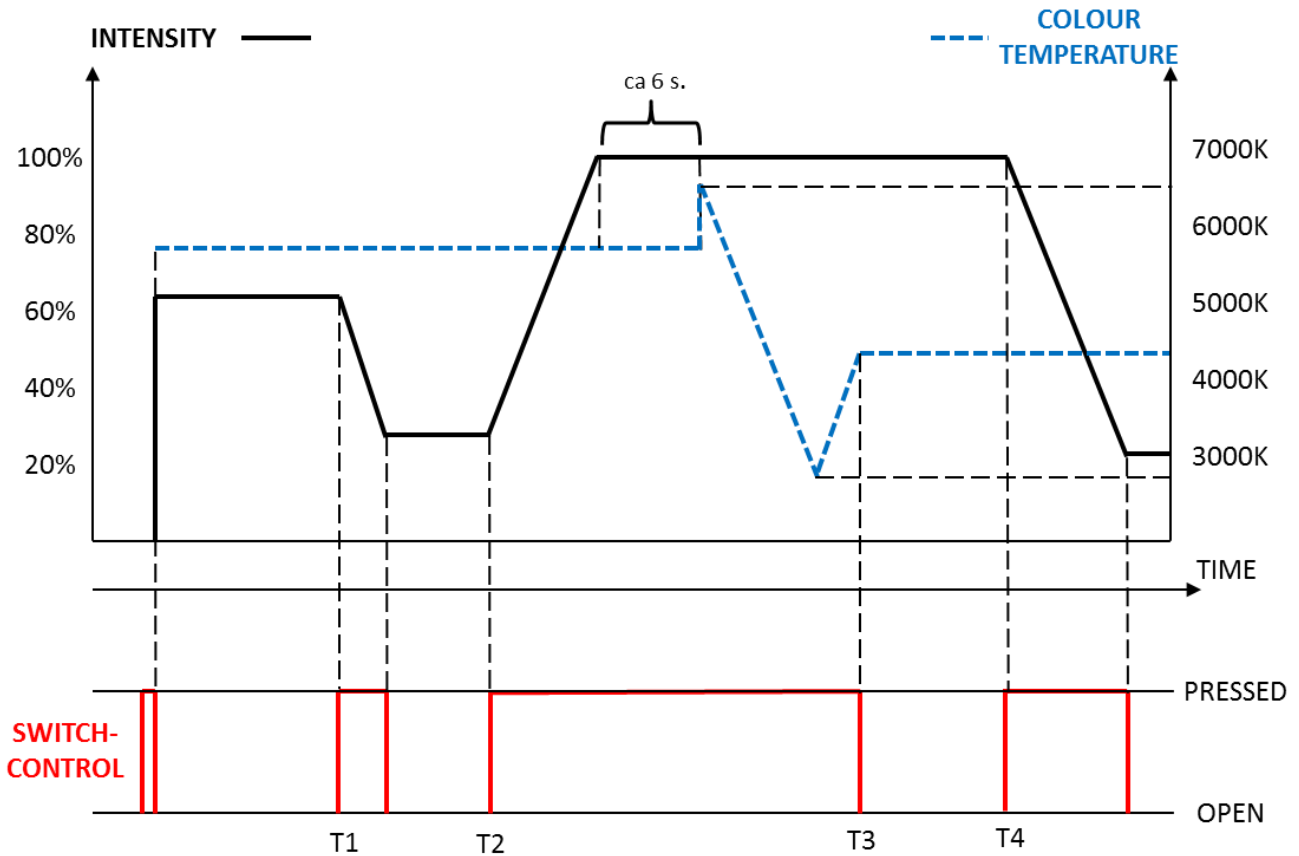


Table 1: Setting of the colour temperature with simple Switch-Control

Reset of Switch-Control in iC drivers

The intensity and/or CCT values of the various drivers might go out of sequence with time due to differences in the cable-inductances of individual luminaires. In this case press and hold the Switch-Control until all lights are ON. Then perform a normal colour temperature setting as described above. This will bring all lights back into synchronisation again.

You can as an alternative synchronisation carry out a power reset. Switching the mains OFF and ON will perform a reset of both light intensity and colour temperature to the default factory setting, unless “power on to last level” is activated.