

Application Note: Set-up and operation of Select the Weather solution

GENERAL DESCRIPTION

Select the Weather (StW) is a simple human centric lighting solution with value added functionality. With this solution it is possible to simulate different scenes of the natural outdoor lighting environment by changing the colour temperature and intensity of the lighting. The solution is easy and quick to install without any configuration needed on site. You only need to connect a StW control panel, a DALI power supply and Helvar's iC Dynamic drivers in the luminaires to get it working.

PRODUCTS NEEDED

- Panel: module 135STW + frame 230S
- DALI power supply i.e. iDim Solo 403
- LL60/2-E-DA Dynamic drivers,
- Optional: DALI PIR detector 311

CONNECTION



No programming or configuration is needed but the system works “out-of-box” having connected mains wiring and DALI network as shown in above picture.

The DALI communication is carried out in broadcast mode to all components.

The number of drivers connected in a circuitry is only limited to the size of the DALI power supply.

If needed several panels and /or PIR detectors can be connected to the DALI network.

SYSTEM OPERATION

The Select the Weather (StW) panel is preprogrammed to recall scenes 1-4 in broadcast mode from the “Weather” buttons.

The Dynamic driver has 16 scenes that can be recalled by DALI commands.





Scenes 1-4 are fixed and recall following “Weather” scenes

Scene 1: Morning light

Scene 2: Daylight

Scene 3: Cloudy weather

Scene 4: Dynamic weather

OPTION	EFFECT	WHEN TO USE	COLOUR TEMPERATURE	LIGHT OUTPUT
	Calm down	High stress period	Warm	80 %
	Energise	Early morning	Cool	100 %
	Concentrate	Thinking process & presentation	Intermediate	50 %
	Stay alert	Normal daily work	Changing naturally	90 %

The colour temperature values of scenes 1-4 are pre-set & fixed and cannot be changed.

The light level can temporarily be adjusted in scenes 1-4 but the new light level values cannot be stored under these scenes.

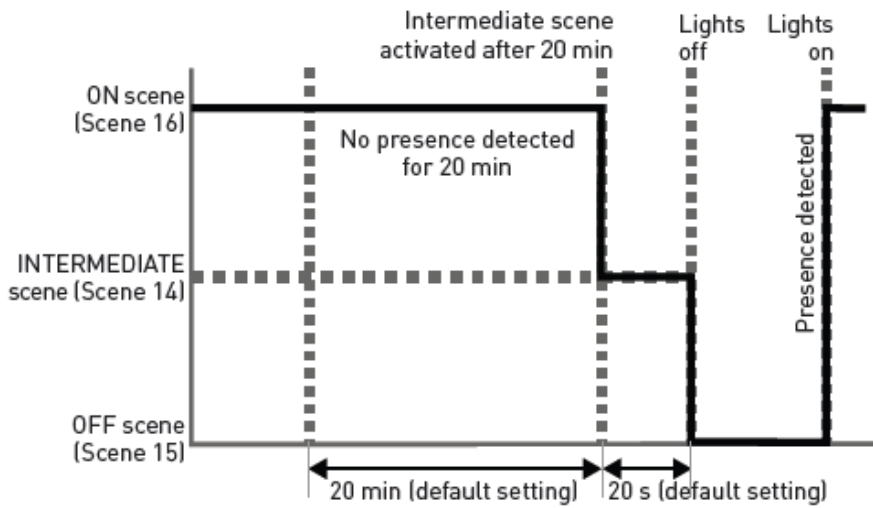
Scene 4: Dynamic weather is the factory default scene.

For further details to the operation of StW and Dynamic Weather please refer to the LL60/2-E-DA Dynamic LED driver datasheet at www.helvar.com/products/led-drivers

OPERATION WITH PIR DETECTOR

Scenes 14-16 are designed to recall scenes serving the PIR operation.

When no presence is detected in 20 minutes by the PIR sensor (i.e. Helvar 311) it will send a broadcast message to recall scene 14 (intermediate scene). If no presence still is detected within 20seconds the sensor will call for scene 15 (OFF). When the sensor next time detects presence it will recall scene 16 (last colour temperature and light level set by the user).



PIR Automatic ON/OFF Sequence

ON scene	Default: scene 16 (last level set by user)
INTERMEDIATE scene	Default: scene 14
OFF scene	Default: scene 15

For further details with installation and operation of the detector please refer to the DIGIDIM 311 Ceiling PIR Detector datasheet at www.helvar.com/sensors