



# OpenCeilings

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## INSTRUCTIONS MANUAL





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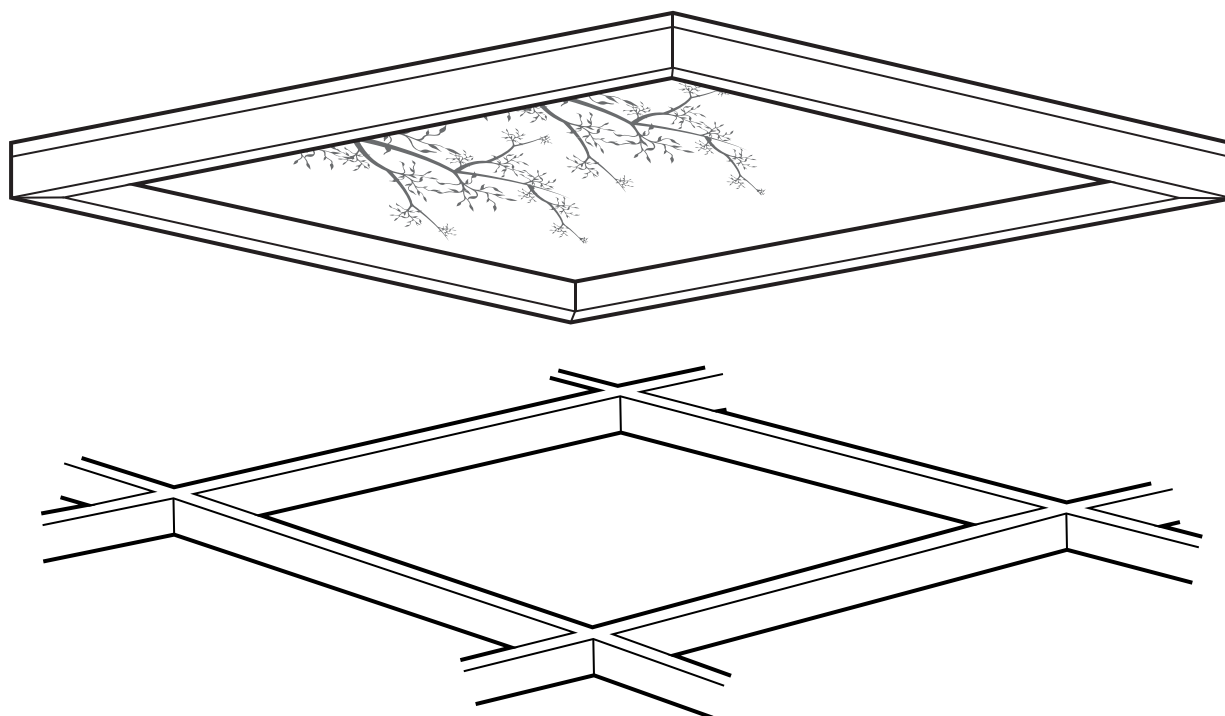
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## TERMS OF USE

- Only use the LED driver and LED panels provided by OpenCeilings. Failure to do so may result in permanent damage to the lightbox and will void the warranty
- OpenCeilings panels are intended for internal use only.
- Do not install the OpenCeilings in areas with high humidity levels
- Do not subject the OpenCeiling panels to extreme temperatures (Operating Temperature =  $-30^{\circ}\text{C}$  +  $40^{\circ}\text{C}$ )
- OpenCeilings must be installed by a competent, trained person following the installation guide provided
- Damages caused by failure to follow this installation guide and/or Terms of Use will void the warranty.
- Any damages to the OpenCeilings should be reported within 30 days after delivery of the goods in order to claim replacement parts.



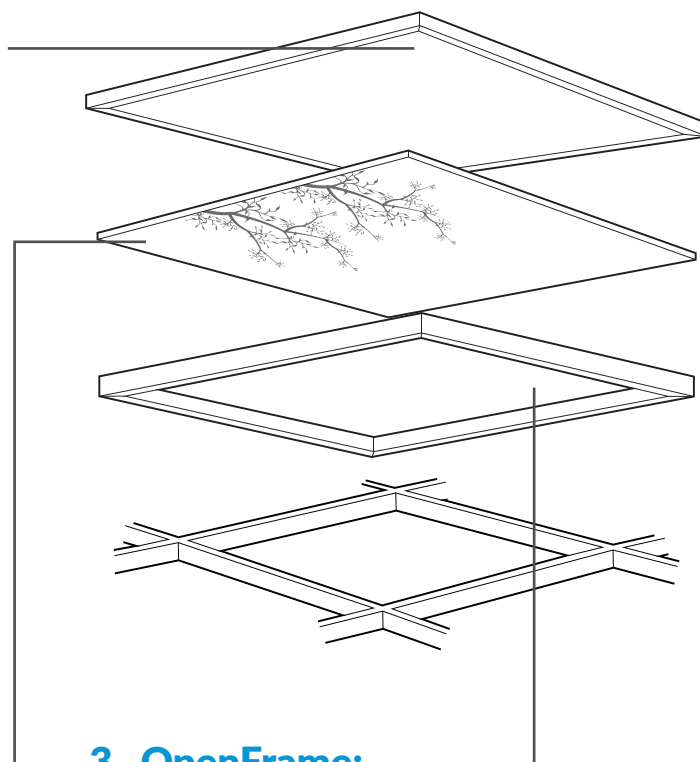
# OPENCEILINGS PRODUCT DATASHEET

## 1. LED Panel & LED Driver:

- Power: 13W
- Illuminance: app. 150 LUX per 4 panels at working plane height
- Color Temperature: 6000K Natural Daylight
- CRI: >85
- Safety Standards: CE, TUV Rheinland, RoHS, REACH, Erp, UL/cUL, Glow wire test 850°
- IP Rating: IP20 (indoor use)
- Lifud GSD Driver. CC 350mA per 60cm x 60cm panel
- Input: 180~295 VAC
- Power factor >0,95
- Supports 0-10V /PWM /Rx and DALI dimming
- Electromagnetic Compatibility: ENEC: EN61347-1: 2015, EN 61347-2-13: 2014/A1: 2017, EN 62384: 2016/A1: 2009

## 2. Photographic Panel:

- High-resolution image printed on a 2 mm PET-G surface
- Reaction to fire Resistance (EN 13501) classification B-s1,d0, Glow Wire 960°
- Calibrated for 6000 Kelvin light source
- Print-to-plate printing, non-glare finish
- UV printing prevents color fading
- Designed to fit in OpenFrames



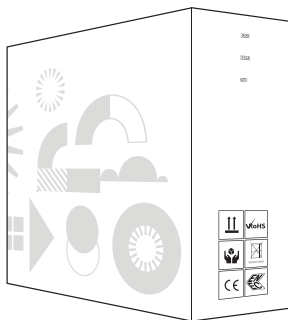
## 3. OpenFrame:

- Light weight aluminum OpenFrame
- Transforms the existing grid of the suspended ceiling into the 3D structure of a window casing.
- Quick and easy installation
- Coated in RAL 9010
- Compatible with standard 60cm x 60cm 24mm and 15mm grid

## Dimensions and Weight:

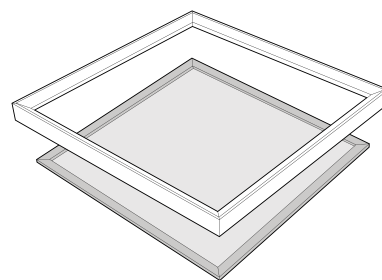
- 593mm x 593mm x 53mm (l\*w\*h)
- Weight assembled fixture: 3,67kg

# WHAT'S IN THE BOX?

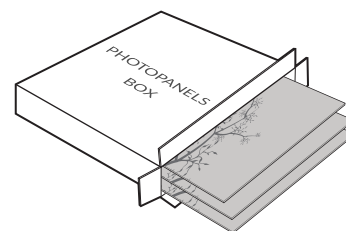


Packaging Box

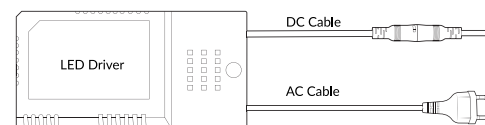
1. OpenCeiling LED Panels & OpenFrames.



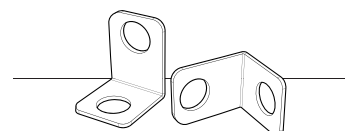
2. Photopanel Box.



3. LED Driver.



4. L-Brackets.



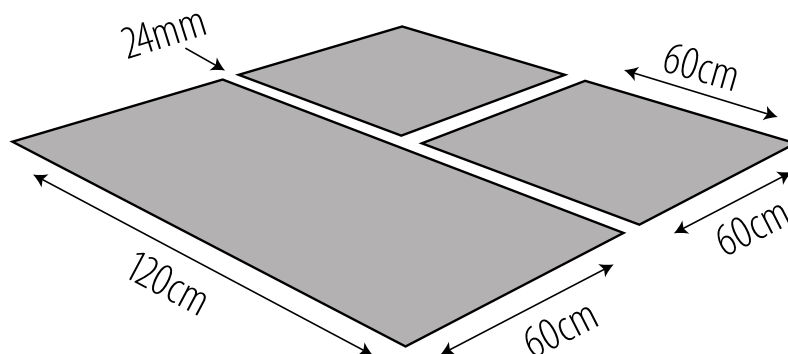
5. Synchronization Wire.



# CHECKLIST

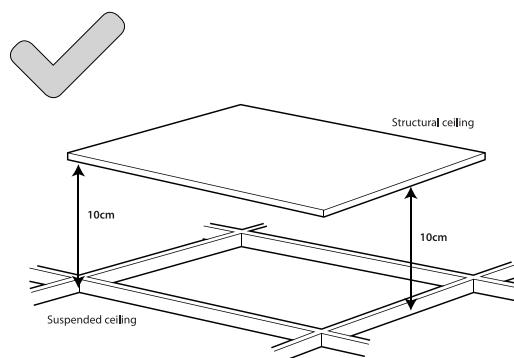
## 1. Ceiling panels & grid size

Do the ceiling panels measure 60cm x 60cm or 120cm x 60cm?  
OpenCeilings panels can be installed in a 15mm or 24mm T-grid.

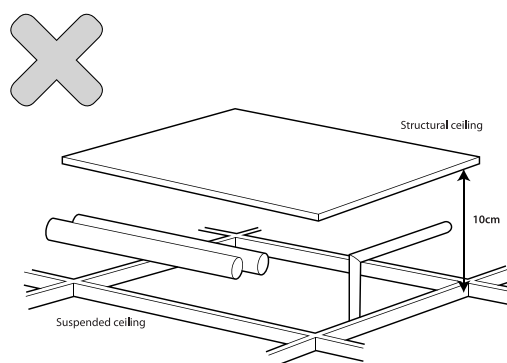


## 2. Clearance above Ceiling

Is the clearance between the base of the false ceiling grid and the structural ceiling 10cm?  
(Please note that in cases with less clearance installation could still be possible, please contact OpenCeilings).



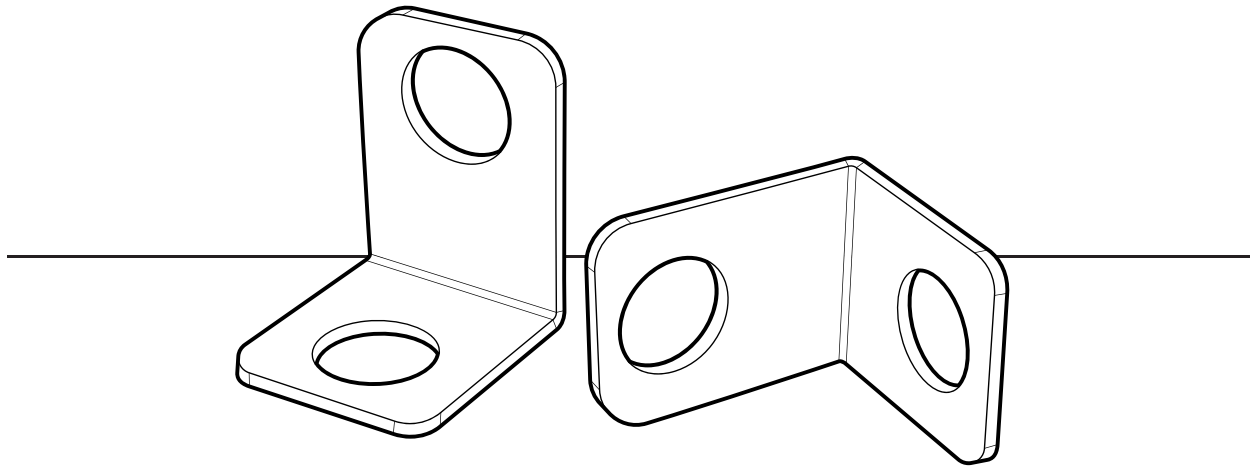
There must be no obstacles in the clearance area (i.e pipes or vents) to be able to install the OpenCeilings light fixture



## CEILING PREPARATION

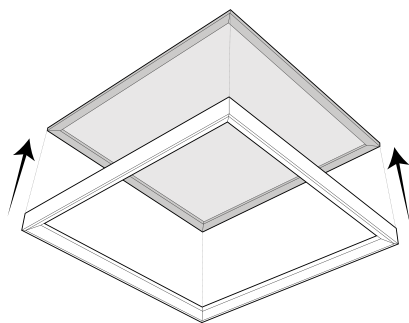
Replace grid hangers with iron wire or squeeze the grid hangers together with pliers in order to create space for the OpenCeilings panels.

OpenCeilings provides additional L-brackets in order to suspend the OpenCeilings panels to a fixed ceiling. The bracket can be fixed directly to the top of the OpenFrame using the provided screws.

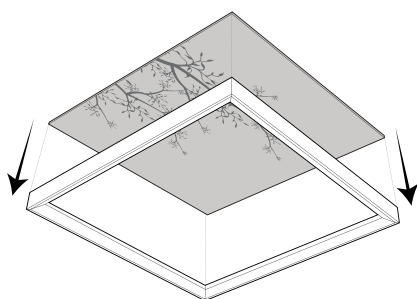


Always ensure that your false ceiling can maintain the weight of the OpenCeiling. If necessary, please reinforce the false ceiling with ceiling hangers/ iron wire or use the L-brackets to suspend the OpenCeilings from a fixed ceiling without resting on the T-grid.

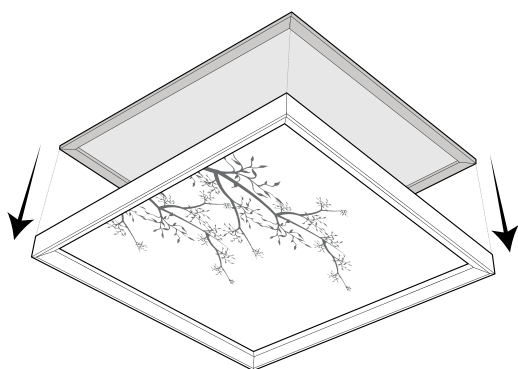
# ASSEMBLE OPENCEILING PANELS



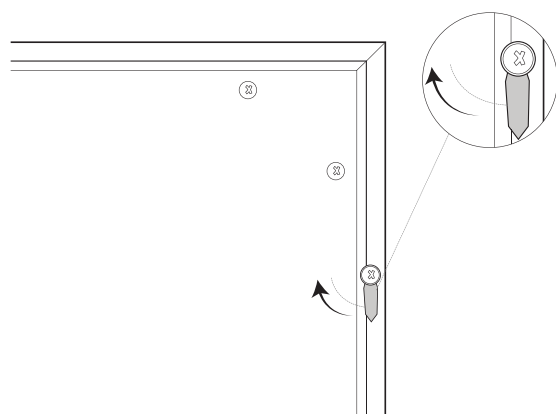
1. Open the box containing the OpenCeilings Photopanel.
2. Please remove the protective film from the back of the Photopanel and the OpenFrames.
3. Temporarily remove the LED panels from the OpenFrames.



4. Insert the Photopanel in each OpenFrame.



5. Insert the LED panel on top of the Photopanel.

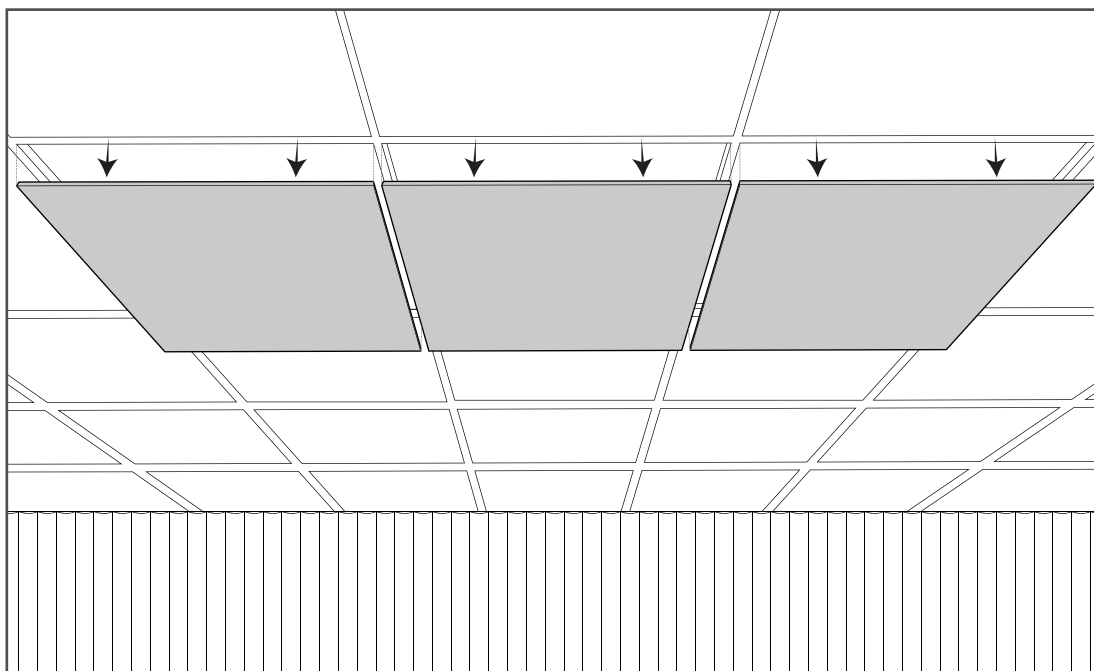


6. Properly secure the LED panel by turning all the frame turn buttons and pressing them firmly down onto the LED panel.

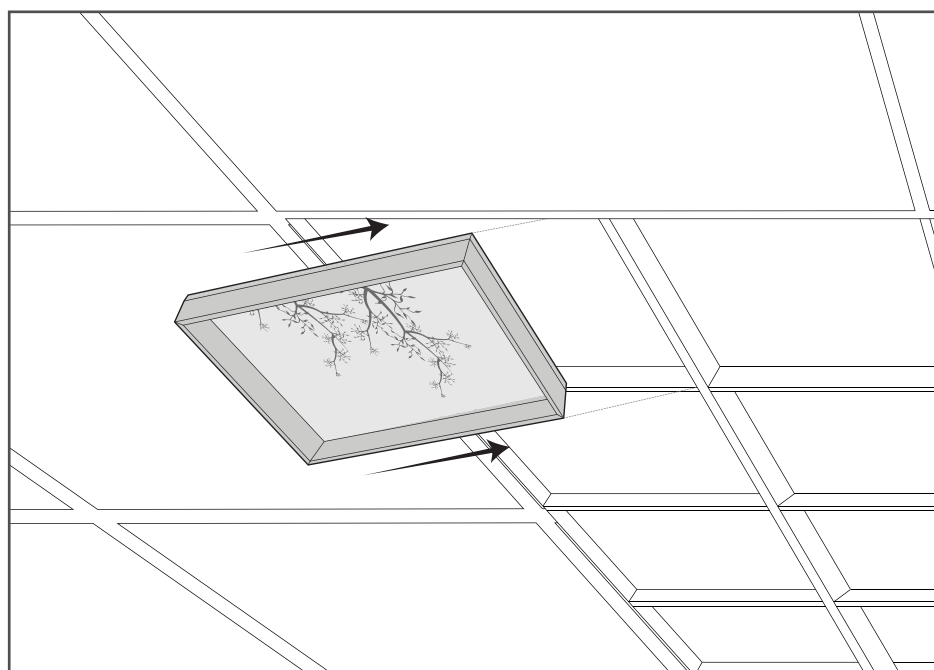


# INSTALLATION GUIDE

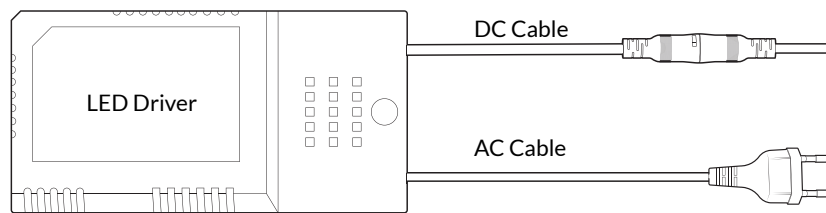
1. Remove the old ceiling panels for the area where you want to install the OpenCeiling.



2. Insert the assembled OpenCeilings panel diagonally through the ceiling grid. Carefully place the Plug and Play model onto the grid. Make sure that the orientation of the image corresponds with the provided image-layout.



3. Connect the OpenCeilings panels to the LED driver provided using the DC cables before switching on the power. Connect the LED driver to a power point.

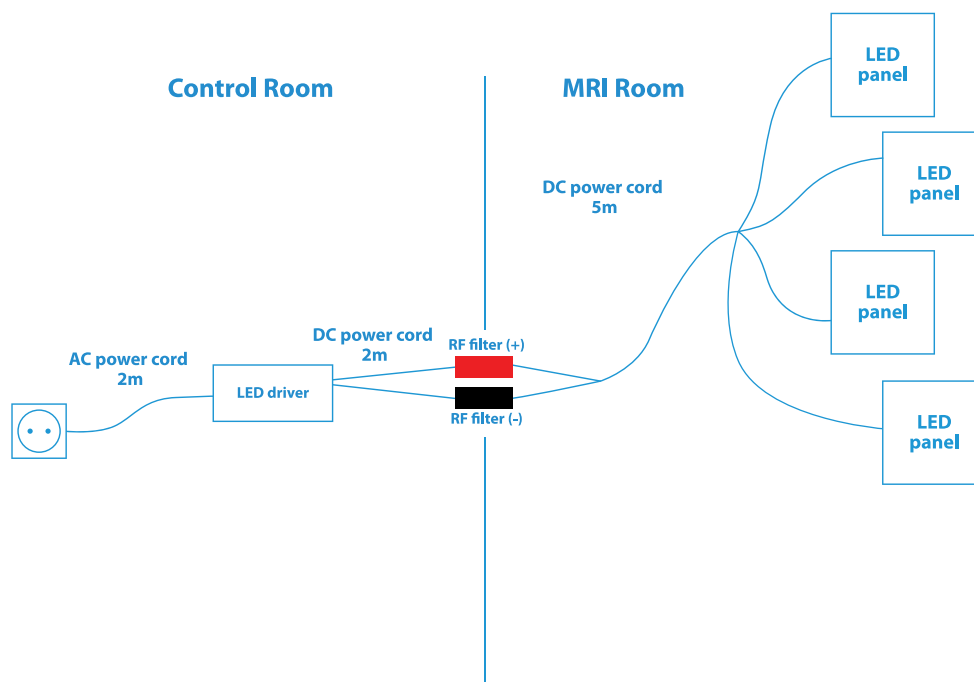


4. Repeat step 2 and 3 according to the image-layout.
5. Switch on the power after all OpenCeiling panels are installed and connected properly to the LED driver(s).

## MRI INSTALLATION

1. The LED driver should be placed outside the MRI environment. The use of RF-Filters is advised.

**Caution:** Only use non-ferro / non-magnetic equipment.



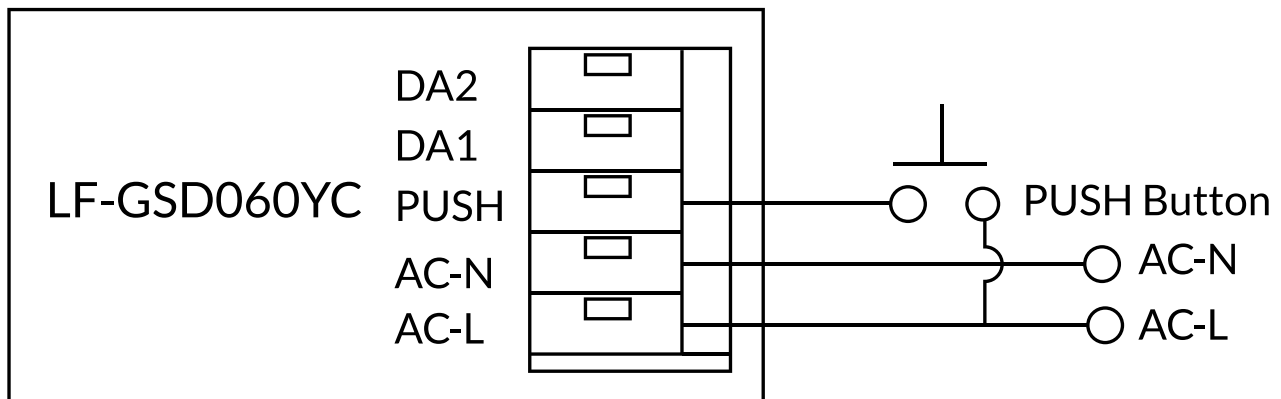
## DIMMING OPTION:

### Standard

All OpenCeilings come standard with the LIFUD GSD series driver. The driver supports:

- 0-10V/PWM/Rx dimming
- DALI dimming and the logarithmic or the linear dimming curves that can be selected via software
- PUSH dimming

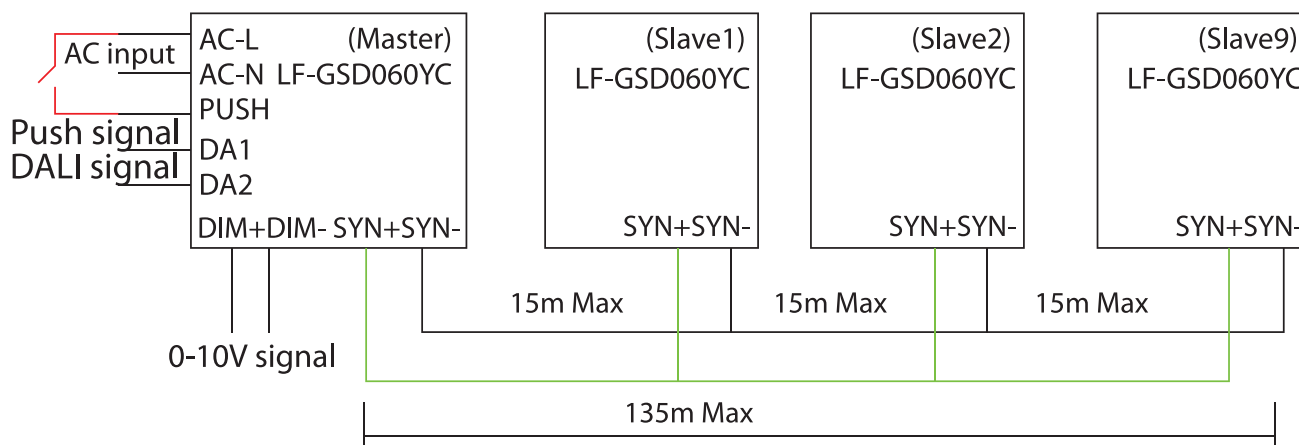
Push dimming wire diagram:



### Master – Slave

The Lifud GSD driver supports Master – Slave dimming in order to synchronize dimming between 1 Master and up to 9 Slave drivers.

**Important:** Select the Master Slave by switching DIP Switch number 5 to ON, on the Lifud driver

**Master - Slave diagram:****EnOcean Option**

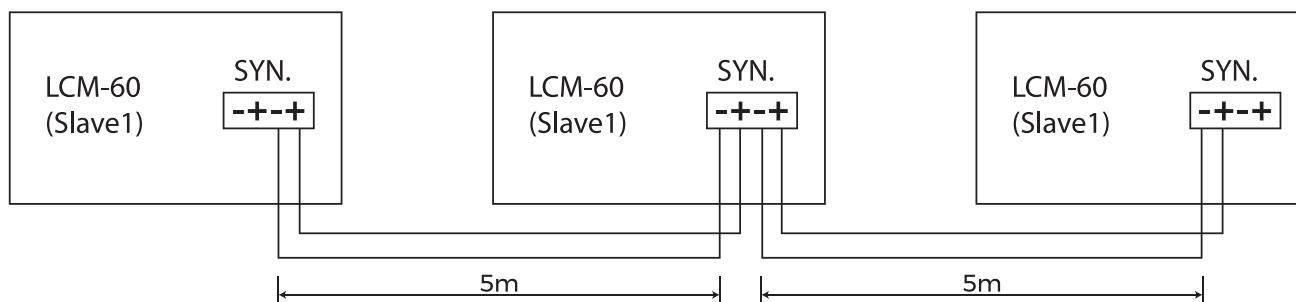
For wireless dimming OpenCeilings offers the wireless EnOcean dimming driver (Meanwell LCM EO series) and EnOcean switch

**EnOcean Pairing Instruction:**

Shortly press (around 2 second) the small button on the EnOcean driver (with a pen or screwdriver) to enter linking / pairing mode. The OpenCeilings panel(s) connected to the EnOcean drivers will start toggling between 10% and 90% indicating that linking mode is active. Once activated, this mode stays active to provide time to link the EnOcean wall switch with the driver. The mode will stop and go back to normal mode after 30 seconds if no wireless signal from the switch is received.

For the switch to be linked to the driver, please click the "I" button on the switch 4 times quickly. The OpenCeilings panels will be on 100% for 4 seconds, indicating a successful pairing between switch and driver. To exit linking / pairing mode and return to normal operation, wait 30 seconds without doing anything or shortly press the small button on the driver again. In order to clear all linked switches and reset the LED driver to factory settings, please press and hold the driver button for 10 seconds.

EnOcean drivers can also synchronize using the Master – Slave function according to the following wiring diagram. Blue and white sync cables are provided in the driver box.



The OpenCeilings EnOcean switch works without batteries. The wireless signal is created kinetically by pushing the buttons on the switch.



[www.openceilings.nl/en](http://www.openceilings.nl/en)

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