



# LIGHTING CONTROLS

## LDM Series

## LED DALI Dimming Module

### DALI SYSTEM

### Overview

LED DALI Dimming Module (LDM) is a Dimming Module connected to DALI Communication Line. This LDM is a device that controls ON / OFF and Dimming of LED lighting, and it is upgraded to enable more various interlocking control by connecting up to 64 to DALI Master through communication by DALI protocol. The LDM Series is classified into various types according to the type of output stage.

### Main Feature

- DALI PROTOCOL INTERFACE
- Photo adjustment function by 254 steps
- 16 sets of SCENE & Group Setting Function
- DALI Protocol : IEC 62386
- Baud Rate : 1,200 bps
- Data : Individual ON/OFF Control, Individual Dimming Control, Lamp Status/Alarm Signal, Ballast Status/Alarm Signal.
- Dimming Range : 1% ~ 100%
- Dimming times : Program
- Do not require a separate shielded communication cables, able to construct with general cable or cable wiring.
- When constructing the cable, able to use the 5C cable (3C-L/N/E, 2C-DALI). Also without installing a separate communication line, construction is possible.
- No need to distinguish between the polarity of the communication line.
- Type of output : Normal type is a module that is directly connected to LED luminaire, and there are modules to give PWM and 0-10v signal to SMPS (LED Driver), respectively.



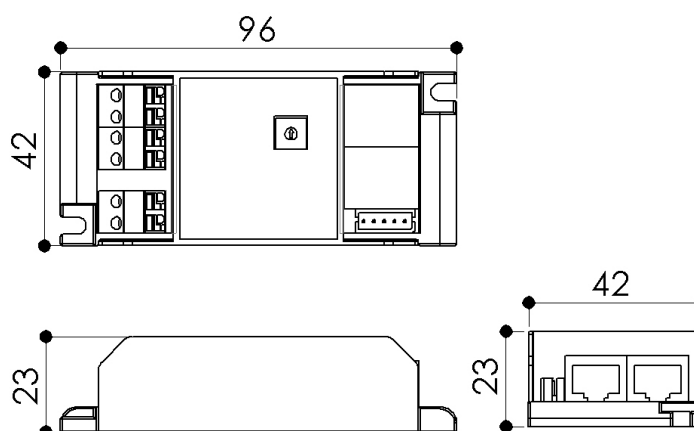
### Application

- LED lighting can be controlled through DALI communication by applying to various types of lighting such as flat panel lighting (downlight), downlight and LED bar..
- By applying the universal DALI Protocol (IEC 62386), compatible with all DALI Controllers (Master).
- Ballast of LED lighting shall use ballast less than 180W when output voltage of constant voltage method is below 60V / 3A.
- The LDM is mounted with screws or magnets next to the ballast at the back of the LED luminaire.
- In cable connection, ballast input voltage and LED output voltage should be connected with the polarity (+/-) in mind.

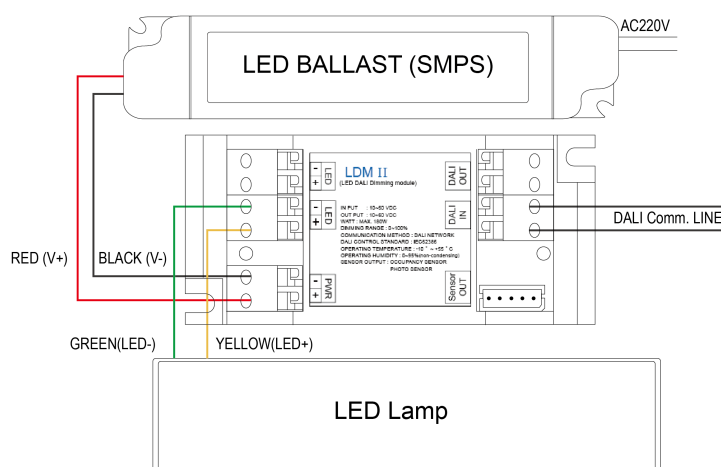
### Specification

- LED Min.10W - Max.180W Type
- Environment Condition: -10°C ~ 55°C, 0~95% RH
- Input Power : DC 10~60V Voltage
- Power consumption : 12 ~ 50W
- Communication Method : DALI
- Max. Comm. distance : 300M
- Output Power(POut) : Max. 180W
- Output Voltage(VOut) : 12 - 60VDC(LDM-n only)
- Outout Current(IOut) : Max.3,000mA(LDM-n only)
- Dimming Range : 1 - 100%
- OverLoad Protection : Yes
- LDM-pwm and LDM-010 are PWM and 0-10v Signal only for SMPS, respectively

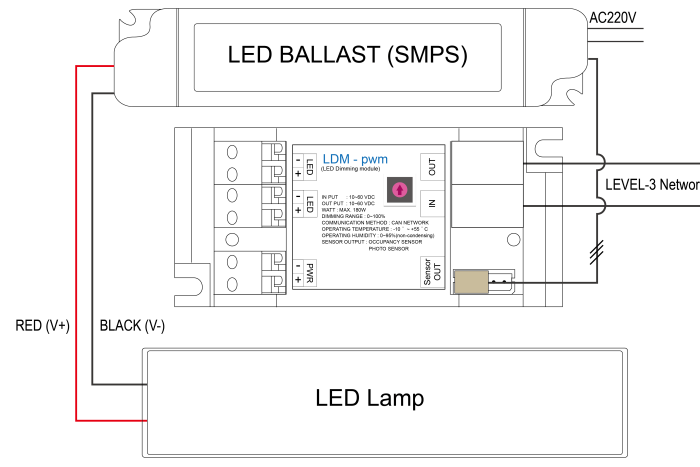
### Dimension of Layout



### Connection Diagram



LDM-n Type



LDM-pwm or O10 Type

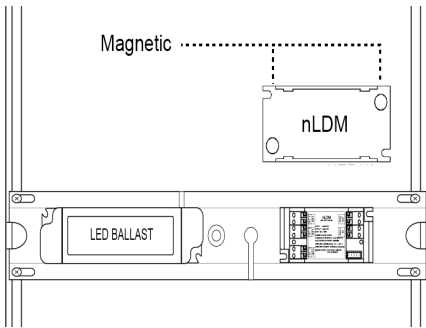
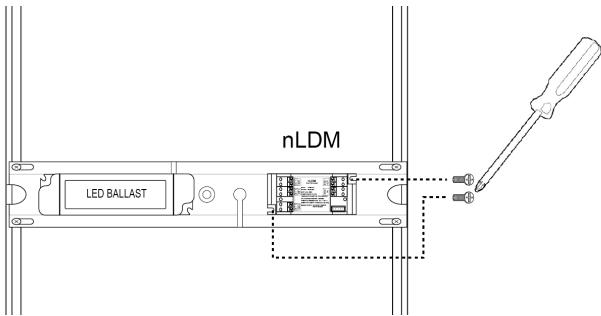


Application

- Up to Maximum of 64 LDM-2 can be connected on one DALI Master, allowing Individual/ Group/ Scene control
- 16 GROUP can be set
- 16 SCENE can be set
- Fade Time can be set
- Fade Rate can be set
- Min/Max. Level can be set
- Controllable by Occupancy sensor
- Controllable by Photo sensor

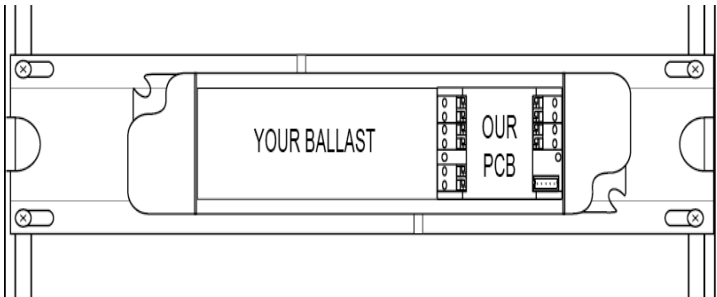


Installation Guide



Semi-finished from available

- It is available in PCB form so that our LDM-2 can be used as an integrated ballast.
- Using semi-finished product of LDM-2, use inside the ballast.
- See the illustration on the side.



Product List

Product Name	Model Number	Key Specification	Output Capacity for LED Load		
			10~20W	21~60W	61~180W
LED DALI Dimming Module with Output Circuit	LDM-L3-n	Input : DC10 -60V, Output : DC12-60V, Dimming Range : 1-100%, DALI Comm.	LDM-L3-n-20	LDM-L3-n-60	LDM-L3-n-180
LED DALI Dimming Module with PWM signal	LDM-L3-pwm	Input : DC10 -60V, Output : PWM signal Dimming Range : 1-100%, DALI Comm.	LDM-L3-pwm	LDM-L3-pwm	LDM-L3-pwm
LED DALI Dimming Module with 0-10v signal	LDM-L3-010	Input : DC10 -60V, Output : 0-10v signal Dimming Range : 1-100%, DALI Comm.	LDM-L3-010	LDM-L3-010	LDM-L3-010