LCM-40(DA), LCM-60(DA) installation manual

Features

- 180~295VAC input only
- Built-in active PFC
- Output current level selectable by DIP switch
- Built-in DALI interface and push dimming function (DA version)
- Built-in 0~10Vdc and PWM signal dimming function (Non-DA version)
- Power supply synchronization function up to 10 units
- Temperature compensation function by external NTC
- Class Ⅱ power unit, ungrounded
- Built-in 12V/50mA auxiliary output
- Full plastic case enclosed
- No load power consumption <1W (1.2W for DA version)
- Protections: Short circuit / Over voltage / Over temperature
- 3 year warranty
- Suitable for intelligent LED lighting

Wiring

- Housing with cable clamp for remote installation
- Use wires with an adequate cross-section (see 5)
- Use suitable mounting tools to do the wiring and mounting (see 5)
- Use a MCB (miniature circuit breaker) with an adequate current rating to protect the lighting system (see 6)

Environmental limitations

- Maximum ambient temperature must not exceed 60℃
- Always allow adequate ventilation clearances, 50mm, around the unit in use to prevent it from overheating
- Only install the unit in interior environments

Cautions

- This unit must be installed by a qualified electrician
- This unit is not suitable for applications that DC/DC converters are connected before LED lamps

Settings and connections

1. Output Current Level Settings

The LCM can provide various output currents by setting the DIP switch. The settings of the DIP switch are shown in the tables below.

LCM-40(DA)

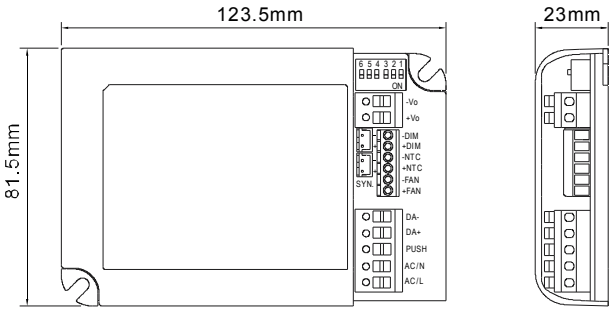
Voltage range	Selectable Current	1	2	3	4	5	6
2-100V	350mA	---	---	---	---	---	---
2-80V	500mA	ON	---	---	---	---	---
2-67V	600mA	ON	ON	---	---	---	---
2-57V	700mA*	ON	ON	ON	---	---	ON
2-45V	900mA	ON	ON	ON	ON	---	ON
2-40V	1050mA	ON	ON	ON	ON	ON	ON

LCM-60(DA)

Voltage range	Selectable Current	1	2	3	4	5	6
2-90V	500mA	---	---	---	---	---	---
2-90V	600mA	ON	---	---	---	---	---
2-86V	700mA*	ON	ON	---	---	---	---
2-67V	900mA	ON	ON	ON	---	---	ON
2-57V	1050mA	ON	ON	ON	ON	---	ON
2-42V	1400mA	ON	ON	ON	ON	ON	ON

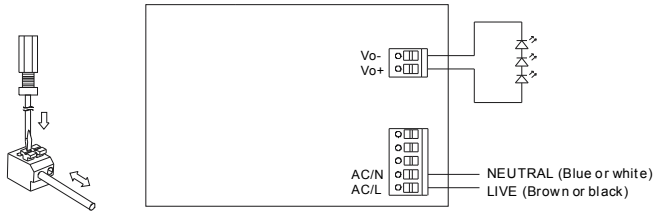
Note : 1.Factory default setting is 700mA.
2.Output voltage and output wattage must not exceed the rated values.

Terminal blocks assignment for LCM



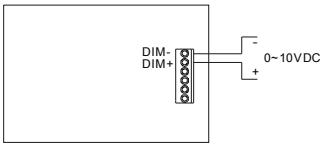
2. Connection of LED Lamps

Press down the "push button" by a slotted screw driver to insert or remove the cable.

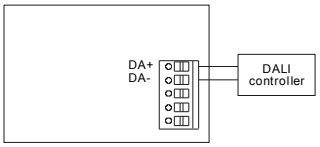


3. Connection of Dimming Functions

a. 0-10Vdc or 10V PWM (non-DA version only)

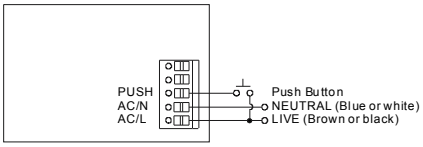


b. DALI (DA version only)



Note : Maximum DALI cable length is 300m
(based on a 1.5mm^2 or 14AWG cable)

c. Push dim (DA version only)



Note: ONLY use open push button without indicator light.

⚠ **Warning:** Risk of short circuit. The push button can only be linked between the PUSH and the AC/L (brown or black). DO NOT connect the push button to the AC/N (blue or white).

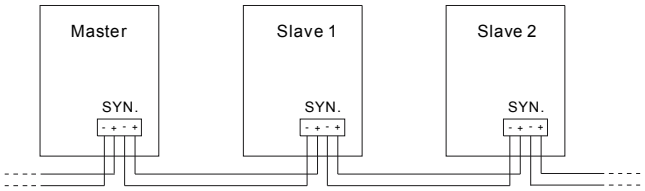
Dimming control mechanism

Function	Pushing time
Turn ON/OFF	0.1 ~ 1 sec
Dim UP/DOWN	1.5 ~ 10 sec
Reset	> 11 sec
None	< 0.05 sec

- It will always dim up when light intensity is lower than 10%, whereas it will always dim down when light intensity is higher than 90%
- Factory dimming setting: 100%

d. Synchronization operation

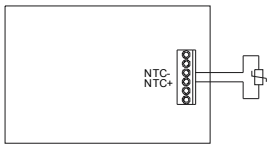
The lights driven by LCM units (slaves) can be dimmed synchronously through a LCM unit (the master) directly controlled via 0-10Vdc, 10V PWM, DALI or push dim dimming function. The wiring is shown as below.



- Mating housing for SYN. connectors : JST B2B-XH or equivalent
- Maximum number of the LCM units : 10 (1 master + 9 slaves)
- Maximum cable length between each units : 20m (based on a cable with cross-section of 0.15mm^2~0.3mm^2 or AWG No. of 22 ~ 26)

Note 1 : DO NOT connect dimming circuitry to slaves.
Note 2 : Please make sure all units are set to 100% dimming setting (factory default) before synchronizing.

4. NTC Connection



5. Recommended Screwdriver, Wire and Torque Setting

Type	The cover (the blue one)	Screw terminal (FAN±, NTC±, DIM±)	Push terminal (ACL/N, PUSH, DA±, Vo±)
Solid wire	-----	ϕ0.404 - ϕ0.643mm	ϕ1.024 - ϕ1.628mm
Stranded wire	-----	0.129 - 0.326mm^2	0.823 - 2.08mm^2
American wire gauge	-----	22 - 26AWG	14 - 18AWG
Wire stripping length	-----	7mm (0.27")	10mm (0.39")
Screwdriver	6mm Phillips	3mm Phillips	3mm Phillips
Recommended tightening torque	4.6 kgf-cm (4 lb-in)	2.88 kgf-cm (2.5 lb-in)	-----
Suggested push-down strength	-----	-----	3 - 4 kp (6.61-8.81 lbF)

6. Suggested Maximum Number of the LCM Units that can be Connected to a MCB (miniature circuit breaker) at 230Vac

Model	B10	B16	C10	C16
LCM-40(DA)	10	16	17	28
LCM-60(DA)	9	15	16	26

Note: These calculated values are based on MCB S201 series manufactured by ABB.

PEWATRON
a member of the Angst + Pfister Group

We are here for you. Addresses and Contacts

Sales Switzerland & Liechtenstein

Matthias Rüegg
Ruhbergstrasse 32
CH-9230 Flawil

Phone +41 44 877 35 18
Mobile +41 76 491 66 66
Fax +41 44 877 35 19

matthias.rueegg@pewatron.com

Sales International Key Accounts

Peter Felder
Thurgauerstrasse 66
CH-8052 Zürich

Phone +41 44 877 35 05
Mobile +41 79 406 49 83
Fax +41 44 877 35 25

peter.felder@pewatron.com

Sales Germany

Postcode 10000–59999
Postcode 80000–99999

Kurt Stritzelberger
Neumarkter Str. 86a
D-81673 Munich

Phone +49 89 260 38 47
Mobile +49 171 803 41 35
Fax +49 89 43 10 91 91

kurt.stritzelberger@pewatron.com

Postcode 60000–79999

Dieter Hirthe
Auf der Entenweide 4
69502 Hemsbach

Tel. +49 6201 508 9250
Mobil +49 1637 627 430
Fax +49 6201 508 9751

dieter.hirthe@pewatron.com

Sales Austria

Kurt Stritzelberger
Neumarkter Str. 86a
D-81673 Munich

Phone +49 89 260 38 47
Mobile +49 17 18 03 41 35
Fax +49 89 43 10 91 91

kurt.stritzelberger@pewatron.com

Sales Other Countries / Product Management

Sensors

Physical Sensors
Data Acquisition

Thomas Clausen
Phone +41 44 877 35 13
thomas.clausen@pewatron.com

Geometrical Sensors

Eric Letsch
Phone +41 44 877 35 14
eric.letsch@pewatron.com

Power Supplies

DC-DC Converters
Switching Power Supplies
DC-AC Inverters

Sebastiano Leggio
Phone +41 44 877 35 06
sebastiano.leggio@pewatron.com

E-Components

Current Sensors
Man Machine Interface
Measurement Probes

Sebastiano Leggio
Phone +41 44 877 35 06
sebastiano.leggio@pewatron.com

PEWATRON AG
Thurgauerstrasse 66
CH-8052 Zurich

Phone +41 44 877 35 00
Fax +41 44 877 35 25

www.pewatron.com
info@pewatron.com