

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



Features

- 90~132VAC 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

- ullet Class ${\rm I\hspace{-.1em}I}$ power unit, ungrounded
- · Full plastic case enclosed
- 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°C (LCM-60U(DA)must not exceed 65°C)
- · 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-40U(DA)

Voltage range	Selectable Current	1	2	3	4	5	6
2-100V	350mA						
2-70V	500mA	ON					
2-59V	600mA	ON	ON				
2-50V	700mA*	ON	ON	ON			ON
2-39V	900mA	ON	ON	ON	ON		ON
2-34V	1050mA	ON	ON	ON	ON	ON	ON

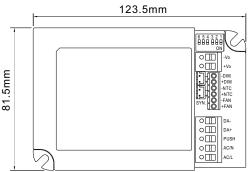
LCM-60U(DA)

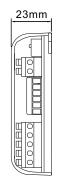
Voltage range	Selectable Current	1	2	3	4	5	6
2-90V	500mA						
2-84V	600mA	ON					
2-72V	700mA*	ON	ON				
2-56V	900mA	ON	ON	ON			ON
2-48V	1050mA	ON	ON	ON	ON		ON
2-36V	1400mA	ON	ON	ON	ON	ON	ON

Note: 1. Factory default setting is 700mA.

 $2. \\ Output \ voltage \ and \ output \ wattage \ must \ not \ exceed \ the \ rated \ values.$

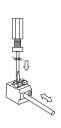
Terminal blocks assignment for LCM

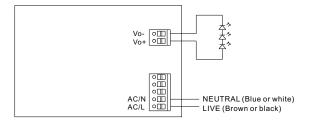




2. Connection of LED Lamps

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







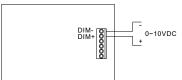




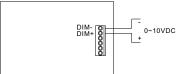


3. Connection of Dimming Functions

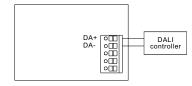
a. 0-10Vdc or 10V PWM (non-DA version only)



c. Push dim (DA version only)



b. DALI (DA version only)



Note: Maximum DALI cable length is 300m (based on a 1.5mm² or 14AWG cable)

-⊙ NEUTRAL (Blue or white) -⊙ LIVE (Brown or black)

Note: ONLY use open push button without indicator light.

(I) 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).

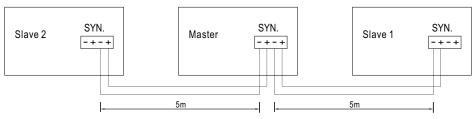
Dimming control mechanism

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

- · Every long pushing action will change the dimming direction.
- · Factory dimming setting: 100%

d. Synchronization operation

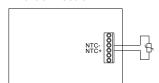
- Synchronization up to 10 drivers (1 master + 9 slaves)
- Dimming operating range : 10%~100%
- Sync cable length: < 5m
- · Sync cable type : Flat cable
- Sync cable cross section area: 22 24 AWG (0.2~0.3mm²)



NOTE: 1. Please make sure all units are set to 100% dimming setting (factory default) before synchronizing.

2. Min. Dimming operating range depends on dimmer setting.

4. NTC Connection



5. Recommended Screwdriver, Wire and Torque Setting

Туре	The cover (the blue one)	Screw terminal (FAN±, NTC±, DIM±)	Push terminal (ACL/N, PUSH, DA±, Vo±)
Solid wire		ϕ 0.404 - ϕ 0.643mm	ϕ 1.024 - ϕ 1.628mm
Stranded wire		0.129 - 0.326mm ²	0.823 - 2.08mm²
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 115Vac

Model	B10	B16	C10	C16
LCM-40U(DA)	13	20	23	38
LCM-60U(DA)	9	15	15	25

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