



MW LCM-40 Switching Power Supply Installation Guide

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MW LCM-40 Switching Power Supply



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 power unit, ungrounded
- Built-in 12V/50mA auxiliary output
- Full plastic case enclosed
- No-load power consumption <1W (1.2W for DA version)
- Protection s: 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)
- MCB circuit breaker) with an adequate current rating to protect Use a (miniature 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 where 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 |
|---------------|--------------------|----|----|----|----|----|----|
| 2-1 00V | 35 0mA | -- | — | -- | — | -- | — |
| 2-8 0V | 50 0mA | ON | — | -- | — | -- | — |
| 2-6 7V | 60 0mA | ON | ON | -- | — | -- | — |
| 2-5 7V | 70 0mA* | ON | ON | ON | — | -- | ON |
| 2-4 5V | 90 0mA | ON | ON | ON | ON | -- | ON |
| 2-4 0V | 1050mA | ON | ON | ON | ON | ON | ON |

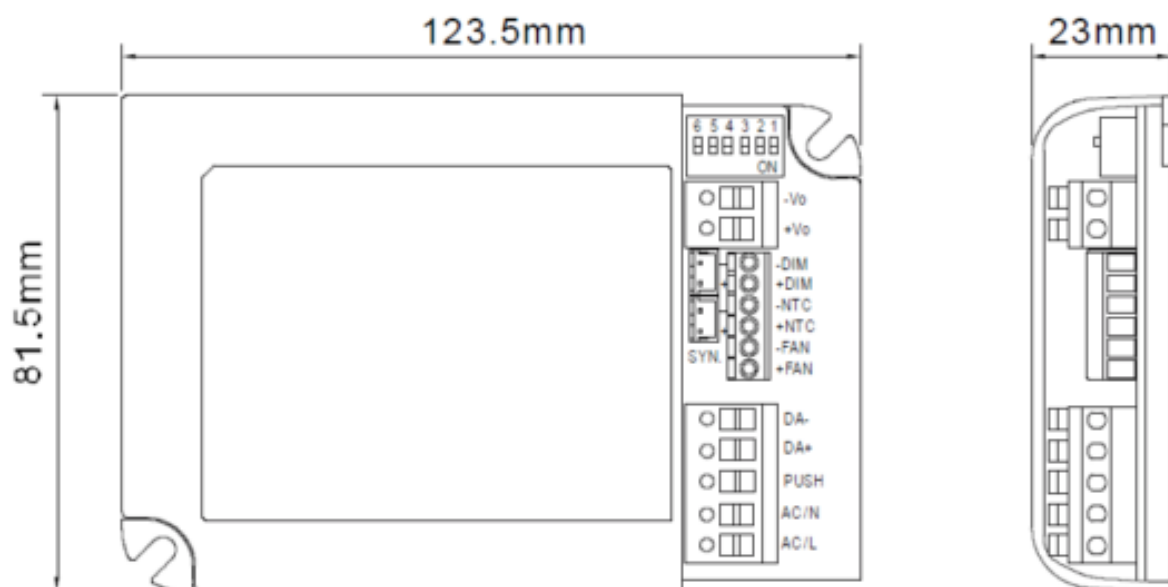
LCM-60(DA)

| 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: The factory default setting is 700mA.

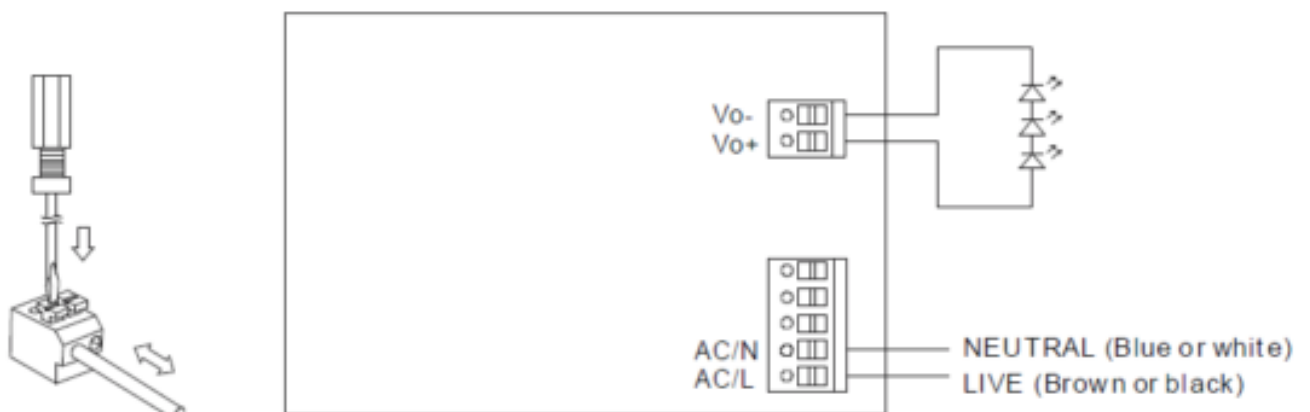
Output voltage and output wattage must not exceed the rated values.

Terminal blocks assignment for LCM



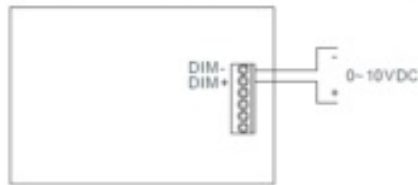
2. Connection of LED Lamps

Press down the “push button” by a slotted screwdriver to insert or remove the cable.

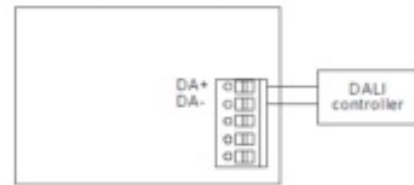


3. Connection of Dimming Functions

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

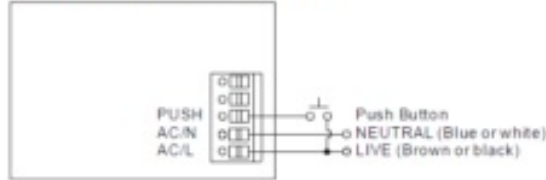


b. DALI (DA version only)



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

c. Push dim (DA version only)



Note: ONLY use the open push button with ut 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).

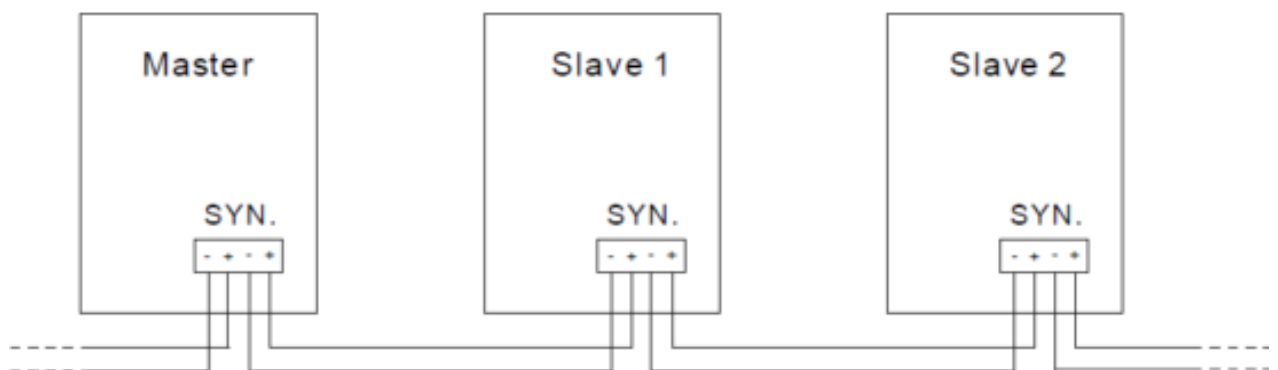
Dimming control mechanism

| 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
- Factory dimming setting: 100% always dim down when light intensity

Synchronization operation

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

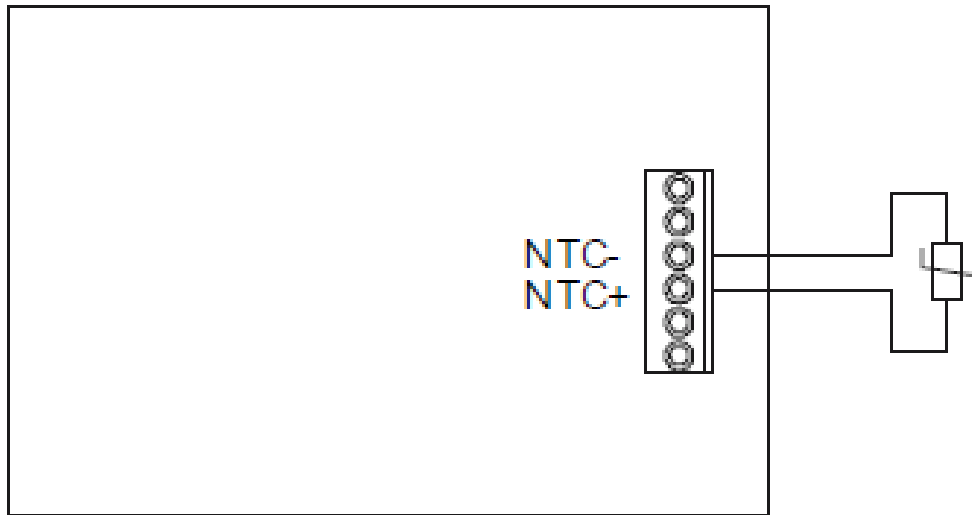


- Mating housing for SYN. connectors : JST B2B-XH or equivalent
- Maximum number of the LCM units: 10 (1 master + 9 slaves)
- Maximum cable length between each unit: 20m (based on a cable with a cross-section of

0.15mm²~0.3mm² 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

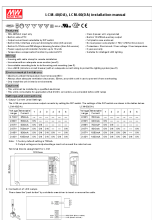
| Type | The cover (the blue one) | Screw terminal (FAN \pm , NTC \pm , DIM \pm) | Push terminal (ACL/N, PUSH, DA \pm , Vo \pm) |
|-------------------------------|--------------------------|--|--|
| Solid wire | — | \varnothing 0.404 - \varnothing 0.643 mm | \varnothing 1.024 - \varnothing 1.628mm |
| Stranded wire | — | 0.129 – 0.326mm ² | 0.823 – 2.08 mm 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 lb) |

6. Suggested Maximum Number of the LCM Units that can be Connected to an 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 the MCB S201 series manufactured by A BB.

Documents / Resources

| | |
|---|--|
|  | <p>MW LCM-40 Switching Power Supply [pdf] Installation Guide LCM-40 Switching Power Supply, LCM-40, Switching Power Supply</p> |
|---|--|