Lightwave LP84 200W RF LED Driver Constant Voltage Instruction Manual

Contents

Lightwave LP84 200W RF LED Driver Constant Voltage

Specifications

- **Model**: LP84
- **Voltage**: 24V
- **Power**: 200W
- **LED Type**: White LEDs
- **Dimensions**: 6-7mm (0.24-0.28in)
- **Output Channels:** 4

Product Usage Instructions

Unlinking the LED Driver

To unlink the LED Driver, follow these steps:

1. Press and hold the ‘Learning’ button until the LED flashes red.
2. Release the button, then hold it for a second time until the LED flashes red to confirm memory clearance.

Firmware Updates

Keep your device updated with new features by following these steps:

1. Approve updates from the App.
2. During the update, the LED will flash cyan in color. Do not interrupt the process.
3. The update generally takes 2-5 minutes to complete.

Error Reporting

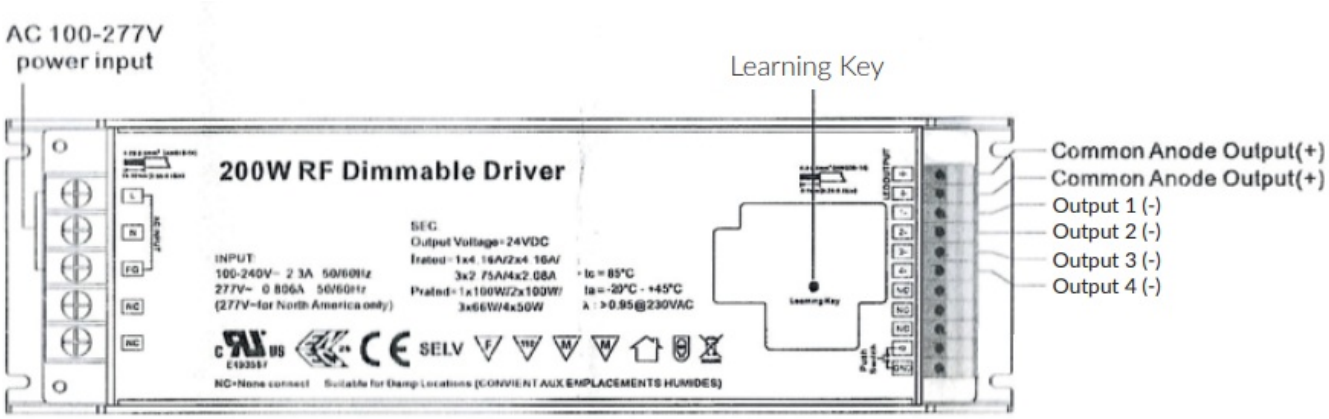
If you encounter a software or hardware error indicated by a permanently flashing red LED:

1. Press the main button to reset the device.

2. If the error persists, contact Lightwave support via www.lightwaverf.com/support.

Important: Read All Instructions Prior to Installation

Function introduction



Product Data

Parameter	Specification
Output	4
Input	24V DC
Control	Max. 4.1A/ch, ch1 /ch2+ch3+ch4=8.4A
LED Channel	+1%
DC Voltage	Max. 200W
Max. Current	100-277V AC
Voltage Tolerance	50/60Hz
Rated Power	> 0.98 @ 230VAC
Voltage Range	THD ≤ 15% (@ full load / 230VAC)
Frequency Range	93% @ 230VAC full load
Power Factor (Typ.)	2.3A @ 100VAC, 1A @ 230VAC. 0.9A@277VAC
Total Harmonic Distortion	COLD START Max. 65A at 230VAC
Efficiency (Typ.)	< 0.5mA /230VAC
AC Current (Typ.)	< 1W
Inrush Current (Typ.)	RF Wireless
Leakage Current	0.1%-100%
Standby Power Consumption	Pulse Width Modulation
Dimming Interface	RF Wireless
Dimming Range	0.1%-100%
Dimming Method	Pulse Width Modulation

Category	Parameter	Specification
Protection	Over Current	Yes, recovers automatically after fault condition is removed
	Over Temperature	Yes, recovers automatically after fault condition is removed
Environment	Working Temp.	-20°C ~ +45°C
	Max. Case Temp.	85°C
	Working Humidity	10% ~ 95% RH non-condensing
	Storage Temp. & Humidity	-40°C ~ +80°C, 10% ~ 95% RH
Safety & EMC	Safety Standards	UL8750, CAN/CSA C22.2 No. 250.13-14, ENEC EN61347-1, EN61347-2-13
	Withstand Voltage	I/P-O/P: 3.75KVAC
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
	EMC Emission	EN55015, EN61000-3-2, EN61000-3-3
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11, surge immunity Line-Line 1KV
Others	MTBF	185900H, MIL-HDBK-217F @ 230VAC at full load and 25°C ambient temperature

- 230V mains voltage input, no external power supply required. 24V Constant Voltage output, compatible with most 24V CV LEDs
- 200W total output power (For individual channel power ratings, refer to the user manual)
- RF controlled with excellent range
- Manual Control typically complemented with an L5x or independently wired L2x (Do NOT wire this product in circuit with a smart dimmer!)
- DC Dimming with flicker free 750Hz refresh rate
- Most common LED types supported (White, RGB, RGBW and CCT Tunable Colour Temperature)
- Energy monitoring
- Dimming Profile adjustment
- Dynamic output assignment at RF pairing for easy installation
- Over current and over temperature protection
- Two-stage Active Power Factor Correction (PF > 0.98)
- High efficiency, 93% @ full load
- Low stand-by power, less than 1W
- Outputs are Safety Extra Low Volatge (SELV) compliant
- IP20 rating
- 5 year warranty
- Voice-control compatibility with Amazon Alexa, Google Assistant & Siri through the Apple HomeKit platform*
- Create timers, scenes, triggers and other automations
- Lightwave Link Plus and WiFi router with broadband internet connection required

Safety & Warnings

- DO NOT install with power applied to the device.
- DO NOT expose the device to moisture.

Linking

- To be able to command the LED Driver, you will need to link it to the Link Plus.
- Follow the in-app instructions which will explain how to link devices.
- On the LED Driver, press and hold down the ‘Learning’ button until the LED flashes blue and red alternately then release it. The LED Driver is now in linking mode.
- Using the App. press the button to link to the device (the App instructions will guide you through this). The indicator on the LED Driver will flash to confirm that it is now linked.

Unlinking the LED Driver (clear memory)

- To unlink the LED Driver, enter linking mode by holding down the ‘Learning’ button until the LED flashes red.
- Release the button, then hold it for a second time until the LED flashes red to confirm that the memory has been cleared.

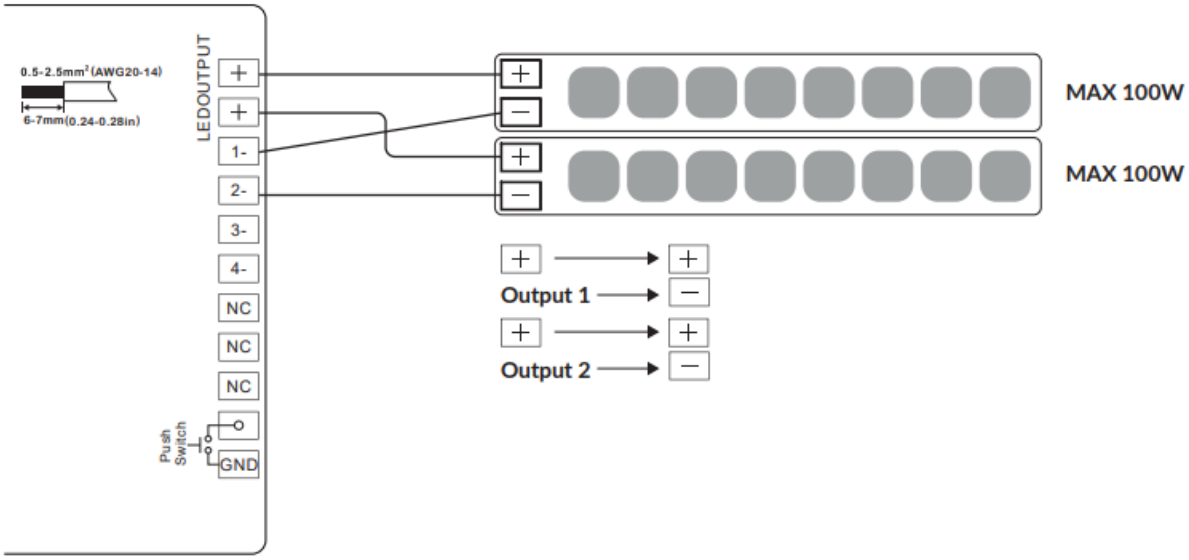
Firmware updates

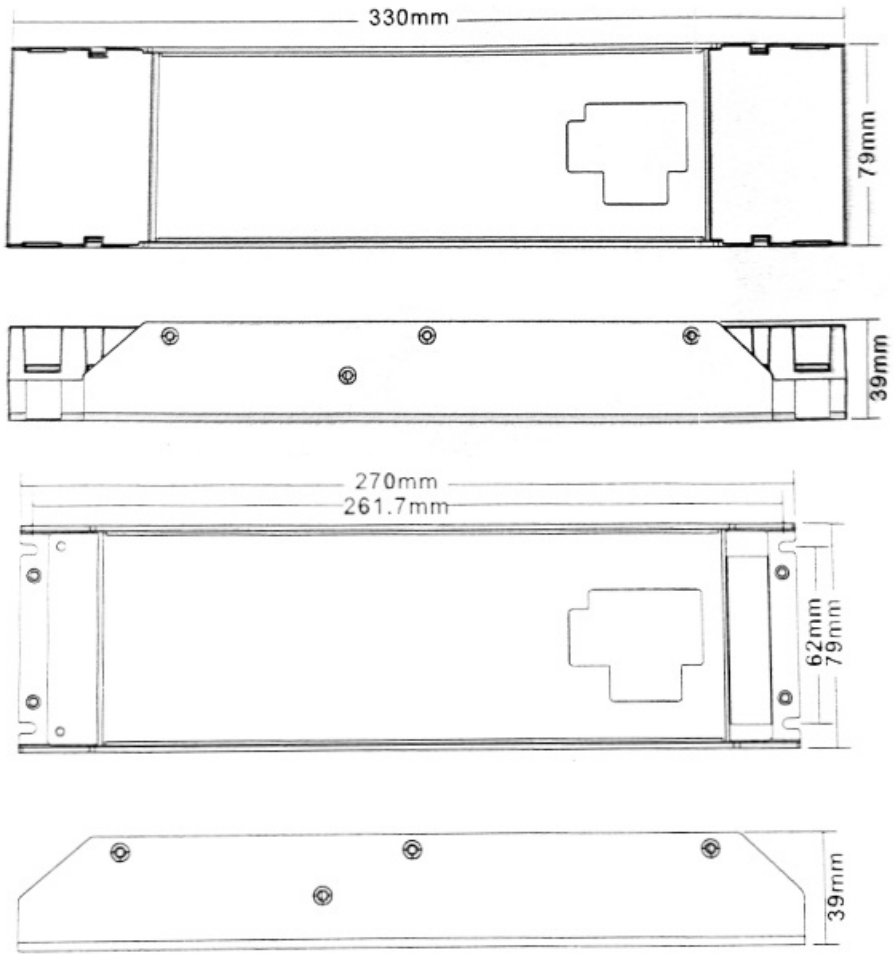
- Firmware updates are over-the-air software improvements that keep your device up to date as well as providing new features. Updates can be approved from the App before being implemented, and generally take 2-5 minutes.
- The LED will flash cyan in colour during an update. Please do not interrupt the process during this time.

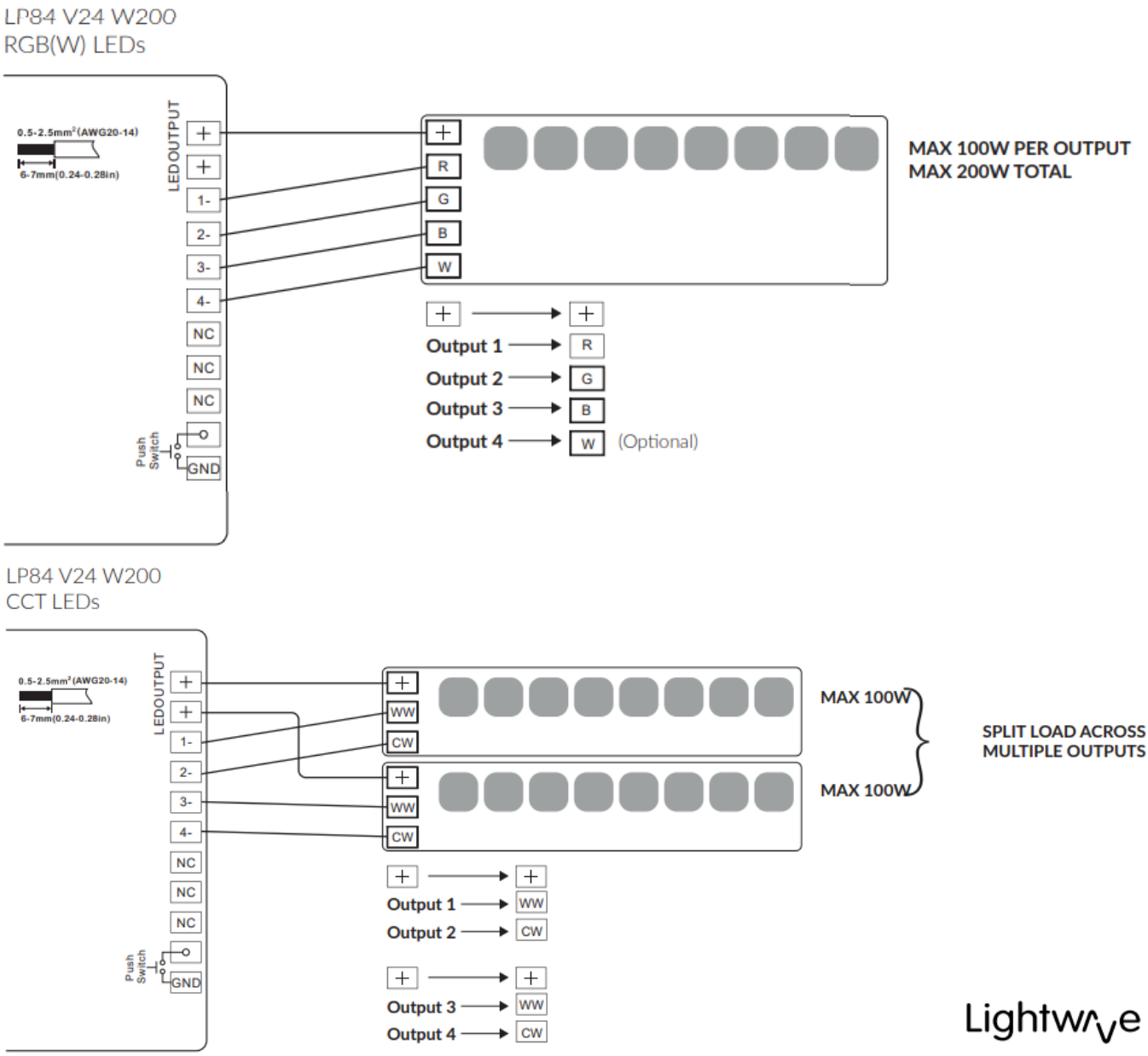
Error reporting
A permanently flashing red LED indicates that a software or hardware error has been encountered. Press the main button to reset the device. If the error light persists, please contact Lightwave support via **www.lightwavert.com/support**.

Product Dimensions

LP84 V24 W200
White LEDs







FAQ

Q: What is the maximum power output per channel?
A: The maximum power output per channel is 100W, with a total maximum power output of 200W across all channels.

Q: How to split the load across multiple outputs?
A: You can split the load by distributing the power output among different channels as per your requirements.

Documents / Resources

	Lightwave LP84 200W RF LED Driver Constant Voltage [pdf] Instruction Manual LP84, V24, W200, LP84 200W RF LED Driver Constant Voltage, LP84, 200W RF LED Driver Constant Voltage, LED Driver Constant Voltage, Driver Constant Voltage, Constant Voltage

References

- User Manual