

RF Constant Current LED Driver

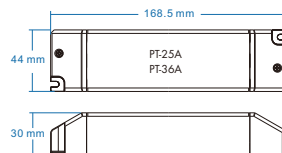
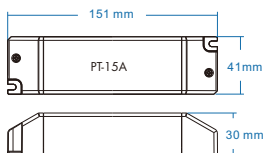
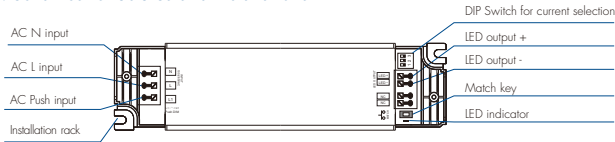
Model No.: PT-15A / PT-25A / PT-36A



Features

- Dimming interface: RF Wireless, AC Push-Dim
- Match with Skydance's 2.4G single color remote control, one RF LED driver accepts up to 10 remote controls
- Universal AC input / Full range
- 1 channel constant current output, configurable current via DIP switch
- Built-in active PFC function: 0.95 Typ
- Auto-transmitting function: LED driver automatically transmit signal to another LED driver with 30m control distance
- Synchronize on multiple number of LED drivers
- Over-heat / Over-load / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty

Mechanical Structures and Installations



Technical Parameters

Model	PT-15A	PT-25A	PT-36A	
Output	Output Voltage	10-45VDC	10-52VDC	10-52VDC
	Output Current	150-700mA	250-900mA	350-1200mA
	Output Power	Max. 15W	Max. 25W	Max. 36W
	Max Output Voltage	48VDC	52VDC	52VDC
	Dimming Range	0~100%		
	PWM Frequency	2000Hz		
	Current Accuracy	±5%	±3%	±3%
Rise Time	1s (Max 700mA / 22V)	1s (Max 900mA / 28V)	1s (Max 1200mA / 30V)	
Input	Input Voltage Range	100VAC~265VAC		
	Frequency Range	50/60Hz		
	Efficiency	>80%/115VAC, >80%/230VAC	>80%/115VAC, >80%/230VAC	>82%/115VAC, >85%/230VAC
	Alternating Current	0.15A/115VAC, 0.07A/230VAC	0.28A/115VAC, 0.14A/230VAC	0.38A/115VAC, 0.19A/230VAC
	Power Factor	>0.98/115VAC, >0.93/230VAC	>0.99/115VAC, >0.95/230VAC	>0.99/115VAC, >0.95/230VAC
	THD	>15%/230VAC	>15%/230VAC	>15%/230VAC
	Inrush Current	Cold start 16A at 230VAC	Cold start 16A at 230VAC	Cold start 16A at 230VAC
	Leakage Current	< 0.5mA/230VAC	< 0.5mA/230VAC	< 0.5mA/230VAC
	No Load Power	< 2W	< 2W	< 2W
	Protection	Over Load Power	When O/P voltage exceed its range, O/P current declines, auto recovers when the load is reduced.	
Short Circuit		Shut down automatically if short circuit occurs, auto recovers.		
Over Temperature		Intelligently adjust or turn off the output current if the PCB temp > 100°C, auto recovers.		
Environment	Working Temperature	-30°C~50°C		
	Temp Max	70°C		
	Working Humidity	20%~90%RH, non-condensing		
	Storage Temp/Humidity	-40°C~80°C, 10%~95%RH		
	Temperature Coefficient	±0.03%/°C (0-50°C)		
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min		
	IP Rating	IP20		
Safety&EMC	Security Specifications	IEC/EN61347-1, IEC/EN61347-2-13		
	Withstand Voltage	I/PC/P: 3750VAC		
	Insulation Resistance	I/PC/P: 100MΩ/500VDC/25°C/70%RH		
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547		
Certifications	CE, EMC			

LED Current Selection:

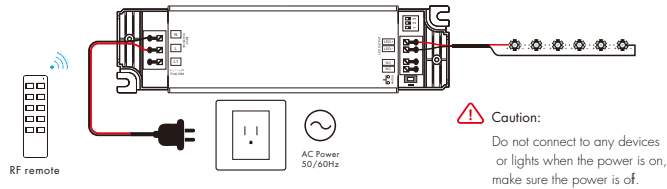
DIP switch									
PT-15A	Output Voltage	10-45V	10-45V	10-43V	10-38V	10-34V	10-30V	10-23V	10-22V
	Output Current	150mA	200mA	350mA	400mA	450mA	500mA	650mA	700mA
	Output Power	1.5-6.75W	2-9W	3.5-15W	4-15W	4.5-15W	5-15W	6.5-15W	7-15W
PT-25A	Output Voltage	10-52V	10-52V	10-52V	10-52V	10-50V	10-42V	10-36V	10-28V
	Output Current	250mA	300mA	350mA	400mA	500mA	600mA	700mA	900mA
	Output Power	2.5-13W	3-15.6W	3.5-18.2W	4-20.8W	5-25W	6-25.2W	7-25.2W	9-25.2W
PT-36A	Output Voltage	10-52V	10-52V	10-52V	10-52V	10-45V	10-40V	10-35V	10-30V
	Output Current	350mA	500mA	600mA	700mA	800mA	900mA	1050mA	1200mA
	Output Power	3.5-18.2W	5-26W	6-31.2W	7-36.4W	8-36W	9-36W	10.5-36W	12-36W

Applications

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

Wiring Diagram

1. RF Connection



Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use Match key

Match:
Short press match key, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.

Delete:
Press and hold match key for 5s to delete all match, The light blinks 5 times means all matched remotes were deleted.

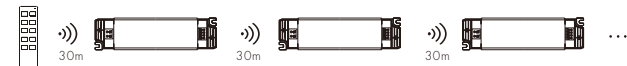
Use Power Restart

Match:
Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

Delete:
Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

When use multiple RF drivers, two application method:

1. All the drivers in the same zone.



RF remote

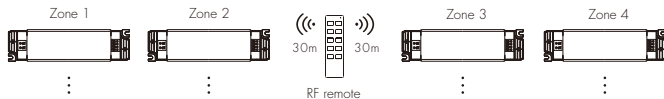
Auto-transmitting: One driver can transmit the signals from the remote to another driver within 30m, as long as there is a driver within 30m, the remote control distance can be limitless.

Auto-synchronization: Multiple drivers within 30m distance can work synchronously when they are controlled by the same remote.

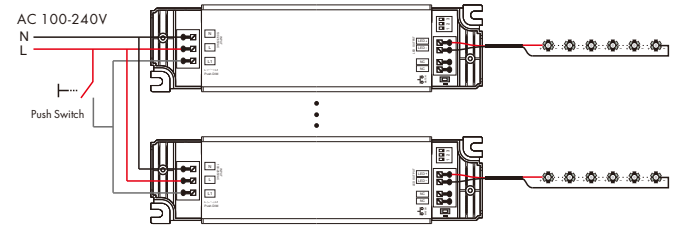
Driver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range.

We recommend for indoor applications that driver placements should be no further apart than 15m.

2. Each driver(one or more) in a different zone, like zone 1, 2, 3 or 4.



2. AC Push-Dim connection



The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

- **Short press:**
Turn on or off light.
- **Long press (1-6s):**
Press and hold to step-less dimming. With every other long press, the light level goes to the opposite direction.
- **Dimming memory:**
Light returns to the previous dimming level when switched off and on again, even at power failure.
- **Synchronization:**
If more than one LED driver are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to 100%. This means there is no need for any additional synchrony wire in larger installations. We recommend the number of LED drivers connected to a push switch does not exceed 25 pieces. The maximum length of the wires from push to LED driver should be no more than 20 meters.

Dimming Curve

