RF 4 Channel Constant Voltage LED Driver

Model No.: PH-150-12-4, PH-150-24-4

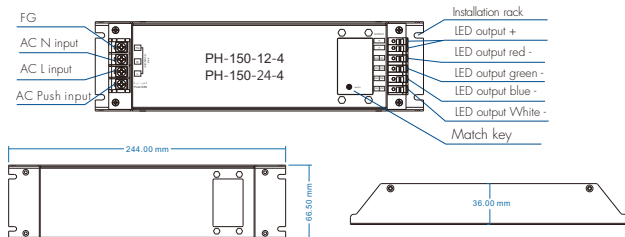PH-150-12-4   PH-150-24-4

PWM Digital Dimming | **RF 2.4G** 30m | **PFC** >0.95 | Logarithmic Dimming | Synchronization | Over-heat Protection | Over Load Protection | Short Circuit Protection | Warranty 5 years

Features

● Dimmable LED driver with RF control, apply to single color, dual color or RGB/RGBW LED constant voltage strips
● Match with Skydance's 2.4G single color, dual color and RGB/RGBW remote.
  One RF LED driver accepts up to 10 remote controls
● Universal AC input / Full range
● 4 channel constant voltage output, Max. total output power 150W
● Built-in active PFC function: 0.95 Typ
● When using with RGB/RGBW light, built in 10 dynamic mode, include jump or gradual change style
● 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
● Suitable for indoor LED lighting application
● 5 Year, 50,000hr warranty
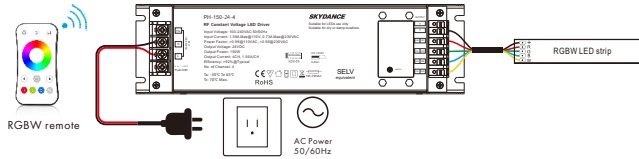
Mechanical Structures and Installations

FG
AC N input
AC L input
AC Push input

PH-150-12-4
PH-150-24-4

Installation rack
LED output +
LED output red -
LED output green -
LED output blue -
LED output White -
Match key

244.00 mm
66.50 mm
36.00 mm

Technical Parameters

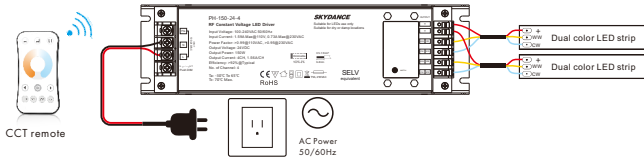| Model		PH-150-12-4	PH-150-24-4
Output	Output Voltage	12VDC	24VDC
	Output Current	4CH x 3.12A	4CH x 1.56A
	Output Power	Max. 150W	
	Dimming Range	0～100%	
	Ripple & Noise	<=150mV/230VAC	
	PWM Frequency	500Hz	
	Rise Time	500ms/115VAC, 424ms/230VAC	
	Hold Time	3.6ms/115VAC, 4.5ms/230VAC	
Input	Input Voltage Range	100VAC～240VAC	
	Frequency Range	50/60Hz	
	Efficiency	92%/230VAC	
	Alternating Current	1.59A/110VAC, 0.73A/230VAC	
	Power Factor	>0.99/110VAC, >0.95/230VAC	
	Inrush Current	Cold start 27.5A at 230VAC	
	Leakage Current	<5mA	
	No Load Power	2W/115VAC, 2W/230VAC	
Protection	Over Load Power	Shut down the output when current load >= 120%～150%, auto recovers.	
	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℃, auto recovers.	
Environment	Woking Temperature	-30℃～50℃	
	T-case Max	70℃	
	Working Humidity	20%～90%RH, non-condensing	
	Storage Temperature/Humidity	-40℃～80℃, 10%～95%RH	
	Temperature Coefficient	±0.03%/℃ (0-50%)	
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min	
Safety&EMC	IP Rating	IP20	
	Security Specifications	IEC/EN61347-1, IEC/EN61347-2-13	
	Withstand Voltage	I/P-O/P: 3750VAC	
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25℃/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	
	Certications	CE, EMC	

Applications

● Suitable for LED related fixture or appliance which use LED light bar and LED tape (like LED Decoration or Advertisement devices).
● Office / Commercial / Domestic Lighting, Hotels, Retail and Display.
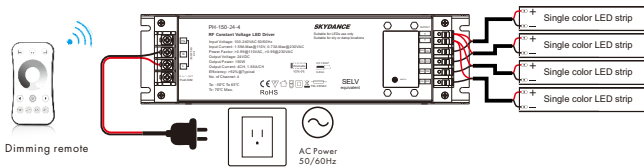● Use for retrofit upgrades & new luminaire designs.

Wiring Diagram

● For RGB/RGBW

RGBW remote

RGBW LED strip

SELV equivalent

AC Power 50/60Hz

● For dual color

CCT remote

Dual color LED strip
Dual color LED strip

SELV equivalent

AC Power 50/60Hz

● For single color

Dimming remote

Single color LED strip
Single color LED strip
Single color LED strip
Single color LED strip

SELV equivalent

AC Power 50/60Hz

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.

RGB/RGBW Dynamic mode list

No.	Name	No.	Name
1	RGB jump	6	RGB fade in and out
2	RGB smooth	7	Red fade in and out
3	6 color jump	8	Green fade in and out
4	6 color smooth	9	Blue fade in and out
5	Yellow cyan purple smooth	10	White fade in and out

Application notes

1. All the receivers in the same zone.

RF remote

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

Auto-synchronization: Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote, under same dynamic mode and with same speed.

Receiver 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 receiver placements should be no further apart than 15m.

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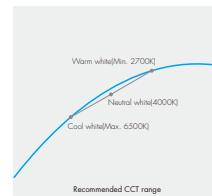

RF remote
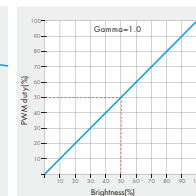
Dual color control

CH1=Warm white LED
CH2=Cool white LED
Each channel can supply up to 150W and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH1=0W,CH2=150W	CH1=75W,CH2=75W	CH1=150W,CH2=0W

Linear dual color tuning

Warm white(Min. 2700K)
Neutral white(4000K)
Cool white(Max. 6500K)

Recommended CCT range

Dimming curve for CCT

Gamma=1.0

PWM duty(%)

Brightness(%)

Dimming curve for RGB/DIM

Gamma=1.6

PWM duty(%)

Brightness(%)