# RF 1-4 Channel Constant Voltage LED Driver

Model No.: PH-75-12, PH-75-12-2, PH-75-12-3, PH-75-12-4 PH-75-24, PH-75-24-2, PH-75-24-3, PH-75-24-4



















## Features

- Dimmable LED driver with RF control, apply to single color, dual color or RGB/RGBW LED constant voltage strips
- Match with RF 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
- 1/2/3/4 channel constant voltage output, Max. total output power 75W
- 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
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty

## Product Size





## Accessories



LED driver 1 pcs











User Manual 1 pcs

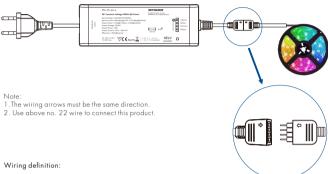
## Technical Parameters

	Model	PH-75-12	PH-75-12-2	PH-75-12-3	PH-75-12-4		
	Туре	Dimming	Color temperarure	RGB	RGBW		
	Output Voltage	12VDC ± 0.5VDC					
	Output Current	6.25A	3.125A x 2CH	2.08A x 3CH	1.56A x 4CH		
Output	Output Power	Max. 75W	1				
	Dimming Range	0~100%					
	PWM Frequency	3900Hz					
	Ripple & Noise	<220mV					
	Overload Power Limitation	>120-150%					
	Input Voltage Range	100VAC~240VAC					
	Frequency Range	50/60Hz					
	Alternating Current	0.86A/115VAC, 0.38A/230VAC					
Input	Power Factor	PF>0.99/110VAC PF>0.95/230VAC, at full load					
	THD	110VAC@THD<10% 230VAC@THD<16%					
	Efficiency(typ.)	88%					
	Inrush Current	Cold start 35A at 230VAC					
	Anti Surge	ĿN: 1KV					
	Leakage Current	<0.5mA					
	Over Load Power	Shut down the output when current load ≥ 120%~150%, auto recovers.					
İ	Over Voltage	Shut down the output when non-load ≥ 13V, auto recovers.					
Protection	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.					
	Woking Temperature	-30°C~50°C					
	T-case Max	80°C					
	Working Humidity	20%~90%RH, no	n-condensing				
Environment	Storage Temperature/Humidity	-40°C~80°C, 10%~95%RH					
	Temperature Coefficient	±0.03%/℃ (0-50	%)				
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min					
	IP Rating	IP20					
	Security Specifications	IEC/EN61347-1, II	EC/EN61347-2-13				
	Withstand Voltage	I/P-O/P: 3750VAC					
Safety&EMC	Insulation Resistance	I/P·O/P: 100MΩ/:	500VDC/25℃/70%RH	I			
	EMC Emission	EN55015, EN610	00-3-2 Class C, IEC610	00-3-3			
	EMC Immunity	EN61000-4-2.3.4.5.6.8.11, EN61547					
†	Certications	CE, EMC					

	Model	PH-75-24	PH-75-24-2	PH-75-24-3	PH-75-24-4		
	Туре	Dimming	Color temperarure	RGB	RGBW		
	Output Voltage	24VDC ± 0.5VD0	2	ļ.			
	Output Current	3.125A	1.56A x 2CH	1.04A x 3CH	0.78A x 4CH		
Output	Output Power	Max.75W					
	Dimming Range	0~100%					
	PWM Frequency	3900Hz					
	Ripple & Noise	<330mV					
	Overload Power Limitation	>120-150%					
	Input Voltage Range	e 100VAC~240VAC					
	Frequency Range	50/60Hz					
	Alternating Current	0.84A/115VAC, 0.37A/230VAC					
Input	Power Factor	PF>0.99/110VAC PF>0.95/230VAC, at full load					
·	THD	110VAC@THD<10% 230VAC@THD<16%					
	Efficiency(typ.)	90%					
	Inrush Current	Cold start 38A at 230VAC					
	Anti Surge L-N: 1KV						
	Leakage Current	<0.5mA					
	Over Load Power	Shut down the output when current load > 120%~150%, auto recovers.					
	Over Voltage	Shut down the output when non-load ≥ 26V, auto recovers.					
Protection	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.					
	Woking Temperature	-30℃~50℃					
	T-case Max	80°C					
	Working Humidity	20%~90%RH, no	n-condensing				
Environment	Storage Temperature/Humidity	-40°C~80°C, 109					
	Temperature Coefficient	±0.03%/℃ (0-50	%)				
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min					
	IP Rating	IP20					
	Security Specifications	IEC/EN61347-1, I					
	Withstand Voltage	I/P-O/P: 3750VAC					
Safety&EMC	Insulation Resistance		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					

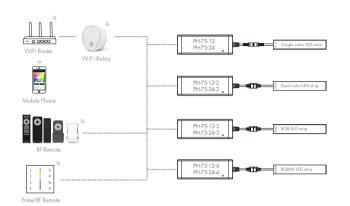
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## Wiring Diagram



PH-75-12 PH-75-24		+(Red) -(Black)
PH-75-12-2 PH-75-24-2	<b>□</b>	o +(Black) o WW(Green) o CW(Blue)
PH-75-12-3 PH-75-24-3	<b>□</b>	o +(Black) o R(Red) o G(Green) o B(Blue)
PH-75-12-4 PH-75-24-4	<b>□</b>	o +(Black) o R(Red) o G(Green) o B(Blue) o W(White)

## System wiring



## Match Remote Control

Use power restart to match the LED driver and RF remote,

The LED driver of different light types matches the RF remote of correponding light type.

#### 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.

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 LED drivers in the same zone.













RF remote

Auto-transmitting: One LED driver can transmit the signals from the remote to another LED driver within 30m,

as long as there is a LED driver within 30m, the remote control distance can be limitless.

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

LED 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 LED driver placements should be no further apart than 15m.

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



## Dual color control

WW=Warm white LED

CW=Cool white IFD

Each channel can supply up to 75W and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	WW=0W, CW=75W	WW=36W, CW=36W	WW=75W, CW=0W

