PHILIPS

Wireless

Wireless RGBW Bridge Box

929001470080

Datasheet

Wireless

Wireless RGBW Bridge Box

This product is a controller that can realize color illumination and can connect with common light strip or RGBW light strip. By receiving wireless control signal, realize color scene lighting.

With the smartphone APP, can easily adjust the color, light and shade of the light, allowing the color to change as you like, and supporting rgb16 million color adjustments. The device is flexible and convenient to install without changing the original layout of the house. It only needs to connect DC power supply, dimmer and light strip, which is ready to use.

Benefits

- Four-way output of R, G, B and W
- Dc voltage input and anti-reverse connection
- The light brightness and color can be adjusted by the mobile App
- Wireless remote control
- Intelligent linkage, which can be linked with other equipment in the home and adjust the lighting according to the indoor environment

Features

- Switch to regulate voltage output, driving RGBW light strip;
- Support gateway system access;
- ZIGBEE compliance agreement (ZHA)
- Scene lighting, colorful RGBW light strip drive
- Support constant voltage LED driver
- Support panel lighting

Application

- Office
- Classroom
- Hotel
- Home

Ordering Information

Commercial product name	12NC	Carton Quantity
Wireless RGBW Bridge Box	929001470080	60 pcs

Product Data

All specifications are typical and at 25 °C Tcase unless otherwise specified.

Dimensions and weight

Specification item	Value	Unit	Conditions
Material	ABS + PC (V0 AC3100)		
Color	Darkgray		
Dimensions L x W x H	87.5 x 41 x 28	mm	Tolerance: +/- 0.1mm
Weight	71	gram	

Electrical data

Specification item	Value	Unit	Conditions
Rated input voltage range	26...10	Vdc	
Rated input voltage	24 or 12	Vdc	
Rated input current	5.02	A	@ Max load
Max output current	5	A	@ Input voltage 12Vdc
Standby power	<0.5	W	
Dimmer mode	PWM voltage on/off switch		
Output driver channel	4		R/G/B/W
Output frequency	4000	Hz	
PWM Resolution	9	bit	
Max output power	60/120	W	@ Input voltage 12Vdc/24Vdc
ESD	4KV @ conductive		
	8KV @ air		
Open load protection	No		
Short circuit protection	No		
Over power protection	No		

EMC & SAFETY

Specification item	Value
SAFETY	GB19510.1, GB19510.14
EMC	GB17625.1, GB/T 17626.4, GB/T 17626.5, GB/T 17626.7
ESD	GB/T17626.2（IEC61000-4-2）

RF data

Specification item	Value	Unit	Conditions
RF Frequency	2.4 ... 2.485	GHz	
Channel	16	pcs	
Modulation	QPSK （DSSS）		
Transmit Power	8...10 Typical value： 8.5	dBm	2.0-3.6V, +25ºC
Receiving Sensitivity	-92 ... -96 Typical value： -94	dBm	Nominal for 1% PER
Maximum receiver input power	+10	dBm	For 1% PER measured as sensitivity; supply current at 14.7 mA
Physical Protocol	802.15.4		
Security	128	bit AES	

Operational temperatures and humidity

Specification item	Value	Unit	Conditions
Ambient temperature	-20...+50	°C	
Relative humidity	10...90	%	
Tcase-life	+65	°C	Measured at Tcase-point
Tc-max	+65	°C	

Storage temperature and humidity

Specification item	Value	Unit	Conditions
Ambient temperature	-25...+85	°C	
Relative humidity	5...95	%	

Lifetime

Specification item	Value	Unit	Conditions
Lifetime	50000	Hours	Measured temperature at Tcase-point is Tcase-life. Maximum failures=10%
Mains switching cycles	100000	Switches	

Certificates and standards

Specification item	Value
Approval marks	CE
RoHS	RoHS
REACH	REACH
ZIGBEE	ZIGBEE
Audible noise	< 20 dB
Ingress Protection classification	IP20

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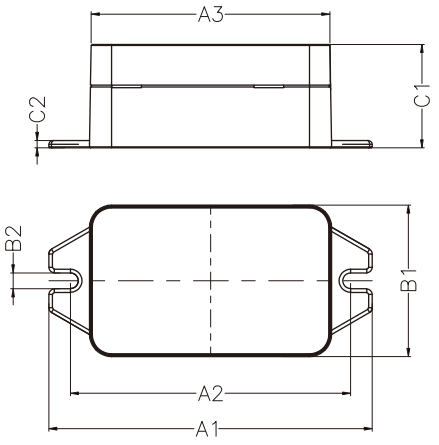
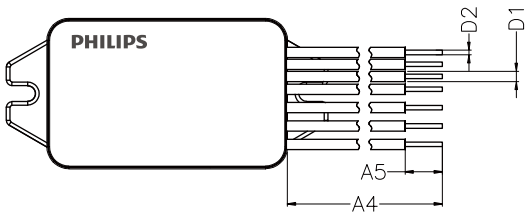
Dimensions (mm)





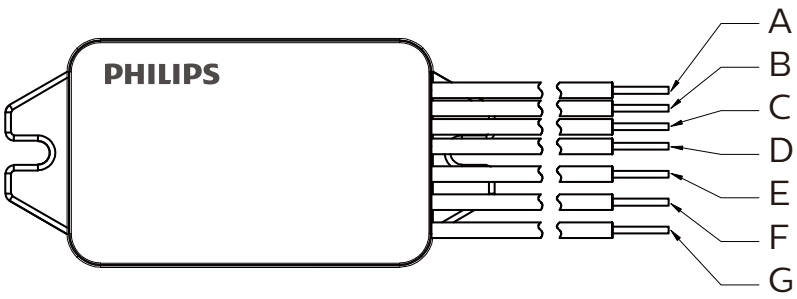
Data Sheet	
Item	Dimensions (mm)
A1	87.5 +/- 0.1
A2	75.8 +/- 0.1
A3	64.6 +/- 0.1
A4	130 +/- 1
A5	10 +/- 1
B1	41 +/- 0.1
B2	4.3 +/- 0.1
C1	28 +/- 0.1
C2	2 +/- 0.1
D1	Ø2.8 +/- 0.1
D2	Ø1.2 +/- 0.1

Wiring & Connections

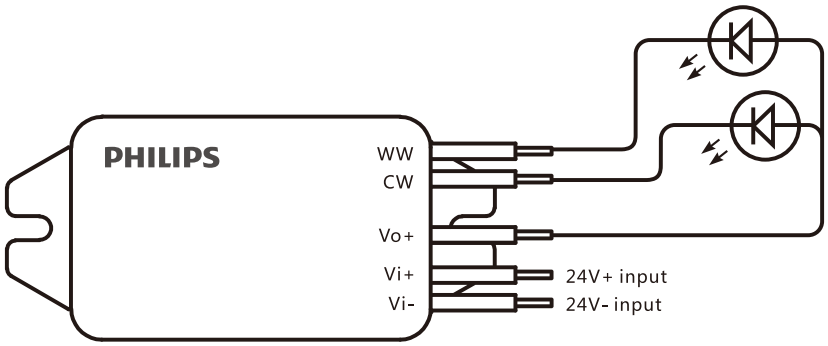
1. Disconnect the mains wire
2. Use screws to fix the product through the u-shaped groove on both sides;
3. Connect the input wire of the product to the output of 24V constant voltage driver.
4. Connect the wire R, G, B, W, and positive V2+ of the product with R, G, B, W of the light strip and the positive electrode wire of driver

Pin Definition

Specification item	Definition	Remark
A: R/Red wired	Output: R led strip	
B: G/Brown wired	Output: G led strip	
C: B/Blue wired	Output: B red strip	
D: W/White wired	Output: W red strip	If no W, please leave W wire no connection.
E: Vo+/Orange wired	Output: LED strip V+	
F: Vi+ /Orange wired	DC power supplier positive input	
G: Vi- /Grey wired	DC power supplier negative input	



Example connections



12/2018
Data subject to change

www.lighting.philips.co.uk/oem-emea/products/connected-lighting