

1 Channel LED Dimmer

Model No.: DIM0120HF-3BRF

3-button / RF dimming / Four PWM frequency / Multiple protection

Features

- 1 channel constant voltage LED RF dimmer with 3-button.
- Switch and dimming by 3 buttons.
- Match with RF 2.4G single zone or multiple zone dimming remote control optional.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
- PWM frequency 500Hz, 2KHz, 8KHz or 16KHz selectable.
- Over-heat / Over-load / Short circuit protection, recover automatically.

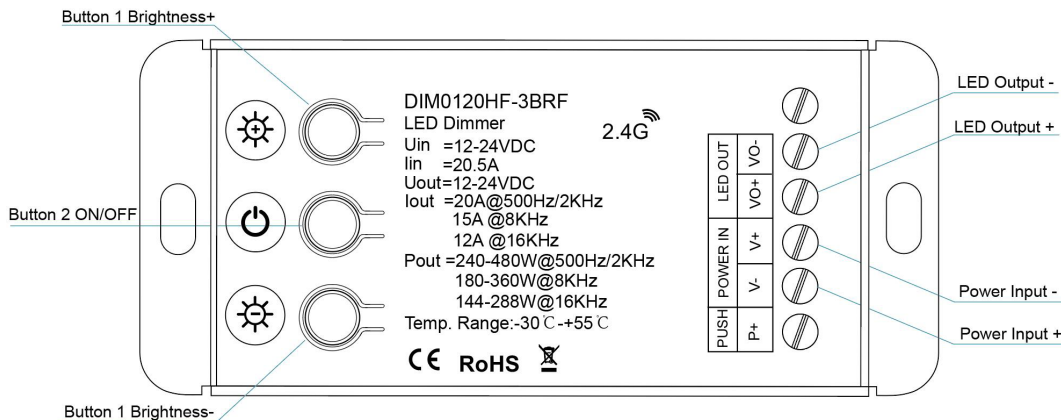


CE RoHS 

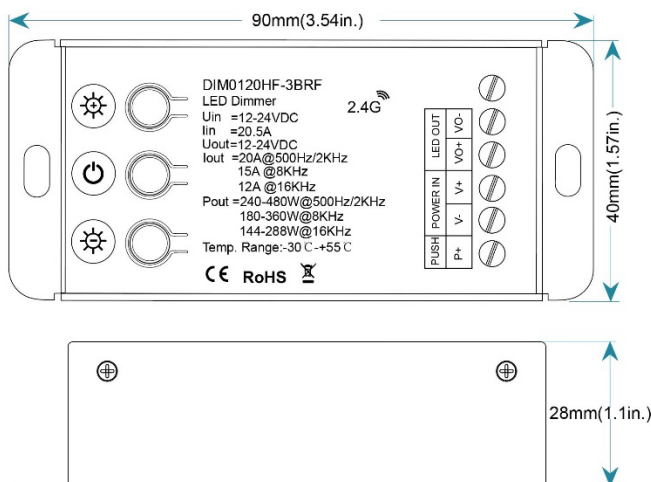
Technical Parameters

Input and Output		Safety and EMC		Dimming Data		
Input voltage	12-24VDC	EMC standard (EMC)	EN55032:2015,	Control Method	3-button + RF 2.4GHz	
Input current	20.5A Max.		EN61000-3-2:2014,	Control distance	30m(Obstruction-free)	
Output voltage	12-24VDC		EN61000-3-2:2013,	Dimming gray scale	4096 (2^12) levels	
Output current	1CH, 20A Max. (@500Hz/2KHz)		EN55024 :2010/A1:2015	Dimming range	0-100%	
	1CH, 15A Max.(@8KHz)	Safety standard(LVD)	EN 62368 1:2020+A11:2020	Dimming curve	Logarithmic	
	1CH, 12A Max.(@16KHz)			Radio Equipment(RED)	ETSI EN 300 328 V2.2.2	
Output power	240/480W (@500Hz/2KHz)	Certification	CE,EMC,LVD,RED	PWM Frequency	500Hz, 2kHz, 8kHz, 16kHz	
	180/360W (@8KHz)					
	144/288W (@16KHz)					
Output type	Constant voltage					
Packing		Warranty and Protection		Environment		
Size	L100 x W46 x H38mm	Warranty	5 years	Operation temperature	Ta: -30 °C ~ +55 °C	
G.W	0.081kg	Protection	Reverse polarity	Case temperature (Max.)	Tc: +85 °C	
			Over-heat		IP Grade	IP20
			Over-load			
			Short circuit			

Mechanical Structures and Installations

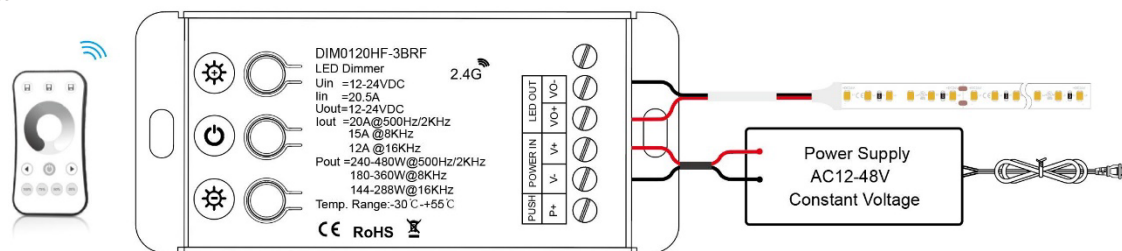


Mechanical Dimensions



Wiring Diagram

Match with dimming remote



Button function



Increase brightness, short press 10 levels, long press 1-6s for continuous 256 levels adjustment.

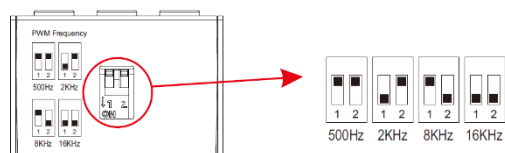


Turn on or off light.



Decrease brightness, short press 10 levels, long press 1-6s for continuous 256 levels adjustment.

PWM frequency setting



We can select four PWM frequency: 500Hz, 2KHz, 8KHz or 16KHz.

Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera (No flickers for video).

Match Remote Control (two match ways)

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

Use the controller's button

Match:

Long press button1 and button 3 for 2s,
press on/off key (single zone remote) or zone
key (multiple zone remote) of the remote immediately.

Delete:

Press and hold button1 and button 3 for 5s to delete all match,
The light blinks 5 times means all matched remotes were deleted.

Use Power Restart

Match:

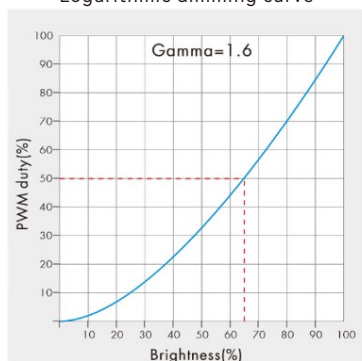
Switch off the power, then switch on power, repeat again.
Short press on/off key (single zone remote) or zone key
(multiple zone remote) 3 times on the remote immediately.
The light blinks 3 times means match is successful.

Delete:

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

Dimming curve setting

Logarithmic dimming curve



Installation Precautions

1. The products shall not be stacked, the distance should be $\geq 20\text{cm}$, so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of $\geq 20\text{cm}$ to avoid the radiation interference of the switching power supply.
3. The installation height shall be $\geq 1\text{m}$ from the floor to avoid shortening the remote control distance due to too weak reception signal.
4. The products are not allowed to be close to or covered by metal objects, with an interval of $\geq 20\text{cm}$ to avoid signal attenuation and shorten the remote control distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of $\geq 20\text{cm}$ to avoid signal interference.