



## Rotary LED Dimmer

A very simple rotary dimmer with 3 digit numeric display for accuracy and repeatability of levels. DIP switches provide the ability to adjust PWM frequency as well as dimming curves.

- 1 Channel rotary dimmer
- Numeric display
- 12V to 48V
- Max 20A
- PWM frequencies
- Linear or logarithmic dimming curve
- 0-100% smooth dimming.
- High load current up to 20A (at 2kHz).
- Logarithmic or linear dimming curve selectable
- PWM frequency 2kHz, 8kHz, 16kHz or 32kHz selectable.
- Over-heat / Over-load / Short circuit protection



Input  
DC 12V - DC 48V



Output  
240W/480W  
(12V / 24V) @ 2KHz



PWM Frequency  
2kHz, 8kHz,  
16kHz, 32kHz



Brightness Level  
16 Levels



Dimming Curve  
Adjustment



Dimensions  
L 107 mm  
W 75 mm  
H 38 mm



Weight  
210g



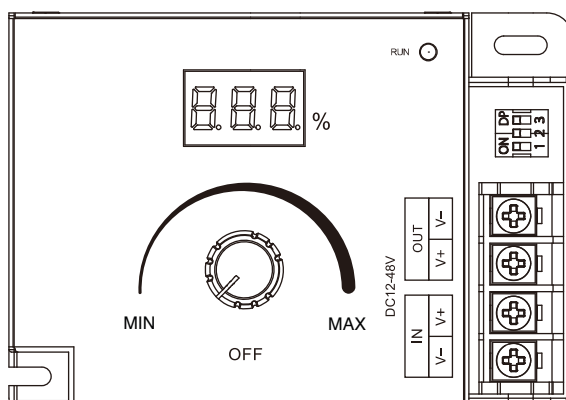
Over Current  
Protection



Short Circuit  
Protection



Temperature Range  
- 30°C to +50°C



DO NOT install with power applied to device.  
DO NOT expose device to excessive moisture.

XDIMMER1CH12V48V2

# TECHNICAL SPECIFICATIONS

NO:

1	PRODUCT TYPE	MINI-CINE V2
2	PRODUCT CODE	XDIMMER1CH12V48V2
3	VOLTAGE	12V ~ 48VDC
4	INPUT CURRENT (12 ~ 24V)	20A @ 2KHZ / 15A @ 8KHZ / 10A @ 16KHZ / 6A @ 32KHZ
5	INPUT CURRENT (36 ~ 48V)	18A @ 2KHZ / 12A @ 8KHZ / 8A @ 16KHZ / 6A @ 32KHZ
6	OUTPUT POWER	CONSTANT VOLTAGE, PWM CONTROL
7	TYPE	SINGLE CHANNEL ROTARY DIMMER
8	WATTAGE (MAX @ 2KHZ)	240W @ 12VDC / 480W @ 24VDC / 648W @ 36VDC / 864W @ 48VDC
9	SAFETY STANDARD (LVD)	EN 62368-1 ; 2020+A11:2020
10	EMC STANDARD	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-1 7 V3.2.4
11	CERTIFICATION	CE, EMC, LVD, RED, ROHS
12	DIMMING RANGE	0-100% (101 LEVELS)
13	DIMMING CURVE	LOGARITHMIC OR LINEAR
14	PWM FREQUENCY	2KHZ, 8KHZ, 16KHZ, 32KHZ
15	OPERATION TEMPERATURE	Ta: -30°C~ +50°C
16	CASE TEMPERATURE (MAX.)	Tc: +85°C
17	WARRANTY	1 YEAR

# INSTALLATION PRECAUTIONS

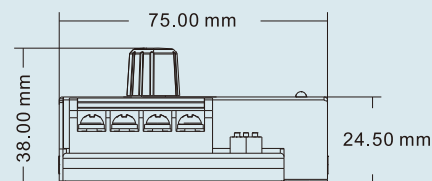
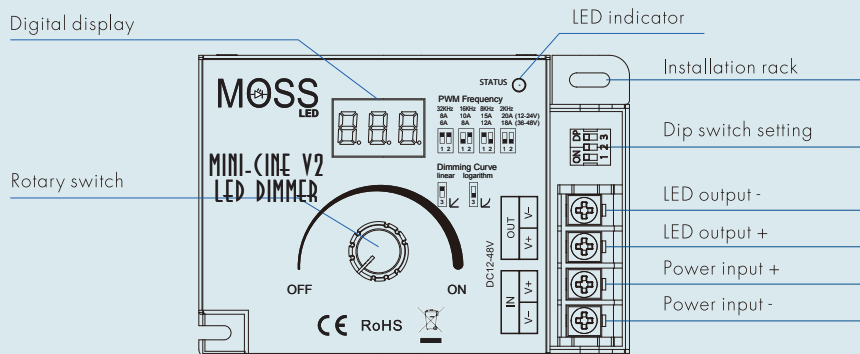
Do not stack the product. The distance between controllers should be at minimum 20cm, so as not to affect lifespan of the products due to poor heat dissipation as well as avoid radiation interference from a switching power supply.

For indoor use only

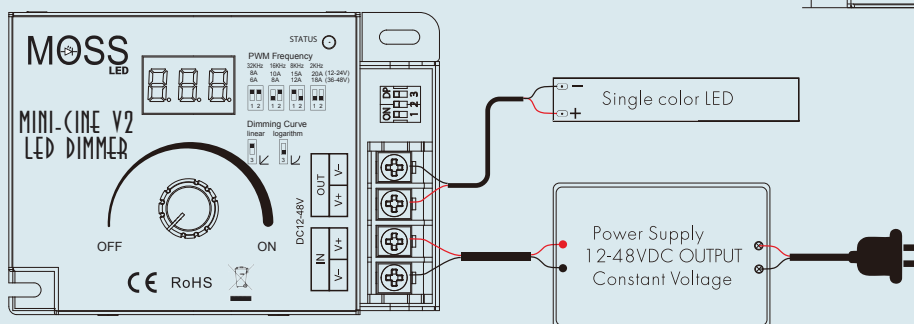
Mount on non-combustible surfaces

# INSTALLATION & USAGE

## 1: Mechanical Structures and Installations



## 2: Wiring Diagram



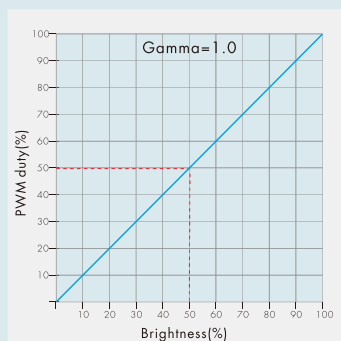
## 3: PWM Frequency setting

32KHz	16KHz	8KHz	2KHz	
8A	10A	15A	20A	(12-24V)
6A	8A	12A	18A	(36-48V)

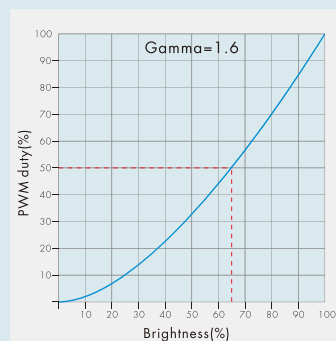
Four PWM frequencies: 2kHz / 8kHz / 16 kHz / 32 kHz  
 The higher the frequency, the less likely there is to be any sort of flicker on camera however the higher frequencies create more heat which reduce the overall current capacity of the Mini-Cine.

## 4: Dimming curve setting

Linear dimming curve



Logarithmic dimming curve





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PROTECT-A-FET



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