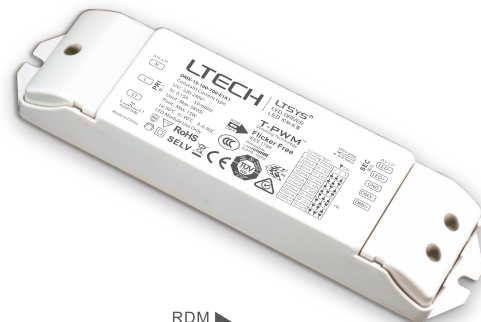


## LED Intelligent Driver (constant current)

- Dimming interface: DMX512/RDM, Push DIM.
- T-PWM™ digital dimming, present a perfect visual experience.
- With RDM remote device management protocol.
- Dimming range: 0-100%, LED start at 0.01% possible.
- With soft-on and fade in function, visual more comfortable.
- DIP switch for 8 optional currents' quick selection.
- 0-100% flicker-free, High frequency exemption level.
- Innovative thermal management technology, intelligent power life protection.
- Multi-current & wide voltage, suitable for different power LED.
- Short circuit / Over-heat / Over load / Non-load protection, recover automatically.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Suitable for internal lights application for I/II/III.
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).



### T-PWM™

Super depth dimming technology

### Flicker-free

IEEE 1789

TUV Certificate No. B 17 06 01119 001

RCM Equipment registration No: E2017013627 Ref: ESV170365

ENEC Certificate No. U6 17 07 01119 004

CE EMC Certificate No. BST1702498520001Y-1EC-1

LVD Certificate No. BST1709992470001Y-1SC-2


 Dimmable:  

 0.01-100%

 5 years  
warranty

 IS15885  
(Part2/Section3)

**RoHS**
**SELV**

**Class 2**


## Specification

Model	DMX-15-100-700-E1A1	DMX-25-150-900-E1A1	DMX-36-200-1200-E1A1	
OUTPUT	Output Voltage	10-54Vdc		
	Max Output Voltage	58Vdc		
	Non-load Output Voltage	0Vdc		
	Output Current	100-700mA	150-900mA	200-1200mA
	Output Power	1W-15W	1.5-25W	2W-36W
	Dimming Range	0-100%, LED start at 0.01% possible.		
	Strobe Level	No video flicker / High frequency exemption level.		
	PWM Dimming Frequency	≤3600Hz		
	Current Accuracy	±5%		
Ripple & Noise	≤2V (no dim)			
INPUT	Dimming Interface	DMX512/RDM, Push DIM		
	Input Voltage Range	220-240Vac ±10%		
	Frequency	50/60Hz		
	Input Current	<0.15A	<0.2A	<0.3A
	Power Factor	PF>0.90/230Vac, at full load	PF>0.93/230Vac, at full load	PF>0.95/230Vac, at full load
	THD	≤20% at 230Vac, at full load		
	Efficiency(typ.)	83%	84%	87%
	Inrush Current(typ.)	Cold start 2.47A at 230Vac [twidth=24.3μs measured at 50% Ipeak]	Cold start 3.05A at 230Vac [twidth=34.1μs measured at 50% Ipeak]	Cold start 6.29A at 230Vac [twidth=57.3μs measured at 50% Ipeak]
	Anti Surge	L-N: 1kV		
Leakage Current	<0.5mA/230Vac			
ENVIRONMENT	Working Temperature	ta: 50°C tc: 90°C		
	Working Humidity	20 - 95%RH, non-condensing		
	Storage Temp., Humidity	-40°C ~ 80°C, 10-95%RH		
	Temp. Coefficient	±0.03%/°C [0-50°C]		
	Vibration	10-500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.		
PROTECTION	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers.		
	Over Load Protection	Shut down the output when rated power ≥102%, auto recovers.		
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.		
	Non-load Protection	Shut down the output if no load, auto recovers when load back to normal.		
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac		
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH		
	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13		
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11 EN61547		
	Strobe Test Standard	IEEE 1789		
OTHERS	Dimension	167×41×32mm(L×W×H)		
	Packing	168×43×35mm(L×W×H)		
	Weight[G.W.]	165g±10g		

## LED Current Selection

DIP switch for 8 optional currents' quick selection[see the table below].

DMX-15-100-700-E1A1	DIP Switch	⬇ ⬇ ⬇	⬇ ⬇ ⬆	⬇ ⬆ ⬆	⬇ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	ON OFF
	Output Current	100mA	180mA	300mA	350mA	450mA	500mA	600mA	700mA	
	Output Voltage	10-54V	10-54V	10-50V	10-43V	10-34V	10-30V	10-25V	10-22V	
	Output Power	1W-5.4W	1.8W-9.72W	3W-15W	3.5W-15.05W	4.5W-15.3W	5W-15W	6W-15W	7W-15.4W	

DMX-25-150-900-E1A1	DIP Switch	⬇ ⬇ ⬇	⬇ ⬇ ⬆	⬇ ⬆ ⬆	⬇ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	ON OFF
	Output Current	150mA	250mA	300mA	350mA	500mA	600mA	700mA	900mA	
	Output Voltage	10-54V	10-54V	10-54V	10-54V	10-50V	10-42V	10-36V	10-28V	
	Output Power	1.5W-8.1W	2.5W-13.5W	3W-16.2W	3.5W-18.9W	5W-25W	6W-25.2W	7W-25.2W	9W-25.2W	

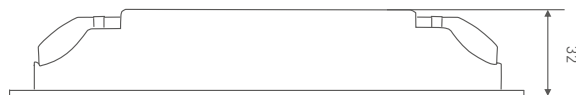
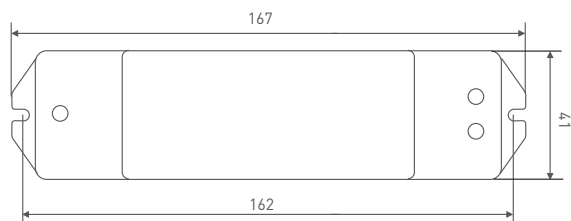
  

DMX-36-200-1200-E1A1	DIP Switch	⬇ ⬇ ⬇	⬇ ⬇ ⬆	⬇ ⬆ ⬆	⬇ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	⬆ ⬆ ⬆	ON OFF
	Output Current	200mA	350mA	500mA	600mA	700mA	900mA	1050mA	1200mA	
	Output Voltage	10-54V	10-54V	10-54V	10-54V	10-52V	10-40V	10-35V	10-30V	
	Output Power	2W-10.8W	3.5W-18.9W	5W-27W	6W-32.4W	7W-36.4W	9W-36W	10.5W-36.75W	12W-36W	

- \* Please choose the current value when the driver is power off.
- \* E.g. LED 3V/pcs: 10-54V can power 3-18pcs LEDs in series, 10-22V can power 3-7pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.
- \* Setting DMX address via RDM function

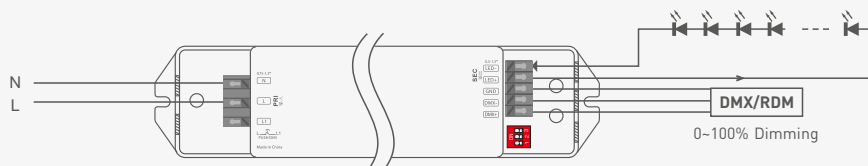
## Dimensions

Unit: mm

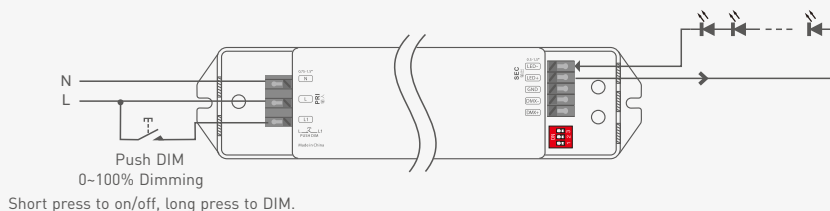


## Wiring Diagram

### DMX/RDM connection



### Push DIM connection



The dimming interface priority: First DMX/RDM, next Push DIM.

## Push Dimming

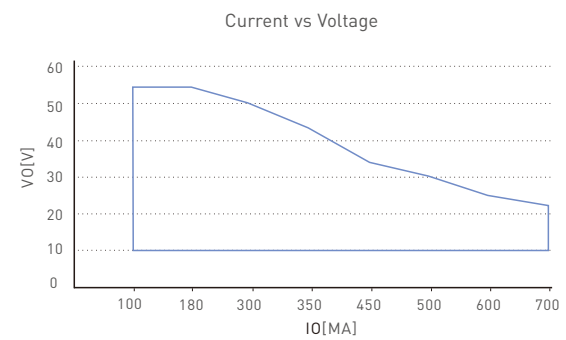
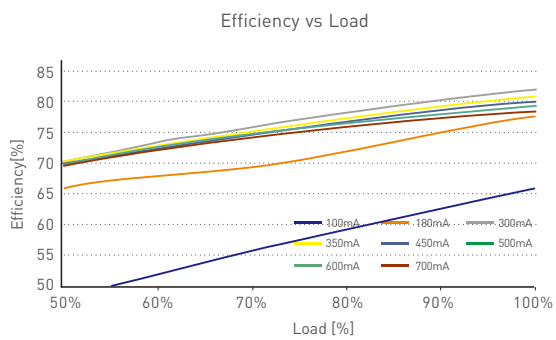
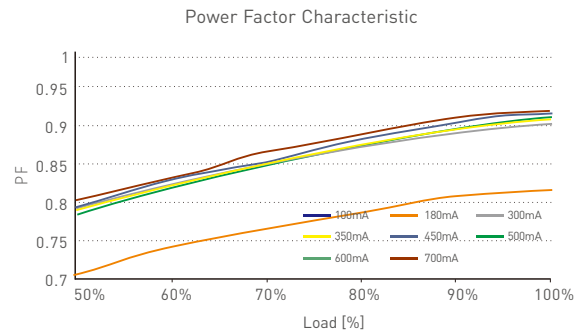
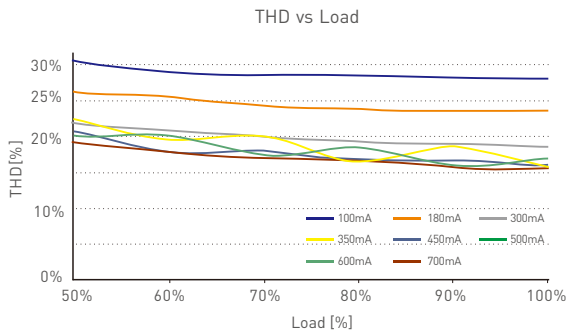


Reset Switch

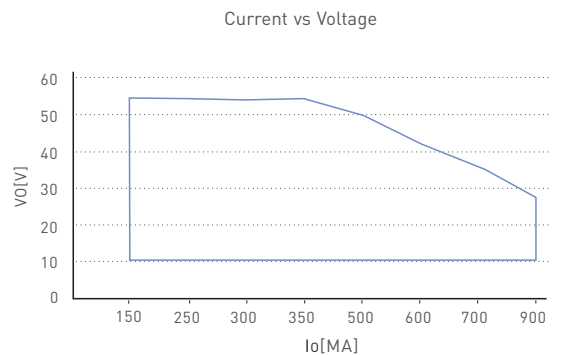
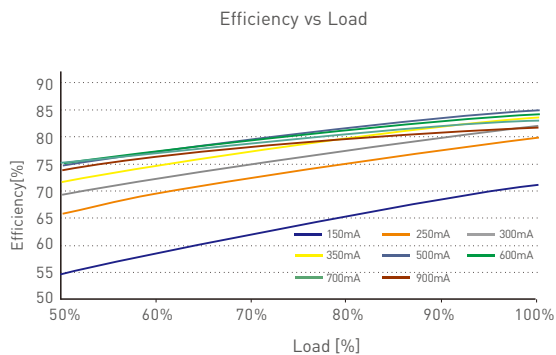
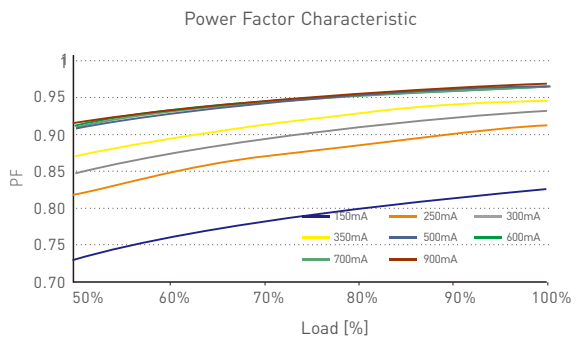
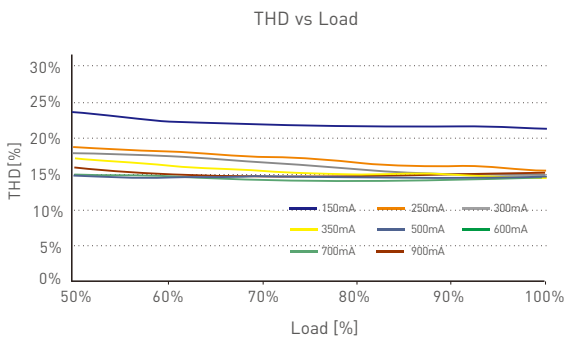
- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the brightness goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning on again.



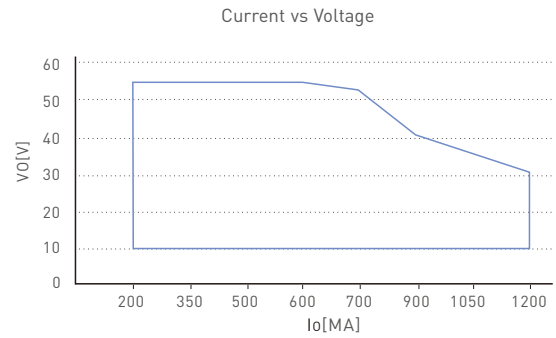
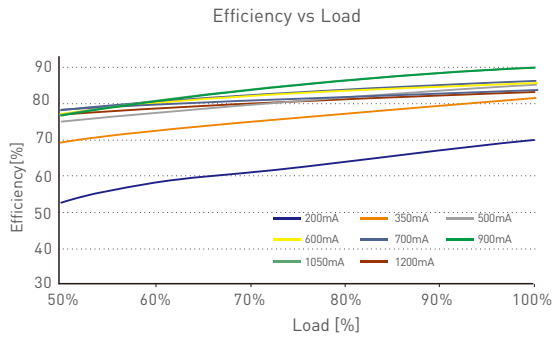
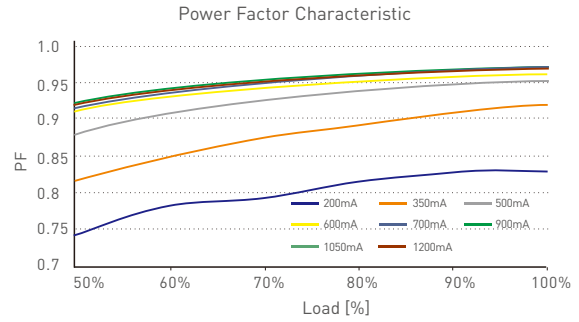
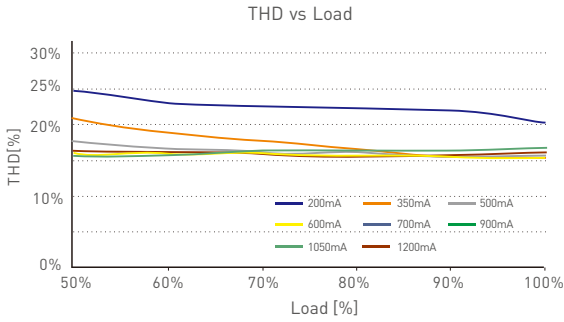
## Relationship Diagrams



DMX-15-100-700-E1A1



DMX-25-150-900-E1A1



DMX-36-200-1200-E1A1

## Flicker Test Form

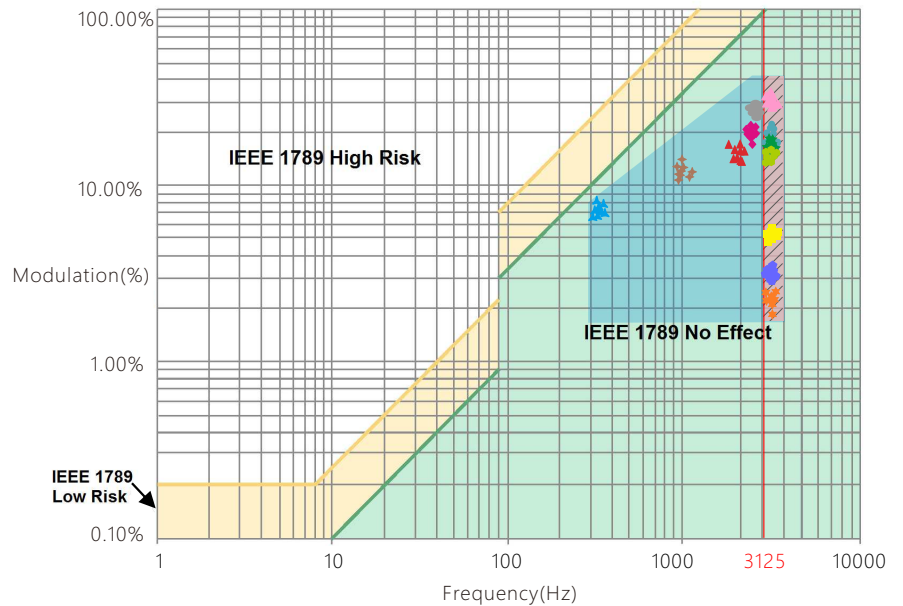
IEEE 1789

Limit of Modulation in low risk area	
Waveform frequency of Optical output	limit (%)
$f \leq 8\text{Hz}$	0.2
$8\text{Hz} < f \leq 90\text{Hz}$	$0.025 \times f$
$90\text{Hz} < f \leq 1250\text{Hz}$	$0.08 \times f$
$f > 1250\text{Hz}$	Exemption assessment
Limit of Modulation in no effect area	
Waveform frequency of Optical output	limit (%)
$f \leq 10\text{Hz}$	0.1
$10\text{Hz} < f \leq 90\text{Hz}$	$0.01 \times f$
$90\text{Hz} < f \leq 3125\text{Hz}$	$[0.08/2.5] \times f$
$f > 3125\text{Hz}$	Exemption assessment (High frequency exemption)

Brightness

- ▲ 0.1%
- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- 80%
- ★ 90%
- ◆ 100%

- Modulation Area Diagram
- ▨ High Frequency Exemption Area Diagram



Marks in the right chart were tested results of different current ranges.

The output frequency is 0Hz in 100% brightness and its corresponding modulation is 0%, which could not be shown in the right chart.

\* No further notice if any changes in the manual. Product function depends on the goods. Please feel free to contact your supplier if any question.