## LED Driver DMX 150-900mA 25W - DMX-25-150-900-E1A1

## General



Length (mm) 17 Width (mm) 44 Height (mm) 30 Housing Color W Housing Material Pla Mounting 16 Wieght (g) 16 Wire Strip Length 51 Wire Type 25 <b>Electronics</b> 16 Unput Voltage 10 Output Power Range (W) 15 Power Factor at Full Load 40 Power Supply 11 LED Outputs 11 Input Frequency 10 Inrush Current 25 <b>Lighting</b>	hite hite astic Irface mounted O nm 5mm2
Width (mm)44Height (mm)50Housing ColorWHousing Material94Mounting50Weight (g)16Wire Strip Length50Wire Type25Electronics50Input Domain60Output Voltage10Output Current (mA) max/output15Output Power Range (W)15Power Supply16Input Frequency50Input Frequency <t< td=""><td>4 hite astic urface mounted 0 nm 5mm2 0 0 ~ 240V AC 0 ~ 240V AC 0 ~ 54V DC 0 ~ 900 5-25 0.95 @ 230VAC ternal</td></t<>	4 hite astic urface mounted 0 nm 5mm2 0 0 ~ 240V AC 0 ~ 240V AC 0 ~ 54V DC 0 ~ 900 5-25 0.95 @ 230VAC ternal
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Housing ColorWHousing MaterialPlaMountingSuWeight (g)16Wire Strip LengthSnWire Type25Electronics25Input DomainACInput Voltage10Output Voltage10Output Current (mA) max/output15Power Factor at Full Load40Power SupplyInLED Outputs1Input Frequency50Inrush Current50Inrush Current50Inru	hite astic urface mounted 0 0 0 0 0 0 0 0 0 0 0 2 0 0 0 2 0 0 0 2 0
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LED Outputs 1 Input Frequency 50 Inrush Current 25 Lighting	) ~ 60Hz
LED Outputs1Input Frequency50Inrush Current25Lighting	
Inrush Current 25	
Lighting	5A @ 230VAC
Color Range Sir	ngle Color
Control	
Output Signal PV	VM-CC
	МХ
RDM Support Ye	S
	100%
Driver Configuration Di	p Switches
Number of Channels 1	
Protection	
Protection Class II	
Environmental	
Operating Temperature -3	0 ~ +55 °C
	20

Disclaimer

Due to the technical evolution and improvement of our products, the data provided in this document may be updated on a regular basis, and as such, confirmation of this information is strongly recommended prior to the order process. OneEightyOne is not responsible for any discrepancies in this document following changes in our products. We reserve the right to make technical changes to our products and to change information, at its sole discretion, without notice.

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CE ROHS IP20 2 year warranty

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# LTECH

#### 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 1 / 11 / 111.
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).

#### T-PWM" Super depth dimming technology Flicker-free

DMX-15-100-700-E1A1

- **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%

**RDM** -

DMX

DMX-36-200-1200-E1A1

DMX/RDM

Push DIM



DMX-25-150-900-E1A1

## Specification

Model		DMX-1	5-100-700-E1A	1	DMX-25-150-900-E1A1	DMX-36-200-1200-E1A1				
	Output Voltage	10-54Vc	c			· · · · ·				
	Max Output Voltage	58Vdc	58Vdc							
	Non-load Output Voltage	0 V d c								
	Output Current	100-700	ImA		150-900mA	200-1200mA				
UTPUT	Output Power	1W~15V	V		1.5~25W	2W~36W				
	Dimming Range	0~100%	, LED start at 0.01%	possible.	I					
	Strobe Level	No vide	o flicker / High frequ	ency exemption	evel.					
	PWM Dimming Frequency	≤3600H	Z							
	LF Current Ripple(120Hz)	<2%								
	Current Accuracy	±5%								
	Ripple & Noise	≤2V (no	≤2V (no dim)							
	Dimming Interface	DMX512	DMX512/RDM, Push DIM							
	Input Voltage Range	220-240	220-240Vac							
	Frequency	50/60H	50Hz							
	Input Current	<0.15A			<0.2A	<0.3A				
	Power Factor	PF>0.90	1/230Vac, at full load		PF>0.93/230Vac, at full load	PF>0.95/230Vac, at full load				
NPUT	THD	≤20% at	230Vac, at full load			≤15% at 230Vac, at full load				
	Efficiency(typ.)	83%			84%	87%				
	Inrush Current(typ.)		art 2.47A at 230Vac 4.3µs measured at 50%	lpeak)	Cold start 3.05A at 230Vac (twidth=34.1µs measured at 50%  peak)	Cold start 6.29A at 230Vac (twidth=57.3µs measured at 50% Ipeak)				
	Anti Surge	L-N: 1k	L-N: 1kV							
	Leakage Current	<0.5mA	<0.5mA/230Vac							
	Working Temperature	ta: 50°C	ta: 50°C tc: 90°C							
	Working Humidity	20 ~ 95	20 ~ 95%RH, non-condensing							
NVIRONMENT	Storage Temp., Humidity	-40°C ~	-40°C ~ 80°C, 10~95%RH							
	Temp. Coefficient	±0.03%/	±0.03%/°C (0-50°C)							
	Vibration	10~500	10-500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes							
	Over-heat Protection	Intellige	Intelligently adjusting or turning off the output current if the PCB temperature≽110°C, auto recovers							
PROTECTION	Over Load Protection	Shut do	Shut down the output when rated power≽102%, auto recovers							
PROTECTION	Short Circuit Protection	Shut do	Shut down automatically if short circuit occurs, auto recovers							
	Non-load Protection	Shut do	Shut down the output if no load, auto recovers when load back to normal							
	Withstand Voltage	I/P-0/P	I/P-0/P: 3750Vac							
	Isolation Resistance	I/P-0/P	: 100MΩ/500VDC/25°	2/25°C/70%RH						
		CCC	China	GB19510.1, GI	319510.14					
	Safety Standards	TUV	Germany	EN61347-1, E	N61347-2-13, EN62493					
		CE	European Union	EN61347-1, E	N61347-2-13, EN62384					
SAFETY		СВ	CB member states	IEC61347-1, II	EC61347-2-13					
<u>s</u>		RCM	Australia	AS61347-1, AS	61347-2-13					
ЕМС		ENEC	Europe	EN61347-1, E	N61347-2-13, EN62384					
		CCC	China	GB/T17743, G	B17625.1					
	EMC Emission	RCM	Australia	EN550515, EN	61000-3-2, EN61000-3-3, EN61547					
		CE European Union EN550515, EN61000-3-2, EN61000-3-3								
	EMC Immunity	EN6100	EN61000-4-2,3,4,5,6,8,11 EN61547							
	Strobe Test Standard	IEEE 17	IEEE 1789							
	Dimension	167×41>	167×41×32mm(L×W×H)							
OTHERS	Packing	168×43>	168×43×35mm(L×W×H)							
	Weight(G.W.)	165g±10	165g±10g							



## LED Current Selection

DIP switch for 8 optional currents' quick selection(see the table below).

	DIP Switch	1111	117	171	1 T T -	711	TAT	TTA	TTT	
DMX-15-100-700-E1A1	Output Current	100mA	180mA	300mA	350mA	450mA	500mA	600mA	700mA	ON OFF
	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	
		1								
	DIP Switch	<b>≜ ≜</b> -	117	171		TLL	TAT	T T 🛓 🚽	TTT	
DMX-25-150-900-E1A1	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	ON OFF
	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	
	1							1		
	DIP Switch	<b>≜ ≜</b> -	117	171	177	무소소	무실무	T T 🛓 🚽	TTT	
DMX-36-200-1200-E1A1	Output Current	200mA	350mA	500mA	600mA	700mA	900mA	1050mA	1200mA	- T 🔺
	Output Voltage	10-54V	10-54V	10-54V	10-54V	10-52V	10-40V	10-35V	10-30V	ON OFF
	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	

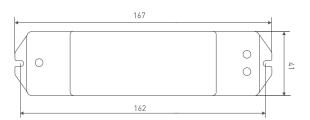
st Please choose the current value when the driver is power off.

\* 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

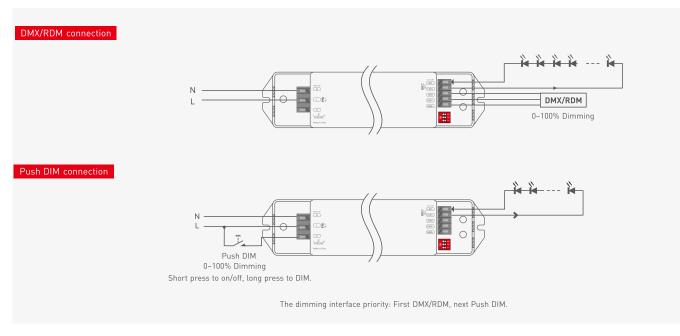
#### **Dimensions**

Unit: mm





## Wiring Diagram



#### Push DIM

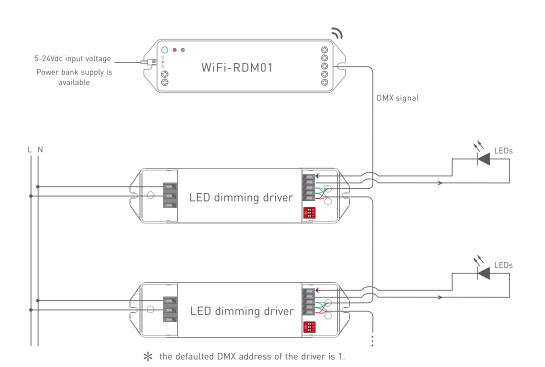
- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the brightness goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning on again.





### DMX Address Setting

The DMX driver can work with the address editor that complies with standard RDM protocol. It is recommended to use LTECH's RDM editor (model WiFi-RDM01), which can achieve more functions such as remote browsing and parameter setting. Wiring diagram as below:





## LTECH RDM editor App interface instruction

Download the App, setting the parameters after well connecting the RDM editor, please check the manual of WiFi-RDM01 for more details.



11 <del>?</del>			\$ 100%
<	Te	st	-
#1	#2	#3	#4
#5	#6	#7	#8
OFF	OFF	OFF	OFF
#9	#10	#11	#12
OFF	OFF	OFF	OFF
#13	#14	#15	#16
OFF	127	OFF	OF
#17	#18	#19	#20
OFF	OFF	OFF	OF
#21		#23	#24
OFF		OFF	OF
#25	#26	#27	#28
OFF	OFF	OFF	OFF
#29		#31	#32
OFF		OFF	OF
#33		#35	#36
OFF		OFF	OFF
#37	#38	#39	#40
#14		•	127
	$\left( \right)$		

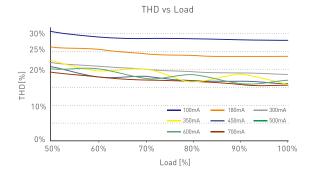
all 🗢	9:4	1 AM	∦ 100% ■
	DMX addr	ess:Unicas	t Ser
Choose the s	orted models firstly	, then modify Srl.	NO and click
	< #	18	· ·
#1	#2	#3	#4
#5	#6	#7	#8
#9	#10	#11	#12
#13	#14	#15	#16
#17	#18	#19	#20
#21	#22	#23	#24
#25	#26	#27	#28
#29	#30	#31	#32
#33	#34	#35	#36
		)	

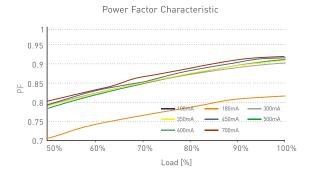
a: Click"Add", edited the address in corresponding box.

b: Click"ID", get more product details. c: Click"<sup>(</sup>O", enter setting interface. d: Click"No.", issue the recognizing command.

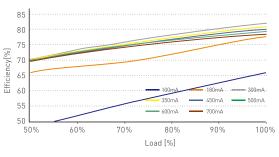


## **Relationship Diagrams**









70%

50%

60%

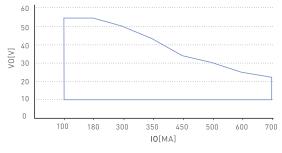
90%

100%

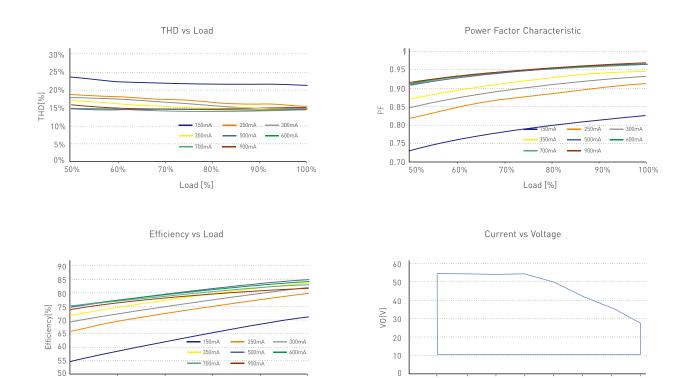
80%

Load [%]

Current vs Voltage







DMX-25-150-900-E1A1

150

250

300

350

Io[MA]

500

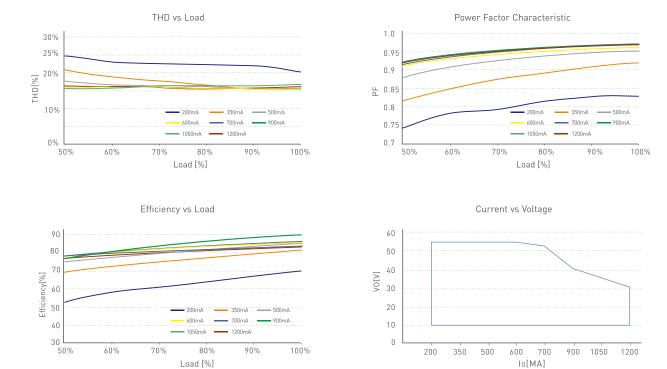
600

700

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900





DMX-36-200-1200-E1A1

## Flicker Test Form

IEEE 1789					
Limit of Modulation in low risk area					
limit (%)					
0.2					
0.025 × f					
$0.08 \times f$					
Exemption assessment					
no effect area					
0.1					
0.01 × f					
(0.08/2.5) × f					
Exemption assessment (High frequency exemption)					

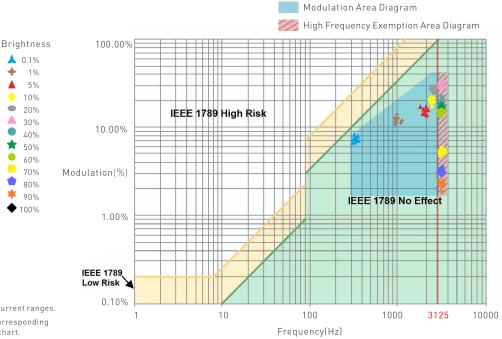
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Marks in the right chart were tested results of different current ranges. The output frequeny is OHz in 100% brightness and its corresponding modulationis 0%, which could not be shown in the right chart.

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#### Attentions

- Products shall be installed by qualified professionals.
- LTECH products are non-waterproof [special models excepted]. Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will extend the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.
- \* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

#### Warranty Agreement

- Warranty periods from the date of delivery 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

#### Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.
- 1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
- 2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail

## **Update Log**

Version	Updated Time	Update Content	Updated by
A4	2019.10.24	Add RDM editor connection diagram	Liu Weili
A5	2021.03.02	Update product silk screen, TUV certification icon; add precautions and warranty agreement	Liu Weili