



# SHENZHEN TWOGAIN ELECTROINCS CO., LTD



# 60W LED POWER DRIVER WITH DMX512 DECODER



Feature:

AC power input 100V to 277Vac

Built-in active PFC fucntion

Efficiency (typ.)90.5%

Protections: Shot circuit/Overload/Over voltage/Over temperature

-30~+55 $^\circ\!\mathrm{C}$  working temperature

Cooling without fan

OCP with trimmer resistor

IP level: IP65/IP67

Support DMX512/1990 protocol , DMX512 decoder

Support constant current LED and constant voltage LED

Using indoor and outdoor

5 years Warranty

### Applications

- LED street lighting
- LED architectural lighting
- LED bay lighting
- LED floodlighting
- LED strip lighting
- LED linear lighting

		24V serial DMX dec	oder LED power		
NO.	Туре	MODEL	Features	Support	Note
1	1 Constant TG-AC60H-DMX24H01 (DIM) DN		DMX constant voltage DIM	Single color LED lamp	Table 6
2	voltage	TG-AC60H-DMX24H02 (CCT)	DMX constant voltage Bi-color, DIM	Bi-color LED lamp	Table 5
3	output	TG-AC60H-DMX24H03 (RGB)	DMX constant voltage RGB	RGB LED lamp	Table 4
4	Constant	TG-AC60H-DMX24H04 (DIM)	DMX constant current DIM	Single color LED lamp	Table 3
5	current	TG-AC60H-DMX24H05 (CCT)	DMX constant current Bi-color, DIM	Bi-color LED lamp	Table 2
6	output	TG-AC60H-DMX24H06 (RGB)	DMX constant current RGB	RGB LED lamp	Table 1
1. S	upport DMX512/19	90, DMX decoder			
2. A	utomatic DMX sign	al input or output			
3. E	Build in DMX signal a	amplifier			
4. A	uto DMX address .				

		48V serial DMX d	ecoder LED power		
NO.	Туре	MODEL	Features	Support	Note
1	Constant	TG-AC60H-DMX48H01 (DIM)	Single color LED lamp	Table 6	
2	voltage	TG-AC60H-DMX48H02 (CCT)	Bi-color LED lamp	Table 5	
3	output	RGB LED lamp	Table 4		
4	Constant	TG-AC60H-DMX48H04 (DIM)	Single color LED lamp	Table 3	
5	current	TG-AC60H-DMX48H05 (CCT)	DMX constant current Bicolor, DIM	Bi-color LED lamp	Table 2
6	output	TG-AC60H-DMX48H06 (RGB)	DMX constant current RGB	RGB LED lamp	Table 1
5. 5	Support DMX512/19	90, DMX decoder			
6. 5	elf-identify DMX sig	nal input or output			
7. E	Build in DMX signal a	amplifier			
8. <i>A</i>	Auto define DMX ad	dress .			



### Model Encoding

- 1. TG=TWOGAIN
- 2. AC=AC100V~277V
- 3. 60W=MAX power 60W
- 4. DMX=Support DMX512/1990 protocol
- 5. 24=24V 48=48V
- 6. 01=Constant voltage DIM 02=Constant voltage CCT and DIM 03=Constant voltage RGB
- TWOGAIN Ac100~277V 60W 60W DMX512 decode Voltage aluminium MODEL
  - 04=Constant current DIM 05= Constant current CCT and DIM 06= Constant current RGB

NO	Product MODEL	Description	LED lamp type
1	TG-AC60H-DMX24H01(DIM)	LED constant voltage ,	Constant voltage single color lamp
		decode DMX DIM	
10 Mar 14			



NO	Product MODEL	Description	LED lamp type
2	TG-AC60H-DMX24H02(CCT)	LED constant voltage ,	Constant voltage Bi-color lamp
		DMX decode Bi-color and DIM	
			0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0   0 0 0 0 0 0 0

NO	Product MODEL	Description	LEI	D lamp	type			
3	TG-AC60H-DMX24H03(RGB)	Constant voltage RGB LED,	RGB LED lamp					
		DMX decode RGB						
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Cons	tant voltage RGB LED							



NO	Product MODEL	Description LED lamp type
4	TG-AC60H-DMX24H04(DIM)	LED constant current ,DMX Constant current Single color lamp decode DIM
ALITITIES .		
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NO	Product MODEL	Description					LED	lamp	type		
5	TG-AC60H-DMX24H05 (CCT)	LED constant	curren	t ,DM	IX Bi-	color	Con	stant	curren	t Bi-Col	or lamp
		and DIM									
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NO	Product MODEL	Description	LED lamp type
6	TG-AC60H-DMX24H06(RGB)	Constant current RGB LED,	Constant current RGB LED lamp
		DMX RGB DMX decoder	

### SPECIFICATION TG-AC60H-DMX

	MODEL	24H01 (DIM)	24H01(CCT)	24H03(RGB)	24H04(DIM)	24H05(CCT)	24H06(RGB)				
	DC VOLTAGE	24	24V								
	ADJUST VOLTAGE RANGE		24V		18~24V						
	RATED CURRENT	2.5A	2.5A								
	RATED POWER	60W	60W								
O U	RIPPLE&NOISE(max.)	150mVp-p									
	VOLTAGE TOLERANCE	±1.5%									
Т	ADJUST VOLTAGE RANGE	CUSTOMER PRODUCTS			24V	24V	24V				
Р		18V~28V(2.5A/2	18V~28V(2.5A/18V, 2.1A/28V)								
U	ADJUST CURRENT RANGE	CUSTOMER PRO	DUCTS								
Т		2.1A~2.5A									
	LOAD ADJUST RANGE	±1%									
	SETUP,RISE TIME	500ms,60ms/10	00VAC, 300ms,50	ms/230Vac							
	HOLD UP TIME(Typ.)	15ms, 230VAC/2	LOOVAC								
	DMX512 DECODER	Auto DMX addre	ess self-identify [	OMX input and ou	itput						



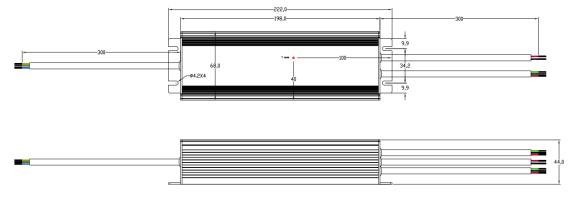
I	MODEL	24H01(DIM)	24H02(CCT)	24H03(RGB)	24H04(DIM)	24H05(CCT)	24H06(RGB)		
INPUT	VOTLAGE RANGE	90~305VAC or 1	27~431VDC						
	FREQUENCY RANGE	47~63Hz							
	PFC	PF>0.98/115VA0	C,PF>0.95/230VA	C,PF>0.93/277VA	C(FULL LOAD)				
	EFFICIENCY(Typ.)	90.5%							
	AC CURRENT(Typ.)	1.5A/115VAC	0.7A230VAC	0.6A/277VAC					
	INRUSH CURRENT	61A/230VAC							
	(Тур.)								
	LEAKAGE CURRENT	<0.76mA/277VA	C						
	OVER LOAD	95%~110% Prote	ection type :Hicc	up mode Recover	s automatically af	ter fault conditio	n is removed		
PROTECTI	SHORT PROTECTION	Hiccup mode Re	covers automati	cally after fault co	ndition is remove	d			
ON	OVER VOLTAGE	Hiccup mode Re	covers automati	cally after fault co	ndition is remove	d			
	OVER TEMPERATURE	Shut down O/P voltage, recovers automatically after temperature goes down							
	WORKING TEMP.	- <b>30~55</b> ℃							
	WORKING HUMIDITY	20~95% RH non-condensing							
ENVIRON	STORAGETEMP., HUMIDITY	-40~80°C,10~95%RH							
MENT	TEMP. CONEFFICIENT	<b>±0.03%/</b> ℃							
	VIBRATION	10~500Hz,5G 12	min. /1Cycle, e	ach along X,Y,Z 72	axes				
	SAFETY STANDARDS	TUV EN61347-1	EN61347-2-13 ir	ndependent IP65	OR IP67 CE				
SAFETY	WITHSTAND VOLTAGE	I/P-O/P:3.75KVA	C IP-FG:2KVAC C	)/P-FG:1.5KVAC					
&	ISOLANTION RESISTANCE	I/P-O/P, IP-FG:	100M Ohms/500	DVDC/25°C/70%R					
EMC	EMC EMISSION	Refer to EN5501	5,EN55022(CISP	R22) CLASB,EN61	000-3-2 CLASS C(	≧ 50 LOAD);EN61	000-3-3		
	EMC IMMUNITY	Refer to EN6100	0-4-2,3,4,5,6,8,1	.1,EN61547,EN55	024 class A				
	DIMENSION	247*488*32mm	(L*W*H)						
NOTE	1. All parameters NOT spec	cially mentioned ar	e measured at 2	30VAC input, rate	d load and 25 $^\circ \! \mathbb{C}/$	70%RH			

	MODEL	48H01 (DIM)	48H01(CCT)	48H03(RGB)	48H04(DIM)	48H05(CCT)	48H06(RGB)				
	DC VOLTAGE		48V								
	ADJUST VOLTAGE RANGE	48	V		42~54∖	1					
	RATED CURRENT	1.25A	1.25A								
	RATED POWER	60W	60W								
0	RIPPLE&NOISE(max.)	150mVp-p	150mVp-p								
U	VOLTAGE TOLERANCE	±1.5%									
Т	ADJUST VOLTAGE RANGE	CUSTOMER PRODUCTS			24V	24V	24V				
Р		42V~54V(1.05A/	42~54V, 1.1A/	54V)							
U	ADJUST CURRENT RANGE	Accept Custom	ized								
Т		1.1A~1.25A									
	LOAD ADJUST RANGE	±1%									
	SETUP,RISE TIME	1500ms,60ms/100VAC, 700ms,50ms/230Vac									
	HOLD UP TIME(Typ.)	15ms, 230VAC/1	00VAC								
	DMX512 DECODER	Auto DMX addre	ss self-identify D	MX input and ou	tput						



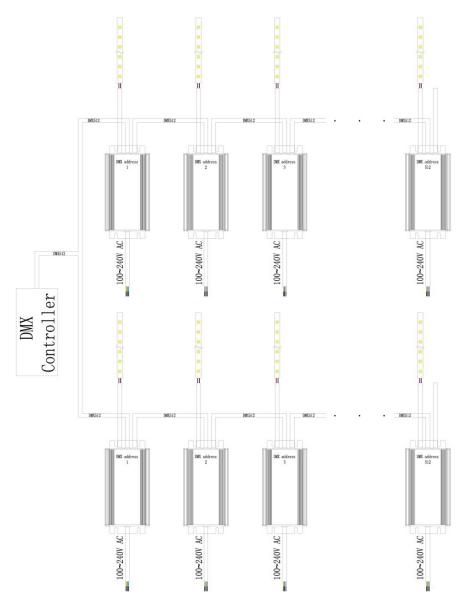
I	MODEL	48H01(DIM)	48H02(CCT)	48H03(RGB)	48H04(DIM)	48H05(CCT)	48H06(RGB)			
INPUT	VOTLAGE RANGE	90~305VAC or 127	~431VDC		·					
	FREQUENCY RANGE	47~63Hz								
	PFC	PF>0.98/115VAC,PF>0.95/230VAC,PF>0.93/277VAC(FULL LOAD)								
	EFFICIENCY(Typ.)	90.5%								
	AC CURRENT(Typ.)	1.5A/115VAC (	0.7A230VAC	0.6A/277VAC						
	INRUSH CURRENT	61A/230VAC								
	(Тур.)									
	LEAKAGE CURRENT	<0.76mA/277VAC								
	OVER LOAD	95%~110% Protect	ion type :Hiccu	p mode Recovers	automatically afte	r fault condition	is removed			
PROTECTI	SHORT PROTECTION	Hiccup mode Recovers automatically after fault condition is removed								
ON	OVER VOLTAGE	Hiccup mode Reco	vers automatica	ally after fault con	dition is removed					
	OVER TEMPERATURE	Shut down O/P voltage, recovers automatically after temperature goes down								
	WORKING TEMP.	- <b>30~55</b> ℃								
	WORKING HUMIDITY	20~95% RH non-	condensing							
ENVIRON	STORAGETEMP.,	-40~80°C,10~95%RH								
MENT	HUMIDITY									
	TEMP. CONEFFICIENT	<b>±0.03%/</b> ℃								
	VIBRATION	10~500Hz,5G 12m	in. /1Cycle, ea	ch along X,Y,Z 72 a	ixes					
	SAFETY STANDARDS	TUV EN61347-1 EN	161347-2-13 inc	lependent IP65 O	R IP67 CE					
SAFETY	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC	IP-FG:2KVAC O/	P-FG:1.5KVAC						
&	ISOLANTION RESISTANCE	I/P-O/P, IP-FG: 10	0M Ohms/500\	/ <b>DC/25℃</b> /70%R						
EMC	EMC EMISSION	Refer to EN55015,	EN55022(CISPR	22) CLASB,EN6100	)0-3-2 CLASS C(≧5	50 LOAD);EN610	00-3-3			
	EMC IMMUNITY	Refer to EN61000-4	4-2,3,4,5,6,8,11	,EN61547,EN5502	24 class A					
	DIMENSION	247*488*32mm (L	*W*H)							
NOTE	2. All parameters NOT sp	ecially mentioned ar	e measured at 2	230VAC input, rate	ed load and $25^{\circ}C/$	70%RH				

### DIMENSION

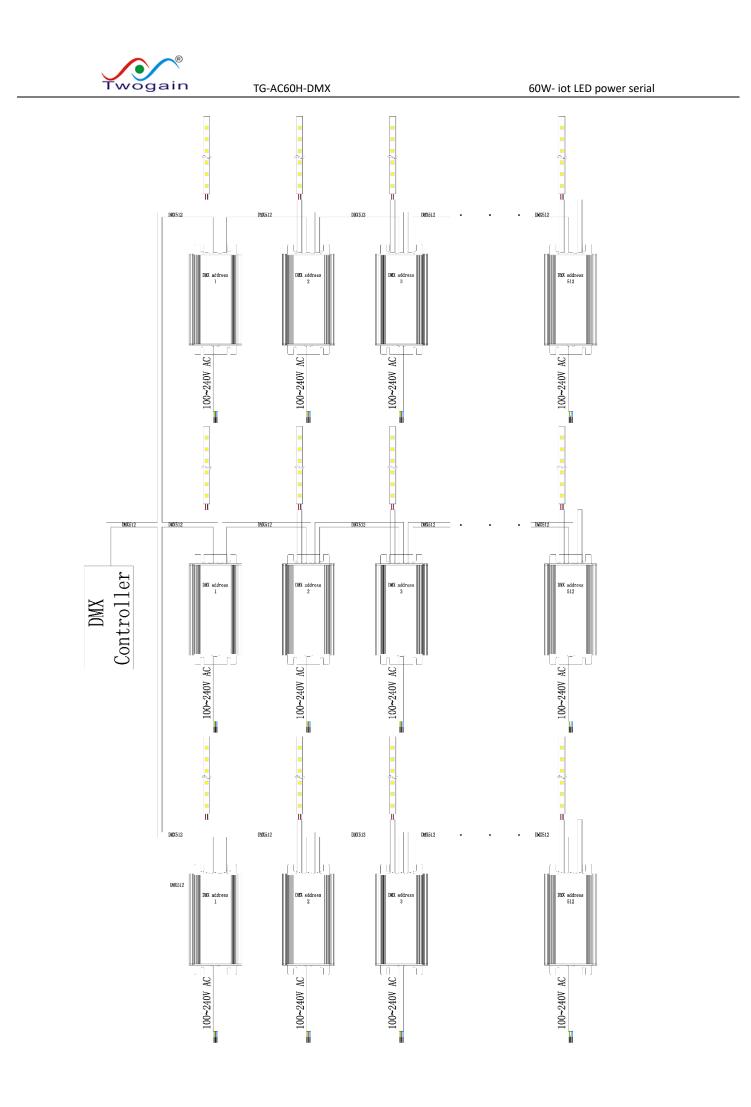


# 150W demision



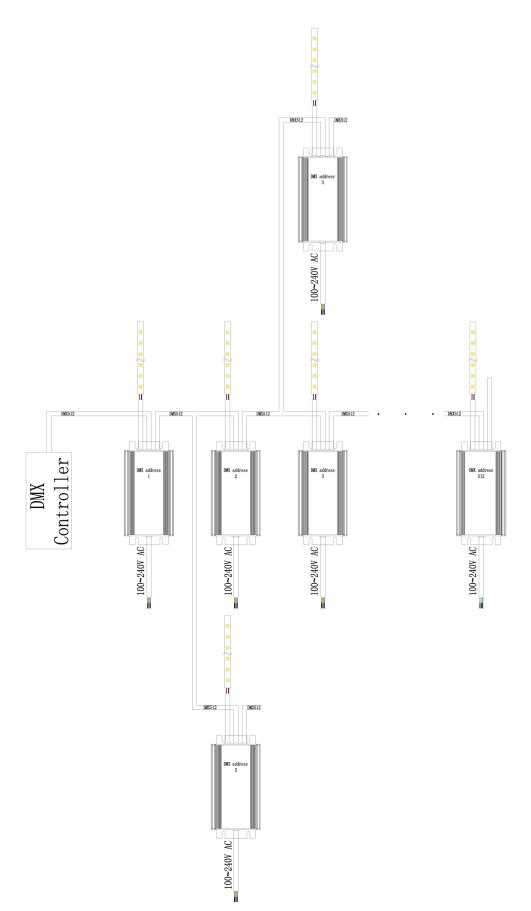


DMX connection for single color (fig.2)



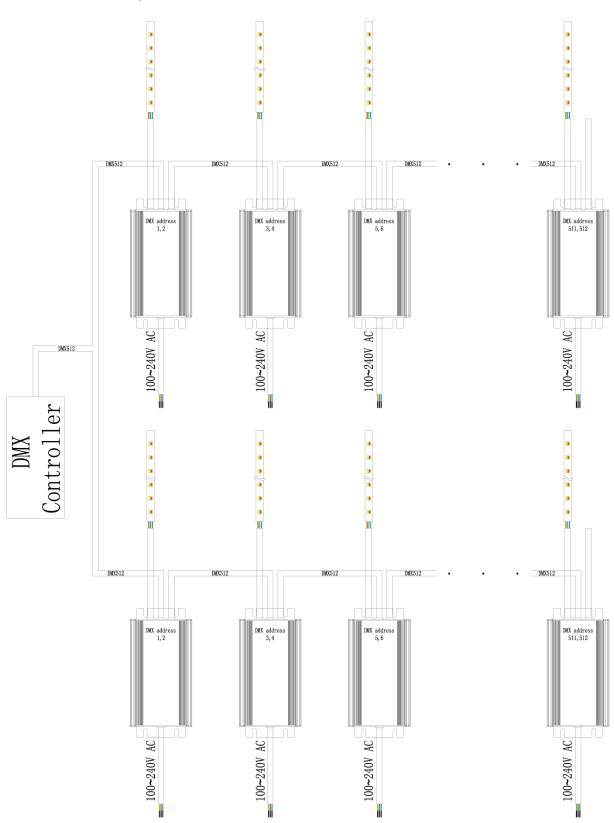


DMX connection for single color (fig.3)



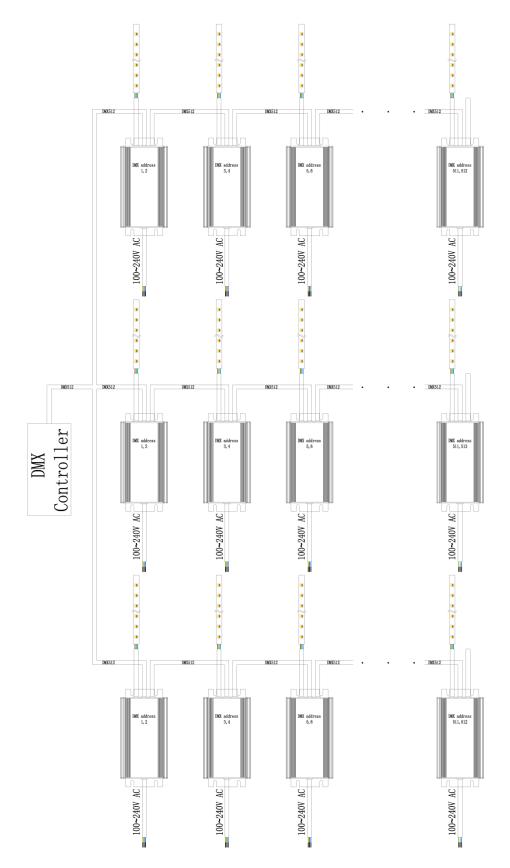


### DMX connection for Bi-color (fig.4)

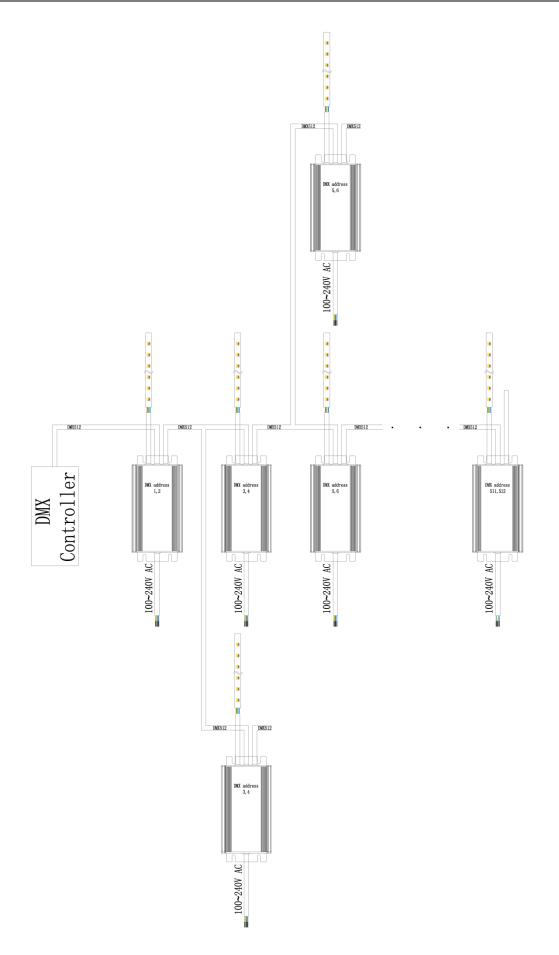




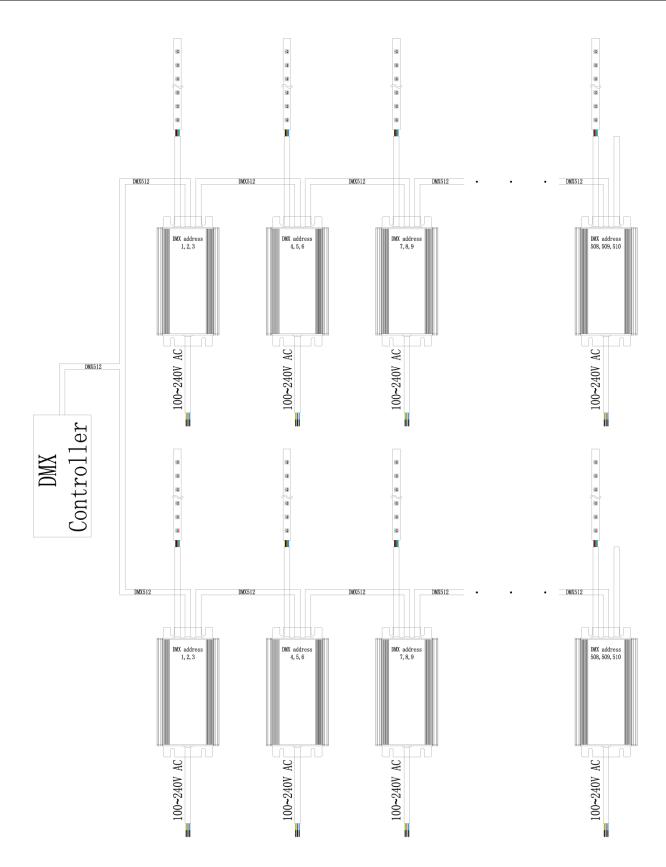
### DMX connection for Bi-color (fig.5)

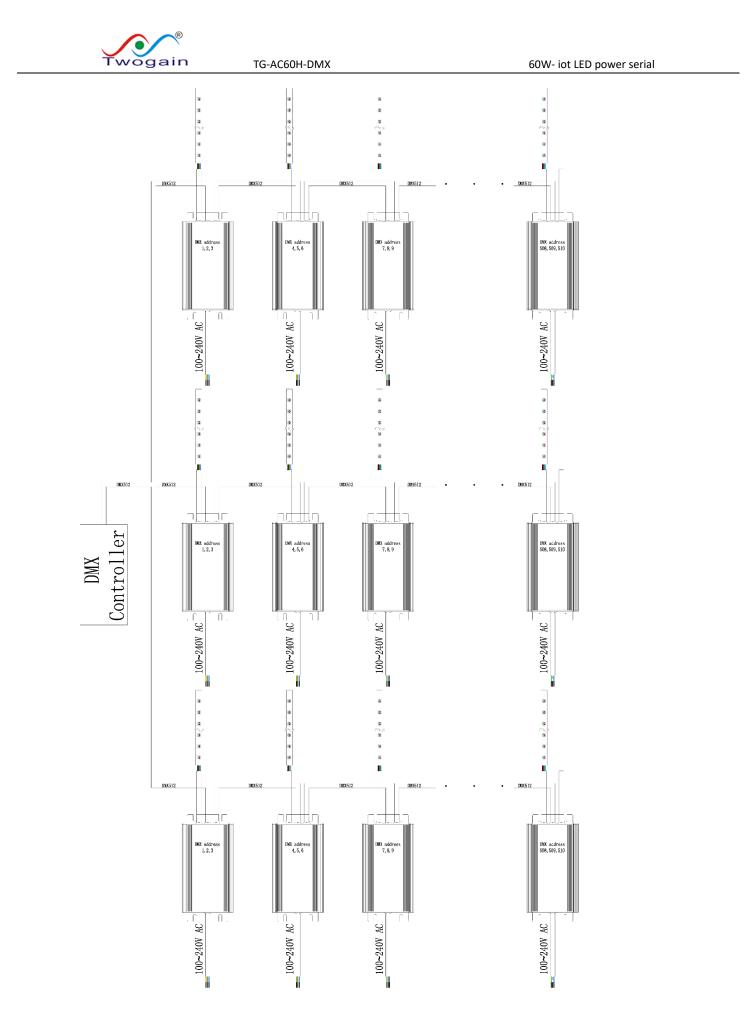




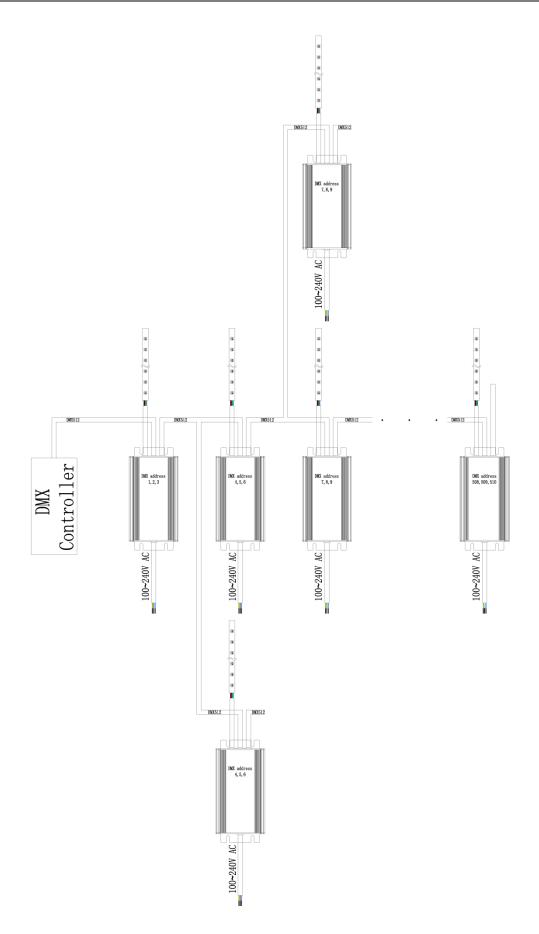














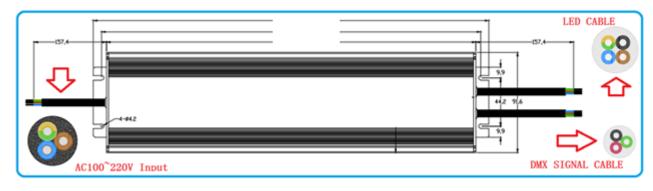
# 1. DMX input cable(three core cable) and output cable(three core cable)

YELLOW/GREEN color=DMX GND

BLACK color =DMX-

RED color =DMX+

- 2. Self-identify DMX signal input or output
- 3. Auto define DMX address



### AC input

- 1. YELLOW/GREEN COLOR : Earth ground
- 2. BLUE COLOR : AC\_N
- 3. BROWN COLOR:

## DMX CABLE input and output

1. YELLOW/GREEN COLOR : DMX GROUND

AC\_L

- 2. BLACK COLOR : DMX-
- 3. RED COLOR : DMX+

LED	) input	
1.	BLACK COLOR:	LED+
2.	BROWN COLOR:	RED-
3.	GREEN/YELLOW COLOR:	GREEN-
4.	BLUE COLOR :	BLUE-
-		

One DMX address of TG-AC60H-DMX									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
							510	511	512

Two DMX address of TG-AC60H-DMX										
1,2	3,4	5,6	7,8	9,10	11,12	13,14	15,16	17,18	19,20	
							507,508	509,510	511,512	

	Three DMX address of TG-AC60H-DMX										
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		
							505,506,507	508,509,510	511,512,X		