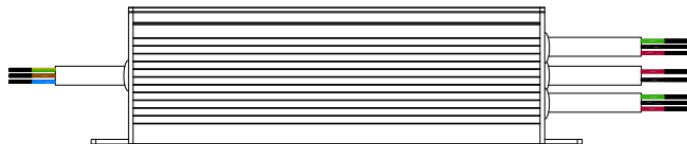




SHENZHEN TWOGAIN ELECTROINCS CO.,LTD

320W LED POWER DRIVER WITH DMX512 DECODER



Feature: AC power input 100V to 277Vac

Built-in active PFC function

Efficiency (typ.)90.5%

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

-30~+55℃ 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

24V LED power driver with DMX decoder series

NO.	Type	MODEL	Features	Support	Note
1	Constant	TG-AC320H-DMX24H01 (DIM)	DMX constant voltage DIM	Single color LED lamp	Table 6
2	voltage	TG-AC320H-DMX24H02 (CCT)	DMX constant voltage Bi-color, DIM	Bi-color LED lamp	Table 5
3	output	TG-AC320H-DMX24H03 (RGB)	DMX constant voltage RGB	RGB LED lamp	Table 4
4	Constant	TG-AC320H-DMX24H04 (DIM)	DMX constant current DIM	Single color LED lamp	Table 3
5	current	TG-AC320H-DMX24H05 (CCT)	DMX constant current Bi-color, DIM	Bi-color LED lamp	Table 2
6	output	TG-AC320H-DMX24H06 (RGB)	DMX constant current RGB	RGB LED lamp	Table 1
1. Support DMX512/1990, DMX decoder					
2. Automatic DMX signal input or output					
3. Build in DMX signal amplifier					
4. Auto DMX address.					

48V LED power driver with DMX decoder series

NO.	Type	MODEL	Features	Support	Note
1	Constant	TG-AC320H-DMX48H01 (DIM)	DMX constant voltage DIM	Single color LED lamp	Table 6
2	voltage	TG-AC320H-DMX48H02 (CCT)	DMX constant voltage Bicolor, DIM	Bi-color LED lamp	Table 5
3	output	TG-AC320H-DMX48H03 (RGB)	DMX constant voltage RGB	RGB LED lamp	Table 4
4	Constant	TG-AC320H-DMX48H04 (DIM)	DMX constant current DIM	Single color LED lamp	Table 3
5	current	TG-AC320H-DMX48H05 (CCT)	DMX constant current Bicolor, DIM	Bi-color LED lamp	Table 2
6	output	TG-AC320H-DMX48H06 (RGB)	DMX constant current RGB	RGB LED lamp	Table 1
5. Support DMX512/1990, DMX decoder					
6. Self-identify DMX signal input or output					
7. Build in DMX signal amplifier					
8. Auto define DMX address.					

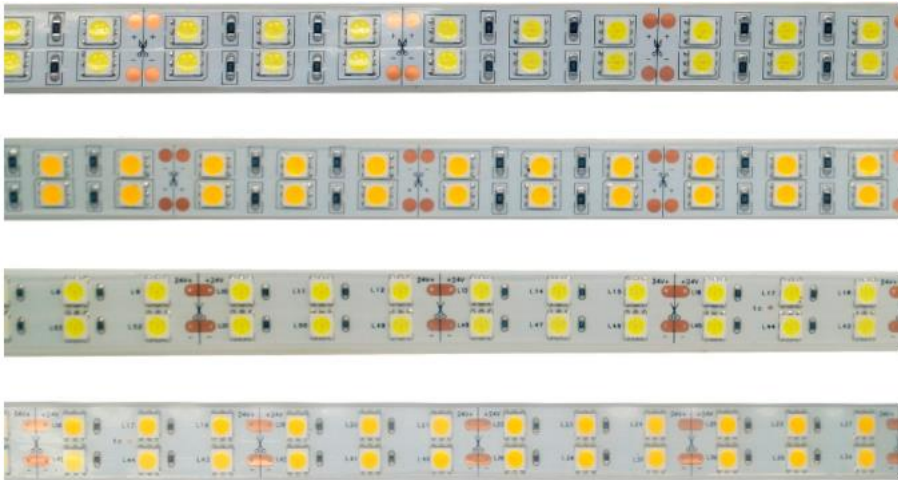
#### Model Encoding

1. TG=TWOGAIN
2. AC=AC100V~277V
3. 320W=MAX power 320W
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  
04=Constant current DIM    05= Constant current CCT and DIM    06= Constant current RGB

TG-AC320H-DMX24H01

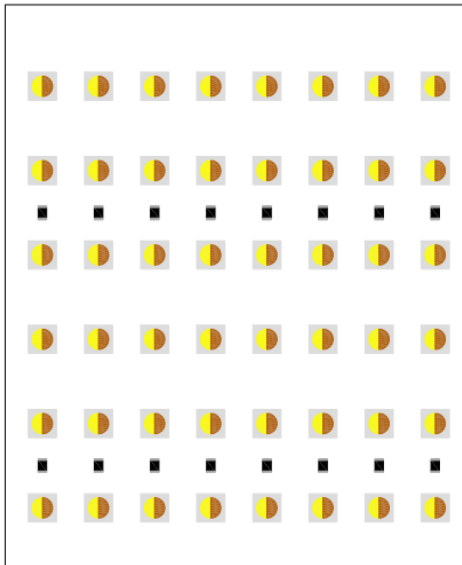
TWOGAIN	AC100-277V	320W	DMX512 decode	Voltage aluminium	MODEL
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NO	Product MODEL	Description	LED lamp type
1	TG-AC320H-DMX24H01(DIM)	LED constant voltage, DMX dim decoder	Constant voltage single color lamp



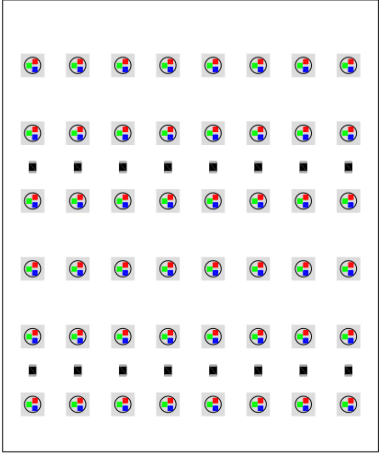
## Constant voltage LED lighting

NO	Product MODEL	Description	LED lamp type
2	TG-AC320H-DMX24H02(CCT)	LED constant voltage, DMX bi-color and dim decoder	Constant voltage Bi-color lamp



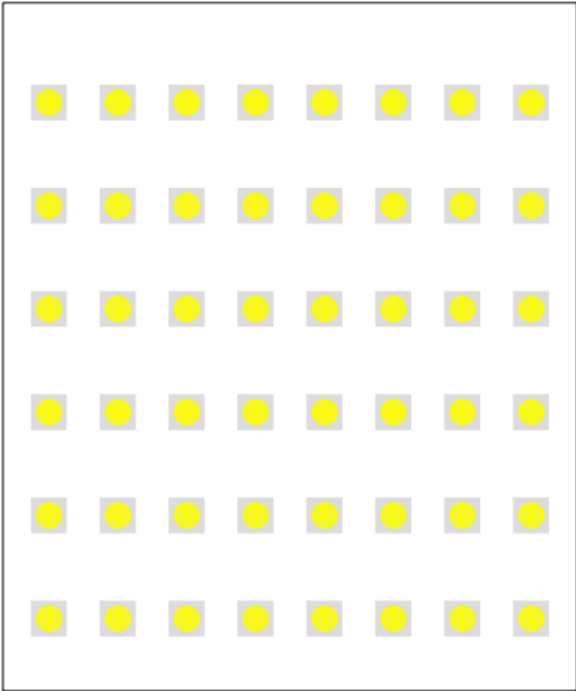
Constant voltage Bi-Color LED lighting

NO	Product MODEL	Description	LED lamp type
3	TG-AC320H-DMX24H03(RGB)	Constant voltage RGB LED, DMX RGB decoder	RGB LED lamp



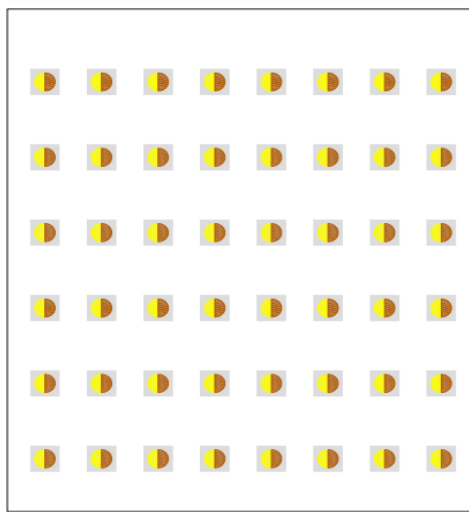
Constant voltage RGB LED

NO	Product MODEL	Description	LED lamp type
4	TG-AC320H-DMX24H04(DIM)	LED constant current, DMX dim decoder	Constant current Single color lamp



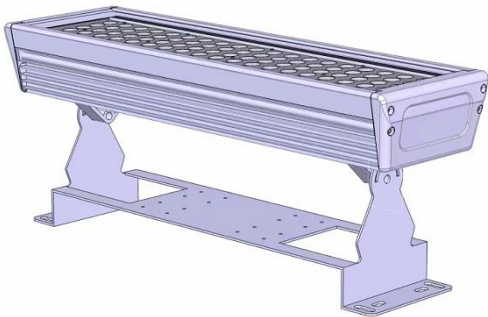
Constant current LED lighting

NO	Product MODEL	Description	LED lamp type
5	TG-AC320H-DMX24H05 (CCT)	LED constant current, DMX Bi-color and dim decoder	Constant current Bi-Color lamp



Constant Bi-Color LED lighting

NO	Product MODEL	Description	LED lamp type
6	TG-AC320H-DMX24H06(RGB)	Constant current RGB LED, DMX RGB decoder	Constant current RGB LED lamp



## SPECIFICATION TG-AC320H-DMX

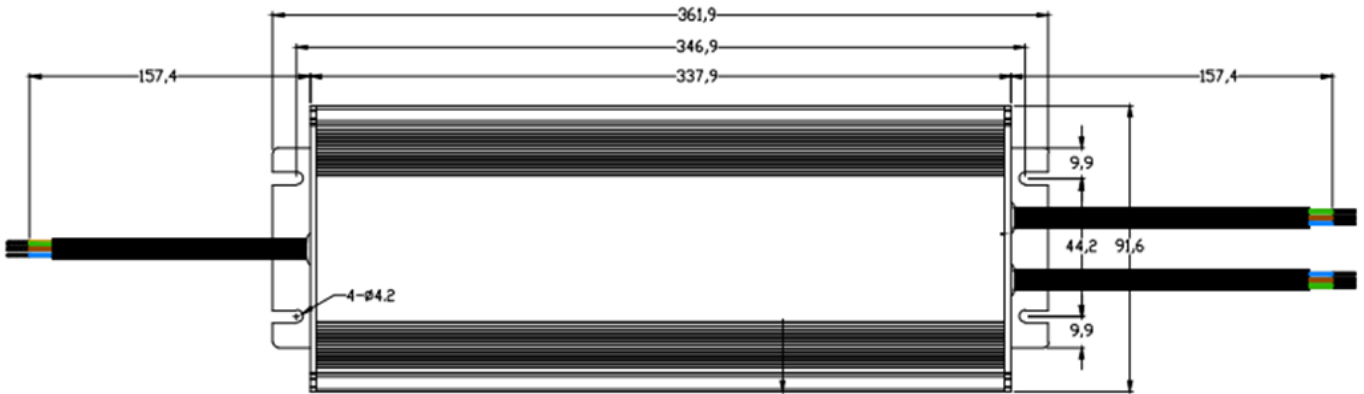
MODEL		24H01 (DIM)	24H01(CCT)	24H03(RGB)	24H04(DIM)	24H05(CCT)	
O U T P U T	DC VOLTAGE	24V					
	ADJUST VOLTAGE RANGE	24V			18~24V		
	RATED CURRENT	13.3A					
	RATED POWER	320W					
	RIPPLE&NOISE(max.)	320mVp-p					
	VOLTAGE TOLERANCE	±1.5%					
	ADJUST VOLTAGE RANGE	CUSTOMER PRODUCTS			24V	24V	24V
		18V~28V(13.3A/18V, 11.4A/28V)					
	ADJUST CURRENT RANGE	CUSTOMER PRODUCTS					
		9A~13.3A					
	LOAD ADJUST RANGE	±1%					
	SETUP,RISE TIME	3200ms,60ms/100VAC, 700ms,50ms/230Vac					
HOLD UP TIME(Typ.)	15ms, 230VAC/100VAC						
DMX512 DECODER	Auto DMX address self-identify DMX input and output						

MODEL		24H01(DIM)	24H02(CCT)	24H03(RGB)	24H04(DIM)	24H05(CCT)
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.)	4A/115VAC	2A/230VAC	1.5A/277VAC		
	INRUSH CURRENT (Typ.)	61A/230VAC				
	LEAKAGE CURRENT	<0.76mA/277VAC				
PROTECTI ON	OVER LOAD	95%~110% Protection type :Hiccup mode Recovers automatically after fault condition is removed				
	SHORT PROTECTION	Hiccup mode Recovers automatically after fault condition is removed				
	OVER VOLTAGE	Hiccup mode Recovers automatically after fault condition is removed				
	OVER TEMPERATURE	Shut down O/P voltage, recovers automatically after temperature goes down				
ENVIRON MENT	WORKING TEMP.	-30~55℃				
	WORKING HUMIDITY	20~95% RH non-condensing				
	STORAGETEMP., HUMIDITY	-40~80℃,10~95%RH				
	TEMP. CONEFFICIENT	±0.03%/℃				
	VIBRATION	10~500Hz,5G 12min./1Cycle, each along X,Y,Z 72 axes				
SAFETY & EMC	SAFETY STANDARDS	TUV EN61347-1 EN61347-2-13 independent IP65 OR IP67 CE				
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC IP-FG:2KVAC O/P-FG:1.5KVAC				
	ISOLANTION RESISTANCE	I/P-O/P, IP-FG: 100M Ohms/500VDC/25℃/70%R				
	EMC EMISSION	Refer to EN55015,EN55022(CISPR22) CLASB,EN61000-3-2 CLASS C(≧ 50 LOAD);EN61000-3-3				
OTHERS	EMC IMMUNITY	Refer to EN61000-4-2,3,4,5,6,8,11,EN61547,EN55024 class A				
	MTBF	≧ 192, 2Khrs				
	DIMENSION	233.7*68*44mm(L*W*H)				
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃/70%RH					

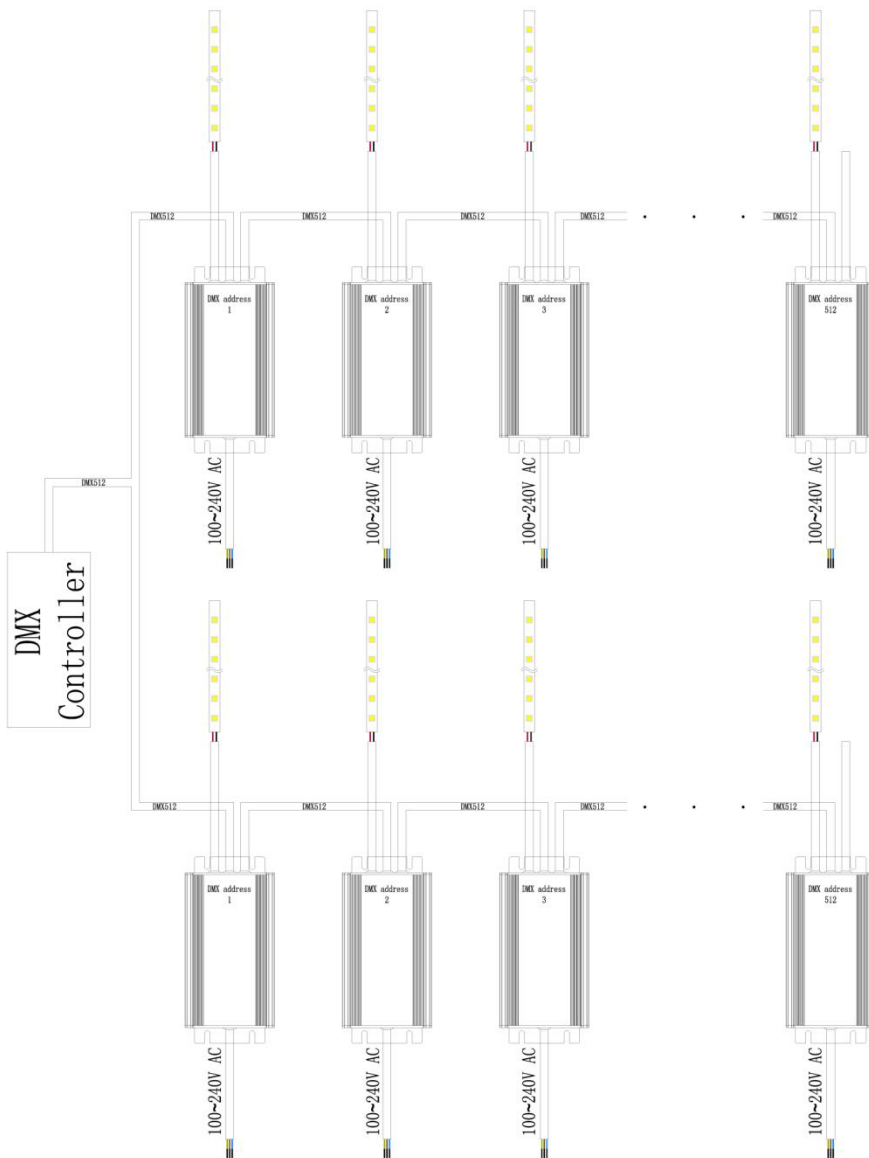
MODEL		48H01 (DIM)	48H01(CCT)	48H03(RGB)	48H04(DIM)	48H05(CCT)	
O U T P U T	DC VOLTAGE	48V					
	ADJUST VOLTAGE RANGE	48V			42~54V		
	RATED CURRENT	6.6A					
	RATED POWER	320W					
	RIPPLE&NOISE(max.)	320mVp-p					
	VOLTAGE TOLERANCE	±1.5%					
	ADJUST VOLTAGE RANGE	CUSTOMER PRODUCTS			24V	24V	24V
		18V~28V (6.6A/42~54V, 5.9A/54V)					
	ADJUST CURRENT RANGE	Accept Customized					
		4.7A~6.67A					
	LOAD ADJUST RANGE	±1%					
SETUP,RISE TIME	3200ms,60ms/100VAC, 700ms,50ms/230Vac						
HOLD UP TIME(Typ.)	15ms, 230VAC/100VAC						
DMX512 DECODER	Auto DMX address self-identify DMX input and output						

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.)	4A/115VAC	2A230VAC	1.5A/277VAC			
	INRUSH CURRENT (Typ.)	61A/230VAC					
	LEAKAGE CURRENT	<0.76mA/277VAC					
PROTECTI ON	OVER LOAD	95%~110% Protection type :Hiccup mode Recovers automatically after fault condition is removed					
	SHORT PROTECTION	Hiccup mode Recovers automatically after fault condition is removed					
	OVER VOLTAGE	Hiccup mode Recovers automatically after fault condition is removed					
	OVER TEMPERATURE	Shut down O/P voltage, recovers automatically after temperature goes down					
ENVIRON MENT	WORKING TEMP.	-30~55℃					
	WORKING HUMIDITY	20~95% RH non-condensing					
	STORAGETEMP, HUMIDITY	-40~80℃,10~95%RH					
	TEMP. COEFFICIENT	±0.03%/℃					
	VIBRATION	10~500Hz,5G 12min. /1Cycle, each along X,Y,Z 72 axes					
SAFETY & EMC	SAFETY STANDARDS	TUV EN61347-1 EN61347-2-13 independent IP65 OR IP67 CE					
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC IP-FG:2KVAC O/P-FG:1.5KVAC					
	ISOLANTION RESISTANCE	I/P-O/P, IP-FG: 100M Ohms/500VDC/25℃/70%R					
	EMC EMISSION	Refer to EN55015,EN55022(CISPR22) CLASB,EN61000-3-2 CLASS C(≧ 50 LOAD);EN61000-3-3					
OTHERS	EMC IMMUNITY	Refer to EN61000-4-2,3,4,5,6,8,11,EN61547,EN55024 class A					
	MTBF	≧ 192. 2Khrs					
NOTE	DIMENSION	233.7*68*44mm(L*W*H)					
	2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃/70%RH						

DIMENSION

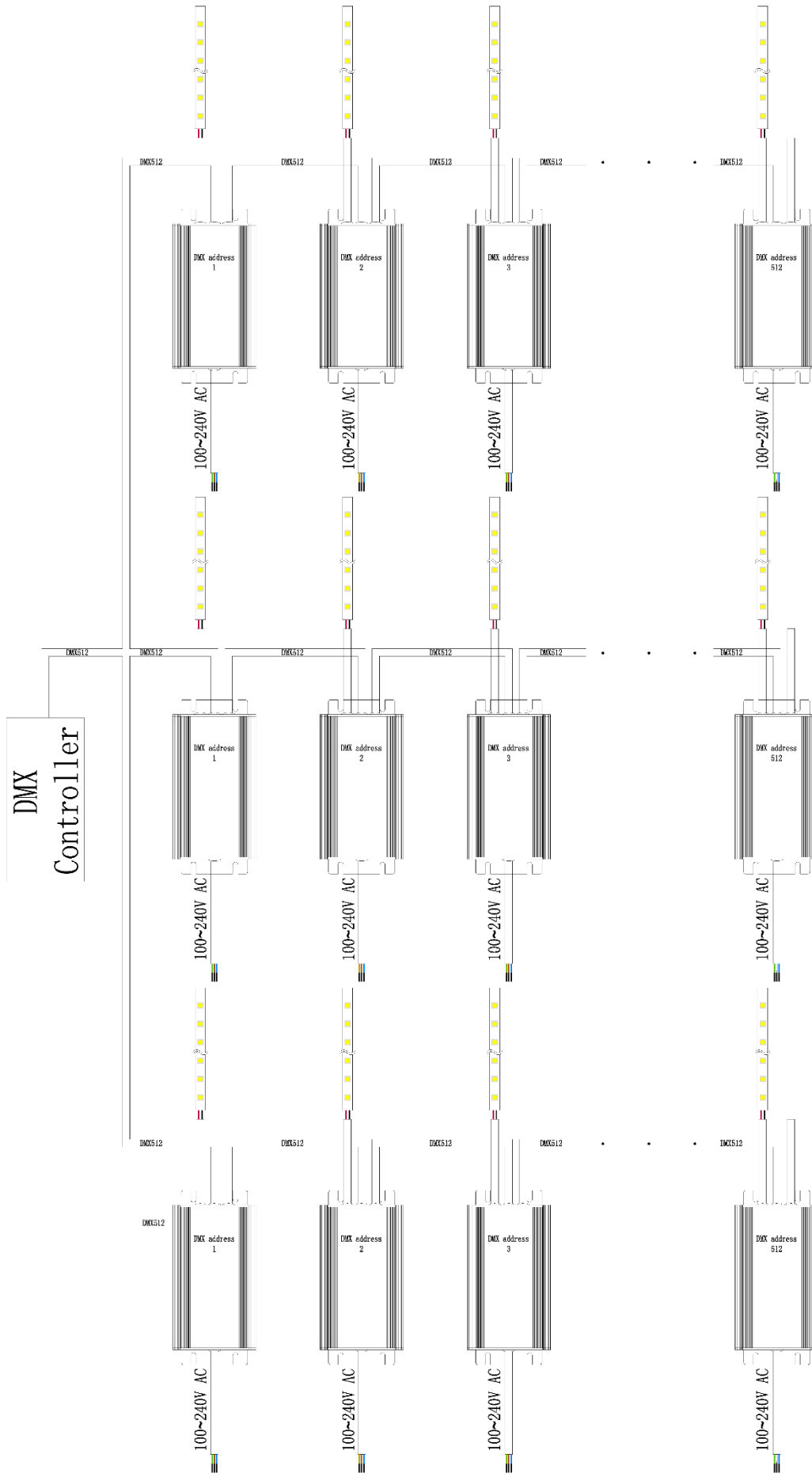


DMX connection for single color (fig.1)





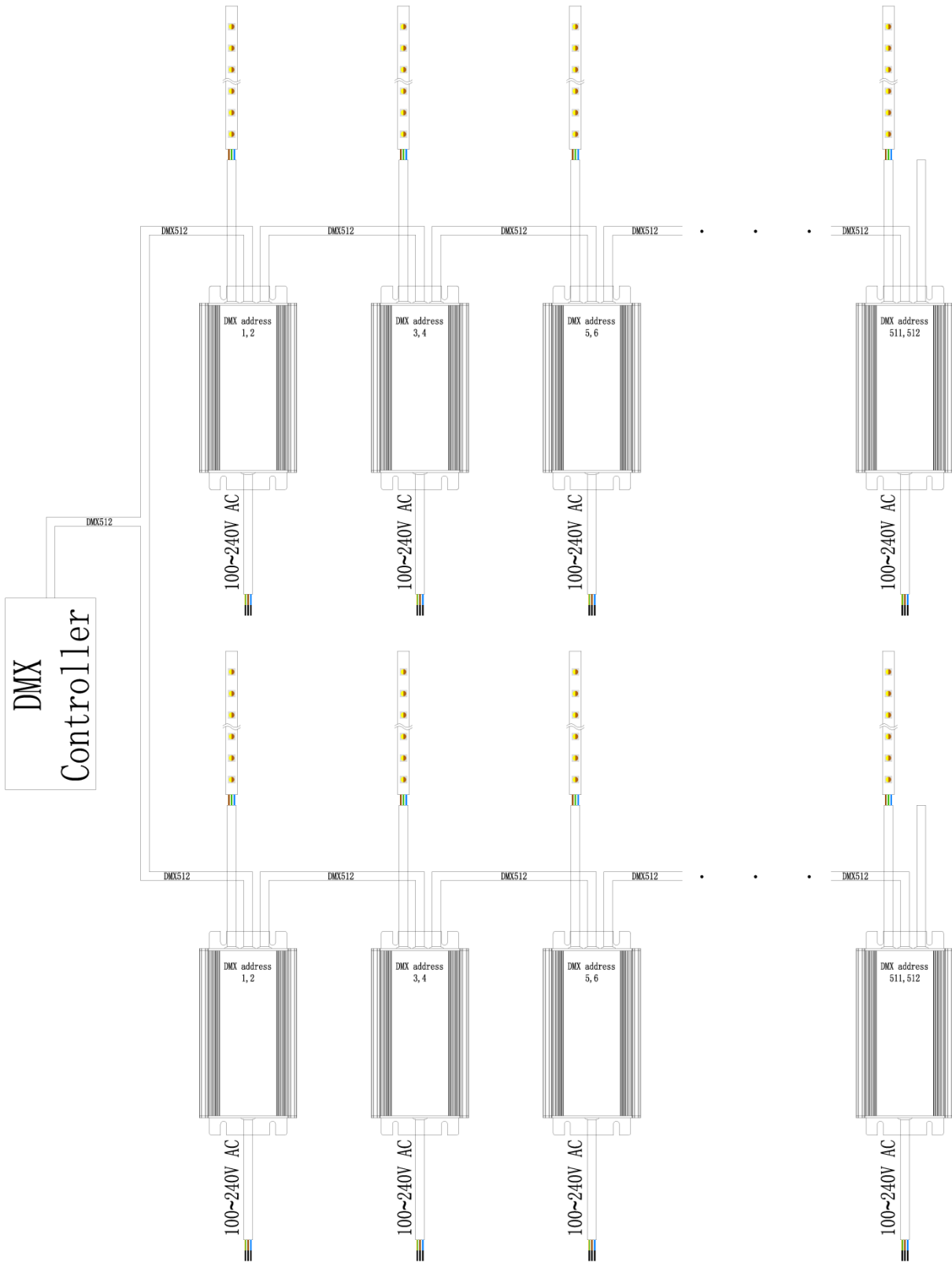
DMX connection for single color (fig.2)



DMX connection for single color (fig.3)



DMX connection for Bi-color (fig.4)



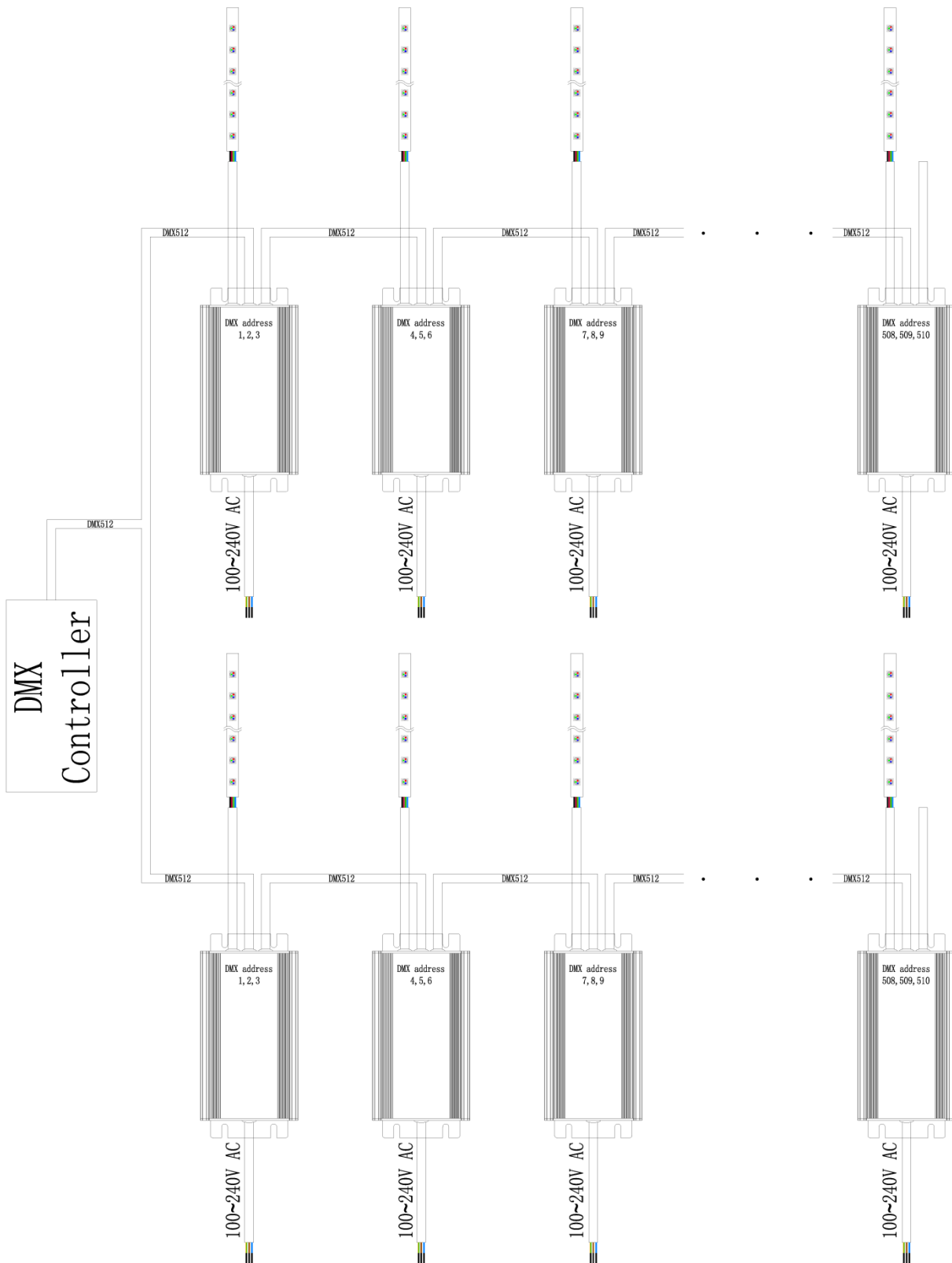
DMX connection for Bi-color (fig.5)



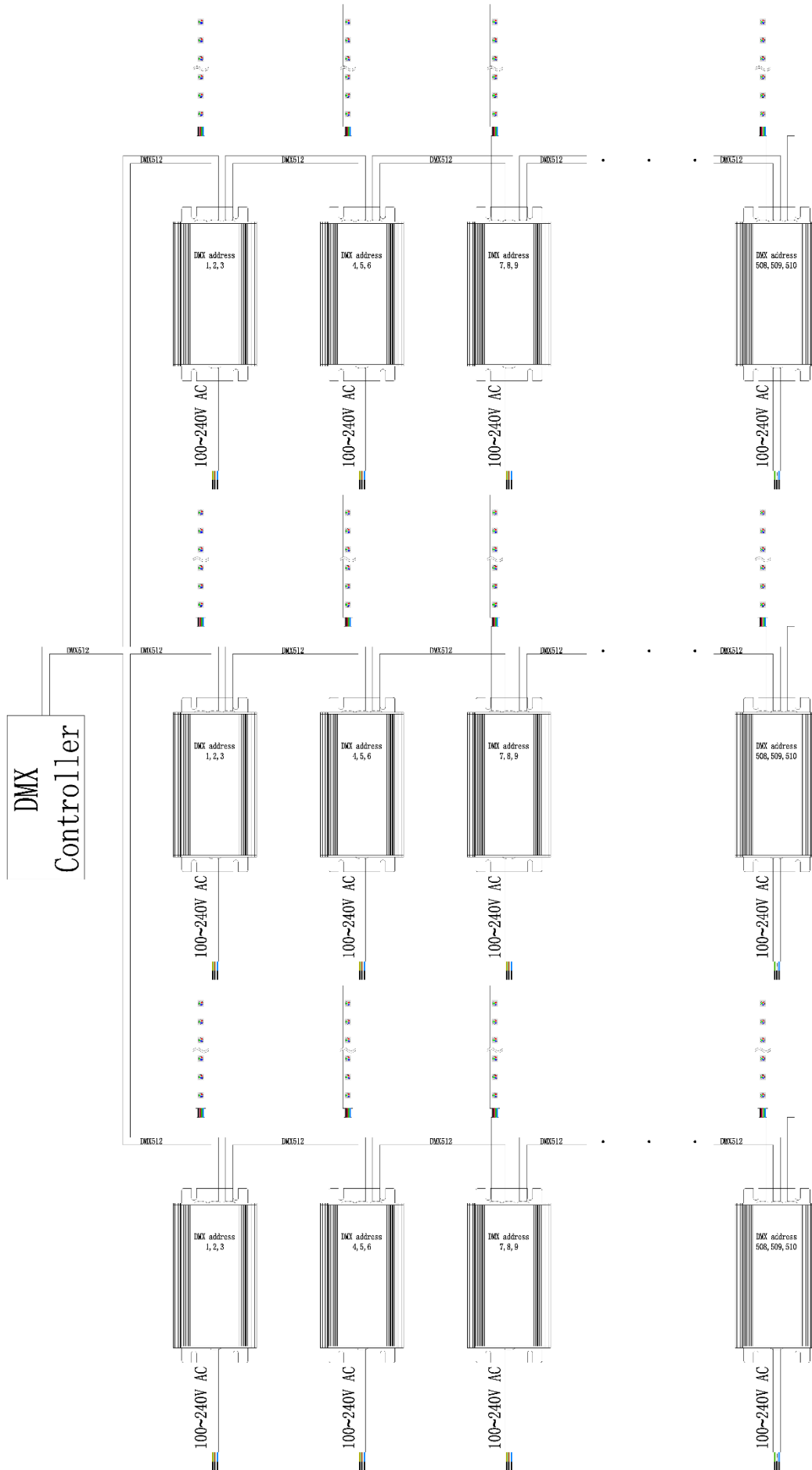
DMX connection for Bi-color (fig.6)



DMX connection for RGB (fig.7)



DMX connection for RGB (fig.8)



DMX connection for RGB (fig.9)





TG-AC320H-DMX cable define

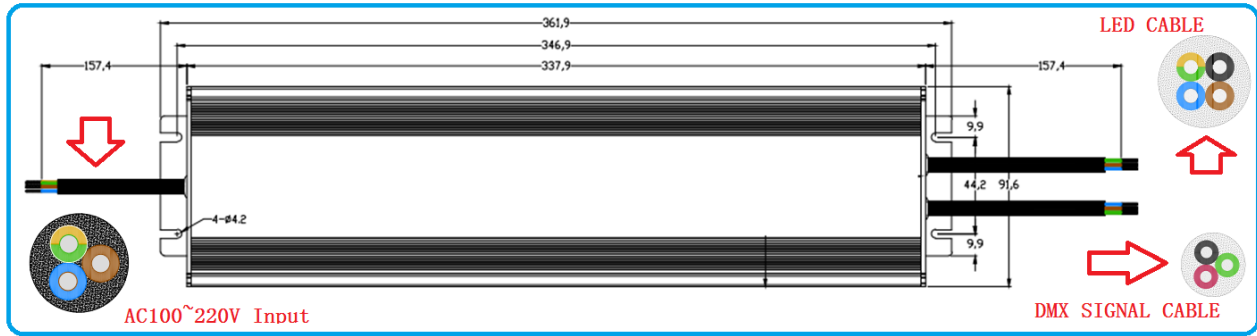
- DMX input cable(three core cable) and output cable(three core cable)

YELLOW/GREEN color=DMX GND

BLACK color =DMX-

RED color =DMX+

- Self-identify DMX signal input or output
- Auto define DMX address



AC input	
1.	YELLOW/GREEN COLOR : Earth ground
2.	BLUE COLOR : AC_N
3.	BROWN COLOR: AC_L

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

DMX CABLE input and output	
1.	YELLOW/GREEN COLOR : DMX GROUND
2.	BLACK COLOR : DMX-
3.	RED COLOR : DMX+

One DMX address of TG-AC320H-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-AC320H-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-AC320H-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