TH2010-X controller instruction
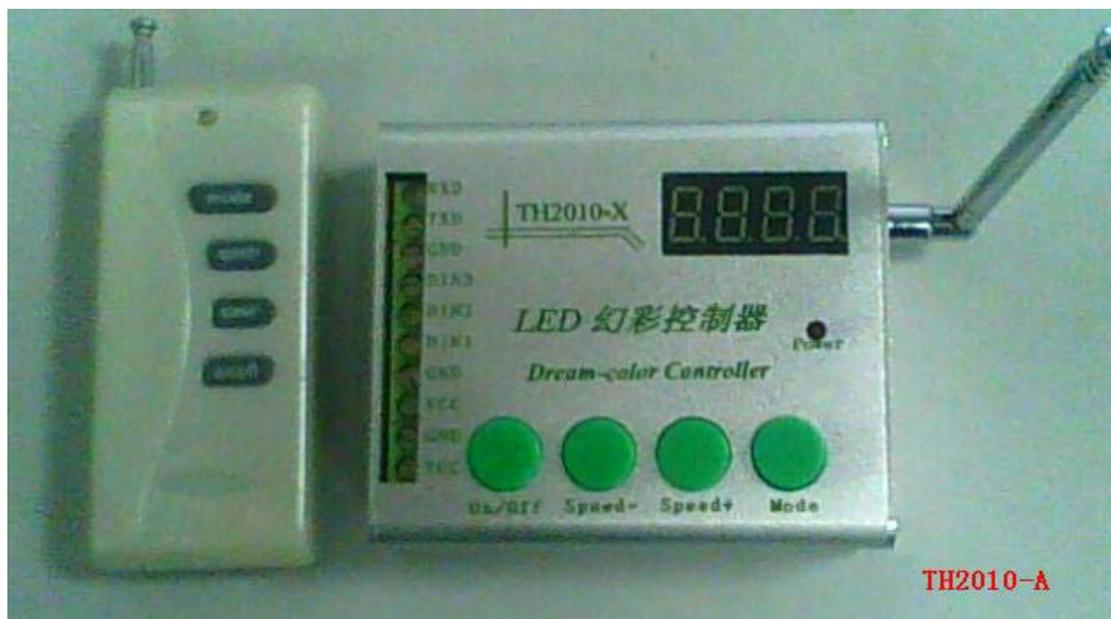
Product features:

◆ Can remote control or button control the light effects of TM1803/TM1804/TM1809/TM1812 and so on..

◆ Both of High speed (control the most 2048 point) and low speed(control the most 1024 point) can be choose.

◆ Three control output, each can control 2048 point.

◆ Auto-save info when turn off..

◆ 100 kind of effect model in it.

◆ 10 level speed can be adjusted.

◆ The point of active cascade can be adjust and up to 2048.

Product picture:

Function instruction:

Remote control (for some item) or button control (for some item) various effect modes. 100 kind of effect modes in it. Also, any effect mode can be customized according to customer's demand. various play mode: operation mode(effect shift by remote control or button control), free mode(with fixed some effect), auto-play mode(circle play in turn). 10level speed can be choose, the most control point up to 2048, 4-digit LED display. Can be adopted in TM1803, TM1804,TM1809,TM1812. high speed/low speed can be choose(according to IC item and IC pin wiring type. For more details, please refer to related IC files.) if parameter changed, info would be auto-saved when turn off.

Button instruction:

Mode: mode shift (at power on)/ menu set (at power off)
Speed+: speed+ (at power on)/menu select+ (under menu set during power off)
Speed-: speed- (at power on)/ menu select- (under menu set during power off)
On/off: turn on/ turn off

Operation instruction:
Turn on/off: shift by pressing on/off, (if parameter changed, info would be auto-saved when turn off.)
Speed adjustment: press speed+/speed- to adjust speed during turn on. Digit LED would display"E-XX" during adjusting speed. "E"means speed, XX means speed level(00-10),00 is the lowest, 10 is the fastest. PS: the less cascade point, the faster speed under same level.
Mode shift: press mode to shift under turn on.
Menu setting: per power on just set 1 time. When boost, controller default into turn on mode, at the moment, please don't press other button(press **"mode**" would cancel the menu setting chance.), should press **"on/off"** to turn off (menu setting work just under turn on), then press "**Mode**" into function setting menu, the digit LED would display"**P-HI**" or "**P-LO**". High speed/low speed can be choose under the menu(**P-HI**: high speed, **P-LO**: low speed) by press **Speed+** and **Speed-**. After that please press **Mode** into cascade point adjusting menu, and the digit LED would display the No. of cascade point, press **Speed+/Speed-** to increase/reduce cascade point. Please press **Mode** to save when finished.
PS: if setting chance has been cancelled, please press Mode, Speed+, and Speed- at the same time(necessity) to recover another **1** time setting chance.

Instruction for digit LED display:
H-XX: operation mode, H means operation mode(remote control or button control to shift mode), XX means current effect NO. when shift to "mode 99(H-99)" as FREE mode, which fixed some effect combination.
When shift to "Mode 0(H-00)", auto-shift to auto-play Mode.

A-XX: auto-play Mode, **A** means auto-play mode(circle play in turn), **XX** means current effect NO. under this Mode press **Mode** would shift to "operation Mode"

E-XX: speed-display, **E** means speed, **XX** means current speed level.

P-HI: high-speed mode

P-LO:low-speed mode

XXXX: current cascade point No. **0000----2048**

ERR: system seriously flawed.

Controller connect :(correspondence in turn from top of controller)

RXD: Receive Data

TXD: Transmit Data

GND: Ground (Data correspondence)

DIN3: Din3 output (connect with LED3)

DIN2: Din2 output (connect with LED2)

DIN1: Din1 output (connect with LED1)

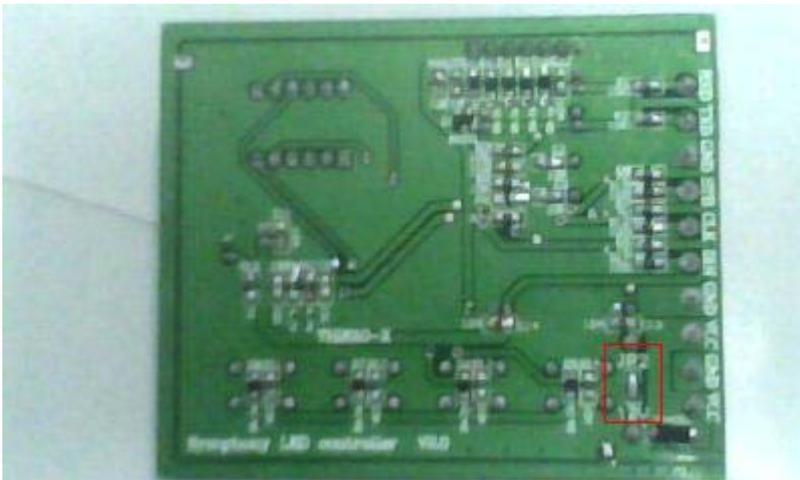**GND**: Ground (output, connect with LED)
VCC: power (output, connect with LED, direct connect with below VCC, power and electronic parameter depends on outer electronic power.)

GND: Ground (input)

VCC: electronic power(input+**12V,** if revised to **24V**, please refer to below electronic instruction to follow process.)

Electronic Parameter Instruction:

The product input voltage default **DC 12V**. for revising to **24V**, please dismantle shell, pick up the circuit board. The back of circuit board as below picture:

Revise the line in red frame to adjust input voltage:
JP2 connect jump line: +12V
JP2 disconnect jump line:+24V

Mode List

NO	Effect Mode	NO	Effect Mode
0	auto-play Mode		
1	colorful blinking jump	2	colorful jump
3	colorful repiration	4	colorful gray gradually
5	dream-color gray gradually	6	colorful accumulation
7	shield colorful for both side	8	light colorful for both side
9	colorful spread to right side	10	colorful spread to left side
11	colorful blinking shield for both side	12	colorful blinking light for both side
13	colorful blinking shield for both side with background	14	colorful blinking light for both side with background
15	colorful left-right chase no background	16	colorful left-right chase with background
17	dream-color left-right chase no background	18	dream-color left-right chase with background
19	colorful cross-shield light for both side	20	colorful open-close
21	colorful spread to middle	22	colorful spread to both side
23	colorful cross-spread	24	colorful blinking cross-shield light
25	colorful blinking open	26	colorful blinking close
27	colorful run to middle	28	colorful run to both side
29	dream-color run to middle	30	dream-color run to both side
31	dream-color drift to right side	32	dream-color drift to left side

33	dream-color pass to right side	34	dream-color pass to left side
35	double-head colorful trailing to right side	36	double-head colorful trailing to left side
37	single-head colorful trailing to right side	38	single-head colorful trailing to left side
39	double-head colorful trailing to middle	40	double-head colorful trailing to both side
41	single-head colorful trailing to middle	42	single-head colorful trailing to both side
43	double-head monochrome trailing to right side	44	double-head monochrome trailing to left side
45	single-head monochrome trailing to right side	46	single-head monochrome trailing to right side
47	single-head monochrome trailing to middle	48	double-head monochrome trailing to both side
49	single-head monochrome trailing to middle	50	single-head monochrome trailing to both side
51	dream-color drift to left/right	52	dream-color pass to left/right
53	colorful flow to left side	54	colorful flow to right
55	colorful flow to left/right	56	section dream-color gradually gray
57	colorful cross-run	58	dream-color cross-run
59	colorful accumulate with background	60	colorful spread to both side
61	both queue colorful accumulate	62	cross-queue colorful accumulate

63	both queue colorful accumulate with background	64	cross-queue colorful accumulate with background
65	queue color shield to both side	66	queue color light to both side
67	queue colorful cross-shield	68	queue colorful cross-light
69	queue colorful spread to right	70	queue colorful spread to left
71	queue colorful spread to both side	72	queue colorful spread to middle
73	queue colorful cross-spread	74	queue colorful chase to left
75	queue colorful chase to right	76	queue colorful chase to left/right
77	queue colorful chase to middle	78	queue dream-color drift to right
79	queue dream-color chase to left	80	queue colorful chase to left/right with background
81	queue colorful cross-chase with background	82	queue dream-color chase to left without background
83	queue dream-color chase to right without background	84	queue dream-color chase to left/right without background
85	queue dream-color cross-chase without background	86	queue dream-color chase to left without background
87	queue dream-color chase to right without background	88	queue dream-color chase to left/right without background

89	queue dream-color cross-chase	90	queue colorful cross-shield light
91	queue colorful cross-open/close	92	queue colorful spread to both side
93	queue color cross-spread	94	queue colorful cross-run with background
95	queue colorful blinking cross-run with background	96	queue drift to middle
97	queue drift to both side	98	queue cross-drift
99	free mode		

Controller item instruction:

item	No of control point	description
TH2010-A	low speed: 512 high speed: 1024	with remote control, button
TH2010-B	low speed: 512 high speed: 1024	with button