2010-X Remote controller User Guide

1 .Parameters of the controller

Working voltage: DC12V or DC24V

Working current :< 60mA
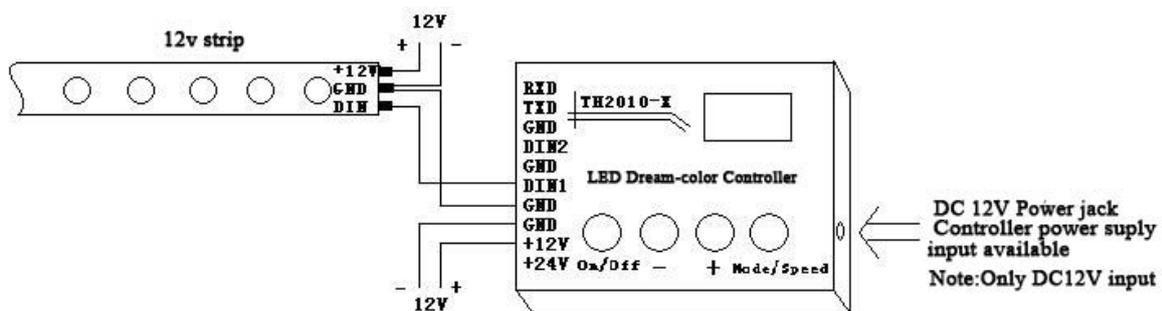
Operation temperature: -20 ° C to 60 ° C.

Dimension: L100*W70*H25 mm

Effectiveness modes: 114pcs

Maximum control points:" "Low-speed 512 points/High-speed 1024 points"(Model:Th2010A、 TH2010-B) and "Low-speed 1024 points/High-speed 2048 points"(Model:TH2010-AA 、 TH2010-BB)
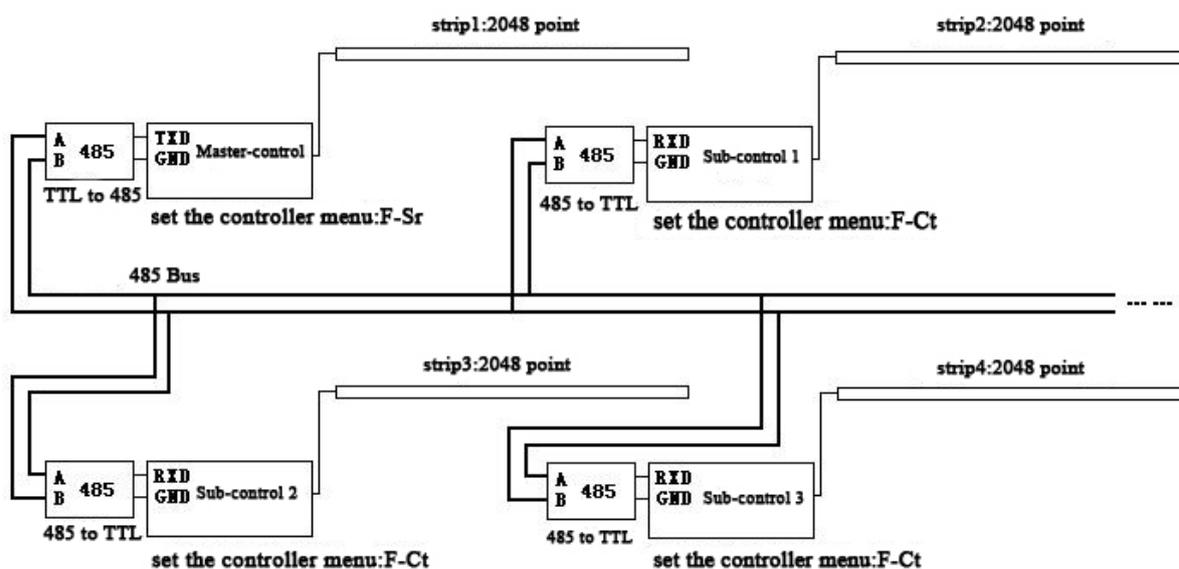
The distance between the controller and the first point of the strip: Slow Mode<30m, high mode<10m (suggest using shielding wire when more than 5 m), if the distance beyond this range, you should add "TTL to 485"Module

2. Controller and strip connection diagram

Note:If the controller adopts 24V power supply,please connect power cord to +24V interface,don't connet to +12V interface, otherwisethe controller willbe burned.

3. Controller Cascade Sync connection diagram

4. Controller interface definition

RXD: Sync data receiving

TXD: Sync data sending

GND: Sync GND

DIN2: Channel 2 data canal (connect with strip)

GND: Channel 2 GND (connect with strip)

DIN1: Channel 1 data canal (connect with strip)

GND: Channel 1 GND (connect with strip)

GND: Controller Power supply   earth wire

+12V: Controller Power supply   power (12V)

+24V: Controller Power supply   power (24V)

5. Controller Menu setting: (Power-on, power-off, high-speed and low-speed setting, Control points setting, Master-control and Sub-control setting, Play menu settings, saving)

(1)According to "wiring diagram", connect the controller with the strip to power-on (After power-on, it is a normal phenomenon if the strip is not bright. You have to set the controller through below steps)

(2)Please power off through pressing "on / off" button when it is in on state (can set the menu when off state)

(3)Please press "-"、"+" "Mode/Speed" three key for one time at the same time, it is a normal phenomenon when the digital tube display nothing. then press" Mode/Speed", inter to menu setting interface.

(4)The first interface is controller "high-speed、low speed setting", the digital tube shows "P-HI" or "P-LO", press "-" and "+" button to choose.(If the strip IC is high-speed model, please choose "P-HI"; and if Low-speed, choose "P-LO")

(5)press "Mode/Speed" ,inter to the second interface" control point setting", then there are 4

numbers on the digital tube shows the larger of the control point."-" and "+" button is used to increase or decrease control points (Long press can adjust quickly)

(6) press "Mode/Speed", inter to the third interface "Master-control and Sub-control setting" and now the digital tube shows "F-Sr" or "F-Ct", press "-" and "+" to choose(if Master-control, choose "F-Sr" and Sub-control setting, choose "F-Ct"),if single machine don't need Cascade Sync connection, suggest to choose "F-Ct".

(7) Press "Mode/Speed", inter to the forth interface "Play menu settings", and now the digital tube shows"00-H"which means the 00 effect is allowed playing, press "Model/Speed" to switch to play or non-play, the digital tube shows"00-L" which means the 00 effect is prohibited playing. Press "-" and "+" to set the other effects.

(8) Finally, press "on/off" to save the changes.

6. Button function introduction when controller in playing mode

(1)On / off: turn on / turn off

(2) _: Model - / Speed -

(3) +: model + / Speed +

(4)Mode / Speed: Mode adjustment / speed adjustment function switch (the first number on digital tube shows H as a mode adjustment, shows E as speed adjustment)

7. Mode list：

Number	Effect mode	Number	Effect model
0	Auto Play Mode		
1	Rainbow colors blinking jump change	2	Rainbow colors direct jump change
3	Rainbow colors respiration	4	Rainbow colors gradual change
5	Dream color gradual change	6	Rainbow colors cumulus
7	Rainbow colors shield on both sides	8	Rainbow colors lighting on both sides
9	Rainbow colors spread to right	10	Rainbow colors spread to left
11	Rainbow colors blinking shield on both sides	12	Rainbow colors blinking lighting on both sides
13	Rainbow colors blinking shield on both sides with background pictures	14	Rainbow colors blinking lighting on both sides with background pictures
15	Rainbow colors chasing from left to right without background pictures	16	Rainbow colors chasing from left to right with background pictures
17	Dream color chasing from left to right without background pictures	18	Dream color chasing from left to right with background pictures
19	Rainbow colors cross shield lighting on both sides	20	Rainbow colors trailing open and close
21	Rainbow colors trailing close	22	Rainbow colors trailing open
23	Rainbow colors cross trailing	24	Rainbow colors cross shield waving lighting

25	Rainbow colors waving open	26	Rainbow colors waving close
27	Rainbow colors waving close unremittingly	28	Rainbow colors waving close unremittingly
29	Dream color waving close unremitting	30	Dream color waving open unremittingly
31	Dream color waving right	32	Dream color waving left
33	Dream color shifted to right	34	Dream color shifted to left
35	Reverse rainbow colors comet trailing right	36	Reverse rainbow colors comet trailing left
37	Forward rainbow colors comet trailing right	38	Forward rainbow colors comet trailing left
39	Reverse rainbow colors comet trailing close	40	Reverse rainbow colors comet trailing open
41	Forward rainbow colors comet trailing close	42	Forward rainbow colors comet trailing open
43	Reverse mono-color comet trailing right	44	Reverse mono-color comet trailing left
45	Forward mono-color comet trailing right	46	Forward mono-color comet trailing left
47	Reverse mono-color comet trailing close	48	Reverse mono-color comet trailing open
49	Forward mono-color comet trailing close	50	Forward mono-color comet trailing open
51	Dream color waving from left to right	52	Dream color shifted from left to right
53	Rainbow colors waving left	54	Rainbow colors waving right
55	Rainbow colors waving from left to right	56	Segmentation dream color gradual change
57	Rainbow colors cross waving unremittingly	58	Dream color cross waving unremittingly
59	Rainbow colors cumulus with background picture	60	Rainbow colors trailing on both sides
61	Integrated rainbow colors cumulus open	62	Integrated rainbow colors cross cumulus
63	Integrated rainbow colors cumulus open with background picture	64	Integrated rainbow colors cross cumulus with background picture
65	Integrated rainbow colors shield open	66	Integrated rainbow colors lighting open
67	Integrated rainbow colors cross shield	68	Integrated rainbow colors cross lighting
69	Integrated rainbow colors waving right	70	Integrated rainbow colors waving left

71	Integrated rainbow colors waving open	72	Integrated rainbow colors
73	Integrated rainbow colors cross waving	74	Integrated rainbow colors chasing left
75	Integrated rainbow colors chasing right	76	Integrated rainbow colors chasing from left to right
77	Integrated rainbow colors chasing close	78	Integrated dream color waving right
79	Integrated dream color waving left	80	Integrated rainbow colors chasing from left to right with background pictures
81	Integrated rainbow colors cross chasing with background pictures	82	Integrated dream colors chasing left without background
83	Integrated dream chasing without background pictures	84	Integrated dream color chasing from left to right without background picture
85	Integrated dream color chasing without background pictures	86	Integrated dream color chasing left with background pictures
87	Integrated dream color chasing right with background pictures	88	Integrated dream color chasing from left to right with background colors
89	Integrated dream color cross chasing with background pictures	90	Integrated rainbow color cross shield lighting
91	Integrated rainbow colors cross open and close	92	Integrated rainbow color waving open at the same time
93	Integrated rainbow colors cross waving at the same time	94	Integrated rainbow color cross waving unremittingly
95	Integrated rainbow color blinking cross waving with background pictures	96	Integrated waving close
97	Integrated waving open	98	Integrated cross waving
99	Integrated both sides rainbow colors comet trailing open with right with background pictures	A0	Integrated both sides rainbow colors comet trailing open with left with background pictures
A1	Integrated one side rainbow colors comet trailing open with right with background pictures	A2	Integrated one side rainbow colors comet trailing open with left with background pictures
A3	Integrated both sides single color comet trailing open with right with background pictures	A4	Integrated both sides single color comet trailing open with left with background pictures
A5	Integrated both sides single color comet trailing open with right with background pictures	A6	Integrated one side single color comet trailing open with left with background pictures

A7	Static red	A8	Static green
A9	Static blue	B0	Static cyan
B1	Static yellow	B2	Static Purple
B3	Static white	B4	Free mode