
Product Specification

Name: Multichannel Programmable RGB controller

Model: TC700



Summarization:

Programmable mode controller with PC software can make the load output the modes saved in the controller. Customer can customize output mode they want through the PC software, and then download the required mode to the controller through USB port. In addition to the function of editing mode, the PC software also can show current effect of editing frame. Customer can check the mode effect after editing through playing function of PC software. The controller can control max 120 channels load of led changing effect, each controller can output 12 channels, and support 10 controllers cascade through DMX512 output port. It can be used in the occasion of the plant lights, light box advertising, the stage, home decoration, etc.

Technical Parameters:

Working temperature: -20-60°C

Supply voltage: DC12-24V

Static power consumption: <2.5W

Net weight: 520g

Gross weight: 615g

External dimension: L200*W100*H30mm

Packing size: L205*W105*H35mm

Output: 12 channels

Each output current: MAX 2A

Maximum output current: 24A

Function Instructions:

The controller can store 16 programmable modes, and there are three buttons "Set",

“Up”, “Down” in the operating interface.

Button function instruction: “Set” button can switch display state, such as mode display state switch with address display state; “Up” button can add mode number and controller address; “Down” button can reduce mode number and controller address.



1. Editing State

When controller connect with software of the upper PC and customer edit mode frame data, controller connected with PC will synchronously output data display of editing state, for user reference. When have no operation of editing data from the last operation after 10 seconds, the controller will exit edit, output display mode, and return to normal play mode. When user edit frame data again, the controller will once again go into the edit, output play mode. In editing mode, the Nixie Tube of controller will twinkle and display “USb” word. As picture 1.




Picture 1

2. Preview State

After user has edited output mode with PC software, user can press play  button, the upper will synchronously display the output data with the controller, and meanwhile you can preview the edited mode effect. In the preview and play state, press  button to stop the current playing state. The Nixie Tube of controller will show same words as picture 1 in the preview mode. Pressing any button in the controller is invalid in the state.

3. Mode Download State

After user has edited output mode with PC software, user can press mode download  button, the upper will download mode data to controller. Pressing any button in the controller is invalid in the state, and the Nixie Tube of controller will show same words with picture 1. It will automatically exit the state after download is completed.

4. Normal Display State

After user download edited mode to controller, the controller will output according to the saved mode. And meanwhile, can press the button to set up the output mode.

(1) The default display word of boot is as below:



Picture 2

“F” represents the current display is mode number, the latter two numbers represent current output mode number, and the output mode number is 01-16, maximum storage mode is 16.

When mode number reaches to the maximum storage mode number, press “up” button again to enter into automatic play mode, and display is “FAt”, as picture 3.

When mode number reaches to the minimum storage mode number, press “Down” button again to enter into automatic play mode.

In the automatic play mode, each mode cycle output 5 times, and then enter into next mode.



Automatic Mode Display

Picture 3

Notice: controller is in the slave mode, output mode setting is invalid, and the slave controller output is synchronous with master controller output.

(2) In the mode display state, press “Up” or “Down” button to add or reduce output mode, the maximum value of output mode is current saved mode number.

(3) In mode display state, press “Set” button to switch to address display state. Address display is as below:



Address 00



Address 09

Picture 4

“A” represents the current display is controller address, 0x represents current controller address, and controller address is 00-09, the controller address of 00 is the master controller, and others are slaves. When controller is cascading, it allows only one master controller in the line, otherwise there will be interference between the data.

(4) In the address display state, press “Up” or “Down” to add or reduce controller address, address can be set up to 00-09.

When the address reaches to maximum 09, press “Up” button again to return to minimum 00 (cascade line without master controller) / minimum 01(cascade line with master controller);

When the address reaches to minimum 00 (cascade line without master controller) /minimum 01(cascade line with master controller), press “Down” button again to return to maximum 09;

When there is controller with master function in cascade line, after slave controller detected the master controller, the slave address can not set up to master controller address 00, can only be set up to 01-09. When detecting the master controller in cascade line is disconnected, slave controller can be set up to master mode.

Interface Instruction

Input Interface:



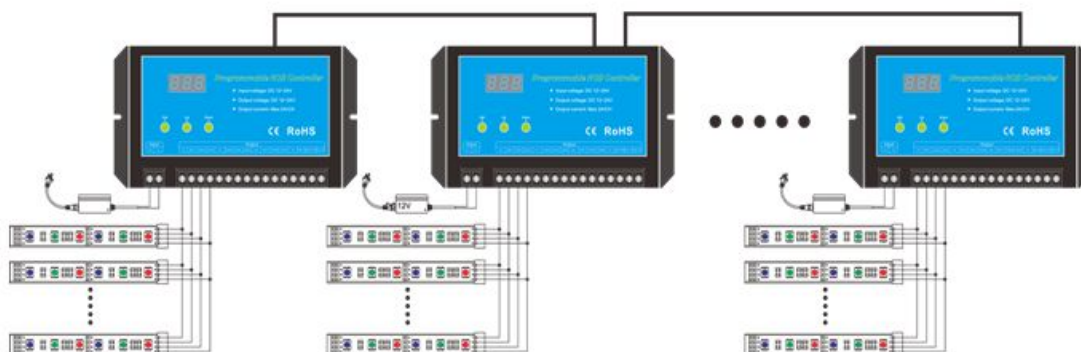
- ① DMX512 cascading input port
- ② DMX512 cascading output port
- ③ USB Interface, connected with PC, use it to download mode data

Output Interface



- (1) (2) Power supply input positive and negative pole
- (3) (7) (11) (15) The load output common anode
- (4) (5) (6) Load output first, second, third negative pole
- (8) (9) (10) Load output 4th, 5th, 6th negative pole
- (12) (13) (14) Load output 7th,8th,9th negative pole
- (16) (17) (18) Load output 10th,11th,12th negative pole

Typical Application



Notice: The use of computer software, please refer to software “Help” - “View Help” help document.