http://www.seekway.com.cn/e/
http://www.3dled.net/e/

MSD-301 Mini Controller

USER MANUAL

Jiangmen Seekway Technology LTD

2011-7-1

Overview

1. MSD-301 controller is suit for the small size screen made of LED Digital Tube or light source.
   For 1-wire Digital Tube, MSD-301 controller can drive 1024 pixel/route.
   For 2-wire Digital Tube, MSD-301 controller can drive 120m (12 section/16 section), 240m (6 section).
   For 3-wire Digital Tube, MSD-301 controller can drive 1536 pixel/route.
   For 4-wire Digital Tube, MSD-301 controller can drive 80m (12section/16 section), 160m (6 section/8 section).
2. Equipped with Seekway LED Player software. Users can freely create effects and put it in the SD card.
3. 1-route TTL signal output:
   MSD-301-L: Control 1-wire Digital Tube, 2-wire TTL output.
   MSD-301-T: Control 2-wire Digital Tube of Seekway, 2-wire TTL output.
   MSD-301-E: Control 3-wire Digital Tube, 3-wire TTL output.
   MSD-301-N: Control 4-wire Digital Tube, 4-wire TTL output.
4. Auto or manual selection, speed adjustment is available. Sound volume and alternating current synchronous are optional.
5. The speed and Mode is with the memory function. When power on, controller will enter to the working condition before shutdown.
6. MSD-301 controller does not support Audio respond function.

Installation Environment

Use in door, keep away from moist.

Power Supply

AC/DC 12-24V (Default to the AC mode)

Speed

From 1 to 9 to adjust the display speed from fast to slow by pressing button [Speed] (KEY 1).
After reach level 9, speed will return to the level 1.

Mode

Select the pattern effect by pressing the [Mode] (KEY 2). Each time you press, the effect mode will turn to the next one. When it reaches the last mode, the indicator light will turn black. Then long press the [Mode] for 3 seconds, mode will turn to [Mode 0], that is an automatic mode.

Power Supply Switchover

AC→DC:

1. Long press [Speed] (KEY 1) for 3 seconds when under the AC mode.
2. Blackout the controller.
3. Apply the power to controller again, and then it comes to the DC mode.
4. After 2 seconds, controller will enter to the working condition and Digital Tube is under control.

DC→AC

1. Long press [Speed] (KEY 1) for 3 seconds when under the DC mode.
2. Blackout the controller.
3. Apply the power to controller again, and then it comes to the AC mode.
4. After 8 seconds, controller will enter to the working condition and Digital Tube is under control.

§ Matters need attention about AC and DC

A. The AC and DC mode is pre-memory in chips. They would not switchover with the change of the external power supply, so it needs to be made a manual switchover.
B. If use DC supply under the AC mode, the yellow light will glitter one time and then black out. In this time, please follow the operation "AC→DC" to switch over to the DC mode.
C. If use AC supply under the DC mode without the synchronous function, controller can normally work.

SD Card Usage and Recording

Please refer to the Operating Instruction of the SD Card Recording.

Don't insert or pull out the SD card when power on, otherwise the SD card maybe damaged.

Indicator Light

Power Indicator Light (Red)	Long bright when power on.
Signal Indicator Light (Yellow)	Glitter one time when power on. Flicker rapidly under regular work. The flicker frequency is the same as the speed of effect.

Types of MSD301 Controller

MSD-301-L: Drive chip 1803/1809, 1804/1812, etc.

OUTPUT					AC/DC
STB	CLK	DATA	GND	TXD	12-24V

DATA	GND
1-wire Digital Tube	

MSD-301-T(MSD-501-F): Drive chip F16,J69/F69,J08,J12 etc.

OUTPUT					AC/DC
STB	CLK	DATA	GND	TXD	12-24V

DATA	GND
2-wire Digital Tube	

MSD-301-E: Drive chip 2801/2803, D705A/6803/6912/6909, etc.

OUTPUT					AC/DC
STB	CLK	DATA	GND	TXD	12-24V

	CLK	DATA	GND
3-wire Digital Tube			

MSD-301-N: Drive chip 595, 3130/134/135/5024/5026, etc.

OUTPUT					AC/DC
STB	CLK	DATA	GND	TXD	12-24V

STB	CLK	DATA	GND
3-wire Digital Tube			

1. The circuits are different in different applications. We have made the appropriate settings according to the practical requirements, so please do not change them arbitrarily.
2. Color grey indicates the port is unused.