User Manual of LED Dance Floor

Product name: Magic LED Dance Floor
Item#: DF500-4

1. Features:
Unit Dimension (mm): 500*500*100
Light source: super bright LEDs
LEDs quantity: 192pcs (64R/64G/64B) <We also could add more LEDs per customers’ requirements>
Material of cover: Tempered glass
Power Supply: UL/CE listed, AC100-240V/DC12V (One power supply is required for 4 units)
Max. Load: 500KG/sqrs.

2. Electricity specification:
Working voltage: DC 12V±0.5V
Max power consumption: <50W/sqrs.
Working environment: -10℃—40℃
Relative humidity: 10%—90%

3. LED dance floor and Accessories:
500mm (L)*500mm (W)*100mm (H) 1000mm (L)*1000mm (W)*100mm (H)
<Formed by 4 units>

Accessories:

4. Controlling systems:
a. LED dance floor can run automatically with “built-in” programs. Stand alone or run synchronizing with two or more units connected.
b. With main controller, it can run with the programs which you could edit and download from PC.
c. DMX compatible
d. Turn on Sound controller, it can let LED dance floor dance to the music. You can adjust the sensitivity.
e. With “color-edit” software, you can DIY color changing programs or edit limitless patterns or pictures by yourself with the guidance of user manual.

5. How to use it?
   a. Stand alone
      ➢ Connect power supply to single DF500-4 with T connector. Turn on power, dance floor will run automatically with “built-in” programs.
      ➢ Connect main controller to DF500-4 with another end of T connector. Turn on power, dance floor will run under control of the programs in main controller.
      ➢ Connect main controller to sound controller with USB connector. Turn Sound ON, the indicator light is on. Dance floor is still under control of main controller. But it can also dance to the music with sound sensor.
   b. Two or more units connect together
      ➢ Make sure each unit could work well independently.
      ➢ Connect DF500-4 one to another in order with splice connector (Please seek detail help from “The wiring diagram of LED dance floor”). And connect power supply to each DF500-4 with T connector. Each 4 units DF500-4 need a power supply. Power on, LED dance floor will run automatically with “built-in” programs.
      ➢ Connect main controller to the first DF500-4 with another end of T connector, which will put all DF500-4 under the control of main controller. You could DIY the programs, the patterns and quantities of dance floor with “color-edit” software and download to main controller. (Please refer to user manual of color-edit software).
      ➢ Connect main controller to sound controller with USB connector. Turn on the sound controller, all dance floors are still under control of main controller. But they can also dance to the music with sound sensor.
Wiring Diagram:
One complete set of 1m*1m LED dance floor is comprised by following parts:
1) 4 units of 0.5m*0.5m LED light sources (We code them to be 1, 2, 3, and 4 in orders)
2) 1pc Main controller
3) 1pc sound controller
4) Power Supply 12V/4.2A
5) 1pc power connector
6) 1pc T connector
7) 4pcs splice connector
8) 1pc USB connector (Two functions: When download programs to main controller, it is used to connect main controller to PC; Otherwise, it is used to connect main controller to sound controller)

4PCS DF500-4
- 1 + - 2 + - 3 - 4 +

Male connector: “+”
Female connector: “-”

Power connector connect to -1, then 1- to 1+ with splice connector, 1+ with -2,...... 3+ with -4.
The User Manual of Color-Edit Software

1. Set up the color edit software, the icon of color-edit will show on the desktop of your PC;

2. Double click the icon, a new window will appear, then choose “NEW”;

3. Click “New” then enter into the main window with many grids. One grid represents one pixel.

You can choose the number of grids by editing the number of grids. The “Col” represents the number of rows in horizontal while the “Sel” represents the number of lines in vertical. The range for both “Col” and “Sel” are from “1~20”, which means that the max total pixels can be 20*20=400. Once confirmed the number of “Col” and “Sel”, click “Select”. Then the operational area is chosen as white color area. If you need to re-choose the area, just click “Clear” and re-do above-mentioned steps.

4. is used to set up the number of pixel each decode board can carry. Decode board is used to decode the signal received from controller. For 1*1, it stands for each decode board can carry 1pc RGB LEDs or 1pixel (1rows, 1lines). For 2*2, it stands for each decode board can carry 4pcs RGB LEDs or 4pixels (2rows, 2lines). For 4*4, it stands for each decode board can carry 16pcs RGB LEDs or 16pixels (4rows, 4lines).

5. was used to set up the number of unit module. To divide the whole panel into some unit modules with same pixels. It can facilitate connection. Furthermore, it is very important since it decides how to connect one unit module with another to form a panel. Click “”, you can see the sheet which indicate the connection methods.

Attention: The number of “Unit mode” must be greater and integer multiple of the number of “PCB mode”. For example: If the number of “PCB mode” is 4*4, then the number available for “Unit mode” is “4*4”, “8*8”, “12*12”, “16*16”, “20*20” and so on.

As follows, we will take several examples to illustrate how the modules was connected to form a panel if the number of “Unit mode” is set to “8*8”, “16*8” and “4*4”.

Given a LED panel with total 256pixels (16rows, 16lines), each decode board carry 16pixels (PCB mode: 4*4)

a. If the number of “Unit mode” is “8*8”, then the panel is divided into 4 unit modules with same 64pixels. 4pcs decode boards are required for each unit module. The connection method of modules is as follow:

<table>
<thead>
<tr>
<th>1st Unit Module</th>
<th>2nd Unit Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Unit Module</td>
<td>4th Unit Module</td>
</tr>
</tbody>
</table>

Within each Unit Module, the connection method of decode board is as follow (Take 1st Unit...
module for example):

\[
\begin{array}{cc}
1_1 & 1_2 \\
1_3 & 1_4 \\
\end{array}
\]

1_1~1_2~1_3~1_4~2_1~2_2…4_4

b. If the number of “Unit mode” is “16*8”, then the panel is divided into 2 unit modules with same 128 pixels. 8pcs decode boards are required for each unit module. The connection method of modules is as follow:

<table>
<thead>
<tr>
<th>1st Unit Module</th>
<th>2nd Unit Module</th>
</tr>
</thead>
</table>

Within each Unit Module, the connection method of decode board is as follow (Take 1st Unit module for example):

\[
\begin{array}{cc}
1_1 & 1_2 \\
1_3 & 1_4 \\
1_5 & 1_6 \\
1_7 & 1_8 \\
\end{array}
\]

1_1~1_2~…1_8~2_1~2_2…2_8

c. If the number of “Unit mode” is “4*4”, then the panel is divided into 16 unit modules with same 16 pixels. 1pc decode board is required for each unit module. The connection method of Unit modules and the decode boards is the same and as follow:

<table>
<thead>
<tr>
<th>1st Unit Module</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th</td>
<td>6th</td>
<td>7th</td>
<td>8th</td>
</tr>
<tr>
<td>9th</td>
<td>10th</td>
<td>11th</td>
<td>12th</td>
</tr>
<tr>
<td>13th</td>
<td>14th</td>
<td>15th</td>
<td>16th</td>
</tr>
</tbody>
</table>

6. Finished above mentioned set-up, click “Edit” then enter a new window:

7. You can edit “Pattern” by yourself freely. As follows is the detail description of each function button:

<table>
<thead>
<tr>
<th>Col</th>
<th>Sel</th>
<th>Fill</th>
<th>Fill All</th>
<th>Left</th>
<th>Right</th>
<th>Color:</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>16*16</td>
<td>20*20</td>
<td>24*24</td>
<td>32*32</td>
<td>Flip(H)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“Fill” and “Fill all” means fill the whole screen with one background color.
“Left” means move the pattern leftward. “Right” means move the pattern rightward.
“UP” means move the pattern upward. “Down” means move the pattern downward.
“Flip (H)” means flip the pattern horizontally. “Flip (V)” means flip the pattern vertically. “Col 1” stands for the position of initial row you could choose for words, letters or number. “Sel 1” stands for the position of initial lines you could choose for words, letters or number. “16*16”, “20*20”, “24*24” and “32*32” stand for font size.

“Text” can be letters, numbers or signs. Click “Text” after you type the content, it can display. “CHN” can be Chinese characters.

“Open”: to open an existing “.cor” file.
“Save”: to save a “.cor” file.
“Save As”: to save to be another “.cor” file.
It means to lock the screen.

It means an information file.

“Frames1”: means the total frames you have created already.

“Frame No. 1”: means the current frame.

“Frame Time”: the time for current frame, with a unit of “second”. The range is from “0.1 second to 5 second”. Customer can choose within the range.

“Soft”: means the pattern will change gradually.

“Skip”: means the pattern jump change.

“Goto”: means to return to one frame you would like to review or edit.

“Back”: means to return to previous frame.

“Next”: means to go to next frame.

“Insert”: means to insert one new frame. If you find you omit one frame between 5th and 6th frame, go to the 6th frame, click “insert” to create a new frame.

“Delete”: means to delete current frame.

“Copy”: to copy the whole pattern in current frame.

“Paste”: to paste the copied frame to any frames.

“Undo”: to cancel previous action.

“View”: to display the pattern of current frame.

“PCB Mode”: same as what described in the fourth items.

“Unit Mode”: same as what described in the fifth items.

“Layout”: you can check the connecting methods of unit modules.

“Download”: Once you finish the programs, click “Download”, you can download the programs to the main controller.
9. Before you download the finished programs to main controller, some jobs need to do as follows:

1) Power the main controller with an AC18V power supply, use USB wire to connect main controller with PC.

2) After step 1, set up drivers of main controller. For one PC, you are only required to set up once. To run this driver, your PC configuration must be Windows 2000 or Windows XP or more advanced systems edition.

3) Click “Download” then “send”, you can download the programs to main controller.

4) Connect main controller to panel with the wire, the panel will run automatically with the program.

5) Please be noted that AC18V power supply is only required for main controller when download programs from PC, unnecessary during work time.

6) If some mistakes occur, please seek help from below possible solutions:
   a. Click “Download” first, then “send”, no “connect succeed” but “linking…” and “please check connect and power”. It may be caused by bad power connection or loose USB connection.
   b. Click “Download” first, then “send”, it said “connect succeed”, but only download maybe 0.3% then failed. At the same time, the red light of main controller turns on. It is certain that something is wrong with the main controller. Maybe the AC18V power supply is not well connected to main controller, or the power supply is burned-out.
   c. It also may cause mistakes if the program file is too big to download. It always fails during download and the red light of main controller also turn on at the same time. So if the frames of the program are too many and the total pixels are large, user should be noted that the file size of the “.cor” should be less than 512K, if not, download also will fail.

If any problem, please contact your local distributors for detail instructions.