

# User Manual of SparkularEdit200

SparkularEdit200 is a kind of software displaying musical special effects, specially developed for the Sparkular. With this software, the users can edit and simulate the effects of the Sparkular according to the audio file (wav. format), and download the file in the main controller of the Sparkular, so as to realize the synchronization between audio playing and Sparkular displaying.

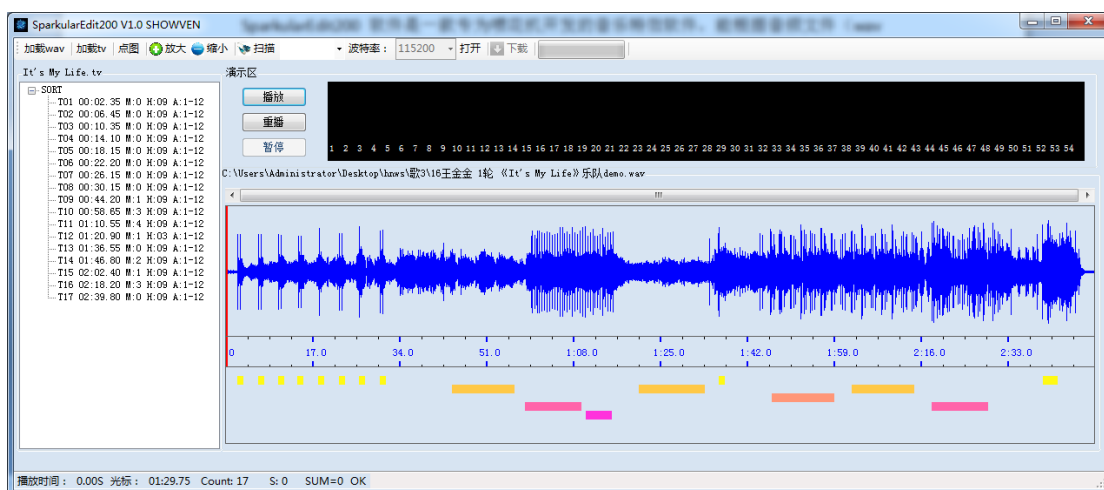


Fig.1 Main Interface

## 1. Loading WAV File (Audio Waveform File)

Move the mouse into the wav area, right click, and pop-up the window like Fig.2. Select 'Load\_Wav' and then select wav file.

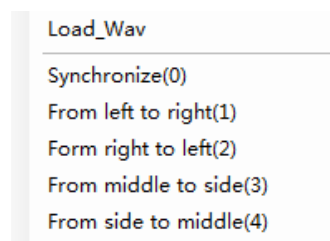


图 2

## 2. Edit tv file ( set the spraying rules in tv file)

### (1) Add rules

Move the mouse into wav area, and then move the cursor to select proper time. Right click (like Fig.1), and select the inserting mode (Fig.3 is inserting synchronous mode).

Mode 0: Synchronous mode, all selected devices spray synchronously.

Mode 1: From left to right, all selected devices spray successively from left to right at proper intervals.

Mode 2: From right to left, all selected devices spray successively from right to left at proper intervals.

Mode 3: From the middle to the ends, all selected devices spray successively from the middle to the ends at proper intervals.

Mode 4: From the ends to the middle, all selected devices spray successively from the ends to the middle at proper intervals.

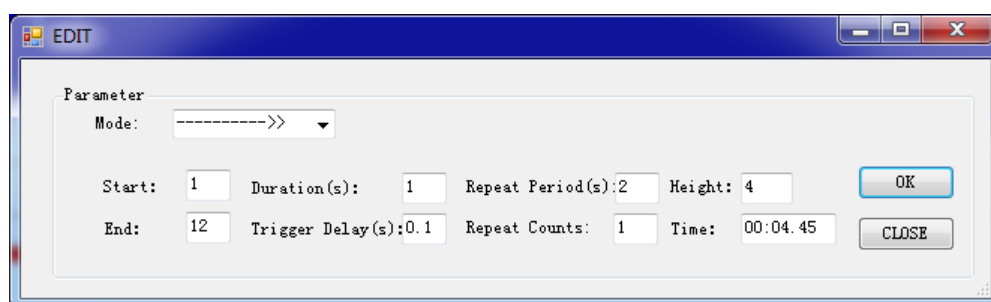


Fig.3 (insert synchronous mode)

### (2) Modifying rules

In Fig.3, after clicking the button “ok”, the new added rules will be displayed on the left of the main window. If there’re some mistakes about

the rules, you can modify them. Double-click the rules needed to be modified, and then you can enter a state like Fig.3. Here you can re-edit the rules.

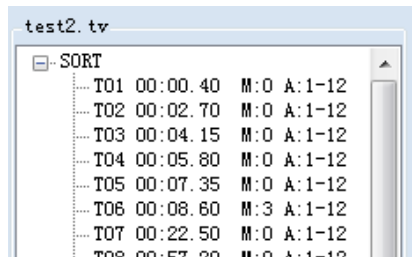


Fig. 4

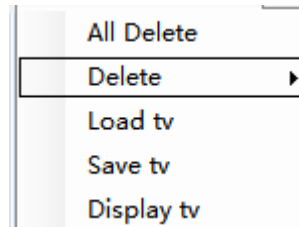


Fig. 5

### (3) Deleting rules

In Fig.4, select the items needed to be modified, right click and select “Delete” (like Fig.5).

### 3. Saving tv file

After editing tv file, it’s necessary to save it. In the window like Fig.5, click “saves tv”.

### 4. Generating dot-picture

After setting the rules, it’s necessary to see the time axis of the effect and corresponding information about the device height. In control are (like Fig.6), click the button “Dot\_pic” to enter into the window of dot-pictures, and then set the quantity of the devices (acquiescently is 12). Click the button “Make Dot”, corresponding dot-pictures (like Fig.8) will be generated on the lift. The name of the generated dot-pictures is corresponding to the name of the tv file, only with different suffixes. And then click the button “Return”.



Fig. 6



Fig. 7

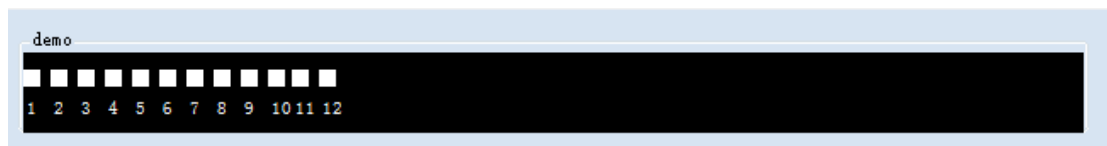
Total Line: 578 Wirt:whistle.fir

Line	Time	1	2	3	4	5	6	7	8	9	10	11	12
1	00:00.00	0	0	0	0	0	0	0	0	0	0	0	0
2	00:00.05	0	0	0	0	0	0	0	0	0	0	0	0
3	00:00.10	10	10	10	10	10	10	10	10	10	10	10	10
4	00:00.15	10	10	10	10	10	10	10	10	10	10	10	10
5	00:00.20	10	10	10	10	10	10	10	10	10	10	10	10
6	00:00.25	10	10	10	10	10	10	10	10	10	10	10	10
7	00:00.30	10	10	10	10	10	10	10	10	10	10	10	10
8	00:00.35	10	10	10	10	10	10	10	10	10	10	10	10
9	00:00.40	10	10	10	10	10	10	10	10	10	10	10	10
10	00:00.45	10	10	10	10	10	10	10	10	10	10	10	10
11	00:00.50	0	0	0	0	0	0	0	0	0	0	0	0
12	00:00.55	0	0	0	0	0	0	0	0	0	0	0	0

Fig. 8

## 5. View the effect

In control area (Fig.6), click the button “Replay” (from the beginning), you can see the red cursor move to start, and in “demo” area you can see the white grid jump .



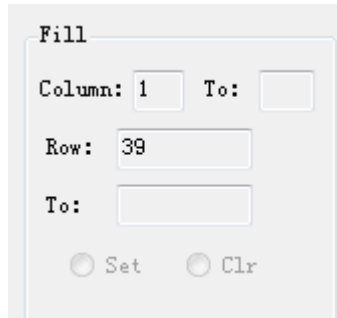
## 6. Modifying the effect drawing manually

If there're some special effects out of rules needed to be edited, you can enter into dot-picture to make a modification manually.

(1) single-dot modification: in Fig.8, single-click the grid needed to be modified, the parameter in the grid will be inverted immediately.

(2) small-area modification: in Fig.8, drag the mouse, select the grid needed to be modified (the grid turns blue), right double-click; the selected area is completely set as spraying height. Right single-click, you can clear all settings.

(3) big-area modification: in Fig.8, select the first dot (like Fig.9), and then select the second dot (like Fig.10). Click “Set” or “Clr” to set or clear the parameters on the first and the second dots.



Fill

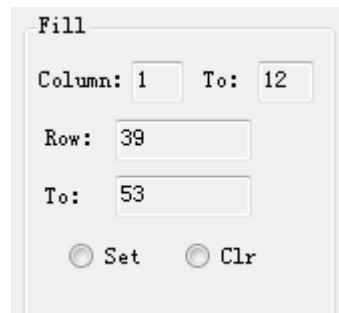
Column: 1 To:

Row: 39

To:

Set  Clr

Fig. 9



Fill

Column: 1 To: 12

Row: 39

To: 53

Set  Clr

Fig. 10

**Note:** the file modified manually must be saved under a file name by clicking the button “Save fir”. Single-clicking “Make Dot” will cover the manually modified information, please caution.

## 7. Download programs

Connect USB download cable to the main controller, in serial port (like Fig.11), click the button “SCAN”, select proper port, the baud rate is acquiescently 11520, click “OPEN”, and then click “DOWN”, the download progress will be displayed in the lower left area. Barring accident, the program will be downloaded in the device within several seconds.

**Note: downloading file is just the Fir file opened under present dot-picture.**

The main controller supports storing several files. If you need to store several files, you should select different file number. If the file number is

unchanged, the new file will cover the old file.

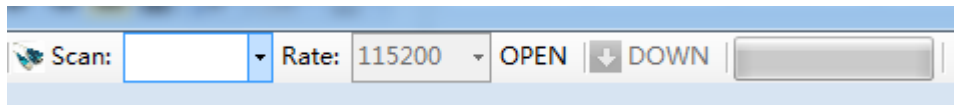


Fig. 11

## 8. Operating

If you use PLAY, it can play from the cursor. If you use REPLAY, it can play from the beginning. When the player is operating, the main controller is also operating synchronously. If the main controller just simulates without spraying, it should operate under the mode of TEST.

Before removing the download cable, it's necessary to turn the connection from OPEN TO CLOSE.

## 9. FAQ

(1) The download button is grayed out.

The download can be started only when the dot-picture is generated.

(2) Download failed.

The software only shows the serial port of CHA340 chip. If there are other CH340 serial ports, it's possible to select wrong serial port. Please change another serial port to have a try.

(3) Cannot find the serial port.

If there is not CH340 marked in Fig.12 in device manager, it impossible to show serial port number in the software. If this situation occurs, it's possible that the device is not connected well or the serial port breaks down.

(Refer to Sparkular Host Controller ZK6200 usb port installation)

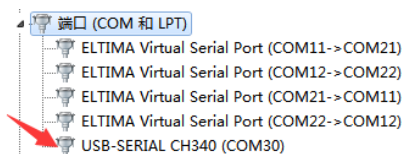


图 12

(4) No displaying in demo area.

The dynamic picture will be displayed only when the dot-picture is generated.

(5) Not operate according to the modified dot-picture.

Dot-picture is calculated from the rules. The dot-picture generated each time is a recalculated result and the modified dot-picture cannot calculate corresponding rules reversely. Thus, after modifying the dot-picture, a new one will be generated and meanwhile the modified dot-picture will be completely cleared. This problem is caused by the newly generated dot-picture after modification

(6) It failed to generate the dot-picture

You need to save tv file first, otherwise the dot-picture cannot be generated.

(7) Error warning shows when the dot-picture is generated.

It's necessary to insert at least two pieces of rules, otherwise error warning shows. In addition, if the rule parameters are improper, out of range, error warning also shows.

(8) The operating effect of the main controller is different from that

of the software.

If above situation occurs, please check whether the main controller is under the special effects mode, or download the latest file into the main controller.

(9) Download failed

There may be something wrong with the USB download cable, or there may be a download mistake. It's necessary to download again.