

## Chapter V Voice Module

Voice alarm function, telephone control function and dialing automatically function are very important functions of SR. To realize these functions, we should match SR with the SR-VP voice module. Voice module blocks have two types: SR-VPA (AC Type), SR-VPD (DC Type).

### 5.1 Structure of Voice Module

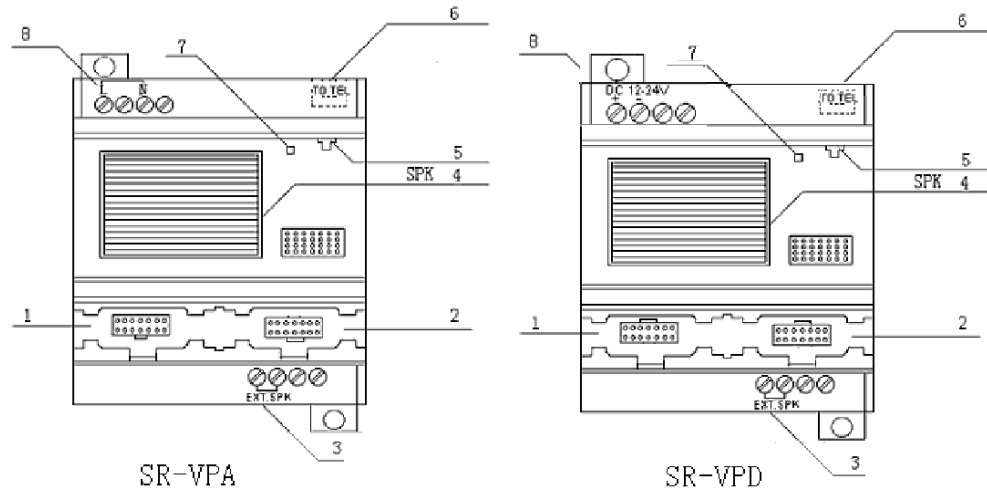


Fig. 5.1 Structure of SR-VP Series Voice Module

1. Connecting port between voice module and the machine
2. Connecting port between voice module and communication cable
3. Audio output port (to be connected with the acoustics)
4. SR (Speaker broadcasting interface which the voice module self-carrying)
5. Voice module on-line recording audio input port
6. Socket of telephone crystal plug
7. Indicator of the power and recording of the voice module (It will be on green when the voice module is powered on-power indicator. It will be on red when the voice module begins recording-recording indicator. When recording, users must wait till the recording indicator is lighted and stop when it is off. Otherwise the voice can't be recorded.)
8. Power input (AC or DC) (100-240VAC), (12-24VDC)

### 5.2 Connection between Voice Module and SR

SR-VP type voice module can be connected with the SR series machines through SR-CB. Pay attention that only the machines of the same type can be connected together. That is to say that SR-VPA, AC type, can only be connected with AC type machine and SR-VPD, the DC type, can only be connected with DC type machine. Insert the telephone crystal head into the "TO TEL" socket. Insert one head of the audio wire into the audio input port of the voice module (5 of Fig. 5.1) and connect the other head with the audio output of the PC. And connect the voice module and PC by the SR-CP.

1. Connection between SR-12MRAC and SR-VPA (AC type)

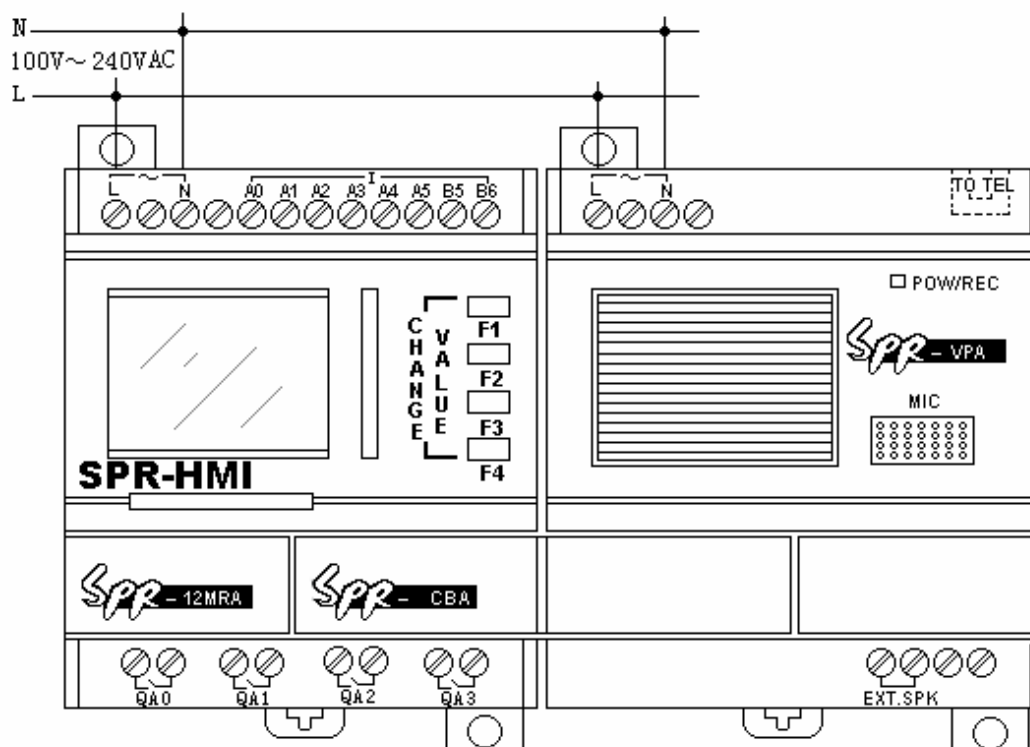


Fig. 5.2 Connection between SR-12MRAC and SR-VPA

## 2. Connection between SR-12MRDC and SR-VPD (DC type)

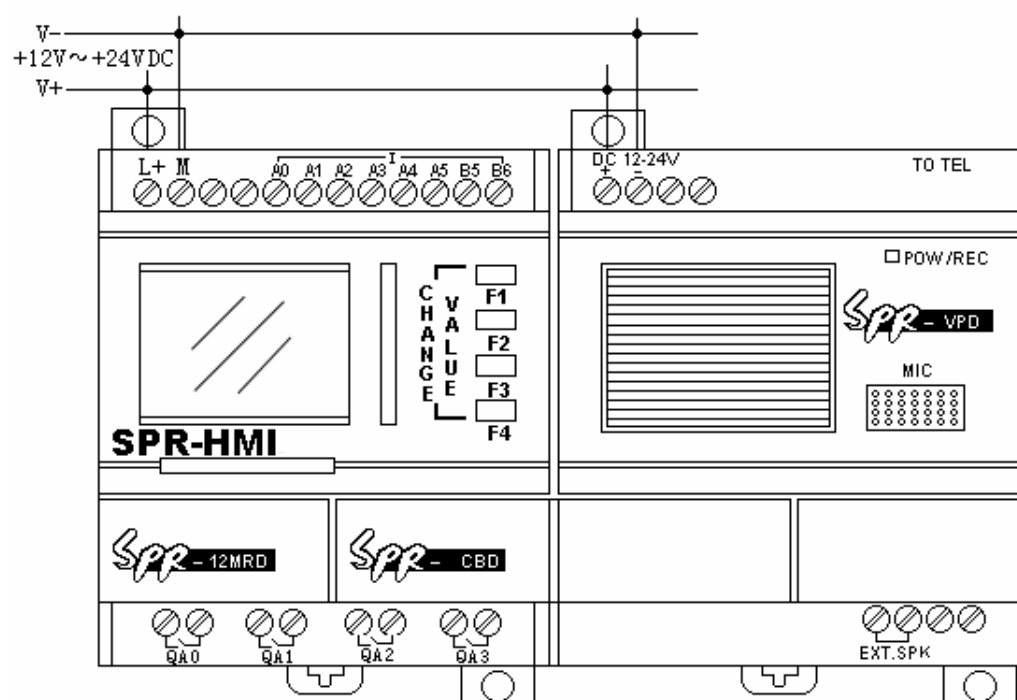


Fig. 5.3 Connection between SR-12MRDC and SR-VPD

### ⚠ Notes:

1. Telephone wire is two-core wire.

2. *Insert the telephone crystal head into the “TO TEL” socket.*
  3. *Remote control module can be flying connected with voice module to realize the wireless control to the voice module.*
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### 5.3 Operation Instruction of the Voice Module

1. The first five sections (section 0, section 1, section 2, section 3, section 4) are for the voice system, users cannot record the five sections randomly.
2. Section 5 to section 99 of the voice module are the voice sections when users programming and can be used randomly. However, users must start recording from section 0 while the functions of section 0 to section 4 are fixed by the system.

Functions from section 0 to section 4 are as shown in the follows:

Section 0: When dialing out through the “D\_OUT” module, it will broadcast this section **“Please enter No. 0 key and receive the information”**. (When recording, users must record this voice contents **“Please enter No. 0 key and receive the information”**)

Section 1: is the prompt voice for confirming the user status. It will be broadcast when SR system number has been dialed. Normal broadcasting can be carried out with this section.

Section 2: is the prompt voice for the correct password. It will be broadcast when the correct password is used. Normal broadcasting can be carried out with this section.

Section 3: is the prompt voice for the wrong password. It will be broadcast when the wrong password is used. Normal broadcasting can be carried out with this section.

Section 4: is the prompt voice for dialing to an external telephone. It will be broadcast when SR dials an external telephone. Normal broadcasting can be carried out with this section.

3. Usage of the five special sections

For example: users can use the five message sections as follows:

Step I:

Record section 0 as **Please enter No. 0 key and receive the information.**

Record section 1 as **Please enter the password for confirmation.**

Record section 2 as Correct password. Please enter the control code to control.

Record section 3 as Wrong password. Please re-enter.

Record section 4 as Emergency. Please enter the password to control.

Record section 5 as Emergency. Gas leakage.

Step II:

When a user dials external telephone, SR will answer the telephone automatically and broadcast-Please enter the password for confirmation, then the user enter the SR password.

- A. If the entered password is correct, SR will then broadcast-**Correct password. Please enter the control code to control.** Then the user can control the equipment by the use of the telephone.
- B. If the entered password is not correct, the SR will broadcast-**Wrong password. Please re-enter.** Then the system will repeatedly broadcast-**Please enter the**

**password for confirmation.**

**Step III:**

When SR dials an external telephone number, it will broadcast the pre-set message such as section 5-**Emergency. Gas leakage.** Together with section 4-**Emergency. Please enter the password to control.**

- A. When the user enters the correct password, the voice system will broadcast section 2-**Correct password. Please enter the control code to control** and then repeatedly broadcast section 5-**Emergency. Gas leakage.** At this time the user can real-time control the equipment by the use of the telephone.
- B. When the user enters a wrong password, the voice system will broadcast section 3-**Wrong password. Please re-enter.** And then it will broadcast section 4 and section 5 repeatedly.

**Notes:**

- 1. SR dialing an external telephone, if there is no answer or a password is not input within 40 seconds of the connection, the SR voice system will stop dialing and cease to broadcast the voice message. The SR voice system will then redial automatically every 40 seconds.
- 2. User must enter a \* before entering the password. The broadcasting will then stop and the user should enter a four-digit password within 9 seconds. If the user fails to enter the password, the SR voice system will rebroadcast the prompt voice. The user must then enter \* first and then enter the password. If the user needs to enter the password again the procedure needs to be repeated. That is to say that every time user entering the password, he must enter a \* first and enter a four-digit password within 9 seconds after the stop of the voice.
- 3. When the user has entered the correct password, the voice system will broadcast section 2-**Correct password. Please enter the control code to control** and then the user can do the following operation. If the password is wrong, the voice system will broadcast section 3-**Wrong password. Please re-enter.** The user can only enter the wrong password three times. If the user enters the wrong password for the fourth time, SR will hang up the telephone and stop broadcasting. And the system will then return to the main system. If the alarm status still exists, the voice system will dial automatically, for alarm purposes, every 40 seconds.
- 4. When the alarm status exists, SR voice module will broadcast the alarm voice repeatedly. It can be stopped by the use of the control function within the program.
- 5. After SR voice module has dialed if the user does not switch-off the alarm ON/OFF switch via the anti-control function i.e., the status of alarm is not eliminated, the voice module will dial, for alarm purpose, automatically every 40 seconds.

While recording, user must delete all the voice once the first time using the voice module before using. Otherwise the recorded voice may lose. As to the recorded voice messages, user may delete or modify randomly the voice message in them. And it has no effect on the other voice messages. As for the details, it is explained in the voice recording explanation.

## 5.4 Examples of Voice Module

### Preparations:

1. We'll connect the voice module and the related equipments according to the demands.
2. Record message. (The first five messages need to be recorded as the rules and the other messages can be recorded according to the contents.)
  - Message 0: Press key #0 and listen to the message.
  - Message 1: Please enter the password.
  - Message 2: Correct password.
  - Message 3: Wrong password. Please re-enter.
  - Message 4: Run normal. No alarming.
  - Message 5: The door is not well closed. Please handle emergently.
  - Message 6: Thief. Please catch. Address: No. 26, He Ping Road.
3. Set the telephone.
  - ① Set the voice module connect with the telephone number 1234567.
  - ② Set the first telephone No. 3456789.  
Set the second telephone No. 8024912.
  - ③ Set the alarm telephone No. 110.

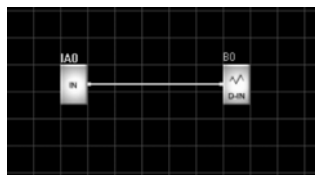
### Example 1

Check if SR system run normal and learn related information. Coz' the user himself check the system, the password is set. Only the password is correct, the system information can be learned. So when programming and recording, the password options need to be selected.

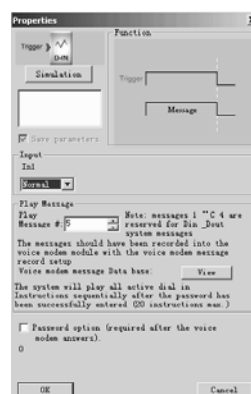
When programming, requirements are as follows:

- ① Correct password.
- ② Set related function block.

### Program is as follows:



**Fig. 5.4**



**Fig. 5.5**

Set the function block D-IN  
(As the right diagram.)

### Actual Demonstration:

- ① Dial the telephone No. 1234567 of the voice module via telephone or mobile.
- ② It will play Message 1 "Please enter the password."
- ③ Enter the preset password via the telephone keys.

A. Correct password.

It will play Message 2 “Correct password.” If IA0 is not triggered, it will play Message 4 “Run normally. No alarm.” After playing, if user doesn’t hang up the telephone, it will play Message 4 repeatedly. After Message 4 is played N times, no matter the user hangs up the call or not, the voice module will hang up the call automatically and return to the main system and wait for the next operation.

(The value of N can be set by PC software. And the default is 5.  $2 \leq N \leq 5$ .)

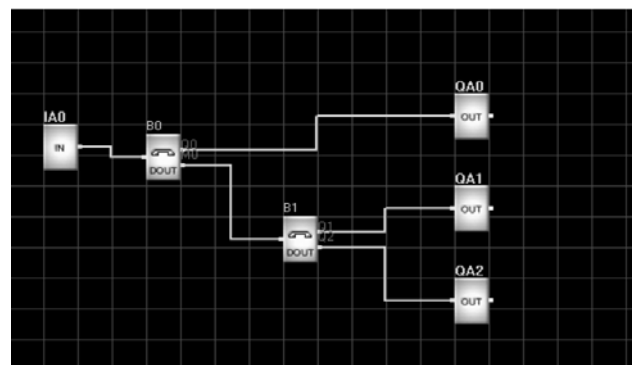
B. Wrong password.

It will play Message 3 “Wrong password. Please re-enter.” and then Message 1 “Please enter the password.”

### Example 2

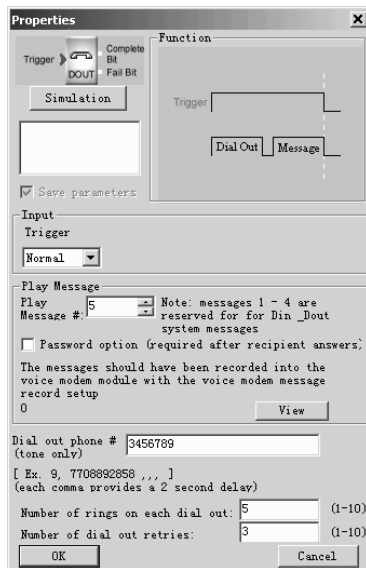
SR system detects there is something abnormal and prompt the user. Under this situation, the voice module is needed to set password to avoid the stranger knowing the prompting contents. If the door is not closed well and the preset telephone in the voice module is a public telephone, it is obvious that password must be entered first to know if the door is closed or not. Otherwise stranger will know that the door is not closed and something strange will happen.

**Program is as follows:**

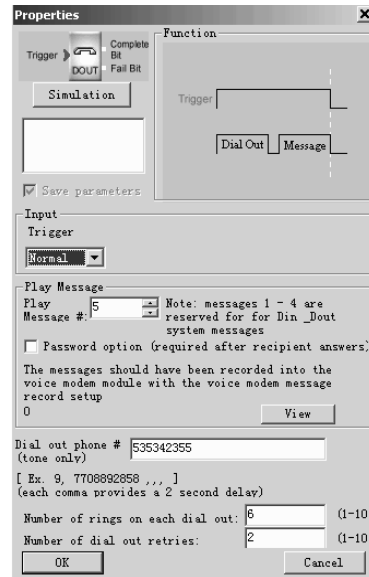


**Fig. 5.6**

The set diagrams of DOUT function block are as follows:



**Fig. 5.7 Set Diagram of B0**



**Fig. 5.8 Set Diagram of B1**

Actual Demonstration:

- ① SR system detects that the door is not well closed. (IA0 connected to the switch testing the switch of the door.) IA0 is triggered and B0 is activated by IA0. Then the voice module will dial 3456789 the preset telephone of B0.
- ② When the user picks up the telephone, he will hear that “Please press Key #0 and listen to the message.”  
When the user presses Key #0, it will play Message 1 “Please enter the password.”

### ⚠Notes:

When set B0, the password option must be selected. And the voice module will play Message 1, otherwise the voice module will directly play the selected message after the pressing of Key #0. In this example, Message 5 is selected.

A. Wrong password.

The voice module will play Message 3 “Wrong password. Please re-enter.” And then Message 1 “Please enter the password.”

B. Correct password.

The voice module will play Message 2 “Correct password.” and then Message 5 “The door is not well closed. Please handle emergently.” Repeatedly for N times till the user hang up the telephone or N times are finished. And then the voice module will hang up the telephone, stop playing messages and return to wait for other works.

(The value of N can be set by PC software. And the default is 5.  $2 \leq N \leq 5$ .)

In this example, when the voice module dials the preset telephone, if the user doesn't pick up the telephone, the voice module will ring for times that user has set. And then it will hang up the telephone. Also the voice module will redial the telephone for times that user has set. If the user still doesn't pick up the telephone. The voice module will dial another telephone number set in B1. The method is the same as dialing the telephone of B0. If the user picks up the telephone, it will run as Step 1 and Step 2 as above. Otherwise the voice module will return a failure to activate QA2.

### Example 3

If thief happens at home, it will be time to dial 110 to alarm. Under this situation, it is obvious that it cannot ask the police to enter the password. But if the telephone is connected, the voice module will play the related message. So when set DOUT function block, Message 6 must be selected and password option cannot be selected.

### Actual Demonstration:

If SR system detects the thief, it will dial the alarming telephone “110” immediately and will play Message 0 “Please press Key #0 and listen the information.” The police pick up the telephone and press Key #0. The voice module will play “Thief. Please catch him. Address: No. 26, HePing Road.” And it explains the reason of alarming and tells the address of alarming. It is good for action.

## 5.5 Explanation to Voice Software

Recording through the software:

Recording software is to record to the voice module via PC. And playing, saving the voice message, recording and playing online, password setup and information printing can all be realized through the software. Using the software to recording to the voice module, it is needed to record and save the recorded messages in PC through the software. And then write each voice message into the voice module via the communication cable. First it is need to learn how to use the recording software and then it is possible to correctly record to the voice module.

In the following we will introduce the recording software in details:

Start Software Super CAD and then click “Option | Sound Record” to enter the main interface:

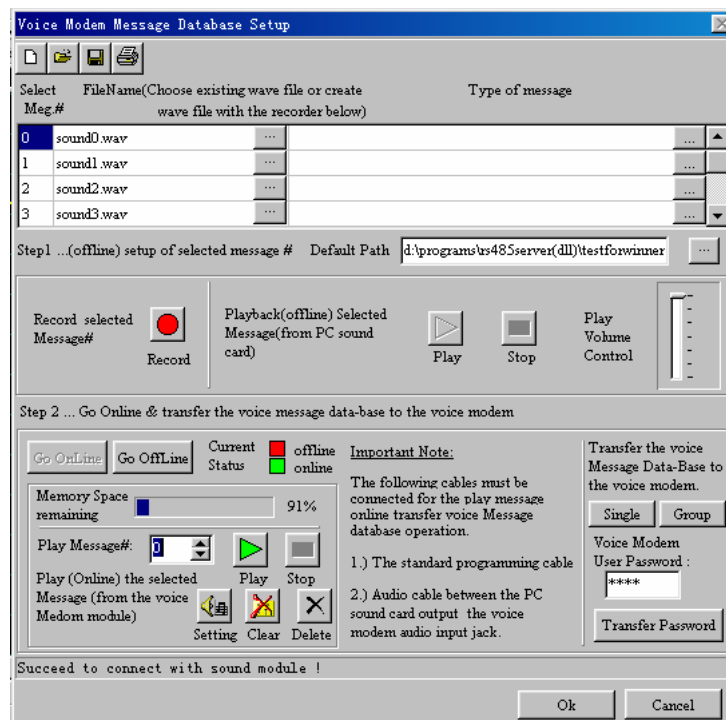



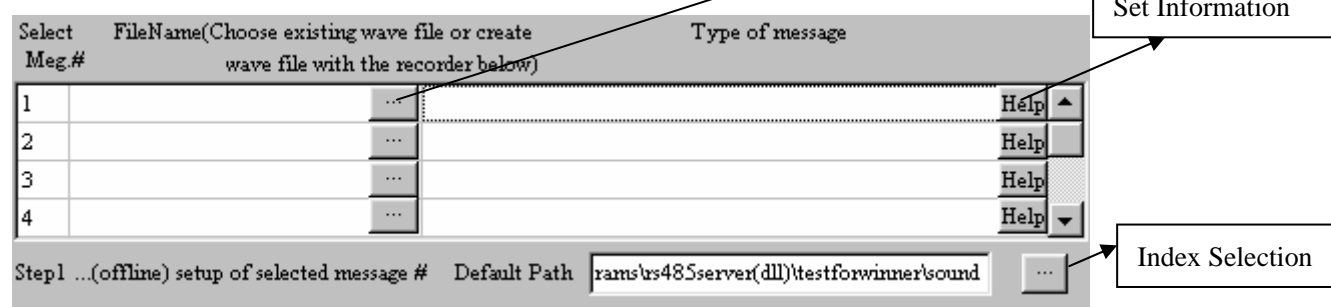
Fig. 5.9 PC Recording Main Interface








### Function Explanation:

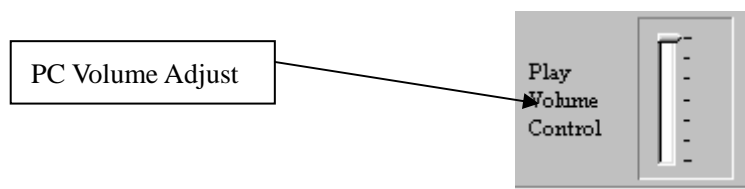
1. Newly build a voice information file

Select “” button, the following blank table will be displayed.




**Fig. 5.10 Voice File Selection Dialogue Frame**

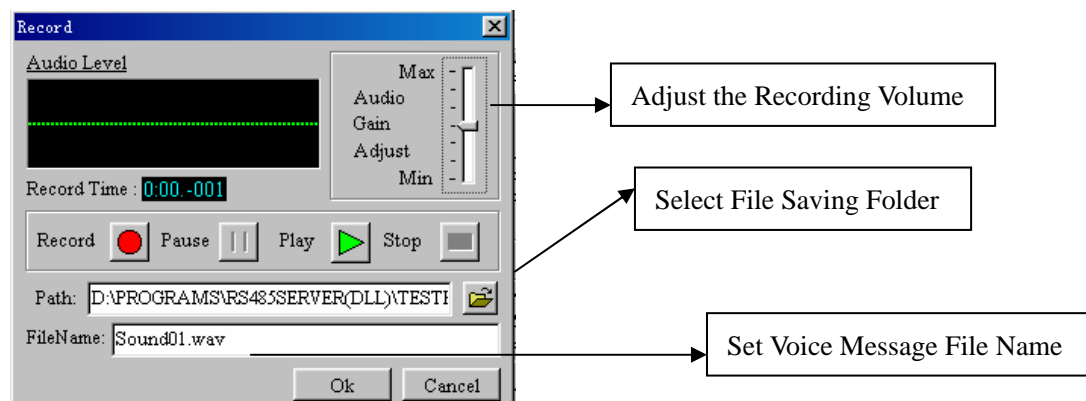
2. Save File: Select button  and save the selected voice message. Enter the new file name.
3. Open File: Select button  and select one existed voice file.
4. Print Information List: Select button .
5. PC Voice Play: Select the playing voice message in  and then select button .
6. Volume Adjust:



**Fig. 5.11 Volume Adjust**

7. PC Recording Procedure


Select button  and enter into the following interface:




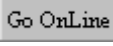
**Fig. 5.12 Recording Dialogue Frame**

- 7.1 Select file saving folder: Select button  and select the saving folder.

7.2 Record voice message file name: Enter the file name on the right of FileName.

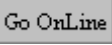
7.3 Record: Select  and start recording from MIC. (Notes: Length of recording is 15 seconds.)


7.4 Select  and start to record this section message.

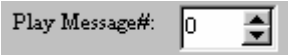
8. Select online: Select button  and connect PC and voice module, SR machine. If being successful, the following prompting dialogue frame will be displayed. At the same time the green indicator (Online) will flash without stopping. (Notes: Voice module must be connected well with SR machine and the power.)




**Fig. 5.13 Successful Connection between PC, Voice Module and Machine Dialogue Frame**

Notes: The following functions can only be displayed and operated only after successful connection to .

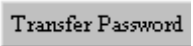
9. Memory Indicator:  indicates the occupied memory of the voice message of the voice module.


10. Voice Message Selection: Select broadcasting or writing voice message via .

11. Play: Click button  and start broadcast the voice module message.

12. PC downloads the voice to the voice module: Select button  and write the selected message into the voice module.

If the relative voice file of the selected section doesn't exist, this function button is forbidden to use. It must select the voice file first. The length of the voice file is 1-15 seconds, otherwise it is regarded ineffective.

13. Set users' password': First enter the password (being 4 digit) and then click button .

14. Set audio tone: Select button . It will display audio tone set dialogue frame as the following.

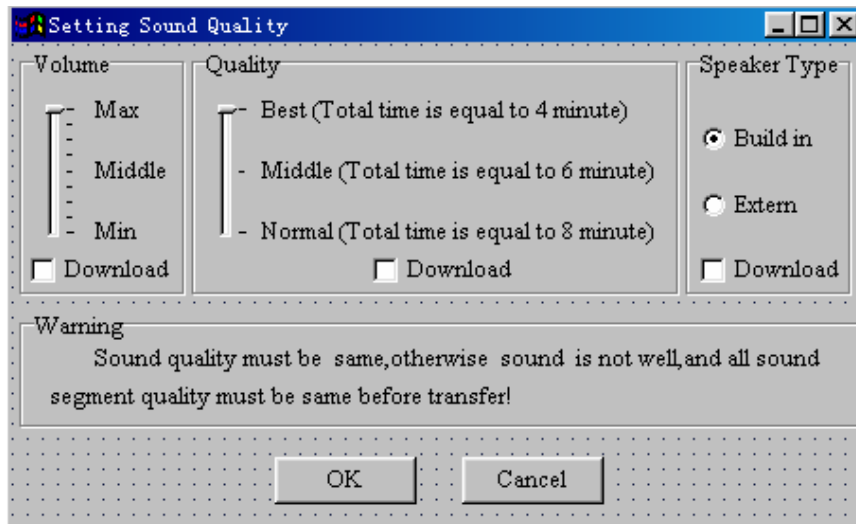




Fig. 5.14 Voice Tone Setup Dialogue Frame

System parameter set includes: Volume, Audio Tone & Speaker Type. After setting the specification values, if needed, select “Download” selection frame to download.

15. Clean out all voice message: To select button  will clean out all the voice sections in the voice module.
16. Delete voice section: Select the deleting section and then select button  to delete.
17. State Indicator: Indicate the current state

Playing progress : 43%

## 5.6 Recording Voice Section

After learning the recording software, it may record to the voice module via this software. In the following, we will introduce how to record series of voice sections into the voice module in details.

### Notes:

First time using voice module, deleting all the voice sections once. Later users may directly record every time. No need to delete all the voice sections.

Before recording, equip your PC with voice card and a microphone, otherwise the recording can't be carried out. Connect the wire as the following diagram:

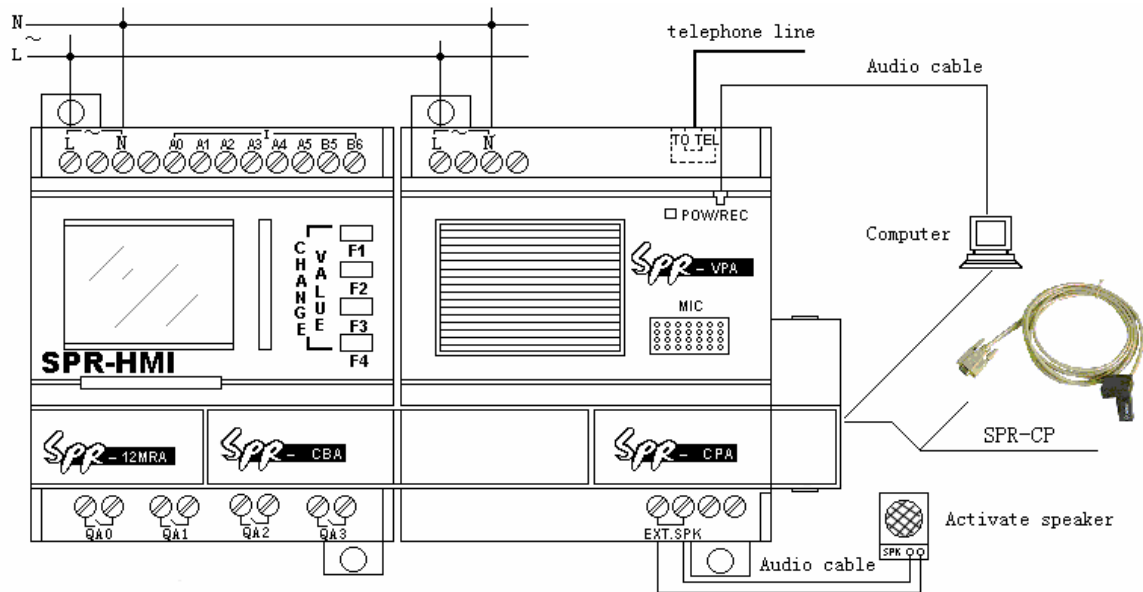


Fig. 5.15 Wiring Diagram of Voice Module Recording



Fig. 16



Fig. 17





Fig. 18


Fig. 23: Free audio wire accessory, to connect the voice audio input and PC audio output.

Fig. 24: SR-CB, to connect the machine and the voice module and so on.

Fig. 25: SR-CP Cable, the private connecting wire with PC series port.

### Recording Operation Procedures:

1. Connect telephone, voice module and SR machine rightly as the following diagram.
2. Connect the power of the voice module and SR (**Notes: Non-connecting of the power now**).
3. Connect it with PC series port via SR-PC.
4. Connect audio input of the voice module and audio output of PC via audio wire.
5. Confirm no failure of the connection and then power on. (**Notes: Only machines of the same type can be connected together.**)
6. Start Super CAD software and newly build a file and open relative series ports.
7. Start Super CAD software and click "Option | Sound Record" to enter the recording main interface as shown in Fig. 5.4.
8. Click button  in Fig. 5.4. The dialogue frame as shown in Fig. 5.7 will be displayed.
9. Click button  in Fig. 5.7 and start to record. Length of the recording voice message is better no longer than 15 seconds. (When recording, it is need to insert

- the microphone into the microphone input terminal of the PC voice card.)
10. After recording this section, save it into the directed folder of the PC.
  11. Record the second section till all the voice sections needed to be written into the voice module is completely recorded.
  12. Then begin to write all the recorded sections into the voice module. Click  and connect successful. If it is the first time to record to the voice module, click button  and delete all the sections. If it is not the first time to record, directly do the next operations.
  13. Select the relative voice message in Fig. 5.5 voice file selection dialogue frame and open the voice message files that needed to write in. In  select the voice section that need to be written in and then click button . Then this voice message will be written into the voice module. As shown in the following diagram:

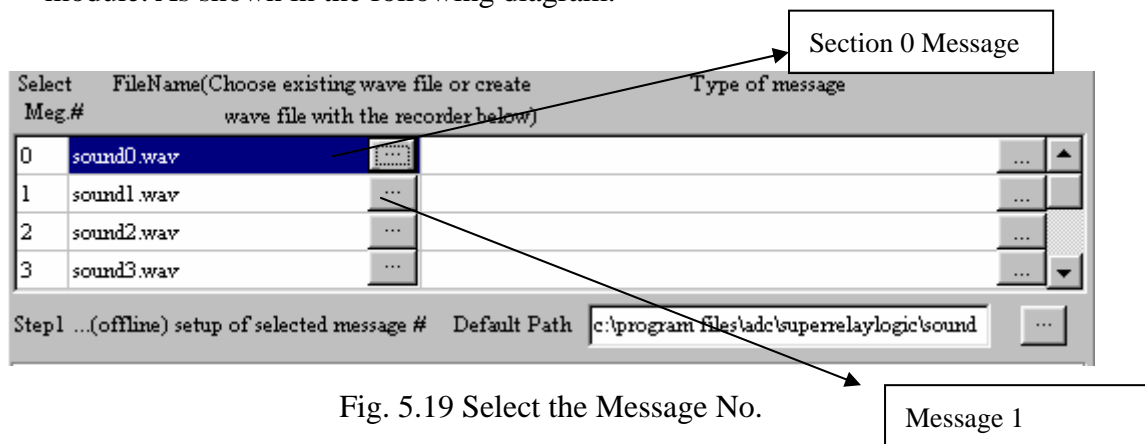


Fig. 5.19 Select the Message No.

- Notes: (1) Open section 0 message that needed to write in “Meg#0” and open section 1 message that needed to write in “Meg#1”. The rest may be deduced by analogy.
- (2) If selected file is not under the current directory, it will be copy to current directory automatically. Thus it is easily to manage.
- (3) The defaulted director is: \...\Sound. Generally it is no need to change.
14. If you want to write all the voice sections into the voice module once, click button  first and then click button  after connecting successfully. The batch writing in voice sections selection dialogue frame is SRing out. Select relative voice section and then click button “Start”, thus all the voice section will be written into the voice module in turns.