



DMR Radio Voice Tool
Operation Guide



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Contents

Documentation Information.....	1
1. Brief Introduction	2
2. Before Use	3
2.1 Prerequisite.....	3
2.2 Requirements on Voice Files	3
3. Operation	5
3.1 For PD98X	5
3.1.1 Writing Voice Files	5
3.1.2 Setting Broadcast Voice.....	9
3.1.3 Other Operations	13
3.2 For Other Radios	14
3.2.1 Writing Voice Files	14
3.2.2 Setting Broadcast Language.....	19
4. FAQ.....	21
4.1 Failed to Open Voice Tool Software	21

Documentation Information

This section describes the conventions and revision history of this document.

Documentation Conventions

Instructional Icons

Icon	Description
 Tip	Indicates information that can help you make better use of your product.
 Note	Indicates references that can further describe the related topics.
 Caution	Indicates situations that could cause data loss or equipment damage.
 Warning	Indicates situations that could cause minor personal injury.
 Danger	Indicates situations that could cause major personal injury or even death.

Notational Conventions

Convention	Description
“ ”	The quotation marks enclose the name of a software interface element. For example, click “OK”.
Bold	The text in boldface denotes the name of a hardware button. For example, press the PTT key.
->	The symbol directs you to access a multi-level menu. For example, to select “New” from the “File” menu, we will describe it as follows: File -> New.

Revision History

Version	Release Date	Description
R8.0	08-2016	Add Chapter 3.1.3 Other Operations (Descriptions on how to export and format the Voice Files in PD98X)
R7.8	04-2016	Add Chapter For PD98X (Descriptions on how to use the voice tool for PD98X)
R5.5	06-2013	Added FAQ (Solution for failed opening the Voice Tool Software).
R5.0	12-2012	Initial release

1. Brief Introduction

Voice tool software is used to manage the voice files in portable or mobile radios for the voice notify feature. Voice notify is applied to functions, zone, channel/personality, private call, group call and subgroup call.

Radios are configured with voice files by factory default. You can also create new voice files and use this software to write them into the radio. After writing the new voice files into the radio, you can set these files as the voice notify file via CPS.

This guide introduces the detailed operations.

2. Before Use

2.1 Prerequisite

Please prepare the resources in the following list accordingly before defining the voice notify files.

Item	Description
PC	Operating System: Windows XP/ Windows 7 This guide takes Windows 7 as the example. Ensure the PC is installed with a USB driver. For more information, refer to the relevant <i>Digital USB Driver Installation Guide</i> .
CPS	The Voice Tool software is included in CPS R5.0 or above. Ensure the CPS is installed properly before using this software. In this guide, CPS V8.0.xx.xxx is taken as the example.
Radio	The Voice Tool software is applicable to radios with firmware version R5.0 or above. In this guide, a radio with Chinese and English voice data is taken as the example.

2.2 Requirements on Voice Files

Default voice files are stored in .wav format in VoiceNotifyFile folder under CPS installation directory. You can use these files. Also, you can create new voice files and write them into radio. Requirements on the newly created voice files are as follows:

For PD98X:

- This software only supports mono .wav voice file of 16 Bit and 8000 Hz.
- Total duration of all the voice files must be within 1152 seconds, and single voice file within 5 seconds.
- Total size of all voice files must be within 18 MB.
- The voice file name supports up to 24 characters, including digits, symbols, English letters and Chinese characters. The following symbols are not allowed:
\\/:*?“<>|
- To configure the voice notify files quickly, name the voice files after the alias of the target. For example, the alias of a channel is “channel 1” and its corresponding voice file is named “channel 1”.

For other radios:

- This software only supports mono .wav voice file of 16 Bit and 8000Hz.
- Firmware version R8.0 or above: Single file not over 32 Kb and total size of all files not over 800 Kb.
- Firmware version R8.0 or below: Single file not over 32 Kb and total size of all files not over 512 Kb.

3. Operation

Use the voice tool software to write voice files into the radio first, and then configure these files via CPS.

**Note:**

The operation for PD98X is different from that for other radios. This chapter will introduce them respectively.

3.1 For PD98X

PD98X Conventional is taken as an example, and PD98X Trunking will be introduced in note.

3.1.1 Writing Voice Files

Step 1 Connect the radio to the PC, and turn on the radio.

**Note:**

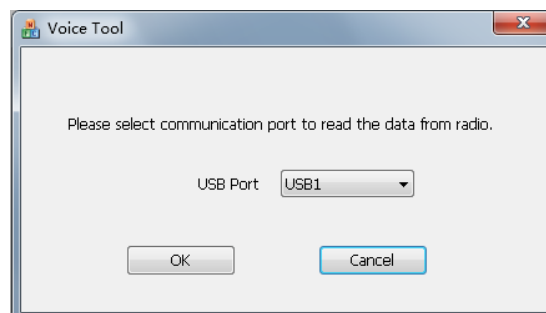
To add the voice files successfully, do not disconnect the radio and the PC during this process.

Step 2 Run the voice tool.

There are three ways to run the voice tool software.

- On the PC, go to “Start -> All Programmers -> Hytera RCPs -> Customer Programming Software -> Voice Tool”.
- On the CPS interface, go to “Tools -> Voice Tool” directly.
- On the installation directory of voice tool software, double click the “VoiceTool.exe”.

Step 3 Select the USB port, e.g. USB1, from the dropdown list, and click “OK”.

**Note:**

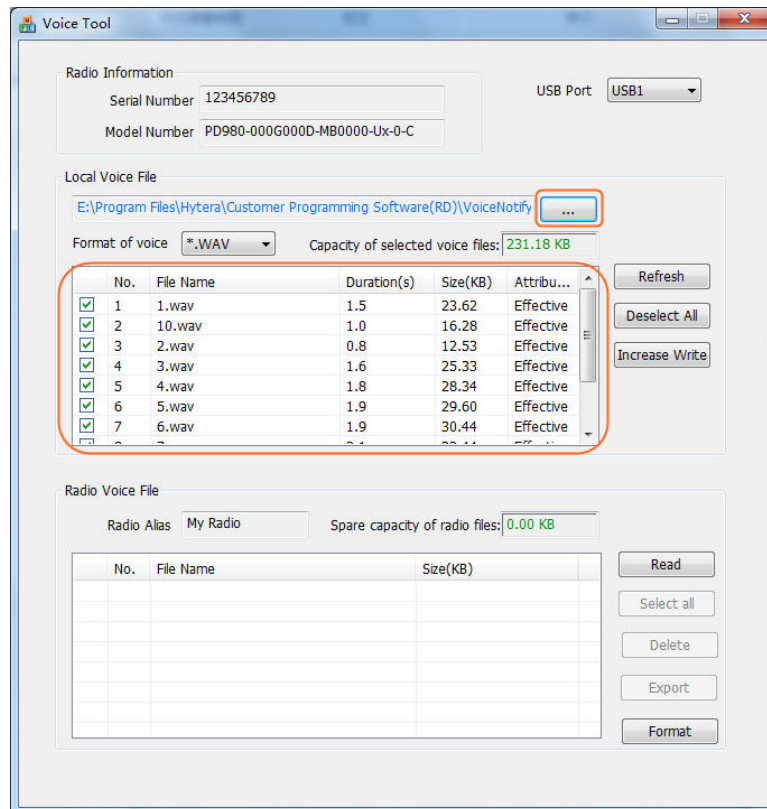
The USB port is for the connection between the radio and the PC. When multiple radios are connected to the PC, the USB port number is subject to the connection sequence. For example, the first connected radio corresponds to USB1, and the second connected radio corresponds to USB2. You can set the voice file for another radio by switching the USB port.

Step 4 Import the voice files.

Click  to choose the storage directory of the voice files, and then click “OK”.

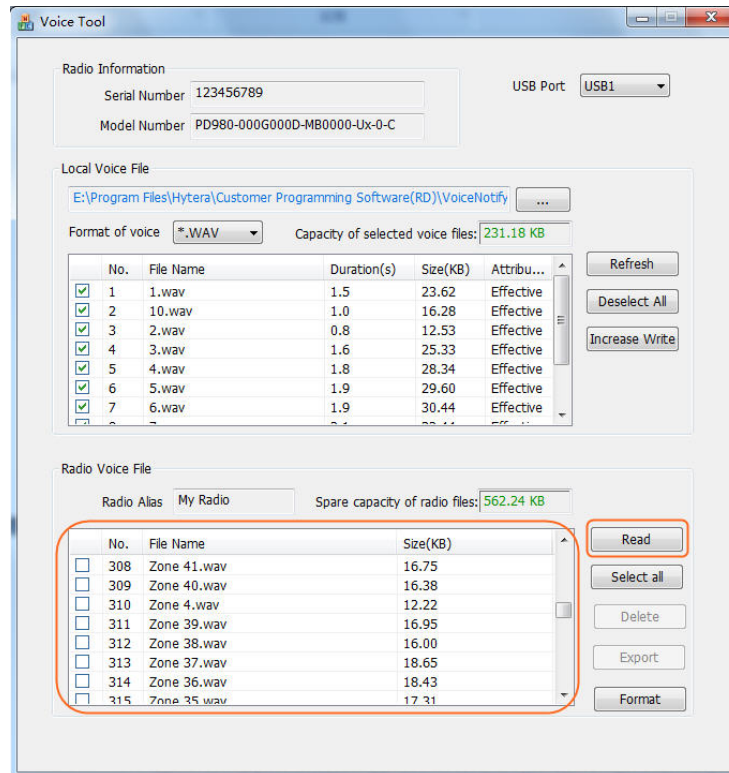
All voice files under this directory will be displayed in the Local Voice File list.

If any voice file in the List is revised or replaced, you can import it by clicking “Refresh”, without choosing the storage directory again.



Step 5 Click “Read” to read radio files.

All radio files will be displayed in Radio Voice File list. “Spare Capacity of Radio Files” indicates the remaining capacity.

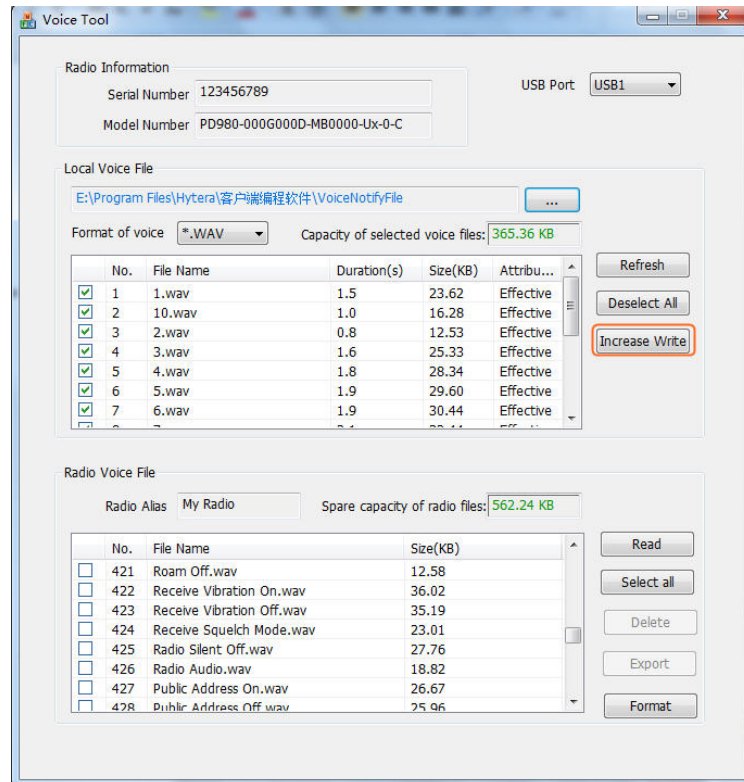


Step 6 Choose the desired voice files.

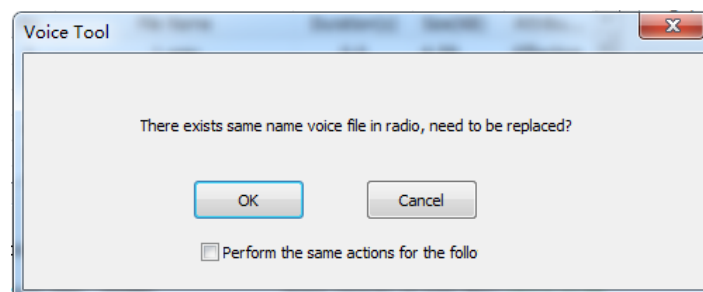
 Note:

- All voice files in Local Voice File list are selected by default. You can deselect the undesired voice files one by one or click “Deselect All”.
- “Capacity of Selected Voice Files” must be smaller than “Spare Capacity of Radio Files”. Otherwise, “Capacity of Selected Voice Files” will be displayed in red and Increase Write operation will fail.

Step 7 Click “Increase Write” to write the checked voice files into the radio

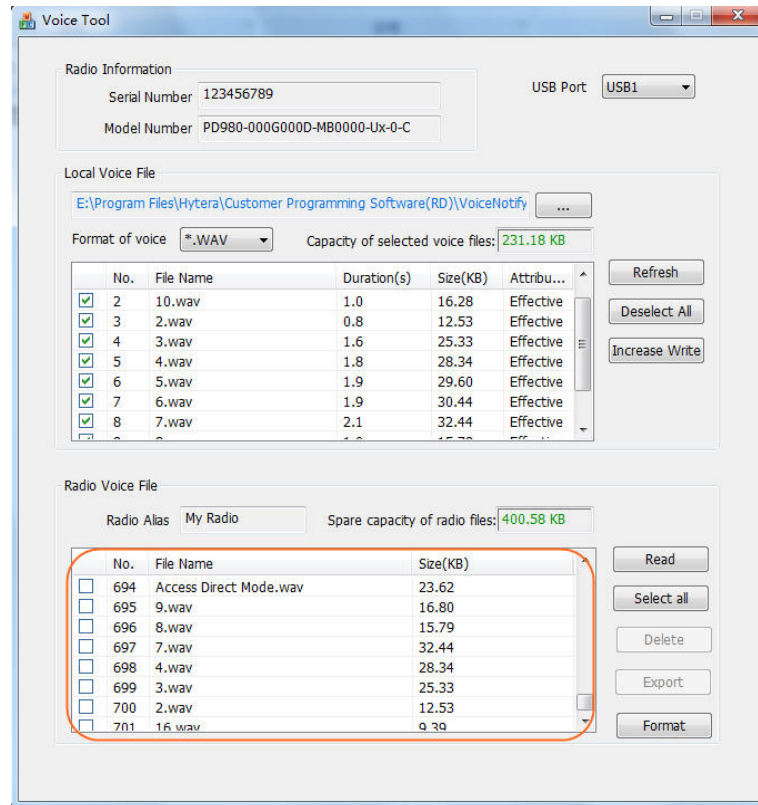
**Note:**

During writing, if there are the same voice files in the radio, the following dialog box will pop up. Choose whether to replace or not.



Step 8 View or manage the written voice files in the Radio Voice File list.

- Local voice files successfully written into the radio will be displayed in the Radio Voice File list.
- You can delete or export the written voice files, or format all voice files .



3.1.2 Setting Broadcast Voice

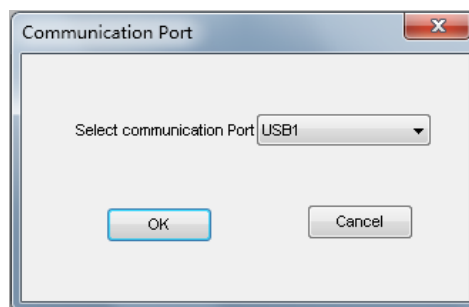
The voice notify files can be set only via the CPS.

Step 1 Run the CPS.

Step 2 Read from radio.

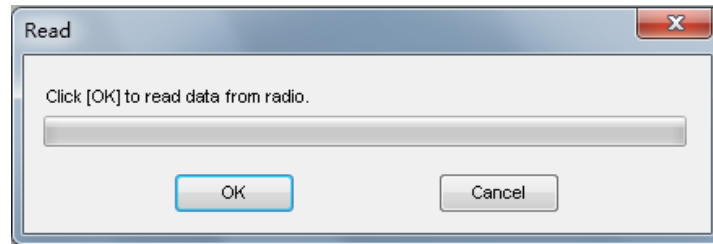
1. Select "Program -> Read from Radio" in the tool bar or click .

The following dialog box pops up.



2. Select the corresponding communication port for the radio, and click "OK".

The following dialog box pops up.



3. Select "OK" to read data from the radio.

After reading data from the radio, the model No. appears on the top left of CPS main interface.

Step 3 Set the Voice Notify feature.

1. Select "Conventional -> General Setting -> Voice Notify -> Basic Setting".



Note:

CPS Path for Trunking Radio:

- "DMR Trunking -> General Setting -> Voice Notify -> Basic Setting"
- "MPT Trunking -> General Setting -> Voice Notify -> Basic Setting"

2. Set the "Notice Type" to "Voice Notify".

"Notify Priority" allows you to set the priority of voice notify. If the priority of voice notify is higher than that of incoming call tone, the radio will make voice broadcast even when it is receiving a call. Otherwise, it will not make any voice broadcast.

3. Click "Read Radio".
4. Assign the desired voice notify file.

You can assign the desired voice notify files in the Voice Name list.

If the voice file has the same name as the alias of the corresponding zone, you can click "Match Voice File" to assign the voice file automatically.

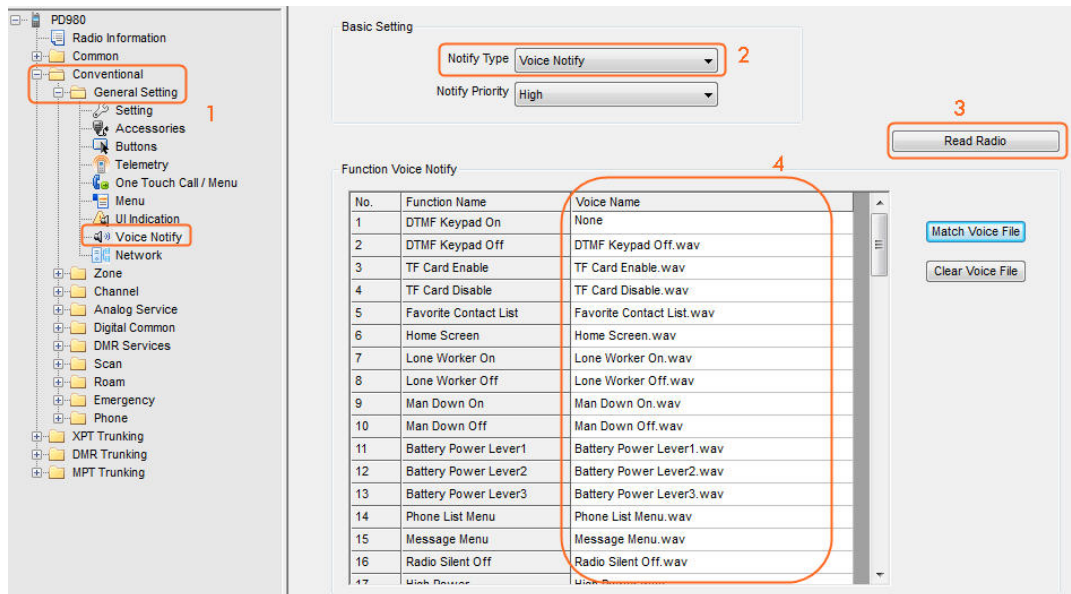


Note:

- "Match Voice File" is valid only for the zone whose voice file is set to "None".
- During matching, it is case insensitive to the names of voice files, and the characters including "-", "_", "&" and space will be ignored.
- You can reset the voice files of all zone to "None" by clicking "Clear Voice File".

Conventional Radio

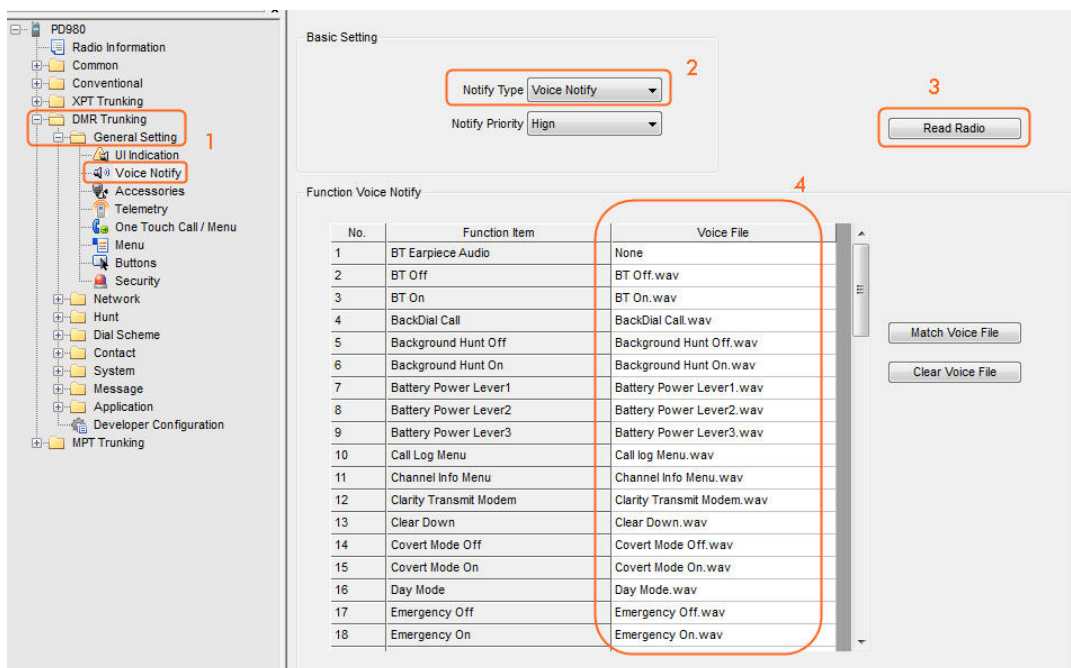
You can set Function Voice Notify, Zone Voice Notify and Channel/Personality Voice Notify for Conventional Radio.



Picture 3-1 Voice Notify for Conventional Radio

DMR Trunking Radio

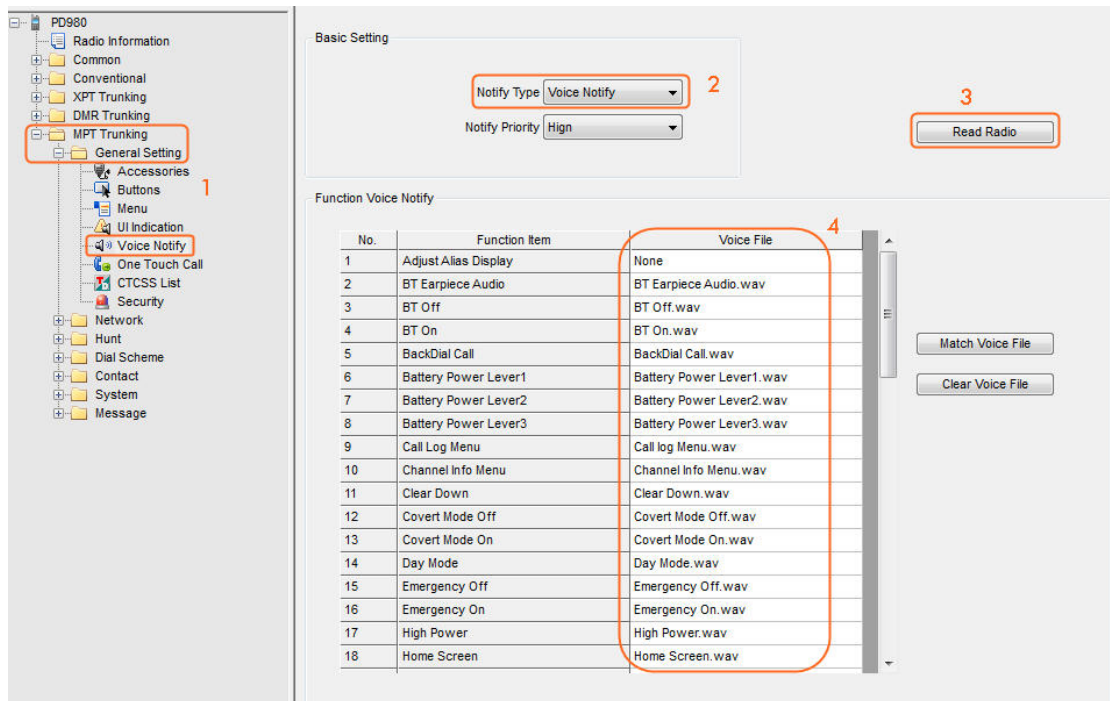
You can set Function Voice Notify, Subgroup Voice Notify, Group Voice Notify and Private Voice Notify for DMR Trunking Radio. The operations are the same as that for Conventional Radio.



Picture 3-2 Voice Notify for DMR Trunking Radio

MPT Trunking Radio

You can set Function Voice Notify, Subgroup Voice Notify and Group Voice Notify for MPT Trunking Radio. The operations are the same as that for Conventional Radio.



Picture 3-3 Voice Notify for MPT Trunking Radio

Step 4 Enable the Voice Notify Tone feature.

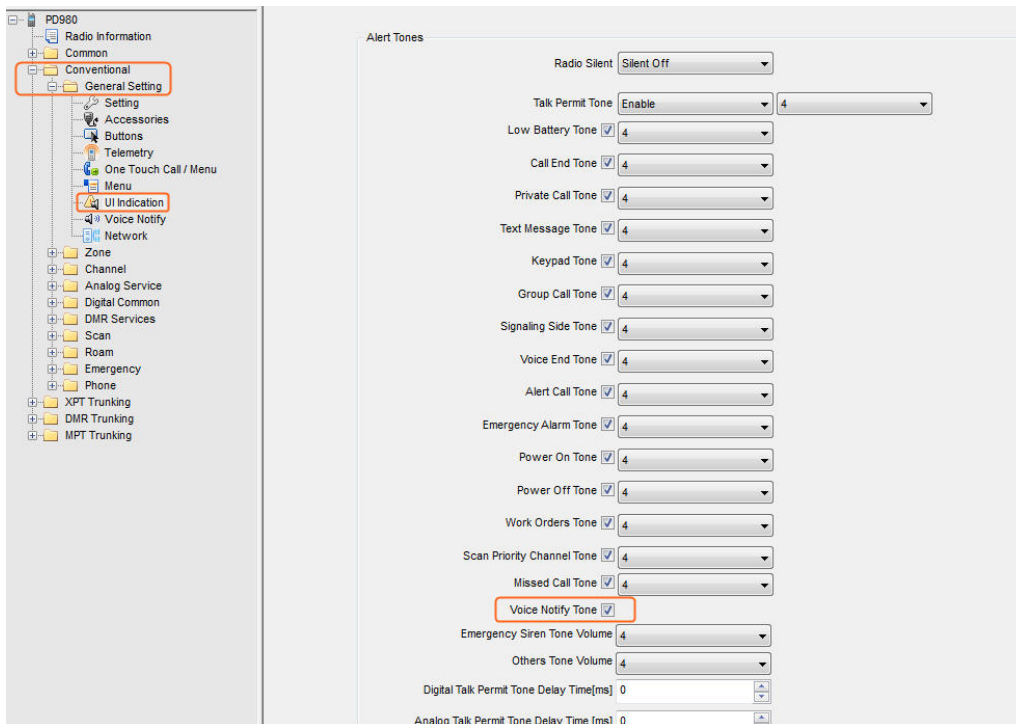
1. Select "Conventional -> General Setting -> UI Indication -> Alert Tones".

**Note:**

CPS Path for the Trunking Radio:

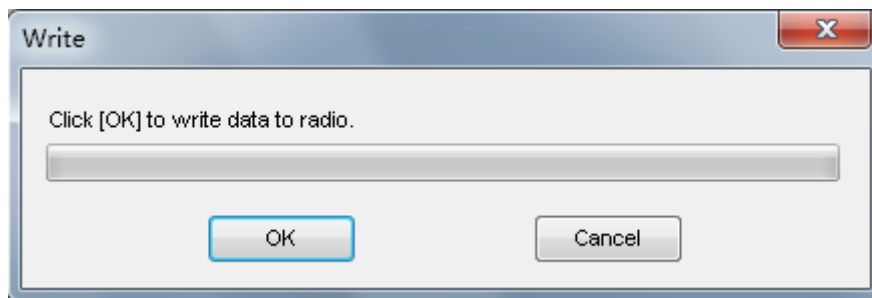
- DMR Trunking -> General Setting -> UI Indication -> Alert Tones
- MPT Trunking -> General Setting -> UI Indication -> Alert Tones

2. Check the "Voice Notify Tone".



Step 5 Write data to the radio.

1. Select "Program -> Write to Radio" in the tool bar or click , and then the "Write" dialog box pops up.



2. Click "OK" to write the setting information into the radio.

The radio will restart automatically to enable the voice setting.

3.1.3 Other Operations

Export

You can export the voice files from radio to PC for re-use. The operations are as follows:

- Step 1** Select the voice files to be exported.
- Step 2** Click "Export".
- Step 3** Set the storage directory and click "Save".

A new folder will be automatically created on the specified directory under the name "Voicefile-XXXXXX" (XXXXXX refers to the exact time, date and year when you make the operation) to save the exported voice files. For example, when you click "Export" at 11:29'54 on July 18, 2016, a new folder will be created under the name "Voicefile 20160718-112954". The selected voice files will be exported into the folder.

Format

Under some abnormal circumstances, the voice files may not be recognized, searched or deleted. You can click "Format" to clear out all voice files. The operations are as follows:

Step 1 Click "Format"

A dialog box appears with "Are you sure to Format the Voice Module?".

Step 2 Select "Yes" to execute Format.

If Format operation is successfully implemented, a dialog box will pop up with "The Format for Voice Module is successful.". Please restart the radio in order to clear the buffer memory during the process.

If Format operation is failed, a dialog box will pop up with "The Format for Voice Module is failed.". In such case, please restart the radio and repeat Format operation.



Note:

After Format operation (no matter success or failure), radios of R8.0 or above will restart automatically; while radios below R8.0 need to be restarted manually.

3.2 For Other Radios

For other radios, the voice tool interface is different. This Operation Guide takes PD78X as an example.

3.2.1 Writing Voice Files

Step 1 Connect the radio to the PC, and turn on the radio.



Note

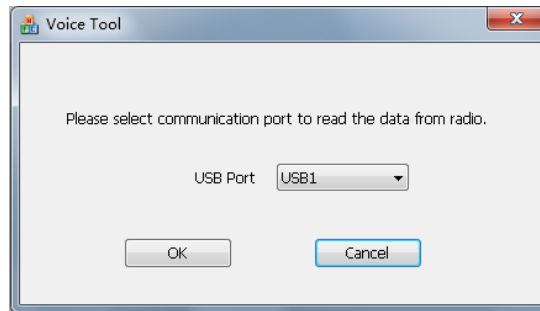
To add the voice files successfully, do not disconnect the radio and the PC during this process.

Step 2 Run the voice tool software.

There are three ways to run the voice tool software.

- On the PC, go to "Start -> All Programmers -> Hytera RCPs -> Customer Programming Software -> Voice Tool".
- On the CPS interface, go to "Tools -> Voice Tool" directly.
- On the installation directory of voice tool software, double click the "VoiceTool.exe".

Step 3 Select the USB port, e.g. USB1, from the dropdown list, and then click “OK”.

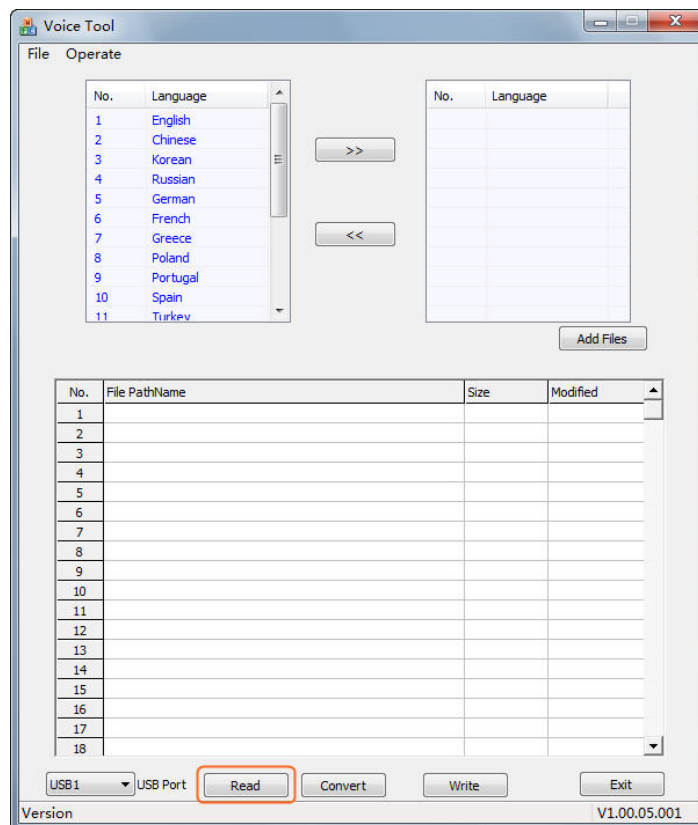


 Note:

The USB port is for the connection between the radio and the PC. When multiple radios are connected to the PC, the USB port number is subject to the connection sequence. For example, the first connected radio corresponds to USB1, and the second connected radio corresponds to USB2. You can set the voice file for another radio by switching the USB port.

Step 4 Read the voice files.

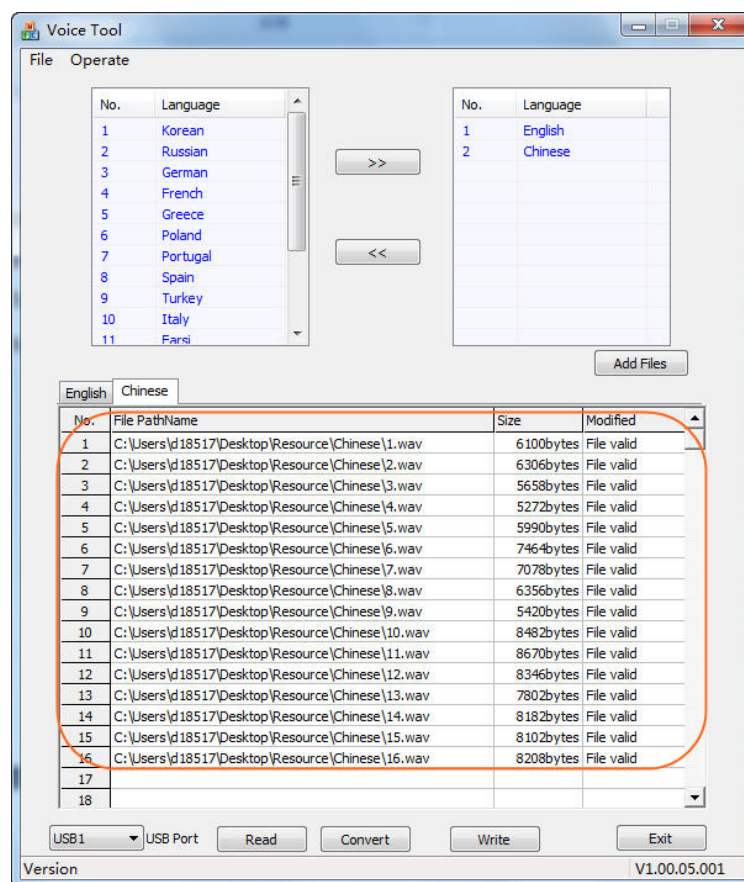
1. Click “Read”, and the software will start to read the voice data from the radio.



2. After the software reads the data, a dialog box pops up for saving the file in **.bin** format. Select the path to save the file, e.g. E:\VoiceTool, name the file such as CHVoices and click “Save”.

Now:

- A CHVoices.bin and a folder (named Resource and with the voice files in it) is generated in local directory (E:\VoiceTool). If error occurs when writing the voice data into the radio, please send the .bin file to the Company for help. You can also write the voice data of the .bin file into the radio by flash burn (Go to “Operate -> Burn .Bin File”).
- The existing broadcast languages in the radio and the saving path of the voice files are displayed on the Voice Tool interface. If you want to revise a voice file in the list, please follow the steps: 1. click the path of the voice file and the icon  will appear at the end of the path. 2. click the icon  and select the voice file in .wav format.



Step 5 Prepare the voice files.

Create a new folder, e.g. French, in the Resource folder. Move the voice files into this new folder.

Caution:

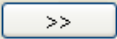
- To import the batch of files successfully, please name the files 1.wav, 2.wav,...,16.wav,...and 60.wav respectively based on the broadcast contents.
- Radios with firmware version R8.0 or below: Each new created folder must contain 16

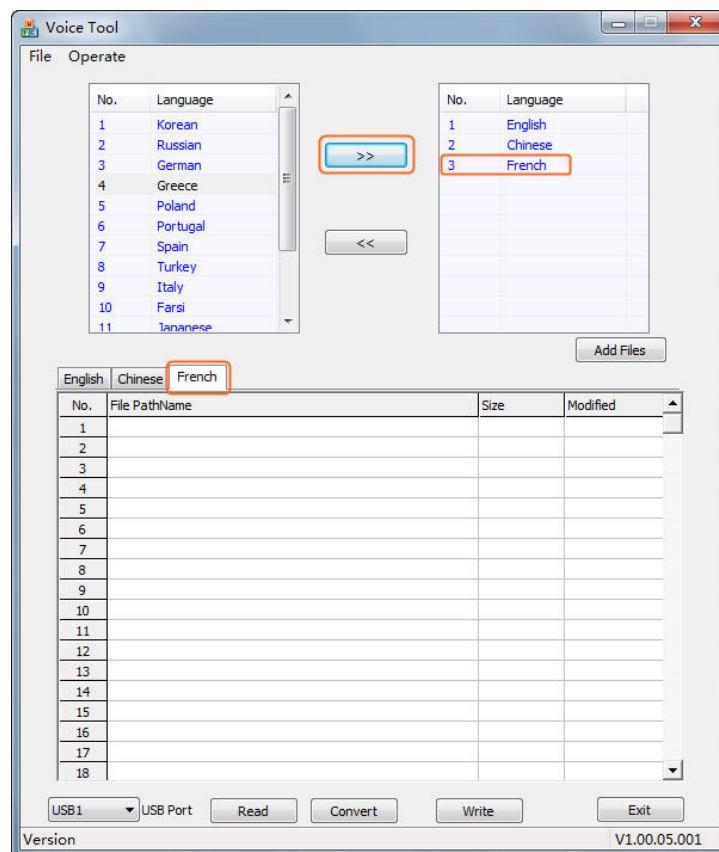
voice files in .wav format, and the files must be from 1.wav to 16.wav. Total size of the Resource folder (including the voice files exported from the radio and the to-be-added ones) must be within 512Kb.

- Radios with firmware version R8.0 or above: The number of the voice file in each new created folder must be the same as that of the radio. The voice files must start from 1.wav and must be in order. For example, it's the correct configuration to contain the files from 1.wav to 10.wav, but not to contain the files from 1.wav to 5.wav then 7.wav to 10.wav (without 6.wav). Total size of the resource folder (including the voice files exported from the radio and the to-be-added ones) must be within 800Kb.

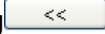
Step 6 Select the language type of the voice files.

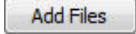
You can add the files in 10 languages at most.

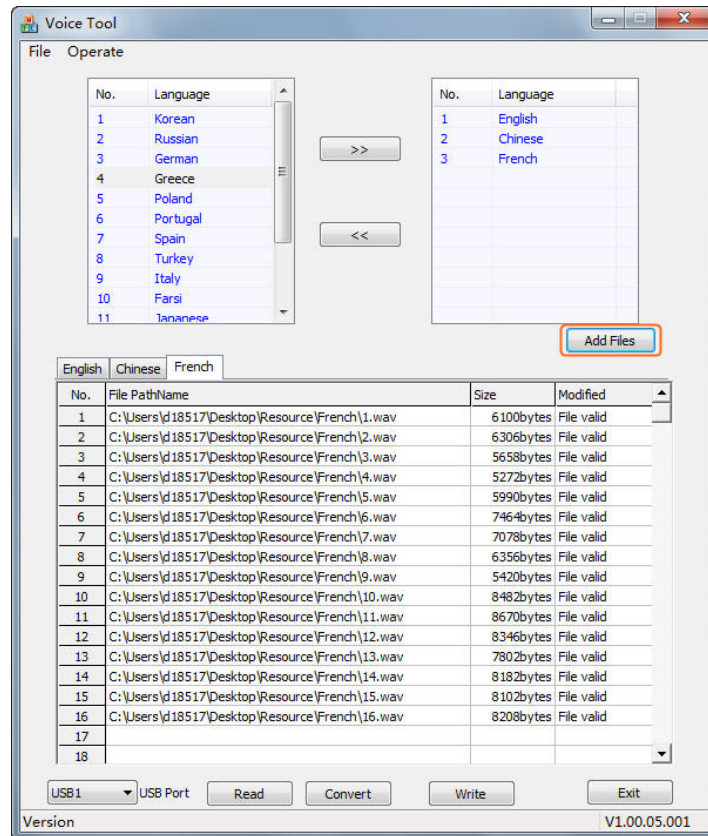
1. Click the required language, e.g. French, from the box on the top left of the Voice Tool interface.
2. Click  to add the selected language into the language box on the right. Now a tab named after the selected language appears above the voice file list. See the parts in the orange circles below:



Note:

By clicking , you can delete your selected language from the box on the right. Meanwhile, the corresponding voice files in the voice file list will be deleted as well.

Step 7 Click  to choose the folder (E:\VoiceTool\Resource\French) of the voice files to be added, and import the files to the Voice Tool as shown below.



 Note:

- In the list above, each No. is corresponding to the channel number on the knob. For instance, No.1 is corresponding to Channel 1.
- The voice files will be imported in a sequence of their names.

Step 8 Click “Write” and the voice files are converted to the voice data which is written into the radio.

After the data is written, the radio restarts automatically to enable the voice setting.

 Note:

- To set the information of the voice files quickly, you can save all the information, including the language type and the saving path of the files, into the configuration file in .ipc format by selecting “File -> Save Configuration File” at the top left corner of Voice Tool software. You can import the configuration file to the software when you need by selecting “File -> Open Configuration File”. You can also create a configuration file to save the voice file information by selecting “File -> New”.

- You can convert the voice files into **.bin** format by pressing “Convert” in the Voice Tool. The **.bin** file contains all the voice data. You can write the voice data of the **.bin** file into the radio by flash burn (Go to “Operate -> Burn .Bin File”). If error occurs when writing the voice data, please send the **.bin** file to the Company for help.

3.2.2 Setting Broadcast Language

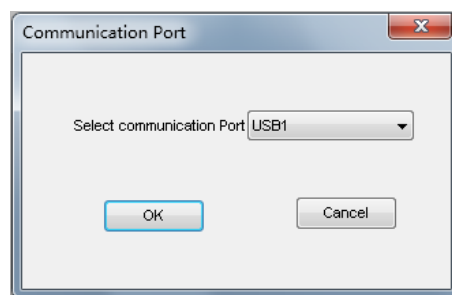
The broadcast language can be set only via the CPS.

Step 1 Run the CPS.

Step 2 Read from radio.

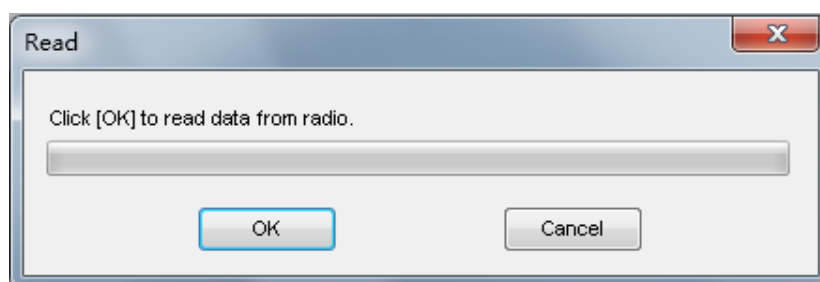
1. Select “Program -> Read from Radio” in the tool bar or click the button .

The following dialog box pops up.



2. Select the corresponding USB port, e.g. USB1 for the radio.

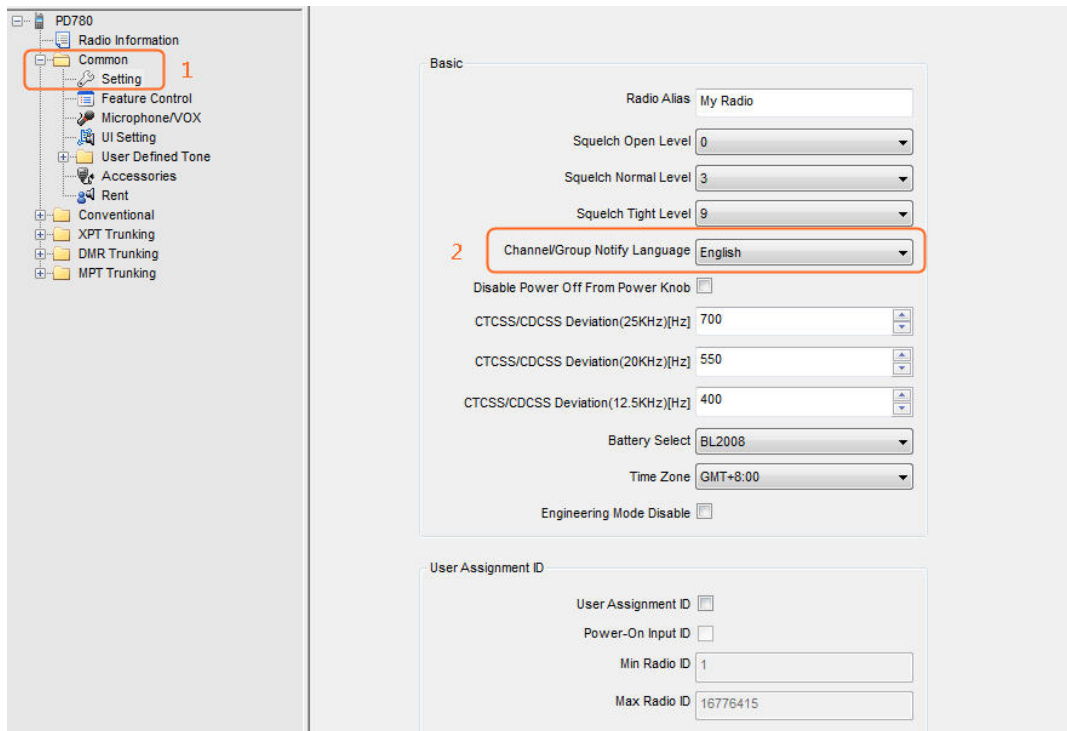
The following dialog box pops up.



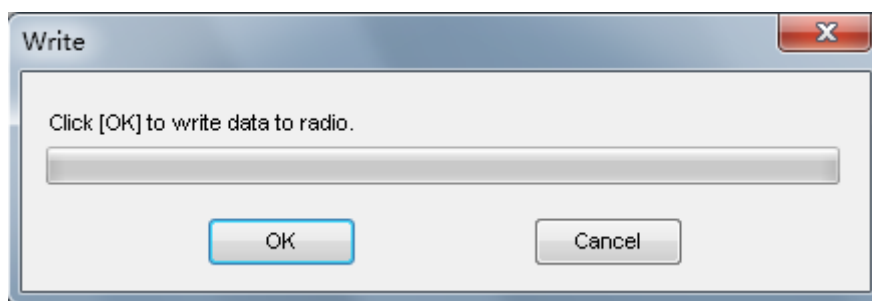
3. Click “OK” to read data from the radio.

Step 3 After reading data from the radio, the model No. appears on the top left of the CPS main interface. Set the “Channel/Group Notify Language”.

1. Select “Common -> Setting -> Basic”.
2. Set the value of the parameter “Channel/Group Notify Language”.

**Step 4** Write to Radio.

1. Select "Program -> Write to Radio" in the tool bar or click the button , and then the "Write" dialog box pops up as follow.



2. Click "OK" to write the setting information into the radio
The radio will restart automatically to enable the voice setting.

4. FAQ

4.1 Failed to Open Voice Tool Software

Problem

Fail to open the voice tool software when going to “Start -> All Programmers -> Hytera RCPs -> Customer Programming Software -> Voice Tool”.

Analysis

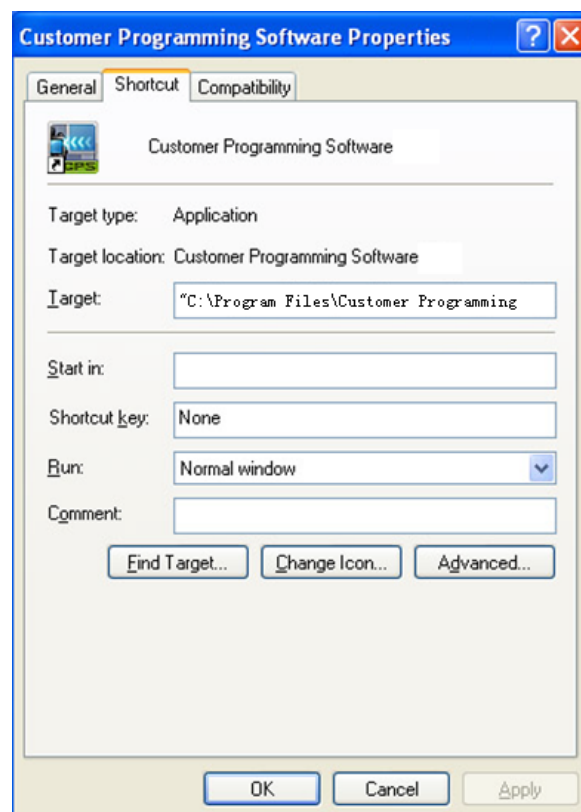
The voice tool software fails to register automatically during the installation of CPS.

Solution

Please operate as follows.

Step 1 Get the target of CPS.

1. Right-click the desktop shortcut of CPS and select “Properties”. The following window appears.



2. Click “Find Target” to view the installation directory of CPS.

Step 2 Check whether the file MSFLGRD.OCX is in the installation directory of CPS.

- If no, please contact the Company to get the MSFLGRD.OCX file, then continue with the following steps.

- If yes, continue with the following steps.

Step 3 Select “Start -> All Programs -> Accessories” at the bottom left of the PC.

Step 4 Right click the “Command Prompt” and select “Run as the Administrator”.

Step 5 Enter register command: regsvr32 "CPS Target path"MSFLXGRD.OCX. in command box.

For example: regsvr32 "C:\Program Files\Customer Programming Software"MSFLXGRD.OCX

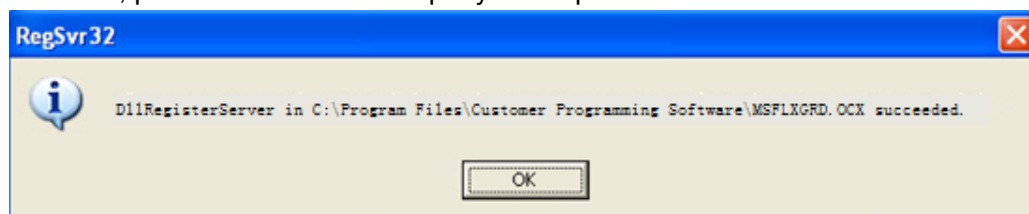


Note:

- There should be space between “regsvr32” and "CPS Target path" in the register command.
- The "CPS Target path" in the register command should be enclosed by double quotation marks.

Step 6 Click “OK”.

If the following dialog box appears, the voice tool software has been registered successfully. Otherwise, please contact the Company for help.





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