



# **Text & Voice Dispatch Software User Manual**

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As a leading supplier of professional wireless communications equipment and solutions, Hytera provides a series of software for the worldwide customers to help customers to further understand our DMR products. This software is:

- Free of charge
- Small and simple
- Easy to configure and use
- For basic use only
- Available online for download

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tools to help your business. Hytera retains the rights to change the products based on the feedbacks received.

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# Documentation Information

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

## Documentation Conventions

### Instructional Icons

Icon	Description
 <b>Tip</b>	Indicates information that can help you make better use of your product.
 <b>Note</b>	Indicates references that can further describe the related topics.
 <b>Caution</b>	Indicates situations that could cause data loss or equipment damage.
 <b>Warning</b>	Indicates situations that could cause minor personal injury.
 <b>Danger</b>	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”.
<b>Bold</b>	The text in boldface denotes the name of a hardware button. For example, press the <b>PTT</b> 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
V1.0	03-2014	Initial release
V1.1	05-2014	The first time revise

# 1. Brief Introduction

Text & Voice Dispatch is an application based on Hytera DMR API, which support text & voice messages with terminals. It mainly faces to customers that take orders as communication manner.

This application guarantees time and smooth of working commusnication, and at the same time, it keeps professional and effective working environment.

Only one free solution is allowed to connect with a dispatch station at the same time.



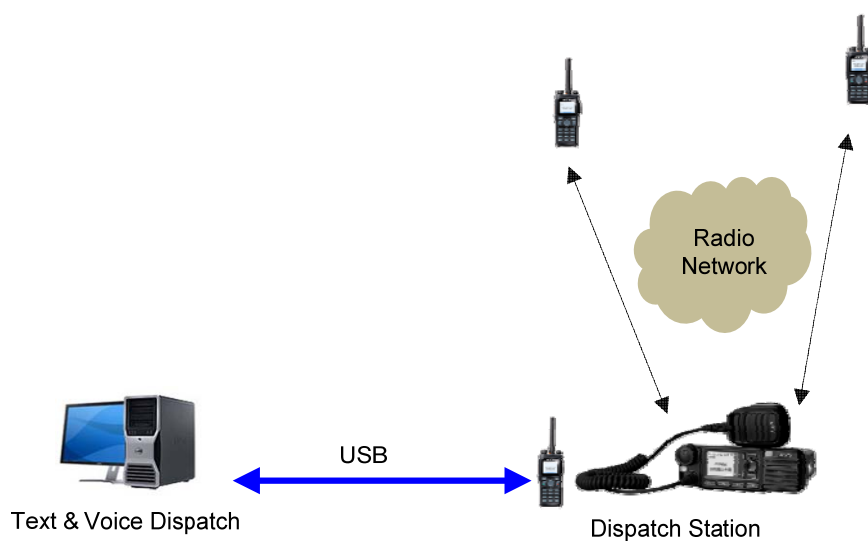
**Note:** For the Text & Voice Dispatch to work correctly, it is recommended to turn off the computer firewall.

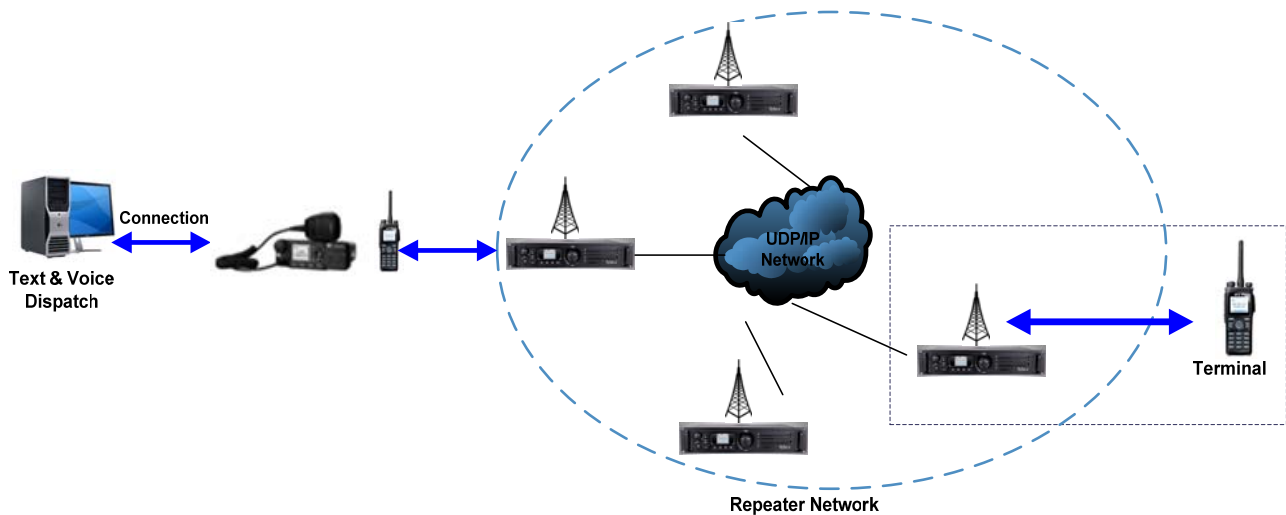
## 1.1 Typical Application Scenarios

Text & Voice Dispatch supports both text and voice operation. For text, it supports both private and group text messaging. For voice, it supports private, group and all call. It takes command center as the core, processes work dispatching and reporting through sending and receiving text & voice messages with executives.

There are message logs for both the text and voice operation for later retrieval. Timing triggered message is also a feature embedded into this tool to enhance the usability

### 1.1.1 Scenario One





Figures above illustrate one of the use cases for Text & Voice Dispatch.

Text & Voice Dispatch uses portable or mobile as a dispatch station via USB. You can send text & voice messages to target terminals via radio network or UDP/IP network between dispatch station and target terminals. In this kind of scenario, you can send both text and voice messages.

### 1.1.2 Scenario Two

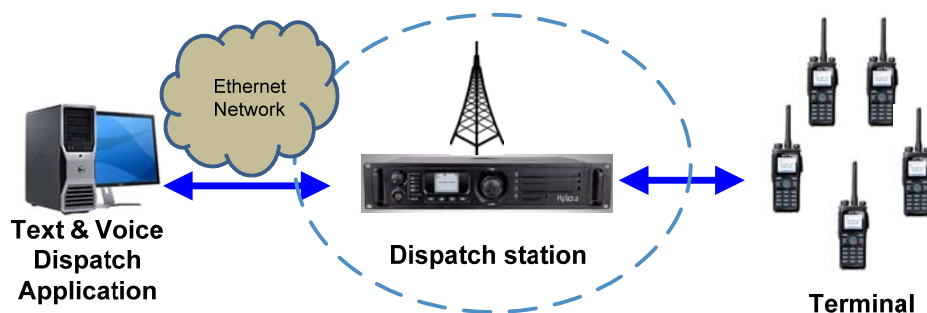


Figure above illustrates another use case for Text & Voice Dispatch.

Text & Voice Dispatch uses repeater as a dispatch station via IP network. You can send text messages to target terminals via radio network between dispatch station and target terminals.



**Note:** Repeater as the Dispatch Station only supports text message. It does not support the voice dispatch.

## 2. Before Use

### 2.1 Prerequisite


Please prepare the resources in the following list.

Item	Description
PC	Operating System: Windows XP/ Windows 7 This guide takes Windows 7 as the example. As for the USB driver, please refer to the <b>Hytera USB Driver Installation User Guide</b> of V5.30.42.0.
CPS	The Text & Voice Dispatch software is included in the program of CPS R5.5 or above. Please make sure the CPS is installed properly before using this software. In this guide, we take CPS V5.05.xx.xxx as the example.
Mobile	The Text & Voice Dispatch software is applicable to the mobile of R5.5 or above.
Programming Cable for Mobile	The programming cable is used to configure the Terminal radio. The detail information, please refer to the mobile's user manual. The Third Party can get the manual from Hytera local sales.
Dispatch Cable	It is used to connect Dispatch Station and PC that has been installed Gateway software. There is audio input, audio output and USB port at the end that connect to the PC, and the other end is used to connect to Dispatch Station through the 26-PIN port

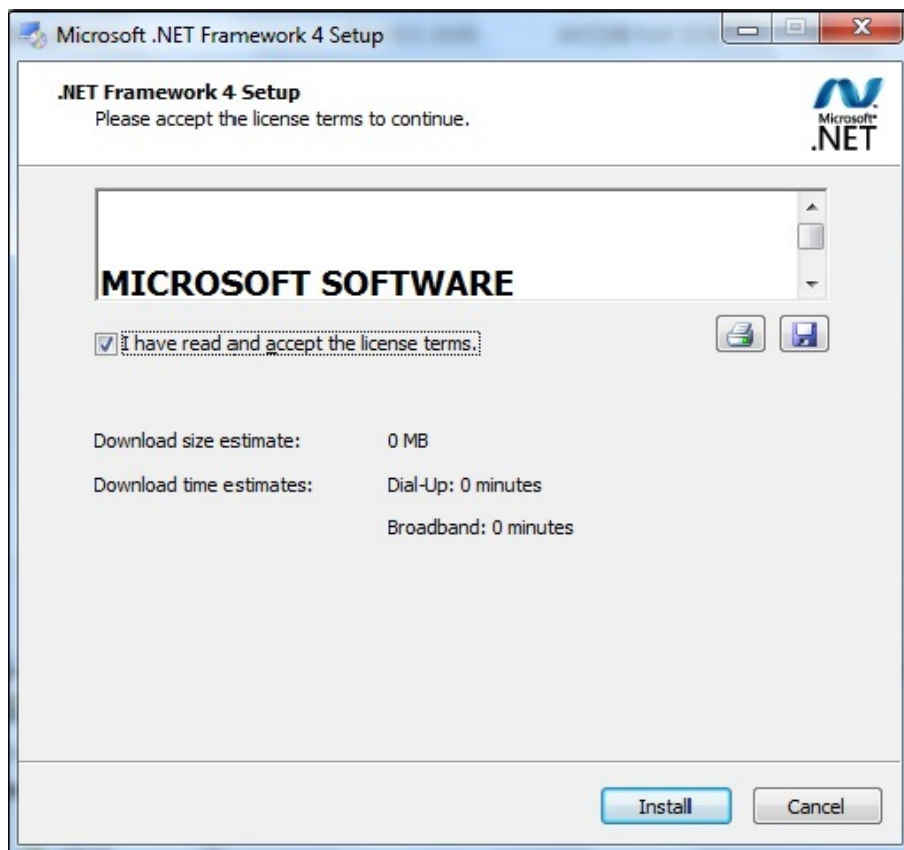


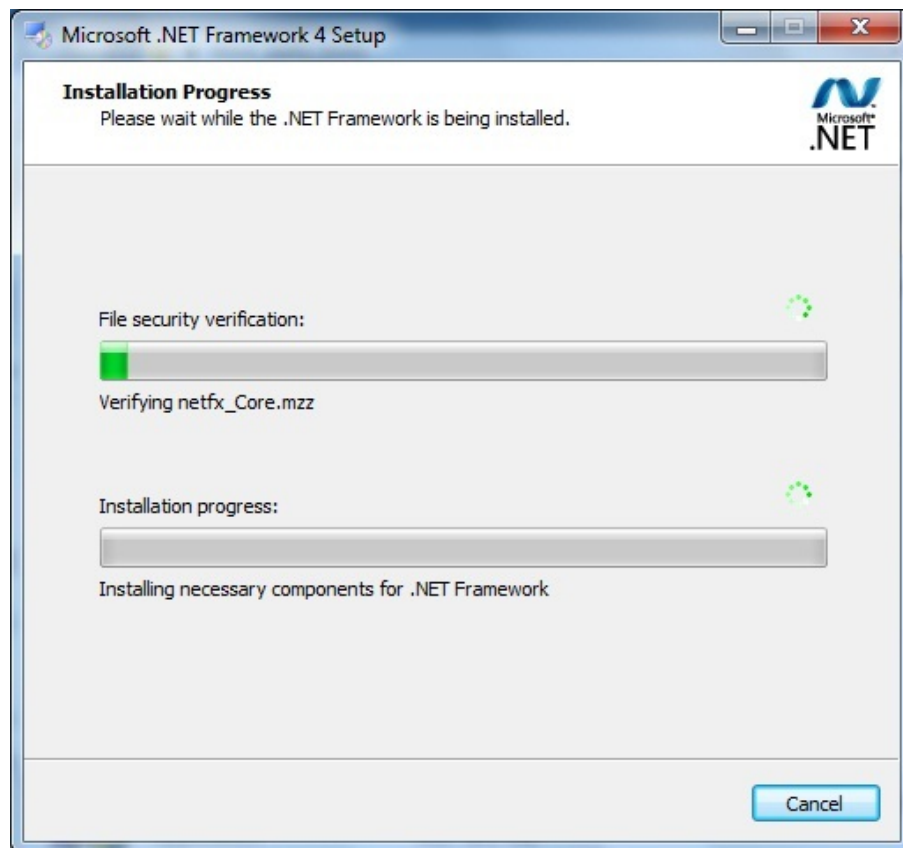
## 3. Software Installation

### 3.1 .Net Framework 4.0 Installation

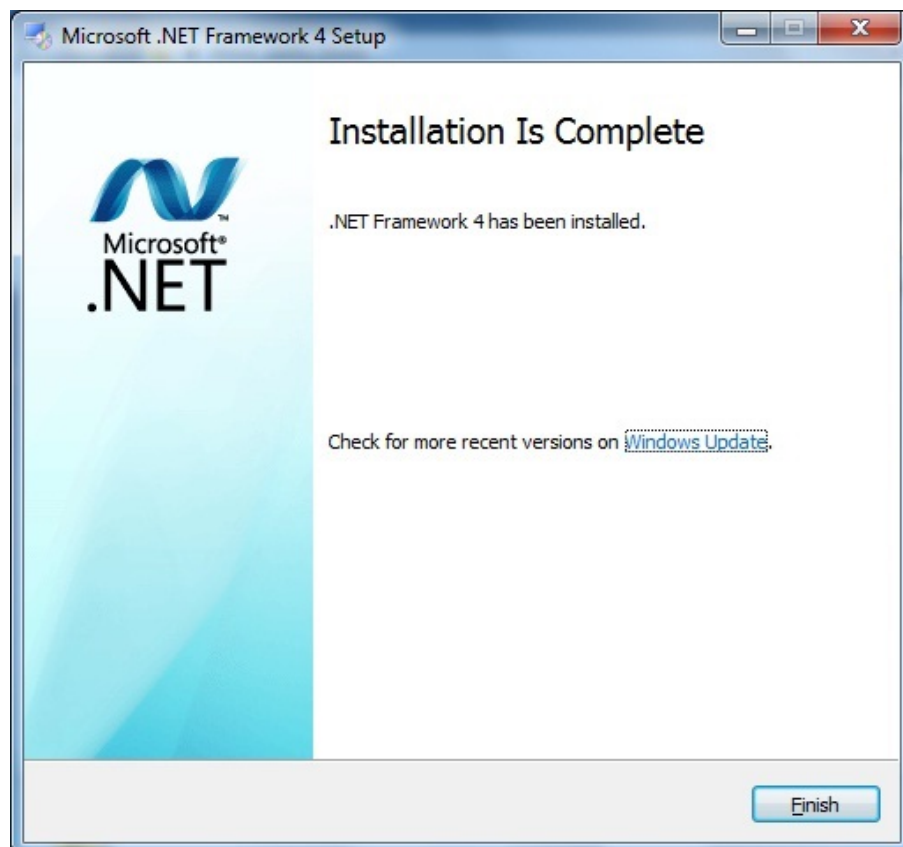
**Step 1.** Find dotNetfx40.exe “third\_party\_tools” file in the archive directory. Double-click Net Framework 4.0 installation package.  dotNetfx40.exe .

**Step 2.** Click "Install".





**Step 3.** Click "Finish" to complete the Net Framework 4.0 installation.



## 3.2 vcredist\_2010\_x86 Installation

**Step 1.** Find the vcredist\_2010\_x86 file from “third\_party\_tools” directory and unzip it.

**Step 2.** Double-click the installation “vcredist\_2010\_x86.exe”. Install it by default.

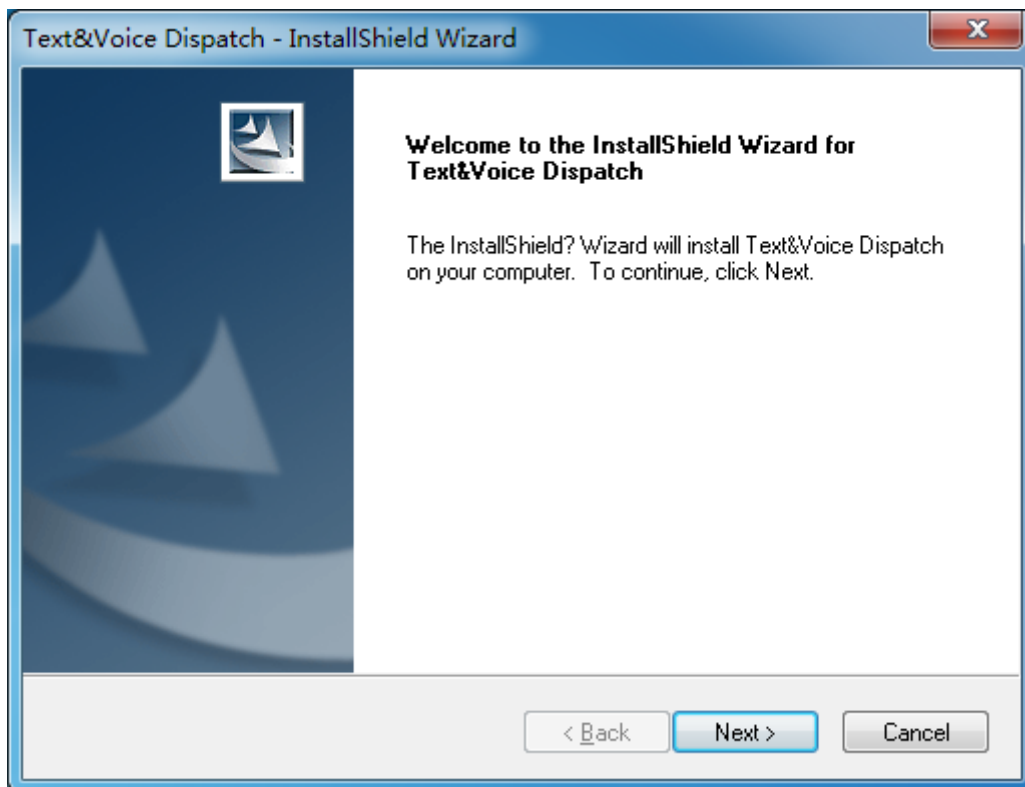


Note: In Win XP, you need to install vcredist\_2008\_x86.exe and vcredist\_2010\_x86.exe. In Win 7, you just need to install vcredist\_2010\_x86.exe.

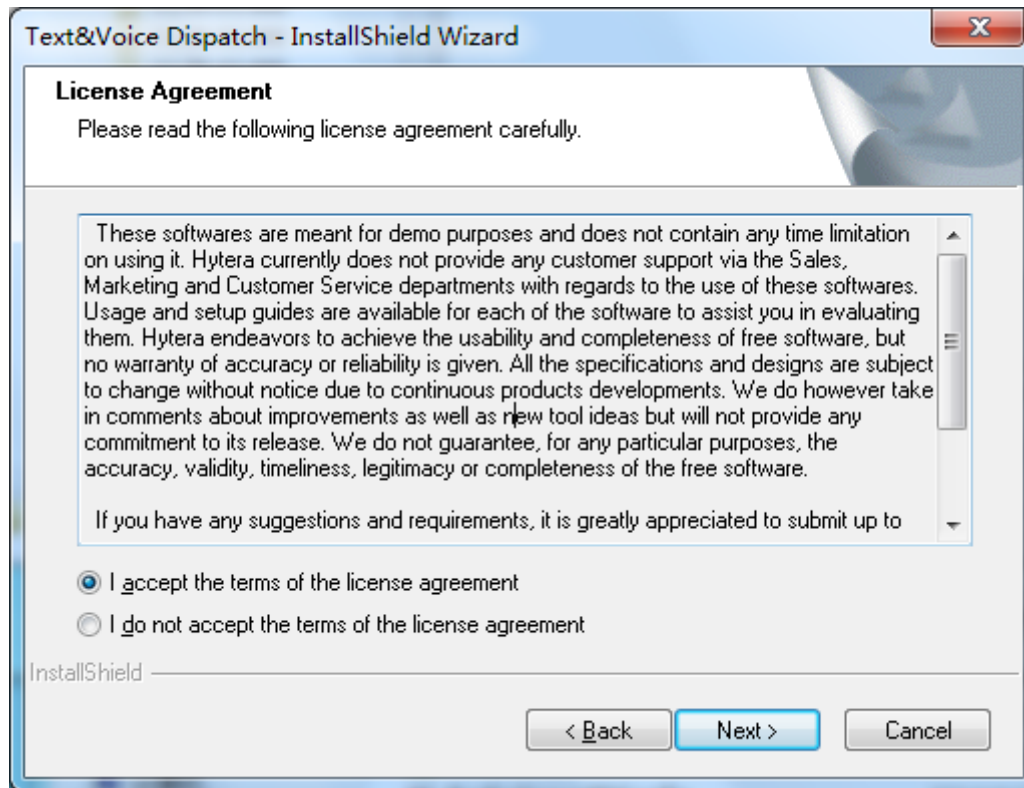
## 3.3 Text & Voice Dispatch Installation

**Step 1.** Find Setup.exe in the compressed package, double-click the installation Setup.exe.

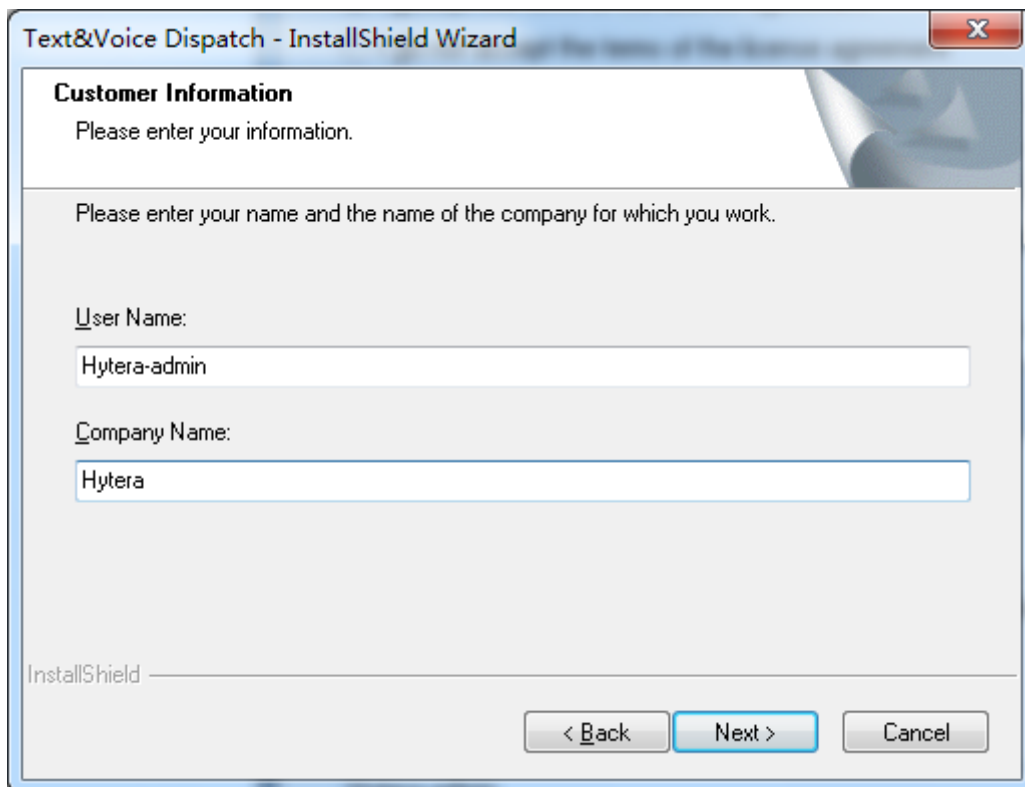
**Step 2.** Click on "Next".



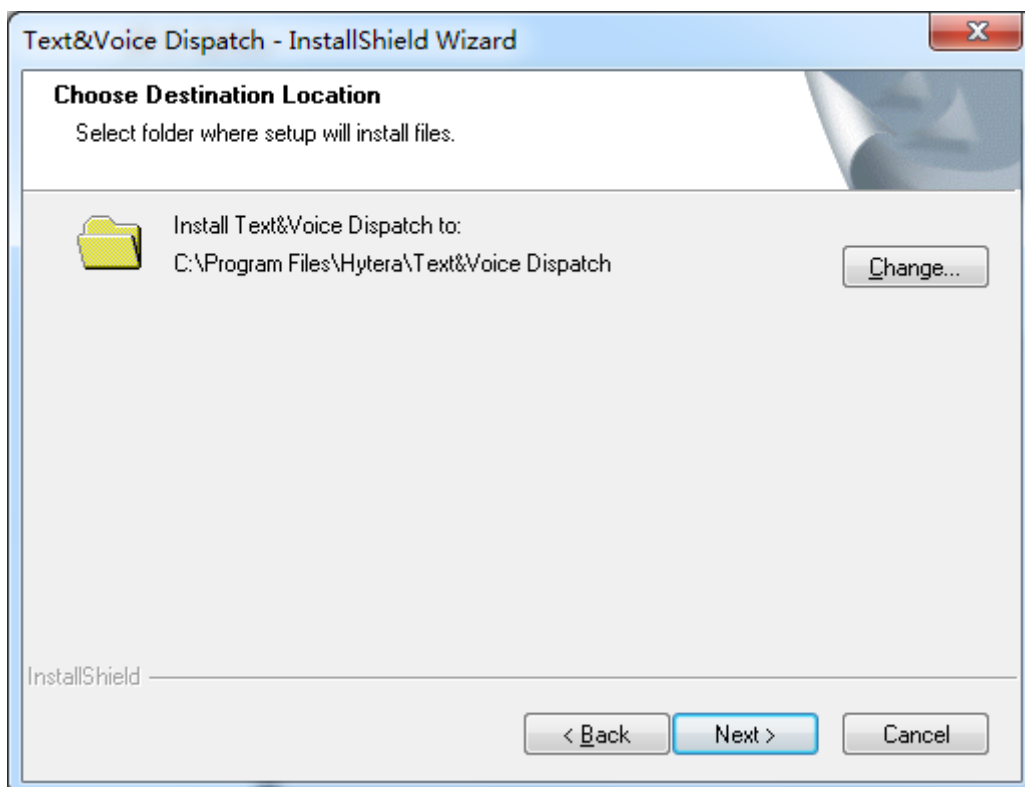
**Step 3.** Choose consent statement, click on "Next".



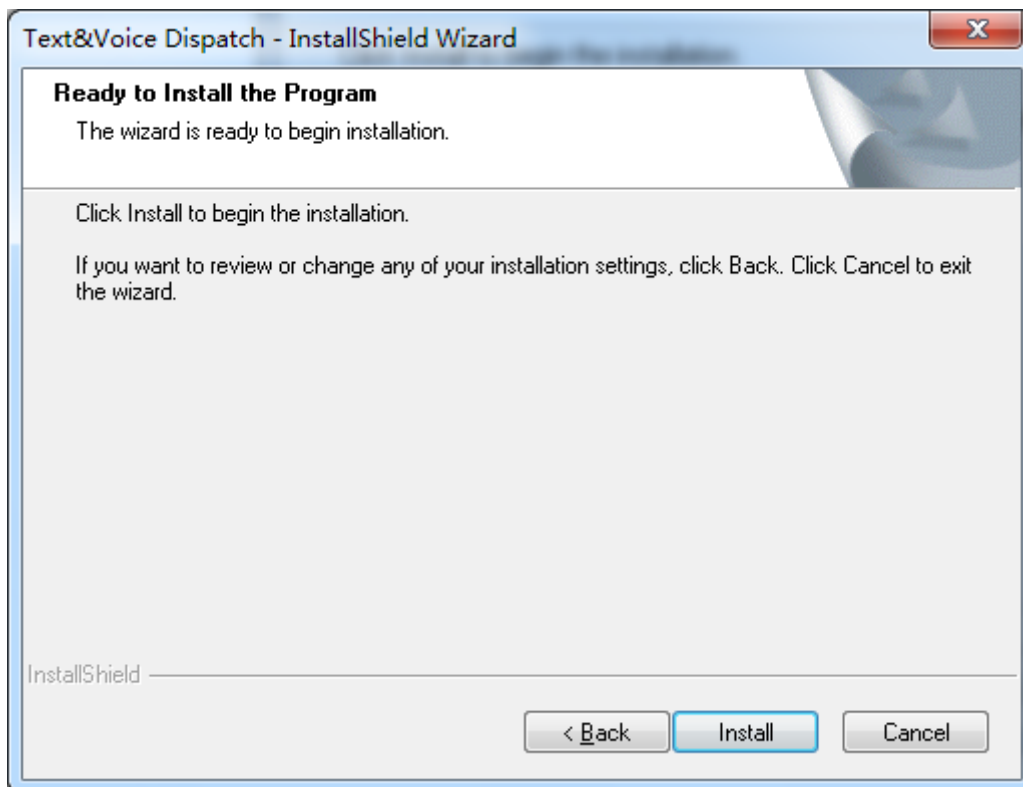
**Step 4.** Enter the User Name and Company Name, click "Next".



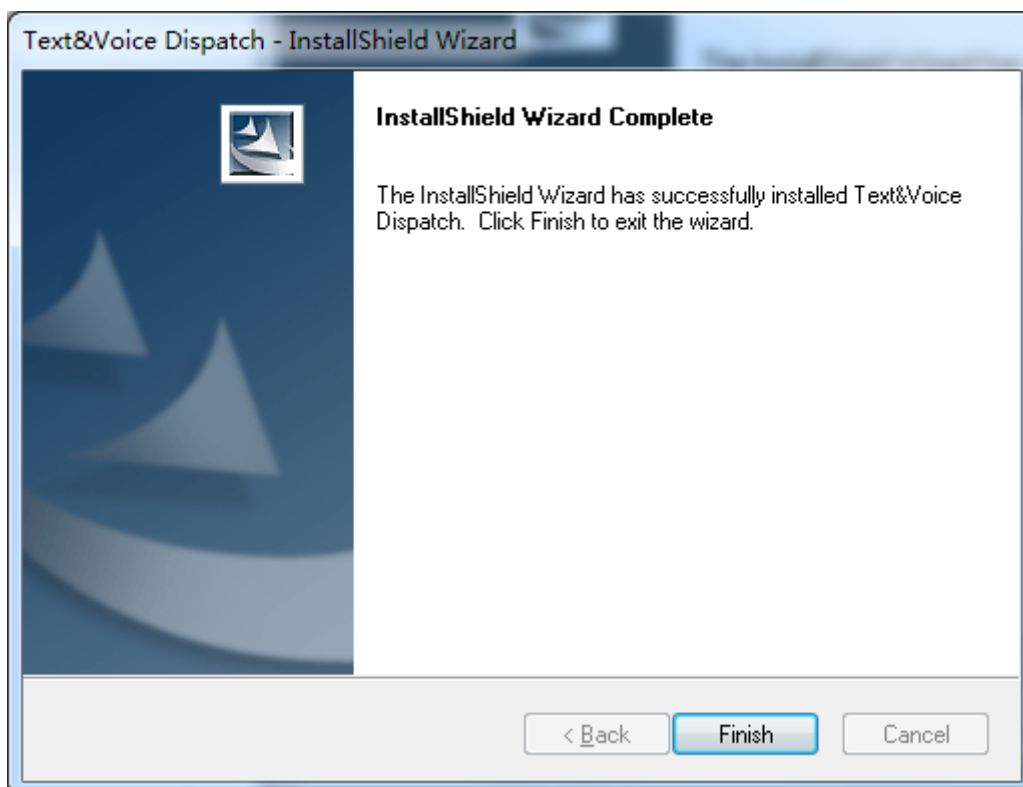
**Step 5.** Select the installation path, click "Next".



**Step 6.** Click "Install".



**Step 7.** Click "Finish" to complete the installation.

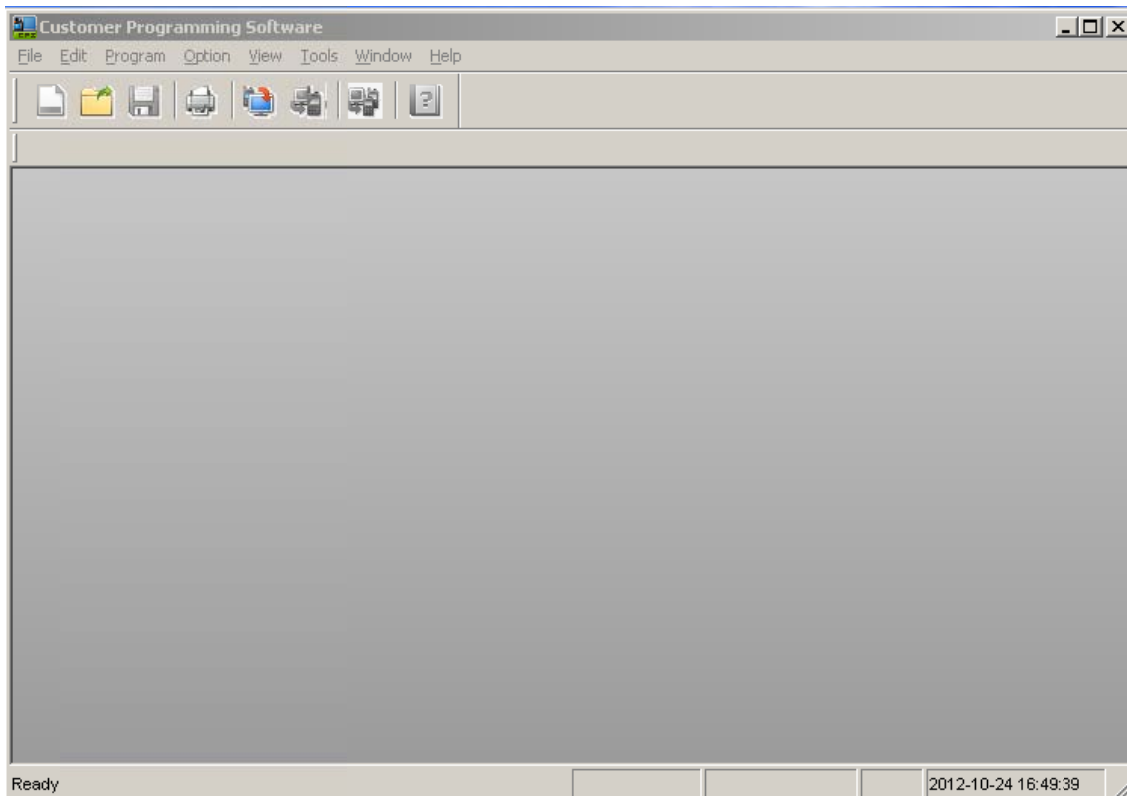



## 4. Text & Voice Dispatch Configuration

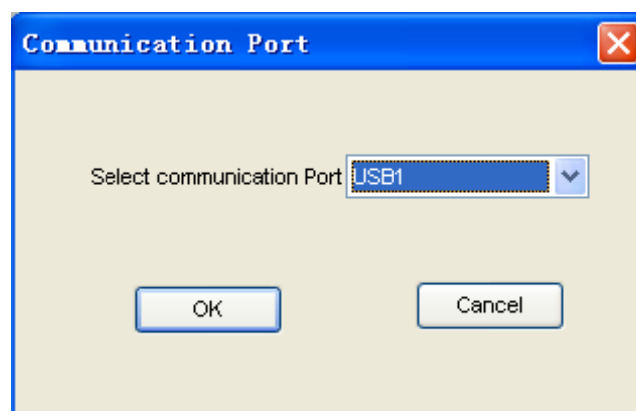
### 4.1 Dispatcher Station Configuration

#### 4.1.1 Dispatch Station - Mobile Configuration

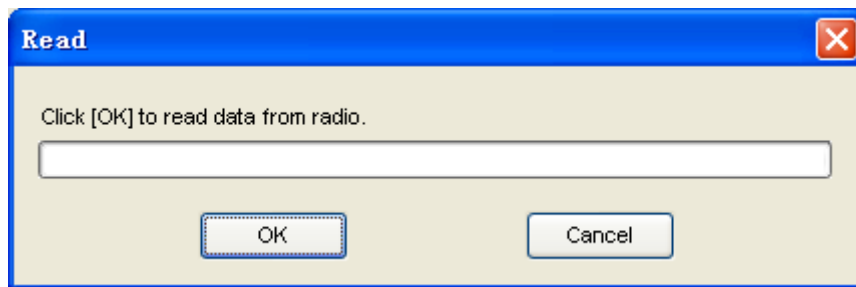
**Step 1.** Run the CPS and enter its main interface.



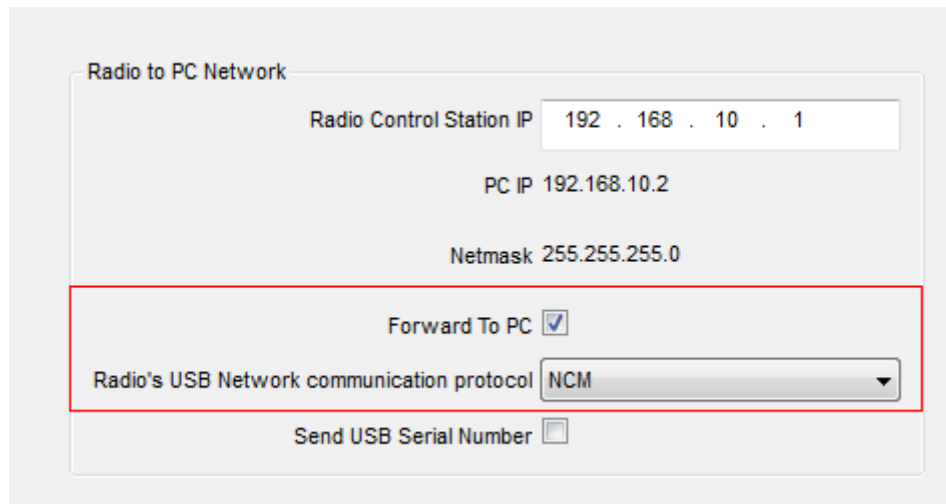
**Step 2.** Select "Program -> Read From Radio" or click , you will see the pop-up "Communication Port" dialogue box.



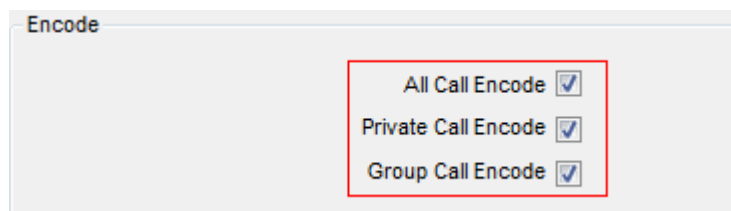
**Step 3.** Select the corresponding USB port (e.g.: USB1) for the MD78X, and click “OK” to enter the “Read” dialogue box.



**Step 4.** Select "Conventional -> General Setting -> Network", check the box "Forward to PC" in the "Network" area, select "NCM" in "Radio's USB Network communication protocol". Default value is suggested in Radio Control Station IP. It also can be set according to user's configuration, but the last digit must be 1.



**Step 5.** Select "Conventional -> DMR Service -> Basic", in the "Encode" area check the box "All Call Encode", "Private Call Encode", "Group Call Encode".



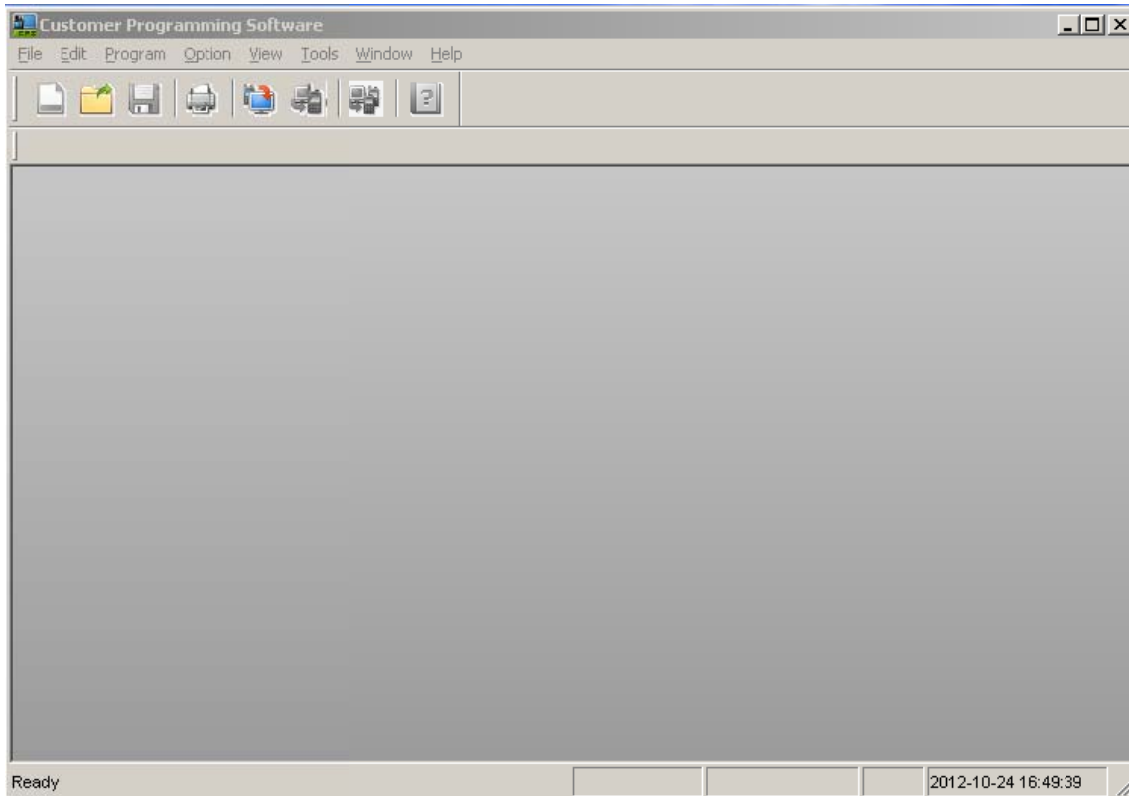
**Step 6.** Select “Program -> Write To Radio” or click , and the “Communication Port” box will pop up.


**Step 7.** Click “OK” to write the configure information into the MD78X. When the information is written, the MD78X will restart automatically to make the setting effective.



## 4.1.2 Dispatch Station - Repeater Configuration

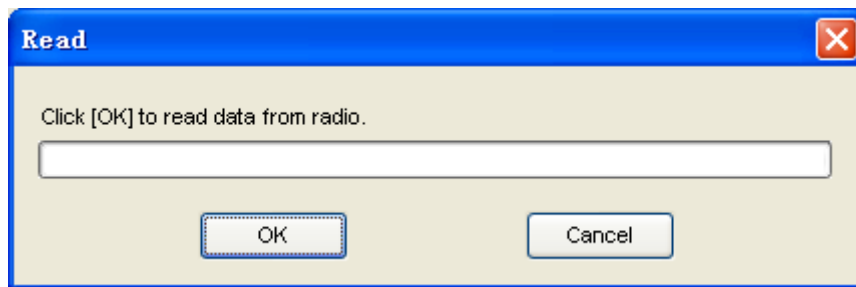
**Step 1.** Run the CPS and enter its main interface.



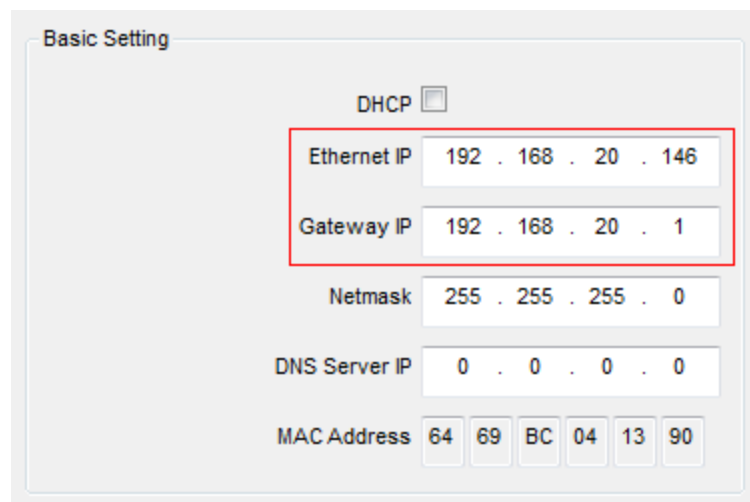
**Step 2.** Select "Program -> Read From Radio" or click , you will see the pop-up "Communication Port" dialogue box.



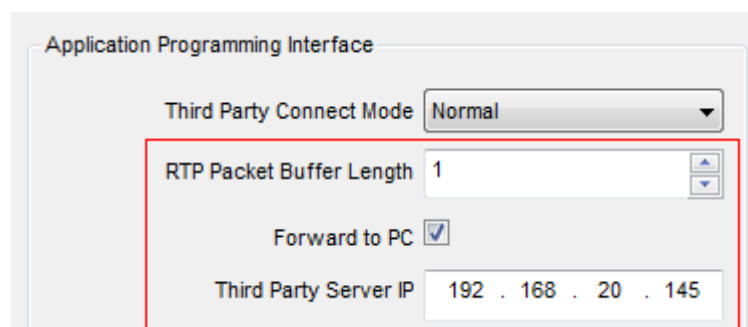
**Step 3.** Select the corresponding USB port (e.g.: USB1) for the RD98X, and click “OK” to enter the “Read” dialogue box.



**Step 4.** Select "Conventional -> General Setting -> Network", Ethernet IP is the IP address of repeater. Gateway IP should be correct. Following figure shows normal IP settings.



**Step 5.** Select "Conventional -> General Setting -> Network". In the "Network" area, check the box "Forward to PC". The default value of “RTP Packet Buffer Length” is 1. If it is in Ethernet, you can set to 3 or above. “Third Party Server IP” is the IP address of PC.

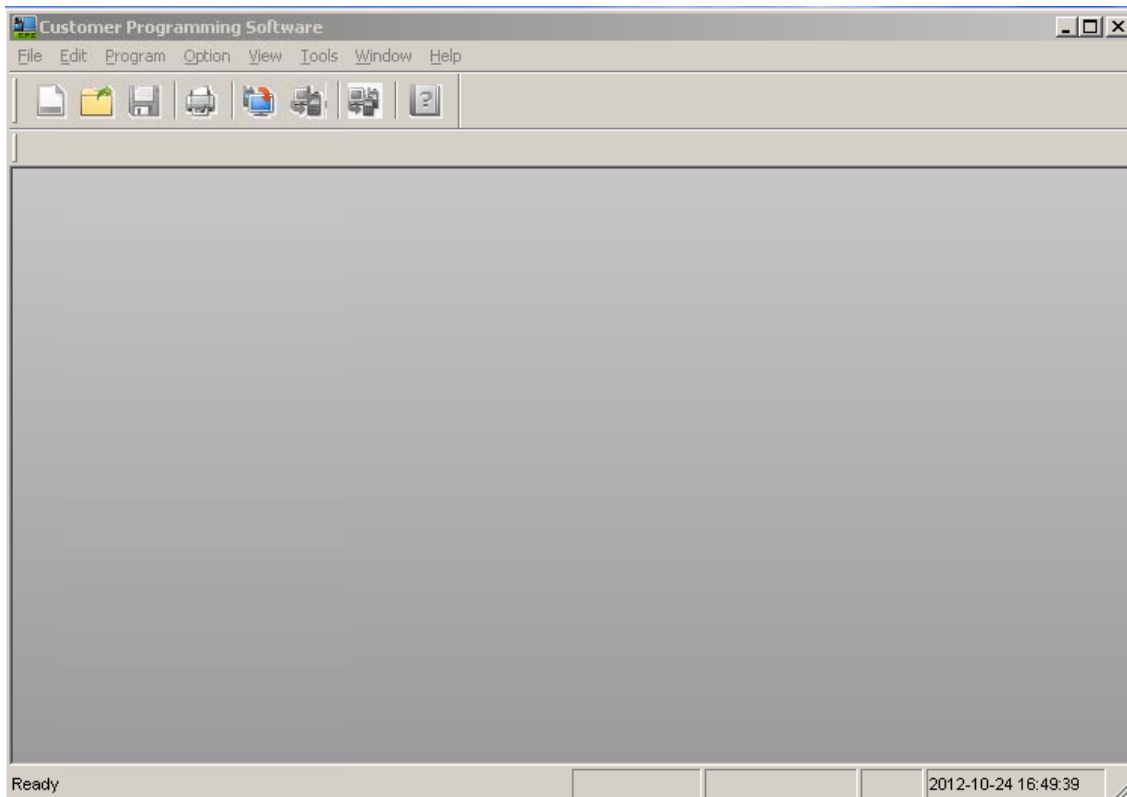



**Step 6.** Select “Program -> Write To Radio” or click , and the “Communication Port” box will pop up.

**Step 7.** Click “OK” to write the configure information into the RD98X. When the information is written, the RD98X will restart automatically to make the setting effective.

## 4.2 Terminal Configuration

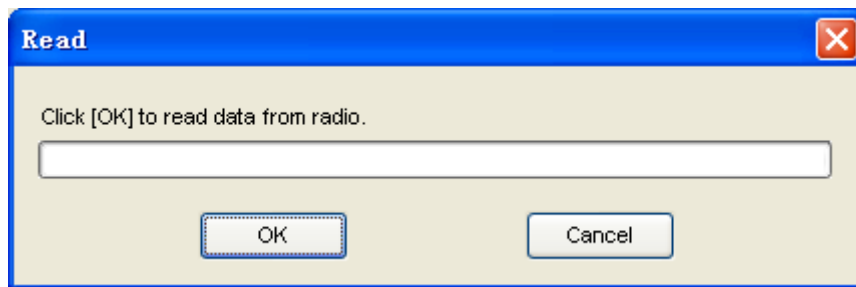
**Step 1.** Run the CPS and enter its main interface.



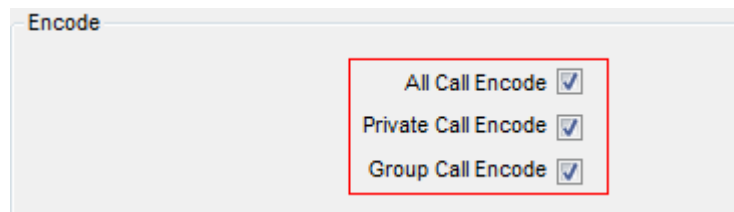
**Step 2.** Select "Program -> Read From Radio" or click , you will see the pop-up "Communication Port" dialogue box.



**Step 3.** Select the corresponding USB port (e.g.: USB1) for the PD78X, and click “OK” to enter the “Read” dialogue box.



**Step 4.** Select "Conventional -> DMR Service -> Basic". Check the box "All Call Encode", "Private Call Encode", "Group Call Encode" in the "Encode" area.

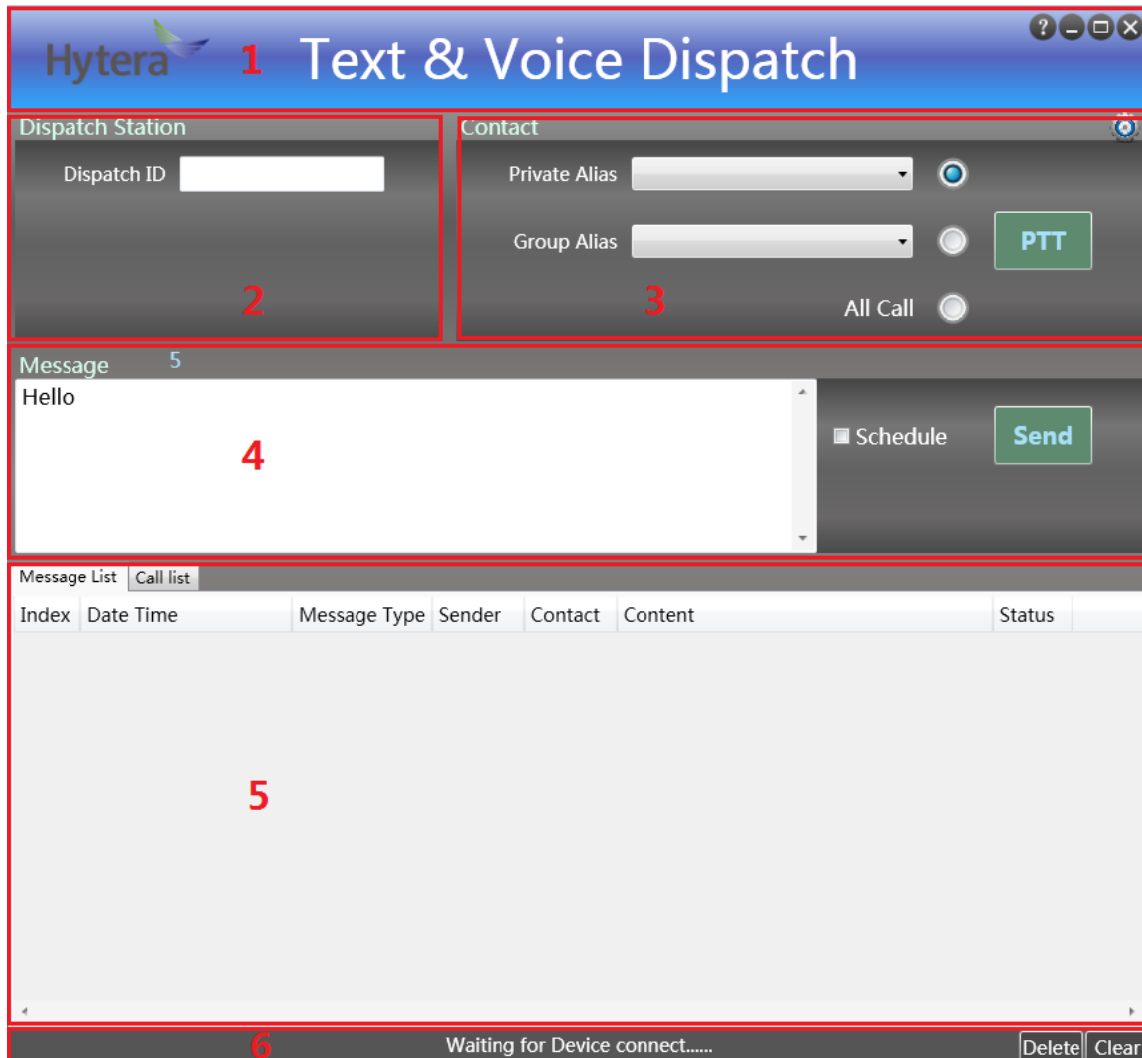


**Step 5.** Select “Program -> Write To Radio” or click , and the “Communication Port” box will pop up.


**Step 6.** Click “OK” to write the configure information into the PD78X. When the information is written, the PD78X will restart automatically to make the setting effective.

## 5. Text & Voice Dispatch

### 5.1 Main Interface of Text & Voice Dispatch



Default view layout introduction:


Area 1: Title bar (click  to display information of version).

Area 2: Dispatch Station's ID. If taking repeater as dispatch station, slot is selectable.

Area 3: Call contact area.

Area 4: Text message area. If "Schedule" is unchecked, it will send command in real time.

Area 5: Message list/ Call list.

Area 6: Status bar (click  to pop up the configuration window, click  to clear the query list)

## 5.2 Configuration Guide

Below are the step by step guides to configure the Text & Voice Dispatch to be used with the radio:



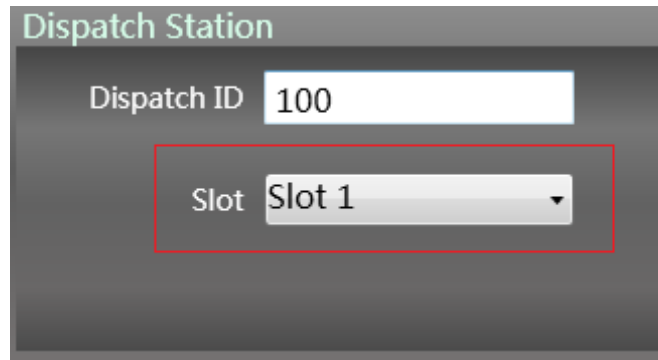
**Note:** The following operation is an example taking mobile as the dispatch station.

**Step 1.** Please connect the Dispatch Station – Mobile to PC via USB. (If taking repeater as the dispatch station, please connect it via IP).

**Step 2.** Run the Text & Voice Dispatch and enter its main interface.

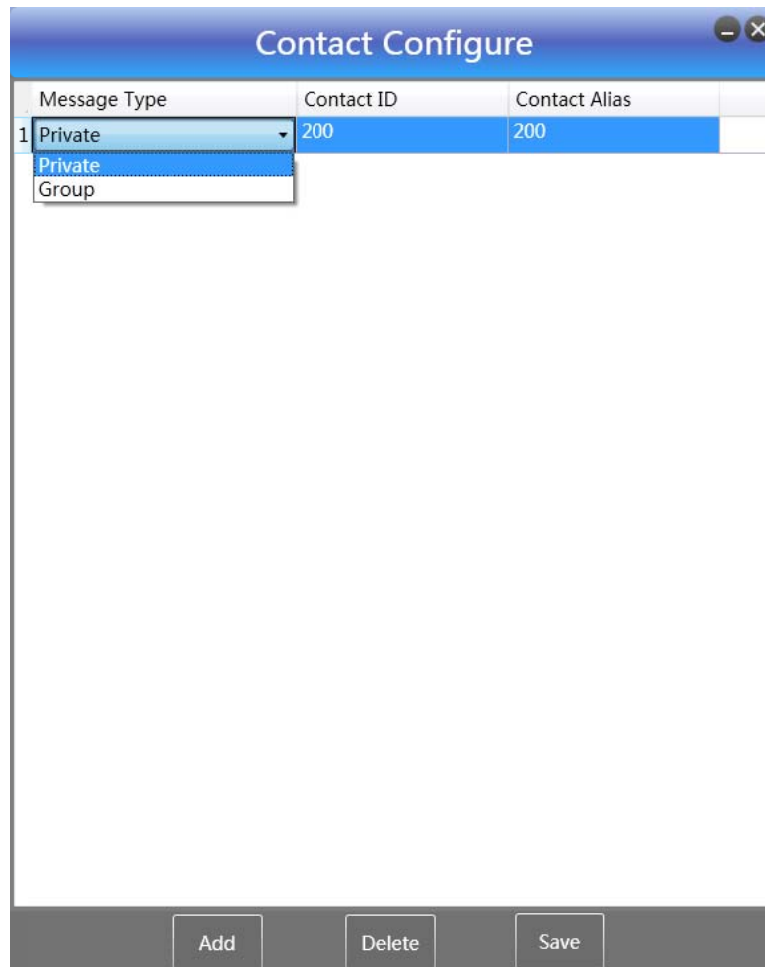
**Step 3.** The application will automatically connect the Dispatch Station. After it is online, it will prompt "Device: XX is connected". "XX" indicates the Dispatch Station ID.

If taking repeater as dispatch station, you can choose slot to send text & voice messages.



The image shows a 'Dispatch Station' configuration window. It has a title bar with the text 'Dispatch Station'. Inside, there is a 'Dispatch ID' label followed by a text input field containing the number '100'. Below this, there is a 'Slot' label followed by a dropdown menu currently showing 'Slot 1'. A red rectangular box highlights the 'Slot' dropdown menu.

**Step 4.** Click  to add/ delete/ save the contact list.



The image shows a 'Contact Configure' window with a table and three buttons at the bottom.

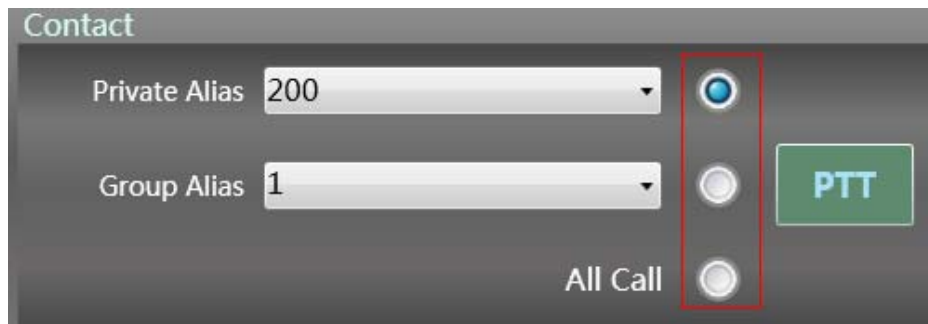
	Message Type	Contact ID	Contact Alias
1	Private	200	200

A dropdown menu is open for the 'Message Type' column, showing 'Private' (selected) and 'Group'.

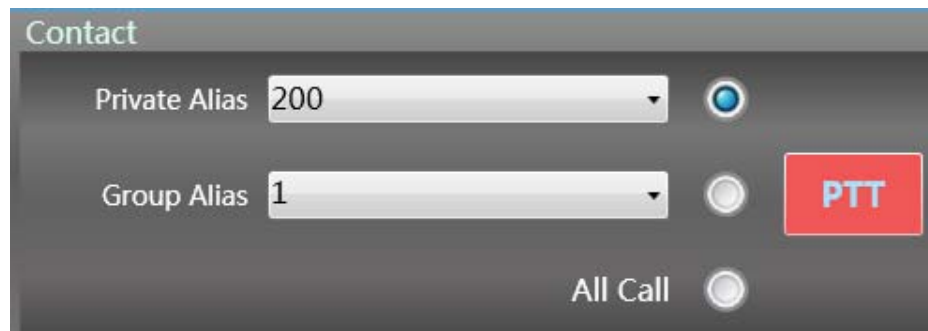
Buttons at the bottom: Add, Delete, Save.

You can double click "Message Type" and modify it. "Contact ID" range is 1-16776415. Length of Alias is 16 characters. "Add" or "Delete" the contact, click "Save" button to save contacts.

**Step 5.** The tool supports “Private Alias” ,”Group Alias” or “All Call”,




Click “PTT” button in green to initiate a call. Click “PTT” in red to end the call.



**Tip:** Text & Voice Dispatch does not support microphone input and output on PC. Voice input and output are operated on dispatch station. Users can purchase Hytera microphone to make it effective on PC.

In “Call list” area, you can see call status and talk time.

Index	Date Time	Call Type	Contact	Talk Time	Status
1	14-04-04 11:11:56	Private	200		Outgoing call



**Outgoing call: 200**

Calling.....

00:00:01



**Step 6.** Edit message, click "Send" button. If "Schedule" is unchecked, it will send message in real time.

Message 5

Hello

☐ Schedule Send

**Step 7.** If "Schedule" is checked, it will send the message according to the time set by user.

Message 5

Hello

☒ Schedule Queue

2014/4/4 10 : 58

**Step 8.** In "Message list" area, you can see the real time message and schedule message.

Message List <span>Call list</span>							
Index	Date Time	Message Type	Sender	Contact	Content	Status	
1	2014-04-04 11:23:35	Private_Message	100	200	Hello	success	
2	2014-04-04 11:30:00	Private_Message		200	Hello	pending	
3	2014-04-04 11:30:00	Private_Message		200	Welcome	pending	

**Step 9.** In the bottom, click "Delete" to delete the selected item in Message list or Call list. Click "Clear" to clear all items in Message list or Call list.



**Tip :** If you want to see more historical data, open the file (csv format) in folder "Data" under installation directory.

## 6. FAQ

### 6.1 Opening the Text & Voice Dispatch software failed

#### Phenomenon

Select "Start -> All Programs -> Hytera RCPs -> Text & Voice Dispatch software -> Text & Voice Dispatch", but the Text & Voice Dispatch software cannot be opened.

#### Analysis

. Net Framework 4.0, vcredist\_2008\_x86 or vcredist\_2010\_x86 not installed correctly.

#### Solution

Need to be properly installed. Net Framework 4.0, vcredist\_2008\_x86 or vcredist\_2010\_x86.

Please refer to [3.1](#) and [3.2](#).

### 6.2 Under USB connection, Dispatch Station is connected to PC, but display offline

#### Phenomenon

Under USB connection, Dispatch Station is connected to PC, but display offline still (about 1 minute later).

#### Analysis

1. USB Driver is not installed correctly.
2. Dispatch Station CPS setting is not correctly, Make sure "Network/Forward To PC" is checked.

#### Solution

1. Need to be properly installing USB Driver.
2. Check "Network/Forward To PC" in CPS.
3. Plug in the USB again or restart mobile.

### 6.3 Call log and Text message log cannot be saved

#### Phenomenon

Call log and Text message log cannot be saved.

#### Analysis

Software does not run as administrator in Win 7 or higher OS. Software installation directory has not written permission.

**Solution**

Software runs as administrator in Win 7 or higher OS. Software installation directory must have write permission.