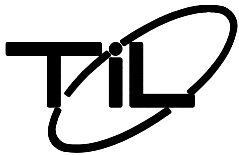


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# **TiL TDP-90 Programming Software Users Guide**

**for USB Programmable  
AM Series Transceivers**

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## **INTRODUCTION**

This document contains instructions for proper installation and operation of the TDP-90 software for USB programmable Technisonic AM series transceivers and details the various elements of the Graphical User Interface (GUI).

Note: The images in this document are examples only and may not reflect your particular data settings, or current TDP software version.

The TDP-90 programming software can be found under the "Programming Software" link at <http://www.til.ca/>

## **SOFTWARE INSTALLATION**

Note: The USB driver must be installed before attempting to use the TDP-90 software.

### **USB Driver**

The USB hardware in your Technisonic AM transceiver is configured as a Virtual Com Port ("VCP") which emulates a serial COM. This driver is available for free distribution from Future Technology Devices International ("FTDI"). Download and install the latest release of the VCP driver for Windows per the instructions on the web page located at this link: <http://www.ftdichip.com/Drivers/VCP.htm>

### **TDP Software**

Download and install the latest release of the TDP-90 software for Windows from the web page located at this link: <http://til.ca/content.php?page=programming-software-tdp90>

Once completed there will be a "TDP90" icon on your computer desktop.

## **TRANSCEIVER TO COMPUTER CONNECTION**

Connect the transceiver to the computer USB port using a standard USB-A male to USB-B male cable. The USB port is located on the rear panel of mobile and base station transceivers and on the front panel of rack mount transceivers.

## GETTING STARTED

To start the TDP-90 program, double click the TDP90 icon on the desktop. The following **Graphical User Interface** will appear. The current *version number* is shown in square brackets on the title bar.

### Main Graphical User Interface

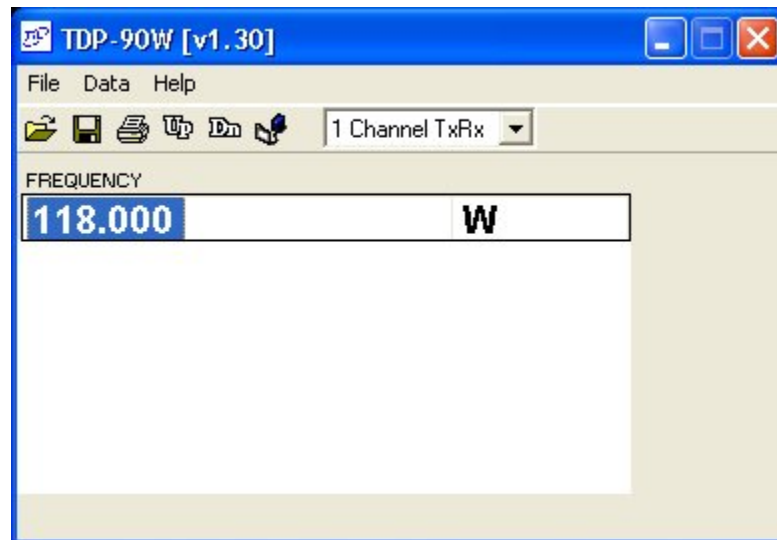


Figure 1

## ICONS AND PULL DOWN MENUS

The *icons* and *pull-down menus* provide the set-up and operating functions. The *Channels* pull-down tab provides selection for single or six channel transceivers (use the 6 channel window for 4 channel transceivers). The number of channels in the *Frequency editing window* changes accordingly. The frequency of each channel, as displayed in the *Frequency editing window*, can be changed by clicking on the desired channel window and entering the frequency.

### ICONS

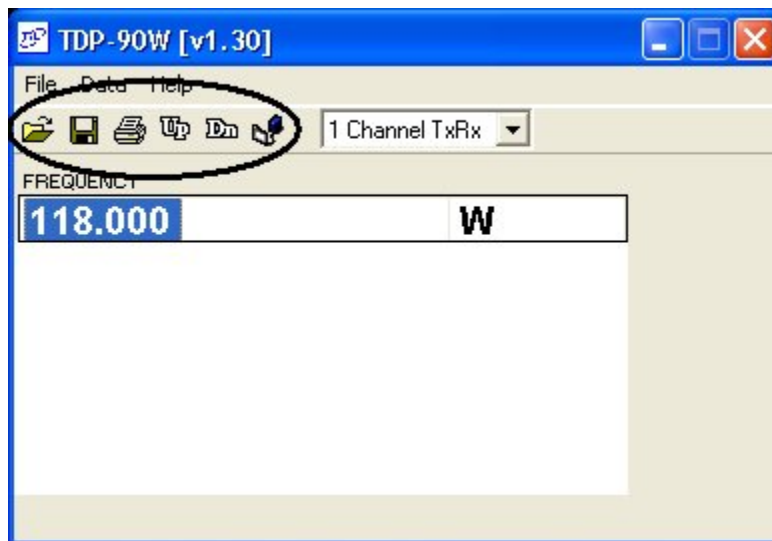
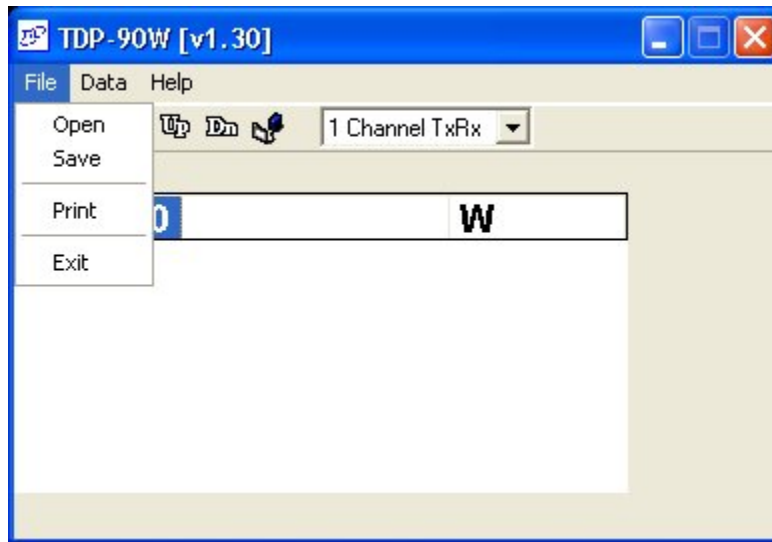


Figure 2

The icons provide single-click access to the features in the pull down menus. Details of these features are explained in the Pull Down Menu descriptions that follow.

## FILE MENU



**Figure 3**

**Open** will allow you to select and load an existing file that was previously saved on disk. The yellow folder icon provides the same function in a single mouse click.

**Save** will allow you to save the current data into a file with a name of your choice. The filename may be any length up to 64 characters. The program will automatically append the .90 suffix to the filename. The diskette icon provides the same function in a single mouse click.

**Print** will create a text file of the channel list, as presented in the Frequency List window. Once the Print function is invoked, you will be prompted to enter the serial number of the currently connected transceiver. The printout will append a header to the top of the page that includes the serial number of the transceiver as well as the time and date. The printout can be filed as a record of the frequencies that are programmed into that particular transceiver. The printer icon provides the same function in a single mouse click.

**Exit** will quit the TDP-90 program. If you have not saved your data, or if any changes were made to your data set since your last save, the TDP will warn you of this, and allow you to do so before quitting.

## DATA MENU

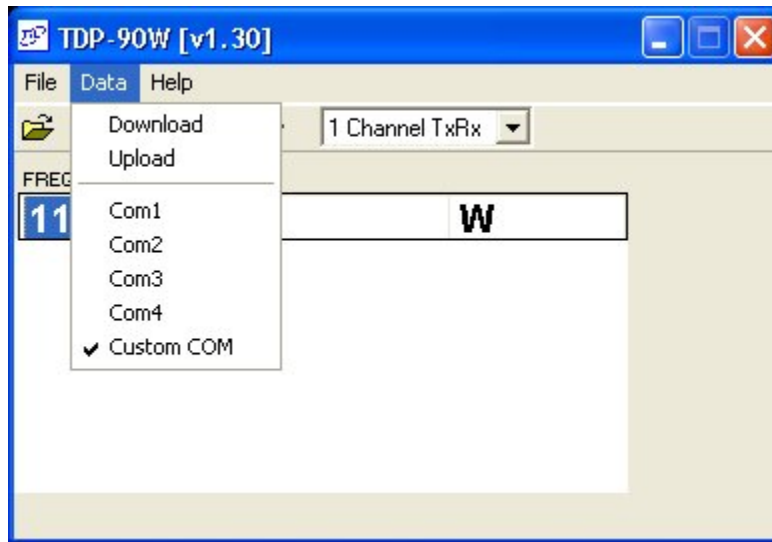


Figure 4

**Download (to Radio)** instructs the TDP-90 software to transfer the frequency data in the list to the memory channels in the connected AM transceiver. The Dn icon provides the same function in a single mouse click.

**Upload (from Radio)** instructs the TDP-90 program to wait for and read the channel data from the memory channels in the connected AM transceiver. The Up icon provides the same function in a single mouse click.

**Com<sub>1</sub> (2,3,4, Custom COM)** allows you to select the COM port on your computer to which the transceiver is connected. The computer may assign a random unused COM port number to the Virtual Com Port (VCP) when the USB driver is installed so "Custom COM" can be selected when it is beyond the normal range of COM1-4. The assigned VCP can be determined by accessing the Device Manager (access in WinXP by right-clicking on "My Computer – Properties – Hardware – Device Manager – Port (COM & LPT) ). Note the COM number that was assigned to USB Serial Port. The Port (5<sup>th</sup>) icon provides the same function in a single mouse click.

## HELP MENU

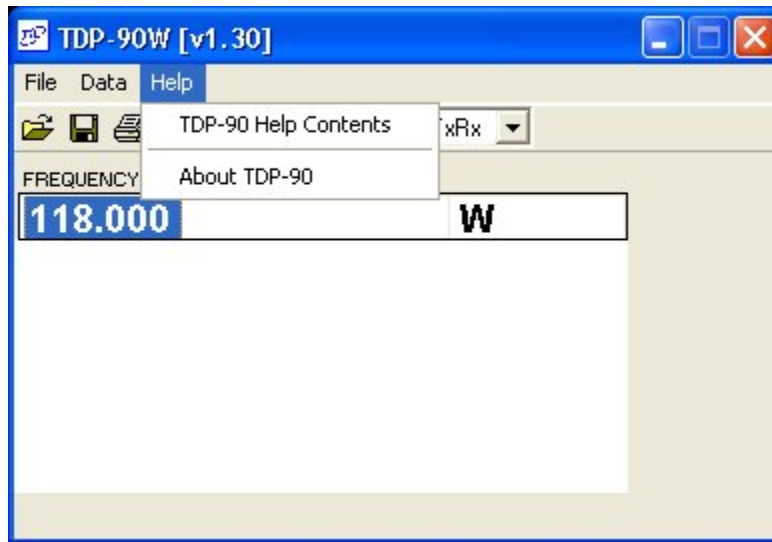


Figure 5

**TDP-90 Help Contents** opens the Windows Help dialog for the TDP-90 software. Here, you will find hardware connection and operating information as well as troubleshooting tips and answers to some Frequently Asksed Questions.

**About** selection displays Technisonic company and contact information as well as the revision number of the TDP software in the "Terminal window" screen.

## CHANNEL SELECTION PULLDOWN

### 1 Channel Transceiver

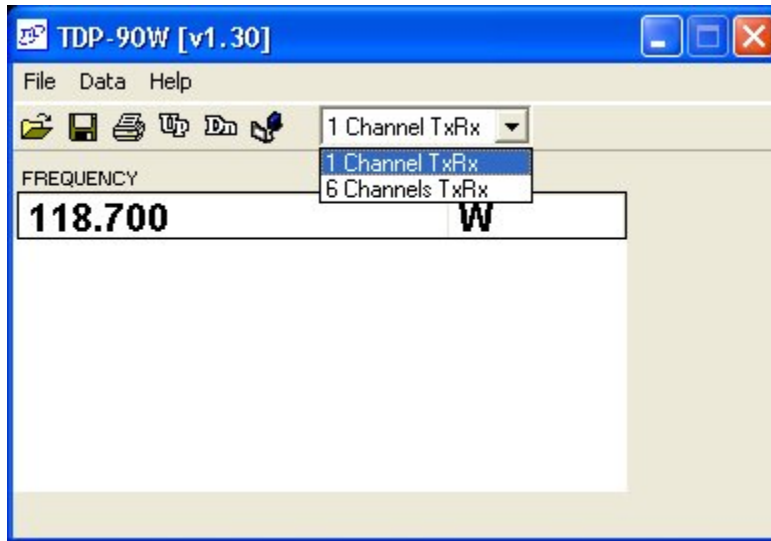


Figure 6

### 6 Channel Transceiver



Figure 7

The **x Channel(s)** pull-down tab allows you to select for single or six channel AM transceiver use. The frequency editing window changes accordingly. The “W” indicates that the channels are 25kHz (**Wide**)channel spacing and as such, only channels in 25kHz increments are accepted. Be sure to set the channel pulldown appropriately for your transceiver otherwise frequency programming may be



unpredictable. For 4 channel transceivers use the first 4 entries in the 6 channel window.

### **SAMPLE UPLOAD AND DOWNLOAD**

1. Connect the transceiver to the computer USB port using a standard USB-A male to USB-B male cable. The USB port is located on the rear panel of mobile and base station transceivers and on the front panel of rack mount transceivers. Turn on the power to the transceiver.
2. Assuming that the USB driver is already installed, determine which Virtual Com Port has been assigned by accessing the Device Manager (accessed in WinXP by right-clicking on "My Computer – Properties – Hardware – Device Manager – Ports (COM & LPT) ). Note the COM number that was assigned to USB Serial Port.
3. Run the TDP-90 program on the computer.
4. Click on the **Data** pull-down list and select the serial port to which the transceiver is connected. Select Custom COM and enter the assigned port number if it is outside the normal range of Com1-4.
5. Set the program for 1 or 6 channels as applicable using the channel pulldown list.
6. Click on the **Up** icon to retrieve the frequencies from the radio. "UPLOADING" will appear at the bottom of the window as data is being transferred.
7. Edit the frequencies as desired. (The program only accepts 25 kHz spaced frequencies.)
8. Click on the **Dn** icon to copy the frequencies to the transceiver. "DOWNLOADING" will appear at the bottom of the window as data is being transferred.
9. Click on the **diskette** icon to save the file. Hint: Use the transceiver serial number or some other unique filename to identify the specific transceiver. The program will automatically append the .90 suffix to the filename.
10. Click on the **printer** icon to print a hard-copy of the frequencies.