

DYNATEL LOCATOR

PC TOOLS

INSTRUCTIONS

2250M

2250M-ID

2273M

2273M-ID

1420

2250ME

2250ME-ID

2273ME

2273ME-ID

1420E

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Introduction

The Dynatel PC Locator Tool (included with each of the M-Series locators) provides the user an excellent interface between the receiver and a PC.

This software utility provides the tool by which the user can upgrade the receiver to the latest software revision; program the receiver to best suit specific applications, and an iD marker utility.

The marker utility can be used to create templates for programming iD markers. It also downloads marker data that has been programmed and/or read by the receiver into the PC for documentation databases.

Installing Software

System Requirements

- * 16 MB RAM
- * Microsoft Windows 95 or later operating system or Microsoft Windows NT (R) operating system
- * 4 MB Hard-disk space
- * Serial Communication capability (with 38400 Baud rate)
- * CD-ROM drive
- * VGA or higher-resolution monitor
- * Microsoft mouse or compatible pointing device

Installation

Insert CD into CD Rom Drive.

The install wizard will open automatically. Follow the instructions on the screen.

The default location for the software is: C:\Program Files\3M\Dynatel Locator PC Tools.

If the CD does not automatically start:

From the Start Menu of the desktop, select "Run...".

Type or select the setup.exe file from the CD.

Opening the Installed Software

Double click the Desktop icon, or

Start – Programs - Dynatel Locator PC Tools – Dynatel PC Tool Kit

Uninstalling Software

To remove the software: **Start – Settings – Control Panel – Add/Remove Programs.**

Highlight the Dynatel Program and click "Remove".

Establishing Communication with the Receiver

In order to send/receive information from a locator, a serial cable (DB9 straight M/F) must be connected between the unit and the PC. The receiver must be on. It is necessary to close other applications that may be using the com port. The default comport connection is COM 1. The transmission baud rate should be set to 38400. When communication is establishing, the “Communication Options” screen will appear.

Initial Configuration - Export Model

In order to enable the electronic marker location feature of this receiver, you must identify the country in which the locator will be used. This initial configuration is required for the 2273ME-iD, 2250ME-iD, and 1420E locator receiver models.

Some countries do not allow all marker operating frequencies. Therefore, the E-Model locators are shipped with all the marker types/frequencies disabled.

Warning: It is unlawful to operate this unit when configured for any other country than the one in which it is used.

Initial Configuration:

- Close any programs that may be using the COM ports.
- Start the software program.
- Connect the receiver to the PC via the RS232 serial cable.
- Turn the receiver on.
- From the main screen, select the country in which the unit will be operating. (If the country is not listed, select ‘All Other Countries’.)
- A communication window will appear. (Baud rate 38400 and Com Port 1) Press OK.
- Press Initial Configuration.
- Press Download.
- Prompt line will display: Download Completed successfully.
- Multiple units may be configured, at this point by simply connecting the next receiver, turning it on, and pressing download.
- Press Exit, when all units have been updated.

Upgrading the Dynatel Receiver

Upgrades for the Dynatel M-Series Locators can be downloaded from the 3M website.

<http://www.3m.com/market/telecom/access/index.jhtml>

Connect the serial cable to the receiver and the PC.

Exit all com port applications.

Turn the receiver on.

Press Upgrade software.

The communication option window will appear.

Press Ok.

The default location of the upgrade file for the receiver is:

C://Program Files/3M. Dynatel Locator PC Tools/Software.

Press Download.

NOTE: Do not press any buttons on the receiver during the upgrade process!

The upgrade function is automatic. Wait until “Download successful” appears in the prompt line of the upgrade software window.

Configuring the Receiver

The configuration tool provides a desktop tool for the user to define the parameters of the receiver. Any saved configuration can be loaded into multiple receivers, thus providing company wide consistency.

In the configuration screen, the user can set the units of measure and date format, specify marker utilities, locate and tone frequencies, and select the language of unit.

Select the tab indicating the parameter to set (ie: units of measure, locate frequencies, etc). Select the utilities to build the receiver’s configuration. (v indicates Enabled. X indicates Supervisor Lockout, see Supervisor Login.) Save the configuration.

Note: the configuration must be saved before it can be downloaded to the receiver.

Default location for the saved configuration: c:\Program files\3M\Dynatel Locator Tools\config.

Multiple configurations can be created and saved. Only one configuration can be downloaded at a time.

To send an existing configuration to a receiver, select the “open” button. Select the configuration file. Choose the model type of the receiver from the drop down list. Press “Send config”.

Supervisor Login

Dynatel PCTools offers the option of a supervisory control to the configuration of the receiver. The Supervisor can ‘lock’ the configuration sent to the receiver. The technician will be unable to change the configuration from the receiver.

Passwords

Press Supervisor Login.

The default password for Supervisor Login is SUPERVISOR.

This password can be changed after logging in with the default password, by pressing Change Password.

Lockout Option

Select the frequency or marker to be locked out, or to make it unavailable on the receiver. Click the box beside the frequency or marker until an “X” appears. The “X” indicates supervisory lockout. Save the configuration.

Send the configuration to the receiver.

When the configuration is sent to the receiver, the field operator will not be able to activate the frequency or marker from the receiver setup screens.

iD Marker Utility

Creating Templates

Select the Create/Edit Template tab.

Type the name of the template in the Template Name box, or select a previously saved template from the drop down box. (Some sample templates are provided with the software.)

If a User List has been created, select the preferred user list from the drop down box. (See Creating a Favorite User List)

Select the Labels on the left side of the template from the drop down boxes in each of the six label boxes. Selecting labels from the drop down box saves memory space allocated for the marker data. If you chose to enter a label that is not included in the drop down lists, be aware that each character that is entered will greatly reduce amount of information that can be programmed into an iD marker. Manually entered labels are limited to 8 characters.

Add default descriptions in the right side for each label on the template. You may leave the description field empty when no default description applies. Selecting predefined descriptions from the 'show all' drop down list will allow more information to be programmed into the marker. Manually entered descriptions are limited to 14 characters.

Remaining memory space for marker data is indicated below the template screen.

Downloading Templates to Receiver(s)

Connect the locator to the PC and verify that the receiver is on.

Select the Create/Edit Template tab.

Click the "Download Templates" button.

The left side of the screen will populate with all saved templates.

The right side of the screen will populate with the templates that are already in the receiver. (Any or all can be removed by highlighting and pressing remove/remove all.)

Select the templates to download to the receiver by highlighting them in list on the left side of the screen.

Click the double arrow button.

The right side of the screen will populate with the selected templates.

Click "Download selected files to Locator" button.

The status bar will indicate downloading and completion.

Click Exit to return to previous screen, or connect another receiver and repeat.

To verify the template content of another receiver, click the refresh button after connecting the new unit.

Creating a Favorite User List

A User List consists of frequently used labels and descriptions that are applicable to a specific industry. It also limits the number of labels and descriptions that appear in the drop down lists when creating templates, thus alleviating the user from having to scroll through long lists of inapplicable

labels and descriptions. These user lists can also be downloaded to the receiver allowing the operator the same ease of use for field editing.

Select the Setup Favorite User List tab.

The screen will appear divided in half, the top section includes the label portion of the favorite list; the bottom portion includes descriptions of these labels.

On the left side of both sections all of the pre-defined labels and descriptions are listed.

Highlight all labels that are applicable to your industry.

Click the double arrow button in the middle of the screen to move the highlighted labels to the box on the top right side of the screen. These labels should represent the most commonly used terms for your industry.

The right side of the screen represents the user list that is being created and will eventually be sent to the receiver.

Select Save As. A pop-up window will appear requesting a name for your favorite list. Type a User List name and select OK. The user list name will populate as the title of the screen and appear in the Favorite User List Box.

If no further editing is done to the favorite user list, the labels defined in the favorite user list will appear with all descriptions available when creating templates.

NOTE: Any label can be removed from the right side of the screen by highlighting the word and clicking remove. Remove all will clear all labels that have been sent to the right side of the screen.

Send a User List to the Receiver(s)

To limit the number of labels that an operator will need to search in order to enter field data on a template, a User List can be downloaded into the receiver.

Connect the receiver to the PC via the serial cable and turn on the receiver.

Select the Setup Favorite User List tab. The screen will populate with the favorite user list information.

Select the User List from the drop down box at the top of the window.

Click the "Send to Receiver" button.

Click Exit to return to previous screen, or connect another receiver and repeat.

Linking Descriptions to Labels

To increase the speed that templates can be created on the computer, or in the field, the list of descriptions in a user list can be reduced by linking only certain descriptions to a specific label.

For example: If the label "TYPE" has been selected, and the only applicable descriptions for your industry with this label are "PHASE B and PHASE C" then the label could be linked to the two descriptions to alleviate scrolling through a full list of descriptions.

Only one user list containing links to descriptions can be downloaded to a receiver. Multiple user lists with links can be saved on the computer for template creation via the PC.

Select the Setup Favorite User List tab.

Select user list from drop down box, or create a new list. (See Creating Favorite User Lists.)

To associate descriptions with a specific label, select the label from the drop down list in the first box in the bottom portion of the favorite user list screen.

Highlight the descriptions in the left side of the screen to associate with the selected label.

Click the double arrow button in the middle of the screen to move the highlighted descriptions to the box on the right side of the screen (max definitions: 16). These descriptions should represent the most commonly used terms for the specific label indicated.

Continue to associate descriptions with labels until all labels have been linked to applicable descriptions. (It is not necessary to associate a description to every label.)

Save favorite user list with description links.

NOTE: Any description can be removed from the right side of the screen by highlighting the word and clicking remove. Remove all will clear all descriptions that have been sent to the right side of the screen.

Note: *The receiver will only accept one user list with linked terms. (All other user lists will appear with all descriptions that are available.)*

Transferring Data from the Receiver

Read Data

Verify receiver is ON and connected to PC.

Select the Xfer Read/Written Mkr Data tab.

Select “Get Read Marker Data from Receiver”

Click “Copy Marker Data to File”. The program will immediately ask if you would like to add the incoming information to a current file. This offers the operator the opportunity to save all read data (from multiple receivers, or multiple dates, etc) in one location.

- If no file exists, or if individual files are going to be created, select “No”. A ‘Save As’ window will open. Name the file. The Read data will load into the screen.
- If “Yes” is chosen, a browser window will open in order to locate the common file. Select the file to upload the new information. The Read data will load into the screen. All new information will be indicated by a red dot.

A window will appear prompting with the option to delete all the Read information from the Receiver. Select ‘Yes’ or ‘No’.

Warning: *The information will be permanently erased from the receiver.*

All of the data can be sorted by clicking the column heading, or by selecting “Sort”.

If duplicate markers are read, they can be removed from the data by selecting “Delete Dup”.

To export data into Excel, select “Export”. A screen will appear. Select the file to export and select ‘Open’. The file will be converted and the location of the converted file will be displayed.

To open the converted file in Excel open the file location. Make sure that “all files” are displayed. Select the converted file (extension .csv).

Programmed Data (Write Data)

Verify receiver is ON and connected to PC.

Select the Xfer Read/Written Mkr Data tab.

Select “Get Programmed Marker Data from Receiver”

Click “Copy Marker Data to File”. The program will immediately ask if you would like to add the incoming information to a current file. This offers the operator the opportunity to save all programmed data (from multiple receivers, or multiple dates, etc) in one location.

- If no file exists, or if individual files are going to be created, select “No”. A ‘Save As’ window will open. Name the file. The Write (Programmed) data will load into the screen.
- If “Yes” is chosen, a browser window will open in order to locate the common file. Select the file to upload the new information. The Write (Programmed) data will load into the screen. All new information will be indicated by a red dot.

A window will appear prompting with the option to delete all the Write (Programmed) information from the Receiver. Select ‘Yes’ or ‘No’.

Warning: The information will be permanently erased from the receiver.

All of the data can be sorted by clicking the column heading, or by selecting “Sort”.

If duplicate markers are read, they can be removed from the data by selecting “Delete Dup”. Only the most recent Write data for each marker will be displayed. Warning: after the file is saved, deleted duplicate data cannot be retrieved in any other way but to upload the information from the receiver again.

To export data into Excel, select “Export”. A screen will appear. Select the file to export and select ‘Open’. The file will be converted and the location of the converted file will be displayed.

To open the converted file in Excel open the file location. Make sure that “all files” are displayed. Select the converted file (extension .csv).