

Doble Test Assistant® Field System Software Version 3.06 RELEASE NOTICE

Doble Test Assistant® (DTA) Field System Software version 3.06 runs under Windows® 3.1 which makes DTA easier to use than prior MS-DOS® versions. DTA software may be used on M4200 Controllers running Windows 3.1 . It will also run on PC's under Windows 95 or Windows NT 4.0. A list of known limitations is included with this release notice.

For current users of the DTA Field System for Windows, please review section II of this notice for improvements over previous Windows versions. To ensure correct use of DTA, please take time to carefully review this notice and retain it for future reference. This notice should be stored with the *DTA Field System User's Guide*.

This information is important for test personnel. Please distribute copies to all concerned.

I. Improvements Over Previous DOS Versions

1. **Do not attempt to use the DTA Field System for DOS under Windows NT! You may destroy test data.** DTA Field System for Windows will run under Windows™ 3.1, 95 and Windows NT
2. Five new apparatus test forms are included:
Rotating Machinery, Cables & Terminations, Reclosers, Reactors, and Air-blast breakers
3. Easy to learn Windows graphical user interface. Screens are designed for consistency and ease of use
4. Out of memory errors are eliminated since DTA Windows is not limited by the 640K DOS memory barrier.
5. Now you can view up to 355 datasets in the data manager
6. A variety of user designed reports can be easily generated using the custom print interface
7. *Cut, copy, and paste* individual nameplate fields using standard Windows short-cut keys
8. *Clear* a complete row of test data
9. *On-line Help, Tips, and Frequently Asked Questions (FAQ)* available via hypertext documents
10. Installation program is user friendly
11. Retain or overwrite limit files- your option
12. The limit files are updated

II. Improvements Over Previous Windows Versions

1. Limit file viewer. A function to allow users to view limit information for particular test lines has been added. The limit file information is view-able from the advice window that contains expert system output for the test line. The view does not show the whole limit file, just the values that apply to the line being evaluated.
2. Enhanced clone function. The Clone function has been enhanced to copy more data across to a cloned record. Previous versions carried forward only a portion of the nameplate data. The new version copies all pertinent nameplate and test description data including bushing nameplate and surge arrester nameplate data.
3. Temperature handling improved. Several changes have been made to the program in the area of temperature handling
 - Temperature information is available from all test screens under the *Test->Update_Temperature* menu item. This will allow users to easily change temperature and humidity values just before (or after) running a test.
 - Use of the Temperature Probe (M4000 mode) can be enabled or disabled by the user from any test screen's *Test->Options* menu item. This program variable, stored in the *doble.ini* file, can also be set through the main screen's *Configuration->General Settings* menu item. The state of this program variable is kept in the *doble.ini* file under the [DTAF Settings] section as "Use Temperature Probe" (YES or NO).
4. If the user chooses to utilize the temperature probe and the M4000 program is unable to return probe data, then the program will ask the user for temperature information before processing the test. Earlier versions of the program discarded the test results. Option menu item added to all test screens. All test screens now have a menu item called *Test->Options*. The item presents a dialog box containing three program variables, *Data Entry Mode*, *Use Temp Probe*, and *Auto-Fill Reversals*. This function allows users immediate access to program variables that affect the operation of the test screen.
5. Enhanced approval and revision functions. To avoid confusion, approved records can be navigated with pushbutton and keyboard controls, but fields can not be directly typed into. Approved records that are un-approved (revised) now allow data changes in all fields including the notepad.
6. Candlestick Breaker support added via Live Tank Breaker form. The program now supports the Candlestick Breaker apparatus type. The new apparatus was implemented as part of the Live Tank Breaker apparatus, and is accessible as a configuration option.
7. Historical Data Entry feature: When the option is selected meter readings and multipliers are copied to their associated reversal fields in the Manual Data Entry window. There are two places in the program to enable or disable this feature (when user is in MANUAL instead of M4000 mode). - from the main screen's *Configuration->General Settings* menu item and

- from any test screen's *Test->Options* menu item. The state of this program variable is kept in the *doble.ini* file under the [DTAF Settings] section as "Copy IWC Data" (YES or NO).
8. Improved field navigation function by enhancing cursor movement. Using TAB, ENTER, or ARROW keys to enter the data fields now places the cursor in the left-most position of the field.
 9. Surge Arrester print function supports S/N detail. Detailed data behind the Serial Number field on the Surge Arrester panel can now be printed through the Custom Print Function (via the Add'l Nameplate column). The Unit Cat#, Overall Cat#, and Type fields are printed after the test data.
 10. Custom Print function allows printing of Rating and/or Analysis. Through the Custom Print function, the user can specify the inclusion of the rating and analysis separately. A column has been added to the custom print screen for Rating, and a separate column for Analysis has been retained.
 11. Installation program lists new Limit Files. During installation, while the option to overwrite limit files is presented, the new limit files are listed in a window. The list of limit files includes their creation date in order to help the user decide whether or not to overwrite their existing files.
 12. Directory Refresh function added to Data Manager. A 'refresh' function has been added to the Data Manager's Directory menu. The function re-counts the number of datasets in the current working directory and updates the screen accordingly.
 13. Edit/View function can now be invoked via the mouse. While on the second screen of the Data Manager the user can now Edit/View the selected record using only the mouse. This is done by single clicking on the record number to the left of the Location field. The selected record symbol '>>' has been moved to the far left column in order to improve readability of the screen. Prior versions of the program forced the user to the keyboard to edit the selected record.
 14. Minor enhancements and bug fixes:
 - Connection configurations are now copied forward from diagnostic test screens
 - Changed degree symbol to spell out 'deg' to avoid confusion between the zero numeral and the degree symbol
 - Circuit designation now included on all printed reports
 - Clearing bushing nameplate data now clears all of the information behind the bushing s/n field
 - Low voltage air-blast breaker overall test procedure corrected

- The correct test mode for *Cables And Terminations* is passed to the M4000
- Added a warning message if test kV exceeds Surge Arrester rated kV
- Added note check box next to the *Note* pushbutton to indicate the presence of a note in the notepad
- Added configuration options to test screens so that user does not have to go back to data manager to access the configuration screen
- STEEL added to choice list for Reactor CORE field
- *Cables and Terminators* - AERIAL added to Install choice list
- *Recover* function changed so that only one copy of the dataset is left in the working directory instead of two
- Reactor Overall test - correct test modes are passed to M4000 for separable phases configuration
- Reports display temperature as “deg C” to avoid confusion with the “°” symbol and the numeral “0”
- Rotating Machinery Prime Mover serial number made alphanumeric
- The *Hot Collar* Ins Rating is now included on printed reports
- The *INS RTG* label is now included on the *2WXFMR Overall* screen
- *AT w/Tertiary* - Type window changed to Class, and standard choice list added
- The *CLASS* field on the Transformer ID screens can now be edited
- File management of Custom Print templates simplified
- In line two of the hot collar test screen for Oil Circuit breakers (OCB's) and Auto-Transformers without Tertiaries (ATw/oT's), the UST Configurations Window no longer pops-up inappropriately for a GST test.
- Spare Bushing UST mode correctly passed to M4000
- On the *Live Tank Breaker Overall Test* screen, phase information is filled in with default settings
- On the *Live Tank Breaker Overall Test*, entering phase information for the first time no longer clears name plate data

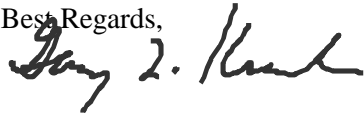
III. Known Problems and Limitations for DTA Field System Software Version 3.06

1. The first digit of the humidity result is truncated in some M4000 printouts. The correct humidity value is displayed on-screen, and test results analysis are correct.
2. On rare occasions, M4000 printouts must be manually advanced in order to see the last couple of rows of data. To manually advance the paper, lift the printer cover, press the brass latches at the end of the paper mechanism, and pull out the desired amount of paper. Re-seat the paper mechanism after the paper is torn from the printer mechanism.
3. When printing the dataset list from a subdirectory, rows beyond 53 are not printed. To print the contents of subdirectories having greater than 50 datasets, create multiple subdirectories each having a maximum of 50 datasets.
4. In the Rotating Machinery form, the first printout after the controller is turned on prints a blank page in between pages 1 and 2. This blank page occurs only for the first printout.
5. Although power factor calculations are made for all *Air-Magnetic Breaker* tests, only watts-loss measurements are used to evaluate the condition of *Air-Magnetic Breakers*.
6. C2 measurements for *Coupling Capacitor Potential Devices (CCPD's)* may result in seven digit data. The seventh digit will be truncated in the DTA display; users must enter the full measurement from the M4000 run screen into the DTA notepad.
7. Layout drawings are not available for auxiliary apparatus. This includes *Three Winding Transformers, Voltage Regulators, Reactors, Air Magnetic Breakers, Low Voltage Air-Blast Breakers, Potential Transformers, Current Transformers, Surge Arresters, Rotating Machinery, and Cables And Terminations*. These layout drawings are only informational; five of these apparatus are newly issued.
8. The *Temperature Correction Factor (CORR FCTR)* for GE type 'B' bushings defaults to 1.0. Users should manually enter the (*CORR FCTR*) listed on page 8-16 of the *Type M4000 Insulation Analyzer* instruction manual or page 4-6 of the M2H instruction manual.
9. Never run a test with the temperature/humidity sensor probe removed and then leave the test conditions screen blank; doing this will cause test results to be rejected. If the probe is unavailable, choose *Test, Options*, and select *NO* for the *Use Temp Probe* text box. Next, manually enter the temperature and humidity.
10. The user can not see all of the text in the Special ID and CCT Desig (circuit designation) columns when viewing the second screen of the data manager (Dataset List). The user must view the actual dataset to see all of the data.

11. When the cursor is in the Test kV field of the *Two-Winding Transformer* form, the status bar says '*Press F2 For More Info*'. This status message should be ignored because there is no information associated with this field.
12. Do not install the DTA Field System onto a network. The DTA Field system is installed on M4200 controllers; it may also be installed on local hard drives of desktop PC's.
13. DTA does not include a temperature correction factor for askarel filled transformers; they are rarely seen in service, today.
14. Advice messages associated with the *Insulation Rating Field (INS RTG)* appear sequentially and are repeated in a test data printout

Doble always appreciates your feedback. Please report any questions or problems with either the software or hardware to your Doble Engineer.

Best Regards,

A handwritten signature in black ink, appearing to read "Gary L. Krauch". The signature is written in a cursive style with a large initial "G".

Gary L. Krauch, P.E.
M Series Product Manager