Chapter 3

Getting Started

Introduction

M-Trend can be run as a standalone program or in an ActiveX document container. This chapter describes how to get started using M-Trend as a standalone program.

This chapter describes how to:

- start M-Trend

- create a new M-Trend file

- open an M-Trend file

- zoom in on part of an M-Trend Graphic View

- view detailed Trend sample information

- save an M-Trend file

- save an M-Trend file with a new name

- print an M-Trend file

This chapter assumes M-Trend is installed and you have defined and connected to an M-Historian database.

For details in installing M-Trend, refer to your workstation installation documentation.

For details on connecting to an M-Historian database or defining a connection to an M-Historian database, see the *Connecting M-Trend to a Database* chapter in this manual.

Key Concepts

M-Trend Main Window

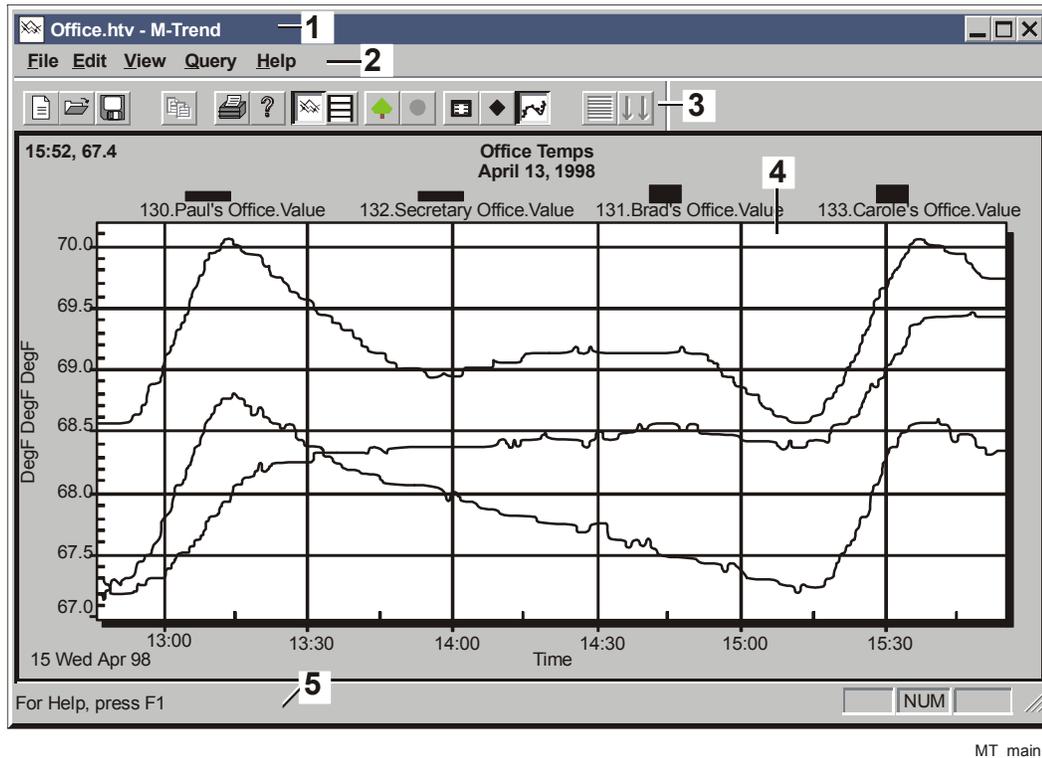Figure 3-1 shows the Main window of the M-Trend program.

MT_main

Figure 3-1: M-Trend Main Window

Table 3-1: Main Window Callouts

Callout	Name	Description
1	Title Bar	Shows name of file and program.
2	Main Menu Bar	Shows top level of available menu selections.
3	Toolbar	Provides button access to commonly used tools.
4	Data Display Area	Area where graphs and tables are viewed.
5	Status Bar	Provides messages about actions being performed.

M-Trend Main Window Menus

Table 3-2 describes M-Trend menus.

Table 3-2: M-Trend Main Window Menu Options

Menu	Command	Description
File	New	Creates a new, blank M-Trend document.
	Open	Opens an M-Trend document.
	Save	Saves the current M-Trend document with a .htv extension.
	Save As	Saves the current M-Trend document with a new name.
	Print	Prints the current M-Trend view.
	Recent File List	Lists recently opened M-Trend documents.
	Exit	Exits M-Trend.
Edit	Edit Trend	Opens the M-Trend Definition dialog box.
	Set Default Connection	Determines or changes M-Historian database connection.
	Undo Zoom	If the current display has any zoom factor, this command returns to normal view.
View	Toolbar	Toggles the display of the M-Trend toolbar.
	Status Bar	If checked, displays a status bar at the bottom of the screen.
	Progress Indicator	If checked, displays percentage completed when querying data.
	View Graph	If checked, data appears in a graphic format.
	View Text	If checked, data appears in a text format.
	Point Symbols	When View Graph is checked, this command adds unique symbols to each point on the graph. Not available in Text View.
	Mark Data Points	When View Graph is checked, this command marks each data point on the graph with a small point. Not available in Text View.
	Grid Lines	When View Text is checked, this command adds grid lines to the displayed table. Not available in Graphic View.
Query	Refresh Data	Starts or restarts the current query.
	Cancel Query	Cancels any query in progress.
Help	Help Topics	Displays the Table of Contents for the online help system.
	About M-Trend	Displays M-Trend version and copyright information.

M-Trend Main Window Toolbar

Table 3-3 describes the M-Trend toolbar buttons.

Table 3-3: M-Trend Toolbar Buttons

Button	Name	Description
	New	Creates a new blank Trend document.
	Open	Opens the Open File document to allow the selection and opening of a saved Trend document.
	Save	Saves the current document. If the document has been saved previously, it overwrites it; otherwise, the Save As dialog box appears.
	Copy	Copies selected text to the clipboard in View Text mode.
	Print	Prints the current graph or table.
	About	Opens the M-Trend information box to display version and copyright.
	Graphic View	Displays data in a graphic format.
	Text View	Displays data as text in a table.
	Refresh Data	Starts or restarts the current query.
	Cancel Query	Cancels any query in progress.
	Edit View	Opens the M-Trend Definition dialog box.
	Point Symbols	Adds unique symbols to each point on the graph.
	Data Points	Marks each data point on the graph with a small dot.
	Grid Lines	Toggles the horizontal grid lines on or off in Text View.
	Auto Scroll	If automatically updating data and in Text View, selecting this button keeps the table scrolled to the latest entry.

M-Trend Right-click Menu in Graphic View

Table 3-4 lists menu options available in Graphic View by right-clicking the mouse.

Table 3-4: Right-click Menu Options

Menu Selection	Description
Edit Trend	Opens the M-Trend Definition dialog box.
Undo Zoom	If the current view has any zoom factor, this command returns it to normal view.
Point Symbols	When View Graph is checked, this command adds unique symbols to each trended data point on the graph. Not available in Text View.
Mark Data Points	When View Graph is checked, this command marks each data point on the graph with a small point. Not available in Text View.
Maximize	Provides a full-screen view of the current Trend View.
Print	Prints the current Trend View.

Procedure Overview

Table 3-5: Getting Started

To Do This	Follow These Steps:
Start M-Trend	On the Windows Start menu select Programs > Johnson Controls > M-Trend. Select the type of database connection. Click OK.
Create a New M-Trend File	On the File menu, click New.
Open an M-Trend File	On the File menu, click Open. Select a file. Click Open.
Zoom in on Part of an M-Trend Graphic View	Left-click the mouse on the graphic and drag over desired portion of graphic data.
View Detailed Trend Sample Information	With Trend data displayed in either Graphic View or Text View, move the cursor over a data point. Left-click to view Trend sample information about the data point you have selected. In Text View, you must select sample data other than the date and time.
Save an M-Trend File	On the File menu, click Save. Enter a name for the file. Click Save.
Save an M-Trend File with a New Name	On the File menu, click Save As. Type in a new name. Click Save.
Print an M-Trend File	On the File menu, click Print. The Print dialog box appears. Click OK.

Detailed Procedures

These procedures assume you have already installed M-Trend, defined a connection to, and connected to an M-Historian database. For more information on connecting to a database, see the *Connecting M-Trend to a Database* chapter in this manual.

Starting M-Trend

To start M-Trend:

1. On the Windows Start menu, select Programs > Johnson Controls > M-Trend. The M-Trend Database Connection Dialog screen appears (Figure 3-2).
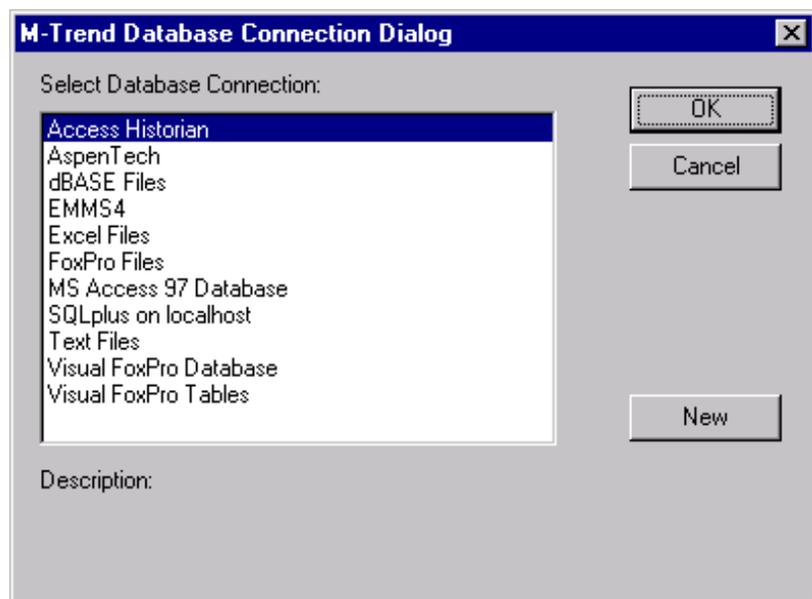

Figure 3-2: M-Trend Database Connection Dialog Screen

2. Select the type of database connection.

Note: Choose the DSN ODBC name that connects to the M-Historian Database file. For Johnson Controls installed servers, select either Access Historian or AspenTech®.

3. Click OK. The M-Trend Main window appears.

Creating a New M-Trend File

To create a new M-Trend file:

On the File menu, click New.

Note: If you have made any changes to the current file you are prompted to save it. Otherwise a new, blank document appears.

Opening an M-Trend File

To open an M-Trend file:

1. On the File menu, click Open. The Open dialog box appears (Figure 3-3).
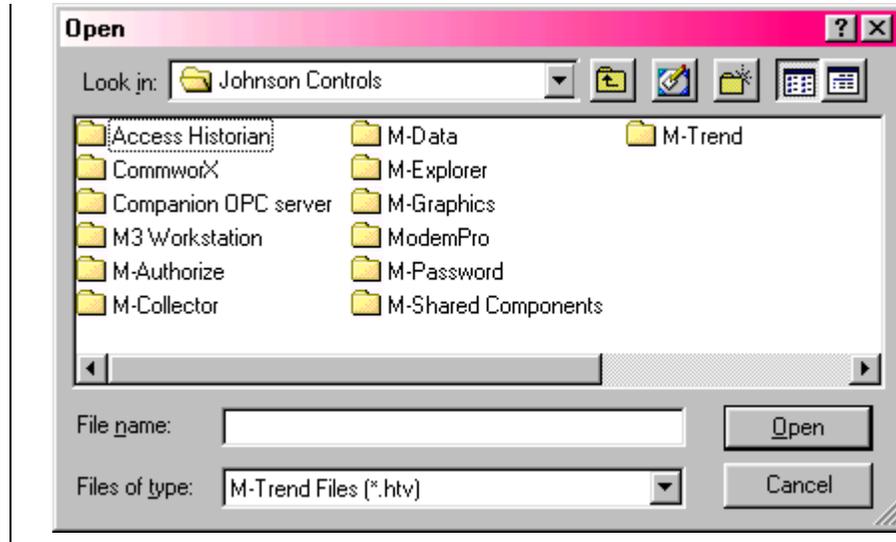

Figure 3-3: File - Open Dialog Box

2. Navigate to the directory where your file is saved and select a file or type the file name in the File name box.

3. Click Open.

Zooming In on Part of an M-Trend Graphic View

To zoom in on part of an M-Trend Graphic View:

1. Left-click and hold the mouse on Graphic View in Main window of M-Trend.

2. Drag the mouse to draw a rectangle over the portion of graphic you wish to zoom in on. A magnifying glass cursor appears as you drag out the rectangle. See Figure 3-4.
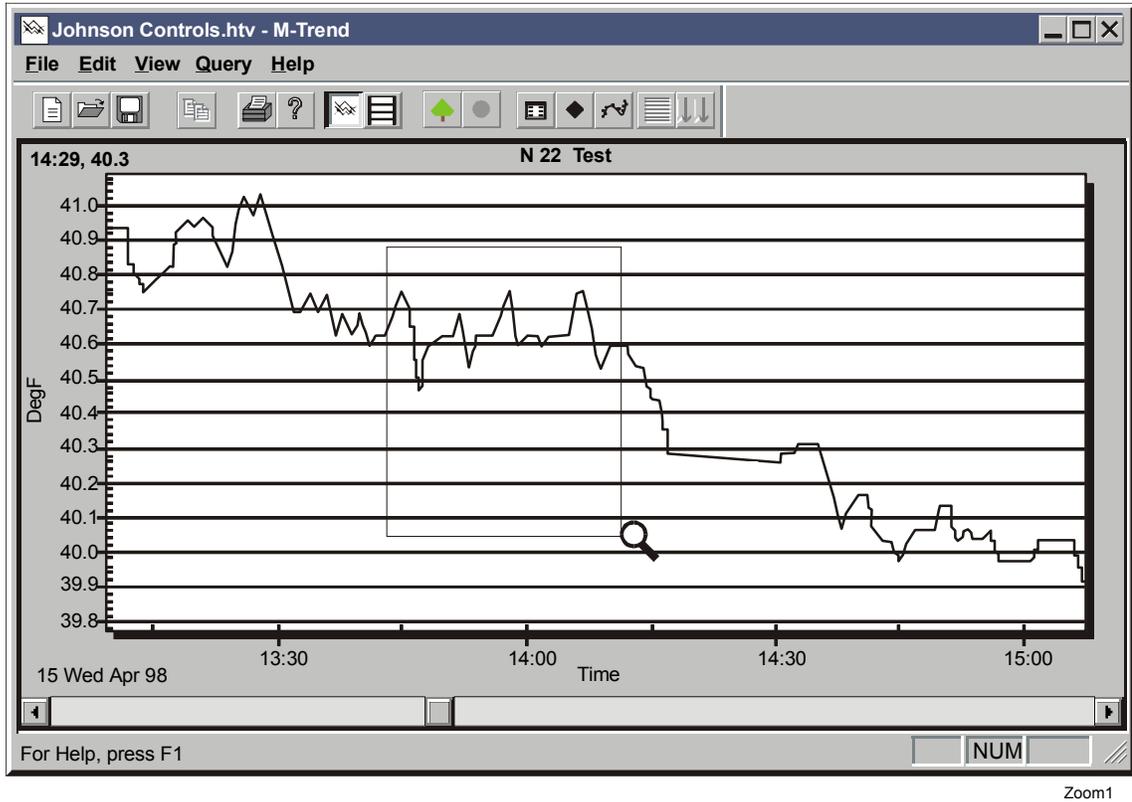
3. Release the mouse button.

Zoom1

Figure 3-4: Zooming In on a View

Viewing Detailed Trend Sample Information

To view detailed Trend sample information:

1. Move the cursor over a data point in the sample. In Graphic View, the cursor turns into a hand. In Text View, the cursor does not change.

Note: You can mark the data points by selecting the data point icon or from the menu with right mouse click.

2. Left-click the mouse to display detailed sample information about the point you have selected. See Figure 3-5 for an example of the sample data point information label.
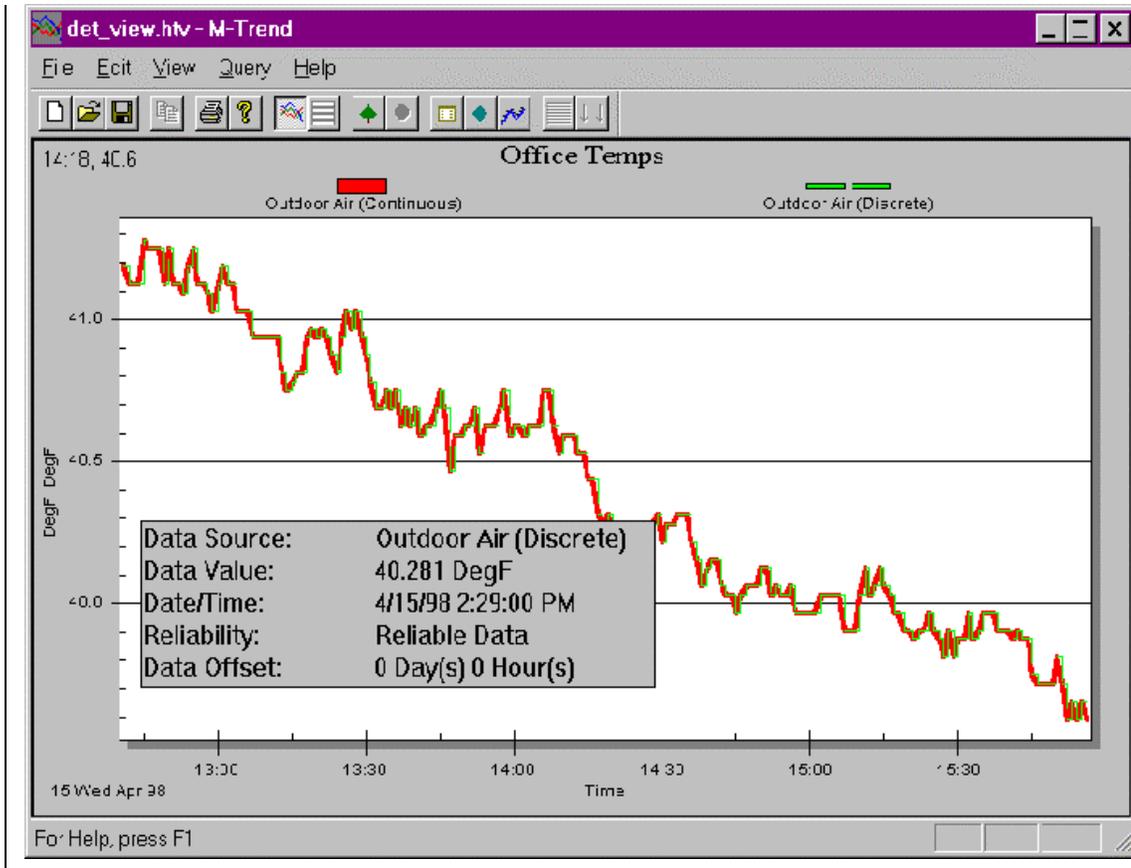
Figure 3-5: Viewing Detailed Sample Information

Table 3-6 contains a description of the fields in the detailed sample information.

Table 3-6: Detailed Sample Information

Name	Description
Data Source	Name of the sample point being viewed
Data Value	Numerical measurement of the sample point being viewed
Date/Time	Date and time the sample was collected
Reliability	An indication of the likelihood of the sample being correct. Not available for aggregate data.
Data Offset	If offsetting the values on a piece of trended data, the value of the offset is indicated on the offset version of the data.

Saving an M-Trend File

To save an M-Trend file:

1. On the File menu, click Save. If the file is already named, it is saved with the current data. Otherwise, the Save As dialog box appears.

2. Enter a file name in the file name box.

3. Click Save.

Saving an M-Trend File with a New Name

To save an M-Trend file with a new name:

1. On the File menu, click Save As…The Save As dialog box appears.

2. Enter a name in the File Name box.

3. Click Save.

Note: If you select an existing name from the File name list box and click Save, all existing data in the selected file is overwritten with the data in the current file.

Printing an M-Trend File

To print an M-Trend file:

1. On the File menu, click Print. The Print dialog box appears.

2. Click OK.

Troubleshooting

Table 3-7: M-Trend Troubleshooting

Error/Condition	Problem	Solution
There is no Johnson Controls directory under Program Files on the Windows Start button.	M-Trend has been installed to a different program group or not installed.	Determine if it is in another directory or install it.
A saved file is opened and there is no graph displayed.	Data is out of range of current settings.	Ensure that the study range start and end times are valid.