



QUICK REFERENCE GUIDE

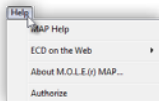


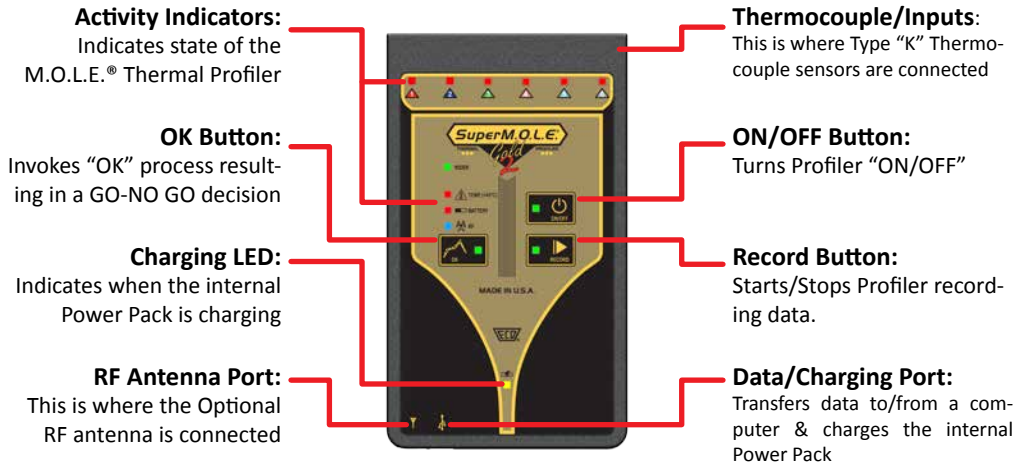
WELCOME	2
EQUIPMENT	3
FEATURES/FUNCTIONS.....	3
STATUS ACTIVITY LED	4
SETUP	5
CHARGING THE POWER PACK	5
SOFTWARE INSTALLATION.....	6
SOFTWARE AUTHORIZATION.....	8
COMMUNICATIONS	9
OPERATION	11
INTRODUCTION	11
STEP 1: SETUP INSTRUMENT	12
STEP 2: DATA COLLECTION.....	17
STEP 3: DOWNLOAD DATA.....	21












This Quick Reference Guide is designed to help the user to familiarize themselves with the equipment, perform basic hardware setup/communications and operation. For detailed information on both Hardware & Software components, please refer to the Help system accessible in the M.O.L.E.® MAP Software.

To access the help system start the software and use any of the methods listed:

- Select the **Help Button** on the **Toolbar**.
- Pressing the shortcut key **[F1]**
- On the **Help menu**, click **MAP Help**.





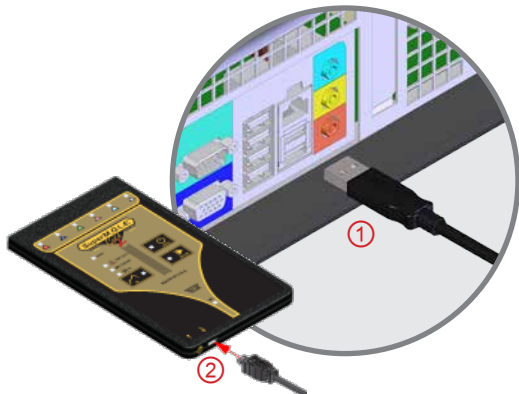
Activity Indicator	Action	LED Color
ON/OFF	Indicates Profiler is "ON" and idle	Green (Flashing) 
Record	Indicates Profiler is recording data	Green (Flashing) 
OK	Indicates recorded profile passes pre-configured criteria	Green- Pass (Solid)  Red- Fail (Solid) 
Temp(erature)	Indicates if internal temp is at or above a threshold.	Red (Solid) >40°C 
Battery	Indicates when the internal Power Pack voltage is low	Red (Solid) <3.0V 
RF (Radio Frequency)	Indicates when unit and RF receiver is transferring data	Blue (Flashing) 
Channel Indicators	Indicates channel is configured or the attached T/C is open	Green: Configured (Solid)  Red: Not config/Open (Solid) 
Rider	Indicates when Profiler is connected to a RIDER® NL 2 test pallet	Green (Solid) 
Charge	Indicates when the internal Power Pack is charging	Yellow (Solid) 



1. Insert the USB computer interface cable into a computer USB Port
2. Insert the other end into the Data/Charging Port.

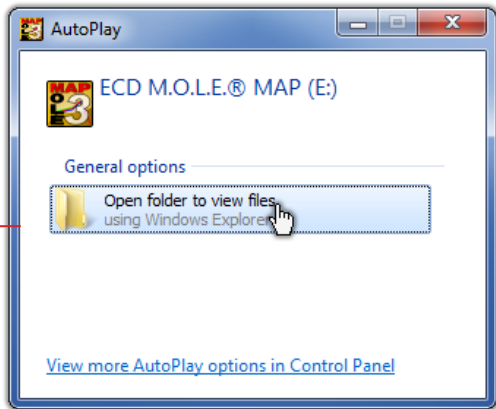


A completely discharged Power Pack takes about 8 hours to be fully charged. For quick charges, it can be charged for 15 minutes allowing one 10 minute data run to be performed.



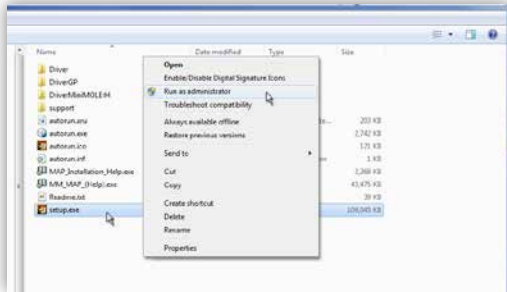
1. Insert the Flash Drive in a USB Port and the AutoPlay menu appears.
2. Select ***Open folder to view files*** button on the AutoPlay menu to launch Windows® Explorer. Closely follow the instructions for your operating system. For detailed information view the ***Installation Help*** file on the Flash Drive.

②





The user must have administrator permissions for the computer to install and authorize the software. To install as administrator, locate the **setup.exe** on the installation drive. Right-click the file to display the shortcut menu and select **Run as administrator**.



An **Unlock Key** can be obtained via an online registration form or using the contact information supplied on the dialog box, contact ECD.

1. On the **Help** menu, click **Register** and the dialog box appears.
2. Select **Online Registration** and enter the required information on the M.O.L.E.[®] MAP Software Registration form.
3. Enter the 16-digit Unlock Key and then the **Register** command button to complete the software Registration.

MAP Registration

Manual Registration

Use the Registration Number below to obtain your Unlock Key.

Web: www.ecd.com/register
Email: register@ecd.com
Phone: +1 503 659 6100

Registration Number: 18978944

Unlock Key:

Help Ask Me Later Register

1. Plug the USB cable into a computer COM Port and the other end into the M.O.L.E.[®] Profiler Data Port. The AutoPlay panel appears in the lower right corner of the desktop. This panel displays the four most common MAP commands.
2. Select **Start M.O.L.E.[®] MAP**

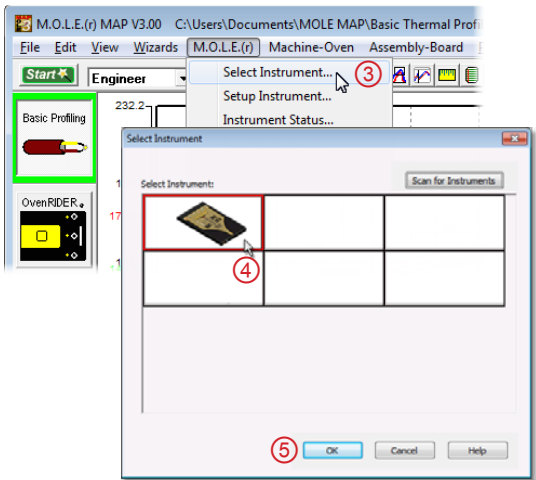


3. On the M.O.L.E.® menu, click the **Select Instrument** command.
4. Select the desired instrument from the dialog box. If there are none displayed, click the **Scan for Instruments** button to detect all available instruments.



Once a M.O.L.E.® Profiler has been selected, the software automatically selects that M.O.L.E. Profiler if it is used again on the same COM port.

5. Click the **OK** command button to accept.



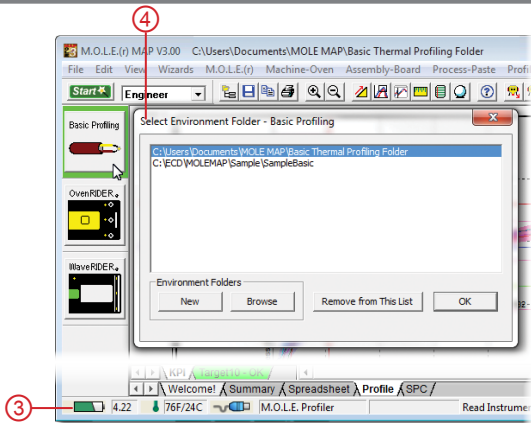
This operation procedure guides you through a typical process on how to set a M.O.L.E.[®] Thermal Profiler up for performing a data run. For additional detail, consult the Help System in the software.

The M.O.L.E.[®] Thermal Profiler depends on the MAP (Machine-Assembly-Process) software to control how it collects and interprets data. Several kinds of data runs may need to be performed to achieve desired information, or the same data run may be performed repeatedly over time to monitor one process. Either way, each data run must be set up at least once.

The MAP software includes wizards that help you get started quickly, even if you are a beginner or infrequent user.

STEP 1: SETUP INSTRUMENT

1. Open the M.O.L.E.[®] MAP software.
2. Connect the M.O.L.E.[®] Thermal Profiler to the computer.
3. Make sure the M.O.L.E.[®] Power Pack battery is fully charged. When a M.O.L.E.[®] Thermal Profiler is selected, the software status bar displays the current battery voltage.
4. Set an Environment. Either open an existing Environment Folder or create a new one.





When navigating through the wizard, the step list on the left of the dialog box uses a color key to inform the user of the progression through the wizard.

- Current
- Completed
- Remaining

5. On the **M.O.L.E.® menu**, select **Setup Instrument** and the workflow wizard appears.
6. Set the **Instrument Name**.

Setup Instrument

Instrument Name: SuperM.O.L.E. Gold 2

Recording Interval
 Hour: 0 Minutes: 0 Second: 0 1/30: 1

☐ Advanced

More >>

Channel	0	Location	Type
1	<input checked="" type="checkbox"/>	Sensor 1 Location	Type-K
2	<input checked="" type="checkbox"/>	Sensor 2 Location	Type-K
3	<input checked="" type="checkbox"/>	Sensor 3 Location	Type-K
4	<input checked="" type="checkbox"/>	Sensor 4 Location	Type-K
5	<input checked="" type="checkbox"/>	Sensor 5 Location	Type-K
6	<input checked="" type="checkbox"/>	Sensor 6 Location	Type-K

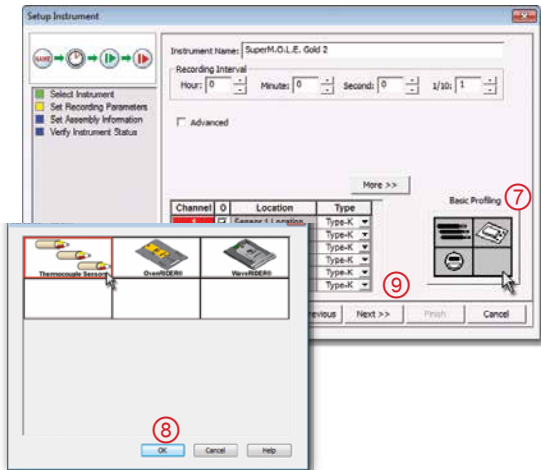
Basic Profiling

Help << Previous Next >> Finish Cancel



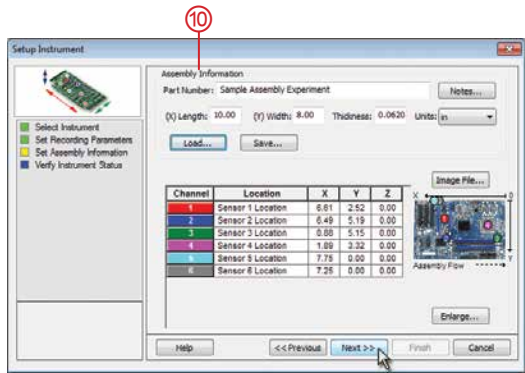
For settings such as **Start Parameters** and **Stop Parameters**, select the **More>>** command button.

7. Select the **Sensor Platform** button.
8. Select the desired sensors then the **OK** command button to proceed.
9. Confirm the settings and then, select the **Next** command button to send the data listed in the dialog box to the instrument.



10. Confirm the assembly information such as the test **Product Description**, **size**, **sensor locations** and a **image**.

11. Click the **Next** command button.

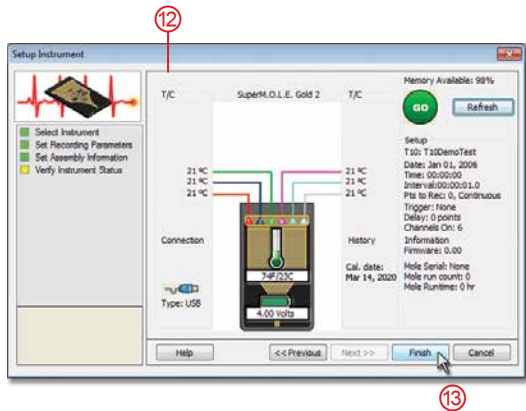


- 12.** Verify the instrument status. This dialog box displays the health of the M.O.L.E.® Profiler such as battery charge, internal temperature, thermocouple temperatures.



If everything is OK, the dialog box displays a **GREEN** sign. If there are any items that may prevent the user from collecting good data, they are highlighted and a **RED** sign is displayed.

- 13.** Select the **Finish** command button to complete the Setup Instrument wizard.

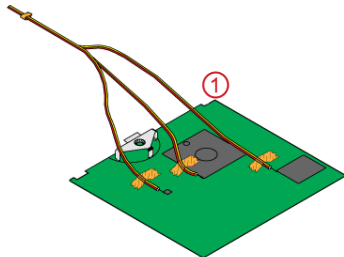


STEP 2: DATA COLLECTION

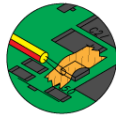


Never permit the M.O.L.E.[®] Thermal Profiler to exceed the absolute maximum warranted internal temperature, as permanent damage may result. The warranty will not cover damage caused by exceeding the maximum specified internal temperature.

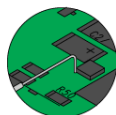
1. Insert the Thermocouple sensors into the test product. This process will vary depending on the type of data you are trying to collect.



SOLDER



TAPE

TEMPROBE[™]

2. Connect the M.O.L.E.[®] Profiler to the sensors.
3. Press the M.O.L.E.[®] Profiler “ON” button.
4. Place the M.O.L.E.[®] Profiler in the appropriate Thermal Barrier and press the “Record” button.
5. Close the Thermal Barrier making sure the sensor wires do not get pinched and the latch is secure.
6. Pass the thermally protected M.O.L.E.[®] Profiler, and test product through the process.



When retrieving the M.O.L.E.[®] Profiler and test product use caution as it may be warm.



7. As the M.O.L.E.[®] and test product emerge from the process, retrieve the sensors from the test product and lay the Thermal Barrier on a table or flat surface.
8. Open the Thermal Barrier and if the Record button is still flashing this means the M.O.L.E.[®] Profiler is still logging and it should be stopped.
9. Remove the M.O.L.E.[®] Profiler from the Thermal Barrier and wait a few minutes for the M.O.L.E.[®] Profiler to cool. Handle it carefully, as the case may still be warm.
10. Disconnect M.O.L.E.[®] Profiler from the sensors and place it near the PC that has the MAP installed.



If sensors are removed before the M.O.L.E.[®] Profiler has stopped collecting data, it may cause the data to become distorted.



STEP 3: DOWNLOAD DATA

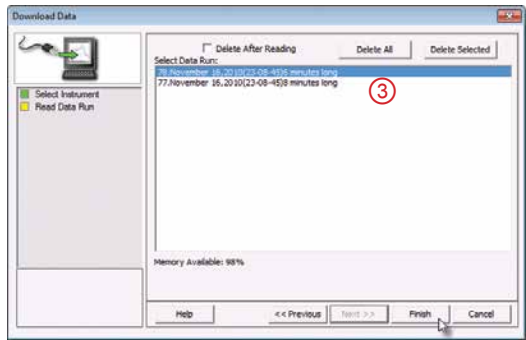
1. Connect the M.O.L.E.[®] Thermal Profiler to a computer and the AutoPlay panel appears in the lower right corner of the desktop.
2. Select the **Read Instrument** command and the workflow wizard appears.



3. Select the desired data run from the M.O.L.E.[®] memory list and then click the **Finish** command button to complete the wizard and read the data run from the M.O.L.E.[®] Profiler.



If a data run (*.XMG) is saved in a different Environment Folder other than the currently selected, the software automatically activates the new Environment Folder. This process does not delete any data run files in the previously set Environment Folder and can be quickly accessed using the Recent Environment Folders on the File menu or Welcome Worksheet.

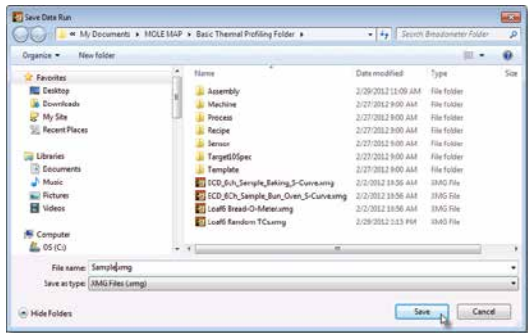


4. When the data run has been downloaded, the software will prompt the user to name and save the data run file (*.XMG).



To prevent data loss, it is recommended that data run files (*.XMG) are not saved in the M.O.L.E. MAP Sample Environments. Your Environment Folders should be in locations such as **My Docs** (Windows® XP) **Libraries>Documents** (Winows® 7/8).

5. The information is automatically saved in the data run file (*.XMG) and the experiment data can now be analyzed with the software tools.





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