

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Mettler Toledo MiniMapper* at our website: ***Click HERE***

AutoChem
It's about time

MiniMapper V1.0

Quick Reference

13000008 Version 1 03-03

Introduction

This Quick Reference outlines the process of running a MiniMapper V1.0 Job. The Job is made up of the following parts. The parts are detailed in the following sections.

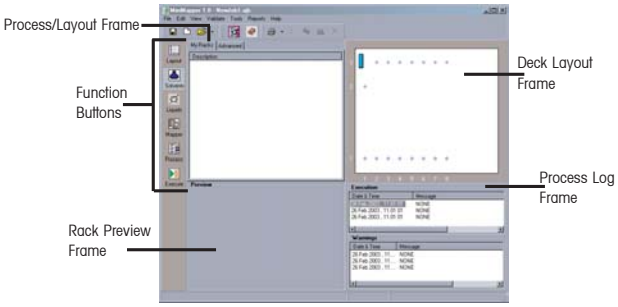
1. Start the System.
2. Load Racks onto the Deck.
3.  Define the Layout in the Controller Software.
4.  Specify On-line Solvents.
6.  Adjust Liquid Manager settings if needed.
7.  Specify Mapping.
8.  Build the Process.
9.  Save the Job.
10.  Execute the Job.

Start the System

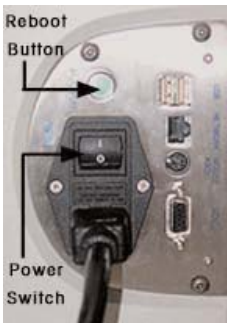
First, start up the system. Follow the instructions below to start the system.

1. Turn on the main power using the power switch on the **Electrical Connection Panel**, shown on the right.
2. Press the power switch on the monitor to turn it on.
   The screen displays a blinking cursor and the Controller PC boots up.

   Note: If the Controller PC does not properly boot, press the green **Reboot Button** on the **Electrical Connection Panel,** shown on the right.
3. Press the green Start button on the front of the workstation.
4. Log-in to the operating system. The default User ID is "MiniMapper" used with no password.
5. Double click the MiniMapper  icon displayed on the Desktop to start the program.
   The MiniMapper interface displays:



MiniMapper Main Window

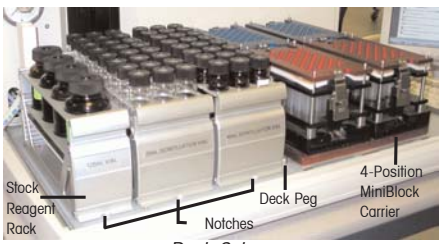


Electrical Connection Panel

Load Racks

Next, the racks and carriers must be placed on the deck. Load racks on the deck using the following guidelines.

- Standard racks and carriers must be placed on pins #2 through #8 with the notch and label toward the user.
- The 4-Position Stock Reagent Rack may only be placed on pin #1 with the notch and label toward the user.
- The 4-Position MiniBlock™ carrier must be placed no further right than pin #6. The front edge of this carrier does not have a notch. Instead, the front edge is beveled in and marked on the under side.
- Each carrier has a unique configuration. Follow the carrier's specifications when adding racks.



Deck Set-up

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

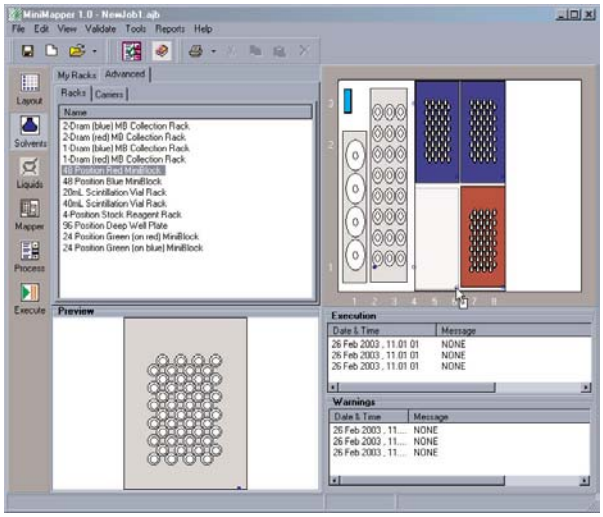
Define the Layout

Now the deck layout must be defined in the MiniMapper controller software. Follow the instructions below to define the Deck Layout.

1. Click the **Advanced** tab in the **Layout** frame.
2. Click the **Carriers** tab to add carriers. If only adding racks, go to Step 5.
3. Click and drag a carrier name from the list onto the **Deck Layout** frame to add it to the layout.
4. Repeat Step 3 for each additional carrier.
5. Click the **Racks** tab.
6. Click and drag a rack into position on the **Deck Layout** frame to add it to the layout.
7. Repeat Step 6 for each additional rack.

Note: Frequently used racks may be moved to the **My Racks** tab. See the on-line help or User Guide for more information.

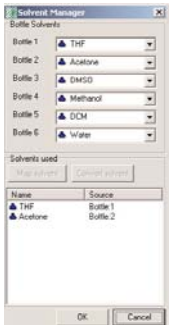
Tip: Save the Job at this point if you plan to use this layout again in the future. Next time, open the Job rather than re-creating the layout. See "Save the Job" on page 4 for more information.



Layout Window

Specify Solvents

MiniMapper must be told which solvents are located in the on-line solvent bottles. Follow the instructions below to specify the on-line solvents.



1. Click the **Locate Solvents** button.
   *The **Solvent Manager** dialog box displays as shown on the right.*
2. Select a solvent from the **Bottle 1** through **Bottle 6** drop down lists to specify which solvent each bottle currently contains.
3. Click the **OK** button.

Liquid Manager

The **Liquid Manager** keeps track of all liquids used with the MiniMapper workstation, along with information about the liquids. Each liquid may have several Pipette parameters defined for handling the liquid in different scenarios. A default set of liquids and Pipette parameters exists and others can be added, modified, and deleted. Select the desired Pipette parameters for the liquids being used before Mapping or Building the Process. See the MiniMapper User Guide or On-line Help for detailed information on using the Liquid Manager.

Mapping

Creating a Map is a visual way to add steps to the process. This method can create three types of steps:

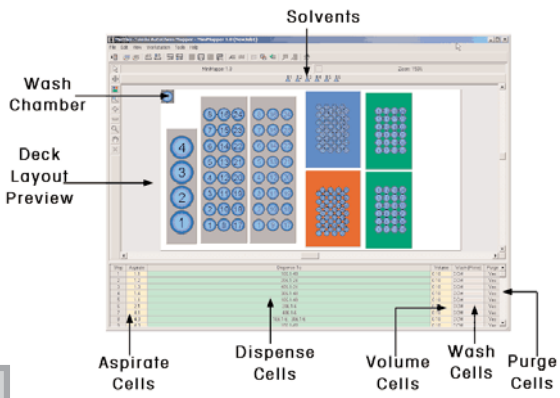
– Prime: Map an on-line solvent to the wash chamber.
– Add Solvent: Map an on-line solvent to vials on the deck.
– Multiple Transfer: Map the contents of one vial on the deck to many other vials.

Follow the steps below to map the solvents in the controller software.

1. Click the **Mapper** button to launch the **Mapping** window.
   *The **Mapping** window and **Set Initial Volumes** dialog box display as shown on the right.*
2. Click on one or more racks in the **Source Racks (full)** list to select the destination rack(s).
3. Click the **Right Arrow** button to move the highlighted rack(s) to the **Destination Racks (empty)** list.

   Note: The mapping software also performs Volume Tracking. This step sets up the default volumes, full and empty. See the MiniMapper User Guide for information on using an input file to specify exact volumes. Right click on a vial in the Mapper window to view a dialog box listing it's activities and volume after each activity.

4. Click the **OK** button.
   *The **Set Initial Volumes** dialog box closes.*
5. Click in the **Aspirate** cell of the table.



Mapping Window

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

6. Click the desired source vial.
   *The vial turns yellow, the information populates the cell, and the cursor moves to the **Destination** cell of the table.*
7. Click a single vial or click and drag the pointer around multiple vials to select the destination vial(s).
   The vial(s) turn white and the information populates the cell.
8. Click in the **Volume** cell of the table.
9. Type a volume to dispense that volume to all vials selected or click the **Arrow** button to enter a different volume for each vial selected.
10. Click in the **Wash** cell of the table and select a solvent to prime with from the drop down list.
11. Click in the **Purge** cell to select purging.
12. Repeat steps 3 – 9 until all liquid transfers have been defined.
13. Select **Save Mapping As...** from the **File** menu.
    *The **Save** dialog box displays.*

> **Note:** The **Save Dialog** box defaults to the "Maps" folder in order to save all mappings in a central location.

15. Type a file name in the **File Name** field.
16. Click the **OK** button.
17. Close the **Mapping** window.
    *The **Main** window and the **Open** dialog box display.*
19. Click the **Map** file name.
20. Click the **Open** button.
    *The **Process** window displays with the appropriate steps added to the process.*

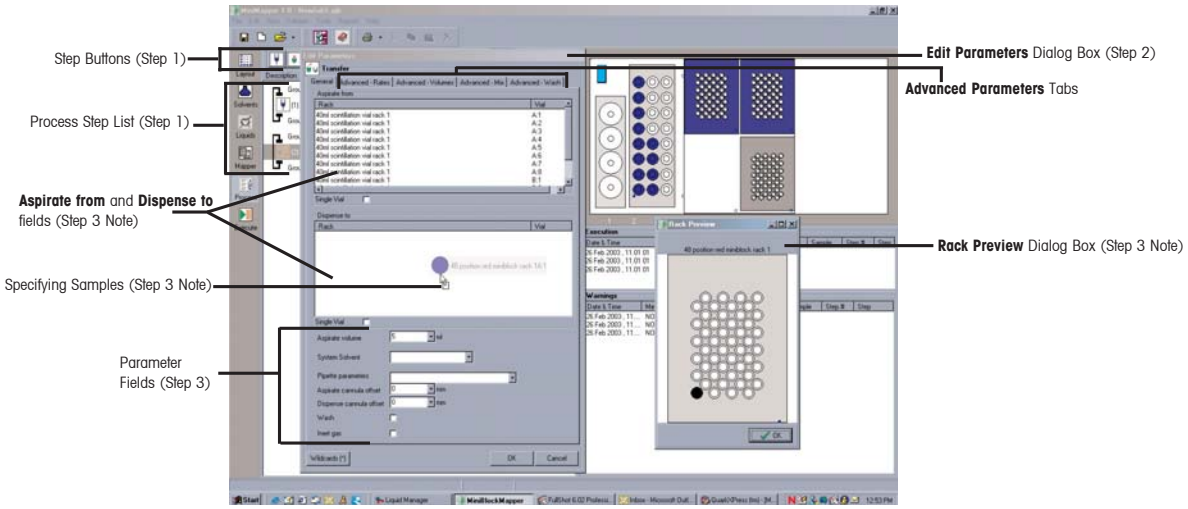
Build Process

The process is made up of steps. For example, the **Group Step** allows specification of sample size. Within a group, all steps are carried out sequentially on the first vial in the sample, then on the second, and so on. It is possible to write Jobs with more than one group and also with steps outside groups, however nested loops are not allowed. For more information on the available steps see the MiniMapper User Guide or On-line Help.
Follow the instructions below to add steps to the process.

1. Click and drag a step button into the **Process Layout** frame.
2. Double click the step.
   *The **Edit Parameters** dialog box displays, as shown below.*
3. Complete the fields to set the correct parameters for the step.

> **Note:** To complete **Dispense** to or **Aspirate** from fields:
> – Click the desired rack in the **Rack Layout** frame to display the **Rack Preview** dialog box.
> – Click and drag the first destination/source vial of the group into the list in the **Edit Parameters** dialog box. The remaining vials in the group are added automatically.

4. Click the **OK** button to save the changes or the **Cancel** button to discard the change.
5. Repeat steps 2-4 for each additional required step.
6. Click the **Validate Process** button to confirm that all required information has been input.



Specifying Transfer Step Details

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Save the Job

Follow the instructions below to save the Job.

1. Click the **Save current job** button to save the Job.
   *The **Save** dialog box displays.*

> **Note:** The **Save Dialog** box defaults to the "Jobs" folder in order to save all Jobs in a central location.

3. Type a name for the Job in the **File Name** field.
4. Click the **Save** button.

Execute the Job

Follow the instructions below to execute the Job.

1. Click the **Execute** button to start the Job.
2. Click the **Recover** button to reset the workstation.
3. Click the **Start Job** button.
   *The Job begins execution. Progress messages display throughout the duration of the Job in the **Process Log** Frame (see the **MiniMapper Main Window** diagram).*

Execution Controls		
	Run	Initiates the Job.
	Pause	Pauses the Job and displays a dialog box to restart the job.
	Stop	Stops the job in a after finishing the current operation. Click the **Run** button to continue the job after stopping it.
	Halt	Halts the job in an emergency (identical operation to pushing the emergency stop button). See Emergency Stop below.
	Recover	Returns the robot arm to the home position. Syringe state does not change.
	Execution Tools	Changes the position of the Step Counter. The job skips to the indicated step and sample.
	Manual Operations	Displays drop down menu: Initialize syringe, Change syringe, Change cannula, Empty syringe, Manual wash, and Manual prime.

Emergency Stop

In the case of an emergency MiniMapper can be stopped without losing the contents of the vials.
Follow the instructions below to stop a Job in an emergency, recover the syringe contents, and resume the job.

1. Click the **Halt** button or push the red **Emergency Stop** button on the front of the workstation.
   *The MiniMapper immediately stops whatever it is doing and goes into **Error** mode.*
2. Click the **Recover** button to reset the workstation.
   The robot head moves to the home position.
3. Click the **Manual Operation** button and select ***Empty Syringe*** from the drop down menu.
   *The **Empty Syringe** dialog box displays.*

> **Note:** Select **Initialize Syringe** instead to discard the current sample in the wash station.

4. Specify which vial to dispense the sample to, by selecting it in the **Deck Layout** frame and dragging it into the ***Empty Syringe*** dialog box.
5. Click the **OK** button.
   MiniMapper dispenses the sample into the selected vial.
6. Select ***Manual Wash*** from the **Manual Operations** drop down menu and specify the parameters in the dialog box that displays.
   MiniMapper washes the cannula and syringe.
7. Click the **Execution Tools** button to resume the job.
   *The **Execution Tools** dialog box displays.*
8. Select the **Step** and **Sample** where the job was halted to begin the job again from that point.
   *The **Runmarker** moves to the specified step and sample.*
9. Click the **Run** button to restart the Job.

Help

For more detailed instructions see the MiniMapper User Guide. If you have any issues that are not addressed in this Quick Reference Guide or the User Guide, contact us. Please have the following information ready:

- A description of what you were trying to do with MiniMapper.
- Copies of all Job, Map, and Log files related to the issue.
- Details about what happened when the system failed to work as you expected.

For technical support issues, please contact your local Mettler-Toledo office or visit our web site at www.mtautochem.com. In the United States, call 1-866-333-MTAC (6822).

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP