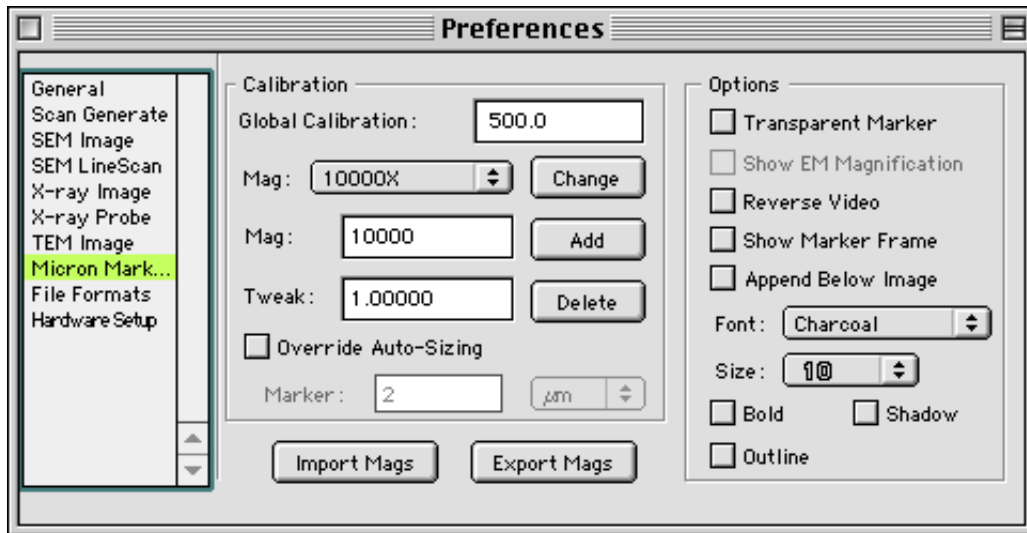


## Micron Marker Preferences [\[download as pdf\]](#)

current for: v1.5.6

The Micron Marker Probe Preferences panel is shown below:



Other Preferences

[General](#)  
[Scan Generate](#)  
[SEM Image](#)  
[SEM LineScan](#)  
[X-ray Image](#)  
[X-ray Probe](#)  
[TEM Image](#)  
• [Micron Marker](#)  
•  
[File Formats](#)  
[Hardware Setup](#)

### • *Calibration*

- **Global Calibration.** The calibration constant (default = 500.0) is used to properly map the micron marker size into the correct number of screen pixels for display on the image or map. Unless the marker length is overridden (see below), the extent of the micron bar is dynamically changed (auto-sized) so that the marker uses approximately the same amount of space on the screen when the magnification is changed. The screen is updated as soon as the calibration number is changed.
- **Mag Menu.** Shows the available magnifications; related edit fields or menus are updated when a new mag is selected.
- **Mag Edit Field.** Used to enter in new magnifications or change existing ones. An update does not take place until the Change button is hit.
- **Tweak.** A multiplicative correction to finely adjust the size of the micron marker. This parameter can be used to adjust for non-linearities (if any) that occur with different magnifications. The software will remember the tweak correction factor for each defined magnification (in contrast to the global calibration factor), thus allowing the greatest possible precision across all magnifications. An update does not take place until the Change button is hit.
- **Override Auto-Sizing.** This checkbox prevents the software from automatically resizing the micron marker. This feature can be used to create a micron marker of a specific size and unit to match any calibration requirement. When it is turned on, an edit field and dimension menu are highlighted for information entry. Once the calibration is performed, this checkbox can be left on or off.
- **Change, Add, Delete.** These buttons are used to make changes to the micron marker menu. The **Mag** menu displays the active magnification. Entering in a new magnification in the edit field creates a temporary record for a new magnification value. If you want to add this record to

the **Mag** menu, hit **Add**. The **Delete** button will remove a record from the **Mag** menu, while the **Change** button will change the entry in the **Mag** menu to a new value. Any number of magnification records can be set up and saved in the menu. After entering the desired values, the user must click on either **Change** or **Add**. If this is neglected, the new definitions will not stick.

- ***Options***

- ***Transparent Marker***. Removes solid background from around numbers. Not available in Windows.
- ***EM Magnification***. Adds the microscope magnification to the information box below the image or map. The EM magnification will only appear if the **Append To Images** checkbox is selected in [General Prefs](#).
- ***Reverse Video***. Reverses black to white for contrast improvement.
- ***Show Marker Frame***. Adds a frame around the marker border for contrast improvement.
- ***Append Below Image***. Places micron marker into the information box below the image or map. Use if no part of the image can be obscured by the micron marker. The micron marker can only appear below the image or map if the **Append To Images** checkbox is **also selected** in [General Prefs](#).
- ***Font***. The font menu displays all installed fonts. Any can be selected. Few will be suitable. Use the associated size menu and style checkboxes (below the font menu) to modify the font in the usual ways.

- ***[Calibration Tutorial](#)***

- ***Import and Export Mags***

**Imports** or **Exports** a straightforward text file that contains the full menu of mag sizes and associated values. This feature is for backing up the mag data in order to transfer the information to another copy of Revolution, or if a file corruption forces the main prefs to be thrown away (after the mags are reset to defaults by throwing away preferences, previously exported mags can be imported to restore extensive additions or modifications).

This feature can also be used to reorder the mags as they appear in the menu. The text files have a sort option built in; with a text editor, the sort can be changed to **Ascending** (default), **Descending**, or **NoOrder** (spelling counts), and the file can be reimported to implement the sort.

It is possible to import a different number of menu items than were exported, so the user can construct all menu items by hand independently of the program, if desired.

- ***How to Control Visibility of the Micron Marker***

The Micron Marker is only available in imaging or x-ray mapping mode. When it is visible, its position can be changed merely by dragging it around the image with the mouse. The visibility of the

micron marker can be controlled from either the multibar or the main menu:

In multibar mode only, turn the micron marker on by single-clicking the Micron Marker button in the [multi-toolbar](#) (blue mouse pointer).



In multibar mode or [SEM Image Mode](#), show or hide the micron marker via the **Options** menu.



The displayed length of the micron marker changes when any new microscope magnification setting is selected. The microscope magnification setting can be changed in any one of three places: 1) from the [micron marker prefs window](#) (see higher on this page); 2) from the **Options** menu (see immediately above); 3) from the [SEM Image Toolbar](#).