

Release Notes
Molecular Analyst / PC Gel Documentation
Version 1.5

INSTALLATION INSTRUCTIONS FOR THE MOLECULAR ANALYST VERSION 1.5

New Item for Windows 95 Users:

After installation, the Molecular Analyst program group contains an additional icon, "Install HASP Hardware Key". Window 95 users must double click on the "Install HASP Hardware Key" icon to install necessary system drivers to properly access the hardware key.

In Windows 3.1 or Windows 95:

1. Install the Coreco framegrabber board in the PC. If you install the card after installing the Molecular Analyst/PC software you will have to manually set some options.
2. Turn on your computer and start Microsoft Windows.
3. Insert the "Molecular Analyst Setup" diskette in the A: drive.
4. In Windows 3.1, select "Run" from the "File" menu in Windows' Program Manager.
In Windows 95, select "Run" from the Start menu.
5. Type a:setup and press the OK button. The Molecular Analyst Setup program will display its window.

The setup program is self explanatory. It will examine your video system software driver to be sure that it is set to 256 color mode and will then determine whether there is enough free space (about 4 Mbytes) on the hard disk.

The setup program will, by default, install the software in the C:\MA directory. Any other directory may be specified instead. If it does not exist, it will be created.

If a previous version of the Molecular Analyst software is already installed in the same "C:\MA" directory, it will be overwritten. User created data will not be disturbed. Sample images included with the software will be updated.

In Windows 3.1, when the installation is done, activate the Windows Program Manager application.
In Windows 95, when installation is done, the Molecular Analyst program in the Start Menu will be open on the desktop.

You will see a new program group called the Molecular Analyst. Within this group are three icons: Molecular Analyst, Read Me Gel Doc 1000 and Read Me Copy Protection.

Double click on the "Read Me Gel Doc 1000" icon to review the document you are reading. Double click on the "Read Me Copy Protection" icon for information on the Copy Protection key installation.

GENERAL INFORMATION

RECOMMENDED 'autoexec.bat' FILE ENTRIES for Windows 3.1 *(this is before installation of Gel Documentation)*

```
REM DOS Version
VER
REM Set DOS prompt to <DRIVE:DIR>
PROMPT $P$G
REM Load disk cache for drive C with a size of 4096k bytes.
C:\WINDOWS\smartdrv.exe C+ 4096 4096
REM Set path variable to DOS and Windows directories.
PATH=C:\WINDOWS;C:\DOS
REM Set TEMP variable to the correct directory for temporary file.
REM Make sure directory exists.
SET TEMP=C:\TEMP
REM Check the integrity of your hard disk
CHKDSK /F
REM Launch Windows
WIN
```

RECOMMENDED "config.sys" FILE ENTRIES for Windows 3.1

```
REM Load High memory manager device driver
DEVICE=C:\WINDOWS\himem.sys
REM Load DOS in high memory.
DOS=HIGH
FILES=30
BUFFERS=20
REM Set system stacks to 9,256
STACKS=9,256
```

RECOMMENDED 'autoexec.bat' FILE ENTRIES for Windows 95

```
REM Set TEMP variable to the correct directory for temporary file.
REM Make sure directory exists.
SET TEMP=C:\TEMP
```

IMPORTANT REQUIREMENTS

The environment variable 'TEMP' should be set as is recommended. The application relies on it to create temporary files.

Unpredictable Display Colors with a PCI Video Card

If you are using a PCI video card and your monitor displays unpredictable display colors you will need to install F64TRAP.EXE to correct the problem.

1. Unplug the connection to the framegrabber board and connect it to your video card. (This will give you correct display colors and make it easier to install F64TRAP.EXE)
2. Install F64TRAP.EXE - read F64TRAP.ME file for a detail description and installation procedure
The F64TRAP.ME file can be found in the F64 directory under your MA directory. ie.) <path where ma was installed>\MA\F64\F64TRAP.ME.

It is also recommended that you add W64TRAP.EXE to your windows start up group. This will correct display color problems when you run a dos shell under windows.

Molecular Analyst / Densitometry Version 1.5

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Addition of Freehand Draw Volume Analysis Tool

Molecular Analyst now has a freehand draw volume analysis tool. This tool provides users a method to define a number of irregularly shaped objects for volume analysis.

TIFF Export

In some cases, the previous version of Molecular Analyst incorrectly exports the calibration table during TIFF export. When the error occurs the calibration table values are off by a factor of 10. This would cause an O.D. value of 1.0 to be incorrectly exported as 10.0. This has been fixed in Molecular Analyst 1.5.

Fixed Windows 95 Image Printing Problem:

Printing images from Molecular Analyst, running under Windows 95, to Hewlett-Packard Laser Jet printers now works correctly.

Version History

Version 1.4.1 Revisions

Support for Windows 95 Operating System

Molecular Analyst now runs under Windows 95.

Version 1.4 Revisions

Saving TIFF Images

Images can now be saved in 3 different TIFF formats.

1. Raw - saves raw data only
2. View - saves 8-bit display data with a table of palette indices
3. Calibrate - saves raw data with calibration table

Reading TIFF Images

TIFF images can now be read using the IMPORT function in the FILE Menu. Support is available for reading 8-bit and 16-bit raw data TIFF files, 8-bit display data with a table of palette colors, and 8-bit and 12-bit data with a calibration table. RGB data import is *not* supported.

This TIFF import/export is compatible with most popular third-party packages.

Version 1.3 Revisions

Possible Video Driver Configuration Problem with AST Premia 4/66d On-board Video

If your Windows video colors become corrupted after installing the Gel Documentation frame grabber board and cables, there may be a video driver configuration problem. Using NOTEPAD or SYSEDIT to open the "WIN.INI" file in your windows directory (the directory is usually C:\WINDOWS). Once the "WIN.INI" file is open, look for the section name **[Mach]**. If the **[Mach]** section is found, look for the key field **VGADAC**. If the **VGADAC** key field is found, set the field equal to on. Otherwise add the **VGADAC** key field to the **[Mach]** section. The key field entry should look as follows:

VGADAC=on

EXAMPLE:

```
[Mach]
VGADAC=on
:
:
:
:
```

If your problems persist, call your local technical service representative for assistance.

// GEL DOCUMENTATION

Saturation (off-scale)

The ability to highlight saturated areas in an image in real-time has been implemented. If the user selects the *Show Saturation* checkbox in the Scan Window, all saturated values will be displayed in red. This feature is useful when quantitating bands on a gel.

.IMG and .SCN Association

.IMG and .SCN files are automatically associated with Molecular Analyst/PC during the setup process. When files with these extensions are double clicked, Molecular Analyst/PC is executed and opens the associated file.

Table Report Heading

The printed Table Report now has a heading that displays the file name and page number.

Object Table Save and Export

The table save and user interface has changed. The table is now saved with the image. The table may be saved in the old manner to a text file via the *File/Export* menu item.

Multiple installations of Gel Documentation

If Molecular Analyst/PC for the Gel Documentation system is installed more than once on the same PC, the setup process now transparently removes all lines in the autoexec.bat file that contain "f64\64firm.bat" and "odxpath."