


Menus

Click-hold to expose a menu listing; drag down the menu listing to highlight/select list items; release mouse-key to activate highlighted list item.

List item with right-pointing arrow indicates a submenu; submenus operate as described above.

File menu

New -n

Opens new, blank database file.

Open... -o

Access standard Open dialog box; locate a Presenter 3D file (v3.6.x or Presenter Professional v3.x), then click on Open button to Open the

database file.

Close

Closes the active database file.

Save -s

Access standard Save dialog box (or overwrites named file); enter name in the Save as: data field; choose a location, then click on Save button to Save the database file.

Save As...

Access standard Save dialog box; enter name in the Save as: data field; choose a location, then click on Save button to Save the database file.

Open Library...

Access standard Open dialog box; locate a Presenter 3D file (v3.6.x or Presenter Professional v3.x), then click on Open to put the file items in the Libraries palette.

Import...

Transfers to v3.x I/O (Open dialog box).

General

Quits ModelPro and launches v3.x IO module. Select the desired import option from the File Type menu; set the Config and Prefs as necessary; locate the appropriate file; click Open button to import the file to ModelPro (makes file

translation; quits v3.x IO module and launches ModelPro; opens ModelPro file

from which Import was selected; inserts imported file into database.)

Prefs (button)

Click button to access dialog box.

On Input (two radio buttons)

Expand inserts into separate groups

Convert inserts into Library references

On Output -- has no effect on import

File Type (pull-down menu)

v1.5 Model File (Presenter Professional v1.5.x models)

Config (button) -- Access dialog box; has no effect on import

Cyberware

Dimensions Design

Config (button) -- Access dialog box

On Input

Skip hidden groups (check box)

On Output -- has no effect on import

DXF

ElectricImage FACT

EPSF (Encapsulated PostScript Format file)

Config (button) -- Access dialog box
On Output -- has no effect on import

IGES

Config (button) -- Access dialog box
On Input (check box)
Convert Lines/Arcs to Wire-Frame Surfaces

PICT or PICT3D

Postscript Font (Type 1 Postscript printer font)

Config (button) -- Access dialog box (2 radio buttons; one data field)

Read Entire Character Set; Read String (two radio buttons)

Click on Read Entire Character Set to configure the import to translate the entire character set of the selected PostScript font.

Click on Read String to enable the data field; type characters in the data field to be translated from the selected Postscript font.

OK (button)

Click button to return to Open dialog; then locate/select the desired font for translation.

Super3D Text

VersaCAD

Config (button) -- Access dialog box (two radio buttons)
Read Solids as Surfaces (Render)
Read Solids as Lines (wire-frames)

Quickdraw 3DMF

Access standard Open dialog; locate/select the desired 3DMF file.

Here are a few solutions to problems encountered by our users:

General

Must import to an open file.

error -108 or 108 during the transfer from program to program is due to lack of system memory.

Check memory on V3IO application. Make sure it is at least 2 times your model size (3

times is better). ModelPro and v3.x IO memory allocation should not be set so high that there is not extra 200K or so left for the system.

error -51 is a path error (for disk location).

The file to be imported needs to be in the same location as v3.x IO application.

error -36 is an I/O error.

Usually this is bad media.

Export...

Transfers to v3.x I/O (Save dialog box).

General

Quits ModelPro and launches v3.x IO module. Select the desired export option from the File Type menu; set the Config and Prefs as necessary; click Save

button to export the file; opens ModelPro file from which Export was selected.

Prefs (button)

Click button to access dialog box.

On Input -- has no effect on export

On Output (18 radio buttons; two check boxes)

Spline Breakup (9 radio buttons)

Click on a button to determine the complexity/smoothness of the exported spline

shapes (low numbers are "coarse"; high numbers are "smooth")

Spline Surface Breakup (9 radio buttons)

Click on a button to determine the complexity/smoothness of the exported spline surfaces. (low numbers are "coarse"; high numbers are "smooth")

Write Invisible Groups (check box)

Create Groups for Unsupported Elements (check box)

File Type (pull-down menu)

v1.5 Model File (Presenter Professional v1.5.x models)

Config (button) -- Access dialog box; has no effect on export

Dimensions Design

On Output

Skip Hidden Groups (check box)

Output File Format (two radio buttons)

Click on the radio button for the desired file type for export:
Dimensions 1.18 or Design 2.0

DXF

ElectricImage FACT

There are two ways to export a Presenter Professional file as FACT:

1. from ModelPro--uses EIAS μ file -- Export > File menu.
2. from Presenter--uses EIAS P μ file -- Export > File menu.

These files belong in the Presenter Plug-ins folder.

Following are a few hints from users who regularly export to FACT:

You can export your model in pieces by turning folders on or off, only the objects you see get exported. If the models appear faceted in EIAS, try importing the FACT file in EI instead of just opening the FACT file (make sure the smooth polygons box is checked). Also, if your model doesn't show up, go into its object attributes and make sure there are no "?" or "inf" in any of the parameters, if there are just set them to 0.

When you import a FACT file into EIAS, turn on "fix cone point shading". This helps with the smoothness of the models. The only problems you will run into is with some booleans and any joined splines that have been extruded. (ie. the letter "O").

If you have cloned a model in ModelPro, that will screw up the models' coordinates when it is taken into EIAS. But you can fix those just by typing in 0,0,0 into the coordinates dialog in EI.

EPSF (Encapsulated PostScript Format file)

On Output

2D File View (six radio buttons)

Click on a radio button to determine which 2D view will be exported (Top XZ, Right YZ, Front XY, Top Skew, Front Skew, Right Skew).

VersaCAD

Config (button) -- no effect on export.

VIDI Public

Wavefront

Quickdraw 3DMF

Access standard Save dialog.

Page Setup...

Access standard Page Setup dialog box; make entries and/or selections, then click on OK to save the settings and exit the dialog box.

Print... [⌘-p]

Access ModelPro Print dialog box.

[Window Orientation For Print](#) (two radio buttons; two check boxes)

[All Object Windows Tiled](#) (layout shown to right)

Use Window Scale and Center (layout shown at right)

[Windows to Print](#) (six check boxes)

Click on Top, Front, Right, Angled to include in print out (screen resolution PICT). (layout shown at top-right)

Click on [Group List](#) and/or With [Library Usage](#) to print out the Groups palette list and/or Library palette list.

[To File](#) (button)

Prints the selected windows to a file rather than to your printer.

Render/Animation

Quits ModelPro and launches Presenter.

Quit [⌘-q]

Quits ModelPro to Finder.

Edit menu

Undo <operation> [⌘-z]

returns model status to pre <operation> (20 levels).

Cut [⌘-x]

removes selected item from database (to ModelPro clipboard).

The ModelPro clipboard is separate from the System clipboard; it handles the special dataset created by ModelPro; this data cannot be pasted into other applications.

Copy [⌘-c]

copies selected item to ModelPro clipboard.

Paste [-v]

pastes contents of ModelPro clipboard into database.

Clear [-b]

removes selected item from database (cannot Undo or Paste).

Select All [-a]

selects all items in database.

Redo <operation> [-r]

Applies the previous <operation> (determined by Undo).

Clone [-w]

creates exact duplicate of selected item and its position.

Duplicate... [-=]

Access ModelPro Duplicate dialog box.

Total # (data field)

Make an entry (whole number > 1) to determine how many copies of the item will be made (including the original item).

Move $\Delta X, \Delta Y, \Delta Z$ (three data fields)

Make entries (Units) to determine how far along the three primary axes the copies will be spread.

Resize Ratio X, Y, Z (three data fields)

Make entries (Units) to determine how the copies will be enlarged/reduced in the three primary dimensions. (1.0 = same size; 0.5 = 50% of original size; 1.5 = 150% of original size)

Rotate^o **TopXZ, FrontXY, RightYZ** (3 data fields)

Make entries (degrees) to determine how the copies will be rotated in the

three primary planes.

Rotate Copies

Must be "on" for Rotate^o to take effect.

Center of Rotation X, Y, Z (pull-down menu; three data fields)

Select a center for Rotate^o from the pull-down menu (coordinates will show in the data fields), or make entries (Units) to precisely set the center.

Resize Affects Rotation (check box)

Method (two radio buttons)

Click on **Polar** to spread the copies about the Center of Rotation.

Click on **Linear** to spread the copies along a straight line.

Distribute (two radio buttons)

Click on **Incremental** to apply Move, Resize Ratio, and Rotate^o to

each copy in relation to the previous copy (i.e. set Linear Method, Move (Δx) to 3 inches, Total# to 4; the last copy will be 9 inches from the initial copy in the x-direction.)
Click on **Distribute** to apply Move, Resize Ratio, and Rotate^o to the whole set of copies (i.e. set Linear Method, Move (Δx) to 3 inches, Total# to 4; the last copy will be 3 inches from the initial copy in the x-direction.)

Preferences...

Access ModelPro Preferences dialog boxes.

Save Preferences (button) -- saves special settings for the next modeling session.

General Preferences

Beep After Long Functions

Sound indicates function is complete.

Auto Update Library Items

Changes made to Library Items will be passed along to all instances of the item.

Delete Spline After 3D Operation

Removes 2D spline after 3D operation has been performed, creating 3D spline mesh.

3D Operations Create Folders

When 3D Operations are performed, a folder (group) is automatically created to hold the result of the operation

Relax Snapping Distance (7 pixels)

Cursor snaps when clicked within 7 pixels of target (relaxed from 3 pixels).

Hide Palettes Instead of Closing

Converts Close box to Windowshade box on floating palettes.

Screen Preferences

Vertex Options (three radio buttons)

Click to display vertices at the desired size (1 or 3 or 5 pixels)

Origin Lines; Depth Lines; Axis Indicators (three check boxes)

Click to toggle display "on/off"

Drawing Preferences

Scale Options (two pull-down menus)

Decimal Places

Make a selection from the menu to determine the accuracy level at which you will be modeling.

Units

Make a selection from the menu to make your modeling space adequate/correspond to your model's real-world size.

Cursor Types (five radio buttons)

Click on a radio button to determine what the cursors will look like as you model your scene. (samples shown to right)

Grid Preferences

Visible Grid X, Y, Z (three data fields)

Make entries (Units) to determine the size of the visible grid.

Link Y, Z (two check boxes)

Duplicates entry made in X data field into Y and/or Z data field(s).

Snapping Grid X, Y, Z (three data fields)

Make entries (Units) to determine the size of the snapping grid.

Link Y, Z (two check boxes)

Duplicates entry made in X data field into Y and/or Z data field(s).

Colors Preferences (eight color chits)

Click on a chit to access standard color picker, then change to the color desired.

Background (all View windows)

Depth Lock (crossed-lines)

Camera Window Grid (3D View window grid display)

Drawing Window Grid (Orthogonal View windows grid display)

Origin (crossed-lines); Guides (lines)

Markers (numbered crosshairs)

Default Drawing Color

Shading Preferences

Faster Spline Drawing

Speeds redraw in 3D View window (takes more RAM).

Enhanced Copy Bits

Speeds redraw in Orthogonal View windows (takes more RAM).

Facet Shading for Shaded View

Speeds redraw in 3D View window.

Relax clipping in QuickRender

Allows very close view of items in 3D View window.

QD3D

Save 3DMF instead of PICT

Makes "camera" button on 3D view window into export button.

3DMF file as TEXT

Makes 3DMF export text file rather than straight 3DMF.

Spline Contours as Lines

Makes exported spline contours segmented straight-lines.

Windows menu

Re-display [A-d]

Redraws images in the View windows and the 3D View window.

Top [A-1]

Makes the Top View window the active window.

Front [A-2]

Makes the Front View window the active window.

Right [A-3]

Makes the Right View window the active window.

3D Window [A-4]

Makes the 3D Preview window the active window.

Palettes

Displays Palettes pull-down menu.

Statistics

Displays Statistics palette (check mark).

Tools

Displays Tools palette (check mark).

Snapping

Displays Snapping palette (check mark).

Groups

Displays Groups palette (check mark).

Tool Info

Displays Tool Info palette (check mark).

Status Line

Displays Status Line palette (check mark).

Libraries

Displays Libraries palette (check mark).

Display Image [A-e]

Access Standard Open dialog box.

Locate/Select a PICT file; view PICT.

Choose Copy PICT into Database from title bar pull-down to paste the PICT into the Front View window to use as template. Use the Selector tool to move the PICT about in the View window(s).

Clean Up windows

Arranges windows/palettes into default configuration.

Fits default configuration to monitor size.

Options menu

Show Rulers

Toggles Rulers display on/off (check mark).
(Rulers display along top/left edges of View windows).

Show Guides

Toggles Guide lines display on/off in the View windows (check mark).

Show Grid

Toggles Grid lines display on/off in the View windows (check mark).

Show Depth Line

Toggles Depth Line(s) on/off in the View windows (check mark).

Show Markers

Toggles Markers display on/off in the View windows (check mark).

Snap to Guides

Forces cursor to snap to Guide lines; within 3 pixels (check mark).

Lock Guides

Holds Guide lines in position in the View windows (check mark).

Clear All Guides

Removes all Guides from the View windows (check mark).
(Includes "Locked" Guides.)

Clear All Markers

Removes all Markers from the View windows (check mark).

Group menu

Group [⌘-g]

Gather selected items into new folder (Groups palette).

Access "Add Folder" dialog box.

Enter a name in the Name for new folder data field; click on Add button to perform the operation.

Ungroup [⌘-u]

Extract items from selected folder (Groups palette; deletes selected folder).

Create Folder [⌘-f]

Access "Add Folder" dialog box.

Enter a name in the Name for new folder data field; click on Add button to perform the operation.

Information [i-i]

Access Information dialog box for selected item.

Name (pull-down menu; data field)

Make a selection to display Information for another item in the database.

Make an entry (characters) to change the item name.

Info

Type

Data type (i.e. Torus or Multi-line or Spline Mesh).

Size

Amount of space the item takes in memory (bytes).

Path

Indicates what folders (if any) the item is contained in.

Options (three check boxes)

Filled/Capped

For closed paths, indicates whether or not the shape is surfaced.

For 3D volumes with two ends (i.e. cylinder), indicates whether or not one of the ends is surfaced.

Capped

For 3D volumes with two ends (i.e. cylinder), indicates whether or not the end opposite the Filled/Capped end is surfaced.

Assembly

Applies to 3D volumes created with the Boolean tool; uncheck Assembly to provide access to the original volumes used to create the Boolean volume (Groups palette).

Must be unchecked to use MacRenderMan's CSG (Constructive Solid Geometry) feature.

Rotation Point X, Y, Z (three data fields; one pull-down menu)

Make entries (Units) to precisely position the rotation point of the item.

Select the desired item from the pull-down menu (right-pointing arrow)

to set the rotation point of the item.

Size X, Y, Z (info display only)

Shows the absolute value dimensions of the item bounding box.

Morph Object

Converts selected object from Spline Mesh data type to Morphable Spline Mesh data type (only available in v3.2 or later).

Perform vertex/surface manipulations on target items for use in Presenter with the Morph Animator plug-in.

Click on Morphable Spline Mesh to access Morphing Objects Parameters

dialog box.

Morphing Objects Parameters (dialog box)

Morphables

displays info on the number of targets created, in addition to the Master.

Add (button)

Click to make a target duplicate of the Master item.

Copy (button)]

Click to make a target duplicate of the selected target item.

Kill (button)

Click to delete the selected target item from the list.

→ Real (button)

Click to convert the selected target item into a Spline Mesh data type.

Item List

Lists the Master item and all of the targets created. Click in the circle next to an item to select/display that item (in preparation to perform vertex/surface manipulation on the item.) Solid black circle indicates

the item is selected/displayed.

Click on the name to edit/change the name; move the cursor to desired place in the name then add and/or delete characters to the name.

Add Normals

On polygon meshes only, adds normals to ensure smooth surface rendering.

Operations menu

Transform... [t]

Access Transform dialog box.

Translate X, Y, Z (three data fields)

Make entries (Units) to precisely set the distance the selected item will move in the three principal directions.

Rotate TopXZ, FrontXY, RightYZ (three data fields)

Make entries (degrees) to precisely set the amount of rotation the item will make around the Center of Transform in each of the principal planes.

Resize (two radio buttons; one check box; three data fields)

Click on **Ratio** to set the data fields to display the resize as a ratio (i.e. 0.5 = 50%).

Click on **Actual** to set the data fields to display the actual dimensions of the item's bounding box.

Click on **Same** (only for use with Ratio) to set the Y and Z data fields to

duplicate the value entered in the X data field.

Make entries (Units (Actual) or positive number (Ratio)) to precisely enlarge/reduce the selected item.

Center of Transform (one pull-down menu; three data fields)

Make a selection from the pull-down menu to position the point about which the item transformation will be centered.

Make entries (Units) to precisely position the point about which the item

transformation will be centered.

Join Elements [-j]

Gathers selected, closed, isoplanar 2D contours into new folder (Groups palette).

Creates a closed, 2D contour with a "hole(s)."

(The smaller contour(s) must be completely enclosed by the larger contour, and must be isoplanar (on the same plane.)

Connects selected, open 2D contours. (Must have coincident endpoints.)

Align...

Access Align dialog box

Notice how the generalized illustration (bottom of the dialog) changes as different settings are employed; this will help you to decide how to align items as you desire.

X, Y, Z (three check boxes)

Click to cause selected items to align with one another along the three primary directions/dimensions.

Align; Distribute (two radio buttons)

Click on **Align** to cause selected items to align edges or centers as chosen below.

Click on **Distribute** to cause selected items to be spread evenly over the total width/height/depth (as chosen below) of the selected items.

Left; Centers; Right; Width/Height/Depth (four radio buttons)

Choose one to determine whether the selected items will align, in the plane determined above, along their Left edges, along their Centers, along their Right edges, or spread evenly over the total Width/Height/Depth

Move To... [-m]

Access Move To dialog box

Use the Information Only displays to determine the precise locations for the Move-To operation.

Section (pull-down menu)

Choose Front, Middle, Back to determine which Section of the item's bounding box is highlighted in the generalized bounding box illustration

(bottom-left of the dialog box); or click on the illustration to highlight the desired Section.

Bounding Box Illustration (bottom-left of the dialog box)

Displays a generalized bounding box for the selected item. The bounding box is split into three Sections (Front, Middle, Back); click on the illustration to highlight the desired Section. Each Section employs eight edge points, and one center point; the highlighted point is solid-white.

Current Location X, Y, Z (information only)

Displays the coordinate information for the highlighted point in the bounding box illustration.

Last Offset X, Y, Z (information only)

Displays the coordinate information for the previous Move-To operation.

New Offset X, Y, Z (information only)

Displays the coordinate information corresponding to the values determined by the From/To pull-down selections.

From/To (pull-down menus)

Make selections from the menus to determine the Move-To Offset parameters.

Move To X, Y, Z (three data fields)

Make entries (Units) depending upon how the From/To pull-down selections are made, to determine the Move To Offset parameters. Click on the boxed arrows to duplicate the coordinate information displayed in Current Location.

Again (button)

Click to repeat the Move-To operation using the Last Offset parameters.