Appendix A

MSC/PATRAN Settings Listed By Category

Geometry

**Directionality**
Show Parametric Direction: DISPLAY/GEOMETRY

**Global Model Tolerance**
Global Tolerance: PREFERENCES/GLOBAL

**Highlighting**
Highlighting: DISPLAY/HIGHLIGHT
Highlight Colors: PREFERENCES/GRAPHICS

**Labels**
Entity Labels and Colors: DISPLAY/ENTITY COLOR/LABEL/RENDER

**Plot/Erase**
Plot/Erase: DISPLAY/Plot-Erase

**Point Size**
Point Size: DISPLAY/GEOMETRY

**Render Settings**
Alternative Light Sources: DISPLAY/LIGHT SOURCES
Chordal Tolerance: DISPLAY/GEOMETRY
<table>
<thead>
<tr>
<th>Feature</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color Configurations:</td>
<td>DISPLAY/COLOR PALETTE</td>
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<tr>
<td>Display Lines:</td>
<td>DISPLAY/GEOMETRY</td>
</tr>
<tr>
<td>Display Method (Entity/Group):</td>
<td>DISPLAY/ENTITY/COLOR/LABEL/RENDER</td>
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<tr>
<td>Geometric Shrink:</td>
<td>DISPLAY/GEOMETRY</td>
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<tr>
<td>Named Attributes:</td>
<td>DISPLAY/NAMED ATTRIBUTES</td>
</tr>
<tr>
<td>Select</td>
<td>DISPLAY/NAMED ATTRIBUTES</td>
</tr>
<tr>
<td>Create</td>
<td>DISPLAY/NAMED ATTRIBUTES</td>
</tr>
<tr>
<td>Render Style:</td>
<td>DISPLAY/ENTITY COLOR/LABEL/RENDER</td>
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<td>Shade Color:</td>
<td>DISPLAY/ENTITY COLOR/LABEL/RENDER</td>
</tr>
<tr>
<td>Shading:</td>
<td>DISPLAY/SHADING</td>
</tr>
</tbody>
</table>

**Finite Element Model**

**Element Properties Display**

Labels and Colors: DISPLAY/FINITE ELEMENTS

**Highlighting**

Highlighting: DISPLAY/HIGHLIGHT

Highlight Colors: PREFERENCES/GRAPHICS

**Labels**

Entity Labels and Colors: DISPLAY/ENTITY COLOR/LABEL/RENDER
**Node Size**

Node Size: DISPLAY/FINITE ELEMENTS

**Plot/Erase**

Plot/Erase: DISPLAY/PLOT-ERASE

**Render Settings**

Alternative Light Sources: DISPLAY/LIGHT SOURCES

Chordal Tolerance: DISPLAY/GEOMETRY

Color Configurations: DISPLAY/COLOR PALETTE

FEM Shrink: DISPLAY/FINITE ELEMENTS

Free Edge and Face Rendering: DISPLAY/FINITE ELEMENTS

Lines Along the Element Edges: DISPLAY/FINITE ELEMENTS

Named Attributes:

Select: DISPLAY/NAMED ATTRIBUTES

Create: DISPLAY/NAMED ATTRIBUTES

Render Style: DISPLAY/ENTITY COLOR/LABEL/RENDER

Shade Color: DISPLAY/COLOR/LABEL/RENDER

Shading: DISPLAY/SHADING
Loads and Boundary Conditions

**Display Markers**

- All Loads/BCs Display (On/Off): DISPLAY/LOAD/BC/ELEM.PROPS.
- All El. Props. Display (On/Off): DISPLAY/LOAD/BC/ELEM.PROPS.
- Individual Labels and Colors: DISPLAY/LOAD/BC/ELEM.PROPS.

**Display Loads/BCs On FEM Only (when applied to geometry)**

- Show On FEM Only: DISPLAY/LOAD/BC/ELEM.PROPS.

**Load/BCs/El. Prop. Vectors and Values**

- Show LBC Vectors (On/Off): DISPLAY/LOAD/BC/ELEM.PROPS./VECTORS
- Show LBC/El. Prop. Values: DISPLAY/LOAD/BC/ELEM.PROPS./VECTORS

**Results**

**Deformation**

- Scale Factor: DISPLAY/RESULTS
- Show Deformation (On/Off): DISPLAY/RESULTS
- Undeformed Entities (On/Off) and Color: DISPLAY/RESULTS

**Element Assignment Plots**

- Show Min/Max Values: DISPLAY/RESULTS
Show Result Values: DISPLAY/RESULTS

**Result Label Format**

Result Label Format: DISPLAY/RESULTS

**Result Ranges**

Assign Target Range to Viewport: DISPLAY/RANGES

Create, Rename, and Delete: DISPLAY/RANGES

**Result Spectra**

Continuous Color: DISPLAY/SPECTRUMS

Create, Rename, and Delete: DISPLAY/SPECTRUMS

**Result Titles**

Show Result Titles: DISPLAY/RESULTS

**Vector**

Color Method: DISPLAY/RESULTS/VECTOR

Show Vector Results (On/Off): DISPLAY/RESULTS

Show Result Values: DISPLAY/RESULTS/VECTOR

Scale Factor: DISPLAY/RESULTS/VECTOR

**Special Toggles**

Toggles:

- Auto Center: PREFERENCES/GRAPHICS
- Auto Extend: PREFERENCES/GRAPHICS
- Auto Fit View: PREFERENCES/GRAPHICS
- Hardware Rendering: PREFERENCES/GRAPHICS
MSC/PATRAN Settings Listed By
Alphabetical Order

Alternative Light Sources: DISPLAY/LIGHT SOURCES
Auto Center: PREFERENCES/GRAPHICS
Auto Extend: PREFERENCES/GRAPHICS
Auto Fit View: PREFERENCES/GRAPHICS
Chordal Tolerance: DISPLAY/GEOMETRY
Color Configurations: DISPLAY/COLOR PALETTE
Deformation Display (On/Off): DISPLAY/RESULTS
Deformation Scale Factor: DISPLAY/RESULTS
Display Loads/BCs On FEM Only: DISPLAY/LOAD/BC/ELEM. PROPS.
Display Lines: DISPLAY/GEOMETRY
Display Method (Entity/Group): DISPLAY/ENTITY COLOR/LABEL/RENDER
Named Attributes:
Select: DISPLAY/NAMED ATTRIBUTES
Create
Entity Labels and Colors: DISPLAY/ENTITY COLOR/LABEL/RENDER
FEM Shrink: DISPLAY/FINITE ELEMENTS
Free Edge and Face Rendering: DISPLAY/FINITE ELEMENTS
Geometric Shrink: DISPLAY/GEOMETRY
Global Tolerance: PREFERENCES/GLOBAL
Highlight Colors: PREFERENCES/GRAPHICS
Highlighting: DISPLAY/HIGHLIGHT
LBC/El. Prop. (All) Labels and Colors: DISPLAY/LOAD/BC/ELEM. PROPS.
LBC/El. Prop. (Individual) Labels and Colors: DISPLAY/LOAD/BC/ELEM. PROPS.
LBC/El. Prop. Values Display:
DISPLAY/LOAD/BC/ELEM. PROPS./VECTORS

LBC/El. Prop. Vectors Display (On/Off):
DISPLAY/LOAD/BC/ELEM. PROPS./VECTORS

Lines Along the Element Edges:
DISPLAY/FI NITE ELEMENTS

Parametric Direction:
DISPLAY/GEOMETRY

Plot/Erase:
DISPLAY/PLOT-ERASE

Radius of Points:
DISPLAY/GEOMETRY

Radius of Nodes:
DISPLAY/FINITE ELEMENTS

Range Assignment to Target Viewport:
DISPLAY/RANGES

Range Create, Rename, and Delete:
DISPLAY/RANGES

Render Style:
DISPLAY/ENTITY COLOR/ LABEL/RENDER

Result Display Min/Max Values
DISPLAY/RESULTS

Result Label Format:
DISPLAY/RESULTS

Result Titles Display:
DISPLAY/RESULTS

Result Values:
DISPLAY/RESULTS/

Shade Color:
DISPLAY/ENTITY COLOR/ LABEL/RENDER

Shading:
DISPLAY/SHADING

Spectrum Continuous Color:
DISPLAY/SPECTRUMS

Spectrum Create, Rename, and Delete:
DISPLAY/SPECTRUMS

Undeformed Entities (On/Off) and Color:
DISPLAY/RESULTS

Vector Color Method:
DISPLAY/RESULTS/VECTOR

Vector Display (On/Off):
DISPLAY/RESULTS

Vector Result Values:
DISPLAY/RESULTS/VECTOR

Vector Scale Factor:
DISPLAY/RESULTS/VECTOR