Quick Reference Guide
Tecplot 360 2025 Release 2

Tecplot, Inc.

Command Line

The general form for running Tecplot 360 from the command line is:

```
tec360 [options]
```

The available options include:

`-addonfile filename`	Supply a custom list of addons via the tecplot.add file.
`-b macrofile`	Run in batch mode.
`-c cfgfile`	Use `cfgfile` for the configuration instead of the default configuration file, `tecplot.cfg`.
`-convert`	Loads all the specified data files, and runs specified macros in a restricted batch mode in which the only permitted options are reading data files (in any supported format) and writing SZL files. Does not use a license key. See also -o.
`-display computername`	Display on computer `computername` (Linux only). The target system must have X-server capability with the GLX extension.
`-datafile filename`	Load data file `filename`.
`-debug dbugfile`	Send debug information to the file `dbugfile`. Information is displayed to aid in debugging a new configuration file, macro file, or binary data file. You may specify the minus sign ("-") for `dbugfile` to send the debug output to the "standard output" (Mac/Linux only).
`-f fontfile`	Use `fontfile` instead of the default font file, `tecplot.fnt`.
`-h homedir`	Use `homedir` for the home directory instead of the default home directory.
`--help`	Open help message for command-line flags.
`-loadaddon addonname`	Load an add-on named `addonname`.
`-m colormapfile`	Use `colormapfile` as the initial color map file.
`--max-available -processors numprocs`	Restrict the number of processors (processor cores) employed by Tecplot 360 to the `numprocs` specified. Some tasks can be performed in parallel, so using all available processors greatly increases performance of those tasks. By default, Tecplot 360 uses all processors available on the machine to provide the best performance in most cases. Assign a value less than the total number of available processors to limit the number of processors used by Tecplot 360 to the assigned number.

`--mesa`	**Linux Only** Run using Tecplot's LLVM Mesa Vulkan driver. This graphics driver is slower than the native Vulkan driver, however it can be used as a workaround when native drivers are buggy or not available.
`-nobanner`	Do not show the opening banner (i.e. splash screen).
`-nobatchlog`	Suppress creation of the file `batch.log` during batch mode operation.
`-nostdaddons`	Do not load the add-ons listed in the `tecplot.add` file.
`-nowelcomescreen`	Do not display the Welcome Screen at startup (it may still be opened after launch from the View menu)
`-o outputfile.szplt`	Writes the specified SZL file from the data loaded from other files (including macros) specified on the command line, then exit. Does not require a license key. See also the `-convert` command.
`-p scriptfile`	Play the macro commands in the file `scriptfile.mcr`.
`-q`	Use quick playback mode. Ignores delay and pause commands.
`-qm quickpanelfile`	Place the macro functions in `quickpanelfile` in the Quick Macro Panel, instead of using the macros from the default file, `tecplot.mcr`.
`-quiet`	Turns off all standard-out messages (Linux only).
`-r printfile`	Set the filename for routing Print Files to `printfile`.
`-s stylefile`	Use `stylefile` as a stylesheet for the first frame (`*.sty`).
`-showpanel`	Open the Quick Macro Panel upon startup.
`--use-sys`	Use the libraries from the bin/sys sub-folder below the tecplot home directory when running Tecplot. The sys sub-folder contains the version of libstdc++ that was used to build Tecplot and may be required when running older Linux systems. (Linux only).
`-v`	Display the version number.
`-y exportfile`	Set the filename for export files to `exportfile`.

Mouse & Keyboard Shortcuts

3D Rotate Tools

Alt-Click-and-drag	Rotate about the viewer position using the active Rotate tool.
Middle-click-and-drag	Smoothly zoom in and out of the data.
Right-click-and-drag	Translate the data.

Control-right-click-and-drag (Mac OS X: Command-right-click-and-drag)	Rotate about the rotation origin (any tool may be active).
C	Move the rotation origin to the probed point, ignoring zones.
O	Set the center of rotation.
R	Switch to Rollerball rotation.
S	Switch to Spherical rotation.
T	Switch to Twist rotation.
X	Switch to X-axis rotation.
Y	Switch to Y-axis rotation.
Z	Switch to Z-axis rotation.

Contour Add Tool

Alt-click	Place a contour line by probing on a streamtrace, slice, or iso-surface.
Click	Place a contour line.
Control-click	Replace the nearest contour line with a new line.
Click-and-drag	Move the new contour line.
-	Switch to the **Contour Remove** tool.

Contour Remove Tool

Click	Remove the contour line nearest to the probed location.
+	Switch to the **Contour Add** tool.

Geometry Polyline Tool

A	Allow translation of polyline segments in all directions.
H	Restrict translation of the current polyline segment to horizontal.
U	End the current polyline at last clicked point and start a new one.
V	Restrict translation of current polyline segment to vertical.

Probe Tool

Click	If the pointer is over a single valid cell, the interpolated field values from all nodes in the cell are returned. If multiple cells are candidates, the action is dependent upon the plot type: • For 2D, the cell from the highest number zone is used. • For 3D, the cell closest to the viewer is used.
Control-click	If the pointer is over a single valid cell, the field values from the nearest node in the cell are returned. If multiple cells are candidates, the action is dependent upon the plot type: • For 2D, the cell from the highest number zone is used. • For 3D, the cell closest to the viewer is used. If the pointer is not over any cell, then the field values from nearest data point (as measured in distance on the screen) are returned.
Shift-Control-click	The field values from the nearest point on the screen are returned (ignoring surfaces, zone number, and depth of the point). This is useful in 3D for probing on data points that are on the back side of a closed surface without having to rotate the object. In 2D, this is useful for probing on data points for zones that may be underneath other zones.
Alt-click	Probe only on streamtraces, iso-surfaces, or slices. If multiple cells are candidates, the action is dependent upon the plot type: • For 2D, the cell from the highest number zone is used. • For 3D, the cell closest to the viewer is used.
Alt-Control-click	Probe only on streamtraces, iso-surfaces, or slices. If multiple cells are candidates, the action is dependent upon the plot type: • For 2D, the cell from the highest number zone is used. • For 3D, the cell closest to the viewer is used. If the pointer is not over any cell, then the field values from nearest data point (as measured in distance on the screen) are returned.
Alt-Control-Shift-click	Probe only on streamtraces, iso-surfaces, or slices. The field values from the nearest point on the screen are returned.

X, Y, T, R	When probing, press X or Y in XY Line to switch dependencies, or R or T in Polar Line.

Slice Tool

+	Turn on start/end slices, or increment the number of intermediate slices.
-	Turn off start/end slices, or decrement the number of intermediate slices.
Click	If no slices are displayed for the current slice group, place the primary slice. Otherwise, move the closest displayed start, end, and primary slice from its current position to the clicked position.
Alt-click	Place the start, end, or primary slice (whichever is closer to the click position) on the nearest derived object (streamtrace, slice or iso-surface).
Control-click	Place the start, end, or primary slice (whichever is closer to the click position) on the nearest data point.
I, J, K	Switch to slicing constant I, J, or K-planes, respectively. Available for ordered zones only.
X, Y, Z	Switch to slicing constant X-, Y-, or Z-planes, respectively.
A	Switch to arbitrary slice mode.
1-8	Switch between slice groups.

Streamtrace Placement tools (3D Cartesian plots only)

D	Change the streamtrace style to streamrods.
R	Change the streamtrace style to streamribbons.
S	Change the streamtrace style to surface lines.
V	Change the streamtrace style to volume lines.
1-9	Change the number of streamtraces to be added when placing a rake of streamtraces.

Translate Tool

-	Reduce the magnification of the data.
+	Increase the magnification of the data.
Drag	Translate the data.
Shift-drag	Translate the paper.
Shift - -	Reduce the magnification of the paper.

Shift -	Increase the magnification of the paper.

Zoom Tool

Click	Center the zoom around the location of your click.
Control-click	Center the zoom around the location of your click and zoom out.
Drag	Draw a box to set the frame view.

Selector Tool

Click	Select the frontmost object at the clicked location.
Control-click	Select the next object behind the currently selected object ("dig").
Shift-click	Multiple selection. Click the first object, then shift-click subsequent objects to add them to the selection
Alt-click	Ignore zone objects when selecting.

Selected Object Options

-	Reduce the size of the object. If multiple objects are selected, all object positions will be shifted towards the first object selected.
+	Increase the size of the object. If multiple objects are selected, all object positions will be shifted away from the first object selected.
Delete	Delete selected object(s).
Control-C	Copy selected object(s) to the clipboard.
Control-V	Paste selected object(s) from the clipboard.
Control-X	Cut selected object(s) to the clipboard, deleting them from the plot.

Time Navigation

Home	Jump to start.
Left Arrow	Step backward.
Space bar	Play or pause animation.
Right Arrow	Step forward.
End	Jump to end.

Other Keyboard Operations

Control-F	Fit Surfaces (3D Only) - Resize plot so that all surfaces are included in the frame, excluding any volume zones. Fit to Full Size (2D, XY, Polar, Sketch) - Fit the entire plot into the frame (including data, text and geometries).
Control-E	Fit Surfaces (3D Only) - Resizes plot so that all data points, text, and geometries are included in the frame.
Control-L	Last - Restore the last frame view.
Control-O	Open a layout file.
Control-P	Print.
Control-Q	Exit.
Control-S	Save the current layout to its file.
Control-W	Save the current layout to a specified file.

Macro Variables

Variables	Notes
`|AUXDATASET:Auxname|`	Retrieves auxiliary data named `Auxname` from a dataset. For example, `|AUXDATASET:Reynolds|` retrieves auxiliary data "Reynolds".
`|AUXFRAME:Auxname|`	Retrieves auxiliary data named `Auxname` from a frame: `|AUXFRAME:MyFrame|` retrieves auxiliary data "MyFrame" from the active frame.
`|AUXZONE:Auxname|`	Retrieves auxiliary data named `Auxname` from a specific zone. For example, `|AUXZONE[3]:BC|` retrieves auxiliary data "BC" from zone 3.
`|AXISMAXn|`	Maximum value of the `n`-axis range, where `n` is one of: A*, R, X, Y or Z.
`|AXISMINn|`	Minimum value of the `n`-axis range, where `n` is one of: A*, R, X, Y or Z.
`|BYTEORDERING|`	Returns the byte ordering (INTEL or MOTOROLA).
`|DATASETFNAME[nnn]|`	Contains full path to loaded data file. If multiple data files have been loaded, use e.g. `|DATASETFNAME[2]|` to specify the desired path (indexing by load order).
`|DATASETTITLE|`	Returns the title of the dataset, or "No Data Set" if a dataset does not exist.
`|DATE|`	Returns the date in the form of *dd Mmm yyyy*.
`|ENDSLICEPOS|`	Returns the position of the end slice.
`|EXPORTISRECORDING|`	Returns YES/NO to help macros complete record commands in the proper order.

Variables	Notes
|FRAMENAME|	Returns the name of the active frame.
|PAGENAME|	Returns the name of the active page.
|INBATCHMODE|	Returns 1 if in batch mode, 0 if in interactive mode.
|ISDATASETAVAILABLE|	Returns 1 if a dataset exists, and 0 otherwise.
|ISOSURFACELEVEL|	Returns the current iso-surface's iso-value.
|LAYOUTFNAME|	Returns the current layout file name.
|LOOP|	Innermost loop counter.
|MACROFILEPATH|	Returns the path to the directory containing the most recently opened macro file.
|MAXB|	Maximum value of the blanking variable.
|MAXC|	Maximum value of the contour variable.
|MAXI|, |MAXJ|, |MAXK|	[I, J, K]-dimension of the first active zone. For finite-element zones, MAXI is the number of nodes, MAXJ is the number of elements, and MAXK is the number of nodes per element (cell-based) or total number of faces (face-based) of the first active finite-element zone.
|MAXn|	Maximum value of the variable assigned to an axis: A (theta, i.e. Angle), R, X, Y, Z.
|MAXS|	Maximum value of the scatter sizing variable in the active zones.
|MAXU|, |MAXV|, |MAXW|	Maximum value of the variable assigned to the [X, Y, Z]-vector component of the active zones.
|MAXVAR[nnn]|	Maximum value of the variable nnn.
|MINB|	Minimum value of the blanking variable.
|MINC|	Minimum value of the contour variable.
|MINS|	Minimum value of the scatter sizing variable for the active zones.
|MINU|, |MINV|, |MINW|	Minimum value of the variable assigned to the [X, Y, Z]-vector component for the active zones.
|MINVAR[nnn]|	Minimum value of the variable nnn.
|MINn|	Minimum value of the variable assigned to an axis: A (theta, i.e. Angle), R, X, Y, Z.
|NUMFRAMES|	Number of frames.
|NUMFIELDMAPS|	Number of fieldmaps assigned to the active frame.
|NUMLINEMAPS|	Number of linemaps assigned to the active frame.
|NUMPAGES|	Number of pages.

Variables	Notes
`|NUMPROCESSORSUSED|`	Number of processors in use. This may be lower than the number of processors on your system due to a `$!Limits MaxAvailableProcessors` command in `tecplot.cfg`.
`|NUMVARS|`	Number of variables in the current dataset.
`|NUMZONES|`	Number of zones in the current dataset.
`|OPSYS|`	Returns 1 = Linux/Macintosh, 2 = Windows.
`|PAPERHEIGHT|`	The height of the paper (in inches).
`|PAPERSIZE|`	The size of the paper (e.g. Letter or A4).
`|PAPERWIDTH|`	The width of the paper (in inches).
`|PLATFORMNAME|`	Returns the type of platform (e.g. SGI or Windows).
`|PLOTTYPE|`	Returns the plot type. 0 = Sketch, 1 = XY Line, 2 = 2D, 3 = 3D, 4 = Polar Line.
`|PRINTFNAME|`	Returns the file name of the last file sent for printing.
`|SLICEPLANETYPE|`	Plane type to which slices are assigned.
`|SOLUTIONTIME|`	The current solution time.
`|SOLUTIONTIME[[ACTIVEOFFSET=]nnn]|`	Returns the solution time of zone `nnn`. If `ACTIVEOFFSET=` is used, the integer value indicates the first zone associated with the `nnn`th active field map.
`|STARTSLICEPOS|`	Position of the first slice.
`|STREAMSTARTPOS|`	Streamtrace starting position in X, Y, Z coordinates.
`|STREAMTYPE|`	Returns the streamtrace type such as "Surface Line" or "Surface Ribbon".
`|TECHOME|`	Path to the home directory.
`|TECPLOTVERSION|`	The product version number.
`|TIME|`	The current time in the form of hh:mm:ss.
`|VARNAME|`	The name of a specified variable.
`|ZONEMESHCOLOR[nnn]|`	Returns the color of the mesh for zone `nnn`.
`|ZONENAME[nnn]|`	Returns the name of zone `nnn`.

* Where A represents the theta (or angle) axis variable in Polar Line plots.

Dynamic Text

Variables	Notes
`&(AUXDATASET:name)`	The value of the named auxiliary data attached to the dataset.
`&(AUXFRAME:name)`	The value of the named auxiliary data attached to the frame.

Variables	Notes
&(AUXPAGE:name)	The value of the named auxiliary data attached to the page.
&(AUXVAR[nnn]:name)	The value of the named auxiliary data attached to variable *nnn*.
&(AUXLINEMAP[Q]:name)	The value of the named auxiliary data attached to linemap Q, where Q is either nnn or ACTIVEOFFSET=nnn and nnn is the linemap number. If ACTIVEOFFSET= is used, the integer value indicates the first linemap associated with the nnnth active fieldmap.
&(AUXZONE[Q]:name)	The value of the named auxiliary data attached to Q, where Q is either nnn or ACTIVEOFFSET=nnn and nnn is the zone number. If ACTIVEOFFSET= is used, the integer value indicates the first zone associated with the nnnth active fieldmap.
&(AXISMAXn)	Maximum value of the current n-axis range, where n is one of: A*, R, X, Y, or Z.
&(AXISMINn)	Minimum value of the current n-axis range, where n is one of: A*, R, X, Y, or Z.
&(BYTEORDERING)	Displays the platform's byte ordering (INTEL or MOTOROLA).
&(DATE)	The current date, in the format *dd Mmm yyyy*.
&(DATASETFNAME[nnn])	Filename of the nnnth file associated with the current dataset. If nnn is omitted, then all dataset filenames are shown, separated by new lines.
&(DATASETTITLE)	The current dataset title.
&(ENDSLICEPOS[nnn])	The position of the ending slice plane where nnn is the slice group or active offset.
&(EXPORTISRECORDING)	Returns "YES" if recording is active, otherwise returns "NO".
&(FRAMENAME)	The frame name.
&(INBATCHMODE)	Returns a value of 1 if the software is in batch mode, 0 if interactive.
&(ISDATASETAVAILABLE)	Returns a value of 1 if a dataset exists for the current frame, 0 if nonexistent.
&(ISOSURFACELEVEL[grp][nnn])	The value of the contour variable on the nnnth iso-surface where grp is the iso-surface group or active offset.
&(LAYOUTFNAME)	The name of the current layout file.
&(LOOP)	Innermost loop counter.
&(MACROFILEPATH)	Path to the folder containing the most recently opened macro file.
&(MAXn)	Maximum value of the n variable, where n is one of: A*, R, X, Y, or Z. For 2D or 3D Cartesian plots, the value is calculated from all active zones. For line plots, the value is calculated from the zone assigned to the first active linemap.

Variables	Notes
&(MAXB)	Maximum value of the blanking variable for the first active constraint. For 2D or 3D Cartesian plots, the value is calculated from the active zones. For line plots, the value is calculated from the zone assigned to the first active linemap.
&(MAXC)	Maximum value of the contour variable for contour group 1. For 2D or 3D Cartesian plots, the value is calculated from the active zones. For line plots, the value is calculated from the zone assigned to the first active linemap.
&(MAXI), &(MAXJ), &(MAXK)	[I, J, K]-dimension of the first active zone. For finite-element zones, MAXI is the number of nodes, MAXJ is the number of elements, and MAXK is the number of nodes per element (cell-based) or total number of faces (face-based) of the first active finite-element zone.
&(MAXS)	Maximum value of the scatter sizing variable of the active zones.
&(MAXU), &(MAXV), &(MAXW)	Maximum value of the variable assigned to the [X, Y, Z]-vector component of the active zones.
&(MAXVAR[nnn])	Maximum value of variable nnn.
&(MINn)	Minimum value of the n variable, where n is one of: A*, R, X, Y, or Z. For 2D or 3D Cartesian plots, the value is calculated from all active zones. For line plots, the value is calculated from the zone assigned to the first active linemap.
&(MINB)	Minimum value of the blanking variable of the first active blanking constraint. For 2D or 3D Cartesian plots, the value is calculated from all active zones. For line plots, the value is calculated from the zone assigned to the first active linemap.
&(MINC)	Minimum value of the contour variable of contour group 1. For 2D or 3D Cartesian plots, the value is calculated from all active zones. For line plots, the value is calculated from the zone assigned to the first active linemap.
&(MINS)	Minimum value of the scatter sizing variable for the active zones.
&(MINU), &(MINV), &(MINW)	Minimum value of the variable assigned to the [X, Y, Z]-vector component for the active zones.
&(MINVAR[nnn])	Minimum value of variable nnn.
&(NUMFRAMES)	Number of frames.
&(NUMPAGES)	Number of pages.
&(NUMPROCESSORSUSED)	Number of processors used. This may be different than the total number on the machine because of the $!Limits MaxAvailableProcessors configuration file command, or because of a product limitation.
&(NUMVARS)	Number of variables in the current dataset.
&(NUMXYMAPS)	Number of XY-linemaps assigned to the current frame.

Variables	Notes
&(NUMZONES)	Number of zones in current dataset.
&(OPSYS)	Displays the current operating system. 1 = Linux/Macintosh, 2 = Windows.
&(PAPERHEIGHT)	The paper height (in inches).
&(PAPERWIDTH)	The paper width (in inches).
&(PLATFORM)	The platform type (e.g. LINUX or WINDOWS).
&(PLOTTYPE)	Plot type of the current frame: 0 for Sketch, 1 for XY Line, 2 for Cartesian 2D, 3 for Cartesian 3D, and 4 for Polar Line.
&(PRIMARYSLICEPOS[grp])	The primary slice position where grp is the slice group or active offset.
&(PRINTFNAME)	The name of the current print file.
&(SLICEPLANETYPE[grp])	The type of the slice plane (X, Y, Z, I, J or K-planes) where grp is the slice group or active offset.
&(SOLUTIONTIME)	The current solution time.
&(SOLUTIONTIME[Q])	Solution time of Q, where Q is either nnn or ACTIVEOFFSET=nnn and nnn is the zone number. If ACTIVEOFFSET= is used, the integer value indicates the first zone associated with the nnn^{th} active fieldmap. &(SOLUTIONTIME[5]) displays the solution time of the 5^{th} zone. &(SOLUTIONTIME[ACTIVEOFFSET=3]) displays the solution time of the first zone in the 3^{rd} active fieldmap.
&(STARTSLICEPOS[grp])	The position of the starting slice plane where grp is the slice group or active offset.
&(STRANDID[x])	The strandID of a zone in dynamic text.
&(STREAMSTARTPOS[nnn])	Starting position (X, Y, Z) ` of the nnn^{th} streamtrace.
&(STREAMTYPE[nnn])	Type (Surface Line, Volume Line, Volume Ribbon, Volume Rod) of the nnn^{th} streamtrace.
&($string)	The value of the system environment variable string.
&(TECHOME)	Path to the home directory.
&(TECPLOTVERSION)	Displays the version number.
&(TIME)	The current time, in the format *hh:mm:ss*.
&(VARNAME[nnn])	The variable name of variable nnn.
&(ZONEMESHCOLOR[Q])	Color of the mesh for zone Q, where Q is either nnn or ACTIVEOFFSET=nnn and nnn is the zone number. If ACTIVEOFFSET= is used, the integer value indicates the nnn^{th} active zone for field plots or the zone associated with the nnn^{th} active linemap for line plots.

Variables	Notes
`&(ZONENAME[Q])`	The zone name of zone `Q`, where `Q` is either `nnn` or `ACTIVEOFFSET=nnn` and `nnn` is the zone number. If `ACTIVEOFFSET=` is used, the integer value `nnn` indicates the `nnn`th active zone for field plots. For line plots, indicates the zone associated with the `nnn`th active linemap that will be defaulted to upon deactivation of a previous zone.

* Where A represents the theta (or angle) axis variable in Polar Line plots.

Additional Resources

For detailed information on any of the topics discussed in this guide, refer to the User's Manual included in your installation package. The same information is available in the help system available from the product's Help menu or the Help buttons throughout the product.

Custom Characters

Character Index	English Text	Greek	Math	User Defined
32	(space)			
33	!	!	ϒ	
34	"	∀	′	
35	#	#	≤	
36	$	∃	⁄	
37	%	%	∞	
38	&	&	ƒ	
39	'	϶	♣	
40	(	(	♦	
41	)	)	♥	
42	*	*	♠	
43	+	+	↔	
44	,	,	←	
45	-	−	↑	
46	.	.	→	
47	/	/	↓	
48	0	0	°	
49	1	1	±	
50	2	2	″	
51	3	3	≥	
52	4	4	×	
53	5	5	∝	
54	6	6	∂	
55	7	7	•	
56	8	8	÷	
57	9	9	≠	
58	:	:	≡	
59	;	;	≈	
60	<	<	…	
61	=	=	⏐	
62	>	>	⎯	
63	?	?	↵	
64	@	≅	ℵ	
65	A	A	ℑ	
66	B	B	ℜ	⊕
67	C	X	℘	⊗
68	D	Δ	⊗	✳
69	E	E	⊕	△
70	F	Φ	∅	▽
71	G	Γ	∩	◳
72	H	H	∪	◈
73	I	I	⊃	◷
74	J	ϑ	⊇	◶
75	K	K	⊄	★
76	L	Λ	⊂	◦
77	M	M	⊆	+
78	N	N	∈	○
79	O	O	∉	∅
80	P	Π	∠	⌀
81	Q	Θ	∇	◌
82	R	P	®	◇
83	S	Σ	©	☼
84	T	T	™	☼
85	U	Y	∏	☼
86	V	ς	√	☒
87	W	Ω	·	●
88	X	Ξ	¬	◙
89	Y	Ψ	∧	◙
90	Z	Z	∨	◙
91	[	[	⇔	
92	\	∴	⇐	
93	]	]	⇑	
94	^	⊥	⇒	
95	_	‾	⇓	
96	`		◊	
97	a	α	〈	◆
98	b	β	®	◙
99	c	χ	©	◙
100	d	δ	™	◙
101	e	ε	∑	◙
102	f	ϕ	⎛	◫
103	g	γ	⎜	
104	h	η	⎝	
105	i	ι	⎡	
106	j	φ	⎢	
107	k	κ	⎣	
108	l	λ	⎧	
109	m	μ	⎨	
110	n	ν	⎩	
111	o	ο	⎪	
112	p	π		
113	q	θ	〉	
114	r	ρ	∫	
115	s	σ	⌠	
116	t	τ	⌡	
117	u	υ	⎮	
118	v	ϖ	⎞	
119	w	ω	⎟	
120	x	ξ	⎠	
121	y	ψ	⎤	
122	z	ζ	⎥	
123	{	{	⎦	
124	|	|	⎥	
125	}	}	⎫	
126	~	~	⎭	
127				

Character Index	Extended Character
160	
161	¡
162	¢
163	£
164	¤
165	¥
166	¦
167	§
168	¨
169	©
170	ª
171	«
172	¬
173	-
174	®
175	¯
176	°
177	±
178	²
179	³
180	´
181	µ
182	¶
183	·
184	¸
185	¹
186	º
187	»
188	¼
189	½
190	¾
191	¿
192	À
193	Á
194	Â
195	Ã
196	Ä
197	Å
198	Æ
199	Ç
200	È
201	É
202	Ê
203	Ë
204	Ì
205	Í
206	Î
207	Ï

Character Index	Extended Character
208	Ð
209	Ñ
210	Ò
211	Ó
212	Ô
213	Õ
214	Ö
215	×
216	Ø
217	Ù
218	Ú
219	Û
220	Ü
221	Ý
222	Þ
223	ß
224	à
225	á
226	â
227	ã
228	ä
229	å
230	æ
231	ç
232	è
233	é
234	ê
235	ë
236	ì
237	í
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239	ï
240	ð
241	ñ
242	ò
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244	ô
245	õ
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247	÷
248	ø
249	ù
250	ú
251	û
252	ü
253	ý
254	þ
255	ÿ