



**ADInstruments Ltd Statement of
Conformance with Section 508 to the
Rehabilitation Act of 1973**

**Pertaining to:
LabChart 6.0 for Windows**

Revision: 0.01

10 July, 2008

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1 SUPPORT LEVEL

Term	Description
Supports	Product FULLY meets the letter and intent of the Criteria.
Supports with Exceptions	Product does not ENTIRELY meet the letter and intent of the Criteria, but does provides some level of access.
Supports through Equivalent Facilitation	Product provides <i>alternative</i> methods to meet the intent of the Criteria.
Does not Support	Product does not meet the letter or intent of the Criteria.
Not Applicable	The Criteria does not apply to the product.

2 SUPPORT SUMMARY

Criteria	Support Level	Remarks
Subpart B: 1194.21 Software Applications and Operating Systems	Supports with exceptions.	Refer below for details.
Subpart C: 1194.31 Functional Performance Criteria	Supports with exceptions.	Refer below for details.
Subpart D: 1194.41 Information, documentation, and support.	Supports with exceptions.	Refer below for details.

3 SUBPART B - 1194.21 SOFTWARE APPLICATIONS AND OPERATING SYSTEMS

a. Executing from the Keyboard

Criteria Description: When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.

Support Level: *Supported with exceptions.*

Details: All tools and functionality in LabChart can be accessed from the keyboard using accelerator keys, access keys, navigation keys and mouse-keys.

Accelerator keys, Access keys and Navigation keys provide a mechanism to access the LabChart system menu and navigate LabChart settings and configuration dialogs from the keyboard. This is implemented throughout LabChart for all standard controls.

A number of custom controls and features in LabChart are designed to respond specifically to mouse input, and as such are only fully accessible using mouse-keys. Areas in which accelerator and navigation keys are not effective in LabChart and mouse-keys must be used for accessibility are:

- The following LabChart view windows: Chart View (with the exception of the horizontal scroll bar which is may be controlled through the arrow keys), Zoom View, XY View and Spectrum View. These are

primarily graphic windows and are designed to interact with the mouse. All context menus, tool strips, selection, scrolling and magnification tools may be accessed through mouse-keys.

- The Comments View window. Keyboard navigation is disabled in this window.
- The LabChart toolbar. As with most toolbars, operation of the toolbar buttons is mouse-based.
- The preview panes used in Cyclic Measurements, Cyclic Measurements Detection Settings, Units Conversion, Computed Input, Input Amplifier and Display Offset are graphic windows and are designed to interact with the mouse.
- Accessing the dropdown Functions and Channels menus in the Arithmetic dialog requires mouse-based operation.
- The custom layouts created with the Layout feature are only available within the toolbar and as such are only accessible with mouse-based activation.

b. Accessibility Features

Criteria Description: Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.

Support Level: *Supported.*

Details: LabChart does not disrupt or disable any accessibility features of the operating system or any other applications.

c. Input Focus

Criteria Description: A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.

Support Level: *Supported with exceptions.*

Details: Indication of current focus in LabChart is implemented in the following ways:

- Standard operating system functions for indicating focus are employed wherever standard controls and windows are used within the application. For example, text input fields display focus with a standard 'I-beam' caret, windows show focus by highlighting the title bar, checkboxes and radio buttons indicate focus with a dashed outline.
- Custom-designed controls are given standard focus indication where applicable, for example the graph drag scales display different cursors to indicate which element of the drag scale currently has focus.
- Customised focus indication is provided for the toolbar groups and the Channel Functions popup menu, where the background of the control is highlighted on mouse-over.

Some older-style button controls in LabChart do not indicate focus. These tool-strip type controls, which are not designed to handle keyboard input and do not have mouse effects to indicate focus, are used in small numbers on some LabChart views and dialogs.

LabChart views that incorporate these controls include the XY, Data Pad and Spectrum views.

Dialogs in LabChart that incorporate these controls include the Channel Settings, Display Settings, Trigger, Preset Comments Event Configuration, Find, Input Amplifier, Cyclic Measurements Settings and Customization, XY View Line Styles and Computer Inputs dialogs.

d. User Interface Element

Criteria Description: Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.

Support Level: *Supported with exceptions.*

Details: LabChart provides assistive text to most controls where practicable, to allow the functionality and usage of the control to be identified. In instances where only images are displayed on a control, identification is enhanced by the use of tooltips to alleviate any confusion as the function of the control.

Command buttons, checkboxes, radio buttons, group boxes, drop-down lists, menus and combo boxes for example are identified by their caption text and this is made available to assistive technologies.

A number of custom controls in LabChart are dynamically created by the application at runtime and may take the place of dummy controls placed in a dialog template during development. Examples of these types of dynamically-generated control-sets would be the preview panes used in dialogs such as the Input Amplifier and Cyclic Measurements dialogs, and the tool-strips used in views such as the XY view. Because of the nature of construction of these controls, they may not contain text details of their component parts to pass to assistive technologies. In these instances, the assistive technologies use information from the placeholder control, if present. For example, the preview pane in the Cyclic Measurements Detection Settings Dialog is reported by screen readers as being a 'button'.

Because of the graphical nature of the LabChart software, and the complexity of its custom controls, it is difficult to provide meaningful descriptive text. For example, although input and calculation data is available as text through secondary means via the DVM windows, rapid changes in the input data may be difficult for assistive technologies to process in a way that is easily understood by blind users.

e. Bitmap Images

Criteria Description: When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.

Support Level: *Supported.*

Details: Images and graphics used within LabChart to indicate controls or functionality have consistent meaning throughout the application.

f. Textual Information

Criteria Description: Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.

Support Level: *Supported with exceptions.*

Details: The operating system is used for displaying text within LabChart. Text on dialogs and in views is displayed using functions exposed by the operating system's API. As LabChart incorporates graph technologies for display of data, and that data is frequently changing, some areas where text is drawn to the screen may prove problematic for assistive technologies. Areas in which textual display of information may be problematic in terms of accessibility are:

- The rapid refreshing of numerous text fields in LabChart when sampling or otherwise evaluating data.

- The details contained in the time scales and drag scales may be difficult to interpret through assistive technologies.
- Comments contained on graphs may be difficult to interpret through assistive technologies.

g. User-Selected Attributes

Criteria Description: Applications shall not override user selected contrast and color selections and other individual display attributes.

Support Level: *Supported with exceptions.*

Details: LabChart custom controls are designed to draw using system-based colors where practicable. In certain cases however, the colors used are predetermined and may have adverse results with certain operating system color schemes. In particular, where black text is specified for a control, the text may not be visible when using the operating system's High Contrast Black Background setting.

Areas which may have problems displaying elements when in high contrast mode include:

- The LabChart graph drag-scale control. The drag-scale background becomes black under the high contrast black background setting and the scale text cannot be seen. The scale up/down buttons in the drag-scale control become black and their graphics cannot be seen.
- Bitmaps that use black-only images cannot be seen when in high contrast black background mode. These include: the scale up/down drag-scale buttons, the horizontal compression buttons in the Chart View, the stacked/overlay buttons in the Zoom View, slope buttons in the trigger dialog and button bitmaps in the Preset Comments Event Configuration dialog.
- Information text in the following areas cannot be seen when using high contrast black background mode: Spectrum View caption area, Comments View controls labels, XY View caption area, Zoom View caption area, Chart View insert comment labels, Experiments Gallery document list.
- The balloon message text of the error feedback indicator used in a number of LabChart settings dialogs cannot be seen when in high contrast black background mode.

h. Animation

Criteria Description: When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.

Support Level: *Supported with exceptions.*

Details: LabChart uses animation to convey information to the user in the following areas:

- When sampling, an animated sampling icon appears in the status bar document button to indicate the sampling status of the document. There is no option to disable this animation, however minimizing the LabChart application while sampling will reduce any adverse effects for users.
- While recording a macro, an animated icon in the status bar is used to indicate that recording is in progress. There is no option to suppress this animation, and it is recommended that affected users move the LabChart application window down the screen to hide the status bar below the bottom of the screen.
- While previewing or sampling, data from the acquisition device is drawn to the data panes on a live basis, producing an animation effect. This is part of the normal operation for the software. Users adversely affected by the online drawing of this data may minimize the window containing the data preview to reduce exposure to the animation. During sampling, the DVM's are used to provide a textual representation of the input or calculated data.
- When switching between open documents (files) in LabChart, a short animation shows the transition of focus from the previous document to the newly activated document. This animation is the same as that used by the operating system to indicate the minimizing/maximizing of windows. There is no option to disable this animation.

i. Color Coding

Criteria Description: Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.

Support Level: *Supported with exceptions.*

Details: Color coding is not used as the only means of conveying information to LabChart users, however it is used as the primary mechanism in many areas. In most cases where colour is used to convey important information, text in the form of tooltips or info-tips is used to provide an alternative description. In cases where this is not implemented, alternative means are provided.

Areas in which color coding is used to convey information and as such may be problematic in terms of accessibility, are:



Status bar document indicators. The color coded icons on these buttons indicate the current document status. Textual representation of this status is given in the document's Chart View window title.



Channel information icons. The color of these icons indicates the current status of the channel. Textual representation of this status is provided in the information on-mouse-down popup info-tip that is the main function of this button.



Toolbar Buttons. The toolbar buttons in LabChart are designed to have a subtle blend of colors for aesthetics and as such it may be difficult for color blind users to determine their enabled status.



The drop-down control items for selecting color in the Display Settings and Channel Settings dialogs do not list the color name beside the color swatch, potentially making it difficult for color blind users to make an accurate color choice.

j. Color and Contrast Settings

Criteria Description: When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.

Support Level: *Supported with exceptions.*

Details: LabChart provides facilities for customizing the color of graphical elements in the software. Elements that may be customized include the color and line-style of plot lines and the color and line-style of the graph graticules. A variety of colors are presented to the user that provide varying contrast levels. Changing the line-styles for graticules and plot lines can also affect the levels of contrast achieved. The background color of the graphs cannot be changed from their default color.

The colors presented to the user are predefined and there is no support for the user to select from the full operating system palette.

k. Flashing or Blinking Text

Criteria Description: Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.

Support Level: *Supported with exceptions.*

Details: LabChart does not utilize blinking or flashing objects or text. Some standard operations in LabChart can give the appearance of flashing, however most of these operations are initiated by the user as part of standard operations. Examples of operations that may appear as flashing are:

- The Recording Macro indication in the LabChart status bar has a fade-in/fade-out pulse effect that may appear as flashing to some users.
- When sampling, the animated sampling icon in the status bar has a cycle speed of 3Hz, and may appear as flashing to some users.
- Also while sampling, the Chart View data pane may appear to be flashing due the rapid redrawing of the pane. This may be eliminated by minimizing the Chart View while sampling.
- With numerous standard operations e.g. moving the mouse over a data pane in the Chart View, text information in the view windows and in the mini windows is updated 'live'. This live updating of text could provide be perceived as a flashing or flickering effect to some users.
- When switching between open documents in LabChart, the toolbar is rebuilt to suit the specific requirements of the new document. This rebuild can cause the toolbar to appear to flash momentarily. This is not a cyclic event and only occurs when the user switches focus to another document.
- A repeating action such as Multiple Add to Data Pad that makes repeated selections in the Chart View may cause the Chart View to appear flashing to some users. Likewise, a recorded macro that is set to rapidly and repeatedly sample-then-wait may be perceived as flashing.
- When resizing view windows in LabChart, flashing can occur as the views are repainted by the operating system. This is a normal operating system effect seen when resizing.

I. Electronic Forms

Criteria Description: When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.

Support Level: *Not Applicable.*

Details: The LabChart software does not utilize forms internally. When Registering for PowerLab resources, LabChart directs the default web browser to an online form and the accessibility of this form is handled by the particular browser.

4 SUBPART C - 1194.31 FUNCTIONAL PERFORMANCE CRITERIA

a. Vision Impaired Users

Criteria Description: At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.

Support Level: *Supported with exceptions.*

Details: Refer to "Subpart B – Software Applications and Operating Systems" for specific information relating to accessibility for vision impaired users.

All data recorded by the LabChart software can be exported to a text file that can be opened in any text editor or a spreadsheet package. This export can be carried out without the use of vision through accessible LabChart functionality.

The LabChart Data Pad does not have screen reader support, however this data can also be exported to a text file for use in other applications.

b. Users With Low Visual Acuity

Criteria Description: At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.

Support Level: *Supported with exceptions.*

Details: Refer to “Subpart B – Software Applications and Operating Systems” for specific information relating to accessibility for vision impaired users.

All data recorded by the LabChart software can be exported to a text file that can be opened in any text editor or a spreadsheet package. This text output can be enlarged, output in audio or otherwise manipulated within the third-party software.

All LabChart graphical data can be printed to hard-copy.

The LabChart Data Pad does not have screen reader support, however the data contained in the Data Pad can be printed directly from the LabChart software.

c. Hearing Impaired Users

Criteria Description: At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided.

Support Level: *Not applicable.*

Details: The standard LabChart software does not produce audio output and may be operated fully by hearing impaired users.

d. Enhanced Auditory Support

Criteria Description: Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.

Support Level: *Not applicable.*

Details: Audio input or output is not included in standard LabChart functionality and as such no enhanced auditory support is required.

e. User Speech

Criteria Description: At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.

Support Level: *Not applicable.*

Details: LabChart does not require user speech and may be operated fully by speech impaired users.

f. Fine Motor Control

Criteria Description: At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.

Support Level: *Not applicable.*

Details: LabChart does not require fine motor control and may be operated fully by users utilising hardware input devices specific to their individual needs.

5 SUBPART D - 1194.41 INFORMATION, DOCUMENTATION AND SUPPORT

a. Alternative Documentation Formats

Criteria Description: Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.

Support Level: *Supported with exceptions.*

Details: Product support documentation is provided in PDF and compiled HTML formats and these are installed with the product. The PDF documents may be saved as a standard text file or printed. Printed manuals are not supplied with products downloaded from the ADI web site, however the electronic manuals may be printed to hard-copy.

b. Accessibility Documentation Formats

Criteria Description: End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.

Support Level: *Supported.*

Details: The 'ADInstruments Ltd Statement of Conformance with Section 508 to the Rehabilitation Act of 1973' document is provided in PDF format. The document may be saved as a standard text file or printed to hard-copy. The document is available online from the ADI website, or alternatively ADI sales staff may be contacted to provide a copy via email or in hard-copy.

c. Support Services

Criteria Description: Support services for products shall accommodate the communication needs of end-users with disabilities.

Support Level: *Supported.*

Details: ADI support services are available for customers by telephone, fax, email or standard mail providing a range of options for end-users with disabilities.

6 APPENDIX

Definitions, acronyms, and abbreviations

Accelerator Keys

A keystroke that sends a notification to the application to invoke a command.

Access keys

Shortcut keys assigned to text elements of a dialog that allow users to jump directly to the specific element, or to an editable control adjacent to the text item bearing the access key.

API (Application Programming Interface)

A published specification that details the calling conventions an application may use to interact with a software service.

DVM (Digital Volt Meter)

A resizable window in LabChart that displays a digital voltmeter readout for the channel.

Error Feedback Indicator

A red dot containing an exclamation mark. Displays a balloon message when left mouse button is held down on it.

Hz (Hertz)

A unit of frequency. Defined as one cycle per second.

LabChart Document

A file that holds LabChart data and settings. Represented in LabChart by views that expose elements of the document such as data, comments and calculations.

Mouse-Keys

An accessibility feature of the operating system where a map of keyboard keys (typically the numeric keypad) is used to emulate mouse movement. All movement and button actions of the mouse are emulated.

Navigation Keys

Keyboard keys used to navigate through a dialog. These include the four arrow keys, Page-Up, Page-Down, Tab, Home and End keys.

PDF (Portable Document Format)

A fixed-layout document format used for representing two-dimensional documents in a manner independent of the application software, hardware, and operating system.

Runtime

The period of time during which the application program is executing.

View

A window in LabChart that displays LabChart data, calculations and annotations. Linked to the LabChart document.

References

LabChart Online Help Center

Unites States Access Board. (2001). *Software Applications and Operating Systems (1194.21)*. Retrieved February 3, 2008, from <http://www.access-board.gov/sec508/guide/1194.21.htm>

Unites States Access Board. (2001). *The Rehabilitation Act Amendments (Section 508)*. Retrieved February 3, 2008, from <http://www.access-board.gov/sec508/guide/act.htm>

Access-Star. (2005). *Voluntary Product Accessibility Template Version 1.3*. Retrieved February 3, 2008, from <http://www.access-star.org/ITI-VPAT-v1.3.html>

Wikipedia. (2008). *Section 508 Amendment to the Rehabilitation Act of 1973*. Retrieved February 3, 2008, from http://en.wikipedia.org/wiki/Section_508

Section508. (2006). *Section 508*. Retrieved February 3, 2008, from <http://www.section508.gov/>