

Accessibility – Planar Touchscreens

The table below is a summary of how Planar's PT touchscreen LCD monitors meet the government's standards for accessibility (Section 508). For more information about the regulations, see www.section508.gov

- [Software Applications and Operating Systems](#)
- [Web-based Intranet and Internet Information and Applications](#)
- [Telecommunications Products](#)
- [Video and Multimedia Products](#)
- [Self Contained, Closed Products](#)
- [Desktop and Portable Computers](#)
- [Functional Performance Criteria](#)
- [Information, Documentation and Support](#)

Software Applications and Operating Systems			
Standard	Reference(36CFR)	Supporting Features*	Remarks*
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.	1194.21(a)	Not applicable. Product does not have a keyboard.	<p>The touchscreen emulates a keyboard and a mouse. The monitor also has an On Screen Display (OSD) which allows the user to modify the image on the screen.</p> <p>The OSD should be locked by the system administrator to prevent setting changes.</p> <p>Refer to manual for more information on OSD.</p>
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.	1194.21(b)	Not applicable. On-Screen Display (OSD) utility does not interfere with Microsoft* Windows* or other operating systems' accessibility features. The monitors themselves do not interfere with the accessibility features of any other related or connected computer or peripheral devices.	See section 1194.21(a) for remarks.

<p>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.</p>	<p>1194.21(c)</p>	<p>Not applicable. Displays image from device to which it is attached. Those products with both analog and digital inputs can be toggled between the two inputs using OSD controls.</p>	<p>See section 1194.21(a) for remarks.</p>
<p>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.</p>	<p>1194.21(d)</p>	<p>Not applicable. Displays image from device to which it is attached</p>	<p>See section 1194.21(a) for remarks.</p>
<p>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.</p>	<p>1194.21(e)</p>	<p>Not applicable.</p>	<p>See section 1194.21(a) for remarks.</p>
<p>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.</p>	<p>1194.21(f)</p>	<p>Not applicable. Displays image from device to which it is attached</p>	<p>See section 1194.21(a) for remarks.</p>
<p>Applications shall not override user selected contrast and color selections and other individual display attributes</p>	<p>1194.21(g)</p>	<p>Supports user application's selected color and contrast schemes and other individual display attributes are maintained.</p>	<p>OSD control includes user-selected brightness, color, and contrast adjustments.</p> <p>See section 1194.21(a) for remarks.</p>
<p>When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.</p>	<p>1194.21(h)</p>	<p>Not applicable. On-Screen Display (OSD) utility or applicable software does not use animation.</p>	<p>See section 1194.21(a) for remarks.</p>

Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	1194.21(i)	Not applicable. On-Screen Display (OSD) utility or applicable software does not use color coding to convey information, actions, prompting responses or distinguishing visual elements.	See section 1194.21(a) for remarks.
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.	1194.21(j)	On-Screen Display (OSD) utility or applicable software allows user selection of color and contrast.	OSD control includes user-selected brightness, color, and contrast adjustments. See section 1194.21(a) for remarks.
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.	1194.21(k)	On-Screen Display (OSD) utility or applicable software at the frequency of the input. Unlike CRT monitors, which require a high refresh rate to minimize flickering, flat panel technology is inherently flicker-free.	See section 1194.21(a) for remarks.
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.	1194.21(l)	Not applicable. On-Screen Display (OSD) utility or applicable software does not have electronic forms.	See section 1194.21(a) for remarks.
Web-based Intranet and Internet Information and Applications			
Standard	Reference(36CFR)	Supporting Features*	Remarks*
A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	1194.22(a)	Not applicable. No Web based Intranet or Internet information or applications	No internet applet or interface is included with the monitor. The monitor is dependent upon being attached to a Personal Computer (PC)
Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	1194.22(b)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.

Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	1194.22(c)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
Documents shall be organized so they are readable without requiring an associated style sheet	1194.22(d)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
Redundant text links shall be provided for each active region of a server-side image map	1194.22(e)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	1194.22(f)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
Row and column headers shall be identified for data tables.	1194.22(g)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	1194.22(h)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
Frames shall be titled with text that facilitates frame identification and navigation.	1194.22(i)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	1194.22(j)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	1194.22(k)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.

When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive technology.	1194.22(l)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l).	1194.22(m)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
When electronic forms are designed to be completed on-line, 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.	1194.22(n)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
A method shall be provided that permits users to skip repetitive navigation links.	1194.22(o)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	1194.22(p)	Not applicable. No Web based Intranet or Internet information or applications	See section 1194.22(a) for remarks.
Telecommunications Products			
Standard	Reference(36CFR)	Supporting Features*	Remarks*
Telecommunications products or systems which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a standard non-acoustic connection point for TTYs. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.	1194.23(a)	Not applicable. Not a Telecommunications product.	This touchscreen monitor complies with section (k) items (1) through (4), please see below, section 1194.26 section (b)

Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.	1194.23(b)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.
Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.	1194.23(c)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.
Voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.	1194.23(d)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.
Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.	1194.23(e)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.
For transmitted voice signals, telecommunications products shall provide a gain adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain shall be provided.	1194.23(f)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.
Requires that an automatic reset be installed on any telephone that allows the user to adjust the volume higher than the normal level. This is a safety feature to protect people from suffering damage to their hearing if they accidentally answer a telephone with the amplification turned too high	1194.23(g)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.
Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided	1194.23(h)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.
Interference to hearing technologies (including hearing aids, cochlear implants, and Assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.	1194.23(i)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.
Products that transmit or conduct information or communication, shall pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the	1194.23(j)	Not applicable. Not a Telecommunications product.	See section 1194.23(a) for remarks.

information or communication in a usable format. Technologies which use encoding, signal compression, format transformation, or similar techniques shall not remove information needed for access or shall restore it upon delivery.		These products use industry standard formats and interfaces.	
Controls and keys shall be tactilely discernible without activating the controls or keys	1194.23(k.1)	Supports	Touchscreen can be configured to emit a sound when the button is touched.
Controls and keys shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls and keys shall be 5 lbs. (22.2 N) maximum.	1194.23(k.2)	Supports	Operating force of less than 100 grams required to activate touchscreen. No grasping, pinching or twisting of the wrist is required. A stylus or prosthetic device can be used to activate the touchscreen.
If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2 seconds per character.	1194.23(k.3)	Supports	Touchscreen can be configured to desired timing through the touchscreen driver installation process.
The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.	1194.23(k.4)	Supports	Touchscreen can be configured to emit a sound when the button is touched.

Video and Multimedia Products			
Standard	Reference(36CFR)	Supporting Features*	Remarks*
All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.	1194.24(a)	Not applicable.	This product does not include a TV tuner.
Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	1194.24(b)	Not applicable.	This product does not include a TV tuner.
All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned	1194.24(c)	Not applicable. Displays image from device to which it is attached.	All product information and user documentation is available online in printed format.
All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.	1194.24(d)	Not applicable. Displays image from device to which it is attached.	This product does not include a TV tuner.

Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.	1194.24(e)	Not applicable. Displays image from device to which it is attached.	This product does not include a TV tuner.
Self Contained, Closed Products			
Standard	Reference(36CFR)	Supporting Features*	Remarks*
Self contained products shall be usable by people with disabilities without requiring an end-user to attach Assistive technology to the product. Personal headsets for private listening are not Assistive technology.	1194.25(a)	Supports	PT products with integrated Resistive or Surface Acoustic Wave (SAW) touchscreen technology can be activated with prosthetic device.
When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	1194.25(b)	Supports	Touchscreen can be configured to desired timing through the driver installation process.
Where a product utilizes touchscreens or contact-sensitive controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).	1194.25(c)	Supports	See section 1194.23 (k) (1) through (4).
When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	1194.25(d)	Not applicable.	No biometric form of user ID or control is sold with this monitor.
When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at anytime.	1194.25(e)	Supports	An audio output connector is on the monitor. The ability to interrupt, pause, and restart the audio would be dependent upon the software chosen by the end user.

When products deliver voice output in a public area, incremental volume control shall be provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function shall be provided to automatically reset the volume to the default level after every use.	1194.25(f)	Not applicable.	No voice output available.
Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	1194.25(g)	Not applicable	Software is user selectable.
When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels shall be provided.	1194.25(h)	Not applicable.	Software is user selectable.
Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	1194.25(i)	Supports	See user's guide for troubleshooting suggestions should the screen flicker.
Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following:	1194.25(j)	Not applicable.	Touchscreen is lightweight and portable.
The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length (see Figure 1 of this part).	1194.25(j.1)	Not applicable.	Touchscreen is lightweight and portable.
Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.	1194.25(j.2)	Not applicable.	Touchscreen is lightweight and portable.

Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor	1194.25(j.3)	Not applicable.	Touchscreen is lightweight and portable.
Operable controls shall not be more than 24 inches behind the reference plane (see Figure 2 of this part).	1194.25(j.4)	Not applicable.	Touchscreen is lightweight and portable.
Desktop and Portable Computers			
Standard	Reference(36CFR)	Supporting Features*	Remarks*
All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through (4).	1194.26(a)	Supports	Section 1194.23 (k) (1) through (4).
If a product utilizes touchscreens or touch-operated controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).	1194.26(b)	Supports	Product is designed to receive input from a touchscreen.
When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	1194.26(c)	Not applicable.	No biometric form of user ID or control is used on this system.
Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards.	1194.26(d)	Not applicable.	No expansion slots, ports or connectors are on this display.
Functional Performance Criteria			
Standard	Reference(36CFR)	Supporting Features*	Remarks*
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.	1194.31(a)	Not applicable.	Touchscreen can be configured to emit a sound when the button is touched. Any other functionality must be addressed by the software chosen by the end user.

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.	1194.31(b)	Not applicable.	See section 1194.31(a) for remarks.
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.	1194.31(c)	Not applicable.	See section 1194.31(a) for remarks.
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.	1194.31(d)	Not applicable.	See section 1194.31(a) for remarks.
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.	1194.31(e)	Not applicable.	See section 1194.31(a) for remarks.
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.	1194.31(f)	Not applicable.	See section 1194.31(a) for remarks.
Information, Documentation and Support			
Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.	1194.41(a)	Supports	User's Guide is available on the web at www.planar.com/support and also is included in every box. See Planar for other available formats.
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.	1194.41(b)	Supports	See section 1194.41(a) for remarks.
Support services for products shall accommodate the communication needs of end-users with disabilities.	1194.41(c)	Supports	Planar customer and technical support is available 24 hours a day, seven days a week. Toll free: +1 866 752-6271 or outside North America +1 503 748-5977 or online at www.planar.com/support .



*Supporting features apply to the Planar PT product family as a whole. Individual products within these families that do not contain one or more of these features are identified as exceptions in the Remarks column, which may also include notes regarding definition, equivalent facilitation, scope of support, etc. Unless otherwise indicated, operating system information is included if applicable. For information on third party software and applications please contact the software manufacturer.

THE INFORMATION AND MATERIALS PROVIDED IN THIS DOCUMENT ARE "AS IS" WITHOUT WARRANTIES OF ANY KIND INCLUDING WARRANTIES OF MERCHANTABILITY FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF INTELLECTUAL PROPERTY. Planar further does not warrant the accuracy and completeness of the information or materials on this document. The information shall not be construed as product specifications for purposes of any warranty of compliance with product specifications in a given contract or order. Planar may make changes to the information on this document or to the products described in them, at any time without notice. The information and materials on this document may be out of date, and Planar makes no commitment to update the information and materials.

All marks and brands are property of their respective owners.