

# Avaya Model 2410 and 2420 Digital Telephones Voluntary Product Accessibility Template (VPAT)

The statements in this document apply to Avaya Model 2410 and 2420 Digital Telephones only when the phones are used in conjunction with an Avaya Communication Manager System, Release 4 or higher.

## § 1194.23 Telecommunications Products

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
1194.23(a) 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.	Supports when configured as described in the Remarks and Explanations.	<p>Most TTYs that permit an electronic, non-acoustic connection to the telephone network do so through RJ-11 tip/ring connectors of the sort found on residential analog telephone equipment. The recommended way to satisfy this requirement with an Avaya Model 2410 or 2420 Digital Telephone is to associate an analog TTY-equipped phone line with the telephone. This can be done by administering a bridged call appearance of the analog TTY line on the telephone.</p> <p>An alternative method is to use Avaya IP Softphone Release 6.0 or higher in "Telecommuter" mode. In this configuration, the IP Softphone registers with Avaya Communication Manager and is configured by the user to show the phone number of the TTY line as the associated analog telephone.</p>

<p>1194.23(b) Telecommunications products, which include voice communication functionality, shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.</p>	<p>Supports</p>	<p>All of the cross-manufacturer non-proprietary standard TTY signal protocols that are commonly used in the US are transmitted and received reliably by Avaya Model 2410 and 2420 Digital Telephones.</p>
<p>1194.23(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.</p>	<p>This requirement applies to voice mail, auto-attendant, and interactive voice response systems. It does not apply to Avaya Model 2410 or 2420 Digital Telephones.</p>	<p>There is no aspect of Avaya Model 2410 or 2420 Digital Telephones that would interfere with the operation or compliance of voice mail, auto-attendant, or interactive voice response systems.</p>
<p>1194.23(d) 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.</p>	<p>This requirement applies to voice mail, auto-attendant, and interactive voice response systems. It does not apply to Avaya Model 2410 or 2420 Digital Telephones.</p>	<p>There is no aspect of Avaya Model 2410 or 2420 Digital Telephones that would interfere with the operation or compliance of voice mail, auto-attendant, or interactive voice response systems.</p>
<p>1194.23(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.</p>	<p>Supports when configured as described in the Remarks and Explanations.</p>	<p>If TTYs are used with Avaya Model 2410 or 2420 Digital Telephones, configured in the manner outlined under Remarks for paragraph 1194.23(a), caller ID and similar information will appear appropriately on the telephone's display.</p> <p>For users who cannot see displays, satisfaction of this requirement, as well as requirement 1194.23(k)(4), can be achieved by using the phone in conjunction with Avaya "Universal Access Phone Status" software, which is available as a free download from the Avaya web site.</p>

<p>1194.23(f) 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.</p>	<p>Supports</p>	<p>Avaya Model 2410 and 2420 Digital Telephones provide a user-adjustable amplitude range of 21 dB. (Specifically, with reference to the typical "normal" setting, users may increase the amplitude by up to 12 dB, or decrease it by up to 9 dB.) For users for whom 12 dB of additional gain is not adequate, the handset of the telephone may be replaced with an Avaya amplified handset that provides an additional 20 dB of user-adjustable gain.</p> <p>Please note that Avaya variable amplified handsets are available in a variety of shapes and colors. The models also differ in their electrical characteristics. When purchasing one of these handsets, it's important to select one that will be compatible with the associated telephone. Avaya Model 2410 and 2420 Digital Telephones use AK-type handsets.</p>
<p>1194.23(g) If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the volume to the default level after every use.</p>	<p>Supports when configured as described in the Remarks and Explanations.</p>	<p>The volume reset behavior that is selected by the Avaya Communication Manager system administrator will apply to all digital terminals on the system.</p>
<p>1194.23(h) 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.</p>	<p>Supports</p>	<p>All Avaya handsets have primary electro-magnetic inductive coils, permitting the phones to be used with inductively coupled assistive hearing devices such as telecoil-equipped hearing aids and cochlear implants.</p>
<p>1194.23(i) 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.</p>	<p>Supports</p>	<p>Avaya Model 2410 and 2420 Digital Telephones conform to FCC standards for electro-magnetic shielding.</p>

<p>1194.23(j) 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 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.</p>	<p>Supports</p>	<p>All cross-manufacturer non-proprietary protocols that are commonly used on the US public telephone network are transmitted and received reliably by Avaya Model 2410 and 2420 Digital Telephones.</p>
<p>1194.23(k)(1) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be tactilely discernible without activating the controls or keys.</p>	<p>Supports</p>	<p>The dial pads on Avaya Model 2410 and 2420 Digital Telephones are arranged in a standard manner, with a raised nub on the 5-key, thereby making "tactile navigation" easier for visually impaired users. Navigation and identification of the special function buttons is facilitated by tactilely discernible landmarks, such as the large concave indentation that separates the "volume up" and "volume down" buttons.</p>
<p>1194.23(k)(2) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be operable with one hand and shall not require tight grasping, pinching, twisting of the wrist. The force required to activate controls and keys shall be 5 lbs. (22.2N) maximum.</p>	<p>Supports</p>	
<p>1194.23(k)(3) Products which have mechanically operated controls or keys shall comply with the following: 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.</p>	<p>Supports</p>	<p>There are no key repeat functions in Avaya Model 2410 and 2420 Digital Telephones.</p>

<p>1194.23(k)(4) Products which have mechanically operated controls or keys shall comply with the following: The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.</p>	<p>Supports when configured as described in the Remarks and Explanations.</p>	<p>On Avaya Model 2410 and 2420 Digital Telephones, the status of functions is indicated visually by LEDs or by text and icons that are displayed on an LCD screen. For users who cannot see displays, satisfaction of this requirement, as well as requirement 1194.23(e), can be achieved by using the phone in conjunction with Avaya "Universal Access Phone Status" software. This software is available as a download from the Avaya web site.</p> <p>In this context, please note that a typical digital telephone, such as the Avaya Model 2410 and 2420, can present a tremendous amount of information visually. Examples include caller ID (name and number), whether there is a new message waiting, whether the phone is forwarded, which lines are available and which are on hold, whether a party on hold has disconnected, and so on. In fact, in some Avaya configurations, the status of more than 200 different functions can be discerned visually on the telephone's display. For example, when used in a contact center environment, the Avaya Model 2410 and 2420 will display information such as the number of calls in queue, the mean waiting time, and the agent's "split assignment."</p> <p>For this reason, consistent with the requirements of 1194.23(k)(4), the Avaya Universal Access Phone Status software is not limited to a handful of commonly used functions. Instead, it provides user-selectable voiced status reports on any of the 200+ functions that are supported on Avaya equipment.</p>
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## § 1194.31 Functional Performance Criteria

<i><b>Criteria</b></i>	<i><b>Support Levels</b></i>	<i><b>Remarks and Explanations</b></i>
1194.31(a) 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.	Supports	The features in the Avaya Model 2410 and 2420 Digital Telephones that facilitate their use by people who are blind or visually impaired are described in the sections that address paragraphs 1194.23(e), 1194.23(k)(1), and 1194.23(k)(4).
1194.31(b) 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.	Supports	Paragraph 707.5.6.2 in the ADA accessibility design guidelines (published in the Federal Register, November 16, 1999) recommends that characters displayed on a screen be in a sans serif font, be 3/16 inch (4.8 mm) minimum in height based on the uppercase letter "I" and contrast with their background with either light characters on a dark background or dark characters on a light background. The alpha-numeric displays on the Avaya Model 2410 and 2420 Digital Telephones conform to all aspects of this recommendation, except that characters are slightly smaller than the recommended value (4.67 mm as opposed to 4.8 mm).

<p>1194.31(c) 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.</p>	<p>Supports</p>	<p>The features in the Avaya Model 2410 and 2420 Digital Telephones that support TTY compatibility are described in the sections that address paragraphs 1194.23(a), 1194.23(b) and 1194.23(j). Features that provide enhanced audio are described in the sections that address paragraphs 1194.23(f) and 1194.23(g). Support for assistive hearing devices is described in the sections that address paragraphs 1194.23(h) and 1194.23(i). In addition to these features, the telephones permit the volume of the alerter (bell) to be adjusted and can be configured to provide a visual indication of incoming calls.</p>
<p>1194.31(d) 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.</p>	<p>Supports</p>	<p>The features in the Avaya Model 2410 and 2420 Digital Telephones that provide enhanced audio are described in the sections that address paragraphs 1194.23(f) and 1194.23(g). Support for assistive hearing devices is described in the sections that address paragraphs 1194.23(h) and 1194.23(i). In addition to these features, the telephones permit the volume of the alerter (bell) to be adjusted and can be configured to provide a visual indication of incoming calls.</p>
<p>1194.31(e) 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.</p>	<p>Supports</p>	
<p>1194.31(f) 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.</p>	<p>Supports</p>	<p>The operational characteristics of all controls in the Avaya Model 2410 and 2420 Digital Telephones (e.g., the amount of strength required to press a button) are within the limits specified by paragraph 1194.23(k)(2).</p>

## § 1194.41 Information, Documentation and Support

<i><b>Criteria</b></i>	<i><b>Support Levels</b></i>	<i><b>Remarks and Explanations</b></i>
1194.41(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge	Supports	Will provide upon request
1194.41(b) 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.	Supports	Will provide upon request
1194.41(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports	<p>Avaya's point-of-contact for accessibility-related issues:</p> <p style="text-align: center;">           Dr. Paul R. Michaelis            Voice: 303-538-4101            TTY: 303-538-3740  <a href="mailto:prmichaelis-at-avaya.com">prmichaelis-at-avaya.com</a>.         </p>

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