



## Section 508 Checklist for §1194.23 Telecommunications products.

For more information on the Standard refer to the United States Access Board description at the following URL:  
<http://www.access-board.gov/sec508/guide/1194.23.htm>.

ID	1194.23 Standard Criteria & Checklist Questions	Evaluation
<b>(a)</b>	<b>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.</b>	
a.1	Does the phone allow the user to intermix speech with TTY use?	
a.2	If a TTY disables the microphone can the microphone be turned on again?	
<b>(b)</b>	<b>Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.</b>	
b.1	Does the product compress or alter transmissions, including TTY audio signals, in such a manner that the signals are not decoded properly?	

ID	1194.23 Standard Criteria & Checklist Questions	Evaluation
<b>(c)</b>	<b>Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.</b>	
<b>c.1</b>	Does the IVRS (interactive voice response system) allow for clear TTY data? TTY users have discovered that some voice mail systems corrupt TTY data left in voice mail boxes.	
<b>c.2</b>	Is the product compatible with direct TTY access or the use of the relay service and by Voice Carry Over (VCO), Hearing Carry Over (HCO), Video Relay Services (VRS) or Speech to Speech users through a relay service?	
<b>c.3</b>	Are controls provided that allow TTY users to pause, skip, rewind, slow down, and repeat all messages and prompts?	
<b>c.4</b>	Is there a visual instruction to save or delete a voice mail message after a TTY user reviews a mail message?	
<b>(d)</b>	<b>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.</b>	
<b>d.1</b>	Does the product give an alert when the time interval is about to run out?	
<b>d.2</b>	Does the product provide sufficient time for the user to indicate more time is required?	

ID	1194.23 Standard Criteria & Checklist Questions	Evaluation
(e)	<b>Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.</b>	
e.1	Is caller identification provided for users of TTYs?	
e.2	Is another form of caller identification provided for users who cannot see displays?	
e.3	Is audible caller identification provided for users who cannot see displays?	
(f)	<b>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.</b>	
f.1	If a volume control (usually a calibrated wheel or slide) is provided that allows a user to set the level anywhere from 0 to the upper requirement of 20 dB, there is no need to specify an intermediate level. If a stepped volume control is provided (usually through pressing a button repeatedly), is one of the intermediate levels provided 12 dB of gain?	
(g)	<b>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.</b>	
g.1	If the telecommunications product allows a user to adjust the receive volume, does it have a function to automatically reset the volume to the default level after every use?	

ID	1194.23 Standard Criteria & Checklist Questions	Evaluation
(h)	<b>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.</b>	
h.1	Is the product hearing aid compatible (HAC)?	
h.2	Does the product have wireless magnetic coupling to hearing technologies?	
(i)	<b>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.</b>	
i.1	Can a user of hearing technologies use the product successfully in an auditory manner?	
i.2	Do users of hearing technologies experience auditory interference coming from the phone and does the sound(s) interfere with the ability to conduct a conversation?	
(j)	<b>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.</b>	
j.1	Can closed captions be decoded from video signals transmitted by this product?	

ID	1194.23 Standard Criteria & Checklist Questions	Evaluation
j.2	Can video descriptions be decoded from video signals transmitted by this product?	
j.3	Can TTYs receive and send clear signals via VoIP through this product?	
j.4	Can assistive technologies receive communication through this product?	
<b>(k) (1)</b>	<b>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.</b>	
<b>(k) (1)</b> <b>(1)</b>	Does the product present telephone keypads and computer keyboards as touch screen only? If yes, this standard 1194.3 (K) (1) – (4) does not apply.	
<b>(k) (1)</b> <b>(2)</b>	Are mechanically operated controls or keys tactilely discernible without activating the controls or keys?	
<b>(k) (2)</b>	<b>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.</b>	
<b>(k) (2)</b> <b>(1)</b>	Are mechanically operated controls or keys operable with one hand?	
<b>(k) (2)</b> <b>(2)</b>	Do mechanically operated controls or keys operate without requiring tight grasping, pinching, twisting of the wrist?	

ID	1194.23 Standard Criteria & Checklist Questions	Evaluation
(k) (2) (3)	Do mechanically operated controls or keys activate with 5 lbs. (22.2N) or less pressure?	
(k) (3)	<b>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.</b>	
(k) (3) (1)	When key repeat is supported for products with mechanically operated controls or keys, is the delay before repeat adjustable to at least 2 seconds per character?	
(k) (4)	<b>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.</b>	
(k) (4) (1)	Can the status of all locking toggle controls or keys for mechanically operated controls or keys be discernible in a visual manner?	
(k) (4) (2)	Can the status of all locking toggle controls or keys for mechanically operated controls or keys be discernible through touch or sound?	

**\*§1194.31 Functional Performance Criteria**

- (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.
- (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.
- (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.
- (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.
- (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.
- (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.

VA Section 508 Program Office (C10A)  
810 Vermont Ave. N.W  
Washington, DC 20240  
[Section508@va.gov](mailto:Section508@va.gov)  
(202) 273-6543  
<http://www.va.gov/accessible/>