



Section 508 Accessibility Information for Dterm® Series i (Digital Terminals)

The following information relates to NEC products offered under our GSA Schedule GS-35F-0245J and other Federal Contracts.

NEC America, Inc., based upon its interpretation of the Section 508 regulations, reasonably believes that its products may support some of the features set forth under Section 1194.23 - Telecommunications Products. However, the information herein is not a representation of conformance or compliance and is provided for informational purposes only.

If you have questions regarding Section 508 regulations as they apply to these NEC products, please contact NEC America Inc., by calling 214-262-7095, or by sending a detailed e-mail request to Section508@necam.com.

Dterm® Series i (Digital Terminals) Models: DTR-2D-1, DTR-8-1, DTR-8D-1, DTR-16D-1, DTR-32D-1, DCR-60-1		
508 Standard 1194.23 and 1194.31	Supporting Feature	Remarks / Comments
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.	Yes	When equipped with the optional Analog port adapter or Analog port adapter with ringer, the NEC Dterm Series i Telephone complies with this standard. In order to connect to the Public Switched Telephone Network (PSTN), the TTY device utilizes an RJ-11 type connector (standard telephone connection found in most homes). The NEC Analog port adapter provides this connection.
1194.23(b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.	Yes	When equipped with the optional Analog port adapter or Analog port adapter with ringer, the NEC Dterm Series i Telephone complies with this standard.

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1194.23(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.	N/A	The NEC Dterm Series i telephone equipped with the optional Analog port adapter or Analog port adapter with ringer would not interfere with the usability of a TTY device or compliance of voice mail, auto-attendant, or interactive voice response systems.
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.	N/A	The NEC Dterm Series i telephone equipped with the optional Analog port adapter or Analog port adapter with ringer would not interfere with the usability of a TTY device or compliance of voice mail, auto-attendant, or interactive voice response systems.

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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.	Yes	The NEC Dterm Series i Terminals complies with this standard. (NOTE: Users who cannot see displays will require a separate analog line between the PBX and their location. If TTY's are used with NEC Dterm Series i terminals as described in the section related to paragraph 1194.23(a), caller ID and the other information displayed during a call will still be displayed on the terminal. "Voice Announce" or "Talking caller ID products would need to be provisioned for people unable to see the displays equipped on the phones. In this case a separate analog line from the PBX would be required. The analog line would appear as a line appearance on the Dterm, so that incoming calls are ring both places at the same time. (The use of a separate dedicated analog line, in order to satisfy requirements that cannot be met by the current generation of digital voice terminals, is permitted by the Federal Access Board. http://www.access-board.gov/sec508/508standards.txt)

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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.	Yes	
1194.23(g) If a 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.	Yes	
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.	Yes	
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.	Yes	

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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.	Yes	
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.	Yes	The dial pad on the NEC Dterm Series i terminal follows the North American standard layout. The "5" key on the dial pad has a tactile bump allowing easy identification of that key and also serves as a navigational waypoint for the entire keypad for users who are visually impaired. Other special function keys are also easily discernible based upon existing waypoints on the terminal or upon specially shaped keys.

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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.	Yes	
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.	Yes	The NEC Dterm Series i terminal has no key repeat function.
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.	Yes	All NEC Dterm Series i models comply with this section to the extent that the status of keys that lock or toggle are visually discernible On the NEC Dterm Series i terminals utilize either an LED or an LCD displayed icon to show the status of a function.
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.	Yes	Refer to the sections that address paragraphs 1194.23(e) and 1194.23(k)(1) for features that allow the NEC Dterm Series i models to be used by people who are blind or visually impaired.

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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.	Yes	All NEC Dterm Series i models comply with this section. Under normal conditions and use, visual acuity greater than 20/70 is not required.
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.	Yes	Refer to the following sections for more information: 1194.23(a), 1194.23(b) and 1194.23(j) for TTY support, 1194.23(e) and 1194.23(k)(1) for features used by people who are blind or visually impaired. 1194.23(f) and 1194.23(g) for enhanced audio features, 1194.23(h) and 1194.23(i) for assistive hearing devices. The NEC Dterm Series i terminals have both a visual indication of incoming calls (support for 1194.23(e)) and allow the volume of the ringer to be changed.
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.	Yes	Refer to the following sections for more information, 1194.23(f) and 1194.23(g) for enhanced audio features, 1194.23(h) and 1194.23(i) for assistive hearing devices. The NEC Dterm Series i terminals have both a visual indication of incoming calls (support for 1194.23(e)) and allow the volume of the ringer to be changed.

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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.	Yes	
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.	Yes	All actions required to normally operate an NEC Dterm Series i models (e.g., lifting the handset, pressing a digit on the key pad etc.) fall within the limits show in paragraph 1194.23(k)(2). All standard features are able to be utilized without any simultaneous actions required.