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Product Model #: Digital Portable Radio XTS 5000 (Std / Rugged / Secure / Type)

Rehabilitation Act Amendments of 1998, Section 508 Subpart 1194.25 Self-Contained, Closed Products	
The following features are derived from Section 508	
	COMMENTS
When a timed response is required – alert user, allow sufficient time for him to indicate that he needs additional time to respond [N/A]	There is only 1 time limited complex function, radio lock, which has a user programmable time limit. The remainder of functions are not time limited because activities are recreate-able and recoverable.
For touch screen or contact-sensitive control input provide: 1. Controls / keys tactilely discernable without activating [N/A]	Keys can be discerned without activation.
2. Controls / keys operable with one hand [X]	Yes
3. Controls / keys that don't require tight grasping, pinching or twisting of the wrist [X]	PTT, volume, and channel selection require moderate pressure to avoid inadvertent button/switch activation. This is by design for environmental aspects of use.
4. Maximum force required to activate controls / keys is 5 lbs (22.2N) [X]	Yes
5. If key repeat supported, delay key repeat at least 2 seconds [X]	Programmable time…longer and shorter
6. Key repeat adjustable to 2 seconds per character [X]	Programmable time…longer and shorter
7. Locking toggle controls / keys status – visually discernable, and discernable through touch or sound [X]	Yes…Keypad and radio lock
Provide an alternative form of identification / activation that doesn't require the user to possess particular biological characteristics [X]	Yes
Products that provide audio output shall: 1. Provide audio signal at a standard signal level through an industry standard connector allowing private listening [X]	Yes
2. Provide ability to interrupt, pause, and restart the audio at anytime [X]	Audio will be lost, but connection can always be re-established.
For products that deliver voice output in a public area: 1. Incremental volume control shall be provided with output amplification up to a level of at least 65 dB [X]	Yes
2. Where ambient noise of the environment is above 45 dB, volume gain of at least 20 dB above the ambient level shall be user selectable [X]	Yes via knob selection, or support for special headgear to allow for this feature.
3. A function shall automatically reset the volume to the default level after every use [ ]	No Need This functionality is not required due to the fact that the power/volume switch is designed such that the user controls the volume level at time of power up.
Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element [X]	Color LED use is indifferent to color actually shown. The lit LED means users actions are occurring.
User adjustable color and contrast settings – shall provide a range of color selections and variety of contrast levels [N/A]	No Contrast setting…contrast is pre-tested and optimized for user environment.
Reduce / eliminate screen flicker or image flashing. Recommended ranges: 2 Hz or lower or 55 Hz or higher [ ]	Certain items do not meet this…secure enunciator, priority scan enunciator, and low battery indicator.

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For products that are freestanding, non-portable and intended for use in one location with operable controls: 1. 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 a maximum protrusion of the product within the 48 inch length [N/A]	N/A
2. 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 [N/A]	N/A
3. Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 in. maximum and 15 in. minimum above the floor [N/A]	N/A
4. Operable controls shall not be more than 24 inches behind the reference plane [N/A]	N/A
For any of the above feature requirements, are there alternative technologies / features that would result in substantially equivalent or greater access to and use of the product for people with disabilities? 1a. Identify required feature above	N/A
1b. Equivalent alternative	N/A
2a. Identify required feature above	N/A
2b. Equivalent alternative	N/A
3a. Identify required feature above	N/A
3b. Equivalent alternative	N/A

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Rehabilitation Act Amendments of 1998, Section 508 Subpart 1194.23 Telecommunications Products	
The following features are derived from Section 508	**COMMENTS**
Standard non-acoustic connection point for TTYs (2.5mm jack) [ ]	No…TTY not a valid choice for portable device nor is it adoptable for user environment.
Adjustable on/off microphone to allow intermix of speech and TTY use [ ]	No…TTY not a valid choice for portable device nor is it adoptable for user environment.
Supports commonly used cross-manufacturer non-proprietary standard TTY signal protocols [ ]	No…TTY not a valid choice for portable device nor is it adoptable for user environment.
Voice mail, messaging, auto attendant, interactive voice response systems shall be usable by TTYs [ ]	No…TTY not a valid choice for portable device nor is it adoptable for user environment.
Voice mail, messaging, auto-attendant, interactive voice response systems that require response time from user – shall give alert that time is about to run out, will allow for extension of time [N/A]	Does not have time-out function
Caller I.D. (and similar functions) shall function with TTYs[ ]	No…TTY not a valid choice for portable device nor is it adoptable for user environment.
Caller I.D. (and similar functions) shall function for people who cannot see [ ]	No…this is based upon a pre-defined user list.
For voice signals – adjustable volume control gain of up to a minimum of 20 dB [X]	Yes
For voice signals – incremental volume control shall have at least one intermediate step of 12 dB gain [X]	Yes
If product allows user to adjust the "receive" volume – there will be an automatic volume reset to the default level after each use [ ]	No, volume always matches volume knob.
Audio transducer normally held up to the ear - provide a means for effective wireless coupling for hearing technologies [N/A]	This is not valid choice for adoption in user environment. The radio operates like a speakerphone.
Interference to hearing aids, cochlear implants and assistive listening systems will be reduced to the lowest possible level to allow usability [N/A]	This is not valid choice for adoption in user environment. The radio operates like a speakerphone.
Pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide usable format [X]	Yes, APCO Standards.
Controls / keys tactilely discernable without activating [X]	Yes
Controls / keys operable with one hand [X]	Yes
Controls / keys shall not require tight grasping, pinching, or twisting of wrist [X]	PTT, volume, and channel selection require moderate pressure to avoid inadvertent button/switch activation. This is by design for environmental aspects of use.
Force required to activate controls / keys is 5 lbs (22.2N) maximum [X]	Yes
If key repeat supported – delay before key repeat shall be at least 2 seconds [X]	Yes. Programmable response time
Key repeat rate adjustable to 2 seconds per character [X]	Adjusted in software from ¼ sec to 6 ¼ sec.

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Locking toggle controls / keys – visually discernable and discernable either through touch or sound [X]	Yes. Keypad and radio lock are visually and sound discernable.
For any of the above feature requirements, are there alternative technologies / features that would result in substantially equivalent or greater access to and use of the product for people with disabilities? 1a. Identify required feature above	Use of short messaging instead of TTY on radios that have keypads.
1b. Equivalent alternative	Short Text Messaging in future
2a. Identify required feature above	Structure and location of physical controls
2b. Equivalent alternative	Console use for statically located personal
3a. Identify required feature above	
3b. Equivalent alternative	

Rehabilitation Act Amendments of 1998, Section 508 Subpart 1194.31 Functional Performance Criteria	
The following features are derived from Section 508	**COMMENTS**
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. [X]	Yes. Consistent control design and audio response allows for non-visual support. Model I is example. Information LEDs can be user disabled because of this feature.
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. [X]	Yes. Consistent control design and audio response allows for non-visual support. Model I is example. Information LEDs can be user disabled because of this feature.
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. [X]	Yes. Consistent visual responses allows for non-hearing support. Tones are capable of being disabled because of this feature. Audio functionality, though, is the main purpose of this device.
Where audio information is important for the use of the 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. [X]	Temple Transducer allows for enhanced auditory behavior.
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. [ ]	No…Audio support is basis of product. Removal of audio functionality will severely limit the use of the product.
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. [X]	Surveillance microphone accessories for limited reach or strength.

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Additional Disability Access Features For Consideration	COMMENTS
Hearing	
Visual alert for "power on" and "power off", low battery, no service, volume [X]	Icons for signal strength and battery level on Model II and III. Volume knob location for power and audio levels
Numbers dialed displayed on screen [X]	Yes for Model II and III.
Accessories [X]	Temple Transducer, Surveillance microphone, pit crew headphones for loud environments.
Other Visual Alerts [X]	Visual alerts for all radio status events
Speech	
2-way text messaging [X]	Available in future
Cognition	
Use consistent colors / shapes for specific function keys [X]	Yes
Group similar functions together [X]	Yes
Provide moving text in at least one static mode at option of user [X]	Model II or Model III
Eliminate time dependent responses [X]	Any time response scenarios are able to be re-established
Provide prompts / cues to assist with complex series of steps [X]	Limited multiple step operations. Button shortcuts are available via customer configuration.
Use of standardized icons [X]	Standardized between all radio products and Motorola PCS products.
User adjusted scroll speed [X]	Button hold adjusts scroll speed
Vision	
Easy tactile differentiation between keys and main surface of product (keys matte non-slip, keys raised off surface of product) [X]	Yes. Nubs on side buttons and standard ergonomics.
Easy tactile differentiation of function keys (tactile or shape differentiation, standardized Motorola key location) [X]	Yes
Tactile orientation on plug that is not self oriented [X]	Yes
Backlit keypad [X]	Yes
Backlit display [X]	Yes
Minimize glare – display and control surfaces [X]	Yes
High contrast display – brightness contrast between 6:1 and 15:1 [ ]	Nominal contrast is 4:1
Use of symbols / icons may be easier to read than fine print [X]	Yes
Different audio indication for "power on" and "power off" [X]	Yes. When the radio is turned on you hear the popple click and tone. When you turn the radio off, you hear the popple click.
Different audio tones emitted for function keys	Depending on the function, keypad is invalid and

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compared to number keys [X]	user hears invalid tone, while valid buttons give valid tone.
Audible low battery warning [X]	Yes. There are user editable thresholds for the Smart Battery.
Volume control - audible indicator [X]	Volume feature makes a constant tone so that the volume level can be set via knob turn.
Key activation to require distinct depression / tactile feedback [X]	Use of poppels for tactile feel.
If information is conveyed via color differentiation include one other mode [X]	Color is associated with the user-selected function. Light emitting diodes merely represent user activation of the feature…scan list edit or transmit receive, low battery, etc…
Auditory feedback from keys ("click, voice mode that announces keys when pressed) [X]	Yes
Manual Dexterity, Reach, Strength	
Shape of device – easy to hold [X]	Designed for customer grip and most used button (PTT) easiest to reach.
If two keys (keyboard products) must be depressed simultaneously, provide option to allow them to be activated sequentially [ ]	This situation does not exist in standard radio operations…except to place the radio in test mode (depot process only)
Make all actions reversible or request confirmation [X]	All reversible except transmission of audio via PTT, which is the intended use of device.
Controls / keys with non-slip surfaces [X]	Textured surfaces
Easy "in" / "out" battery [X]	Button activation
Non-slip grips on sides of device [X]	Textured surfaces
Photosensitive Epilepsy	
Reduce / eliminate screen flicker or image flashing. Recommended ranges of 2 Hz or lower or 55 Hz or higher [ ]	Certain items do not meet this…secure enunciator, priority scan enunciator, and low battery indicator.

Last Updated 9/10/02