

HumanWare Accessibility Conformance Report

Revised Section 508 Edition

(Based on VPAT® Version 2.5Rev)

Field	Report information
Name of Product/Version	Mantis Q40; firmware version 2.6
Report Date	May 2026
Product Description	Refreshable braille display and keyboard device designed for blind and visually impaired users, with tactile keyboard input, refreshable braille output, haptics, optional audio settings, connectivity, and user-configurable settings.
Contact Information	HumanWare Customer Support: support@humanware.com
Notes	This report covers the Mantis Q40 embedded hardware and firmware, support documentation, and support services. Third-party operating systems, external screen readers, host devices, host software, and their interoperability behavior are outside this report scope. The Mantis Q40 is intended primarily for nonvisual braille interaction. Limited visual indicators may be present, but no additional low-vision accommodations are documented for this product. This report does not evaluate the full HumanWare website or third-party documentation or media players.
Evaluation Methods Used	Review of the Revised Section 508 VPAT 2.5Rev template, Mantis Q40 product team responses, engineering confirmations, functional analysis of embedded hardware and firmware behavior, review of support documentation accessibility, and review of support-service claims. Testing was performed by product personnel with knowledge of common product uses and flows.

Applicable Standards/Guidelines

This report covers the degree of conformance for the following accessibility standards/guidelines.

Standard/Guideline	Included In Report
Web Content Accessibility Guidelines 2.0	Level A: Yes Level AA: Yes Level AAA: No
Revised Section 508 standards published January 18, 2017 and corrected January 22, 2018	Yes

Terms

The terms used in the Conformance Level information are defined as follows:

Supports: The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.

Partially Supports: Some functionality of the product does not meet the criterion.

Does Not Support: The majority of product functionality does not meet the criterion.

Not Applicable: The criterion is not relevant to the product.

Not Evaluated: The product has not been evaluated against the criterion. This can only be used in WCAG Level AAA criteria.

WCAG 2.0 Report

Tables 1 and 2 also document conformance with Revised Section 508 Chapter 5 - Software and Chapter 6 - Support Documentation and Services, where applicable.

Scope for WCAG tables: embedded non-web software and electronic support documentation are included in this report scope. Web content, authoring tools, third-party operating systems, external screen readers, host devices, host software, and third-party media players are treated as Not Applicable unless specifically noted. If HumanWare-produced support videos are added to the report scope in the future, timed-media criteria should be reviewed.

Table 1: Success Criteria, Level A

Notes: Applies to embedded software and electronic support documentation as described in the scope above.

Criteria	Conformance Level	Remarks and Explanations
1.1.1 Non-text Content	Supports	Software: non-text interface and status information is available through braille, tactile controls, haptics, optional audio, or text labels where applicable. Electronic support documents include or are intended to include text alternatives for images, diagrams, and graphics.
1.2.1 Audio-only and Video-only (Prerecorded)	Not Applicable	The embedded software does not include prerecorded audio-only or video-only media. Support videos or other prerecorded media are not included in this report scope unless added before publication.
1.2.2 Captions (Prerecorded)	Not Applicable	The embedded software does not include prerecorded synchronized media. Support videos are not included in this report scope unless added before publication.
1.2.3 Audio Description or Media Alternative (Prerecorded)	Not Applicable	The embedded software does not include prerecorded video content. Support videos are not included in this report scope unless added before publication.
1.3.1 Info and Relationships	Supports	Software: dialogs, menus, and controls are exposed through braille output and structured navigation. Electronic support documents are intended to use headings, lists, tables, and other document structure.

Criteria	Conformance Level	Remarks and Explanations
1.3.2 Meaningful Sequence	Supports	Software: menu and dialog sequences are presented in logical order through braille navigation. Electronic support documents maintain a meaningful reading order.
1.3.3 Sensory Characteristics	Supports	Instructions do not depend solely on visual shape, size, location, color, or sound. Core operation is available through braille, tactile controls, keyboard input, haptics, and optional audio.
1.4.1 Use of Color	Supports	Core functionality does not rely solely on color perception. Status and operation are available through braille, tactile controls, haptics, or optional audio where applicable.
1.4.2 Audio Control	Supports	Audio is optional and independently adjustable through firmware commands or settings. Core operation does not require audio output.
2.1.1 Keyboard	Supports	All tested product functions are operable through keyboard and tactile input.
2.1.2 No Keyboard Trap	Supports	No known keyboard traps were identified in embedded firmware workflows.
2.2.1 Timing Adjustable	Supports	Sleep and auto-power settings are configurable by the user where timing is part of firmware behavior.
2.2.2 Pause, Stop, Hide	Supports	The embedded firmware does not include moving, blinking, scrolling, or auto-updating content that prevents use or requires pause, stop, or hide controls.
2.3.1 Three Flashes or Below Threshold	Supports	No flashing content has been identified in firmware workflows.
2.4.1 Bypass Blocks	Not Applicable	This criterion does not apply to non-web software or non-web documents in this report scope.
2.4.2 Page Titled	Supports	Menus and dialogs identify the operational context through braille output and structured navigation. Electronic support documents include appropriate titles.
2.4.3 Focus Order	Supports	Navigation order is logical and sequential through braille navigation and keyboard operation.

Criteria	Conformance Level	Remarks and Explanations
2.4.4 Link Purpose (In Context)	Supports	On-device software does not rely on web links. Electronic support documents are intended to use meaningful links where links are present.
3.1.1 Language of Page	Supports	The product provides user-configurable language settings. Electronic support documentation identifies the document language.
3.2.1 On Focus	Supports	No change of context is expected merely from focus or highlighting. Selection or activation is user initiated.
3.2.2 On Input	Supports	Changing settings or entering commands is user initiated and predictable.
3.3.1 Error Identification	Supports	Errors and status information are exposed through braille and haptic feedback where applicable.
3.3.2 Labels or Instructions	Supports	Menus, controls, commands, and settings provide textual, braille, or tactile identification. Support documentation describes controls and workflows.
4.1.1 Parsing	Supports	The VPAT 2.5Rev template notes this criterion is always answered Supports for WCAG 2.0 and 508 standards after the September 2023 errata.
4.1.2 Name, Role, Value	Supports	Interface controls expose identifiable operational context through firmware UI, braille output, tactile controls, and keyboard interaction.

Table 2: Success Criteria, Level AA

Notes: Applies to embedded software and electronic support documentation as described in the scope above. WCAG Level AAA is not included in this report.

Criteria	Conformance Level	Remarks and Explanations
1.2.4 Captions (Live)	Not Applicable	The embedded software does not include live synchronized media.
1.2.5 Audio Description (Prerecorded)	Not Applicable	The embedded software does not include prerecorded video content. Support videos are not included in this report scope unless added before publication.

Criteria	Conformance Level	Remarks and Explanations
1.4.3 Contrast (Minimum)	Supports	The embedded product is primarily operated nonvisually through braille and tactile controls. Electronic support documentation is intended to meet text contrast requirements. Limited visual indicators are not required for core operation.
1.4.4 Resize Text	Supports	The embedded product is primarily operated through braille rather than visual text. Electronic support documents support user-agent text resizing or zoom.
1.4.5 Images of Text	Supports	The embedded software does not rely on images of text for core operation. Electronic support documentation provides or is intended to provide alternatives for images and graphics.
2.4.5 Multiple Ways	Not Applicable	This criterion does not apply to non-web software or non-web documents in this report scope.
2.4.6 Headings and Labels	Supports	Menu items, controls, commands, and documentation headings are descriptive.
2.4.7 Focus Visible	Supports	Focus and selection are represented through braille cursor routing, tactile navigation, and keyboard interaction.
3.1.2 Language of Parts	Supports	The product provides user-configurable language settings. Electronic support documentation identifies language changes where applicable.
3.2.3 Consistent Navigation	Not Applicable	This criterion does not apply to non-web software or non-web documents in this report scope.
3.2.4 Consistent Identification	Not Applicable	This criterion does not apply to non-web software or non-web documents in this report scope.
3.3.3 Error Suggestion	Supports	Where firmware errors are presented, feedback is provided through braille or haptics to support recovery.
3.3.4 Error Prevention (Legal, Financial, Data)	Not Applicable	The product does not perform legal commitments, financial transactions, or user-controlled data submissions covered by this criterion.

Revised Section 508 Report

The following tables report conformance with the Revised Section 508 standards for the Mantis Q40 scope described above.

Chapter 3: Functional Performance Criteria (FPC)

Notes: Chapter 3 is included to explain functional access where Chapters 4 and 5 do not fully describe user access, especially because the product is designed primarily for nonvisual braille interaction.

Criteria	Conformance Level	Remarks and Explanations
302.1 Without Vision	Supports	Primary operation is designed for blind users through refreshable braille, tactile controls, haptics, and keyboard input.
302.2 With Limited Vision	Partially Supports	The device is primarily intended for nonvisual braille interaction. Limited visual indicators exist, but no additional low-vision accommodations are documented for this product.
302.3 Without Perception of Color	Supports	Operation does not rely solely on color perception.
302.4 Without Hearing	Supports	All core functionality is operable without audio output.
302.5 With Limited Hearing	Supports	Audio is optional and not required for operation.
302.6 Without Speech	Supports	Speech input is not required.
302.7 With Limited Manipulation	Partially Supports	Operation requires physical keyboard or braille chord input. Some commands require simultaneous keypresses. One-handed mode is available to support users who can operate the device with one hand.
302.8 With Limited Reach and Strength	Supports	The portable device uses tactile controls designed for tabletop use. Operation requires the force needed to press a QWERTY key. One-handed mode is available for users who have the use of one hand.
302.9 With Limited Language, Cognitive, and Learning Abilities	Partially Supports	The interface is task-based and uses consistent tactile and braille interaction. Formal cognitive accessibility evaluation has not been completed for all workflows.

Chapter 4: Hardware

Notes: Scope includes Mantis Q40 hardware, including refreshable braille display, physical keyboard and controls, haptics, optional audio output, connectivity, battery/charging, and status indicators.

Criteria	Conformance Level	Remarks and Explanations
402 Closed Functionality	Heading cell - no response required	Heading cell - no response required
402.1 General	Heading cell - no response required	Heading cell - no response required
402.2 Speech-Output Enabled	Heading cell - no response required	Heading cell - no response required
402.2.1 Information Displayed On-Screen	Supports	The product provides information through refreshable braille, tactile controls, haptics, and optional audio rather than requiring visual screen access for core operation.
402.2.2 Transactional Outputs	Not Applicable	The product does not provide transactional outputs such as receipts, tickets, or other transaction records.
402.2.3 Speech Delivery Type and Coordination	Not Applicable	The product does not provide speech output as the primary accessibility output for closed functionality.
402.2.4 User Control	Not Applicable	The product does not provide speech output as the primary accessibility output for closed functionality.
402.2.5 Braille Instructions	Supports	Braille documents and refreshable braille output are provided.
402.3 Volume	Heading cell - no response required	Heading cell - no response required
402.3.1 Private Listening	Supports	Optional Bluetooth headset audio is supported.
402.3.2 Non-private Listening	Supports	Audio is optional for core operation. Audio settings remain through a standard reset and are reset by a factory reset.
402.4 Characters on Display Screens	Not Applicable	The product does not rely on a visual display screen for core operation.

Criteria	Conformance Level	Remarks and Explanations
402.5 Characters on Variable Message Signs	Not Applicable	The product does not include variable message signs.
403 Biometrics	Heading cell - no response required	Heading cell - no response required
403.1 General	Not Applicable	The product does not use biometric authentication.
404 Preservation of Information Provided for Accessibility	Heading cell - no response required	Heading cell - no response required
404.1 General	Supports	Accessibility information is presented directly through braille, tactile controls, haptics, and optional audio where applicable.
405 Privacy	Heading cell - no response required	Heading cell - no response required
405.1 General	Supports	The same braille, tactile, haptic, and optional audio access methods are available when users access product features. Optional headset audio supports private listening where audio is used.
406 Standard Connections	Heading cell - no response required	Heading cell - no response required
406.1 General	Supports	The device uses standard supported connection methods for host communication and accessories.
407 Operable Parts	Heading cell - no response required	Heading cell - no response required
407.2 Contrast	Supports	Core operation does not depend on visual contrast because primary controls and output are tactile and braille based. Visual indicators are supplemental.
407.3 Input Controls	Heading cell - no response required	Heading cell - no response required
407.3.1 Tactually Discernible	Supports	Physical controls are tactually distinguishable.

Criteria	Conformance Level	Remarks and Explanations
407.3.2 Alphabetic Keys	Supports	Alphabetic keys are provided through the QWERTY keyboard layout.
407.3.3 Numeric Keys	Supports	Numeric input is available through the keyboard layout.
407.4 Key Repeat	Supports	Keyboard functionality supports standard repeat behavior.
407.5 Timed Response	Supports	Sleep and auto-power settings are configurable by the user where timing is part of firmware behavior.
407.6 Operation	Partially Supports	Certain braille or shortcut commands may require simultaneous keypresses. Alternative operation is supported through one-handed mode for applicable workflows.
407.7 Tickets, Fare Cards, and Keycards	Not Applicable	The product does not dispense or process tickets, fare cards, or keycards.
407.8 Reach Height and Depth	Heading cell - no response required	Heading cell - no response required
407.8.1 Vertical Reference Plane	Not Applicable	The product is portable/personal-use ICT and is not installed in a fixed public location requiring fixed reach-range evaluation.
407.8.1.1 Vertical Plane for Side Reach	Not Applicable	Not fixed-location ICT.
407.8.1.2 Vertical Plane for Forward Reach	Not Applicable	Not fixed-location ICT.
407.8.2 Side Reach	Not Applicable	Not fixed-location ICT.
407.8.2.1 Unobstructed Side Reach	Not Applicable	Not fixed-location ICT.
407.8.2.2 Obstructed Side Reach	Not Applicable	Not fixed-location ICT.
407.8.3 Forward Reach	Not Applicable	Not fixed-location ICT.
407.8.3.1 Unobstructed Forward Reach	Not Applicable	Not fixed-location ICT.
407.8.3.2 Obstructed Forward Reach	Not Applicable	Not fixed-location ICT.
407.8.3.2.1 Operable Part Height for ICT with Obstructed Forward Reach	Not Applicable	Not fixed-location ICT.
407.8.3.2.2 Knee and Toe Space under ICT with Obstructed Forward Reach	Not Applicable	Not fixed-location ICT.
408 Display Screens	Heading cell - no response required	Heading cell - no response required

Criteria	Conformance Level	Remarks and Explanations
408.2 Visibility	Not Applicable	The product does not rely on a visual display screen for core operation.
408.3 Flashing	Supports	No flashing content has been identified in firmware workflows.
409 Status Indicators	Heading cell - no response required	Heading cell - no response required
409.1 General	Supports	Status information is available through braille, tactile, haptic, or optional audio feedback and is not dependent solely on visual indicators.
410 Color Coding	Heading cell - no response required	Heading cell - no response required
410.1 General	Supports	Core functionality does not rely solely on color coding.
411 Audible Signals	Heading cell - no response required	Heading cell - no response required
411.1 General	Supports	Audible signals are optional. Core functionality is also available through braille, tactile controls, and haptics.
412 ICT with Two-Way Voice Communication	Heading cell - no response required	Heading cell - no response required
412.2 Volume Gain	Heading cell - no response required	Heading cell - no response required
412.2.1 Volume Gain for Wireline Telephones	Not Applicable	The product is not a wireline telephone.
412.2.2 Volume Gain for Non-Wireline ICT	Not Applicable	The product is not non-wireline ICT with two-way voice communication.
412.3 Interference Reduction and Magnetic Coupling	Heading cell - no response required	Heading cell - no response required
412.3.1 Wireless Handsets	Not Applicable	The product is not a wireless handset.
412.3.2 Wireline Handsets	Not Applicable	The product is not a wireline handset.

Criteria	Conformance Level	Remarks and Explanations
412.4 Digital Encoding of Speech	Not Applicable	The product does not provide two-way voice communication.
412.5 Real-Time Text Functionality	Reserved for future	Reserved for future
412.6 Caller ID	Not Applicable	The product does not provide caller ID.
412.7 Video Communication	Not Applicable	The product does not provide real-time video communication between users.
412.8 Legacy TTY Support	Heading cell - no response required	Heading cell - no response required
412.8.1 TTY Connectability	Not Applicable	The product is not ICT with voice communication.
412.8.2 Voice and Hearing Carry Over	Not Applicable	The product is not ICT with voice communication.
412.8.3 Signal Compatibility	Not Applicable	The product is not ICT with voice communication.
412.8.4 Voice Mail and Other Messaging Systems	Not Applicable	The product does not provide voice mail or messaging systems.
413 Closed Caption Processing Technologies	Heading cell - no response required	Heading cell - no response required
413.1.1 Decoding and Display of Closed Captions	Not Applicable	The product does not receive, play, or display captioned video programming.
413.1.2 Pass-Through of Closed Caption Data	Not Applicable	The product does not process closed caption data.
414 Audio Description Processing Technologies	Heading cell - no response required	Heading cell - no response required
414.1.1 Digital Television Tuners	Not Applicable	The product does not include a digital television tuner.
414.1.2 Other ICT	Not Applicable	The product does not process audio description content.
415 User Controls for Captions and Audio Descriptions	Heading cell - no response required	Heading cell - no response required
415.1.1 Caption Controls	Not Applicable	The product does not display captions or captioned video programming.
415.1.2 Audio Description Controls	Not Applicable	The product does not play audio description content.

Chapter 5: Software

Notes: Scope includes embedded non-web software running on Mantis Q40 firmware version 2.6. Third-party operating systems, external screen readers, host devices, and host software are outside scope.

Criteria	Conformance Level	Remarks and Explanations
501.1 Scope - Incorporation of WCAG 2.0 AA	See WCAG 2.0 matrix	The embedded non-web software is addressed in the WCAG 2.0 Level A and Level AA working matrices above.
502 Interoperability with Assistive Technology	Heading cell - no response required	Heading cell - no response required
502.2.1 User Control of Accessibility Features	Supports	User-configurable settings are available for language, braille, sleep, audio, and connectivity.
502.2.2 No Disruption of Accessibility Features	Supports	The embedded firmware does not disrupt accessibility features needed for device operation.
502.3 Accessibility Services	Heading cell - no response required	Heading cell - no response required
502.3.1 Object Information	Not Applicable	The embedded firmware is closed-functionality software and does not expose object information to platform accessibility services for third-party assistive technology.
502.3.2 Modification of Object Information	Not Applicable	No platform accessibility services are exposed.
502.3.3 Row, Column, and Headers	Not Applicable	The embedded firmware does not expose tabular object information to platform accessibility services.
502.3.4 Values	Not Applicable	The embedded firmware does not expose values to platform accessibility services.
502.3.5 Modification of Values	Not Applicable	No platform accessibility services are exposed.
502.3.6 Label Relationships	Not Applicable	No platform accessibility services are exposed.
502.3.7 Hierarchical Relationships	Not Applicable	No platform accessibility services are exposed.
502.3.8 Text	Not Applicable	No platform accessibility services are exposed.
502.3.9 Modification of Text	Not Applicable	The product does not provide user text editing through platform accessibility services.
502.3.10 List of Actions	Not Applicable	No platform accessibility services are exposed.
502.3.11 Actions on Objects	Not Applicable	No platform accessibility services are exposed.
502.3.12 Focus Cursor	Not Applicable	No platform accessibility services are exposed.
502.3.13 Modification of Focus Cursor	Not Applicable	No platform accessibility services are exposed.

Criteria	Conformance Level	Remarks and Explanations
502.3.14 Event Notification	Not Applicable	No platform accessibility services are exposed.
502.4 Platform Accessibility Features	Not Applicable	The product is an embedded braille device and is not a general-purpose software platform.
503 Applications	Heading cell - no response required	Heading cell - no response required
503.2 User Preferences	Supports	User-configurable settings are available for language, braille, sleep, audio, and connectivity.
503.3 Alternative User Interfaces	Supports	Core interaction is provided through a braille display, tactile keyboard input, haptics, and optional audio settings.
503.4 User Controls for Captions and Audio Description	Heading cell - no response required	Heading cell - no response required
503.4.1 Caption Controls	Not Applicable	The embedded firmware does not play video programming with captions.
503.4.2 Audio Description Controls	Not Applicable	The embedded firmware does not provide audio description playback.
504 Authoring Tools	Heading cell - no response required	Heading cell - no response required
504.2 Content Creation or Editing	Not Applicable	The product is not primarily an authoring tool for creating or editing web, document, or multimedia content as defined by Section 508.
504.2.1 Preservation of Information Provided for Accessibility in Format Conversion	Not Applicable	The product does not perform format conversions of authored content with accessibility information.
504.2.2 PDF Export	Not Applicable	The product does not export PDF files.
504.3 Prompts	Not Applicable	The product is not an authoring tool and does not prompt authors to create accessible content.
504.4 Templates	Not Applicable	The product is not an authoring tool and does not provide content templates.

Chapter 6: Support Documentation and Services

Notes: Scope includes user guide, quick start, electronic support files, and HumanWare support services. Support videos are not included in this report scope.

Criteria	Conformance Level	Remarks and Explanations
601.1 Scope	Heading cell - no response required	Heading cell - no response required
602 Support Documentation	Heading cell - no response required	Heading cell - no response required
602.2 Accessibility and Compatibility Features	Supports	HumanWare can provide information about accessibility and compatibility features. Product documentation describes accessibility-related product features, including braille output, tactile input, keyboard operation, haptics, audio settings, language settings, sleep settings, and connectivity.
602.3 Electronic Support Documentation	Supports	Electronic support documentation is planned to be provided in accessible electronic formats. See the WCAG 2.0 matrix for criteria-level notes related to electronic documents.
602.4 Alternate Formats for Non-Electronic Support Documentation	Supports	Alternate documentation formats may be available upon request through HumanWare support.
603 Support Services	Heading cell - no response required	Heading cell - no response required
603.2 Information on Accessibility and Compatibility Features	Supports	Support services can provide information about accessibility and compatibility features.
603.3 Accommodation of Communication Needs	Supports	Support is available through communication methods that can accommodate disability-related needs, based on product team input.

Legal Disclaimer (HumanWare)

This Accessibility Conformance Report is provided for informational purposes only and reflects HumanWare's evaluation of the product identified above as of the report date and product version stated in this document. The information in this report is based on HumanWare's review of product functionality, support documentation, support services, and available test information. Product features, documentation, support materials, and services may change without notice. This report is not intended to create any warranty, certification, contractual commitment, or legal obligation beyond those expressly provided in HumanWare's applicable product documentation, agreements, or warranty terms. Customers should evaluate the product in their own environment to determine whether it meets their accessibility, procurement, and user requirements.

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