Mantis Q40

User Guide

Contents

Getting Started

Welcome to your new Mantis Q40 keyboard. This keyboard is both a standard QWERTY keyboard and a refreshable braille display in one device.

This user guide provides instructions for orientation, usage, navigation, and updating of the device. For more information please refer to the Mantis Q40 product page on the APH website or call APH Customer Service at 1(800) 223-1839.

In the Box

The box contains the following items:

- Mantis Q40 keyboard
- Protective case (TPU)
- Print and Braille Getting Started Guides
- USB power adapter
- USB-A to USB-C recharge cable

Orientation of Mantis Q40

The Mantis has a 40-cell Braille display, a standard QWERTY keyboard, a Home button, and four Thumb keys for navigation. There are buttons and ports on the front, back, and left edges.

Top Face

The top face of the Mantis can be divided into two sections: front and rear.

The front section consists of a refreshable braille display containing 40 braille cells and 40 cursor routing buttons. Each cursor routing button is associated with the cell directly below it.

When editing text, pressing one of the cursor routing buttons moves the editing cursor to the associated braille cell. For any other instance, pressing any cursor button activates a selected item.

The rear section includes a standard computer QWERTY keyboard.

Front Edge

On the front edge of the Mantis are five buttons. From left to right, the buttons are as follows:

- Previous thumb key
- Left thumb key
- Home button (circular shape) – used to return to the Main menu or exit Terminal mode
- Right thumb key
- Next thumb key

Left Edge

On the left edge, from front to back are the following:

- USB-A port
- Power button – press and hold this button for 2 seconds to turn the device ON
- Green LED – visually indicates the status of the device
- USB-C port – use the cable that came with your Mantis to connect the Mantis to a power outlet or a PC

Rear Edge

The rear edge only contains an SD card port located near the left edge of the device. This port allows you to insert SD cards for external storage.

Bottom Side

In each corner underneath your Mantis are four anti-slip pads.

In the middle, closer to the front edge is a slightly indented rectangle with a different texture. In this rectangle is a sticker containing printed hardware information about your Mantis. Above the sticker, there is a braille label containing the serial number of your device.

Towards the back left of the device is the battery compartment. It is closed and secured with two Phillips screws.

QWERTY Keyboard Layout

Starting with the top row (furthest away from you), from left to right, the keys on the Mantis keyboard are laid out as follows:

Row 1 (top row): Escape, F1 to F12, Delete

Row 2: Grave accent (`), numbers 1 through 9, zero (0), hyphen (-), equals (=), Backspace

Row 3: Tab, q, w, e, r, t, y, u, I, o, p, [(left bracket),] (right bracket), \ (backward slash)

Row 4: Caps lock, a, s, d, f, g, h, j, k, l, ; (semicolon), ` (apostrophe), Enter

Row 5: Left Shift, z, x, c, v, b, n, m, , (comma), . (period), / (forward slash), right Shift

Row 6: Left Ctrl (control), Fn (function), Windows, left Alt (alternate), Spacebar, right Alt, right Ctrl, and Left, Up, Down, Right Arrows

Charging Mantis Q40

Prior to using your Mantis, make sure it is charged completely.

Connect the USB-C end of the recharge cable to the USB-C port located on the left edge of your Mantis. Minimal effort is required and forcing the connection can damage the cable or the device.

Connect the USB-A end of the recharge cable to the power adapter, then plug the power adapter into a power outlet. Use the provided power adapter for optimal recharge.

Alternatively, you can charge the device using your computer and the USB-A to USB-C recharge cable, but note that this method of charging is slower than charging with a power adapter.

Powering On and Off

The Power button is on the left edge of the Mantis. It is oval-shaped with a raised dot in the center.

If your device is charged, press and hold the Power button for approximately 2 seconds to power On the Mantis. There is a quick vibration and Starting appears on the braille display along with a tactile loading animation that circles during start-up.

After a few seconds, the start-up is complete and "editor" appears on the braille display. Your Mantis is now ready for use.

To power Off, press and hold the Power button for approximately 2 seconds. A confirmation message appears on the braille display. Select Ok by pressing the Previous or Next thumb key, then press Enter or a Cursor-routing key.

Alternatively, you can follow these steps to power Off the

Mantis:

1. Press P to reach the Power Off menu item.
2. Press Enter or a cursor routing key.
3. Select Ok by pressing the Previous or Next thumb key.
4. Press Enter or a cursor routing key.

Adjusting the Sleep Mode

To preserve the battery, Mantis goes into Sleep mode after 5 minutes of inactivity. You can adjust the length of time in the settings. You can also manually put your device into Sleep mode by a short press of the power button.

To wake up the device, press the Power button.

About the About Menu

The About menu provides various information about your device, such as version numbers, model number, serial number, licenses, and copyright.

Navigating and Using Menus

Navigating the Main Menu

The Main menu options are:

- Editor
- Terminal
- Library
- File manager
- Calculator
- Date and time
- Settings

- Online services
- User guide
- Power Off

Press the Previous or Next thumb keys to scroll through the list to the menu item of your choice. Then press Enter or a cursor routing key to access it.

You can return to the Main menu at any time by simply pressing the Windows key, the Home button, or Ctrl + Alt + H on the QWERTY keyboard.

Panning Text on the Braille Display

Often times the text on the braille display is too long to fit on a single line. To read the entire sentence, scroll or "pan" the text ahead or back by pressing the Left and Right thumb keys on the Mantis. The Left and Right thumb keys are the second and fourth buttons on the front edge of the device.

Using the Context Menu for Additional Functions

The Context menu is a special menu that is accessed from almost everywhere in the device. It offers useful contextual functions that are relevant to what you're currently doing on your Mantis. Think of it as the Contextual menu of a PC (the menu you get when you right-click the mouse). If you're looking for a specific action, or simply forgot the shortcut, chances are it can be found in the Context menu.

To activate the Context Menu, press Ctrl + M. A menu opens with a list of actions you can perform at that particular moment. Scroll through the menu to the desired action and press Enter or a cursor routing key.
Press Escape to exit the Context Menu.

Navigating by First Letters of Words

Most of the time, you can jump to an item in a menu by typing the first letter of that item. Doing so automatically moves your focus to the first item in the list starting with that letter. Typing the same letter twice moves the focus to the second item in the list starting with that letter, and so on.

For example, to reach the Settings menu on the Mantis, you type the letter 'S' on your keyboard.

Using Braille Entry Method to Type

Although the Mantis comes with a QWERTY keyboard, it is still possible to toggle to a Perkins-style keyboard, which uses the A, S, D, F, J, K, L, and ; keys. With this entry scheme, each of these keys represents a dot in the braille cell of computer braille, which has eight cells, as shown in Table 1.

Table 1: Keyboard to Braille Cell Dot Equivalents

QWERTY Key	Braille Cell Dot
F	1
D	2
S	3
J	4
K	5
L	6
A	7
;	8

Press F12 to toggle between QWERTY and braille entry. A prompt is given indicating what input method is in use.

Using Shortcuts/Key Combinations to Navigate

As the name implies, shortcuts, also known as key combinations, make it easy to quickly navigate through a menu or file.

The most commonly used shortcuts on the Mantis Q40 are indicated in Table 2.

Table 2: Shortcut/Key Combination Table

Action	Shortcut or Key Combination
Activate Selected item	Enter or cursor routing key
Escape or Back	Escape key
Previous item	Up Arrow or Previous thumb key
Next item	Down Arrow or Next thumb key
Jump to any item in a list	Type the first letter of the item or app
Pan left and right	Left or Right thumb key
Go to top	Ctrl + Fn + Left arrow
Go to bottom	Ctrl + Fn + Right arrow
Toggle Braille grade	Ctrl + Alt + G
Switch Braille profile	Ctrl + Alt + L
Battery level	Ctrl + Alt + P
Context menu	Ctrl + M
Main menu	Windows key, Home button, or Ctrl + Alt + H
System information	Ctrl + I
Toggle braille and QWERTY keyboard	F12

Action	Shortcut or Key Combination
Time	Ctrl + Alt + T
Date	Ctrl + Alt + D
Eject media	Ctrl + Alt + E

Using the Editor Application

The Editor is an application that allows you to open, edit, and create text files on the Mantis. You can open .docx, .doc, .txt, .brf, and .brl files with the Editor. The files you create or modify are saved as a .txt file.

To open the Editor, press the Next thumb key until you reach Editor or press 'e' in the Main menu, then press Enter or a cursor routing key.

The Editor opens in the Editor menu, which includes Create file, Open file, Editor settings, and Close.

Create a File

There are several ways to create a file depending on your current location on the device.

- If you are in the Editor menu, select Create file and press Enter or a cursor routing key.
- From the Context menu, select and activate File menu, then Create file.
- From any other location on the device, press Ctrl + Alt + N in the Editor app.

The cursor is visible between two braille brackets. You can begin writing in your new file.

Open a File

If you are in the Editor menu, select Open file and press Enter or a cursor routing key. From any other location, press Ctrl + O, then select the file you wish to open using the Previous and Next thumb keys.

Close a File

To close a file that is opened in Editor, press the Escape key. Alternatively, open the Context menu using Ctrl + M, then scroll to and activate the File menu. Select Close file item.

If there are changes to your file that have not been saved, you are asked if you want to save the changes before closing.

Save a Text File

There are two types of saving in Editor: Save and Save as.

Save: Press CTRL + S to save your file to an already existing filename.

Save as: Press Ctrl + Shift + S to save a copy of your file with a new filename and change the location.

If your file has never been saved, Editor asks you to enter a new filename regardless of the save method you choose.

Auto Scrolling Through Written Text in the Editor

The Editor app features an Auto Scroll functionality that automatically pans through the written text on the braille display.

To start Auto Scrolling, press Alt + G.

To stop Auto Scrolling, press any key.

Modifying Auto Scroll Speed

You can change the Auto Scroll speed when auto-scrolling inside a file.

To slow down Auto Scroll, press Ctrl + Alt + -.

To speed up Auto Scroll, press Ctrl + Alt + =.

Finding Text in a File

To find text in your file, press Ctrl + F. Enter your search term in the blank field. Your cursor is placed at the first location the text is found.

Press F3 to find additional instances of the search word.

Press Ctrl + F3 to find the last instance of the search word in the file.

Finding and Replacing Text

To find and replace text:

1. Press Ctrl + H.
2. Enter the text to find in the first edit box.
3. Enter the text to replace it with in the second prompted edit box.
4. Press the Next button to find the next instance of the word.
5. Press the Down Arrow or the Next button to find Replace All.

Cutting, Copying, and Pasting Text

The Editor lets you cut, copy, and paste text in a way similar to computer programs.

To Select the text, position your cursor on the first character using a cursor routing button, then press F8.

Alternatively, you can select text from the Context menu:

1. Open the Context menu with Ctrl + M.
2. Scroll down to Edit.
3. Press Enter or a cursor routing key.
4. Scroll down to Select Text.
5. Press Enter or a cursor routing key.

This marks the start of your selection. Now go to the location of the end of your selection, and press Enter or a cursor routing key to end the selection.

To Select All text included in the file, press Ctrl + A.

To Copy the selected text, press Ctrl + C.

To Cut the selected text, press Ctrl + X.

To Paste the copied or cut text, position your cursor where you want the text to be pasted using a cursor routing button and press Ctrl + V.

As always, these commands can be accessed through the Context menu.

Using the Read Mode

Read mode allows you to read files without the possibility of editing content by mistake. You cannot edit files while in Read mode.

To activate or deactivate Read mode, press Ctrl + R.

To activate or deactivate Read mode from the Context menu:

1. Press Ctrl + M to activate the Context menu.
2. Scroll to File using the Previous and Next thumb keys.

3. Scroll to Read mode using the Previous and Next thumb keys.
4. Press Enter or a cursor routing key.

Editor Commands Table

The Editor commands are listed in Table 3.

Table 3: Editor Commands

Action	Shortcut or Key Combination
Activate edit mode	Enter or a cursor routing key
Leave edit mode	Escape
Create file	Ctrl + Alt + N
Open file	Ctrl + O
Save	Ctrl + S
Save as	Ctrl + Shift + S
Find	Ctrl + F
Find next	F3
Find previous	Shift + F3
Replace	Ctrl + H
Start/Stop selection	F8
Select all	Ctrl + A
Copy	Ctrl + C
Cut	Ctrl + X
Paste	Ctrl + V
Delete previous word	Ctrl + Backspace
Delete current word	Ctrl + Delete
Delete previous character	Backspace
Move to next edit box while editing	Home button

Action	Shortcut or Key Combination
Move to next edit box without editing	Tab, Next thumb key, or Alt + Right Arrow
Move to previous edit box without editing	Shift + Tab, Previous thumb key, or Alt + Left Arrow
Move insertion point to start of text field document	Ctrl + Home
Move insertion point to end of text field document	Ctrl + End
Start auto-scroll	Alt + G
Increase auto-scroll speed	Ctrl + Alt + =
Decrease auto-scroll speed	Ctrl + Alt + -
Toggle Reading mode	Ctrl + R

Using the Library Application

The Library is the application you use to read books on the Mantis. It supports the file formats .brf, .pef, .txt, .html, .docx, and .rtf, and is compatible with .zip files containing books in text format.

To open the Library app, press the Next thumb key until you reach Library, or press l in the Main menu. Press Enter or a cursor routing key to access the app.

The Library menu includes Book list, Recently read, Search, and Close.

Navigating the Book List

In Library, your books are stored in a Book list, comparable to a directory containing all the available media on your device in alphabetical order.

Use the Previous and Next thumb keys to select a book from your Book list, then press Enter or a cursor routing key.

To close a book and return to the Book list, press Escape or Ctrl + Shift + B.

Searching for Books

To search for a specific book on the device:

- Select Search from the Library menu or press Ctrl + F.
1. Type in the text/name of book.
2. Press Enter.
3. You are presented with a list of books matching your search criteria.
4. Use the Previous and Next thumb keys to scroll to the book.
5. Press Enter or a cursor routing key to open it.

Accessing Recently Opened Books

You can open a list of the last five books you previously opened for quick access.

To open a list of the five most recent books, press Ctrl + R or select Recently read from the Library menu.

You can scroll through the five most recent books using the Previous and Next thumb keys. Press Enter or a cursor routing key to open a book from the list.

Managing Your Books

When browsing the Book list, you can copy, move, or delete a selected book from the Library application to an external storage device. The actions that are available for each book depend on the type and location of the book. The Context menu tells you what actions are available.

The basic rules are:

- Books located on the SD card can be deleted.
- Books downloaded from online services can be moved or deleted.
- Books can only be copied or moved to/from when external storage is connected.
- You are unable to copy or move books from within the internal storage.

To copy, move, or delete a book:

1. Access the book list by pressing Ctrl + Shift + B.
2. Select a book using the Previous or Next thumb keys.
3. Press Ctrl + Alt + M to open the Manage Book menu.
4. Select Copy to, Move to, or Delete.

Navigating and Accessing Additional Information in Books

The easiest way to navigate inside a book is by using the thumb keys. Use the Left and Right thumb keys to pan the text left and right.

Changing the Navigation Level for Books

The Library includes different navigation levels to make navigating through a book easier. Navigation levels are dependent on each book and may differ from book to book.

To change the Navigation level:

1. Press Ctrl + T.
2. Scroll through the available Navigation levels using the Previous and Next thumb keys.
3. Press Enter or a cursor routing key to select the Navigation level.

Once the Navigation level is selected, use the Previous and Next thumb keys to navigate at this Navigation level.

For example, if you selected the "Sentence" Navigation level, pressing the Next thumb key would move you from sentence to sentence within the book.

Navigating by Page, Heading, Percentage, or Bookmarks

To reach a specific page, heading, book percentage, or bookmark:

1. Press Ctrl + G.
2. Scroll through the navigation options using the Previous and Next thumb keys.
3. Choose between Page, Heading, Percent, or Bookmark.
4. Press enter or a cursor routing key.
5. Enter a value.
6. Press Enter or a cursor routing key.

Auto-Scrolling Through Text in Books in the Library App

The Auto-scroll feature of the Mantis Q40 allows you to scroll through the text of an open book automatically.

To turn On Auto-scroll, press Alt + G when inside a book. Press any key to stop the Auto-scroll and return to the regular Panning mode.

You can modify the Auto-scroll speed when auto-scrolling inside a book.

To slow down Auto-scroll, press Ctrl + Alt + -.

To speed up auto-scroll, press Ctrl + Alt + =.

Finding Your Current Position in a Book

Use the Where am I command whenever you need to know your current position within a book.

To activate the Where am I command, press Ctrl + W.

Alternatively, access the Context menu by pressing Ctrl + M. Go to Where am I using the Previous and Next thumb keys, then press Enter or a cursor routing key to activate the item.

Use the Previous and Next thumb keys to scroll through the available elements (Heading, Percent, Page, and Line). Use the Left and Right thumb keys to pan the text left and right.

Navigating to the Beginning or End of a Book

You can reach the beginning or end of a book using shortcuts.

To reach the beginning of a book, press Ctrl + Fn + Left arrow.

To reach the end of a book, press Ctrl + Fn + Right arrow.

Searching for Text in a Book

Another way to navigate within a book is to search for a specific string of text.

To search for text, press the Ctrl + F command. You are prompted to enter the text. Type the text, then press Enter.

Accessing Additional Book Information

You can display additional information about the book you are currently reading on the device (title, author, description, date, language, subject, publisher and bookmarks).

To display additional book information, press Ctrl + I.

You can also press Ctrl + M to open the Context menu. Use the Previous and Next thumb keys to select the Book Information menu item, then press Enter or a cursor routing key to activate it.

Use the Previous and Next thumb keys to scroll through the available book information. Use the Left and Right thumb keys to pan the text left and right.

Adding, Navigating, Highlighting, and Removing Bookmarks

Bookmarks are a useful way to keep your location within the book and allow you to return quickly to that position at a later time.

To open the Bookmark menu, press Alt + M. You can also press Ctrl + M to open the Context menu and select Bookmark menu.

Inserting a Bookmark

To add a bookmark in a book:

1. Press Alt + M to open the Bookmark menu.
2. Select Insert Bookmark using the Previous and Next thumb keys
3. Press Enter or a cursor routing key.
4. Enter a specific unused bookmark number.

   Note: If you do not enter a number, Mantis selects the first available number and assigns it to the bookmark.
5. Press Enter.

Alternatively, you can insert a Quick Bookmark by pressing Ctrl + B.

Navigating to Bookmarks

To jump to a bookmark, press Ctrl + J. You are prompted to enter the bookmark number. Enter the bookmark number you wish to navigate to, then press Enter.

Highlighting Bookmarks

The Highlight Bookmarks menu item is used to define the Start and the End positions of a passage. Using highlighted bookmarks is a great way to study important passages in textbooks.

To highlight bookmarks:

1. Open the Bookmark menu by pressing Alt + M.
2. Select Highlight Bookmark Start using the Previous and Next thumb keys.
3. Press Enter or a cursor routing key.
4. Enter a specific unused bookmark number.

    Note: If you do not enter a number, your Mantis will select the first available number and assign it to the bookmark.

5. Press Enter.
6. Navigate to the end point of the highlighted passage.
7. Open the Bookmark menu by pressing Alt + M.
8. Select Highlight Bookmark End using the Previous and Next thumb keys.
9. Press Enter or a cursor routing key.

    The current position is set as the ending position. If the end position is placed before the start position, they are switched.

You can also insert a Quick Bookmark. It is used to mark the end of the Highlight Bookmark.

To insert a Quick Bookmark:

1. Press Alt + H to open the Highlight Bookmark list.
2. Select a Highlight Bookmark number.
3. Press Enter.

   The content of the current Highlight Bookmark is displayed.
4. Use the thumb keys to navigate.
5. Press Escape to close the Highlight Bookmark and return to the entire book content.

Removing Bookmarks

To remove a saved Bookmark:

1. Press Alt + M to open the Bookmark menu.
2. Scroll to Remove Bookmark using the Previous and Next thumb keys.
3. Press Enter or a cursor routing key.
4. Enter the Bookmark number you want to remove.
5. Press Enter.

Library and Reading Commands Table

The Library and reading commands are listed in Table 4.

Table 4: Library/Reading Commands

Action	Shortcut or Key Combination
Book list	Ctrl + Shift + B
Manage books	Ctrl + Alt + M
Go to Option menu	Ctrl + G
Bookmark menu	Alt + M

Action	Shortcut or Key Combination
Jump to bookmark	Ctrl + J
Insert Quick Bookmark	Ctrl + B
Show Highlight Bookmarks	Alt + H
Toggle Navigation level	Ctrl + T
Previous element	Previous thumb key
Next element	Next thumb key
Start Auto-scroll	Alt + G
Increase Auto-scroll speed	Ctrl + Alt + =
Decrease Auto-scroll speed	Ctrl + Alt + -
Where am I	Ctrl + W
Info	Ctrl + I
Go to beginning of book	Ctrl + Fn + Left Arrow
Go to end of book	Ctrl + Fn + Right Arrow
Open recent books	Ctrl + R
Search for books or text	Ctrl + F
Find next	F3
Find previous	Shift + F3
Next non-blank line	Ctrl + Alt + Down Arrow
Previous non-blank line	Ctrl + Alt + Up Arrow
Previous character	Left arrow
Next character	Right arrow
Previous word	Ctrl + Left Arrow
Next word	Ctrl + Right Arrow
Previous paragraph	Ctrl + Up Arrow
Next paragraph	Ctrl + Down Arrow
Jump to the beginning of a line or sentence	FN + Left Arrow
Jump to the end of a line or sentence	FN + Right Arrow

Action	Shortcut or Key Combination
Jump to the top of an area	Ctrl +FN + Left Arrow
Jump to the bottom of an area	Ctrl + Right Arrow
Page up	FN + Up Arrow
Page down	FN + Down Arrow

Using Terminal Mode

One of the main features of the Mantis is Terminal mode. When connected to a host device running a screen reader, such as a computer or a smart device, Terminal Mode displays all text selected on the host device.

You can connect to your host device either through Bluetooth, or by connecting the USB-C cable included with your Mantis to the host device. Up to five Bluetooth devices and one USB can be connected at one time.

Connecting and Exiting Terminal Mode

To connect in Terminal mode, make sure you have a Windows, iOS, or Mac device with a screen reader running.

To activate Terminal mode:

1. Press the Windows key, the Home button, or Ctrl + Alt + H to enter the Main menu.
2. Go to Terminal using the Previous and Next thumb keys.
3. Press Enter or a cursor routing key.

To exit Terminal mode and access the Braille Terminal menu, press the Home button once.

Determining Mantis Q40 Compatibility

The Mantis is compatible with the following:

Screen readers: JAWS 18+ (version 18 and newer), NVDA, Narrator, and VoiceOver

Operating systems: any Windows 8+, Mac OS 10.15+ (Catalina), or iOS device 13.4+

Waking Your iOS Device Using the Mantis

With your iOS device locked, pressing the Home command of Ctrl + Alt + H on the Mantis wakes it up to enter your passcode. This allows you to keep your iOS device in a pocket or bag while you use the Mantis as its controller and output.

Using Mantis as an External Keyboard

When connected as a braille terminal, the Mantis also acts as an external keyboard for your host device. This works even if there is no screen reader running on your host device.

When connected to a Mac, the bottom-left keys become Ctrl, Function, Option, and Command as when using a standard Mac keyboard.

Connecting by USB

To connect via USB:

1. Connect the Mantis to a Windows or Mac computer with the USB-C cable.
2. From the Terminal menu, select Settings USB.
3. Press Enter or a cursor routing key to toggle between Windows or Mac, depending on the type of computer that is connected.
4. Select USB connection (first item in the Terminal menu).

5. Press Enter.
6. Wait for the connection to be established.

If the connection is successful, the content of your host device is shown on the braille display.

The Mantis is now also available as an external keyboard to type on the host device.

Connecting by Bluetooth

To pair a new device in Bluetooth:

1. Click Activate Bluetooth Pairing.

   If Bluetooth is Off, it is automatically activated.
2. Select iOS, Windows or Mac.
3. Press Enter.
4. Read instructions on the display; press Enter to dismiss the message.

   The focus returns to the menu item.
5. From the host device, initiate the Bluetooth pairing.
6. Once the connection is complete, press the Previous thumb key on the Mantis until you reach Bluetooth Connection.
7. Press Enter or a cursor routing key.

   The connected device appears in the list.
8. Press Enter or a cursor routing key.
9. Wait for the connection to be established.

If the connection is successful, the content of your host device is shown on the braille display.

The Mantis is now also available as an external keyboard to type on the host device.

Navigating Between Connected Devices

When you have more than one device connected with the Mantis, you can switch devices at any time.

To switch to another connected device:

1. Press the Home button to return to the Terminal menu.
2. Select USB or Bluetooth connection.
3. Select the connected device using the Previous and Next thumb keys.
4. Press Enter or a cursor routing key.

   Note: When a Bluetooth device is connected, an 8-dot symbol is displayed after the device name. If the 8-dot symbol is not visible, click on the device to establish the connection.

If you have problems with a Bluetooth connection, you can click on Reconnect devices. This turns Bluetooth Off and back On and reconnects your devices. Use this option only if you are not getting any braille when connected to a device.

Using the File Manager

The file manager allows you to browse, delete, copy, and perform all the file operations you would expect from a PC file manager.

To open the File Manager, press the Next thumb key until you reach File Manager.

Alternatively, you can open the File Manager by pressing F in the Main menu, then press Enter or a cursor routing key.

Browsing Files

You can browse through your files and folders using the Previous and Next thumb keys. Folder names have an 8-dot symbol in front of the folder name. Press Enter on a folder to open it.

Press Escape to return to the parent folder. Alternatively, you can scroll to the Back item, then press Enter or a cursor routing key.

Selecting a Drive in the File Manager

Before using the file manager, you first need to choose which drive you wish to access: the internal memory, an SD card, or a USB flash drive.

To select a drive, press Ctrl + D to display a list of available drives. Scroll through the list using the Previous or Next thumb keys, then press Enter or a cursor routing key to confirm your choice.

You are now at the root of your selected drive.

Press Ctrl + D at any time to return to the Drive Selection screen.

Accessing File and Folder Information

To get additional information on a file or folder, select it using the Previous or Next thumb keys, then press Ctrl + I.

You can now scroll through a list of information on the file or folder using the Previous and Next thumb keys. Use the Left and Right thumb keys to pan the text left and right.

Displaying the Current File Path

The Where Am I function allows you to display the path of your current location on the braille display of the Mantis.

To display your current file path, press Ctrl + W.

Searching for Files and Folders

You can promptly access a certain file or folder by performing a search in the file manager.

To start searching for a file or folder in the file manager:

1. Press Ctrl + F.
2. Type in the file or folder name.
3. Press Enter.

   A list of files and folders related to your search results is generated on the braille display.
4. Press Escape to close the search result.

Sorting Files or Folders

By default, file and folder names are sorted alphabetically. However, you can sort the files and folders using different parameters.

To change the sorting parameters of your files and folders:

1. Press Ctrl + Shift + V.

   Mantis displays a list of sorting options available: Name, Date, Size, and Type.
2. Scroll through the list using the Previous or Next thumb key.
3. Press Enter or a cursor routing key to activate the sorting option of your choice.

Selecting the same sorting parameter already selected, changes the information from ascending to descending and back again when selected once more.

Modifying Files and Folders

The File manager on the Mantis lets you work with files similarly to a computer or tablet.

Creating a New Folder

The File manager gives you the possibility to create new folders.

The simplest way to do this is by pressing Ctrl + N and entering the name of the new folder in the blank field. Then, press Enter to create it.

Renaming Files or Folders

To rename a file or folder:

1. Select the file or folder you wish to rename using the Previous and Next thumb keys.
2. Press F2.
3. Enter the new file or folder name.
4. Press Enter to rename the file or folder.

Note: The file name must be unique in your current directory, and only one file or folder can be renamed at a time.

Selecting Files or Folders for Applying Additional Actions

Before you can perform an action on a file or folder, such as cut, copy, or paste, you must first select (or Mark) the desired file or folder.

To Mark a file or folder, select the file using the Previous or Next thumb keys, then press Ctrl + Enter.

To Unmark a file or folder, select it and press Ctrl + Enter again.

To Mark All files and folders in the current directory, press Ctrl + A.

Copying, Cutting, and Pasting Files or Folders

Copying and Cutting Files and Folders

To copy a single file or folder, select the file using the Previous or Next thumb keys, then press Ctrl + C.

To cut a single file or folder, select the file using the Previous or Next thumb keys, then press Ctrl + X.

To copy or cut multiple files or folders:

1. Select the file or folder to copy using the Previous or Next thumb keys.
2. Press Ctrl + Enter to Mark the file or folder.
3. Repeat this step to Mark all files or folders to be copied.
4. Press Ctrl + C to copy OR Ctrl + X to cut.

The files or folders are now copied/cut to the clipboard and ready to be pasted.

Pasting Files and Folders

To paste the copied or cut files or folders, navigate to the location where you want to paste to, then press Ctrl + V.

Deleting Files or Folders

To delete a single file or folder, select the file using the Previous or Next thumb keys, then press Delete.

To delete multiple files or folders:

1. Select the file or folder you wish to delete using the Previous or Next thumb keys.
2. Once selected, press Ctrl + Enter to Mark the file or folder.

3. Repeat this step to Mark all files or folders you wish to delete.

4. When ready to delete the Marked files or folders, press Delete.

Note: Mantis asks if you are sure you want to delete the files and/or folders only when Confirm Deletion has been set to On in the Settings menu. Select Yes using the Previous or Next keys, and press Enter or a cursor routing key to confirm the deletion. For more information on the Confirm Deletion setting, go to the Setting User Preferences section.

File Manager Commands Table

The File Manager commands are listed in Table 5.

Table 5: File Manager Commands

Action	Shortcut or Key Combination
Create new folder	Ctrl + N
File info	Ctrl + I
Mark/Unmark	Ctrl + Enter
Mark all/Unmark all	Ctrl + A
Rename file	F2
Delete file	Delete
Copy file	Ctrl + C
Cut file	Ctrl + X
Paste file	Ctrl + V
Search file	Ctrl + F
Sort files	Ctrl + Shift + V
Where am I	Ctrl + W
Select drive	Ctrl + D
Go to parent folder	Escape

Using the Calculator Application

The Mantis features a calculator app that enables you to perform the most common operations.

Note: The braille output for the Calculator currently supports Computer Braille only.

To open the Calculator:

1. Go to the Main menu.
2. Press C OR press the Previous or Next thumb keys until you reach the Calculator menu item.
3. Press Enter or a cursor routing key.

Operating the Calculator

To use the Calculator, write your complete equation, then press Enter to get the result.

For example, type the equation 20-(6+8) (with no spaces). Press Enter and Mantis displays 6 as the answer.

To clear the previous equation, press Delete.

To add operators such as + or -, open the Context menu using Ctrl + M. Refer to the Calculator Commands Table section, for a full list of calculator commands and operators.

Calculator Commands Table

The Calculator commands are listed in Table 6.

Table 6: Calculator Commands

Action	Key or Key Combination
Plus	+
Minus	-
Multiply	*
Divide	/
Equals	= OR Enter
Clear	Delete
Decimal point	.
Percent	%
Square root	Ctrl + Shift + S
Pi	Ctrl + Y

Using the Date and Time Application

The Mantis features an application that gives you the current date and time.

To open Date and Time:

1. Go to the Main menu.
2. Press the Previous or Next thumb keys until you reach the Date and Time menu item.
3. Press Enter or a cursor routing key.

Displaying the Time and Date

When you open the Date and Time application, Mantis displays the current time.

Pan right once using the Right thumb key to display the date.

Pan left using the Left thumb key to return to the time.

To quickly review the date and time, press Ctrl + Alt + T for the time and Ctrl + Alt + D for date from anywhere on the Mantis.

Setting the Time and Date

To change the time and date, press Ctrl + M from the Date and Time application.

A submenu opens with the following options:

Change time: Type the current hour inside the square brackets, press Enter; repeat for the minutes.

Change date: Type the current year inside the square brackets and press Enter; repeat for the month and day.

Daylight saving time: Press Enter to turn daylight saving time On or Off.

Time format: Press Enter to change between 24h and 12h time format.

Date format: Select the preferred date format (listed below) and press Enter.

- Day, Month, Year
- Month, Day
- Month, Day, Year
- Year, Month, Day
- Day, Month

Setting User Preferences

To open the Settings menu, press the Next thumb key until you reach Settings OR press 's' in the Main menu, then press Enter or a cursor routing key.

Setting Options Table

The Setting options are listed in Table 7.

Table 7: Settings Operations

Setting	Option/Result
Airplane mode	On or Off; when On, all wireless functionalities are disabled
Format Markers	On or Off; when Off, format markers are hidden
Cursor visible	On or Off
Message display time	1–30 seconds: time of message displayed
Sleep time	Number in minutes; 0 to turn Off
Word wrap	On or Off
Condense blank lines	On or Off; when On, blank lines are not visible
Confirm deletion	On or Off; when On, Mantis asks for confirmation of file deletion
Vibration	On or Off; when On, Mantis vibrates
Beep	On or Off; when On, Mantis beeps
Thumb keys configuration	Map the Previous Item, Next Item, Pan Left, and Pan Right commands to the thumb key of your choice.
Wireless notifications	Enable or disable wireless and Bluetooth connection feedback

Adding, Configuring, and Deleting Braille Profiles

The Braille Profile menu lists all the available Braille Profiles on your Mantis. The active Braille Profile is underlined with dots 7 and 8 on the device.

Scroll through the available Braille Profiles using the Next and Previous thumb keys, then press Enter or a cursor routing key to select it.

Adding a Braille Profile

To add a Braille Profile, select Add Braille Profile, then press Enter or a cursor routing key.

You are prompted to enter the following options:

- Profile name: Type the name for the profile in the brackets, then press Enter.
- Braille grade: Choose between Uncontracted, Contracted, and Computer braille, then press Enter.
- Computer braille table: Select your computer braille table, then press Enter.
- Uncontracted braille table: Select your uncontracted braille table, then press Enter.
- Contracted braille table: Select your contracted braille table, then press Enter.
- Save configuration: Press Enter to save your configuration.

The new Braille Profile is now available in the Braille Profile Settings menu.

Configuring or Deleting a Braille Profile

To configure or delete a Braille Profile

1. Scroll through the available Braille Profiles using the Next and Previous thumb keys.
2. Press Ctrl + M to open the Context menu.
3. Select Configure Braille Profile **OR** Delete Braille Profile.
4. Press Enter.

Using a Wi-Fi Network or Bluetooth

Mantis Q40 features 2.4 GHz Wi-Fi capabilities.

Connecting to a Wi-Fi Network

Select New Connection from the Wi-Fi menu, then press Enter or a cursor routing key to access it.

There are three connection choices:

Scan for SSID: Select this option to discover the available networks in your vicinity. When Mantis is done scanning, it displays a list of all the networks it found.

Press Enter or a cursor routing key to select this network. Then enter the password, and press Enter to complete the connection.

WPS Connection: Select this option to establish a Wi-Fi Connection using WPS. The Mantis displays "loading..." for approximately 30 seconds. Press the WPS button on your network Router to turn on discovery of new devices. After a few seconds, you are automatically connected to the network.

Manually Connect: To enter the SSID of your network and the password manually, select this option. When done, press Enter to connect.

Wi-Fi Settings Table

The available Wi-Fi Settings are listed in Table 8.

Table 8: Wi-Fi Settings

Setting	Option/Result
Wi-Fi	Press Enter to turn Wi-Fi On or Off
Status	Provides information about your current Wi-Fi status
New connection	Press Enter to create a new Wi-Fi connection
Launch connection	Connect to a Wi-Fi network known by your device
Delete connection	Make your device forget a known Wi-Fi network
Network settings	Change advanced network settings, such as Mode, IP, Subnet mask, Gateway, and DNS
Import Wi-Fi	Import Wi-Fi network information from a file

Choosing Bluetooth Mode Options

The following Bluetooth mode options are available on the Mantis Q40.

Bluetooth mode: On or Off

Connect device: Connect the Mantis with a paired Bluetooth device

Disconnect device: Disconnect the active Bluetooth connection

Delete paired device: Makes your device forget a Bluetooth device

Accessing and Using Online Services

This Online Services menu contains online libraries included on your Mantis. The Online Services are subscription-based and require you to enter your account credentials.

Note: Make sure you have an established internet connection with the Mantis before using Online Services.

Books from online libraries are downloaded in the Online-books folder of the Mantis. All books are included in the Main Book list of the Library application.

Activating Bookshare and Downloading Books

Bookshare is an online library of copyrighted content for people with qualifying print disabilities. More information about Bookshare is available from http://www.bookshare.org.

You are able to search for books and download them to the Mantis wirelessly. Newspapers and magazines are currently not available in the online search.

To activate the Bookshare service and download a book:

1. Enter your Bookshare account email address and password.
2. Select your preferred book format (Daisy or BRF).
3. Search books by title, author, full text search, and/or browse by categories. You can also search for the most recent or popular books.

4. Press Enter or a cursor routing key on a book to get more information.

5. Use Previous and Next thumb keys to navigate between the title, author, and book description.

6. Press Enter on the Download item to download the book to the Mantis.

Configuring, Managing, and Syncing a NFB Newsline Account

If you have an NFB Newsline account, the Mantis allows you to connect to your account and download NFB material for reading in the Library.

Configure account: Enter your NFB Newsline credentials, select the issue update frequency, and determine whether your Mantis should keep or delete outdated issues.

Manage publications: Select which material you wish to subscribe to. Subscribed material is underlined.

Sync content now: Downloads the latest issues of your subscribed material.

Updating the Mantis Q40

When connected to the Internet, Mantis regularly looks to see if a newer version is available for download. If a new version is available, Mantis asks if you wish to download the update. Select Ok by pressing the Previous or Next thumb key to download the update now or Cancel to update it later.

You can continue to use the Mantis while the update is downloading. After a few minutes, Mantis asks you to install the downloaded update. Select Ok to install the update. The Mantis reboots and a progress indicator line is shown on the braille display.

At the end of the update process, all 8 dots of the 40 braille cells raise one column at a time and then the device shuts down.

You can also manually verify if an update is available.

To verify an update manually:

1. Go to the Main menu.
2. Select Settings.
3. Press Enter.
4. Go to the About item.
5. Press Enter.

Alternatively, you can use the shortcut Ctrl + I to open the About dialog. Then, press 'C' a few times until you see Check for update. Press Enter.

Customer Support

USA Only

For customer support, please contact APH Customer Service at 800-223-1839 or cs@aph.org.

Europe and Other countries

For customer support, please contact the HumanWare office nearest you or view our web site at: www.humanware.com

Europe: (0044) 1933 415800 or send an email to eu.support@humanware.com

Australia / Asia: (02) 9686 2600 or send an email to au.sales@humanware.com

End User License Agreement

By using this Product (Mantis Q40), you agree to the following minimum terms:

1. <u>License Grant</u>. HumanWare grants to End User a non-exclusive, non-transferable right and licence to use the Software on this product.

2. <u>Ownership of Software</u>. End User acknowledges that HumanWare retains all right, title and interest in and to the original, and any copies, of software which is incorporated into this product. End User agrees not to: modify, port, translate, decompile, disassemble, reverse engineer, or make public in any way the software of this Product.

Warranty

Manufacturer Warranty

This device is a high-quality product, built and packaged with care. All units and components are guaranteed against any operational defects as follows:

US and Canada: One (1) year

Continental Europe and UK: Two (2) years

Australia and New Zealand: One (1) year

Other countries: One (1) year

Warranty covers all parts (except battery) and labor. If any defect should occur, please contact your local distributor or the manufacturer technical assistance line.

Note: Warranty terms may periodically change, please consult our website for the latest information.

Conditions and Limitations:

No replacement or repair covered by the warranty will be carried out unless the unit is accompanied by a copy of the original bill of purchase. Please retain your original. If the unit must be returned, please use the original packaging. This warranty applies to all cases where the damage is not a result of improper use, mistreatment, negligence or acts of God.