



# *Mantis* *Q40*



# User Guide

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# Getting Started

Welcome to your new Mantis™ Q40 keyboard. This keyboard is both a standard 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 your nearest APH supplier if you are located in the USA. If you are located outside of the USA, please refer to the [Mantis Q40 product page](#) on the HumanWare website or call your nearest HumanWare supplier.

## In the Box

The box contains the following items:

- Mantis Q40 keyboard
- USB-A to USB-C cable
- USB-C to AC power adapter
- Thermoplastic polyurethane (TPU) protective case
- Print *Getting Started* Guide

## Orientation of Mantis Q40

The Mantis has a 40-cell braille display, a standard 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. While in the menus, pressing any cursor-routing button activates the selected item.

The rear section includes a standard computer 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 – this lights up to visually indicate the status of the device
- USB-C port – use the cable that came with your Mantis to connect it to a power outlet or a PC

## Rear Edge

The left side of the rear edge contains an SD-card port. This port allows you to insert SD cards with a capacity of up to 64 GB for external storage.

## Bottom Side

In each corner underneath your Mantis is one of 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-head screws.

## Keyboard Layout

This section provides only a description of the system keys, as the location of the letter keys varies depending on your keyboard configuration and language. Starting with the top row (furthest away from you), from left to right, the system keys on the Mantis keyboard are laid out as follows:

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

**Row 2:** Backspace (at the right end of the row)

**Row 3:** Tab (at the left end of the row)

**Row 4:** Caps Lock (left end of the row), Enter (right end of the row)

**Row 5:** Left Shift, right Shift

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

## Charging Mantis Q40

Prior to using your Mantis, make sure you charge it completely.

Connect the USB-C end of the 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 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.

Press and hold the Power button for approximately 2 seconds to power on the Mantis. There will be a quick vibration and “starting” will appear on the braille display along with a tactile loading animation that circles during start-up.

A few moments after you boot your device for the first time, you will be welcomed with a language-selection menu. Press Enter to open the list of languages, select one and press Enter to close the list. Close the dialog box once the changes are completed.

After a few seconds, the start-up will be complete and “editor” will appear 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 will appear 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.

To open the About Menu:

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.

## Navigating and Using Menus

### Navigating the Main Menu

The Main menu options are:

- Editor
- Terminal
- Library
- Braille Editor
- File Manager
- Calculator
- Date and Time
- Settings
- Online services
- User guide
- Power off

Press the Previous or Next thumb key 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 pressing the Windows key, the Home button, or Ctrl + Fn + H on the keyboard.

## **Panning Text on the Braille Display**

Oftentimes, 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 third 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 context menu on 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 will open 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 Esc 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, type the letter ‘S’ on your keyboard.

# Using the Braille-Entry Method to Type

Although the Mantis comes with a standard 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 dots, as shown in Table 1.

**Table 1: Keyboard to Braille dots Dot Equivalents**

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

Note that the letters may differ, depending on your current keyboard layout.

Press F12 to toggle between standard keyboard entry and braille entry. A notification 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
Esc or Back	Esc 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 or right	Left or Right thumb key
Go to top	Ctrl + Fn + Left arrow
Go to bottom	Ctrl + Fn + Right arrow
Toggle braille grade	Ctrl + Fn + G
Switch language profile	Ctrl + Fn + L
Battery level	Ctrl + Fn + P
Context menu	Ctrl + M
Main menu	Windows key, Home button, or Ctrl + Fn + H
System information	Ctrl + I
Toggle braille and standard keyboard	F12
Time	Ctrl + Fn + T
Date	Ctrl + Fn + D
Eject media	Ctrl + Fn + E
Create a quick note	Ctrl + Fn + N
Create a quick braille note	Ctrl + Fn + B
Search for Wi-Fi	Fn + F10
Sticky Keys enabled/disabled	Shift key five (5) times

# 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, .brl, .pdf, .ban, and .bra files with the Editor. The files you create or modify are saved as .txt files.

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, Recently Saved, 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 select Create File.
- Alternatively, press Ctrl + Fn + N from anywhere on the device to quickly create a new file.

The cursor will be visible between two braille brackets, and can be set as blinking in the User Settings. 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. Alternatively, you can press Ctrl + O, then select the file you wish to open using the Previous and Next thumb keys.

Note that the Mantis may display an error message when a PDF file is opened. This generally occurs when the file contains mostly images rather than text.



## Recently Saved

You can open a list of the last ten documents you previously saved for quick access.

To open a list of the ten most recent files, select the editor from the main menu. Use your Previous or Next thumb keys until you reach recently saved and press Enter.

You can scroll through the ten most recent files using the Previous and Next thumb keys. Press Enter or a cursor-routing key to open a file from the list.

## Close a File

To close a file that is opened in the Editor, press the Esc 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 will be asked if you want to save the changes before closing.

## Save a Text File

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

**Save:** Press Ctrl + S to save your file to an already existing file name.

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

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

Note that if you open a file under any extension other than .txt, the device will prompt a message asking if you wish to keep the original file in addition to the .txt file that will be saved.

# Using Auto-Scroll in the Editor

The Editor app includes an Auto-Scroll feature that automatically pans through the written text on the braille display.

To start Auto-Scroll, press Alt + G.

To stop Auto-Scroll, 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 + -.

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

## Finding Text in a File

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

Press F3 to find additional instances of the search term.

Press Shift + F3 to reach the previous instances of the search word.

## Finding and Replacing Text

To find and replace text:

1. Press Ctrl + H.
2. Enter the text to find in the first edit box, called Find.
3. Enter the replacement text in the second edit box, called Replace.
4. Select Replace All to replace all text found with the text in the Replace box.
5. Select Next to find and replace the next instance of the word.
6. Select Previous to find and replace the previous instance of the word.

# Cutting, Copying, and Pasting Text

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

To Select the text, position your cursor on the first character using a cursor-routing key, 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 at 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 key and press Ctrl + V.

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

The Ctrl + C shortcut can also be used to copy the last result from the Calculator application and the current paragraph in the Library application.

## Using 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.

## Adding, Navigating, and Removing Bookmarks

Bookmarks are a useful way to keep your location within a file 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 file:

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, the Mantis selects the first available number and assigns it to the bookmark.
5. Press Enter.

Alternatively, you can insert a Bookmark by pressing Ctrl + B. Note that a maximum of 98 bookmarks can be inserted in a document.

### 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.

## 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.

**Note:** If you want to remove all bookmarks in the document type 99 when prompted for a Bookmark number.

## Toggle Text Indicators

Text indicators are a useful tool to help you locate your position when working in a document with the Editor. Upon activating the text indicators, brackets will appear on the braille display to indicate the beginning and the ending of the text.

To toggle text indicators:

1. Press Ctrl + M to activate the Context menu.
2. Use the Previous or Next thumb keys until you reach File Menu and press Enter.
3. Use the Previous or Next thumb keys until you read editor settings and press Enter.
4. Use the Previous or Next thumb keys until you reach show text editor indicators.
5. Press Enter to deactivate Text indicators; press Enter again to activate them.

Note that toggling Text Indicators will only apply to the editor; all other edit fields will continue to include text indicators.

## 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	Esc
Create file	Ctrl + Fn + 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	Enter
Move to next edit box without editing	Next thumb key
Move to previous edit box without editing	Previous thumb key
Move insertion point to start of text field document	Ctrl + Fn + Left Arrow
Move insertion point to end of text field document	Ctrl + Fn + Right Arrow
Start Auto-Scroll	Alt + G

Action	Shortcut or Key Combination
Increase Auto-Scroll speed	Ctrl + =
Decrease Auto-Scroll speed	Ctrl + -
Toggle Reading mode	Ctrl + R
Bookmark menu	Alt + M
Jump to Bookmark	Ctrl + J
Insert Bookmark	Ctrl + B

## Using the Braille Editor Application

The Braille Editor is an application similar to the Editor, but explicitly designed to edit, open and create braille documents in .brf and .brl formats. The files are created, modified, and saved as .brf.

To open the Braille Editor, press the Next thumb key until you reach Braille Editor or press “B” in the Main menu, then press Enter or a cursor-routing key.

The Braille Editor opens in the Braille Editor menu, which includes Create File, Open File, Recently Saved, Braille Editor Settings, and Close.

Note that when editing a document in the Braille Editor application, no standard keyboard input is possible. Entry will be limited to the Perkins-style keyboard configuration, using the keys A,S,D,F and J,K,L,; (see table 1 for more details).

### Create a File

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

- If you are in the Braille Editor menu, select Create File and press Enter or a cursor-routing key.
- From the Context menu, select and activate the File menu, then select Create File.

- Alternatively, press Ctrl + FN + B from anywhere on the device to quickly create a new .brf file.

The cursor will be visible between two braille brackets, and can be set as blinking in the User settings. You can begin writing in your new file.

## Open a File

If you are in the Braille Editor menu, select Open File and press Enter or a cursor-routing key. Alternatively, you can press Ctrl + O, then select the file you wish to open using the Previous and Next thumb keys.

## Recently Saved

You can open a list of the last ten documents you previously saved for quick access.

To open a list of the ten most recent files, select the editor from the main menu. Use your Previous or Next thumb keys until you reach recently saved and press Enter.

You can scroll through the ten most recent files using the Previous and Next thumb keys. Press Enter or a cursor-routing key to open a file from the list.

## Close a File

To close a file that is opened in the Braille Editor, press the Esc 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 will be asked if you want to save the changes before closing.

## Save a Braille File

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

**Save:** Press Ctrl + S to save your file to an already existing file name.

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



If your file has never been saved, the Braille Editor will ask you to enter a new file name regardless of the save method you choose.

## **Export a Braille File to Text**

The .brf files opened in the Braille Editor application can be exported as text files. This can be useful if you wish to open them in the Editor application and work on them in another format.

To export a braille file to text:

1. Press Ctrl + M to open the Context menu.
2. Use the Previous and Next thumb keys to select the option Export as text and press Enter.
3. The Mantis will display a list of braille tables for exportation. Use the Previous and Next thumb keys to select the braille table of your choice and press Enter.
4. You will be prompted to enter a name for the exported file. Type the desired name and press Enter.
5. You will be prompted with the list of File Manager folders in which you can save your newly created file. Select the folder of your choice using the Previous and Next thumb keys and press Enter.

## **Using Auto-Scroll in the Braille Editor**

The Braille Editor app includes an Auto-Scroll feature that automatically pans through the written text on the braille display.

To start Auto-Scroll, press Alt + G.

To stop Auto-Scroll, 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 + -.

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

## Finding Text in a File

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

Press F3 to find additional instances of the search word.

Press Shift + F3 to reach previous instances of the search word.

## Finding and Replacing Text

To find and replace text:

1. Press Ctrl + H.
2. Enter the text to find in the first edit box, called Find.
3. Enter the replacement text in the second edit box, called Replace.
4. Select Replace All to replace all text found with the text in the Replace box.
5. Select Next to find and replace the next instance of the word.
6. Select Previous to find and replace the previous instance of the word.

## Cutting, Copying, and Pasting Text

The Braille 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 key, 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 at 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 key and press Ctrl + V.

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

The Ctrl + C shortcut can also be used to copy the last result from the Calculator application and the current paragraph in the Library application.

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

## Adding, Navigating, and Removing Bookmarks

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

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

# Inserting a Bookmark

To add a bookmark in a file:

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, the Mantis selects the first available number and assigns it to the bookmark.

5. Press Enter.

Alternatively, you can insert a Bookmark by pressing Ctrl + B. Note that a maximum of 98 bookmarks can be inserted in a document.

# 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.

# 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.

**Note:** If you want to remove all bookmarks in the document type 99 when prompted for a Bookmark number.

# Toggle Text Indicators

Text indicators are a useful tool to help you locate your position when working in a document with the Braille Editor. Upon activating the text indicators, brackets will appear on the braille display to indicate the beginning and the ending of the text.

To toggle text indicators:

1. Press Ctrl + M to activate the Context menu.
2. Use the Previous or Next thumb keys until you reach file menu and press Enter.
3. Use the Previous or Next thumb keys until you reach editor settings and press Enter.
4. Use the Previous or Next thumb keys until you reach show text editor indicator.
5. Press Enter to deactivate Text indicators; press Enter again to activate them.

Note that toggling Text Indicators will only apply to the Braille Editor, all other edit fields will continue to include text indicators.

## Braille Editor Commands Table

The Braille Editor commands are listed in Table 4.

**Table 4: Braille Editor Commands**

Action	Shortcut or Key Combination
Activate Edit mode	Enter or a cursor-routing key
Leave Edit mode	Esc
Create braille file	Ctrl + Fn + B
Open braille file	Ctrl + O
Save	Ctrl + S
Save as	Ctrl + Shift + S

Action	Shortcut or Key Combination
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	Enter
Move to next edit box without editing	Next thumb key
Move to previous edit box without editing	Previous thumb key
Move insertion point to start of text field document	Ctrl + Fn + Left Arrow
Move insertion point to end of text field document	Ctrl + Fn + Right Arrow
Start auto-scroll	Alt + G

Action	Shortcut or Key Combination
Increase auto-scroll speed	Ctrl + =
Decrease auto-scroll speed	Ctrl + -
Toggle Reading mode	Ctrl + R
Bookmark menu	Alt + M
Jump to bookmark	Ctrl + J
Insert Bookmark	Ctrl + B

## Using the Library Application

The Library is the application you use to read books on the Mantis. It supports the following file formats: .brf, .pef, .txt, .html, .pdf, .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 the Library, your books are stored in the 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 the Book List, then press Enter or a cursor-routing key.

Note that the Mantis can display an error message if a PDF file is opened. This generally occurs when the file contains mostly images rather than text.

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

## Searching for Books

To search for a specific book on the device:

1. Select Search from the Library menu or press Ctrl + F.
2. Type in the text/name of book.
3. Press Enter. You will be 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 when external storage is connected.
- You cannot 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 + Fn + 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 the file format of the book and may differ from book to book. Examples of navigation levels are page, line, and sentence.

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.

Alternatively, you can select the Navigation level of your choice using a quick shortcut:

1. Press Ctrl + Fn + Up arrow to access the next Navigation level OR Press Ctrl + Fn + Down arrow to access the previous Navigation level.
2. Press the Previous or Next thumb key to navigate within the book in the Navigation level selected.

## 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.
  - a. Note that the options available will vary based on the formatting available in the book.
4. Press Enter or a cursor-routing key.
5. Enter a value.
6. Press Enter or a cursor-routing key.

## Using Auto-Scroll in the Library App

The Mantis Q40's auto-scroll function 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 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 + -.

To speed up Auto-scroll, press Ctrl + =.

## 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 to 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 selects the first available number and assigns 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.

**Note:** 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 will be displayed.
4. Use the thumb keys to navigate.
5. Press the Esc key 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.

**Note:** If you want to remove all bookmarks type 99999 when prompted to enter a Bookmark number.

## Library and Reading Commands Table

The Library and reading commands are listed in Table 5.

## Table 5: Library/Reading Commands

Action	Shortcut or Key Combination
Book list	Ctrl + Shift + B
Manage books	Ctrl + Fn + M
Go to Option menu	Ctrl + G
Bookmark menu	Alt + M
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
Change to previous Navigation level	Ctrl + Fn + Down Arrow
Change to next Navigation level	Ctrl + Fn + Up Arrow
Start Auto-scroll	Alt + G
Increase Auto-scroll speed	Ctrl + =
Decrease Auto-scroll speed	Ctrl + -
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

Action	Shortcut or Key Combination
Previous word	Ctrl + Left Arrow
Next word	Ctrl + Right Arrow
Previous paragraph	Ctrl + Up Arrow
Next paragraph	Ctrl + Down Arrow
Start/Stop selection	F8
Select all (current paragraph)	Ctrl + A
Copy (current paragraph)	Ctrl + C
Delete book	Delete

## 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® wireless technology, or by connecting the Mantis to the host device with the USB-C cable included in your kit. Up to five Bluetooth devices and one USB can be connected at one time.

Note that if there is a device connected to the Mantis via USB, you can have the device automatically ask if you wish to start the connection upon starting the Mantis in Terminal mode.

## Connecting and Exiting Terminal Mode

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

To activate Terminal mode:

1. Press the Windows key, the Home button, or Ctrl + FN + H to enter the Main menu.

2. Go to Terminal by pressing ‘t’ or by using the Previous and Next thumb keys.
3. Press Enter or a cursor-routing key.

To exit Terminal mode and access the list of connected devices, 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, SuperNova, ChromVox(USB only), Android(USB only) and VoiceOver

**Operating systems:** Windows 8+, Android, macOS® 10.15.5 (Catalina), or iOS device 13.6+

## Waking Your iOS Device Using the Mantis

With your iOS device locked and your Mantis connected to it in Terminal mode, pressing any cursor-routing keys on the Mantis wakes it up and prompt you 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 they are when using a standard Mac keyboard.

## Connecting by USB

Note that steps in this section assume that the “always connect” option is not enabled. If “always connect” is enabled, you do not need to follow these steps.



To connect via USB:

1. Connect the Mantis to a Windows or Mac computer with the USB-C cable.
2. Select Connected devices (first item in the Terminal menu).
3. Press Enter.
4. Select USB connection.
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 for typing on the host device.

## Connecting by Bluetooth

To pair a new device in Bluetooth:

1. From the host device, activate Bluetooth.
2. On the Mantis, go to the Main menu.
3. Select Terminal mode and press Enter or a cursor-routing key.
4. In the Terminal menu, select Add Bluetooth Device and Press Enter.

If Bluetooth is off, it is automatically activated. Note that once the Bluetooth mode is activated, your display will be in a 5-minute discoverable mode.

Note that at any time, you can press and hold the Enter key for 5 seconds to set the device in a 5-minute discoverable mode.

5. The braille display will prompt instructions on how to connect to the host device. From the host device, initiate Bluetooth-pairing with the Mantis.
6. On the braille display, a message will prompt: “xx is connected”, where xx is the name of the host device. The focus will be directed to the list of connected devices.

7. Use the Use Previous and Next thumb keys to move through the list of connected devices until you reach the host device you are trying to connect with. Press Enter or a cursor-routing key to activate it.

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

## Terminal Clipboard

When a selection of text is copied or cut, it is stored in a global clipboard and can be pasted on other locations on the device. This feature can be useful if, for example, you wish to copy a passage from a book in the Library and paste it into a document in the Editor.

The global clipboard can also be used when using external devices paired with the Mantis via USB or Bluetooth. Currently, JAWS and iOS are supporting the terminal clipboard. All other screen readers might have difficulty in handling the clipboard. When using the Terminal clipboard, please note there is a 360 character limitation.

To copy an item to a connected device:

1. Press Ctrl + C to copy the element of your choice.
2. On the connected device, access the location where you wish to paste the item.
3. Enter the bypass command Fn + F3. The message “Enter local command” will be displayed. The bypass command allows you to use some internal functions on the Mantis while being connected to an external device, such as the Battery Status, and showing the Date and Time.
4. Press Ctrl + V to paste the item on the connected 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, press the Home button + Next thumb key or Home button + Previous Thumb key to navigate through the list of devices.

Alternatively, you navigate to another connected device by doing the following:

1. Press the Home button to return to the list of connected devices.
2. Select the connected device using the Previous and Next thumb keys.
3. 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 if you are not getting any braille when connected to a device.

## USB connections in Terminal Mode

When using the Mantis Q40 in terminal mode, it is possible to either be prompted to connect with a USB connection or automatically start the connection upon inserting a USB cable from a host device.

To activate the Ask to open USB connection feature in terminal mode:

1. Go to the Main menu.
2. Select Settings and press Enter.
3. Select User Settings and press Enter.
4. Use the Previous and Next thumb keys until you reach the item Ask to open USB connection, then press Enter.
5. Use the Previous and Next thumb keys until you reach the item you require, then Press Enter.

# 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 pressing 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 Esc to return to the parent folder. Alternatively, you can scroll to the Back in the menu and 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, Folder, or Drive 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.

The Ctrl + I shortcut can also be used to expose the amount of internal memory of a drive.

## 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. Your Mantis will generate a list of files and folders related to your results on the braille display.
4. Press Esc 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; it changes 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 lets you 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 desired location, 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:** The 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 6.

**Table 6: File Manager Commands**

Action	Shortcut or Key Combination
Create new folder	Ctrl + N
File/drive 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	Esc
Eject media	Ctrl + Fn + E

## 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 will display 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 Table 7 for a full list of Calculator commands and operators.

## Calculator Commands Table

The Calculator commands are listed in Table 7.

**Table 7: 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 + Fn + T for the time and Ctrl + Fn + 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.

- Language Default
- 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.

### User Setting Options Table

The Setting options are listed in Table 8.

**Table 8: 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
Cursor blink	On or off; when on, the cursor will blink at a rate of 0.5 seconds.
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

Setting	Option/Result
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
Start in terminal	On or off; when on, the device will automatically start in the Terminal menu upon restarting
Ask to open USB connection	<p>When connecting the device to a PC with a USB cable, there are three possible outcomes:</p> <ol style="list-style-type: none"> <li>1. If “never ask” is selected, nothing happens</li> <li>2. If “ask for connection” is selected, the user will be asked of they want to open the connection</li> </ol> <p>If “always connect” is selected, the device will automatically connect to the PC</p>
Key Repeat	On or off; when On, the delete, backspace, space and arrow keys will be held down, which causes a behavior similar to repeatedly pressing the held key at a short interval.

Setting	Option/Result
Sticky Keys	When On, keys can be pressed and released one-by-one, the key combination is only confirmed once the Space key is pressed.

## Adding, Configuring, and Deleting Language Profiles

The Language Profile menu lists all the available language profiles on your Mantis. The active language profile is underlined with dots 7 and 8 on the device.

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

### Adding a Language Profile

To add a language profile, select Add Language Profile, then press Enter or a cursor-routing key.

You will be 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. Note that the Mantis allows you to hide contracted braille and/or computer braille when toggling between the braille grades.

**Computer braille table:** Select your computer braille table, then press Enter. Select None to not have to cycle through computer braille when using the braille grade toggle.

**Uncontracted braille table:** Select your uncontracted braille table, then press Enter.

**Contracted braille table:** Select your contracted braille table, then press Enter. Select None to not have to cycle through contracted braille when using the braille grade toggle.

**Save configuration:** Press Enter to save your configuration.

The new language profile is now available in the Language Profile Settings menu.

## Configuring or Deleting a Language Profile

To configure or delete a language profile:

1. In the Settings menu, select the item Language Profile.
2. Scroll through the available language profiles using the Next and Previous thumb keys.
3. Press Ctrl + M to open the Context menu.
4. Select Configure Language Profile or Delete Language Profile and press Enter.
5. Alternatively, Configure profile and Delete profile can be selected in the language profile menu.

## 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. You can also use the global shortcut to access the Wi-Fi search (note that if airplane mode is enabled, it will disallow access).

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 will display 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 will be 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 9.

**Table 9: 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
Search for Wi-Fi	Fn + F10

# 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 to a paired Bluetooth device

**Disconnect device:** Disconnect the active Bluetooth connection

**Delete paired device:** Makes your device forget a Bluetooth device

## Sticky Keys

The Mantis Q40 features Sticky Keys that allow entering shortcuts with only one hand. Each key can be pressed and released one by one.

For example, to perform the Go to top command (standard command is Arrow): press Ctrl, then Up arrow.

To lock any modifier keys, press them twice. To unlock, press the same modifier key again.

Note: the operation of the thumb key and cursor routing keys remains the same as with the standard two-handed mode.

To activate/deactivate Sticky Keys:

Pressing the Shift key in sequence five times will activate or deactivate Sticky Keys. You will be prompted with a confirmation.

Alternatively, you can follow these steps:

1. Go to the Main menu.
2. Select Settings and press Enter.
3. Select User Settings and press Enter.
4. Use the Previous and Next thumb keys until you reach the Sticky Keys item.
5. Press Enter to activate Sticky Keys or press Enter again to deactivate.



# Change Language

To change the system language and keyboard layout of the Mantis Q40:

1. Go to the Main menu.
2. Select Settings.
3. Select Change Region.
4. Select the Language option; a list will appear on the display.
5. Select the language of your choice from the list.
6. Select the Keyboard Layout option; a list will appear on the display.
7. Select the keyboard layout of your choice from the list.
8. Select Close.
9. You will be prompted to select the option Replace Language Default Profile. If you click on OK, a new language profile will be created with a braille table allowing you to read braille menus in the selected language. Press Cancel if you wish to stay with your current language profile.
10. When prompted, reboot the Mantis to apply the changes.

It is also possible to add a second keyboard layout on the Mantis within the same Braille profile. This feature can be useful if you wish to switch from one keyboard layout to another while typing in the same language.

To add a keyboard layout:

1. Go to the Main menu.
2. Select Settings.
3. Select Change Region.
4. Select Secondary keyboard layout.
5. Select the layout of your choice from the list (ex: AZERTY, QWERTY, etc.)

Once you have selected a second keyboard layout, you can toggle from one layout to another by entering the Ctrl + Space shortcut.

# Accessing and Using Online Services

The 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 to the Mantis's Online-Books folder. All books are included in the Library app's Book List.

## Activating Bookshare and Downloading Books

The Bookshare® online library contains copyrighted content for people with qualifying print disabilities. More information about Bookshare is available from [bookshare.org](http://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 library.

To activate the Bookshare service and download a book:

1. Enter your Bookshare account email address and password.
2. Select BRF book format.
3. Search books by title, author, full text search, and category. 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 the Previous and Next thumb keys to navigate between the title, author, and book description.
6. Select the book of your choice and press Enter to download it 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:** Syncing downloads the latest issues of your subscribed material.

## Exam Mode

Exam Mode is used to block certain functions and applications from the Mantis for a certain amount of time. While Exam Mode is active, you will have access to the Terminal functions only. Note that in Exam Mode, the Bluetooth connection is deactivated and Terminal mode is accessible only via USB. All other applications and the use of an external memory (USB drive or SD card) are blocked while this mode is active.

When activating Exam Mode, you will be prompted to enter a time between 1 and 360 minutes (6 hours) and will be asked to enter a desired password to turn off Exam Mode. To unlock the device, you will need to either wait for the selected time to run out or enter the selected password.

Upon restarting the device, if the period selected is not completed yet, the device will automatically go back to Exam Mode.

## To activate Exam Mode:

1. Go to the Main menu.
2. Select Settings.
3. Press Enter.
4. Go to Activate Exam Mode.
5. Press Enter.
6. Enter the desired time (between 1 and 360 minutes).
7. Enter the desired password to activate Exam Mode.
8. Press Enter.

## Updating the Mantis Q40

### Updating the Mantis Q40 manually

When connected to the Internet with the Mantis, you can manually check if an update is available.

To check for an update manually:

1. Go to the Main menu.
2. Select Settings.
3. Press Enter.
4. Select Software Update.
5. Press Enter.
6. Select Check for Update.
7. Press Enter.

If prompted with a new update, select Download to download the update now or choose Remind Me Later to update it later. You can continue to use the Mantis while the update is downloading.

Note that the device must be plugged in and the battery must be more than 50% charged for the update to be performed.

After a few minutes, Mantis will ask you to install the downloaded update. Select OK to install it. The Mantis will reboot and a progress

indicator line will be shown on the braille display.

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

## Updating the Mantis Q40 via USB or SD Card

You can update the Mantis by downloading the update file on a computer and transferring it to a USB flash drive or an SD card. To update the Mantis via USB or SD card:

1. Insert a USB flash drive or SD card into your computer.
2. Transfer the update file to the USB flash drive or SD card. Note that the update file must be placed at the root of the USB drive/SD card.
3. Insert the USB flash drive or SD card containing the update file into your Mantis. Make sure your Mantis is powered on.
4. When the Mantis detects an update file on the USB drive or SD card, the braille display will notify you that an update is available for installation.
5. Press the Next thumb key until you reach OK, then press Enter to activate the update. The device will shut down and restart to process the update.

The latest update is always available on the Mantis Q40 Product Page: [aph.org/product/mantis-q40](http://aph.org/product/mantis-q40).

## Automatic Check for Update Feature

By default, an Automatic Check for Update feature is enabled. When connected to the internet, the Mantis regularly checks if a new update is available for download. If an update is available, the Mantis will prompt you to download it.

To disable/enable the Automatic Check for Update feature, follow these steps:

1. Go to the Main menu.
2. Select Settings.
3. Press Enter.

4. Go to Software Update.
5. Press Enter.
6. Select Automatic Check for Updates.
7. Press Enter to enable/disable the feature.

Note that when enabled, the Mantis will check every 23 hours if a new update is available.

## Customer Support

### USA Only

For customer support, please contact APH Customer Service at 800-223-1839 or [cs@aph.org](mailto:cs@aph.org).

### Europe and Other Countries

For customer support, please contact the HumanWare office nearest you or view the website at: [humanware.com](http://humanware.com).

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

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

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## End User License Agreement

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

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2. Ownership of Software. End User acknowledges that HumanWare retain 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's 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.

## Extended Warranty

Extended warranties are available through APH and HumanWare. Please contact the organization from where you purchased the Mantis Q40 to discuss warranty options.

### USA Only

**APH:** 1-800-223-1839 or send an email to [cs@aph.org](mailto:cs@aph.org).

**HumanWare:** 1-800-722-3395 or send an email to [us.info@humanware.com](mailto:us.info@humanware.com)



# Appendix A – Command Summary

## Shortcut/Key Combination Table

Action	Shortcut or Key Combination
Activate Selected item	Enter or cursor-routing key
Esc or Back	Esc 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 + Fn + G
Switch language profile	Ctrl + Fn + L
Battery level	Ctrl + Fn + P
Context menu	Ctrl + M
Main menu	Windows key, Home button, or Ctrl + Fn + H
System information	Ctrl + I
Toggle braille and standard keyboard	F12
Time	Ctrl + Fn + T
Date	Ctrl + Fn + D
Eject media	Ctrl + Fn + E
Create a quick note	Ctrl + Fn + N
Create a quick braille note	Ctrl + Fn + B
Search for Wi-Fi	Fn + F10
Sticky Keys enable/disable	Shift key five (5) times

## Editor Commands

Action	Shortcut or Key Combination
Activate edit mode	Enter or a cursor-routing key
Leave edit mode	Esc
Create file	Ctrl + Fn + 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	Enter
Move to next edit box without editing	Next thumb key
Move to previous edit box without editing	Previous thumb key
Move insertion point to start of text field document	Ctrl + Fn + Left Arrow
Move insertion point to end of text field document	Ctrl + Fn + Right Arrow

<b>Action</b>	<b>Shortcut or Key Combination</b>
Start Auto-scroll	Alt + G
Increase Auto-scroll speed	Ctrl + =
Decrease Auto-scroll speed	Ctrl + -
Toggle Reading mode	Ctrl + R
Bookmark menu	Alt + M
Jump to bookmark	Ctrl + J
Insert Bookmark	Ctrl + B

## Braille Editor Commands

<b>Action</b>	<b>Shortcut or Key Combination</b>
Activate Edit mode	Enter or a cursor-routing key
Leave Edit mode	Esc
Create file	Ctrl + Fn + B
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

<b>Action</b>	<b>Shortcut or Key Combination</b>
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	Enter
Move to next edit box without editing	Next thumb key
Move to previous edit box without editing	Previous thumb key
Move insertion point to start of text field document	Ctrl + Fn + Left Arrow
Move insertion point to end of text field document	Ctrl + Fn + Right Arrow
Start auto-scroll	Alt + G
Increase auto-scroll speed	Ctrl + =
Decrease auto-scroll speed	Ctrl + -
Toggle Reading mode	Ctrl + R
Bookmark menu	Alt + M

<b>Action</b>	<b>Shortcut or Key Combination</b>
Jump to bookmark	Ctrl + J
Insert Bookmark	Ctrl + B

## Library/Reading Commands

<b>Action</b>	<b>Shortcut or Key Combination</b>
Book list	Ctrl + Shift + B
Manage books	Ctrl + Fn + M
Go to Option menu	Ctrl + G
Bookmark menu	Alt + M
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
Change to previous Navigation level	Ctrl + Fn + Down Arrow
Change to next Navigation level	Ctrl + Fn + Up Arrow
Start Auto-scroll	Alt + G
Increase Auto-scroll speed	Ctrl + =
Decrease Auto-scroll speed	Ctrl + -
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

<b>Action</b>	<b>Shortcut or Key Combination</b>
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
Start/Stop selection	F8
Select all (current paragraph)	Ctrl + A
Copy (current paragraph)	Ctrl + C
Delete book	Delete

## File Manager Commands

<b>Action</b>	<b>Shortcut or Key Combination</b>
Create new folder	Ctrl + N
File/drive info	Ctrl + I
Mark/Unmark	Ctrl + Enter
Mark all/Unmark all	Ctrl + A
Rename file	F2
Delete file	Delete
Copy file	Ctrl + C

<b>Action</b>	<b>Shortcut or Key Combination</b>
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	Esc
Eject media	Ctrl + Fn + E

## Calculator Commands Using US Computer Braille

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

# Appendix—Braille Tables

## United States 8-Dot Computer Braille

exclamation mark: ‘!’ 2,3,4,6

quote: “” 5

pound: ‘#’ 3,4,5,6

dollar sign: ‘\$’ 1,2,4,6

percent: ‘%’ 1,4,6

ampersand: ‘&’ 1,2,3,4,6

apostrophe: ‘’ 3

left paren: ‘(’ 1,2,3,5,6

right paren: ‘)’ 2,3,4,5,6

asterisk: ‘\*’ 1,6

plus sign: ‘+’ 3,4,6

comma: ‘,’ 6

dash: ‘-’ 3,6

period: ‘.’ 4,6

forward slash: ‘/’ 3,4

colon: ‘:’ 1,5,6

semi-colon: ‘;’ 5,6

less than: ‘<’ 1,2,6

equals: ‘=’ 1,2,3,4,5,6

greater than: ‘>’ 3,4,5

question mark: ‘?’ 1,4,5,6

at symbol: ‘@’ 4,7



left square bracket: '[' 2,4,6,7  
back slash: '\' 1,2,5,6,7  
right square bracket: ']' 1,2,4,5,6,7  
carat sign: '^' 4,5,7  
underscore: '\_' 4,5,6  
grave accent: '`' 4  
left curly bracket: '{' 2,4,6  
vertical bar: '|' 1,2,5,6  
right curly bracket: '}' 1,2,4,5,6  
tilde: '~' 4,5  
'0': 3,5,6  
'1': 2  
'2': 2,3  
'3': 2,5  
'4': 2,5,6  
'5': 2,6  
'6': 2,3,5  
'7': 2,3,5,6  
'8': 2,3,6  
'9': 3,5

## Uppercase letters:

'A': 1,7  
'B': 1,2,7  
'C': 1,4,7  
'D': 1,4,5,7

'E': 1,5,7  
'F': 1,2,4,7  
'G': 1,2,4,5,7  
'H': 1,2,5,7  
'I': 2,4,7  
'J': 2,4,5,7  
'K': 1,3,7  
'L': 1,2,3,7  
'M': 1,3,4,7  
'N': 1,3,4,5,7  
'O': 1,3,5,7  
'P': 1,2,3,4,7  
'Q': 1,2,3,4,5,7  
'R': 1,2,3,5,7  
'S': 2,3,4,7  
'T': 2,3,4,5,7  
'U': 1,3,6,7  
'V': 1,2,3,6,7  
'W': 2,4,5,6,7  
'X': 1,3,4,6,7  
'Y': 1,3,4,5,6,7  
'Z': 1,3,5,6,7

## **Lowercase letters:**

'a': 1

'b': 1,2

'c': 1,4  
'd': 1,4,5  
'e': 1,5  
'f': 1,2,4  
'g': 1,2,4,5  
'h': 1,2,5  
'i': 2,4  
'j': 2,4,5  
'k': 1,3  
'l': 1,2,3  
'm': 1,3,4  
'n': 1,3,4,5  
'o': 1,3,5  
'p': 1,2,3,4  
'q': 1,2,3,4,5  
'r': 1,2,3,5  
's': 2,3,4  
't': 2,3,4,5  
'u': 1,3,6  
'v': 1,2,3,6  
'w': 2,4,5,6  
'x': 1,3,4,6  
'y': 1,3,4,5,6  
'z': 1,3,5,6

## United Kingdom 8-dot Computer Braille

exclamation mark: ‘!’: 2,3,4,6

quote: “” 4

pound: ‘#’ 5,6

dollar sign: ‘\$’ 4,5,6

percent: ‘%’ 4,6

ampersand: ‘&’ 1,2,3,4,6

apostrophe: ‘’ 3

left paren: ‘(’ 4,5

right paren: ‘)’ 3,4,5

asterisk: ‘\*’ 3,5

plus sign: ‘+’ 2,3,5

comma: ‘,’ 2

dash: ‘ ‘ 3,6

period: ‘.’ 2,5,6

forward slash: ‘/’ 3,4

colon: ‘:’ 2,5

semi-colon: ‘;’ 2,3

less than: ‘<’ 2,3,6

equals: ‘=’ 2,3,5,6

greater than: ‘>’ 3,5,6

question mark: ‘?’ 2,6

at symbol: ‘@’ 2,3,4,6,7

left square bracket: ‘[’ 1,2,3,5,6,7

back slash: ‘\’ 5,7

right square bracket: ']' 2,3,4,5,6,7

carat sign: '^' 6,7

underscore: '\_' 3,4,6

grave accent: '`' 2,3,4,6

left curly bracket: '{' 1,2,3,5,6

vertical bar: '|' 5

right curly bracket: '}' 2,3,4,5,6

tilde: '~' 6

Pounds sterling: '£' 2,3,6,7,8

degree sign: '°' 1,3,4,6,8

'0': 1,2,3,4,5,6

'1': 1,6

'2': 1,2,6

'3': 1,4,6

'4': 1,4,5,6

'5': 1,5,6

'6': 1,2,4,6

'7': 1,2,4,5,6

'8': 1,2,5,6

'9': 2,4,6

## **Uppercase letters:**

'A': 1,7

'B': 1,2,7

'C': 1,4,7

'D': 1,4,5,7

'E': 1,5,7  
'F': 1,2,4,7  
'G': 1,2,4,5,7  
'H': 1,2,5,7  
'I': 2,4,7  
'J': 2,4,5,7  
'K': 1,3,7  
'L': 1,2,3,7  
'M': 1,3,4,7  
'N': 1,3,4,5,7  
'O': 1,3,5,7  
'P': 1,2,3,4,7  
'Q': 1,2,3,4,5,7  
'R': 1,2,3,5,7  
'S': 2,3,4,7  
'T': 2,3,4,5,7  
'U': 1,3,6,7  
'V': 1,2,3,6,7  
'W': 2,4,5,6,7  
'X': 1,3,4,6,7  
'Y': 1,3,4,5,6,7  
'Z': 1,3,5,6,7

## **Lowercase letters:**

'a': 1

'b': 1,2

'c': 1,4  
'd': 1,4,5  
'e': 1,5  
'f': 1,2,4  
'g': 1,2,4,5  
'h': 1,2,5  
'i': 2,4  
'j': 2,4,5  
'k': 1,3  
'l': 1,2,3  
'm': 1,3,4  
'n': 1,3,4,5  
'o': 1,3,5  
'p': 1,2,3,4  
'q': 1,2,3,4,5  
'r': 1,2,3,5  
's': 2,3,4  
't': 2,3,4,5  
'u': 1,3,6  
'v': 1,2,3,6  
'w': 2,4,5,6  
'x': 1,3,4,6  
'y': 1,3,4,5,6  
'z': 1,3,5,6

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