

# BrailleNote™ APEX

an educational resource guide

Take note. Take charge.  
Take academic success to new heights.



Humanware™

see things. differently

## Table of contents

Introduction	1
The KeySoft Suite	2
✓ Functions and Features	3
The BrailleNote Apex Models	4
Orientation to the BrailleNote Apex	5
Braille Table	6
Braille Alphabet	6
Powering ON your BrailleNote Apex	7
Help	7
The KeySoft Menues	8
✓ Main Menu Structure	8
Menu Navigation	9
Speech Preferences	10
The Scroll Wheel	11
Writing a document	12
✓ A-Z Keystrokes	13
✓ 0-9 Keystrokes	15
Reading a document	16
✓ Braille Display	16
Reading Options	17
✓ Character	17
✓ Word	18

## Reading Options (*cont'd*)

✓ Sentence	.....	18
✓ Paragraph	.....	19
✓ Memo	.....	19

Visual Display	.....	20
----------------	-------	----

The Technology	.....	21
----------------	-------	----

✓ Hardware	.....	21
✓ Operating system	.....	21
✓ Connectivity	.....	21

# welcome VI professionals and parents. you're there to help, so we're here to help you.

A new piece of electronic equipment can seem a little daunting to begin with. But any teacher or parent knows that learning takes time, patience and proper instruction. This resource guide will help you to empower your child or student with the skills they need to get the most out of their BrailleNote APEX.

Having developed the BrailleNote APEX from the ground up with extensive input from our customers we already know of its potential. We know just how user-friendly it is and how the many thousands of BrailleNote APEX users would rather not be without it. Now we want to impart this information to you.

The BrailleNote APEX's interface is sublimely simple. However this may not be immediately apparent to a first time user. Only with correct use will this become clear. This kit will answer simple questions, hopefully prevent common mistakes that might detract from the user experience and provide the tools needed to realise the BrailleNote's power in very little time.

## Included in this kit you will find:

- An overview of the KeySoft software and its advantages.
- A short introduction to the APEX range of BrailleNote products and a look at their features and functions.
- A quick guide to the braille alphabet.
- A BrailleNote APEX keystroke guide to help familiarise you with the different key combinations that drive the BrailleNote APEX.

We want our customers to reach out and get in touch with the world. Through BrailleNote APEX, and with your guidance, how far they reach is only limited by their imagination and determination.



## the KeySoft Suite - opening Windows™ for the blind user

KeySoft is a powerful suite of applications written from the ground up specifically for blind users. By utilising KeySoft, the BrailleNote family of notetakers offers the best of both worlds – a system running on a mainstream operating system (Microsoft's Windows CE operating system) using software written to maximise ease of use and efficiency for the blind user.

KeySoft enables blind people to do the same things with a portable device as a sighted person. But it's what we put on top of Windows CE that makes the real difference.

Instead of software designed to convert a "sighted friendly" environment, KeySoft operates out of the box with no special screen reading software needed. With KeySoft every function is designed for a blind person to use. There is no need to explain graphical Windows elements, because KeySoft doesn't use them. Powerful keyboard commands or simple menus allow the user to complete tasks in a friendly but highly powerful environment.

With KeySoft, help is just one keystroke away. The context sensitive help in KeySoft means that the system always knows where you are and what task you are trying to perform.

### Functions and Features

The acclaimed KeySoft Suite of applications is both user-friendly and efficient.

- ✓ Easy-to-use menu system allows users to quickly review applications and settings.
- ✓ An extensive set of shortcut commands allows users to instantly access any desired feature.
- ✓ Context-sensitive "help" is always available when you need to remember a command.
- ✓ Instant access to the Main Menu and Online Help.



## Functions and Features (*cont'd*)

**Word Processor:** Translate between any grade of Braille and text formats including Microsoft Word, then print or emboss any document or attach it to an e-mail.

**Book Reader:** Read books from Bookshare, RFB&D, Audible and numerous other sources. Read Braille or text formats in your preferred grade of Braille. Listen to audio books and take advantage of the powerful DAISY navigation features.

**Web Browser and E-Mail:** Surf the Web – do online research, shopping and banking. Send and receive e-mails, and stay connected via your preferred network connection.

**Voice Memos:** Record lectures, class notes and memos, then instantly play them back from anywhere in KeySoft with a single key press.

**Media Player:** Listen in stereo to MP3, WAV and Windows Media files and a number of other formats. Create playlists, enjoy Internet radio or music while reading, e-mailing or surfing the web.

**Streaming Audio:** Listen to Internet radio programs that use MP3 or Windows Media formats.

**Keychat:** Communicate in real time with colleagues, friends and family using state-of the-art instant messaging (IM) services.

**KeyPlus Scientific Calculator:** Aside from performing standard mathematical operations, you can also convert fractions to and from decimals and percentages, convert a fraction to its lowest terms, and much more.

**KeyBase Database Manager:** This is a powerful database manager with step by step wizard-style interface, making it a snap to create your own databases.

**Daily Planner:** Schedule single or recurring appointments, set reminder alarms and synchronize with MS Outlook's Calendar

**Address List:** Store and organize your contact information, look up an address quickly and simply, paste it into a document or email, synchronize with MS Outlook's Contacts.

**Stopwatch:** Keep track of time while performing other tasks.

**Terminal Mode:** Using the BrailleNote Apex as a braille display with PC / MAC and mobile devices.

**FM Radio:** Apex can scan the FM band for your stations, save them as presets & read the frequency on the Braille display.

**Game on!** There are hundreds of compatible games available for download on the Internet, ranging from educational titles right through to epic fantasy, and you can easily switch in and out of games when you need to check e-mail or make a note.

## The BrailleNote Apex Models

The BrailleNote APEX family of notetakers – Empowering your child or student to compete effectively in a sighted world.

All BrailleNote BT & QT models feature a 32 or 18 cell refreshable Braille display and high quality speech output. The BT models use a nine-key Braille keyboard for input while the QT features a computer-style keyboard. The VoiceNote BT & QT are the same only they utilise speech output without a Braille display.

BrailleNote  
Apex

BT 32



BrailleNote  
Apex

QT 32



BrailleNote  
Apex

BT 18



BrailleNote  
Apex

QT 18



VoiceNote  
Apex

BT

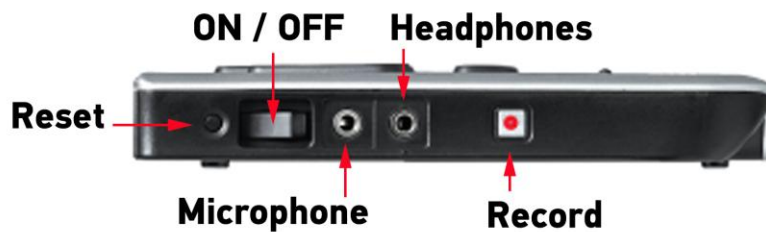


VoiceNote  
Apex

QT

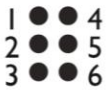


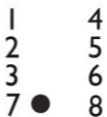
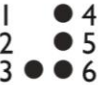
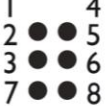


## Orientation to the BrailleNote Apex



































## Braille Table

Braille grade 1 and 2	Computer Braille
 <p>The six dots of the Braille cell are arranged and numbered:</p>	 <p>In computer Braille, dots 7 and 8 are added.</p>
 <p>The capital sign, dot 6, placed before a letter, makes a capital letter.</p>	 <p>The capital sign, dot 7, placed before a letter, makes a capital letter</p>
 <p>The number sign, dots 3, 4, 5, 6, placed before the characters a through j, makes the numbers 1 through 0. For example: a preceded by the number sign is 1, b is 2, etc.</p>	 <p>In computer Braille, dots 7 and 8 are added. Dots 2,3,5,6,7,8 are used for numbers. Dot combinations for letters a to j, one row lower, make the numbers 1 through 0. For example, number 2 is obtained by pressing dot 2 and 3</p>

## Braille Alphabet

a	b	c	d	e	f	g	h	i	j
									
k	l	m	n	o	p	q	r	s	t
									
u	v	w	x	y	z	capital sign	number sign	period	comma
									

## Powering ON Your BrailleNote Apex

To switch the BrailleNote on, press the power switch near the front of the rocker. A power on message is displayed, the content of which will depend on where the BrailleNote was when you last switched off. To switch off, press the power switch near the rear of the rocker. If you don't use the BrailleNote for approximately 10 minutes it will enter hibernate mode, where the power drawn from the battery is the same as if the unit was switched off. Pressing any key will end the hibernate mode. If you want the Braille display to come up without typing, press **BACKSPACE with ENTER**.

When the unit is powered on, the amber LED on the rear edge of the unit will light up. If the AC cord is plugged in and the battery is recharging, this LED will blink. It will turn off when the unit is powered down.

If the BrailleNote does not start, wait 30 seconds or so and try switching it off then on again. If this does not work then press the Reset button. The BrailleNote immediately beeps to confirm that it has been reset. After about 10 seconds, KeySoft displays a sign on message and resumes from the Main Menu.

If your BrailleNote displays "Battery is low," or "Battery is critical" or does not come to life, you should plug in the AC adapter.

## Help

There are several ways to get help from KeySoft. At any point in KeySoft you can get information about the options that are available by pressing **SPACE with H**.



**Space with dots 1-2-5  
Context sensitive help**

You can also select "Keyboard Learn" from the Main Menu. KeySoft displays the function of the keys and the key combinations that are always available. For example, pressing **ENTER with T** will give the response "display the time." To exit help, press **SPACE with E**.

## The KeySoft Menus

The entry point to KeySoft is the Main Menu. You can display each of these items in turn, and select one.

When you have done this, you are generally presented with another menu. The system may extend to 3 or 4 levels of sub-menu. This structure is an important aspect of KeySoft. Items are grouped together for easy location, so a huge range of functions can be found from one starting point, the Main Menu.

## Main Menu Structure

### **Word Processor**

- Create a Document
- Open a Document
- Emboss a Document
- Print a Document
- Setup Options

### **Planner**

- Open Planner
- Emboss Planner
- Print Planner
- Setup Options
- KeyPlan Maintenance Utility

### **Address List**

- Add Address
- Lookup Address
- Copy Addresses
- Emboss Addresses
- Print Addresses
- Setup Options

### **Email**

- Write an Email
- Read Email
- Connect to Send and Receive Email
- Setup Options

### **Internet**

- Address? Press ENTER for (...)
- List of Favorites in My Favorites Folder

### **Chat**

- Start new Conversation
- Review Conversation
- My Availability
- Options

### **Media Center**

- Media Player
- Record a Memo
- Playback Memos
- FM Radio
- Setup Options

### **Book Reader**

- Read Book in which folder? Press ENTER for (...)
- List of folders on Flash Disk

### **Scientific Calculator**

- KeyPlus

### **Database Manager**

- Database to use? Press ENTER for (...)
- List of KeyBase files in KeyBase folder

### **Games**

- Play which game?
- List of Game files in My Games folder

### **File Manager**

- Directory
- Copy File
- Erase File
- Rename File
- Move File
- Protection
- Translate File
- Folder Manager

### **Utilities**

- Connect to Active Sync Synchronization
- Backup or Restore Files
- Pronunciation Dictionary
- Date and Time Set
- Application Program
- Miscellaneous Options
- Key Management

### **Terminal for Screen Reader**

- Braille Terminal port? Currently (...)

### **Keyboard Learn**

- Keyboard Learn Mode

### **For Information press Space with I**

- Version Details

### **For the Options Menu, press Space with O, anywhere**

## Menu Navigation



**Space with dots 1-2-3-4-5-6  
Go to Main menu**



**Space or advance thumbkey  
Go to next menu**



**Backspace or Back thumbkey  
Go to previous menu item**



**Enter or Next thumbkey or first letter  
Select a menu option**



**Space with dots 1-3-5  
Go to options menu**



**Space with dots 1-5 or Previous thumbkey  
Exit menu or Prompt**

## Speech Preferences

You can listen to the BrailleNote using either the built-in speakers, or earphones. If earphones are plugged in, the speakers are automatically disabled.



**Enter with dot 1  
Decrease volume**



**Enter with dot 4  
Increase volume**



**Enter with dot 3  
Decrease speech speed**



**Enter with dot 6  
Increase speech speed**



**Enter with dot 2  
Decrease pitch**



**Enter with dot 5  
Increase pitch**



**Space with previous  
Turn speech on / off**



**Power with dot 3  
Turn on with no speech**

## The Scroll Wheel

The wheel has 6 raised lines. You can use your finger to scroll the wheel to the left or to the right. The wheel was designed to provide incremented scrolling, meaning that it will only turn in short steps to ensure accurate selections.



To activate or deactivate the Scroll wheel:  
**Press SPACE with O, then W.**  
This is an On/Off toggle command.

In menus, lists and at the List of Folders prompt, **turning counter-clockwise will move you backwards**. At the Folder name prompt, it will allow you to access the Drive list. (Back thumb key)



In menus, lists and at the List of Folders prompt, **turning clockwise will move you forward**. At the Folder name prompt, it will allow you to access the Folder list. (Advance thumb key)



Note that in certain applications, you can toggle between different navigation levels by pressing the Down arrow.

## Center button

In Menus or Lists, at the Folder name prompt, and list of Folders prompt, **the Center button acts as the Enter function** (dot 8).



## Writing a Document

**a)** To reach a common starting point, go to the Main Menu by pressing SPACE with dots 1 to 6. Your BrailleNote displays: "Main menu."

**b)** From the Main menu, you can access the word processor using the Spacebar to go through menu options or press W to jump directly to the Word processor. Your BrailleNote displays: "KeyWord menu."

**c)** Use the Spacebar to select the Create option, or press C, and your BrailleNote displays: "Folder name? General,"

**d)** KeySoft asks where you want to save your work. It suggests "General" folder. This is fine for now, so follow the prompt and press ENTER. KeySoft then displays: "Document to create?"

**e)** You are being asked to provide a name for the new document, so Braille a name such as: "test." You can do this in Grade 1, as: 't e s t', or in Grade 2 as: 't e' followed by the 's t' sign. A capital sign is optional because KeySoft does not take them into account when finding documents.

**f)** When you have typed the name, press ENTER. Your BrailleNote displays: "Top of document. Blank." This means that you have created a new document named "Test," and the cursor is sitting at the top of it. The Braille display is completely blank.

**g)** You are now free to Braille whatever you like. For this demo, just Braille a simple sentence such as: "This is a test of my new BrailleNote BT." You can use Grade 1 or Grade 2 as you wish. Braille the first word and press SPACE. The characters are displayed on the Braille display as you Braille. The cursor, dots 7-8, appears to the right of the last character Brailled. This shows where the next character will be entered. Each word is spoken when the Spacebar is pressed. Complete your sentence.

**h)** That's all we'll write for now. To finish this little exercise, press SPACE with E. Your BrailleNote BT displays: "KeyWord menu." You are back at the Word processor menu, and your new document has been automatically saved. If you press SPACE with E again you arrive back where you started, at the Main Menu.

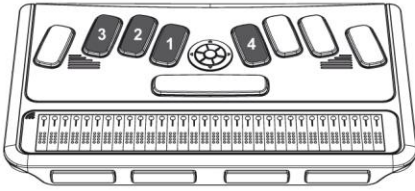


**Space with dots 1-5  
Exit**

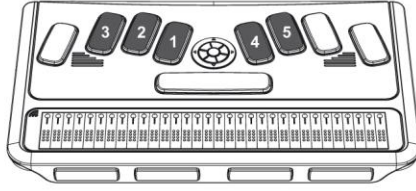




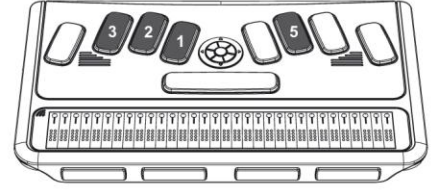
*A-Z Keystrokes (cont'd)*



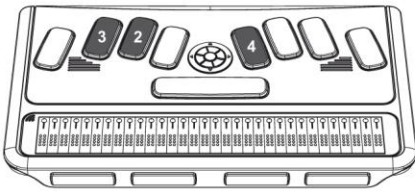
**P**



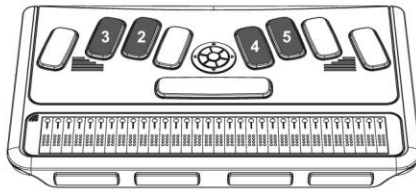
**Q**



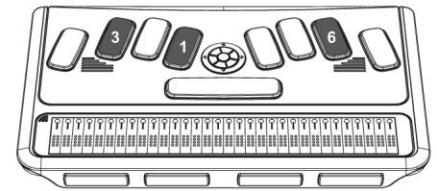
**R**



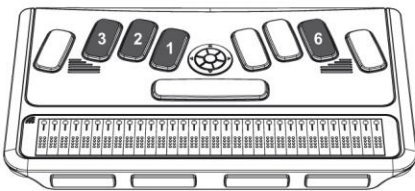
**S**



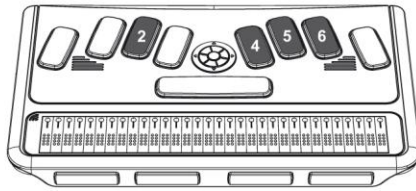
**T**



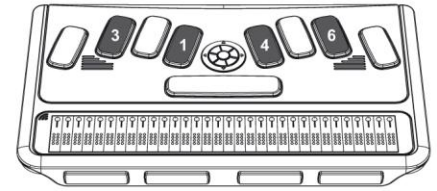
**U**



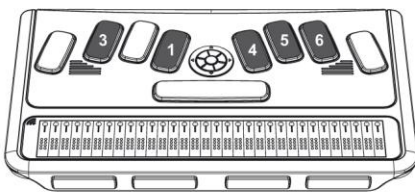
**V**



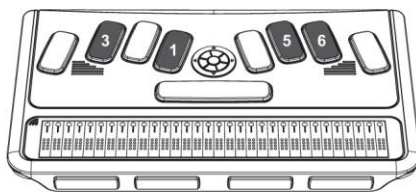
**W**



**X**

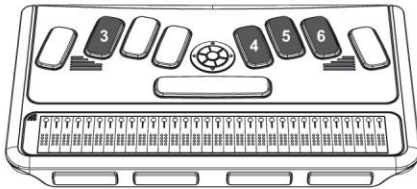


**Y**

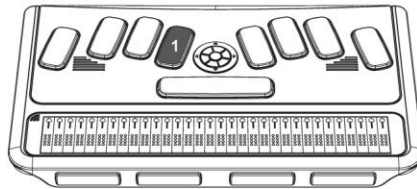


**Z**

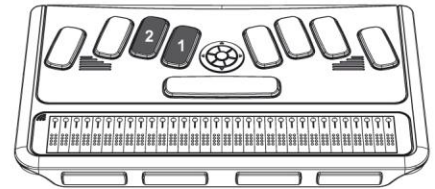
0-9 Keystrokes



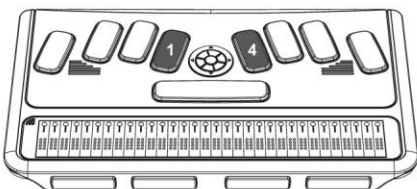
**Number sign**



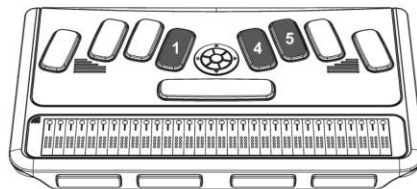
**1**



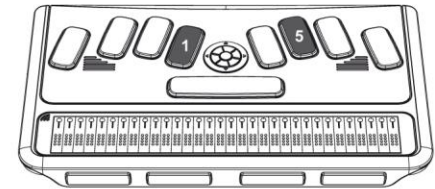
**2**



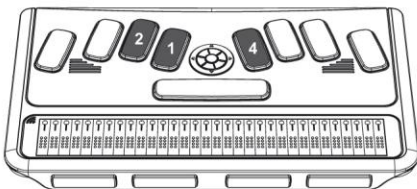
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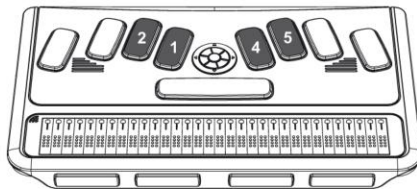
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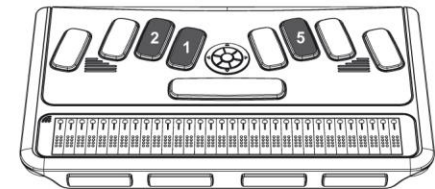
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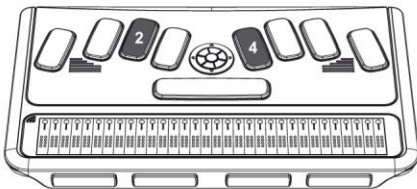
**6**



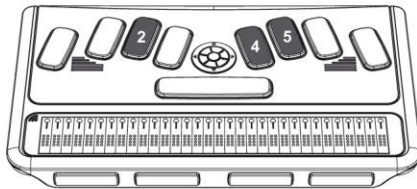
**7**



**8**

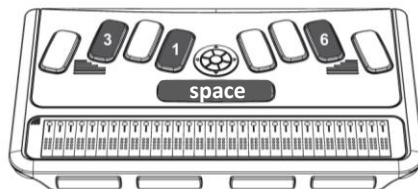


**9**



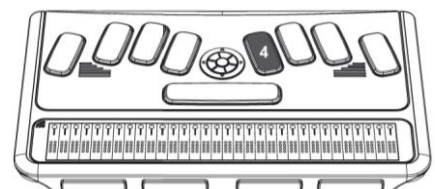
**10**

@ :



**Space with letter U**

*followed by*



**dot 4**

## Reading a Document

### ✓ Braille Display



**Space with dots 1-2-4-5-6  
Turn on automatic scrolling of display**



**Touch cursor above relevant cell  
Route cursor**



**Previous thumbkey  
Move display up a line**



**Next thumbkey  
Move display down a line**



**Back thumbkey  
Pan display back**



**Advance thumbkey  
Pan display forward**

## Reading Options



**Space with dots 1-2-4-5**  
**Reading continuously**



**Backspace with enter**  
**Stop reading or scrolling**



**Space with dots 1-2-3**  
**Top of document**



**Space with dots 4-5-6**  
**Bottom of document**

## ✓ Character



**Space with dot 3**  
**Move back by character**



**Space with dots 3-6**  
**Read current character**



**Space with dot 6**  
**move forward by character**



**Backspace with dots 3-6**  
**Delete current character**

## Reading Options (cont'd)

### ✓ Word



**Space with dot 2  
Move back by word**



**Space with dots 2-5  
Read current word**



**Space with dot 5  
Move forward by word**



**Backspace with dots 2-5  
Delete current word**

### ✓ Sentence



**Space with dot 4  
Move forward by sentence**



**Space with dots 1-4  
Read current sentence**



**Space with dot 1  
Move back by sentence**



**Backspace with dots 1-4  
Delete current sentence**

## Reading options (cont'd)

### ✓ Paragraph



**Space with dots 2-3  
Move back by paragraph**



**Space with dots 1-4  
Read current sentence**



**Space with dots 5-6  
Move forward by paragraph**



**Backspace with dots 2-3-5-6  
Delete current paragraph**

### ✓ Memo



**Record button  
To record a memo**



**Enter with dots 1-3-4  
To play last memo recorded**

## Visual Display

The visual display options allow a sighted teacher, parent or colleague to view in real time the work being done on the BrailleNote. All text that is displayed on the Braille display, or that is spoken, appears on the VGA monitor.

To use the VGA display option, connect a VGA monitor into the VGA port located at the back of the Braille- Note Apex BT.

To activate the display, follow these steps:

Select the Options Menu on your BrailleNote, by pressing **SPACE with 0**.

1. From the Options Menu, select "Visual Display" by stepping through the menu until you get to Visual Display and pressing **Enter**, or by pressing **V**.
2. Press **V** for VGA. Alternatively, press **space** with **dots 3-4** to view the available options and press **Enter**.



**Plug monitor to VGA port**

## The Technology

Every BrailleNote and VoiceNote Apex has the following hardware making them highly compatible with mainstream technology.

### ✓ Hardware

- 18 or 32 cell refreshable Braille display (models with voice output only also available)
- Computer-style keyboard (QT model)
- 8 dot Braille keyboard (BT model)
- Speech output with choice of TTS
- Stereo speakers
- Internal Omni Directional Microphone
- Rechargeable and user-replaceable lithium-ion battery
- Real-Time Clock with 30-day battery backup
- External speaker / headphone and microphone jacks
- Weight: BrailleNote 32 cells: 812 g (1.8 lbs)  
BrailleNote 18 cells: 734 g (1.6 lbs)  
VoiceNote: 612 g (1.35 lbs)
- Dimensions: 19 mm (0.78 in) H x 244 mm (9.61 in) W x 143 mm (5.63 in) D

### ✓ Operating system

- Microsoft Windows CE 6 operating system
- 8GB of non-volatile user storage
- 256MB SDRAM

### ✓ Connectivity

- One SD card socket supporting SDHC cards
- Built-in Ethernet port (10/100Mbps)
- Built-in Wi-Fi 802.11 b/g protocol
- Built-In Bluetooth 2.1
- One high-speed USB 2.0 client port for Active Sync and Braille Terminal Mode
- 3 high speed USB 2.0 host ports
- Optional USB voice modem
- Optional GPS receiver via Bluetooth



Optional Keysoft applications to support learning.

- ✓ Concise Oxford Dictionary and Thesaurus
- ✓ Nemeth tutorial
- ✓ Sendero GPS



# Customer support

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

[www.humanware.com/support/brailnote\\_apex](http://www.humanware.com/support/brailnote_apex)

## North America:

1 (800) 722-3393

[us.support@humanware.com](mailto:us.support@humanware.com)

## Australia / Asia:

(02) 9686 2600

[au.sales@humanware.com](mailto:au.sales@humanware.com)