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## 1.la tablette BrailleNote Touch



## BrailleNote Touch 32 Plus – Braille note taker/tablet

### **Quick Overview**

- Powered by Android 8.1 Oreo.
- Provided with EasyReader Plus, a new reading application specifically tailored for BrailleNote Touch Plus.
- Optimized Chrome web browsing.
- Filled with educational tools including math learning and graph creation.
- Perfect braille translation in contracted or uncontracted braille, including UEB and multiple languages.
- Use Exchange, POP or IMAP email accounts.
- Fully supports standard keyboards to enhance transferable skills.
- Cooperative tool via its touchscreen provides instant feedback.
- Optimized user experience powered by KeySoft.
- Enhanced web view navigating.
- Innovative tactile graph view.

- Free and automatic updates.
- Modern and simple menu-driven interface.
- Familiar keyboard shortcuts to efficiently accomplish tasks.
- Professional documents created with KeyWord.
- Printed material instantly converted to braille using the included optimized KNFB Reader application.
- Team collaboration by sharing documents using Google Drive or other cloud services.
- Synchronized emails, contacts and calendars with KeyMail.
- Includes a removable Perkins style keyboard.
- Access to Google Assistant, and much more.

## 2.L'application BrailleTouch

# BrailleTouch

BrailleTouch is a smartphone app that allows blind and visually impaired people to type on a touchscreen. It is based the familiar six-key braille keyboard found on the Perkins Brailler and many electronic braille notetakers. More information can be found at: <a href="http://brailletouchapp.com/">http://brailletouchapp.com/</a>

Both the free trial version and the full version of BrailleTouch are now available through the App Store: https://itunes.apple.com/app/brailletouch/id579725651?ls=1&mt=8

To type with BrailleTouch, hold the phone in two hands with the screen facing away from you. The first three fingers of your left and right hands will naturally fall on the left and right sides of the screen, respectively. To type a braille chord, use the same fingers you would use on the standard six-key Perkins-style keyboard. For example, to type the letter "B", tap the screen with the first two fingers of your left hand.

We recommend using a rubber case to aid in gripping your phone comfortably in both hands, and either wireless headphones or a right-angle headphone plug if your headphone jack is on the side of the phone where you would hold it.

#### **BACKGROUND**

BrailleTouch is based on research at the Georgia Tech School of Interactive Computing, which won first place in the Design Competition at the MobileHCI 2011 conference in Stockholm, Sweden. Researchers Caleb Southern, James Clawson, Brian Frey, Dr. Gregory D. Abowd, and Dr. Mario Romero evaluated BrailleTouch with eleven blind volunteers. They found that expert braille typists could transfer their skills to BrailleTouch on a touchscreen smartphone within an hour of practice, and could achieve typing speeds averaging 23 words per minute in Grade 1 braille.

There are currently no ideal solutions for mobile text entry in the blind community. Electronic braille notetakers, starting with the Braille 'n Speak in the 1980s, offer portability and the Perkins-style six-key braille keyboard. However they are bulky and expensive, typically costing \$1000s. Today's smartphones offer computing power that can fit in your pocket for \$200. However their small size makes typing on miniature QWERTY keyboards difficult for sighted users, and even more challenging for the blind. The growing popularity of touchscreens is especially problematic for blind users, as these phones have no tactile landmarks to aid in finding keys while typing. Current accessible soft keyboards for touchscreen smartphones, such as Apple's VoiceOver split tap keyboard for the iPhone, are slow and tedious, with typing speeds below 10 words per minute. BrailleTouch fills this gap in accessible mobile text entry for the visually impaired. It offers fast typing on the familiar six-key braille keyboard, using a \$200 commodity touchscreen smartphone that can fit in your pocket.