

## Etude de l'existant

### 1. La tablette BrailleNote Touch:

BrailleNote Touch Plus is the most powerful and up-to-date note taker in the assistive technology industry packed with educational tools.

Designed to be used in the classroom, at home or at work, the revolutionary BrailleNote Touch Plus will be your guide through your life journey!

#### **Say hello to the most powerful note taker!**

The ever-innovative BrailleNote Touch Plus combines the simplicity and accessibility of a note taker with the power and efficiency of a modern smartphone or tablet. Supported by the Android Oreo platform, it expands the entire experience and fulfills today's digital expectations. BrailleNote Touch Plus is hands down the most up-to-date, powerful and efficient braille note taker on the market!

#### **Get the fastest and most accessible braille tablet you can ever wish for!**

With its powerful, lightning fast processor, the BrailleNote Touch Plus gives you all the efficiency you need to empower your life. And since it is compatible with most third-party applications, you can download books on your BrailleNote Touch Plus and start reading in braille right away.

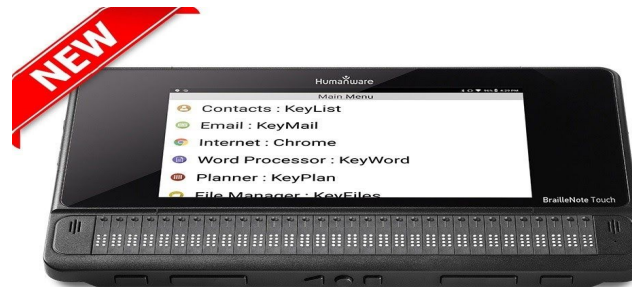
#### **Never settle for less than the best!**

Writing your assignments in the classroom without making any noise, downloading and reading your favorite books during your free time, watching videos on YouTube on the weekend, sending emails to your friends, sharing content to cloud services such as Dropbox and Google Drive...BrailleNote Touch Plus is the perfect tool to make this easy for you.

BrailleNote Touch Plus is the note taker that takes you from grade school to college graduation and beyond.

**A note taker that fits your unique needs and goals!**

BrailleNote Touch Plus is the most flexible note taker you can own. Create multiple language profiles and customize them with a large selection of braille codes and voices to choose from, ideal for those learning or proficient in other languages. BrailleNote Touch Plus is uniquely equipped with a touchscreen making the communication between the student and the teacher seamless.



## 2.L'application Braille Touch:

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 Brailier and many electronic braille notetakers. More information can be found at:

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.