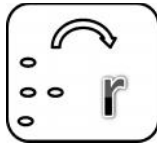


# User Manual

**First Edition**



**Braille to Text/Voice Converter**  
For Android

2013

## Contents

1. Installation.....	3
2. Getting Started with BT/VC application .....	4

## Tables of Figures

FIGURE 1: INSTALL CONFIRMATION .....	3
FIGURE 2: INSTALLATION PROGRESS.....	3
FIGURE 3: INSTALLING DONE .....	3
FIGURE 4: WELCOME SCREEN .....	4
FIGURE 5: CAPTURE OR LOAD A BRAILLE IMAGE .....	4
FIGURE 6: CHANGE RESOLUTION .....	5
FIGURE 7: IMAGE CALIBRATION .....	5
FIGURE 8: CROP IMAGE .....	6
FIGURE 9: AFTER CROPPING.....	6
FIGURE 10: SELECT AN IMAGE.....	7
FIGURE 11: SELECT DESIRED IMAGE.....	7
FIGURE 12: DESIRED IMAGE SELECTED.....	8
FIGURE 13: RESULT SCREEN .....	8



## 1. Installation

Download the application using “play store” on Android, then you can install the application on your device by doing the following steps.

1. After finish downloading the application it will show you an “Installation Confirmation” message like Figure 1 just click the “Install” button.

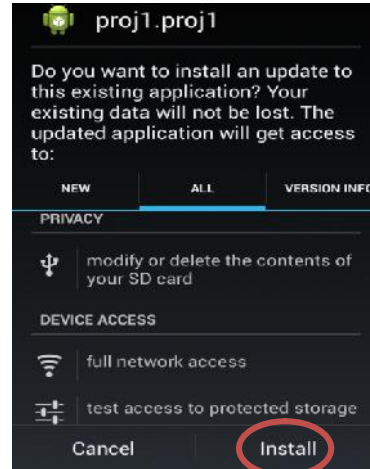


Figure 1: Install Confirmation

2. Wait for the program to be installed on your device, Figure 2 shows the installation progress.

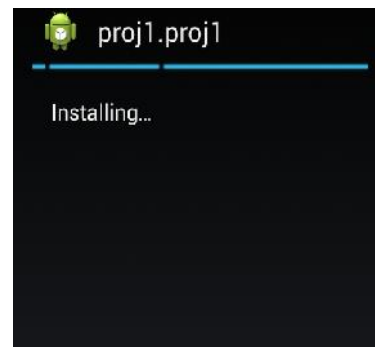


Figure 2: Installation progress

3. After installation is done, you can whether open the application by clicking on the “Open” button or just click the “Done” button as shown in Figure 3.

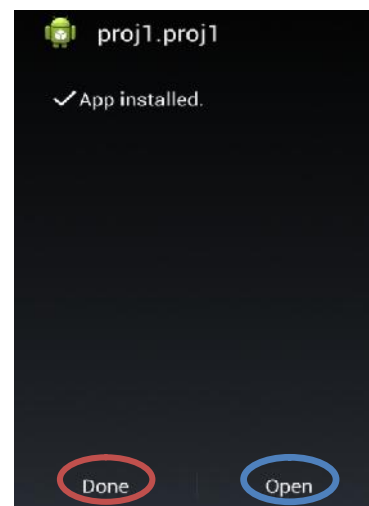


Figure 3: Installing done

## 2. Getting Started with BT/VC application

1. A welcome screen for the application is provided; just click the “Start” button as shown in Figure 4, to start the application.

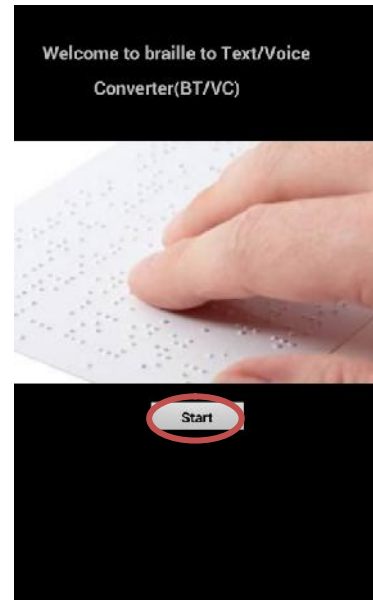


Figure 4: Welcome screen

2. After clicking “Start” button, the window in Figure 5 will appear to the user; so the user can choose whether to capture a braille image using the mobile camera by clicking on “Capture” button, or to load an existing image from storage by clicking on “Load” button, note that the “Convert” button is not enabled before loading an image .

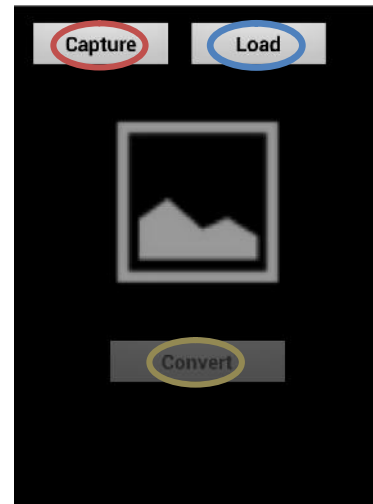


Figure 5: Capture or load a Braille image

3. If the user wishes to capture an image by clicking on “Capture” button as shown in Figure 5, the system camera will be opened, the user responsibility is to change the resolution of the camera to be 3.2MP, as shown in Figure 6.

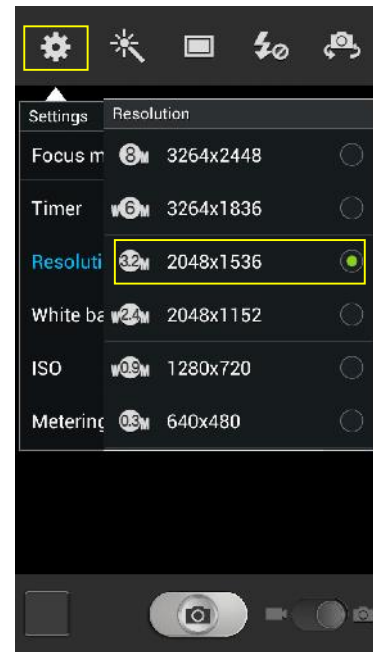


Figure 6: Change resolution

4. The user should calibrate the left top corner of the Braille image with the left top corner in the camera as shown in Figure 7, which is represented in the red small window, and then you can whether to “Save” the taken image or “Discard” it.



Figure 7: Image calibration

5. The user should crop the captured image, because the Braille paper is look like a square and to remove unnecessary information from the image as shown in Figure 8, and then the user choose whether “Done” or “Cancel” cropping operation.

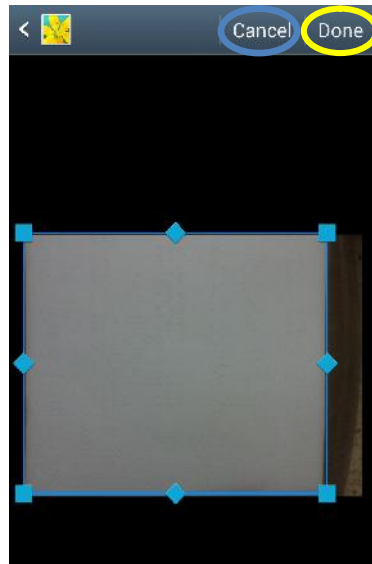


Figure 8: Crop image

6. After the cropping operation has been finished, the Braille image will look like what shown in Figure 9.



Figure 9: After cropping

7. After taking the image, the user have to load it by clicking on the “Load” button, then a pop-up will be appeared to select a photo then choose to select a photo from “Gallery” as shown in Figure 10.

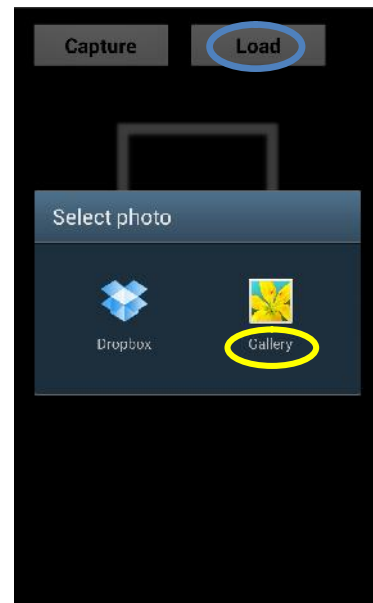


Figure 10: Select an image

8. Select the desired Braille image from the gallery, as shown in Figure 11.



Figure 11: Select desired image



9. After selecting the desired image it will be displayed to the user and the “Convert” button will be enabled as shown in Figure 12.

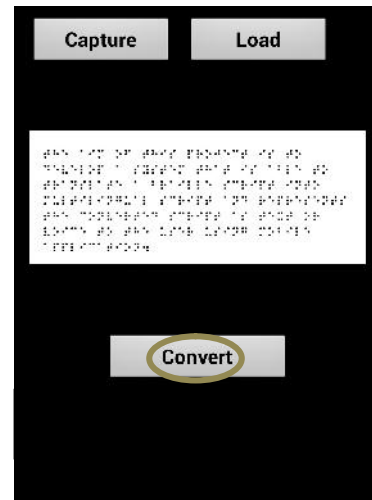


Figure 12: Desired image selected

10. After clicking the “Convert” button in Figure 12, the selected image will be translated using “BT/VC” algorithm and the result is shown on the screen and there is availability to “Save” or to “listen” to the converted text, in addition to a “Return” button that will restart the application as shown in Figure 13.

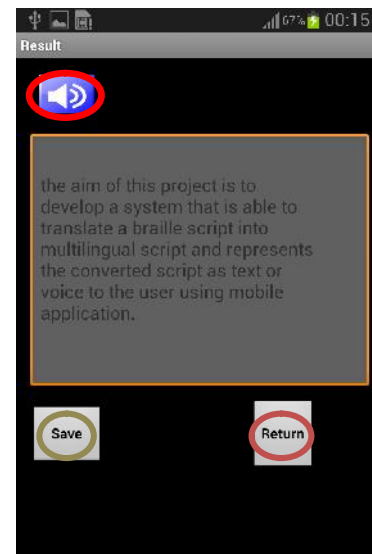


Figure 13: Result screen