Input-Corrective Drawing Pad User Manual

Jesse Jensen

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1 Introduction

This document provides guidance which is intended to assist the user of the Input-Corrective Drawing Pad in utilizing its features. It is also a useful reference for/////// TODO

1.1 USE OF THIS DOCUMENT

The Introduction overviews the purpose and general use of the Input-Corrective Drawing Pad.

The remaining sections constitute specific processes to be followed and stand as a reference for individual steps.

The information in this document is not necessarily exhaustive. Reference to additional resources and user manuals will be included in this document in the 'Related Documents' section(1.3).

The Input-Corrective Drawing Pad will alternatively be referenced as 'the Drawing Pad' throughout this document

1.2 FUNCTION OF THE INPUT-CORRECTIVE DRAWING PAD

The Input-Corrective Drawing Pad is a drawing tablet designed to help users with fine motor skill challenges to write and draw with minimal error. It aids in this goal by implementing several features:

- Handwritten text recognition
- Line smoothing
- User error recognition and correction

1.3 RELATED DOCUMENTS

The document ['Raspberry Pi User Guide'](#) presents an overview of the installation, maintenance, troubleshooting, and schematics of the raspberry pi processor used for the Drawing Pad. Additionally, references to the Raspbian Operating System, which the Drawing Pad uses, is included in this documentation.
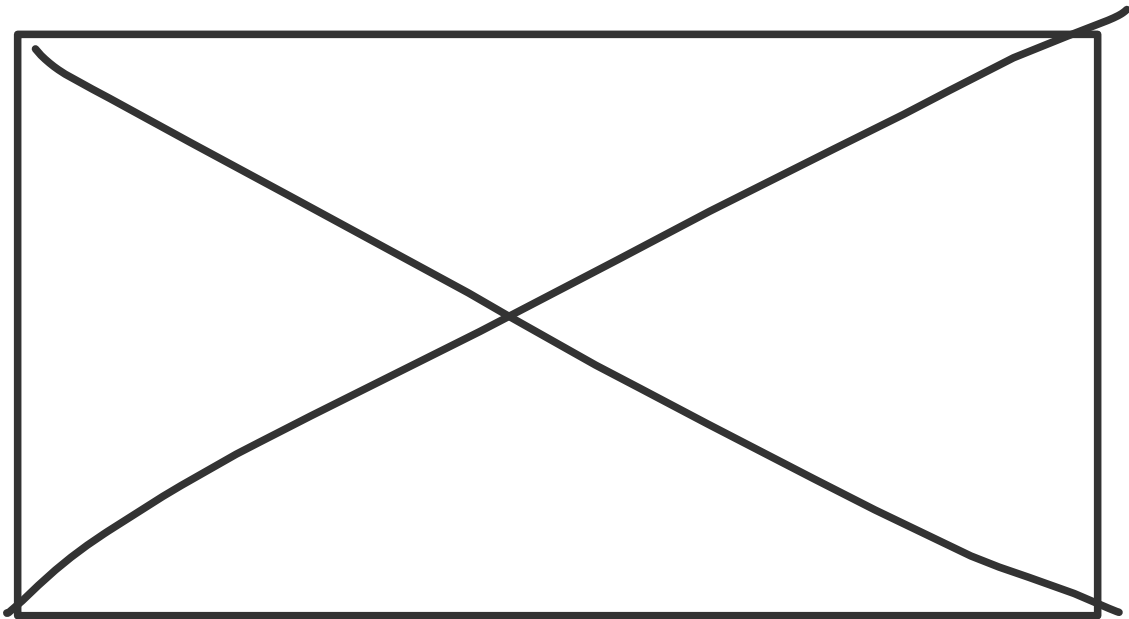
2 OVERVIEW

The Input-Corrective Drawing Pad corrects user drawings or writing. If the user inputs writing, the Drawing Pad also outputs recognized text to the textbox on screen.

The Drawing Pad contains three main hardware modules: the processor, the touchscreen, and the stylus. The user inputs data (in the form of writing or drawing) with the stylus onto the touchscreen. The stylus sends pressure-sensitivity data to the processor which it then combines with input coordinate data from the touchscreen. The processor then executes software to accomplish handwriting recognition and/or error correction. The result of the software is then output onto the touchscreen.

3 INSTRUCTIONS

3.1 Turning On the Device

Flip the switch on the side of the Drawing Pad. Wait for approximately 40 seconds until the drawing canvas appears as seen in Figure 1.

3.2 Converting Writing to Text

Click on the button titled "Writing Mode", which will activate handwritten text and number recognition. Draw the character to be printed as text. Wait for 2 seconds for the text to be output to the textbox.

To insert a space (" "), tap the 'Space' button at the bottom of the screen. To insert punctuation, tap the desired character from the selection at the right-hand side of the screen.

To remove an undesired character, tap the 'Backspace' button.

3.2.1 Saving Text to a '.txt' file

1. Tap on the 'Options' menu in the top left corner of the screen.

2. From the drop-down menu, tap the 'Save' option.

3. Write to the canvas the name you wish to save the file as (pausing 2 seconds between characters until they appear in the text box).

Files are located under the 'Texts and Images' folder on the Drawing Pad. This folder is accessed by tapping the 'x' at the top-right corner of the screen and double-tapping the folder icon titled 'Texts and Images'.

3.3   Drawing pictures

First, ensure that the Drawing Pad is in Drawing Mode by tapping the 'Drawing Mode' button at the top of the screen. Then, draw the desired picture to the screen.

3.3.1 Changing the color of the brush

1. Tap the '_____' menu on the top, right-hand corner of the screen.

2. Tap 'Change Brush Color'.

3. Select the color desired by tapping and dragging the red, green, and blue slider bars.

3.3.1 Changing the color of the background

1. Tap the '_____' menu on the top, right-hand corner of the screen.

2. Tap 'Change Background Color'.

3. Select the color desired by tapping and dragging the red, green, and blue slider bars.

3.4 Charging the Device

Insert USB-Micro cable into the side of the Drawing Pad as seen in Figure 3.