

SOFTWARE REVIEW

IMb Reader for Android

Developer: Infinity Software Solutions LLC

Software Version: 2.5

Platform: Android 1.6 and above

OVERVIEW:

IMb Reader is Android smart phone software that decodes USPS Intelligent Mail barcodes that are printed on mail pieces. The 65 bars in the IMB can be tall or short and are placed in various positions relative to the baseline to indicate their value.

Without IMb Reader installed on a smart phone, document center staff have to read barcodes by placing them under permanently-mounted cameras, such as may be found on inserting equipment, or use hand-held scanners that typically cost \$200 - \$400. This software can be downloaded to your phone for \$9.99.

IMb Reader is not meant to replace dedicated mail piece verification equipment such as those devices that emulate tests performed by the MERLIN units installed at USPS acceptance facilities. However, it will detect some codes that might be determined to be unreadable by MERLIN due to blurry images, dropouts, missing bars, or excessive skew while the mail is still in the plant.

The software returns the following data from the barcode:

Barcode ID & Description
Service Type ID & Description
Mailer ID
Serial Number
Zip Code (Zip Code Lookup optional)
Zip+4 (Zip4) Code
Delivery Point

Scan data can be read and discarded or saved to a history file.

IMb Reader is software that can be downloaded from the Android Market directly to a compatible Android phone. The program is ready to use immediately after downloading and accepting the terms of use.



At the present time, the software is available only for Android phones. Apple iPhones and Blackberry phones are not supported.

INSTALLATION:

We downloaded the IMb Reader from the Android Market with no problems. The software downloaded swiftly and installed itself on the phone. Once we accepted the Terms of Service an icon for the software appeared on the main applications screen, ready for use.

TESTING:

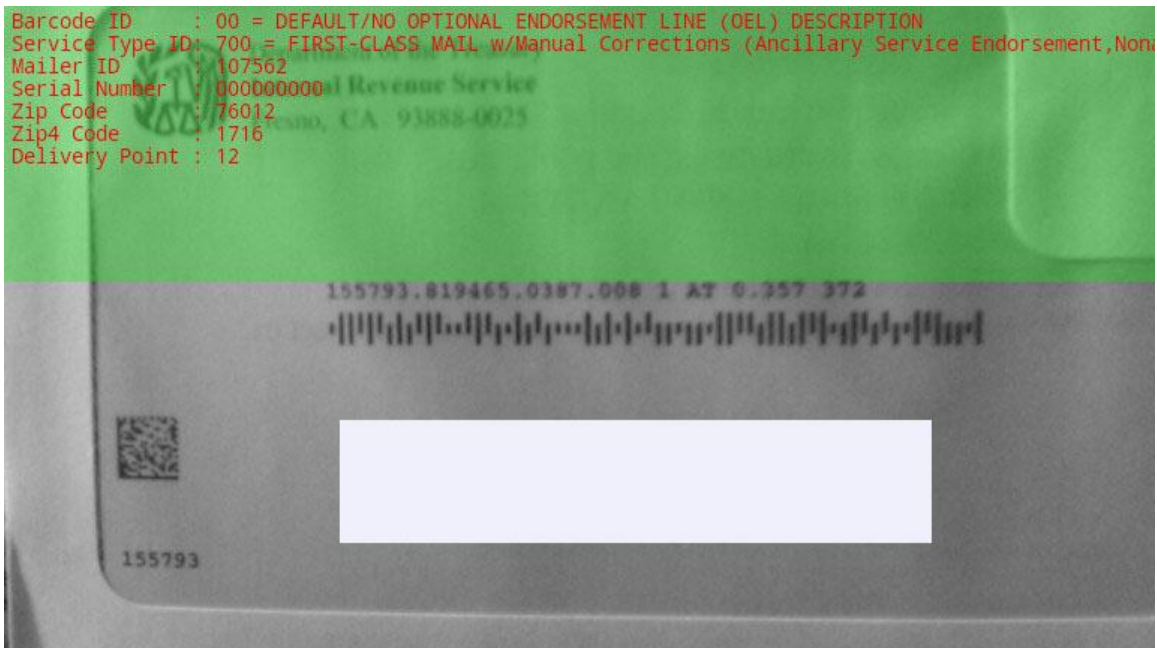
We used an HTC Evo 4G smart phone and tested several pieces of actual mail including magazines, transactional documents, and direct mail advertisements. The samples were printed on various types of paper including coated stock. Some of the samples were printed with inkjet technology while others appeared to have been laser printed. Several of the scans were performed through glassine windows on live mail pieces.

Scanning was flawless on most of the samples. The only difficulty we had was with a magazine that did not lay completely flat. Holding the material down with one hand while scanning seemed to take care of the problem.

Scanning is a simple procedure. After starting up the program, orient the phone horizontally. Move the camera about so the red line in the viewfinder is parallel to the barcode and crosses every one of the bars. Position the camera so the entire barcode appears in the viewfinder and hold it steady. As soon as the camera captures the image, the phone beeps and the captured data is displayed. There are no buttons to push, making one-hand operation quite easy.



After capturing the image the user has the option of saving the scan image and data to history by entering a job ID and description. Viewing the saved image calls up a jpeg picture of the scanned bars superimposed with the captured data fields. This jpeg can be emailed as an attachment directly from the application.



Scanned image from History

In the Settings menu, the user has the option of toggling the length of the Mailer ID field between 6 digits and 9 digits. Mailer ID's are assigned by the USPS based upon the volume of mail produced by individual mailers. Those with higher volumes receive a 6-digit Mailer ID, leaving more digits available for Mail Piece ID. Lower volume mailers receive a 9-digit Mailer ID. Most mailers will make the appropriate setting on their phones for their own environment and then never need to change it.

Also in the Settings menu, is an option to enable or disable a zip code lookup function. Enabling zip code lookup allows the software to interpret the city and state, based upon the 5-digit zip code captured by the scan. The destination lookup is not based on an official USPS database so it should be used only as a reasonability check. The limitations of the zip code lookup is clearly communicated in a disclosure that the user must accept before enabling zip code lookup.

A help section is included that describes how to use and manipulate the software.

CONCLUSION:

We could find no drawbacks or limitations to this software. An added feature in version 2.5 is the addition of a barcode ID and service type ID description, relieving the user from having to refer to external charts or reference materials to determine the meanings of these codes.

Scanning Intelligent Mail barcodes with IMb Reader is quick and easy. Document professionals can use the program to check that Mailer ID's are accurately represented in barcodes, that Mail Piece ID's are falling within the correct pre-defined range to maintain uniqueness, and to verify that the mail pieces are requesting the USPS services as intended.

This can be an inexpensive way to check new applications while testing or to spot check live production. Programmers can verify that barcodes are correct without being issued an expensive scanner or having to interrupt mail center personnel to scan test pieces for them. The low price and easy installation makes it feasible to install the software on phones of multiple employees even if their use of the application will be sporadic.

While not specifically tested, reading barcodes on returned mail may also be of use, especially when the returned mail is processed in an area separate from the outbound mail production facility.