EM220II
Mobile Printer
Android Utility Manual
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FCC Compliance Statement

NOTE: This equipment has been tested and found to comply with the limits or a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet or circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this device shall be used in accordance with the operating conditions and instructions listed in this manual.

NOTE: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to insure compliance.

Changes or modifications to this unit not expressly approved by Zebra Technologies Corporation could void the user's authority to operate this equipment.
Canadian Compliance Statement
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
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1. Manual Information

This manual contains information about Android utility applications for Zebra printer models used in Android environment.

Android Utility Application has the following functions.

1) VMSM (Virtual Memory Switch Manager)
   This function is used to set the virtual memory switch used for the thermal printer suitable for the user’s environment.

2) NV Image Tool (Non-Volatile Image Tool)
   This function helps you to download user-defined images to the flash memory in the printer and to recall and print those images with fast speed.

3) FDU (Firmware Download Manager)
   A function that is used to download and install the latest Firmware, which is subject to ongoing modification for the enhancement of product performance (Firmware Download Manager)
2. Usage Environment

2-1 Operating System (OS) Environment

Supported Android OS version is 3.1 or later.

3. Detailed functions

3-1 Setting Interface

Types of interfaces are Bluetooth, WLAN and USB. Select the interface to use after selecting the option menu of your device.
1) Bluetooth

Select the Bluetooth Address of the printer to connect to. Bluetooth Address of the printer can be obtained from [RF Interface]-[Bluetooth BD address] in the self-test printed data.

If Bluetooth connection is desired, the connection between Android host and the printer should be established in advance. Please refer to the "Miscellaneous - Bluetooth Connection" around the end of this document for details about Bluetooth connection.
2) WLAN

Select the IP address of the printer to connect to. IP address of the printer can be obtained from [WLAN SETTING]-[IPADDR] in the self test printed data.

[Note]
For connected WLAN, please prepare wired/wireless router
3) USB

Select the USB information of the printer to connect to.

Connector with proper gender suitable for Android host is required to use USB interface. When USB is successfully connected to Android host with a connector with proper gender, application screen will be displayed on the screen.
3-2 VMSM (Virtual Memory Switch Manager)

1) Get Status
   Information of Virtual Memory Switch of the connected printer is received and displayed on the screen.

2) Set Status
   Set the desired functions and select the "Set Status" button to change the settings of the printer.
## 3) Itemized description

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Density</td>
<td>Sets printing density</td>
</tr>
<tr>
<td>Print Speed</td>
<td>Sets printing speed</td>
</tr>
<tr>
<td>Default Code Page</td>
<td>Sets the default code page (Refer to the Code Page Manual for more detailed information on the Code Pages supported.)</td>
</tr>
<tr>
<td>Default Font Type</td>
<td>Sets default font type and size</td>
</tr>
<tr>
<td>Beep Mode for Paper Status</td>
<td>Sets no beeping or beeping when reaching paper roll end</td>
</tr>
<tr>
<td>Beep Mode for Low Battery Status</td>
<td>Sets beeping when reaching low battery capacity</td>
</tr>
<tr>
<td>Auto Power Off Time</td>
<td>Sets time interval between absence of printer use and automatic turning off of printer power</td>
</tr>
<tr>
<td>Auto Power Saving Time</td>
<td>Sets time interval for automatic entering into power saving mode while the printer is in use</td>
</tr>
<tr>
<td>MSR Trigger</td>
<td>Sets MSR data scanning mode, 7 modes supported.</td>
</tr>
</tbody>
</table>
3-3 NV Image Tool

1) Image list management

Move the scroll bar below the image to adjust the brightness of the image. Press the Download button then the list of images stored in the printer will be displayed.

- Album: Load the image stored SD card.
- Download: Download the image in the printer.
- Refresh: Update the list of image stored in the printer.
- Print: Print the selected image.
- Print All: Print all images in the list.
- Remove: Deleted the selected image.
- Remove All: Delete all images in the list.
The only download file format is ".fls" and ".bin". It will take about one minute for downloading, but actual time may depend on specific printer. Printer must be restarted after finishing downloading.
4. Miscellaneous

4-1 Bluetooth connection

1) Turn on the printer power.

2) Select [Environment Setting] - [Bluetooth].
   Connection can also be enabled from [Environment Setting] - [WLAN and Network] – [Bluetooth Setting].

3) The list of Bluetooth devices that can be connected will be displayed as shown below if the "OFF" is changed to "ON" in the upper right corner. Select the device to connect from the list.
4) When the following Bluetooth registration screen pops up, enter the password and click OK. The password is 0000.

5) If the Bluetooth device to connect is listed in the "Registered Devices" as shown below, it means that the connection is established.
4-2 Bluetooth connection (Tablet PC)

1) Turn on the printer power.
2) Select [Environment Setting] and activate [Bluetooth] "ON”.
3) Select "Bluetooth" for Bluetooth connection.

4) When the "Search Devices" at the top of the screen is selected, the list of Bluetooth devices that can be connected will be displayed. Select the device to connect from the list.
5) When the following Bluetooth registration screen pops up, enter the password and click OK. The password is 0000.

6) If the Bluetooth device to connect is listed in the "Connected Devices" as shown below, it means that the connection is established.