



ZQ110

Mobile Printer

Unified Utility Manual

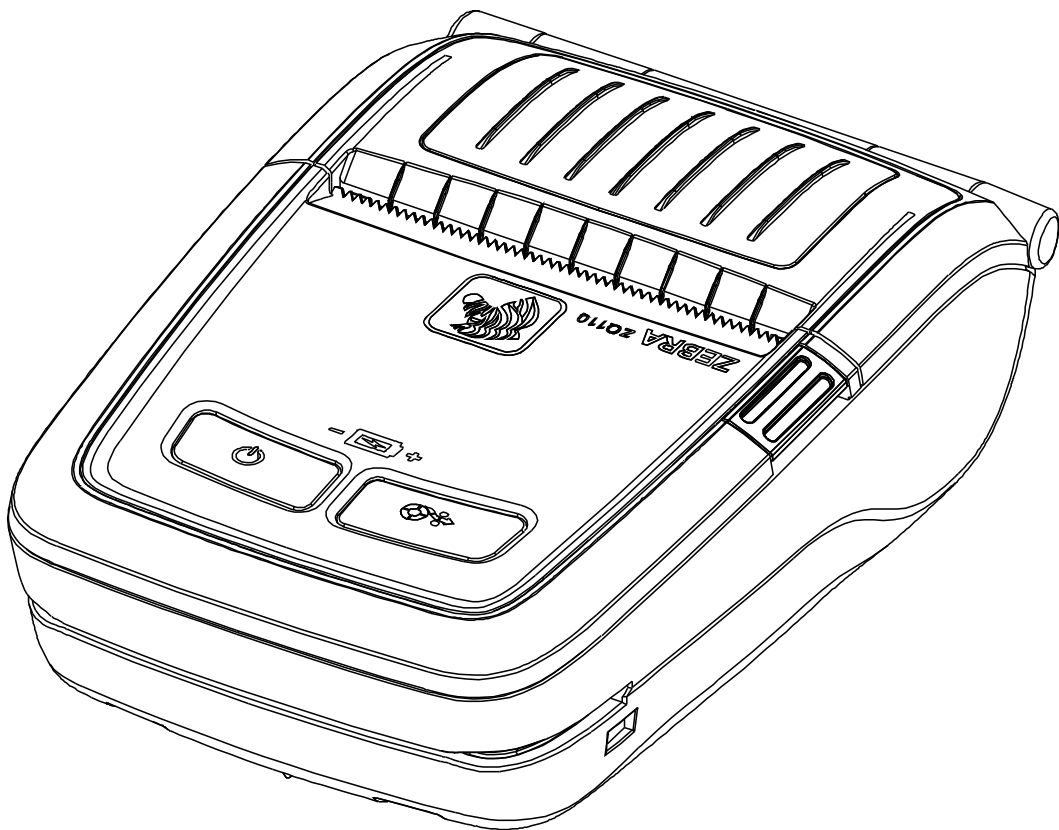


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NOTE: This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 with 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 the receiver.
- Connect the equipment to 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 ensure compliance.

Changes or modifications to this unit not expressly approved by Zebra Technologies Corporation could void the user's authority to operate this equipment.

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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. Notice

This Unified Utility Manual provides information on the utility program used to set printer operation conditions and add functions.

The utility program consists of three functions.

1. A function that sets printer operation conditions via non-hardware control, software-based virtual switches (**VMSM: Virtual Memory Switch Manager**).
2. A function that facilitates the downloading of image files, such as logos, intended for repetitive printing (**NV Image Download Manager**).
3. A function that downloads and installs the latest firmware, which is subject to ongoing modifications for the enhancement of product performance (**Firmware Download Manager**).

2. Operating System (OS) Environment

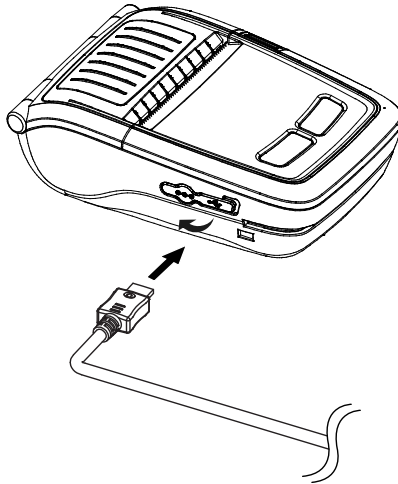
The following operating systems are supported:

- Microsoft Windows XP (32bit/64bit)
- Microsoft Windows 2003 Server (32bit/64bit)
- Microsoft Windows Embedded For Point Of Service
- Microsoft Windows VISTA (32bit/64bit)
- Microsoft Windows 7 (32bit/64bit)
- Microsoft Windows 8 (32bit/64bit)
- Microsoft Windows CE 5.0
- Microsoft Windows CE 6.0
- Microsoft Windows Mobile 5.0
- Microsoft Windows Mobile 6.x

3. Virtual Memory Switch Manager

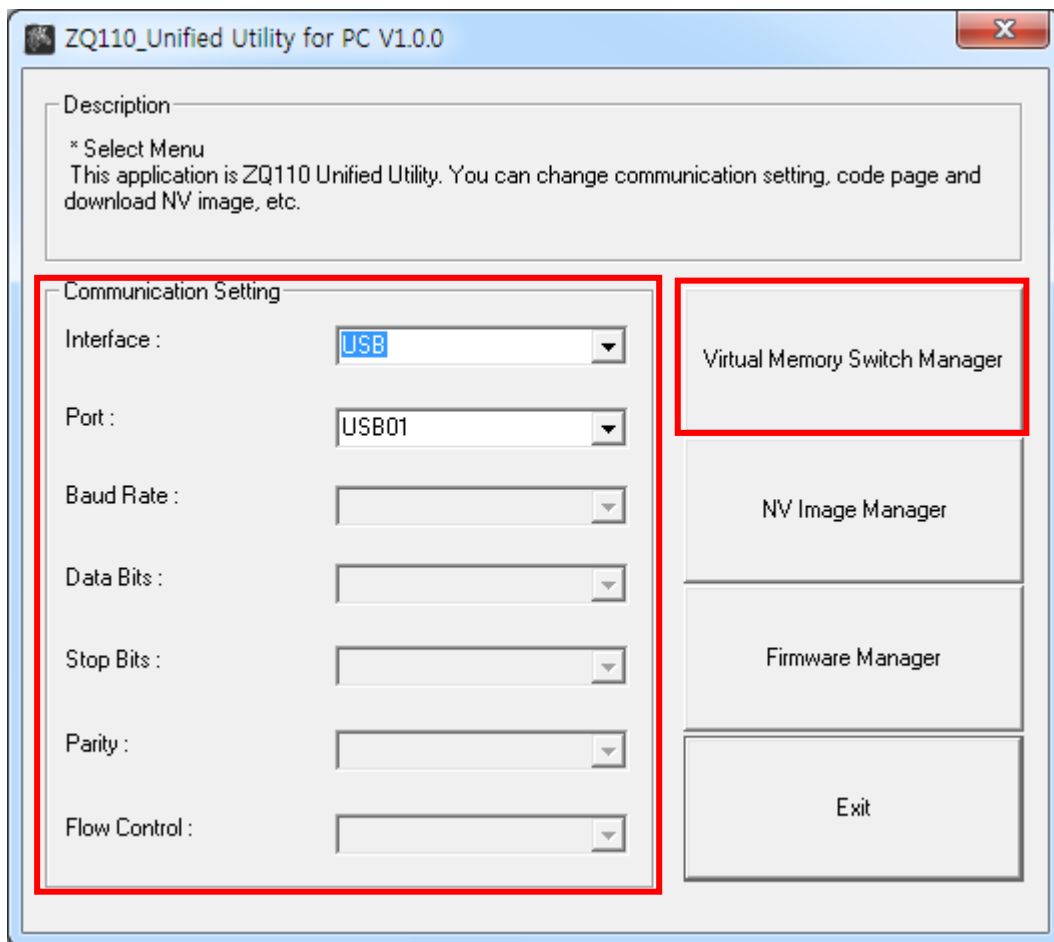
3-1 When Using on a PC

1. Connect the printer and the PC via the interface cable (USB type). If using Bluetooth, a cable connection is not necessary.



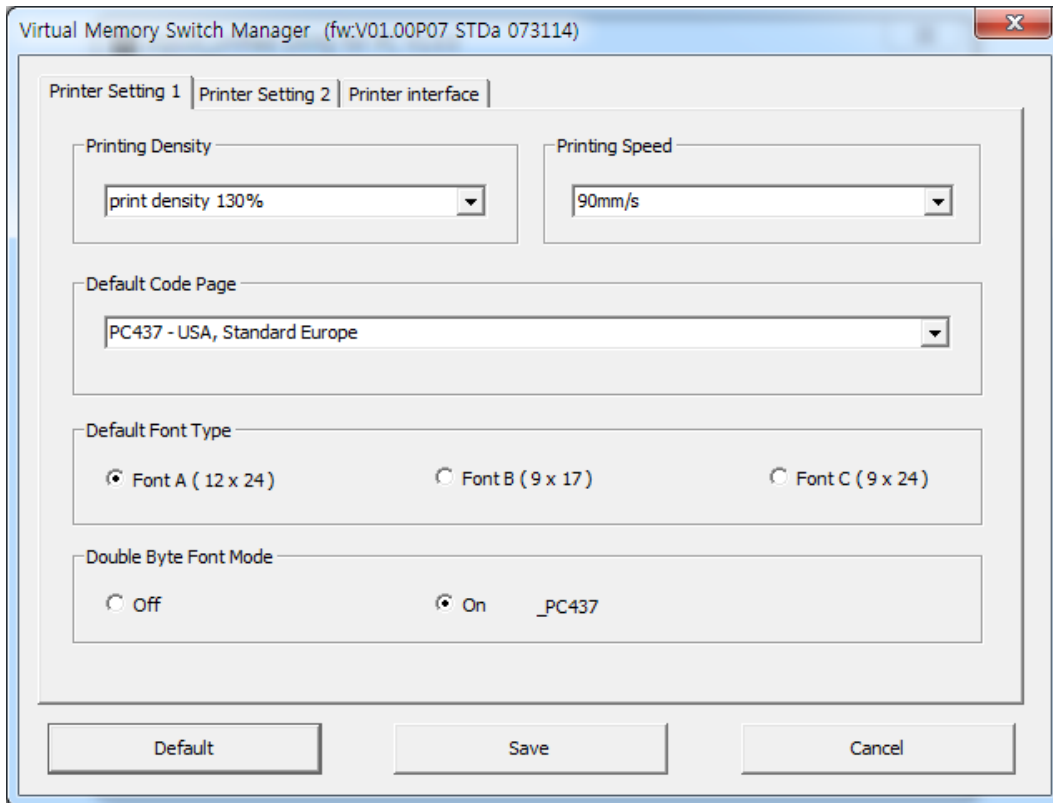
2. Turn on the printer.
3. Prepare the Unified Utility executable file to be used on the PC.
The executable file can be found on the enclosed CD.
(ZQ110_Unified Utility for PC ver 1.x.x.exe)
4. Run the Unified Utility executable file.

5. Select **Port** and click **Virtual Memory Switch Manager**.
Refer to the *Bluetooth Connection Manual* regarding the port (may vary according to device).

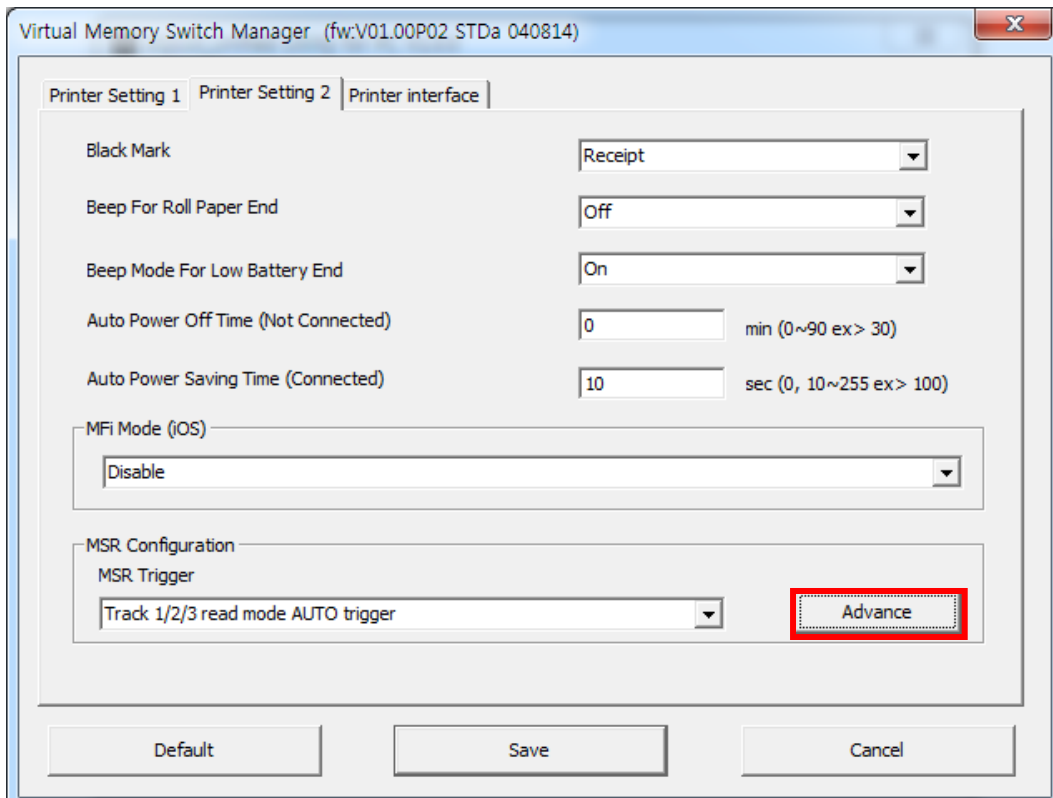


6. The Virtual Memory Switch settings for the printer displays.

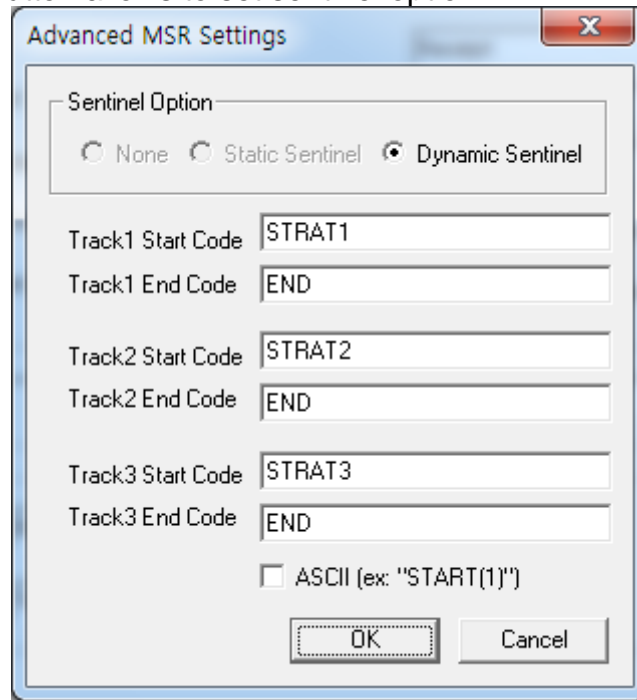
- a. In a Printer Setting tab 1, printer density, speed and code page setting is available.



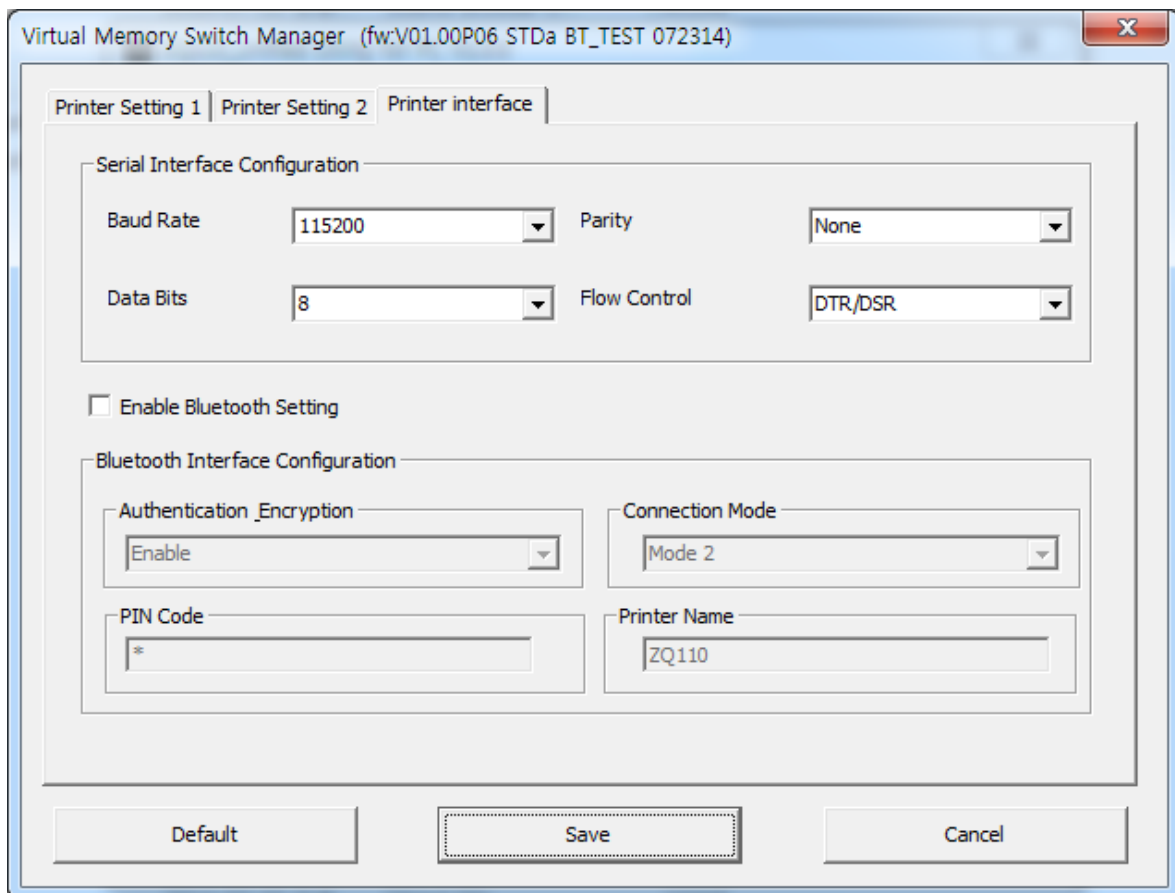
- b. In a Printer Setting tab 2, black mark, beep sound(beeping) setting according to the paper status is available.



c. "Advance" button allows to set sentinel option



d. In a Printer Interface tab, bluetooth information setting is available.



7. After setting the desired function(s), click **Save** to store the settings.
The functions per category are as follows:

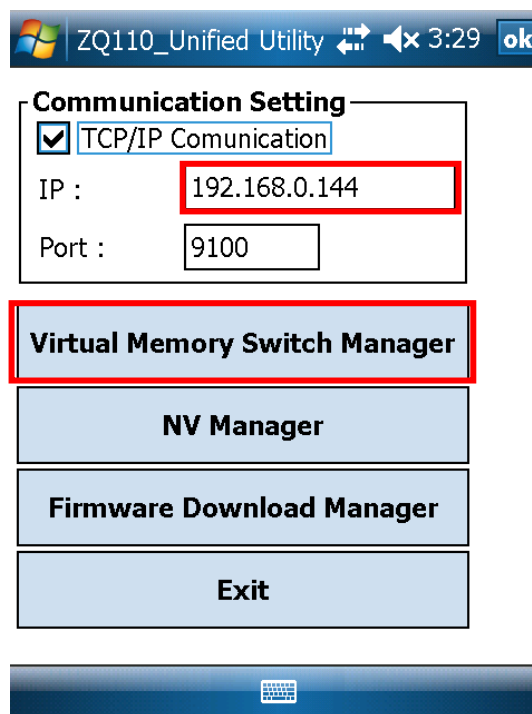
Function	Description
Printing Density	Sets printing density Value range: 80-150%
Printing Speed	Sets printing speed Value range: 50 or 90 mm/s
Default Code Page	Sets the default code page (Refer to the <i>Code Page Manual</i> for more detailed information on supported Code Pages.)
Default Font Type	Sets default font type and size
Double Byte Character Mode	Sets double byte language usage mode
Black Mark	Black Mark change receipt mode or black mark mode.
Beeps for Paper Roll End	Sets no beeping or beeping when reaching paper roll end
Beeps for Low Battery End	Sets beeping when reaching low battery capacity
Auto Power Off Time	Sets time interval between idle printer and automatically turning off printer power
Auto Power Saving Time	Sets time interval for automatically entering into power saving mode while the printer is in use
MSR (Magnetic Stripe Reader) Trigger	Sets MSR data scanning mode, 7 modes supported (Refer to "GS (E" in the "Command Manual".)
RF Interface Configuration	Sets Wireless connection type (WLAN, Bluetooth)
Serial Interface Configuration	Changes the Serial Interface setting * After changing this setting, printer must be reset for the change to take effect.
Authentication & Encryption	Sets or cancels Authentication & Encryption mode when connecting via Bluetooth * If Authentication & Encryption mode is disabled, connection to a device can be done without entering a PIN.
Connection Mode	Sets Mode1, Mode2, or Mode3 when connecting via Bluetooth. <ul style="list-style-type: none"> • Mode1: Connection possible only with the first device with which connection succeeds. • Mode2: Connection with all Bluetooth-enabled devices possible via a PIN. • Mode3: Connection possible only with the first device with which connection succeeds, and searches for or use of connected device possible.
PIN Code	Changes the PIN required for Bluetooth connections. (maximum 12 characters long)
Printer Name	Changes the device name created when establishing a Bluetooth connection (maximum 12 characters long)

* You may check authentication, Encryption mode as well as Connection mode of the Bluetooth from self test page.

8. Reset the printer.

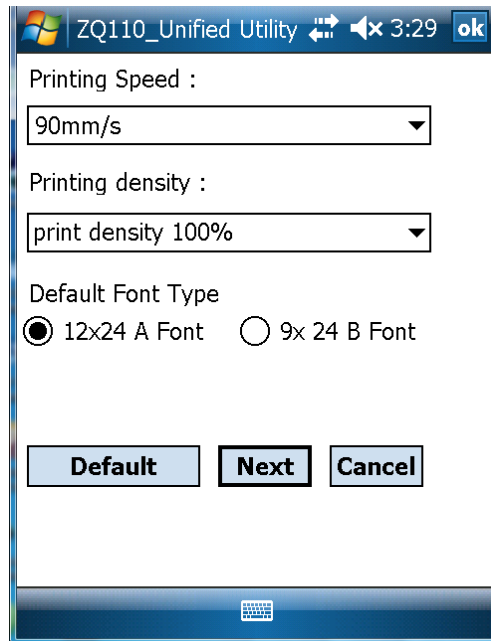
3-2 When Using on a PDA

1. Turn on the printer.
2. Prepare the Unified Utility executable file to be used on the PDA.
The executable file varies according to CPU and may be found on the enclosed CD.
 - ARMV4: ZQ110_ Unified Utility for PPC armv4 ver 1.x.x.exe
 - ARMV4I: ZQ110_ Unified Utility for PPC armv4i ver 1.x.x.exe
3. Run the Unified Utility executable file.
4. Select **Port** and click **Virtual Memory Switch Manager**.
Refer to the *Bluetooth Connection Manual* regarding the Port (may vary according to device).

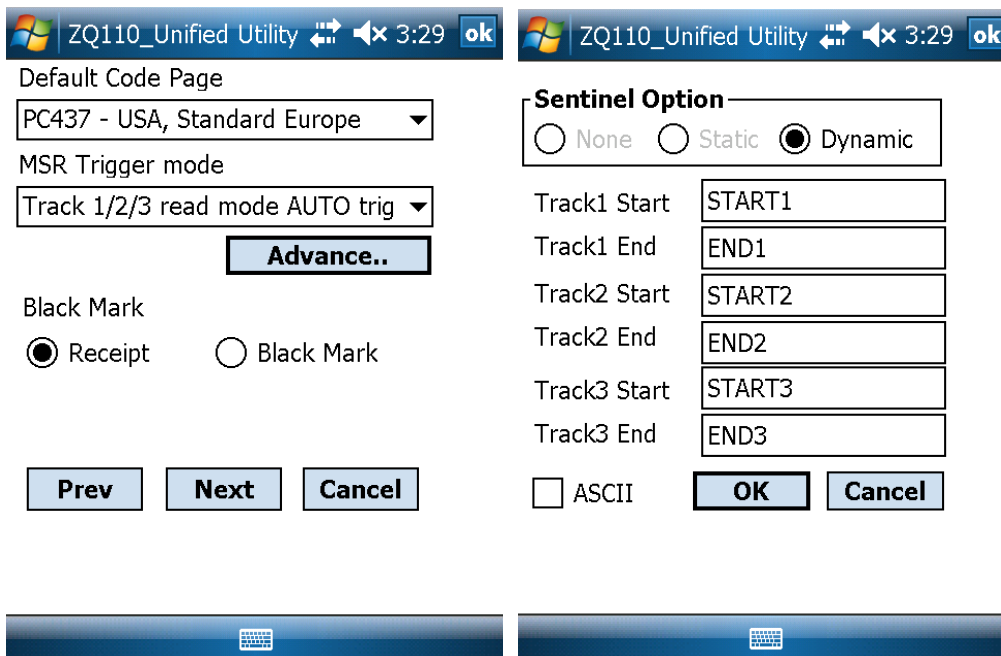


5. The Virtual Memory Switch settings for the printer are received and display.

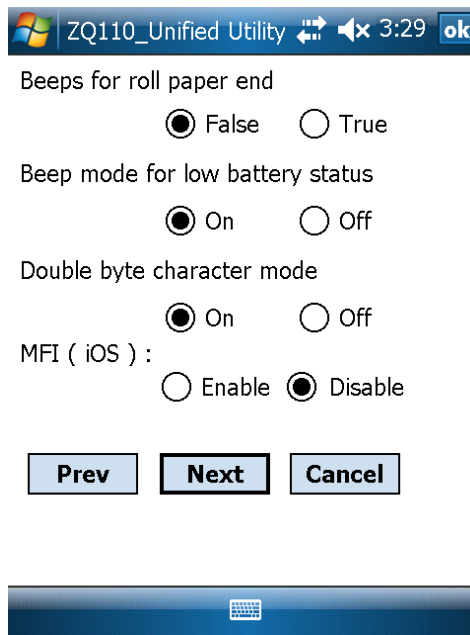
6. After setting the desired function, click **Next**.
 (The functions per category are identical to those on the PC.)
- * Click **Default** to return the printer to the default settings.



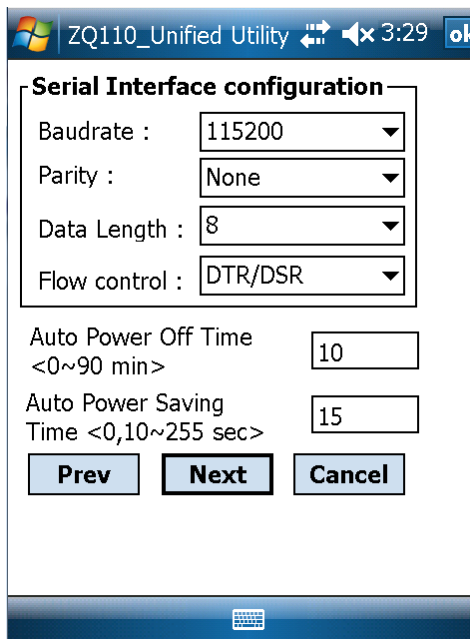
7. After setting the desired function, click **Next**.
 (Clicking **Prev** returns to the previous screen.)



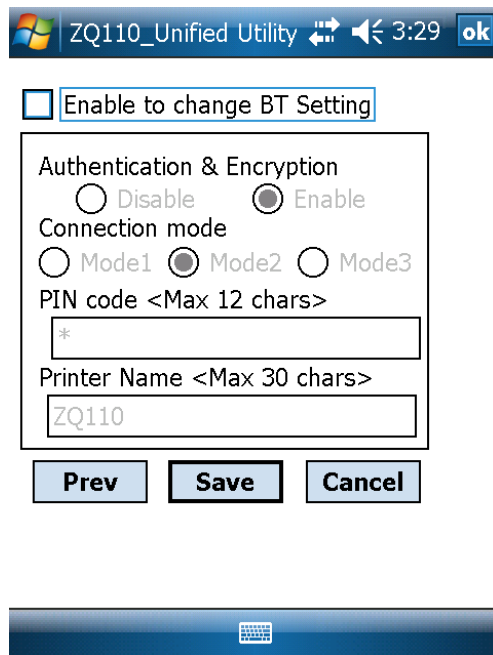
8. After setting the desired function, click **Next**.



9. After setting the desired function, click **Next**.



10. After setting the desired function, click **Save**.

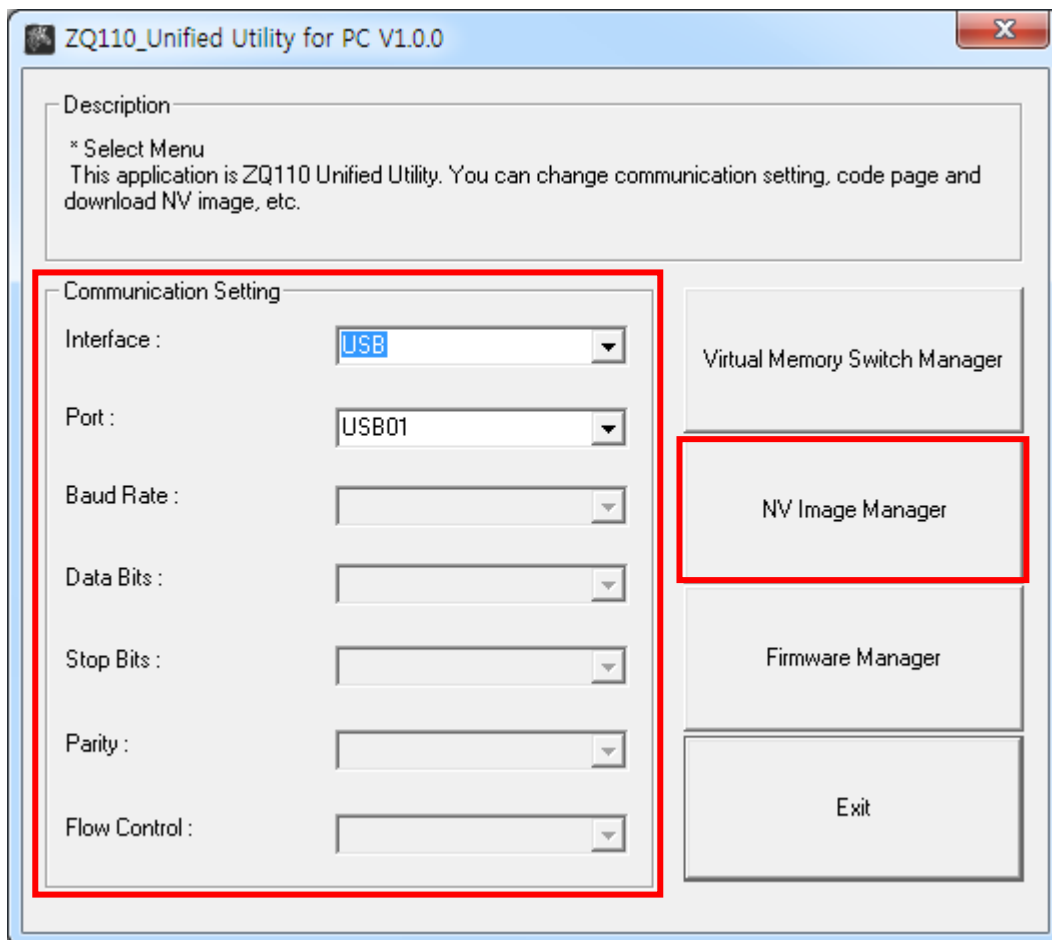


11. Reset the printer.

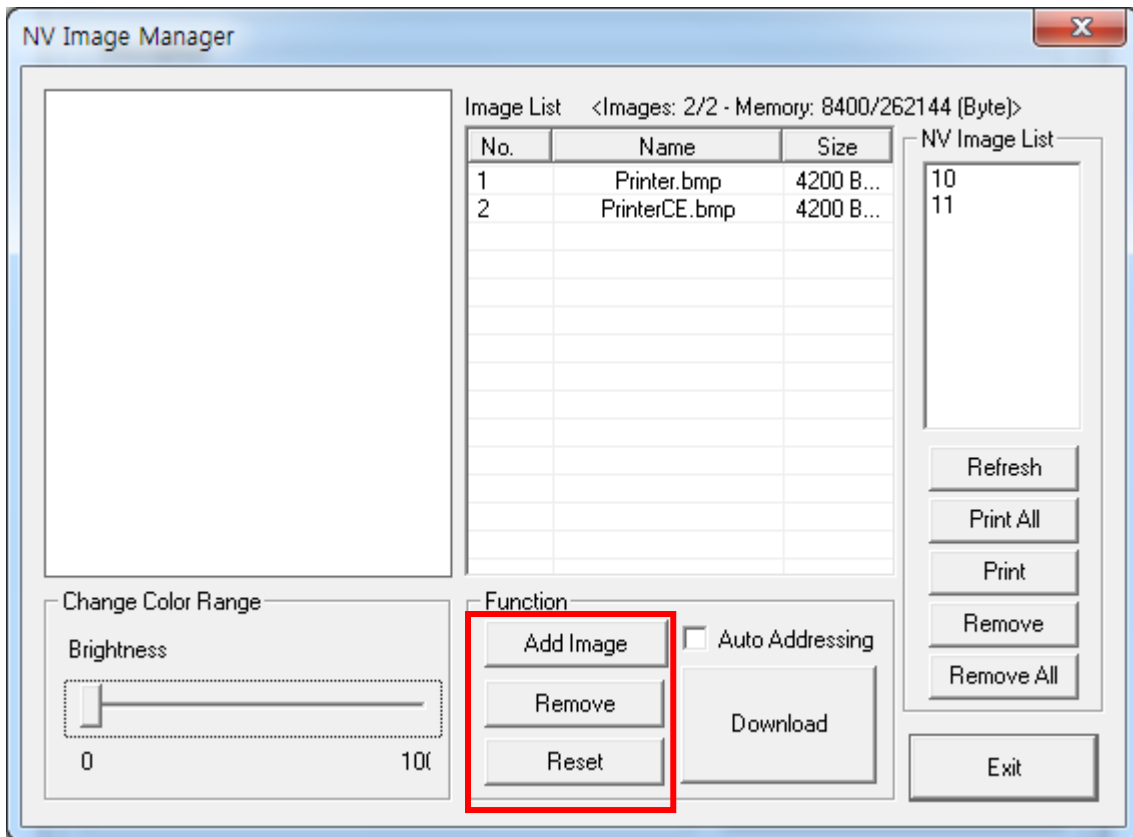
4. NV Image Download Manager

4-1 When Using on a PC

1. The printer connection method and instructions for running the Unified Utility executable file are identical to those provided in section 3. **Virtual Memory Switch Manager**. Refer to the aforementioned section.
2. Prepare the image file on the PC (for example, Main.bmp)
3. Select **Port** and click **NV Image Manager**.
Refer to the *Bluetooth Connection Manual* regarding the Port (may vary according to device).



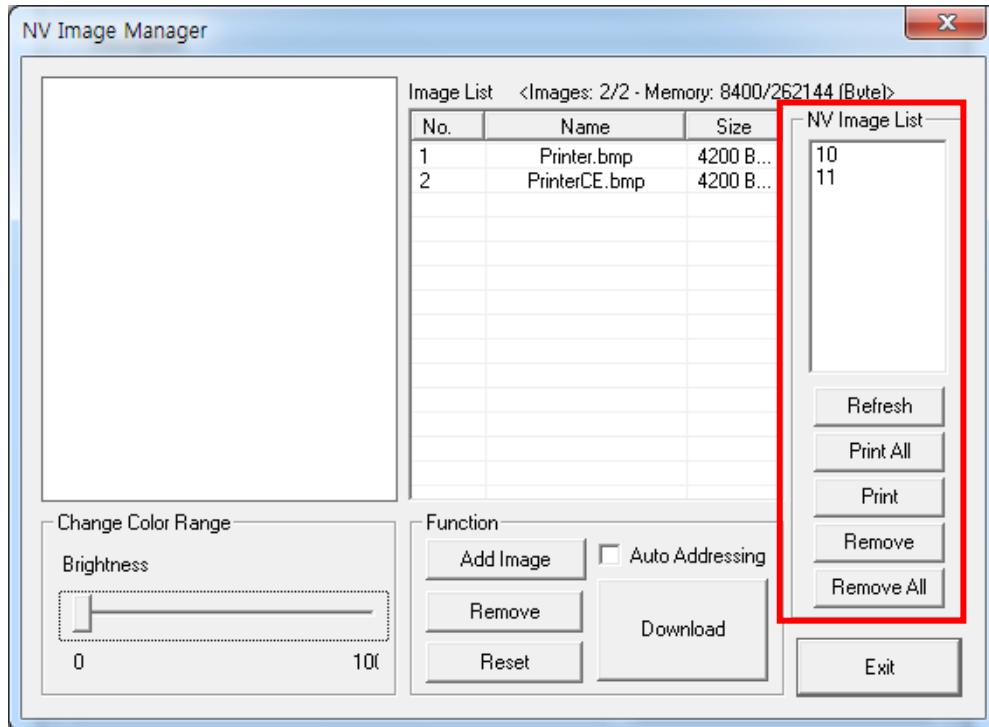
4. Click **Add Image** to add the desired image(s) to the image list.
Click **Remove** to delete selected image(s), and click **Reset** to delete the entire image list.



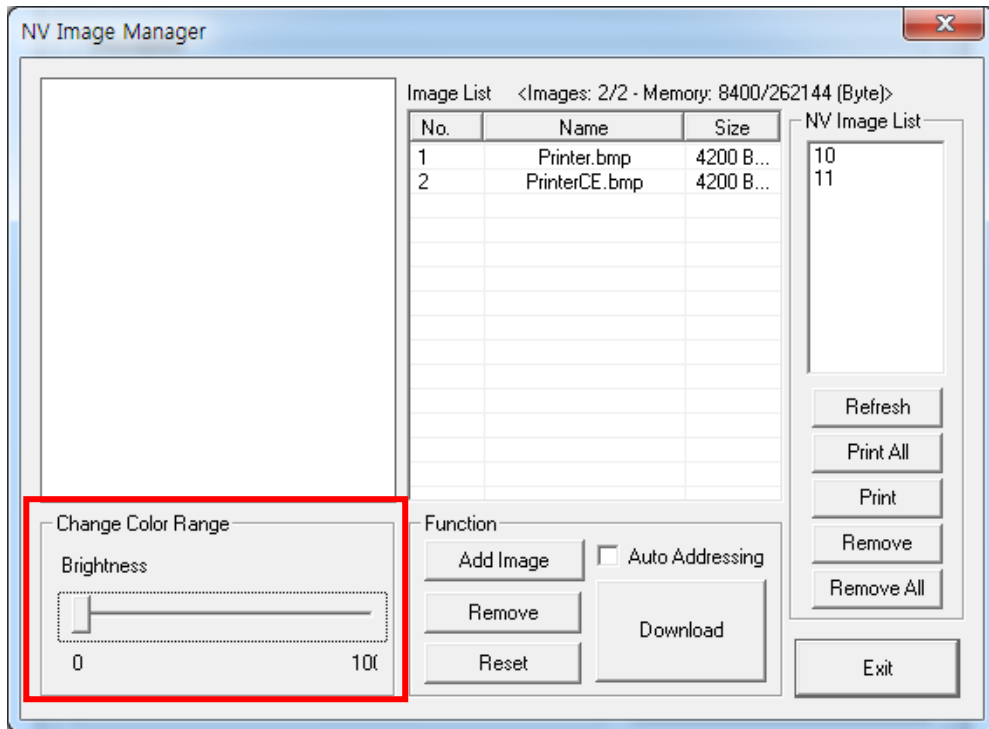
5. The NV Image List contains the address numbers of saved images.

The following buttons can be used to handle saved images.

- **Print All:** Prints all images in the list
- **Print:** Prints selected image(s)
- **Remove All:** Delete all images

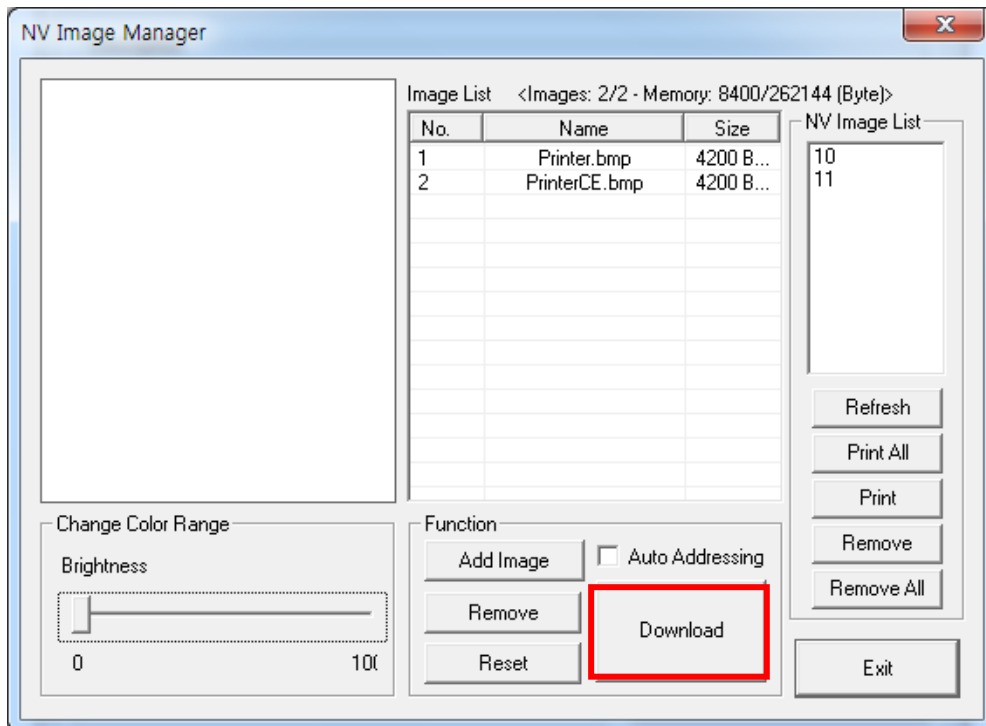


- After selecting an image from the image list, adjust the brightness level to set the brightness of the image to be downloaded.



- Click **Download** to download the image(s).

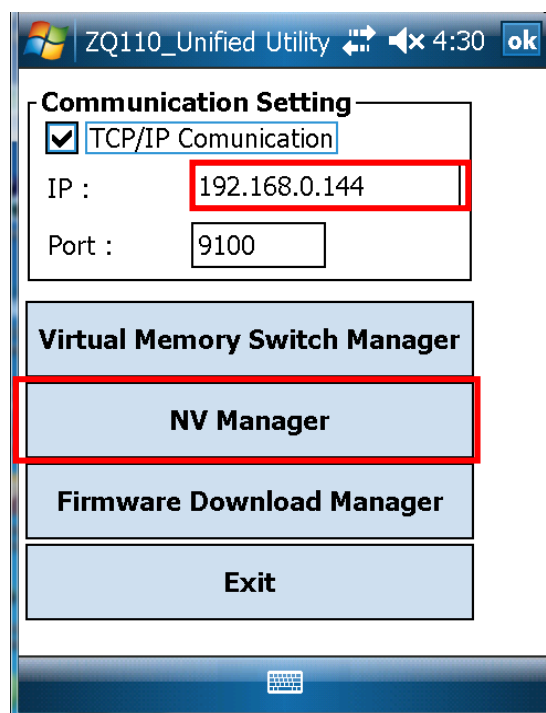
Checking **Auto addressing** automatically saves address numbers.
(Manual input is required if unchecked.)



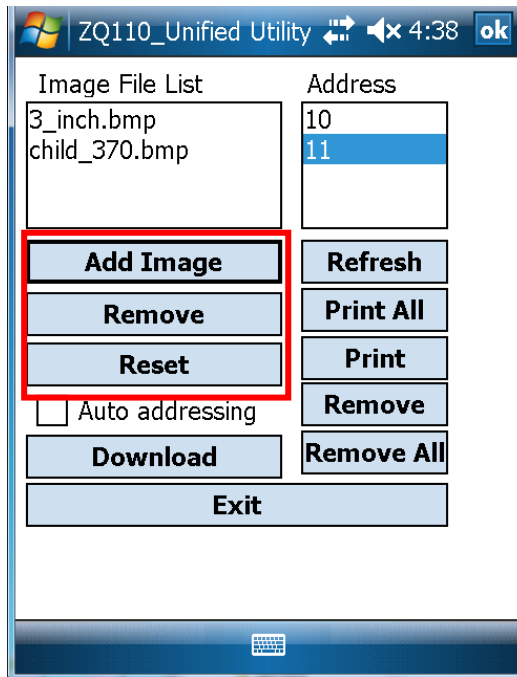
- When downloading is complete, the saved address numbers appear in the **NV Image List**.

4-2 When Using on a PDA

1. Turn on the printer power.
2. Prepare the Unified Utility executable file to be used on the PDA.
The executable file varies according to CPU and may be found on the enclosed CD.
 - **ARMV4: ZQ110_ Unified Utility for PPC armv4 ver 1.x.x.exe**
 - **ARMV4I: ZQ110_ Unified Utility for PPC armv4i ver 1.x.x.exe**
3. Prepare the image file on the PDA (for example, Main.bmp)
4. Run the Unified Utility executable file.
5. Select **Port** and click **NV Manager**.
Refer to the *Bluetooth Connection Manual* regarding the port (may vary according to device).



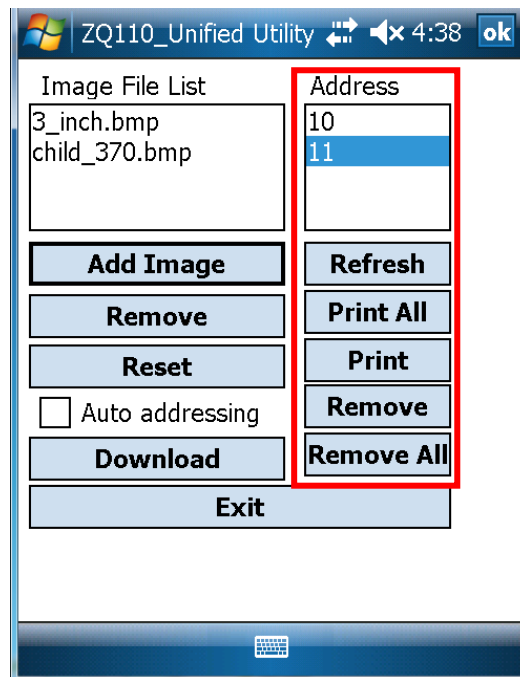
6. Click **Add Image** to add the desired image(s) to the image list. Click **Remove** to delete selected image(s), and click **Reset** to make modifications.



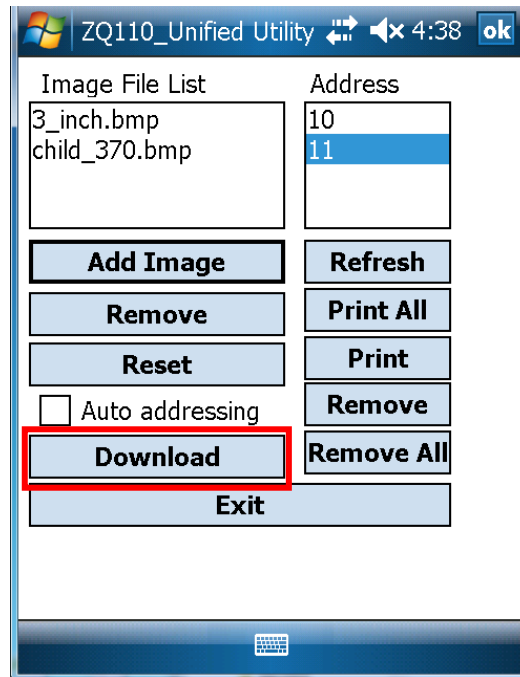
7. The **Address** field contains the address numbers of saved images.

The following buttons can be used to handle saved images.

- **Print**: Prints selected image(s)
- **Print All**: Prints all images in the list
- **Remove All**: Delete all images



8. Click **Download** to download the image(s).
Automatically saves address numbers. (Start Address is “00”.)



9. When downloading is complete, the saved address numbers appear in the “address”.

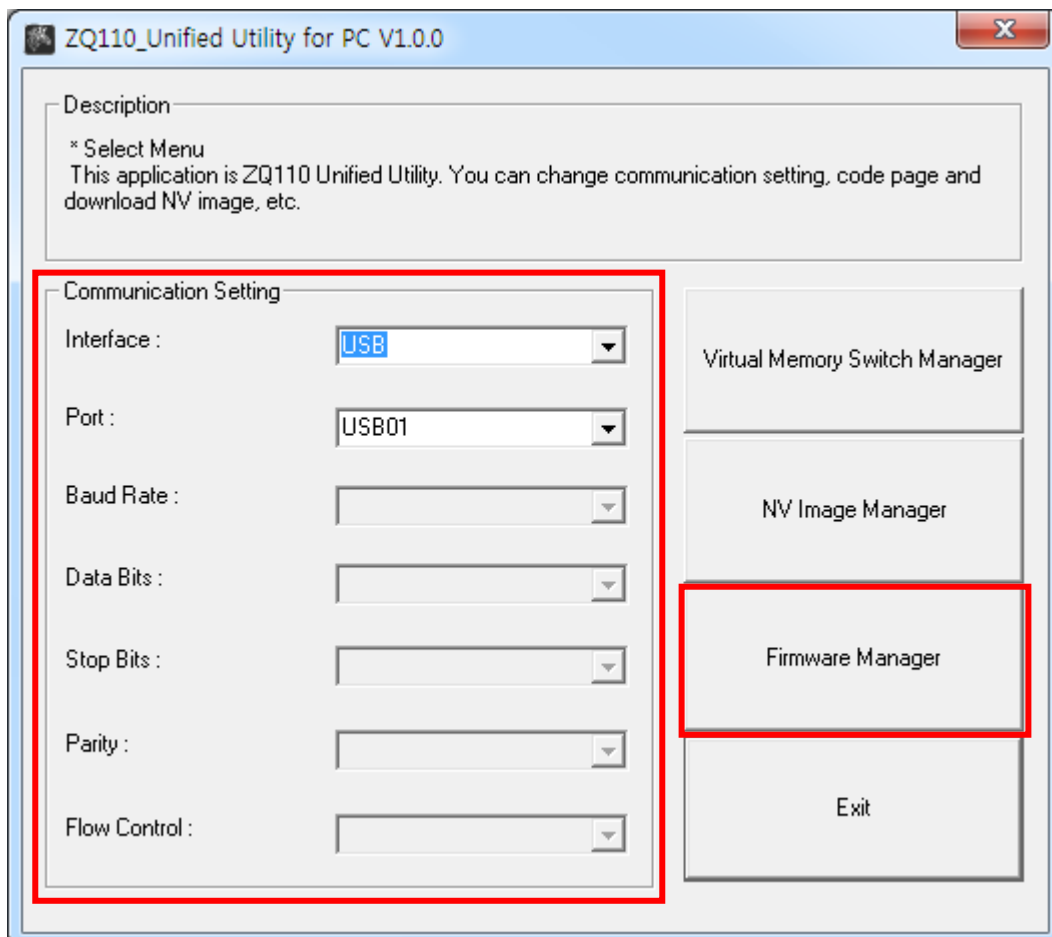
5. Firmware Download Manager

5-1 When Using on a PC

The printer is already equipped with standard firmware.

To download and install firmware on the ZQ110 printer, follow the steps below:

1. The printer connection method and instructions for running the Unified Utility executable file are identical to those provided in section **3. Virtual Memory Switch Manager**. Refer to the aforementioned section.
2. Prepare the firmware file on the PC.
Firmware can be upgraded to improve printer performance.
3. Select **Port** and click **Firmware Manager**.
Refer to the *Bluetooth Connection Manual* regarding the port (may vary according to device).



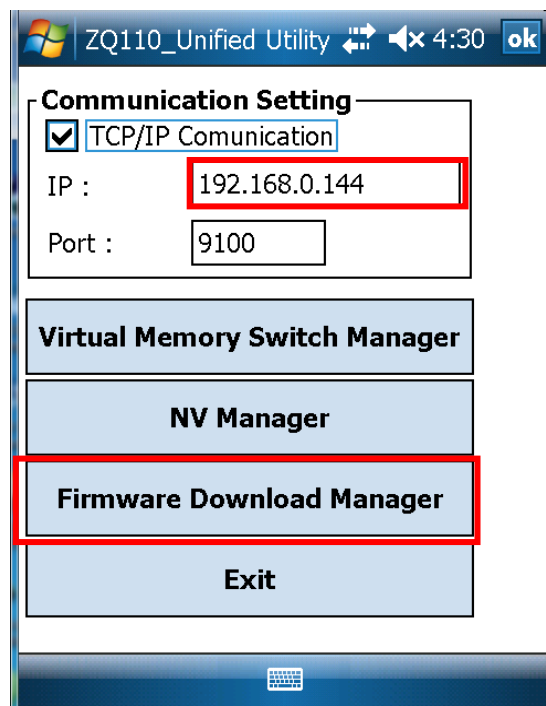
4. Download firmware; refer to section **5-3 Instructions for Firmware Download** for specifics.

5-2 When Using on a PDA

The printer is already equipped with standard firmware.

To download and install firmware on the ZQ110 printer, follow the steps below:

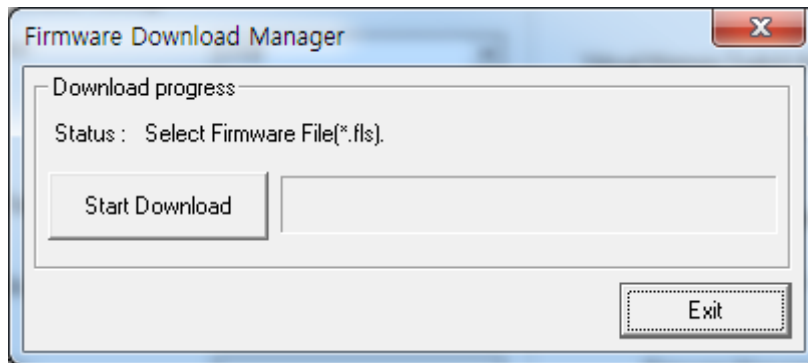
1. Turn on the printer power.
2. Prepare the Unified Utility executable file to be used on the PDA.
The executable file varies according to CPU and may be found on the enclosed CD.
 - **ARMV4: ZQ110_ Unified Utility for PPC armv4 ver 1.x.x.exe**
 - **ARMV4I: ZQ110_ Unified Utility for PPC armv4i ver 1.x.x.exe**
3. Prepare the Firmware file on the PDA.
Firmware can be upgraded to improve printer performance.
4. Run the Unified Utility executable file.
5. Select **Port** and click **Firmware Download Manager**.
Refer to the *Bluetooth Connection Manual* regarding the port (may vary according to device).



6. Download firmware; refer to section **5-3 Instructions for Firmware Download** for specifics.

5-3 Instructions for Firmware Download

1. Open the Unified Utility.
2. Run the Firmware Download Manager to download the firmware file (extension: *.fls).



3. While downloading the firmware, the printer's status advances as follows:
 - a. Green LED lights are lit.
 - b. Red LED lights are lit.
 - c. Blue LED lights are lit.
 - d. All three LED's turn on.
4. After step 3 is complete, reset the printer.
5. Open the Unified Utility.
6. Run Firmware Download Manager to download the font file (extension: *.fls) which matches your downloaded firmware.

The list below provides a map of font files to firmware.

- In case of KROB: mobile_godic.flc
- In case of CHOB: mobile_big5.flc
- In case of CNOB: mobile_gb2312.flc
- In case of JPOB: mobile_japfont.flc

Note: You do not need to reset the printer to use the fonts. You do not need to download the fonts in any specific order.

7. After downloading the firmware and fonts, you will need to set the memory switches according to user preferences and printer hardware settings.