iOS NPI SDK
User Manual

Nippon Printer Engineering, Inc.
2014/07/01
SDK Version. 1.0.0.0

Precaution

This user manual contains the setting/procedure necessary for simple demo by SDK app (NPI SDK) for iOS.

Specifically,
·Pair/Connect with printer (at the setting screen)
·Create printer information
·Open printer
·Sample print
·Status check
·Normal print / Image print
·Close printer

This user manual does not explain other function such as obtaining extended information, barcode print and log check.
Please refer to "SDK guide (iOS)" separately.

Also, the error code is shown as "Return Code:~" at the top of App after clicking each button. (~ is numerical number)

0 means successful and negative value means an error.
**Please refer to SDK guide for error code table.**

<Advance preparation 1 (pairing)>

You can pair with the printer at "setting" of each iOS terminal.

Please put on Bluetooth.

Please pair with the printer by clicking NEX-M230.

[Bluetooth model name setting]
<<GS y Dn NULL>>
It enables you to change the printer name by using the command.

<Advance preparation 2 (pairing)>

You can pair with the printer at "setting" of each iOS terminal.

iPad 📶	18:50	＊ 100% 🔋⚡
設定	**Bluetooth**	

✈ 機内モード	⚪	
📶 Wi-Fi	H181220	
＊ Bluetooth	オン	

Bluetooth 🟢

デバイス

NEX-M230　　　　接続されました ⓘ

検出可能

📇 通知センター

🔲 コントロールセンター

🌙 おやすみモード

⚙ 一般

🏵 壁紙/明るさ

🔊 サウンド

🔒 パスコード

✋ プライバシー

☁ iCloud

✉ メール/連絡先/カレンダー

📒 メモ

📋 リマインダー

💬 メッセージ

📷 FaceTime

🗺 マップ

🧭 Safari

Advance preparation is completed if "connected" is displayed.

In addition, if you turn OFF the printer while keep holding it, "not connected" will be displayed.
In this case, the communication is disabled.

Also, "not connected" will be displayed when turning OFF Bluetooth of iOS terminal and returning to ON .

Please pair the printer again to put into "not connected" state.

* In case of putting ON the reconnection function with the printer setting, the printer will automatically be connected to the last connected iOS terminal. (Memory switch 2-6)

Please check the product specification for more details.
It may take long for the normal connection by setting ON.

<Run NPI SDK App>

Please install "NPI SDK" app from Apple Store.

By running app and clicking "start" button at the home screen, the following screen will be shown.

**At first, clicking "Information/Setting" button
to create the printer information**

＜Create printer information＞
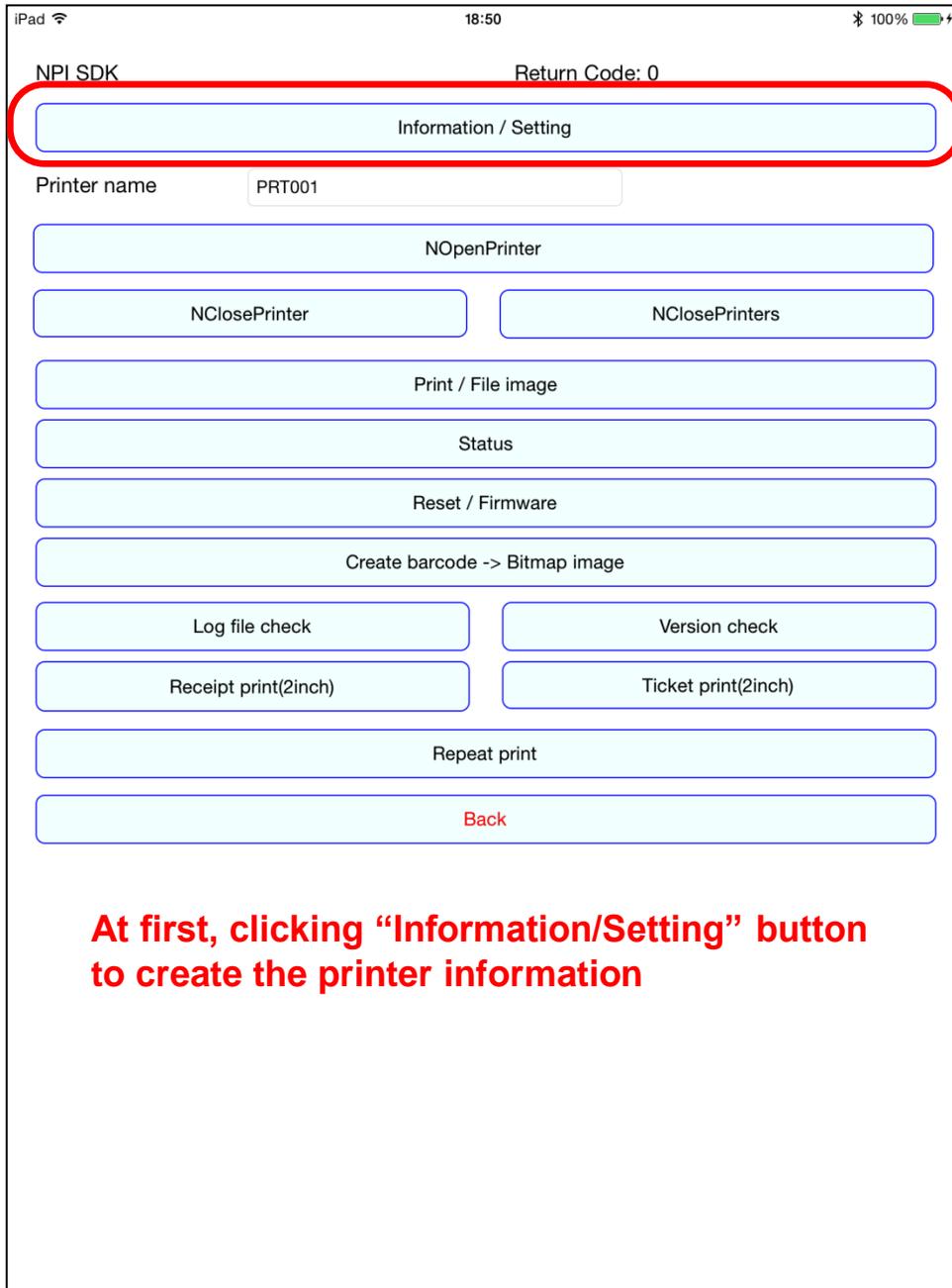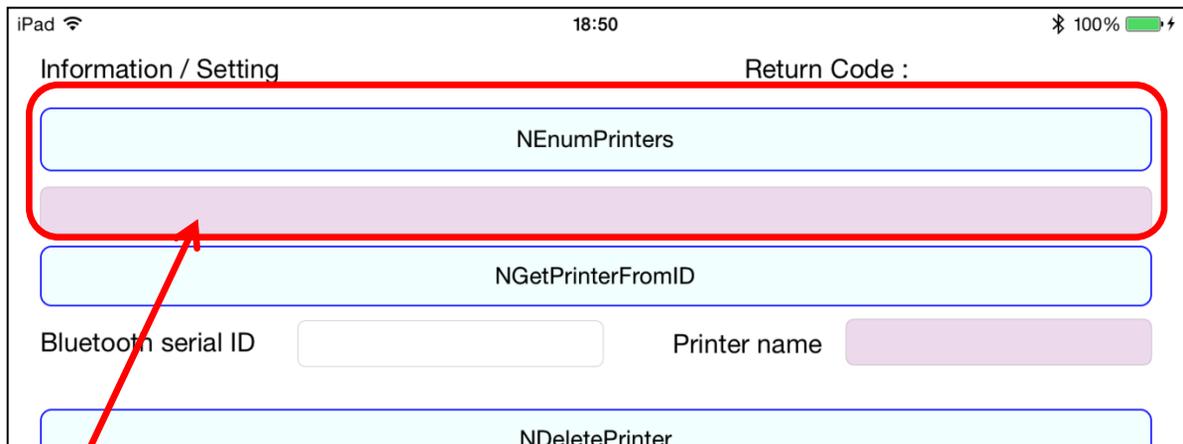
Once the printer information is created, it can be used unless it is deleted by "NDeletePrinter". ("NEnumPrinters" is used only for the first time.)
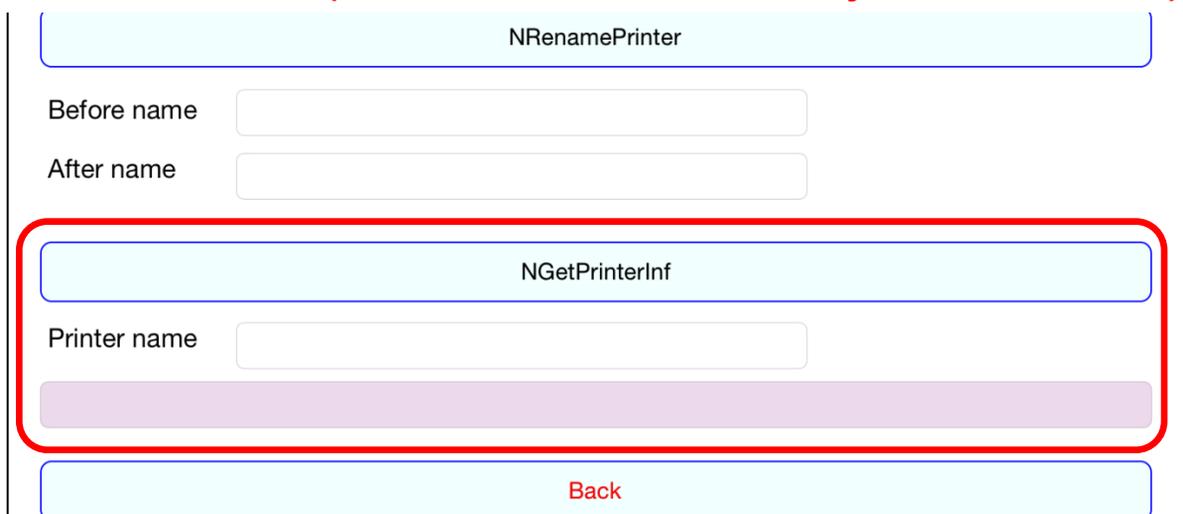
Please touch "NEnumPrinters" button when you can pair/connect (by the setting screen) with the printer.

The printer name "PRTxxx" (xxx is a figure) will be issued in the purple colored box if it is connected to the printer.

In case the printer name is not shown even though it is connected, please try to close NPI SDK app from a task and restart it.

If you want to check the Bluetooth serial ID of the issued printer, please enter the printer name in the white colored box under "NGetPrinterInf" button and touch "NGetPrinterInf" button.

Please touch "Back" button after creating the printer name.

\<Open printer\>

You can communicate with the printer by opening printer after creating the printer name by "NEnumPrinters".

Please enter the printer name in the white colored box for the printer name and touch "NOpenPrinter" button.
You will get 0 as return code at the top of the screen if successful. Be careful not to touch the button repeatedly since error code of -21 (already connected) is shown.

<Sample print>

You can print and get status after connection is built by "NOpenPrinter".

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NPI SDK   Return Code: 0

Information / Setting

Printer name   PRT001

NOpenPrinter

NClosePrinter	NClosePrinters

Print / File image

Status

Reset / Firmware

Create barcode -> Bitmap image

Log file check	Version check

Receipt print(2inch)	Ticket print(2inch)

Repeat print

Back
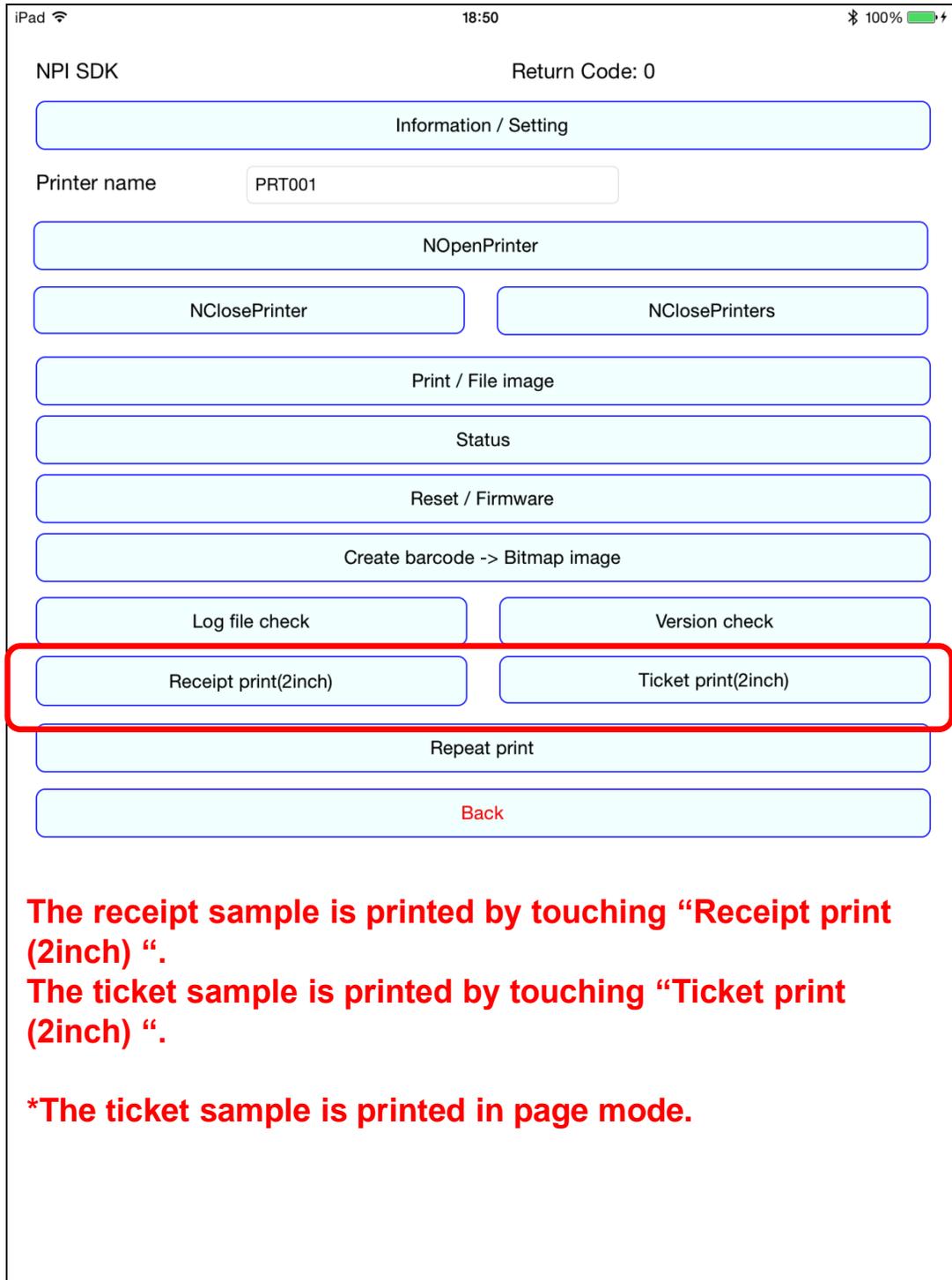
The receipt sample is printed by touching "Receipt print (2inch) ".
The ticket sample is printed by touching "Ticket print (2inch) ".

*The ticket sample is printed in page mode.

\<Status check\>

The following screen is shown by touching "Status" button.

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Status / Extend Info					Return Code :	

NGetStatus

Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0

NGetInformation

Extend Info No   `1`

Result :

Date:

```
+0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +A +B +C +D +E +F
-------------------------------------------------
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

Back

The status can be monitored by touching "NGetStatus" button.

"Bit1" will be displayed in red by opening cover of the printer in monitor status. "Bit2" will be displayed in red due to paper end as well.

\<Normal print/Image print\>

The following screen is shown by touching "Print/File image" button.

Normal print is done by "Nprint".
The command entered in the white colored box under the button is executed.

Image print is done by "NimagePrintF".
When installing the app, the following files are stored.
test01.jpg（image of dog for test print）
test02.png（image of goldfish）
test03.bmp（image 2 of dog）

The print method of raster line/raster block/raster gray scale/bit image can be selected by touching select button.

Please note that the print speed is slow comparing to Android since the image print has large amount of data and ACK process per packet is required due to iAP rule in case of communication with iOS terminal.

<Close printer>

Please close printer when you finish the communication to the printer.

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NPI SDK　　　　　　　　　　　　　　　　Return Code: 0

Information / Setting

Printer name　　　　PRT001

NOpenPrinter

NClosePrinter	NClosePrinters

Print / File image

Status

Reset / Firmware

Create barcode -> Bitmap image

Log file check	Version check
Receipt print(2inch)	Ticket print(2inch)

Repeat print

Back

Please touch "NClosePrinter" button after entering the printer name(issued by "NEnumPrinters") in the white colored box of the printer name.
Return code at the top of the screen become 0 if successful.
Be careful not to touch the button repeatedly since error code of -22 (already disconnected) is shown.
Please use "NClosePrinter" for iOS SDK as much as possible although "NClosePrinters" is prepared to be communalized with Windows SDK and Android SDK.
(Error code can be acquired with "NClosePrinter")