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GoDEX iOS framework User Manual

Control GoDEX printer by iOS framework

This manual explains how to use the GoDEX iOS framework in GoDEX printer control program.

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CONTENTS

1. Overview

godextool.framework is an iOS library provided by GoDEX. Software developers can use this library to develop software for printing on iOS platform.

godextool.framework provides communication function of Wi-Fi. Before the start of sending commands to the printer, you must call *open* function to establish communication between the program and the printer. After printing job is completed, you must call *close* function to close the connection between program and printer.

You can use *sendCommand* function to send commands to GoDEX printer. You can use *read* function to get data from printer. You must use EZPL GoDEX printer language to control the print. If you need more advanced control method, you can go to the official website to download GoDEX EZPL Programming Manual.

Some examples：
1. Use the EZPL "~V" command to print the self-test page as below:

    open:@"192.168.1.1" port:9100;
    sendCommand:@"~V";
    close;

2. You can use *putImage* function to print image as below:

    open:@"192.168.1.1" port:9100;
    sendCommand:@"^L";
    　　　:
    putImage:UIImage pointX:0 pointY:0;
    　　　:
    sendCommand:@"E";
    close;

2. Function List

Command	Description
open	Connect Wi-Fi with the GoDEX printer (default timeout time of 2 second).
open	Connect Wi-Fi with the GoDEX printer (timeout time by users setting).
findAllNet	Find all GoDEX printers connected to the same network segment.
close	Close the connection.
sendCommand	Send EZPL command (default UTF8 encoding).
sendCommand	Send EZPL command (other encoding).
read	Read strings from the printer (default timeout time of 3 second).
read	Read strings from the printer (timeout time by users setting).
setup	Set label size, darkness and speed of printer.
printCmdFile	Send a command file to the printer.
loadImage	Download image to the internal memory of printer.
putImage	Print image (this command doesn't download image to the internal memory of printer).

3. Function Description

Before using the godextool.framework function, you must first create and initialize an object as described below:

Objective-C

```
@property (strong, nonatomic) GoDEXWiFi *godex;
_godex = [[GoDEXWiFi alloc] init];
```

Swift

```
var godex = GoDEXWiFi()
```

3.1 - (BOOL)open:(NSString *)address port:(NSInteger)port

Description	This method is used to connect the printer by Wi-Fi with a default timeout setting of 2 second.	
Parameters	address	Type：NSString IP Address of printer for Wi-Fi.
	port	Type：NSInteger Printer port.
Return	true	Connection with the printer is success.
	false	Connection with the printer is failure or over the timeout time.

3.2 - (BOOL)open:(NSString *)address port:(NSInteger)port timeout:(NSInteger)timeout

Description	This method is used to connect with the printer by Wi-Fi with timeout setting.	
Parameters	address	Type：NSString IP Address of printer for Wi-Fi.
	port	Type：NSInteger Printer port.
	timeout	Type：NSInteger Set timeout time.
Return	true	Connection with the printer is success.
	false	Connection with the printer is failure or over the timeout time.

3.3 - (NSArray *)findAllNet

Description	Find all GoDEX printers connected to the same network segment.
Parameters	None.
Return	An (NSArray *) object contains the found printers. Each found printer is an (NSArray *) object of 3 strings. The first string is printer name, the second string is printer IP address and the last string is printer port.

3.4 - (void)close

Description	This method is used to close connection with the printer.
Parameters	None.
Return	None.

3.5 - (BOOL)sendCommand:(NSString *)command

Description	This method is used to send a command to the printer.	
Parameters	command	
		Type：NSString
		Send command to the printer (default NSUTF8StringEncoding).
Return	true	Send command to the printer is success.
	false	Send command to the printer is failure.

3.6 - (BOOL)sendCommand:(NSString *)command encoding:(NSInteger)encode

Description	This method is used to send a command to the printer with setting of encoding method.	
Parameters	command	
		Type：NSString
		Send command to the printer.
	encode	
		Type：NSInteger
		Choose encode of command.
		(For example：NSUTF8StringEncoding or NSASCIIStringEncoding. For more information, please refer to StringEnconding provided by Apple in the documentation).
Return	true	Send command to the printer is success.
	false	Send command to the printer is failure.

3.7 - (NSString *)read

Description	This method is used to read strings from the printer with a default timeout setting of 3 second.
Parameters	None.
Return	Read strings from the printer.

3.8 - (NSString *)read:(NSInteger)timeout

Description	This method is used to read strings from the printer with timeout setting.	
Parameters	timeout	
		Type：NSInteger
		Timeout time to read a string from the printer.
Return	Read strings from the printer.	

3.9 - (BOOL)setup:(NSInteger)height gap:(NSInteger)gap top:(NSInteger)top dark:(NSInteger)dark speed:(NSInteger)speed mode:(NSInteger)mode

Description	This method is used to setup the parameters of the printer.	
Parameters	height	
		Type：NSInteger
		Height of paper (unit：mm).
	gap	
		Type：NSInteger
		Label gap (unit：mm).
	top	
		Type：NSInteger
		Black top for black mark label (unit：mm).
	dark	
		Type：NSInteger
		darkness (range：0~19).
	speed	
		Type：NSInteger
		Printer speed (unit：IPS, range：2~7).
		The speed range is dependent on the printer. Different printer model may have a different range.
	mode	
		Type：NSInteger
		Paper type
		0: label with gap.
		1: plain paper.
		2: black mark label.
Return	true	Setup the parameters of printer is success.
	false	Setup the parameters of printer is failure.

3.10 - (BOOL)printCmdFile:(NSString *)fileName

Description	This method is used to send a command file to the printer.	
Parameters	fileName	
	Type：NSString	
	Path of command file and filename.	
Return	true	Send a command file to the printer is success.
	false	Send a command file to the printer is failure.

3.11 - (BOOL)loadImage:(NSString *)fileName imageID:(NSString *)imgaeID

Description	This method is used to upload bitmap to the internal memory of the printer.	
Parameters	fileName	
		Type：NSString
		Path of image and filename.
	imageID	
		Type：NSString
		imageID represents the image upload to the printer to recall and print the image, please use command ^Y.
Return	true	Upload bitmap is success.
	false	Upload bitmap is failure.

3.12 - (BOOL)putImage:(UIImage *)image pointX:(NSInteger)px pointY:(NSInteger)py

Description		This method is used to the print an image directly to the printer.
Parameters	imgae	
		Type：UIImage
		This is the image to print.
	px	
		Type：NSInteger
		X coordinate of the top left point of the image (unit：dot).
	py	
		Type：NSInteger
		Y coordinate of the top left point of the image (unit：dot).
Return	true	putImage is success.
	false	putImage is failure.

4. GoDEX framework sample

Through the following step in 4.1 and 4.2 you can build a simple program to control GoDEX printer with Objective-C or Swift. 4.3 contain a sample App for you reference.

4.1 Create iOS Application
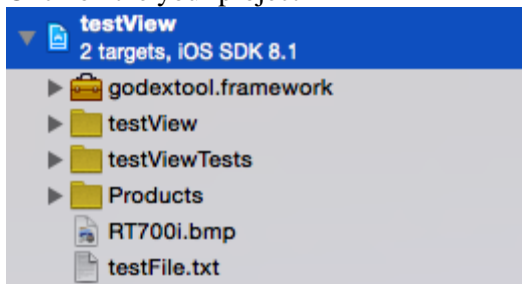
Choose Single View Application
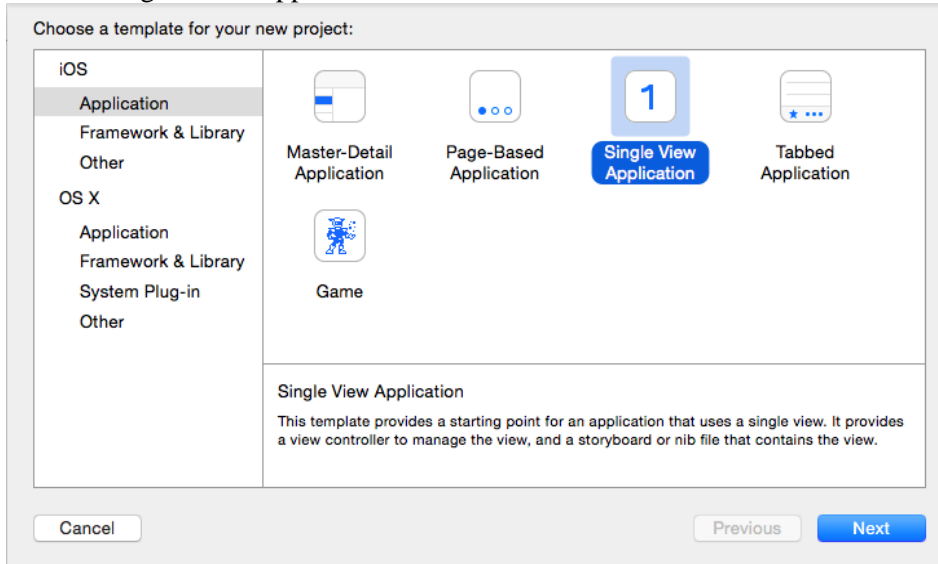
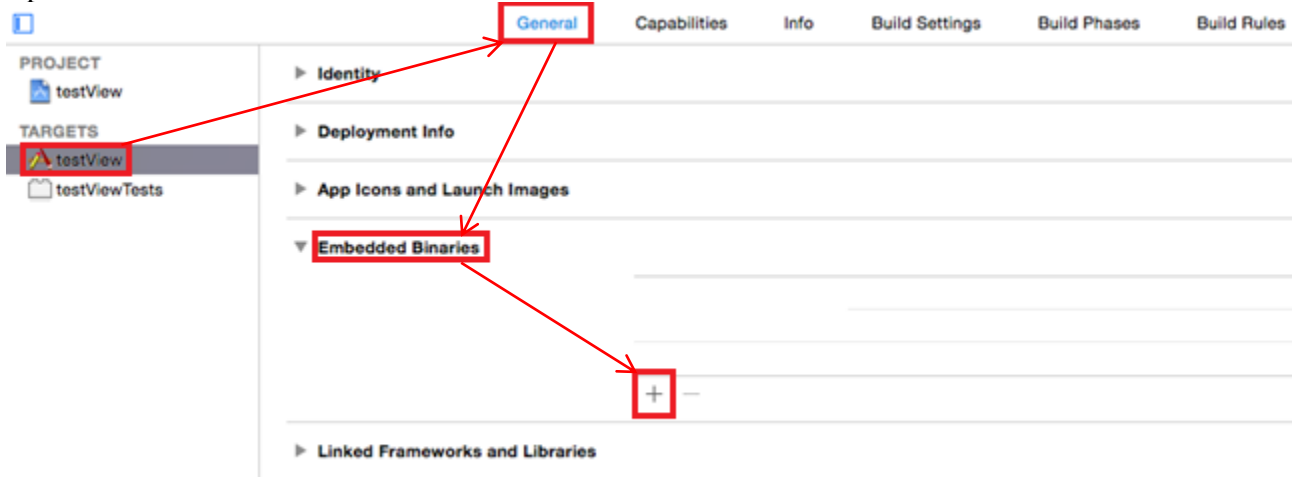Input Product Name，Language choose Objective-C or Swift
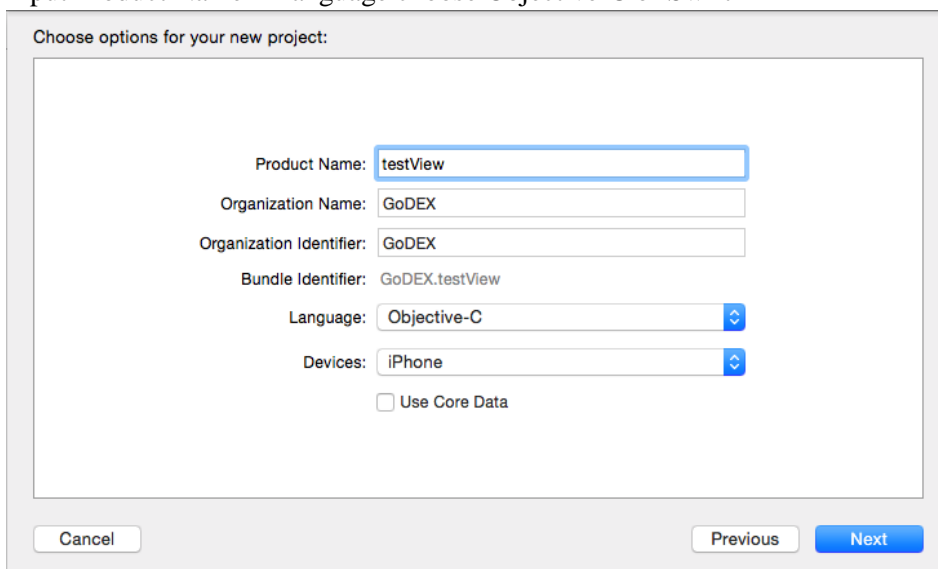
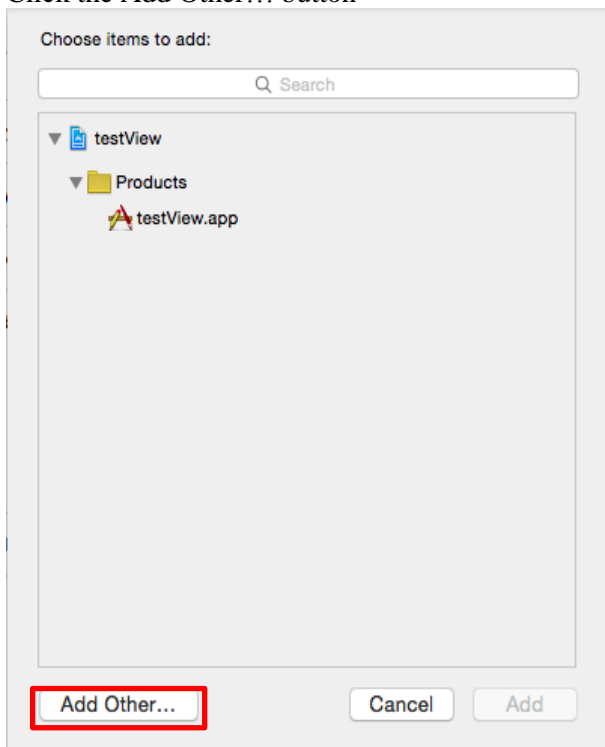## 4.2 Add godextool.framework into your project

Click on the your project

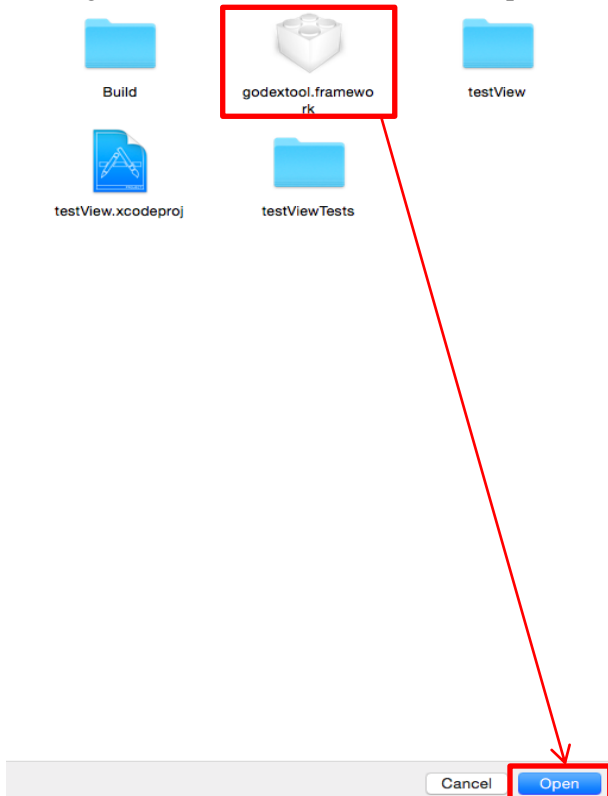Open TARGETS then click the General tab and then click the + in Embedded Binaries.
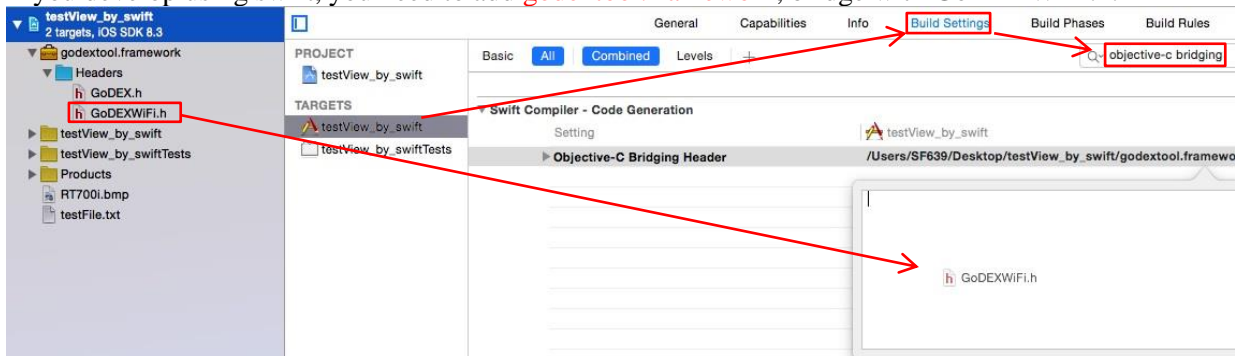

Click the Add Other… button

Select godextool.framework. Then click Open

If you develop using swift, you need to add godextool.framework, bridge with GoDEXWiFi.h.

Click your project and then Open TARGETS, select Build Settings then input Objective-C Bridging in search, add GoDEXWiFi.h into Objective-C Bridging Header.

If you develop using Objective-C, you need to add <godextool/GoDEXWiFi.h> in ViewController.h.

4.3 This sample App is used to demo godextool.framework.

The sample App is contained in iOS_SDK.zip, Readme contains the detail information about this framework and is sample App. After Compile and Run this sample code, a screen will be show as below:

This view includes two UITextFields represents the IP address and command, a UITextView shows the feedback load from the printer, five UIButtons Connect 、 Disconnect 、 Send 、 PrintCmdFile 、 PrintSampleLable represents execute command and a UIImageView display the printed SampleLable.