

Connection Guide

WiFi Signature Pads

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Overview	
Software Installation, Firmware, and WiFi Con	figuration 3
WiFi Set-Up3 Topaz SigPlus Installation3	Signature Pad Conversion 4
WiFi Pad Configuration	
Wi-Fi Connection to an Access Point	
Configuration Utility	5
Configuring the WiFi Pad6	Programming the WiFi Pad10
Connecting to Wi-Fi	
Access Point Mode11	Test with the Topaz DemoOCX Utility 12
Operating Information	
LED Meanings13 Power-Save Feature13	Charging & Battery Length 13



Overview

To simplify connection and evaluation, the Topaz WiFi Pads comes configured as a Wi-Fi Access Point. The pad can be programmed via the USB port on the back of the unit to either connect to an existing Access Point or to a Router.

The pad communicates with applications via serial data. This data is sent over a WiFi network interface to a virtual serial port on the PC which is connected to the application.

Software Installation, Firmware, and WiFi Configuration

WiFi Set-Up

Be sure that your WiFi is set-up before continuing.

Topaz SigPlus Installation

1. Follow the steps to download SigPlus WiFi from the following link: <u>www.sigpluspro.com/wifi</u>

When running the installer, it is crucial to run as an administrator. To do this, once the .exe is on the desktop, right click on the installer, and select "Properties". Under the "Compatibility" tab, check "Run this program as an administrator". Click "Apply", and then "OK".

- 2. The installer will prompt the user to select the signature pad model being used. See the prefix listed on the back of the pad. Follow all installers through, including the FTDI installer and ELTIMA Software.
- 3. After installation, you must reboot your system in order for the drivers to operate properly.

Note: The USB cable is used for charging the battery and programming the WiFi pad only. The pad only communicates with applications via serial data sent over a WiFi network interface to a virtual serial port on the PC.



Signature Pad Conversion

If your signature pad model is T-LBK750, T-LBK755, or T-LBK766, your wired signature pad can be converted to wireless. For more information, contact the Topaz Sales Team at: <u>www.topazsystems.com/contact_sales.html</u>.

WiFi Pad Configuration

The WiFi pad can be configured to work in two modes:

- 1. Access Point Mode: This mode uses an integrated WiFi card or USB WiFi adapter.
- 2. Device Mode: This modes uses a router.

To use your WiFi pad "out-of-the-box", go to the "**WiFi Connection to an Access Point**" section below. To configure your WiFi pad for "Router Mode" or to customize the "Access Point Mode" configuration, go to the "**Configuration Utility**" section below.

Wi-Fi Connection to an Access Point

Note: For custom access point or device mode configuration, skip this step.

This installation process uses default settings to allow the unit to work "out-of-the-box". This process is designed for use with an Access Point (an integrated WiFi adapter card or a USB WiFi adapter) on a PC. In addition, the default COM ports of COM3 and COM9 must be available so that no conflicts prevent proper operation.

Note: If the default COM ports are not available, skip to the "Configuration Utility" section below.

- 1. Turn on the Topaz WiFi pad.
- 2. In the system tray (bottom right of your PC screen), select the "Network" icon.





3. Select the SSID name of your WiFi pad (printed on the label on the back of your unit) from the list. Connect your WiFi pad and enter the password (printed on the label on the back of your unit). This configuration set-up only needs to be done once.



- Additional instructions from Microsoft can be found at: <u>http://windows.microsoft.com/en-us/windows/view-connect-available-wireless-networks</u>
- 5. Test the signature pad connectivity with DemoOCX by following these steps:

When running the DemoOCX, it is crucial to run as an administrator. To do this, right click on the DemoOCX icon on the desktop, and select "Properties". Under the "Compatibility" tab, check "Run this program as an administrator". Click "Apply", and then "OK".

Open "DemoOCX", found on your desktop. Click "Start"; if your pad's WiFi connection to DemoOCX has been established, the blue "CONNECT" LED light on your signature pad will change from blinking blue to solid blue. Sign on your signature pad, and the signature will appear in the box.

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For more information on using the Topaz "DemoOCX", see the how-to PDF guide at: www.topazsystems.com/software/download/demoocxhowto.pdf.

Configuration Utility



The following can be used to configure the WiFi pad as a device for operation with a router or to customize the "Access Point Mode" configuration.

Configuring the WiFi Pad

- 1. Connect the micro-USB cable from the pad to your PC.
- 2. Turn the pad power ON.

The PC should detect a USB device, which is then automatically assigned an FTDI COM port (used to update WiFi operational parameters).

Note: The pad automatically shuts off after 5 minutes if not connected to an application, to conserve battery.

3. Verify the WiFi pad configuration COM port. To do so, click "Start" → "Control Panel" → "Device Manager". Under the "Ports (COM & LPT), note the COM port number next to "Topaz Network Port". The default is COM3.

Next, note the COM port number next to "USB Serial Port". The default is COM9, unless another device is using COM9. In our example below, COM9 is already in use, so the USB Serial Port is assigned to COM11. Remember these values, as they will be used for later set-up.



If you wish to change the COM port for the USB Serial Port (free used serial ports from 3 to 16), follow these steps:

- a. Double click on the "USB Serial Port"; go to Port Settings \rightarrow "Advanced..."
- b. Change to a COM port number that is not in use.
- c. If all COM ports are unavailable, then choose a COM port that is in use but can be verified as available. Do not use a COM port greater than 16.
- d. Select that COM port, and click "Yes" to continue.
- 4. Turn the pad Power OFF.
- 5. Run the "SigPlusAdjustWiFi.exe" as an administrator by following these steps:



When running the "SigPlusAdjustWiFi.exe", it is crucial to run as an administrator. To do this, go to C:\Windows\SigPlus\Tools\WiFi. Right-click on "SigPlusAdjustWiFi", and select "Properties". Under the "Compatibility" tab, check "Run this program as an administrator". Click "Apply", and then "OK".

- 6. Now, open the desktop shortcut to run the "SigPlusAdjustWiFi.exe" (WiFi Config Utility).
- 7. The "WiFi SigPlus Update and Module Configuration" window will appear.

Please select the Model and COM setting and Input the WiFi Parameters Tablet 755 SignatureGemLCD4X3 750 SigLiteLCD4x3 766 SignatureGemLCD4X5 755E LCD4X3SE 765E LCD4X3SE 766SE LCD4X3SE 766SE SignatureGemLCD472 766SE SignatureGemLCD475	i SigPlus Update and Module Configuration			
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8. Fill out the fields as follows:



TABLET:

Choose your signature pad model.

SELECT SERIAL PORT:

- a. Tablet Config Port:
 - Enter the COM port you noted for the USB Serial Port in step 3 on page 6. In our example, this is COM11.
- b. Ini / VSP Port:
 - Enter the COM port you noted for the Topaz Network Port in step 3 on page
 In our example, this is COM3.

WIFI MODE:

- a. Access Point Mode:
 - Sets up the Signature Pad as a server. In this configuration, the PC must have WiFi integrated or have WiFi USB adapter.
- b. Device/Router Mode:
 - Sets up the Signature Pad as a client. In this configuration, the PC will need to have a WiFi Router configured and enabled.

WLAN:

- a. For Access Point Mode:
 - The SSID and password entered here can be default or changed to new custom values. Note: Default SSID and Password are printed on the label located on the bottom of the unit and are case sensitive.
 - The default Channel is 1. If problems occur, change to 6 or 11.
 - Password must be a minimum of 8 characters.
- b. For Device/Router Mode:
 - Enter the SSID and Password of the router.
 - Set the desired WiFi Channel (Standard Channels are 1, 6 and 11).
 If a channel has many devices using it, then better performance can be obtained by trying other channels.

NETWORK:

a. For Access Point Mode:



- Network data is automatically filled in; use default IP Address, Gateway and Netmask values.
- b. For Device/Router Mode:
 - Network data is automatically detected and filled in.

Note: If you wish to manually configure the IP, see the "Manual IP Configuration Procedure" below. If not, skip to step 9 below.

MANUAL IP CONFIGURATION PROCEDURE:

a. Open a command prompt: enter the following: "ipconfig /all".

Note: Current directory in command prompt is not important.

b. Find the following (values shown are examples only):

Ethernet Adaptor Local Area Connection:			
IPv4:	192.168.1.118 (preferred)		
Subnet mask:	255.255.255.0		
Default Gatewav:	192.168.1.1		

- c. Create an IP Address by using the IPv4 value and adding 1. For example, enter address 192.168.1.119 instead of 192.168.1.118. Use the same Subnet mask and Gateway values.
- 9. This completes all parameter fields.
- 10. Put the signature pad into "LCD Backlight Adjust" mode by following these steps:
 - a. Hold and press the pen tip in the upper-right hand corner while turning pad power ON. If the pad has an LCD, 2 boxes on the LCD will be displayed (see below); leave the pad in this mode until configuration is complete.





Program the Topaz WiFi signature pad by following these steps:

1. In the "WiFi SigPlus Update and Module Configuration" window, select the "Program" button.

Please select the Model and COM setting and Input the WiFi Parameters			
Tablet SignatureGemLCD4x3 SigLiteLCD4x3 750 75055 SignatureGemLCD4x3 SigLiteLCD4x35E 75555 Tablet Config Pott 11 Set 9600 Baud Default Config ini / VSP Pott 3 WiFi Mode © Device/Router Mode Browse Set 9600 Baud Default Config ini / VSP Pott 3 WiFi Mode © Device/Router Mode Browse Set 9600 Baud Default Config ini / VSP Pott 3 StD (1-32) Topaz_WiFi_Ad Channel Browse Network PSWD/Key B64 Charsi Topaz_WiFi W2P Setting Disabled - Kay#HW2P Network PAddress 192 168 42 Netmask 255 255 255 255 255	dapter Image: state		
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- 2. A window will be displayed to remind you to make sure step 9 on page 8 has been done. Press "OK" to start the programming process.
- 3. Wait for programming to complete (this may take approximately 30 seconds).



- 4. A window will display "All Updates Completed". Select "OK".
- 5. The programming operation can be reviewed in the large display window if you have any questions about the actions taken.
- 6. All parameters can be modified if change is necessary and the Program button pressed again starting over at step 9 on page 8.
- 7. Cycle signature pad power by turning the power OFF and ON.

Note: LCD Backlight mode does not require input to adjust levels; it is OK to turn off unit in this mode.

Connecting to Wi-Fi

Access Point Mode

- 1. From Control Panel, open the "Network and Sharing Center" window.
- 2. Click on "Connect to a network".



3. Find the SSID of your WiFi pad. Select, and choose "Connect".

Wireless Network Connection	^
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Note: If you set your PC to automatically connect to the network, then you only will need to do this once.

4. Enter the case sensitive password, if prompted.



Test with the Topaz DemoOCX Utility

Test the signature pad connectivity with DemoOCX by following these steps:

- 1. When running the DemoOCX, it is crucial to run as an administrator. To do this, right click on the DemoOCX icon on the desktop, and select "Properties". Under the "Compatibility" tab, check "Run this program as an administrator". Click "Apply", and then "OK".
- Open "DemoOCX", found on your desktop. Click "Start"; if your pad's WiFi connection to DemoOCX has been established, the blue "CONNECT" LED light on your signature pad will change from blinking blue to solid blue. Sign on your signature pad, and the signature will appear in the box.

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	- Ea	mith)	Stop	Load Sig	
				Clear	Save Img	
				Properties	About	
				AutoKey	OK	
	Key Receipt	0c0d0404	Sig Rece	eipt 84a8c9	e3	-

For more information on using the Topaz "DemoOCX", see the how-to PDF guide at: **www.topazsystems.com/software/download/demoocxhowto.pdf**.





Operating Information

LED Meanings

Left LED:	
RED Steady	Battery is charging.
GREEN Steady	Unit is on.
GREEN Slow Flash	Unit is on, but battery is low (<15%).
GREEN Rapid Flash (20x)	Battery is critically low and must be charged before it can be used. Once the green light completes flashing 20 times, the unit will turn off.
Right LED:	
BLUE Slow Flash	The access point is configured and ready.
BLUE Steady	A computer has connected to the tablet.
BLUE Blinking	Data is being sent or received.

Power-Save Feature

The tablet will shut down if there is no computer connected to it for 5 minutes. To turn the tablet back on, you must switch the power switch to the OFF position and then back to the ON position.

Charging & Battery Length

The tablet is charged via the micro-USB port on the back of the wireless housing. You may connect to your PC or to a dedicated USB charging adapter. For Topaz WiFi signature pads, see the following battery length times. These times are from a full charge to low battery indication, with the unit always ON and the wireless module connected. Turning off the pad in between uses will give an even longer use time.

MODEL SERIES

T-LBK766SE-WFB T-LBK755SE-WFB T-LBK750SE-WFB

BATTERY LENGTH

Approximately 8 hours Approximately 12 hours Approximately 16 hours