

FieldPro 641 Series

Operator's Manual



PRINTEKMOBILE™

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Printek, LLC. A **DASCOM** Company.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for 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 the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with Canadian and FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Part 15.21 Caution: Changes or modifications not expressly approved by Printek could void the user's authority to operate the equipment.



Statement of compliance:

The following products have been tested and comply with FCC Part 15, Subpart B and ANSI C63.4-2014 standard limits.

Printek Branded Mobile Thermal Printers:

Series/Model: Vehicle Pro series, VP420	Tested by: AGC Attestation of Global Compliance	Report number: AGC05548190101FE01, AGC05548190102FE01
Interceptor series, I820	EST Technology Co., Ltd	ESTE-R1709080, ESTE-R1709081
Interceptor series, I80	EST Technology Co., Ltd	ESTE-F2103037
FieldPro series, FP530, FP530L	EMTEK Co., Ltd	ES180516013E, ES180516014E
FieldPro FP530Si, Payload	AGC Attestation of Global Compliance	AGC05548180801FE01, AGC05548180802FE01
FieldPro FP541	WH Technology Corp.	CF17110506
MLP Series, MLP35	EST Technology Co., Ltd	ESTE-F1907016

Printek Branded Dot Matrix printers:

FormsPro 5100 Series Printer	Underwriters Laboratory	4788630615.1
PrintMaster 700 Series Printer	WH Technology Corporation	CF16100107

These devices comply with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) These devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operation.

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<https://www.printek.com>

Dascom President: Ron Acorn
Signature: 

Date: April 7, 2021



This device fulfills the European standards requirements by complying with the Directive relating to electromagnetic compatibility and relating to low-voltage electrical equipment. Furthermore, it fulfills the requirements for RoHS and R&TTE if applicable.

Conformity with the above-mentioned Directives is indicated by the CE symbol attached to the device.

Note: Conformity may be affected by:

- using interface cables not complying with the specifications
- non-observance of important instructions in the operator's manual
- installing components not approved for this device by the manufacturer
- unauthorized manipulation



Dieses Gerät erfüllt die Anforderungen der Europäischen Normen durch Einhaltung der Richtlinien bezüglich der Elektromagnetischen Verträglichkeit sowie bezüglich Elektrischer Betriebsmittel mit Niederspannung. Des Weiteren werden die Anforderungen bezüglich RoHS und falls anwendbar R&TTE erfüllt.

Die Konformität zu den oben angeführten Richtlinien ist durch das am Gerät angebrachte CE-Zeichen gekennzeichnet.

Hinweis: Die Konformität kann beeinflusst werden durch:

- Benutzung von nicht spezifizierten Schnittstellen
- Nichtbeachtung wichtiger Hinweise der Bedienungsanleitung
- Ersetzen von Bauteilen, die nicht vom Hersteller für dieses Gerät freigegeben wurden
- Eingriffe durch Unbefugte



This device complies with the requirements of the United Kingdom (UK) legislation of Electrical Safety Regulations, Electromagnetic Compatibility Regulations, if applicable the Radio Regulations and the Restriction of the Hazardous Substances in Electrical and Electronic Equipment Regulations.



(Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.)

Battery Disposal

Only dispose of used batteries according to your local regulations. If you do not know your local regulations, the Rechargeable Battery Recycling Corporation (RBRC) is a non-profit organization created to promote recycling of rechargeable batteries. For more information visit www.rbrc.org.



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Windows is a registered trademark of Microsoft Corporation

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Read all set up and operating instructions before proceeding with operation. Do not operate in an enclosure unless properly ventilated. Do not operate near a heat source.



Lesen Sie vor der Inbetriebnahme die Aufbau- und Bedienungsanleitung. Betreiben Sie den Drucker nicht in einem kleinen, geschlossenen Raum, es sei denn dieser wird ordnungsgemäß belüftet. Nehmen Sie den Drucker nicht in der Nähe einer Wärmequelle in Betrieb.



No user-serviceable parts inside. Refer service or repairs to a qualified service professional. Use of genuine Printek replacement parts is required to warrant proper, safe operation. Any alteration or modification of this device voids the user warranty and may make the product unsafe to operate. The print head and motors get hot during use. Wait until they cool before touching them. Make certain the printer is disconnected from AC power before removing any covers or performing any required cleaning or maintenance. Connecting this printer to an ungrounded receptacle can result in electrical shock. Never place the printer near inflammable or explosive substances. Do not operate near liquid or spill liquid into the printer at any time.



Enthält keine Teile, die vom Bediener instandgesetzt werden können. Bitte wenden Sie sich bei Instandsetzung oder Reparatur an qualifiziertes Kundendienstpersonal. Die Verwendung von echten Printek Ersatzteilen ist notwendig, um ordnungsgemäßen, sicheren Betrieb zu gewährleisten. Änderungen oder Modifikationen dieses Geräts machen die Garantie ungültig und können den sicheren Betrieb des Produkts gefährden. Während des Druckens werden Druckerkopf und Motoren heiß. Warten Sie, bis sich die Teile abgekühlt haben, bevor Sie sie berühren. Vergewissern Sie sich, dass der Drucker nicht mehr an die Stromquelle angeschlossen ist, bevor Sie Abdeckungen abnehmen oder das Gerät reinigen bzw. warten. Schließen Sie diesen Drucker nicht an eine ungeerdete Steckdose an; dies kann zum Elektroschock führen. Setzen Sie den Drucker niemals in die Nähe von feuer- oder explosionsgefährlichen Stoffen. Betreiben Sie den Drucker nicht in der Nähe von Flüssigkeiten und lassen Sie keine Flüssigkeiten in den Drucker gelangen.

Specifications are subject to change without notice.

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Introduction

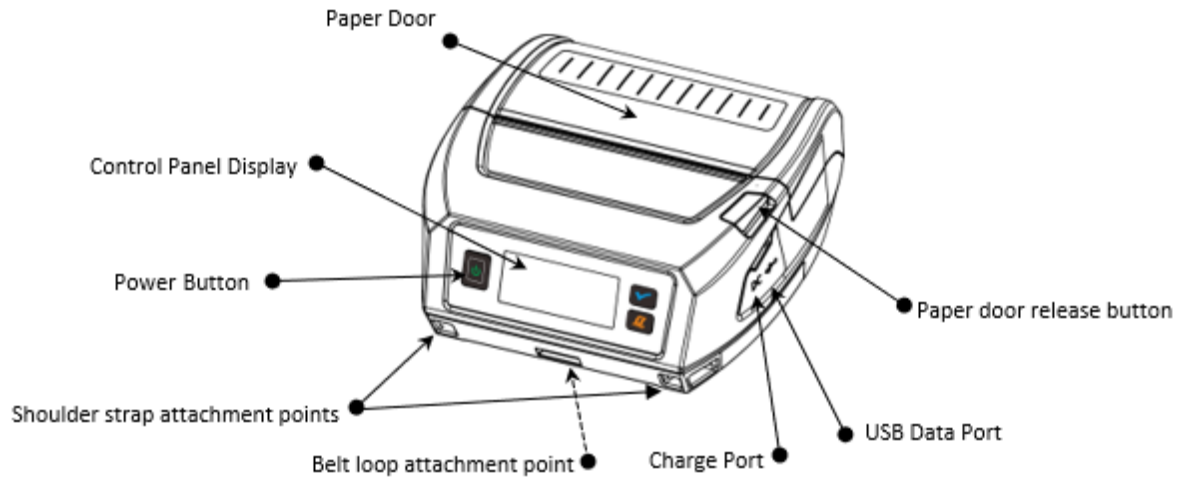
Thank you for purchasing the Printek FieldPro 641 Series mobile thermal printer also referred to in this manual as the “FP641”. The FP641 series prints on direct thermal media supplied in roll form up to 4.25 inches wide. All models are equipped with a USB port which supports charging and cabled communications and a DC port for use with wall power adapter and various in-vehicle adapters. All models support optional dual radio for Bluetooth or Wi-Fi communication. Receipt printers utilize a ½” core paper holder while label printers come standard with ¾” core. An interactive LCD display allows full use of on board printer settings. Complete specifications may be found in [Appendix A – FieldPro 641 Printer Specifications](#).

The remainder of this manual focuses on preparing the printer for initial use and performing tasks that will be encountered during daily use.

[Maintenance and Troubleshooting](#) describes how to maintain the printer for optimal performance and has information on how to diagnose any problems that may occur.

Printek recommends using genuine Printek supplied media and accessories. For detailed lists, please contact your PrintekMobile sales representative.

Printer Features



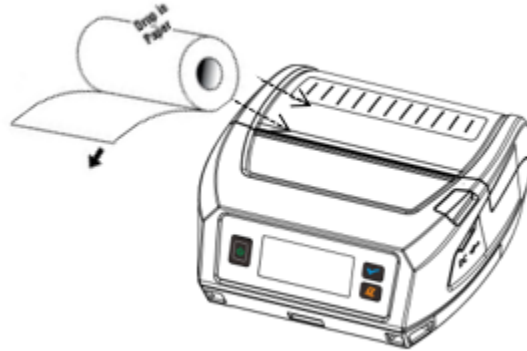
Your FieldPro 641 features:

- Easy-to-read control face and simple centered paper holding.
- Quickly prints a wide variety of tickets, and receipts.
- IP54 rated for water and dust resistance and IEC 68-2 certified for repeated 6-foot drops to concrete.
- Print speeds up to 6 ips.
- Extensive fonts, character sets, bar codes and graphic capabilities
- Printer configuration is quick and easy with a web-based interface and on board LCD display.
- The latest in battery technology provides for full-shift printing in all modes.
- Compatible with Windows, Windows Mobile, Apple iOS, and Android.
- Emulations that allow the printer to be a drop-in replacement for nearly any mobile printer.
- Fast 2 hour charging via USB C charge port.

For detailed specifications reference [Appendix A – FieldPro 641 Printer Specifications](#).

Quick Start Instructions

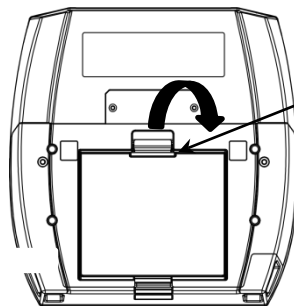
A. Paper Loading



Press Paper door release button to open the paper compartment door. Insert roll into paper holding lining up the media roll core with the core holder. Pull small leader of paper out and close paper door.

“Clicks” when properly closed. Dual serrated tear edges allow you to tear towards front or back.

B. Battery Installation



Depress the battery door clip and pull battery out.

The battery icon on the display will indicate the battery level.

Disposal

Please dispose the batteries separately and free of cost at your sales agency or the designated local collecting points. Therefore, please consider the national recycling standards! Disassembly and removal of the batteries are described in the User Guide.

C. Charge Battery



Uncover the printer ports and plug in your AC power adapter to the Power port (must be a Printek-supplied accessory). The yellow LED will show solid ON while the printer battery is charging.





Or utilize USB C charging port to quick charge in 2 hours using Printek USB charge adapter.




D. Power On

Depress and hold the Power button for 3 seconds on the control panel. The display will turn on. The Power LED will turn green (about 20 seconds) after the printer has passed its internal testing and is ready to print.

E. Control Panel

POWER & PAPER FEED	FUNCTION	HOW TO:
 Power Button	Power up & Power down	Press & hold for ~ 3 seconds
	Access Web page *	Press 2 times to enter Press 2 times to exit
 Paper feed button	Advance paper	Press and hold
	Self-test print	Press 2 times rapidly

DISPLAY NAVIGATION:	FUNCTION	HOW TO:
 Menu button	Menu set up	Press 1 time
 Paper feed button	Scroll down	Press to scroll down
 Menu button	Select category	Press 1 time
	Scroll up	Press 1 time.
 Power button	Save setting	Press 1 time
	Go back	Press 2 times
	Return to main menu	Press 3 times

Power & Status (Green) 	Power & Status (Yellow) 	Power & Status (Red) 	Indication
On	Off	Off	Power supplied by battery
On	Off	Off	Power supplied by adapter
Off	On	Off	Charging battery
Off	Off	On	Booting up
Off	Off	On	Power on/off
Off	Off	On	Battery failure
Flashing (If no battery is charged)	Flashing (If battery is being charged)		Config mode

F. Setting Descriptions (* = default setting)

System Config		
LCD Contrast	Adjust LCD brightness	1*,2,3,4,5
Menu Login	Turn menu password on or off	On*/off
MENU login PW	Set login password	0000* Check Mark button to select Paper Feed button to change value

Image Config		
Emulation	Allows for use of different print commands	ESCPOS*, ZPL, CPCL, PRINTEK
	Depending on emulation other options may be available	

Device Config		
Max paper speed	Selects print speed	1ips, 1.5ips, 2.0ips, 2.5ips, 3.0ips, 3.5ips, 4.0ips, 4.5ips, 5.0ips, 5.5ips, 6.0ips*
Mark seek	Selects type of paper	Rollpaper*, front, rear, gap
Sleep mode	Sets energy setting	
	Light sleep – turns off display information	30 seconds, 1 min*, 2 min, 5 min, 10 min, Disable
	Deep sleep – effects whole printer	
	Deep mode	Auto power off*, power sleep
	Sleep time	30 mins, 60 mins*, 90 mins, Disable
Paper size	Selects print size	2 inch, 3 inch, 4 inch*
Contrast	Sets print darkness	1 – 32. (16*)
Left margin	Sets left margin offset	0 inch* to 2inch
Unit	Set unit	Inch*, mm

BT Config		
On/off	Turn Bluetooth on or off	On, off
BT address	Display BT address	/
BT Pin	Display BT Pin	/
BT Name	Display BT name	/
BT Paired Mode	Display BT Paired Mode	/

Wireless Config		

Wireless method	Select wifi mode	Static,DHCP,Access point
IP ADDRESS	Display IP ADDRESS	/
NETMASK	Display NETMASK	/
WIFI BROADCAST	Display BROADCAST	/
SSID	Display SSID	/
WIFI PORT	Display WIFI PORT	/
WIFI MAC	Display WIFI MAC	/

About		
Model	Display printer model	/
SN	Display printer SN	/
Vkernel	Display printer vkernel	/
Vpsw	Display printer vpsw	/
Vcsw	Display printer vcsw	/
Vfpga	Display printer vfpga	/

Reset printer		
Do not reset	/	/
Reset all settings	/	/
Reset image cfg	/	/
Reset device cfg	/	/
Reset bt cfg	/	/
Reset wifi cfg	/	/

BAT INFO		
CAP	Display battery capacity	/
TEMP	Display battery temperature	/
STAT	Display battery status	Discharging, charging, FULL, unknown

G. Performing a Printer Self-Test



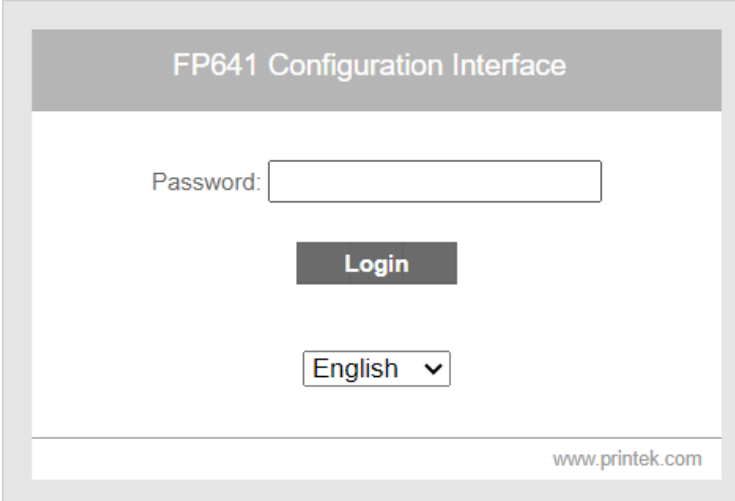
With power on, press the paper feed button twice quickly.

Configuration

Configuration of the FP641 printer is done through a built-in web page or via on board LCD display.

Web Based Configuration

1. Turn the printer ON.
2. Connect a USB cable between the printer and a PC or utilize your on board LCD display.
3. To access the FP641 web page, push the Power button twice rapidly. This will put the printer into Configuration mode.
4. When the printer is in Configuration mode the POWER LED will flash.
 - a. Open browser on your PC and type **169.254.200.1** into the address bar of the browser and hit Enter - A login box should appear:



The image shows a screenshot of the FP641 Configuration Interface. At the top, there is a grey header bar with the text "FP641 Configuration Interface". Below the header, there is a white area containing a "Password:" label followed by a text input field. Below the input field is a dark grey "Login" button. Below the button is a language selection dropdown menu showing "English" with a downward arrow. At the bottom right of the white area, the URL "www.printek.com" is displayed.

- b. Type "0000" and hit Enter- you should now be at the home page for FP641 Configuration.

5. The main configuration screen of the FP641:

The screenshot displays the 'Current 0JV023210017 Configuration' page. At the top, there is a navigation menu with options: Main, WIFI Config, Bluetooth Config, Image Config, Device Config, Fonts, Graphics, Updates, Reset To Factory Defaults, and Downloads. The main content area is divided into several sections:

- Printer Info:** Model: FP641, Primary SW Version: 00.00.00.EB, CoProcessor SW Version: 00.00.00.25, Kernel info: V00.01.0F, Print head recode: 18.89 m.
- Bluetooth Config:** Local Name: FP641-0JV023210017, MAC ADDRESS: E8:FB:1C:B9:CF:DA, Paired Mode: Paired, Discoverability: ON, Pin: 0000, Connection: Printer.
- Image Config:** Emulation: ESCPOS, Font Type: Font A, Chinese Font Type: Font A.
- Storage:** Total Flash: 296 MB, Used: 238 MB (87%), Free: 37 MB.
- Installed Fonts:** A list of 11 fonts including Andika Basic, Atrian 3, Courier Prime, Dancing Script, DejaVu Sans Mono, and various FONTA-FONTG fonts.

On the right side, there are interactive elements: a 'Print Test Page' button, a 'ViewHexDump' section with radio buttons for 'disable' (selected) and 'enable', a 'Submit Changes' button, and a 'DelHexDump' button. At the bottom right, there is a 'Service and Support' section with a brief description of Printek's customer service focus.

This is an overview of the printer configuration.

To return the printer to normal operating mode, double-click the Power button. The POWER LED will be returned to a solid light.

At the top of the Main Page are selections to access the sub-menus.


A. Connectivity Parameters

This page allows you to set up the connection to your printer. In the detailed descriptions, an asterisk (*) indicates the factory default value.

Wireless (Wi-Fi) Configuration

This will display the current Wi-Fi configuration. The default setting for Wireless connection is Access Point mode. The default passphrase is DASC0M123.


Personal Area Network* –The printer will broadcast itself as a network connection. The SSID will be the serial number of the printer. When connecting to the printer, the passphrase is DASC0M123.


Wireless Configuration 	
WiFiStat	<input checked="" type="radio"/> ON <input type="radio"/> OFF
IP Address	<input type="text" value="169"/> <input type="text" value="254"/> <input type="text" value="200"/> <input type="text" value="1"/>
SubnetMask	<input type="text" value="255"/> <input type="text" value="255"/> <input type="text" value="0"/> <input type="text" value="0"/>
Gateway	<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>
SSID	<input type="text" value="FP641-0JV023210017"/>
passphrase	<input type="text" value="DASC0M123"/>
Address Method	<input type="radio"/> Static <input type="radio"/> DHCP <input checked="" type="radio"/> Access Point
Printer Name	<input type="text" value="DASC0M"/>
Wifi Port	<input type="text" value="8023"/>

Static – printer will always connect to the network using the IP address defined.

DHCP – printer will acquire an IP address from your network DHCP server.

If Static or DHCP are selected, the printer will display available access points:

Previously Connected Networks 					
Network ID	SSID	BSSID	Status	Connect/Disconnect	Remove
0	Printek1-5G	any	[DISABLED]	<input type="button" value="Connect"/>	<input type="button" value="Remove"/>
1	Printek1	any	[CURRENT]	<input type="button" value="Disconnect"/>	<input type="button" value="Remove"/>

Available Networks 					
BSSID	Frequency	Signal Level	Flags	SSID	Add/Connect
c8:9e:43:5c:fa:9b	2432	-31	[WPA2-PSK-CCMP][WPS][ESS]	Printek1	<input type="button" value="Add/Connect"/>
f8:54:f6:37:02:27	2422	-54	[WPA2-PSK-CCMP][ESS]	"FP641-0JV023300045"	<input type="button" value="Add/Connect"/>
d4:5d:df:98:1c:e8	2412	-65	[WPA2-PSK-CCMP][WPS][ESS]	CBCI-C512-2.4	<input type="button" value="Add/Connect"/>
d4:5d:df:98:1c:d0	5805	-77	[WPA2-PSK-CCMP][WPS][ESS]	CBCI-C512-5	<input type="button" value="Add/Connect"/>
88:9e:68:01:a9:90	2462	-79	[WPA2-PSK-CCMP][WPS][ESS]	DRIVEN4	<input type="button" value="Add/Connect"/>
a0:f3:c1:ab:de:a2	2462	-57	[WPS][ESS]	Testing	<input type="button" value="Add/Connect"/>
da:5d:df:98:1c:d0	5805	-75	[ESS]	xfinitywifi	<input type="button" value="Add/Connect"/>
c8:9e:43:5c:fa:9a	5220	-45	[WPA2-PSK-CCMP][WPS][ESS]	Printek1-5G	<input type="button" value="Add/Connect"/>
de:5d:df:98:1c:d0	5805	-78	[WPA2-EAP-CCMP][ESS]	XFINITY	<input type="button" value="Add/Connect"/>
8a:9e:68:01:ab:9a	5745	-91	[WPS][ESS]	xfinitywifi	<input type="button" value="Add/Connect"/>

IP Address – user defined. If Static Address Method is selected, type in the address the printer will use on the network.

SubNetMask – user defined. If Static Address Method is selected, type in the subnet mark of the network.

GateWay – user defined. If Static Address Method is selected, type in the gateway address of the network.

WiFi Port – user defined. Type in the IP port to be used by the printer. (default value = 8023)

Address Method – user selectable

Available Networks – access points detected by the printer will be displayed. Select Add/Connect to use one of these access points.

Previously Connected Networks – access points detected by the printer or added through Add/Edit Network will be displayed. Select Connect to use one of these access points or Remove to delete it from printer.

Currently Configured Networks – access points added through Add/Edit. They may not have been connected yet. Select Remove to delete access point from printer.

Set Date – Some Enterprise network connections require this setting. Simply enter the current year.

Add/Edit Network

Enter the SSID of a network connection. If authentication is used select the authentication type. Click Next. The following form will change depending on the authentication type:

WPA-PSK

Enter the password for the network connection.

Add/Edit Network

Key Management Protocol WPA-PSK	Network Name Test1	Next
------------------------------------	-----------------------	------

Password

Submit Changes Discard Changes

WPA-EAP or IEEE8021X

These are Enterprise network settings. Consult your server manual for recommended settings.

Add/Edit Network

Key Management Protocol IEEE8021X	Network Name Test2	Next
--------------------------------------	-----------------------	------

EAP
TTLS

Phase1	Phase2
--------	--------

Identity	Anonymous Identity
----------	--------------------

Password

Private Key Password	Private Key2 Password
----------------------	-----------------------

CA Certificate File	Client Certificate File	Private Key
CA2 Certificate File	Client2 Certificate File	Private Key2


Submit Changes Discard Changes

Upload Digital Certificate

If your enterprise network uses digital certificates as another form of authentication, you can upload the certificates here.

NOTE : Be sure to click the “Submit Changes” button at the bottom of the list to save any settings.

Bluetooth Config:

Bluetooth Config 

BTStat
 ON OFF

Local Name

MAC ADDRESS: **E8:FB:1C:B9:CF:DA**

Paired Mode
 UnPaired Paired

Discoverability
 Off On

Pin

Connection
 Printer Personal Area Network

Paired Mode:

Possible values: UnPaired, Paired*

This feature allows Bluetooth pairing to occur between the printer and the connecting device whenever Pairing is required by either device. Pairing requires that the PIN on the printer and the connecting device exactly match each other.

Discoverability:

Possible Values: Off, On*

This feature is used to set whether the printer may be discovered by other Bluetooth devices.

PIN:

Possible Values: 0000*, Up to 16 Numeric Characters.

Note that this feature is only available if Pairing Mode is set to "Paired". The PIN value must exactly match the PIN value set in the Bluetooth manager on the host computer.

Connection:

Possible Values: Printer*, Personal Area Network

This feature selects the role of the printer's interface in the Bluetooth network.

In Printer mode, the printer behaves as a regular Bluetooth device.

In Personal Area Network mode, the printer behaves similar to a Wi-Fi access point.

The Power LED will flash off every two seconds while in this mode.

After pairing with the printer, the host Bluetooth icon will appear different, indicating that an access point is present.



Some hosts require an extra connect step after pairing. After connecting, the printer will issue an IP address to the host and the host can communicate to the printer as if it were a Wi-Fi printer. The printer's address to the host is always **169.254.200.1**.

In the host device's browser (if equipped) this address may be entered in the address bar to access the printer web page.

NOTE : Be sure to click the "Submit Changes" button at the bottom of the list to save any settings.

B. Image Parameters

This page allows you to make selections about the image to be printed.

Image Config	
Encoding	<input checked="" type="radio"/> GB18030 <input type="radio"/> UNICODE <input type="radio"/> UTF-8
Current Emulation	ESCPOS
Font Type	Font A Font A: 12*24 Font B: 9*17
Letter Shape	Art Style
Digit Shape	Normal
Chinese Font Type	Font A Font A: 24*24 Font B: 32*32
Character Type	Chinese Character Set
Default Line Spacing	30 Unit: point

Submit Changes Discard Changes

Current Emulation:

Possible Values: ESCPOS*, PRINTEK, ZPL, CPCL, AUTOIMAGE, PDF, POSTSCRIPT, IMAGE

The FP641 printer is capable of using several different emulation modes. This feature sets the family of printer commands that may be used by a host application program to control the various capabilities of the printer. The printer will only respond to commands valid for the currently selected emulation. For more information, please refer to the *Integrator's Guide*.

Besides the popular printer languages to choose from, the following selections allow the FP641 to print many other file formats directly, without the need for a driver.

AUTOIMAGE – selected when mixed PDF and POSTSCRIPT images are sent to the printer. The printer will determine which type of file has been sent. This can increase printer response time.

PDF – When in this mode the printer will directly print Portable Document Files (PDF).

POSTSCRIPT – When in this mode the printer will directly print Postscript formatted files (.ps). You can also use a generic Postscript driver to print when in this mode.

IMAGE – selected if just image files are being sent to the printer. When in this mode the printer will directly print the following file types: .png, .jpg, .bmp.

Default Font: (depends on emulation selected)

The FP641 has the ability to use True Type Fonts. All True Type Fonts loaded into printer memory are listed here. When using emulations that do not specify the font for each line of text, select the font you would like to use as the default font. All print jobs will use the default font unless a command is sent to the printer to use another font.

Chars Per Inch and Default Text Line Spacing:(depends on emulation selected)

This determines how large the characters are and how many characters will print in a one-inch space. The higher the number, the greater the number of lines per vertical inch of print.

NOTE : Be sure to click the “Submit Changes” button at the bottom of the list to save any settings.

C. Device Config

This page allows you to set certain hardware parameters on the printer.

Device Config

Login Password

Length must be less than or equal to 8

Form

Units	<input type="text" value="inch"/> ▾
Max Paper Speed	<input type="text" value="5.0"/> ▾ inches per sec.
Mark Seek	<input checked="" type="radio"/> RollPaper <input type="radio"/> Front <input type="radio"/> Rear <input type="radio"/> Gap
Paper Sensor Threshold	<input type="text" value="50"/> % range 0-100%
Backup Distance Before Printing	<input type="text" value="0.0"/> inches
Feed Distance After Printing	<input type="text" value="0"/> inches
Left Margin	<input type="text" value="0"/> inches
Contrast	<input type="text" value="16"/> ▾ 1 - 32
PaperSize	<input type="text" value="4"/> ▾ 2 - 4 inches

Sleep Config

Light Sleep	<input type="text" value="60"/> ▾ seconds
Deep Sleep	<input type="text" value="60"/> ▾ mins
Deep Sleepmode	<input type="text" value="Auto poweroff"/> ▾

Form:

Units

Select between inches or millimeters. If you change units, do so before entering other settings.

Max Paper Speed

Possible values: 1.0 to 6.0 ips, Default = 5.0

When using labels or heavy paper stock, you may need to decrease the paper speed to prevent paper jams.

Mark Seeking

Possible values: Off*, Front, Rear, Gap.

Set the value when using regular or label media with black alignment marks or label media with gaps between the labels. Depending on the value selected here you may or may not see some of the sensor threshold settings listed below.

NOTE: Before adjusting black mark gap thresholds set the Mark Width to match the width of the black mark or label gap on your media.

Paper Sensor Threshold

When using paper with a black mark on the front adjust this setting to ensure the paper stops at the black mark. Normal value is between 70-90%.

Rear Paper Sensor Threshold

This is set the same as the paper threshold but using the rear (in lid) paper.

Gap Paper Sensor Threshold

When using labels without a Black Mark, adjust this setting to ensure the label stops at the gap in between labels. Normal value is about 60%.

Backup Distance Before Printing

Used with Mark Seek. User defined. This is the distance the printer will pull in the paper before starting to print.

Stop Distance after Mark

Use with Mark Seeking. User defined. This is the distance the printer will advance the paper after the mark is detected.

Left Margin

Setting this value will tell the printer how far from the left edge of the paper to start the print job.

Contrast

Possible values 1-32. The default value is 16.

The lower the value the lighter the print. The higher the value the darker the print.

Sleep Config

Light Sleep

Possible values: Disabled, 30, 60*, 120, 300, 600, minutes.

Set this value to have the display turn off after a specified time of inactivity. The printer will “wake up” when data is received.

Deep Sleep

Set this value to conserve battery power.

Possible Values: Disabled, 30, 60*, 90 minutes

Deep Sleepmode

Possible Values: Auto poweroff*, PowerSleep

Auto poweroff – the printer will turn off after the selected time.

PowerSleep – the printer will power down after the selected time but will wake up when data is received.

NOTE : Be sure to click the “Submit Changes” button at the bottom of the list to save any settings.

D. Fonts

Upload Font File



Truetype Fonts (.tff, .otf, .ttc and .bdf) can be uploaded here.

Languages like ZPL and CPCL can use the fonts by referring to them by their Font Family Name.


Printek emulation uses the Index value when selecting a font.

Font Aliases

Languages like ZPL and CPCL can use an uploaded Font Alias Table so legacy jobs can have their font names mapped to other uploaded fonts. Contact Printek Technical Support at (800) 368-4636 for more information.


Fonts  **Current Font Mapping** 

Font Family Name	Index	Indicator(System default fonts, which cannot be removed.)
Andika Basic	A	*
Courier Prime	B	*
Liberation Mono	C	*
FONTA	D	
FONTG	E	
MICR	F	*
Instruction	G	*
Liberation Sans	H	*
OCRA	I	*
IPAexMincho	J	
FONTD	K	
FONTB	L	
HAN NOMA	M	*
Liberation Serif	N	*
VCR OSD Mono	O	*

Upload Font File 

Choose File No file chosen

Upload

Remove Font File 

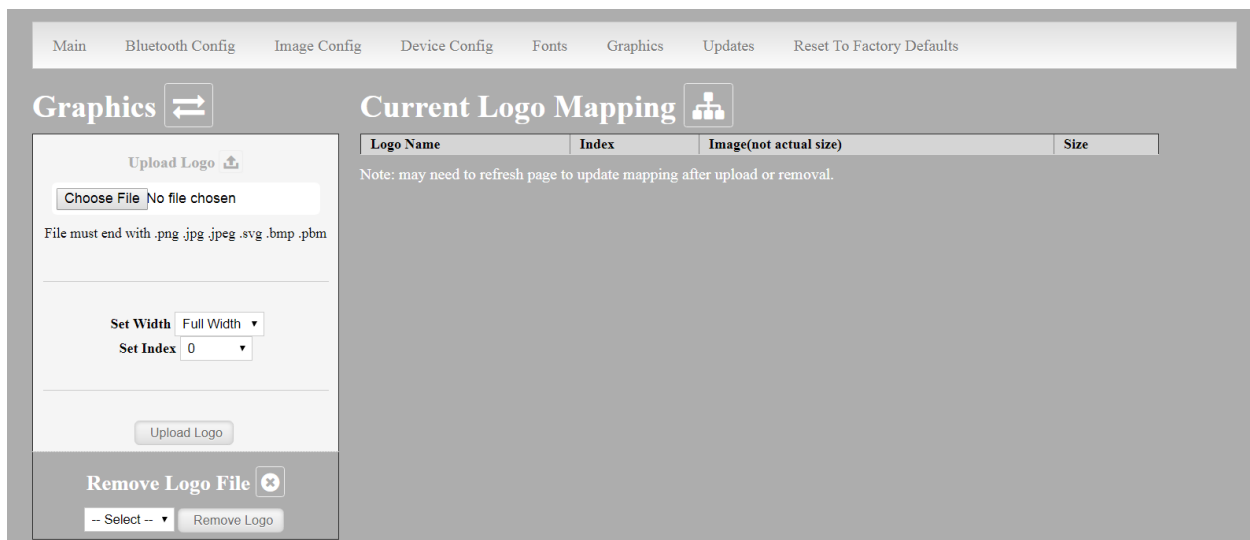
-- Select --

Remove

E. Graphics

This menu will allow you to load a graphics file into printer memory for use in creating your output.

For instance, logos can be stored for recall and use by your host program (see *Integrator's Guide* for more details).



Upload File

Select the graphics file to load into printer memory. Acceptable graphics formats are .jpeg, .pbm, .pcx, .bmp, .png and .svg.

Set Width

Select the width you want to use to display your logo: full width, half width, or small width.

Set index

Depending on the Index value used, you can automatically print the graphics file as a header (prints at the beginning of the print job), footer (prints at the end of a print job) or use the graphics print command to print anywhere on your receipt or label. See *Integrator's Guide* for more information on graphics commands.

When selecting header, the graphics file will automatically print the logo at the beginning of each print job.

When selecting footer, the graphics file will automatically print the logo at the end of each print job.

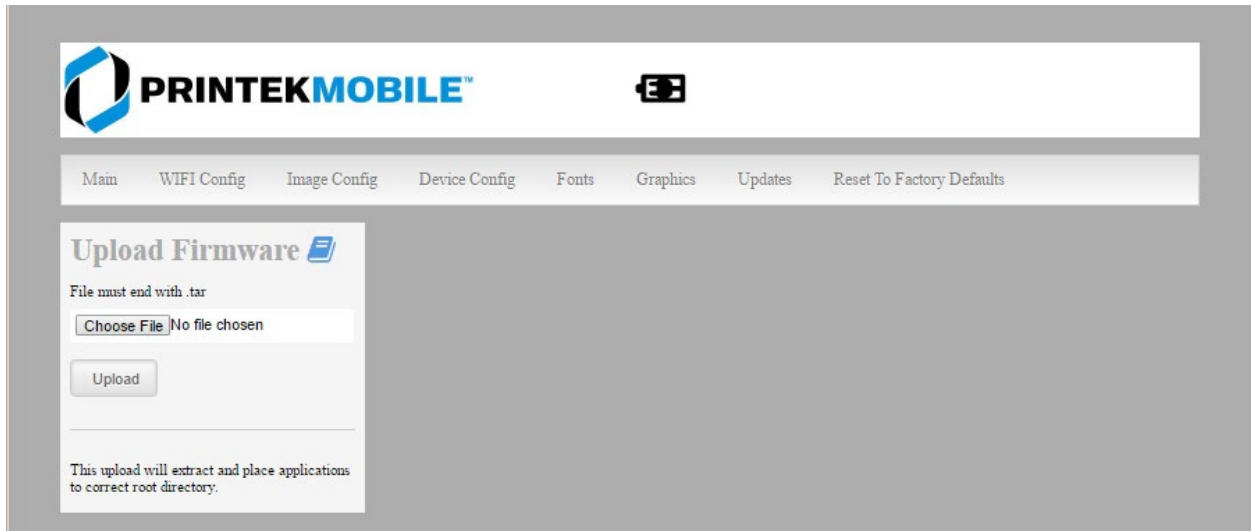
You must set each of these values before selecting Upload Logo or the default values will be associated with your image.

Current Logo Mapping

Once uploaded into the printer memory, your image and settings will be displayed here.

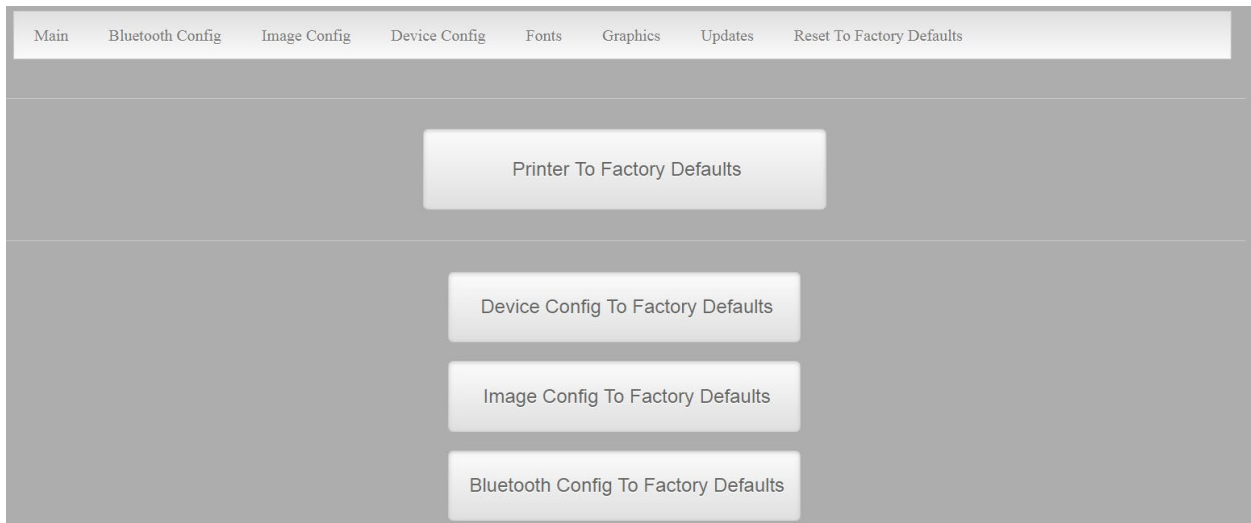
NOTE : Be sure to click the "Submit Changes" button at the bottom of the list to save any settings.

F. Update Printer Firmware, Upload Files to Printer Memory



Printer Application Updates, OEM information and Manuals and more can be uploaded here. Contact Printek Technical Support at (800) 368-4636 for more information.

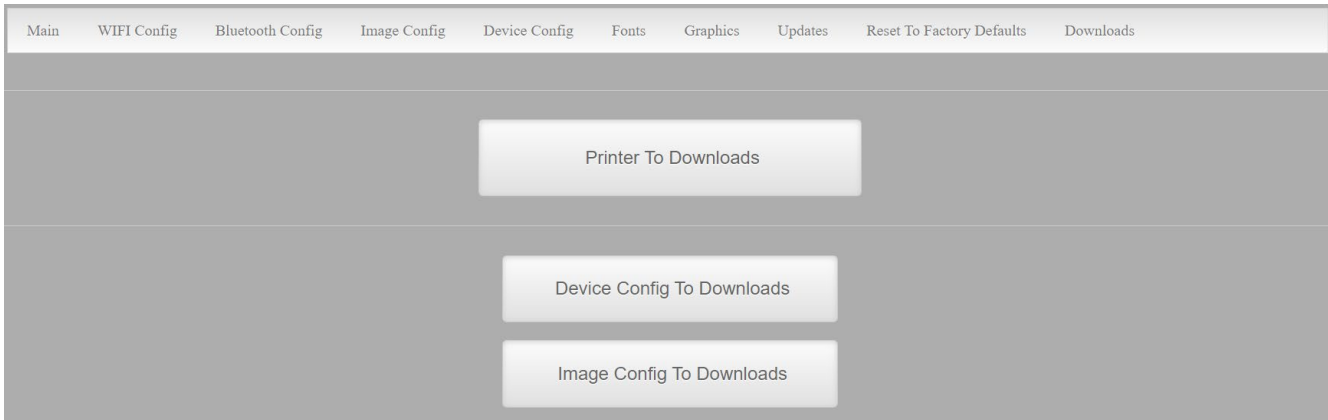
G. Reset Printer Configuration to Factory Defaults (Safe Mode)



Printer settings can be restored to factory configurations.

Note that WIFI network configurations will be lost when Network Config to Factory Defaults is checked.

H. Downloads



This will allow you to save the printer configuration to a file that can be sent to another printer through the Updates to configure another printer with the same settings.

Printer to Downloads

Saves all settings within the printer.

Device Config to Downloads

Saves just the Config settings from the printer.

Image Config to Downloads

Saves just the Image config settings from the printer.

LCD Panel Configuration

Use the buttons on the front panel to navigate the menu system.

Menu Button



Enter the Menu system and menu configuration selections.

Paper Feed Button



Move to the next menu selection. Selects configuration options.

Power Button





Return to previous menu. Save changes.

The table below shows selections available from the front panel. See Web Page Configuration for more details of these settings.




System Config		
LCD Contrast	Adjust LCD brightness	1*,2,3,4,5

Image Config		
Emulation	Allows for use of different print commands	ESCPOS*, ZPL, AUTOIMAGE, PDF, POSTSCRIPT, IMAGE, PRINTEK, CPCL
Encoding (emulation dependent)	Selects font sets	GB18030*, UNICODE, UTF-8
FontType (emulation dependent)	Selects font type	FONTA*, FONTB, Customize
Letter Shape (emulation dependent)	Selects type of letters	Art Style*, Simun, Mono
Digit Shape (emulation dependent)	Selects type of shapes	Normal*, Bank Style, OKI Digit
CHN_Font_Type (emulation dependent)	Selects font type	FONTA*, FONTB, Customize
LineSpacing (emulation dependent)	Sets spacing between lines	30*, 0 through 50
CharType	Selects different font tables	

Device Config		
Max paper speed	Selects print speed	2.0ips, 2.5ips, 3.0ips, 3.5ips, 4.0ips, 4.5ips, 5.0ips*, 5.5ips, 6.0ips
Mark seek	Selects type of paper	Rollpaper*, front, rear, gap
Sleep mode	Sets energy setting	Light sleep – 30seconds, 1min*, 2min, 5min, 10 min, disable Deep sleep – deep mode – auto power off*, power sleep – sleep time, 30 mins, 60 mins*, 90 mins, disable
Paper size	Selects print size	2 inch, 3 inch, 4 inch*
Contrast	Sets print darkness	16*, 1-32
Left margin	Sets left offset	0.0inch*, -2.0inch to 2.0inch
Unit	Set unit	Inch*, mm

BT Config		
On/off	Turn bluetooth on or off	On, off
BT address	Display BT MAC address	information only, cannot change
BT Pin	Display BT Pin	0000* use  button to entry selection. Use  button to change value.
BT Name	Display BT name	Information only. Use Web Config to change.

BT Paired Mode	Display BT Paired Mode	Paired*, UnPaired
----------------	------------------------	-------------------

Wireless Config		
ON/OFF	Turn WI-FI on or off	ON*, OFF
Wireless method	Select wifi mode	Access Point *, Static, DHCP
IP ADDRESS	Change I.P address. (Static mode only)	use  button to entry selection
NETMASK	Change subnet address. (Static mode only)	use  button to entry selection
GATEWAY	Change gateway address. (Static mode only)	use  button to entry selection
SSID	Display SSID	Information only. Use Web Config to change
WIFI PORT	Display WIFI PORT	Information only. Use Web Config to change
WIFI MAC	Display WIFI MAC	Information only. MAC address cannot be changed.

About		
Model	Display printer model	Information only.
SN	Display printer SN	Information only.
Vkernel	Display printer kernel version	Information only.
Vpsw	Display printer primary software version	Information only.
Vcsw	Display printer co-processor version	Information only.
Vfpga	Display printer FPGA version	Information only.

Reset printer		
Do not reset	/	/
Reset all settings	Reset all settings to factory defaults	Push POWER button to reset
Reset image cfg	Resets Image Config settings to factory defaults	Push POWER button to reset
Reset device cfg	Resets Device Config settings to factory defaults	Push POWER button to reset
Reset bt cfg	Resets Bluetooth Config settings to factory defaults	Push POWER button to reset
Reset wifi cfg	Resets wireless config settings to factory defaults	Push POWER button to reset

BAT INFO		
CAP	Display battery capacity	Information only.
TEMP	Display battery temperature	Information only.
STAT	Display battery status	Information only.

Printing Modes

There are two fundamental printing modes with mobile printers.

A. ASCII Based Print Jobs

The host sends the print job as a series of lines of characters, some of which represent the text to be printed, while other portions are command codes which tell the printer which font to use, where to locate the text, what barcodes to use, etc. These text-based files are encoded in a print language specific to the target printer.

The FP641 understands ASCII based jobs in several different print languages. Refer to the [Appendix](#) or the *Integrator's Guide* for the list of print languages supported.

B. Graphic Based Print Jobs

The host assembles the printed image as a series of lines of dots and transmits this image as a sequence of data bytes that represent the dot patterns assembled. Often these jobs or files have some control characters on the front end and / or rear end of the dot pattern bytes to define their format, help control pagination, etc.

Windows drivers in particular encode the image as a graphic based print job before it is passed along to the printer.

In addition to accepting graphic jobs from its Windows driver, the FP641 can accept and print directly many other graphic image file types. This opens the option to print job images from a variety of devices for which drivers or print utilities don't exist, such as some tablets and smartphones.

Please see the *Integrator's Guide* or your system integrator for more details.

Integrating the Printer into your Business Applications Step by Step – Creating a Link from Host to Printer

A. Windows Desktop Computers

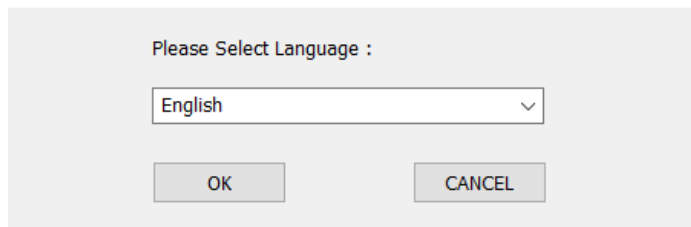
Print Drivers

The latest Windows printer drivers can be downloaded from our web, www.printek.com.

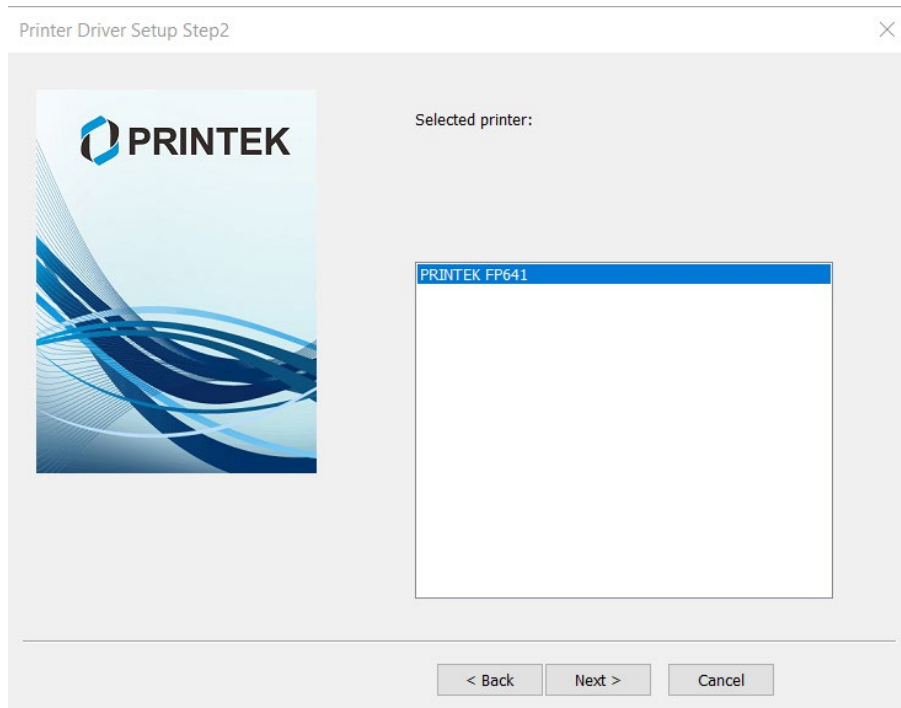
I. USB

- a) Turn on the printer.
- b) Plug the printer into a USB port on your host system using a USB-A to USB-C cable.
- c) From the folder that you unzipped the driver files to select “DriverSetup”
- d) Select your Language:

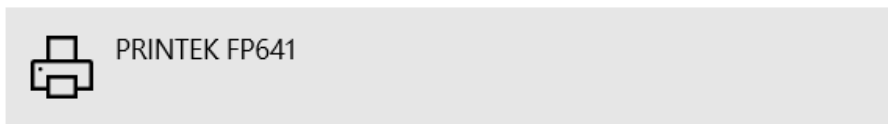
Set Language



- e) Follow the prompts for automatic installation.
- f) The installation program should identify the printer model:



- g) Follow the prompts to complete the installation.
- h) After the printer driver is installed, the printer will appear as “Printek FP641” under the “Printers & scanners” screen.



II. Bluetooth – General

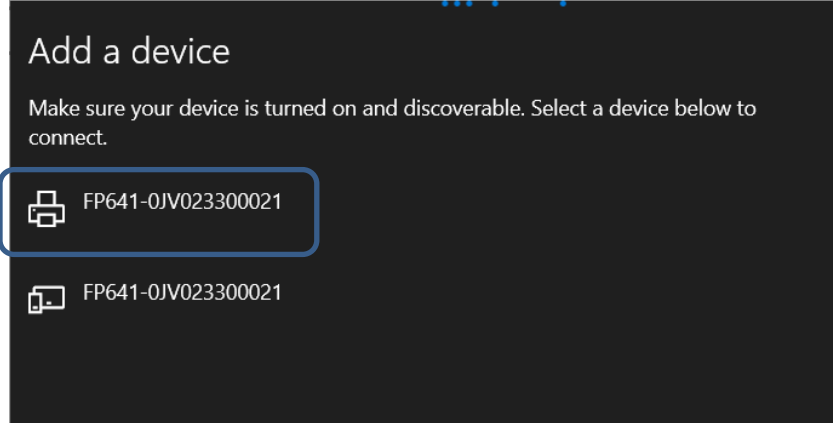
- a) Turn on printer. Make sure Bluetooth on your host device is turned ON.
- b) Open your Bluetooth settings and scan for devices. The default discover name of the FP641 printer is “FP641-#####”, where ##### is the Printer Serial Number.
- c) For Pairing, the default passkey is “0000”.
- d) The printer should appear in your paired devices list.

Note: Bluetooth host devices pair after discovery, but only **connect** to Bluetooth printers when the host application has asked it to print.

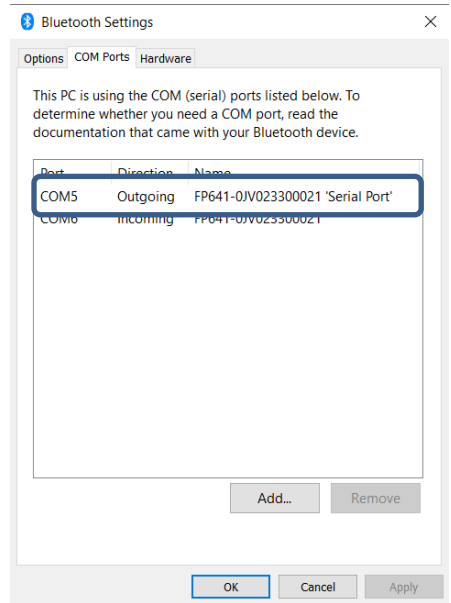
III. Bluetooth – Windows 10

- a) From Start menu select Settings
- b) Select Devices
- c) Select Bluetooth & other devices
- d) Select Printer
- e) Select Add Bluetooth or other device
- f) In the Add a Device window select Bluetooth

- g) The PC will scan for available Bluetooth devices. This can take a few minutes depending on your PC and how many Bluetooth devices your PC discovers.
- h) The printer will be displayed as model number with the serial number following the model name:



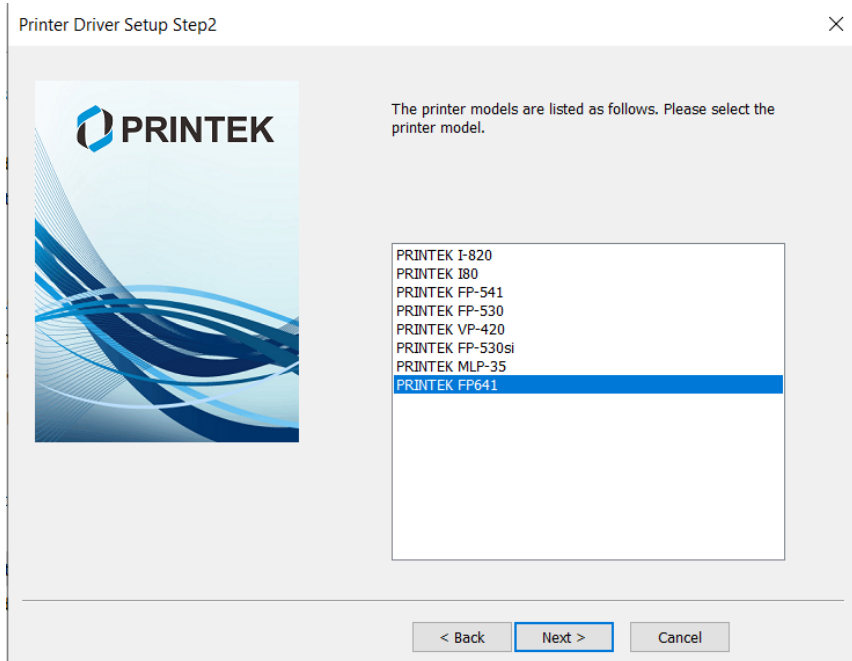
- i) Select the printer you want to pair with
- j) Enter the PIN code, 0000
- k) Select Connect
- l) You should see a message "Your device is ready to go!"
- m) Select DONE
- n) This will return you to the Bluetooth & other devices window.
 - a. The printer will be listed under Other devices
 - b. Under the printer it will display Driver is unavailable.
- o) Scroll down to find **Related settings**
- p) Select More Bluetooth options
- q) Select the COM ports tab
- r) Note the outbound COM Port number assigned to the printer. You will use this number when installing the printer driver.



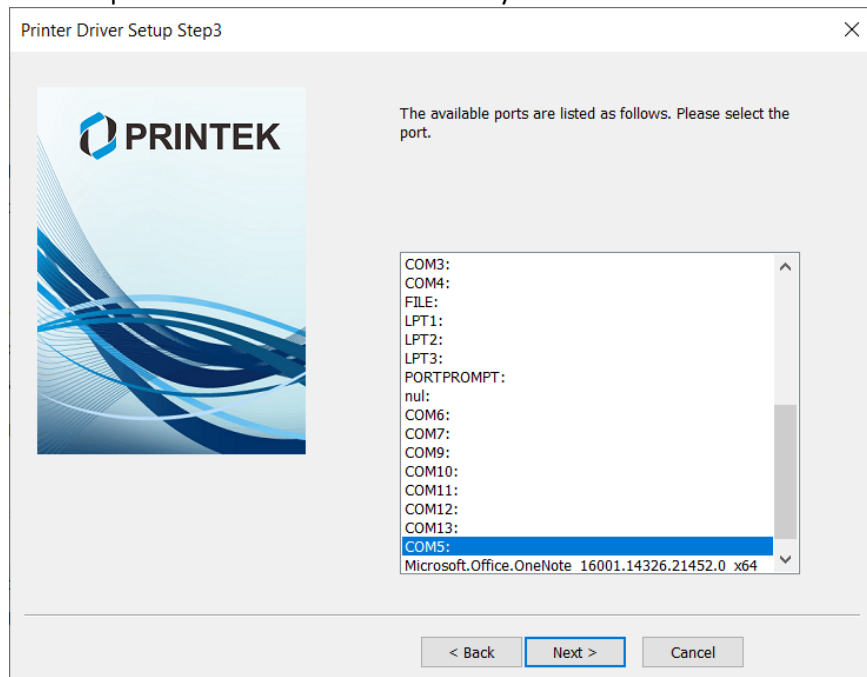
- s) Select OK to close the window.

Installing the Driver under Windows 10:

- a) From the folder that you unzipped the driver files to select “DriverSetup”
- b) Select Language you want the driver to be installed with
- c) Select “OK”
- d) Select “Next”
- e) Select “Cancel” for manual installation
- f) Select the printer model



- g) Select “Next”
- h) Select the COM port number you got from the Bluetooth settings.
 - a. If the COM port number is not listed restart your PC and restart the driver installation.



- i) Follow the prompts to complete the installation.

- j) You should see the Printek model listed in under Printers & scanners. FP641 will be listed twice.
- a. The listing with the serial number is the Bluetooth connection.
 - b. The listing without the serial number is the printer driver.

Printers & scanners



Fax



FP641-0JV023300021
Driver is unavailable



Generic / Text Only



Microsoft Print to PDF



Microsoft XPS Document Writer



OneNote (Desktop)



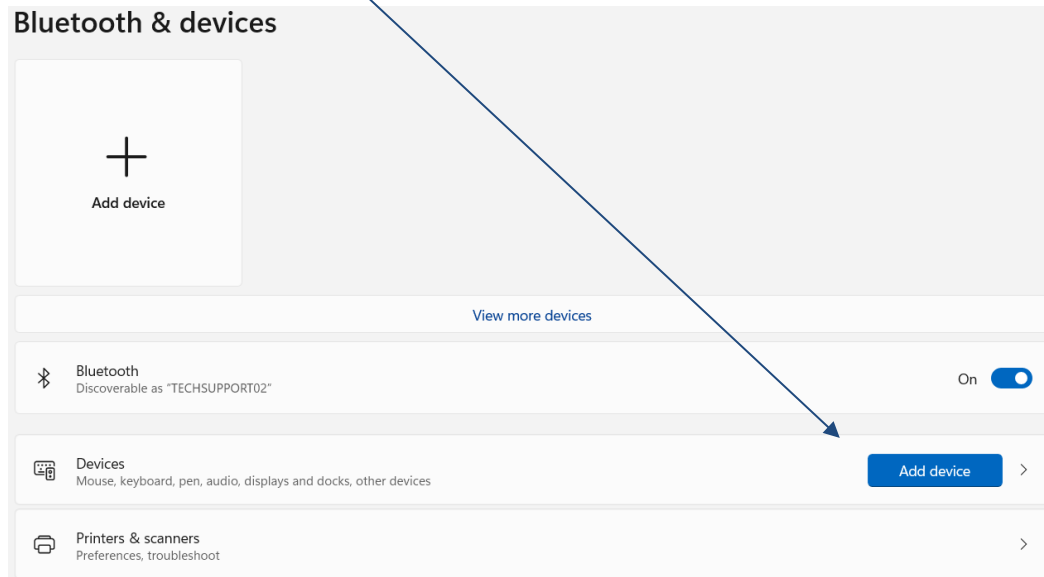
OneNote for Windows 10



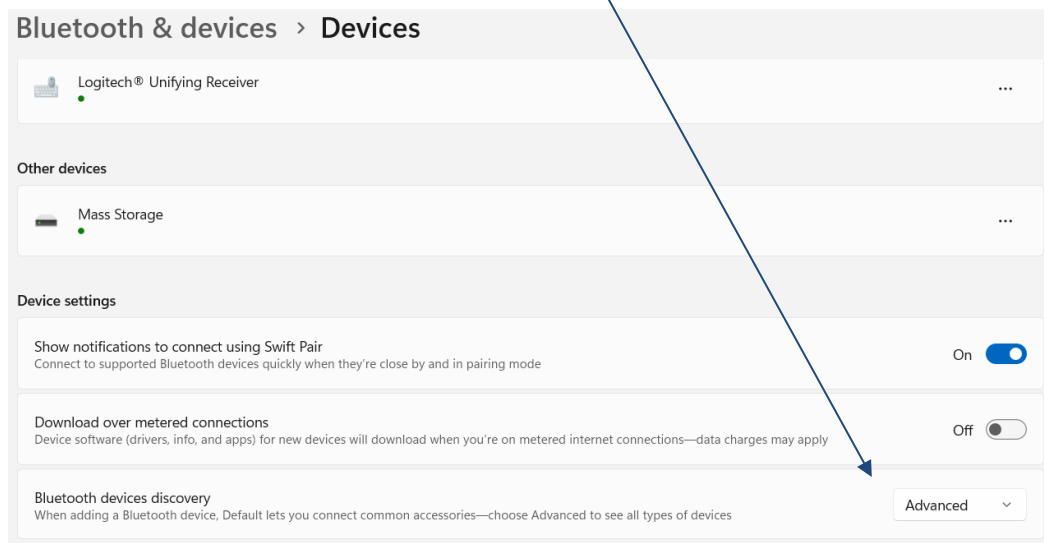
PRINTEK FP641
Default

I. Bluetooth – Windows 11

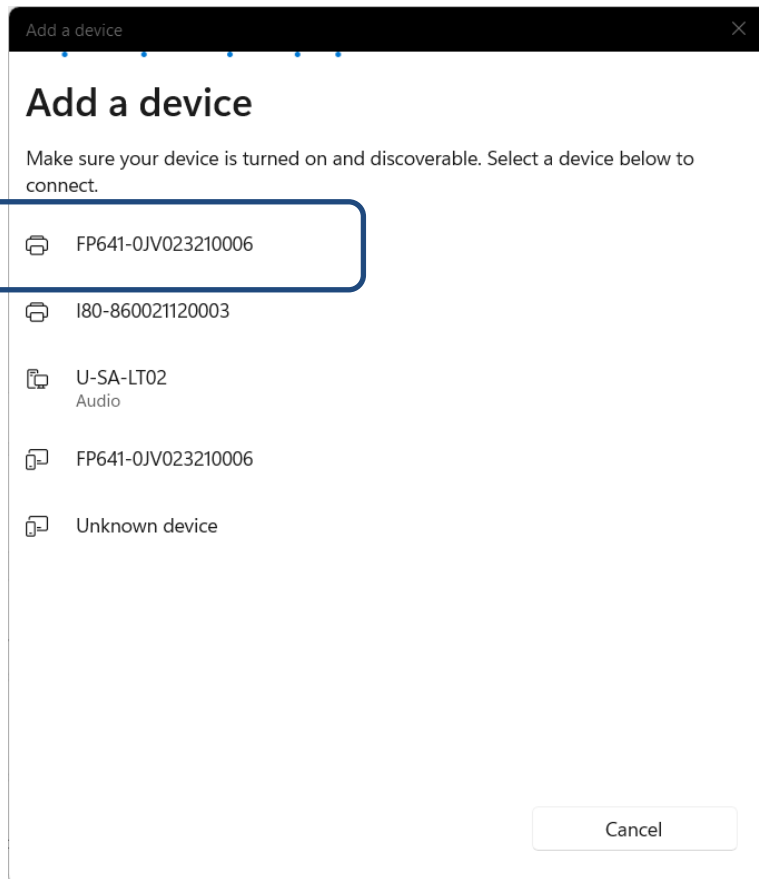
- a) From Start menu select Settings
- b) Select Devices
- c) Select Bluetooth & other devices
- d) Click the Arrow button for Devices



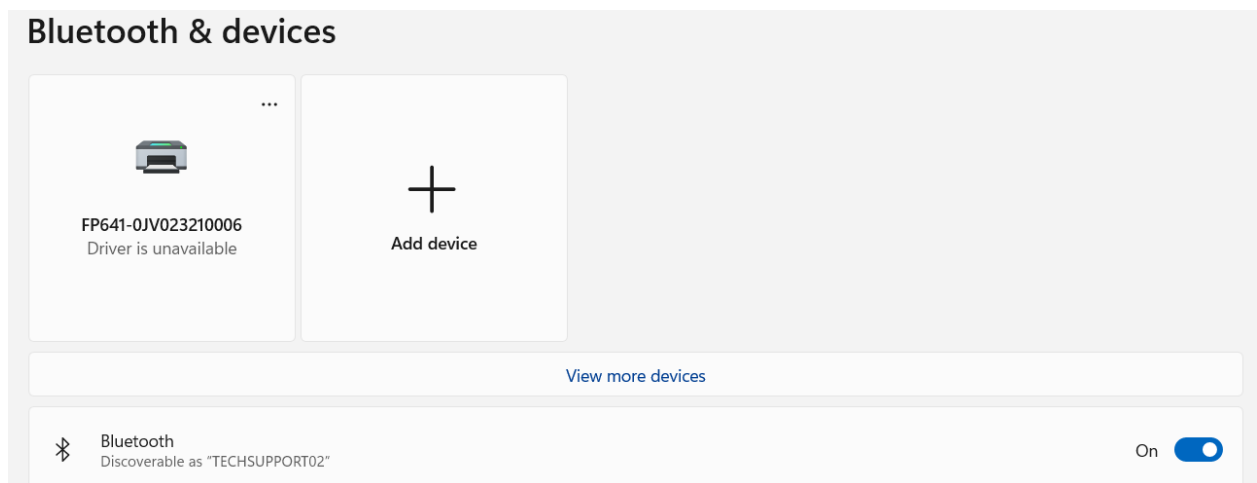
- e) Change the Bluetooth devices discovery to **Advanced**.



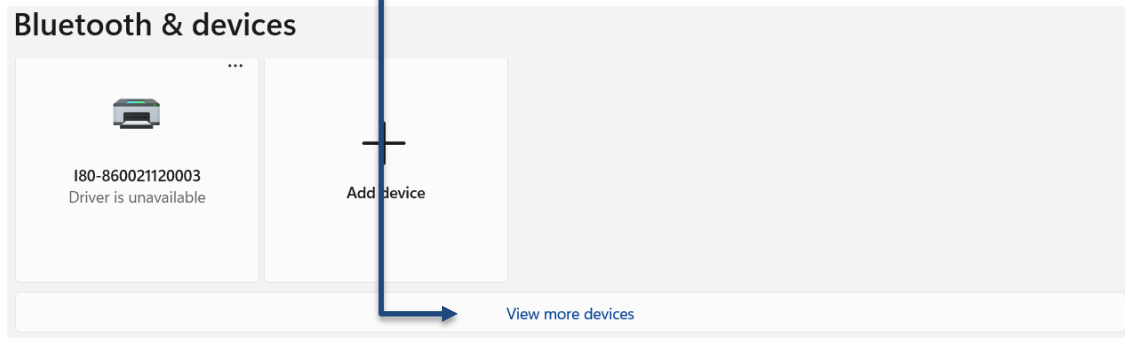
- f) Go back to Bluetooth & devices
- g) Select Add Device
- h) Select Bluetooth
- i) The printer will appear with a printer symbol next to it



- j) Select the printer.
- k) The pin is 0000(4 zeros)
- l) The paired printer will appear under Bluetooth & devices
 - a. Under the printer it will display Driver is unavailable.



m) Select "View more devices"

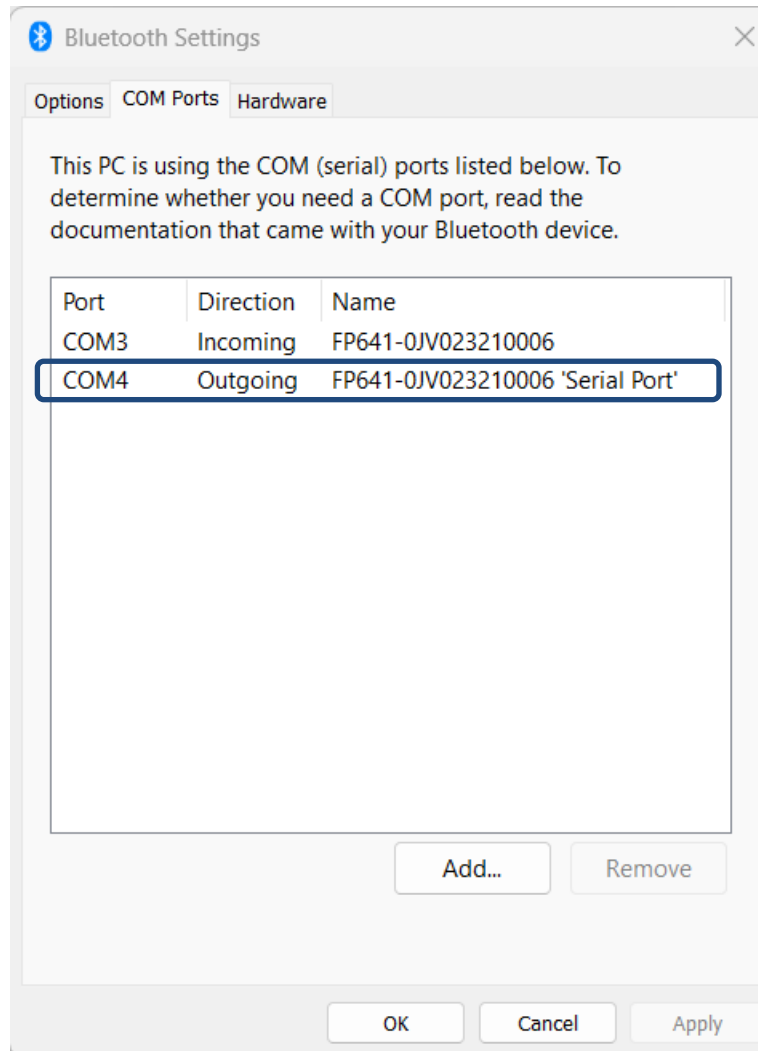


n) Scroll down to find **Related settings**

o) Select **More Bluetooth options**

p) Select the COM ports tab

q) Note the outbound COM Port number assigned to the printer. You will use this number when installing the printer driver.



r) Select OK to close the window.

II. Installing the printer driver under Windows 11:

- a) From the folder that you unzipped the driver files to select “DriverSetup”
- b) Select Language you want the driver to be installed with
- c) Select “OK”
- d) Select “Next”
- e) Select “Cancel” for manual installation
- f) Select the printer model
- g) Select “Next”
- h) Select the COM port number you got from the Bluetooth settings.
 - a. If the COM port number is not listed restart your PC and restart the driver installation.
- i) Select if you want this to be default printer
- j) Select if you want to print a test page
- k) Select “Next”
- l) Verify the model and port setting is correct select “Finish”
- m) A popup window will inform you the driver was successfully installed select “OK”
- n) You should see the Printek model listed in your Printers & scanners



- o) You will notice the printer is listed twice in the Printers & scanners.
 - a. The listing with the serial number is the Bluetooth connection.
 - b. The listing for the printer is the printer driver.

IV. Wi-Fi

Note: The following instructions are fundamentally the same for an Infrastructure or Access Point mode setup. The FP641 WI-Fi is set to Access Point mode by default. The default password is DASCOM123.

- a) Perform a configuration printout to verify the printer Wi-Fi setup and to record the IP address assigned and the Port number.
- b) Install the printer as a local printer using the USB instructions above.
- c) In the “Printers & scanners” screen, click the printer icon representing your mobile printer.
- d) Select “Manage your device”
- e) Select “Printer Properties”
- f) Select the Ports tab
- g) Select Add Port
- h) In the new dialog box which appears, select “Standard TCP/IP ports”; this will open the Standard TCP/IP Printer Port wizard.
- i) Follow the on-screen prompts in this wizard. You’ll use the IP address recorded above to set up the port. In the same screen you can also name the port something familiar and relevant, and this will appear as the name of the printer to the user.
- j) After the port is detected, it will be displayed as a “generic network card” – accept this by clicking Next / Finish.
- k) After you are finished adding the port, Windows will report it as a “Standard TCP/IP port”; click OK to accept this.
- l) Now in the Printer Properties dialog box your IP address (or the familiar name you assigned above) will appear in the list of ports available. Select it to configure the port.
- m) Windows defaults standard TCP/IP ports to port number 9100. The FP641 Wi-Fi port number is internally set to 8023. Change the port number to 8023 in the Windows screen and click OK.
- n) Click “Apply” in the Printer Properties box.
- o) Your FP641 printer driver should now be properly coupled to the Wi-Fi parameters you have chosen.

B. Android Tablets & Smart phones

Printek offers an Android Print app that can be downloaded from our web site, www.printek.com.

I. Bluetooth

- a) Turn on printer. Make sure Bluetooth on your host device is turned ON.
- b) Open your Bluetooth settings and scan for devices. The default discover name of the FP641 printer is "FP641-#####", where ##### is the Printer Serial Number.
- c) For Pairing, the default passkey is "0000".
- d) The printer should appear in your paired devices list.
- e) Your app may need further configuration to print to the paired printer.

Note: Android devices pair after discovery, but only **connect** to Bluetooth printers when the host application sends a print job.

II. Wi-Fi

The printer has two different WI-FI modes, Access Point and Infrastructure mode. Access Point mode does not require a router and allows you to directly connect to the printer. Infrastructure mode requires an access point connect to your network.

- 1) Access Point Mode-
 - a. Open the WI-FI connections on your Android device
 - b. Scan for available WI-FI devices
 - c. The printer should appear as FP641 xxxxxxxxxx (xxxxxxx is the printer's serial number).
 - d. The default password is DASC0M123.
 - e. The Android device should show a successful connection.
- 2) Infrastructure Mode –
 - a. Setup the printer to connect to your network using the printer's built-in web configuration page.
 - b. Your app may need further configuration to print to the printer.

C. Apple™ Tablets & Smartphones

2. Bluetooth

NEED TO COMPLETE

3. Wi-Fi

NEED TO COMPLETE

Media

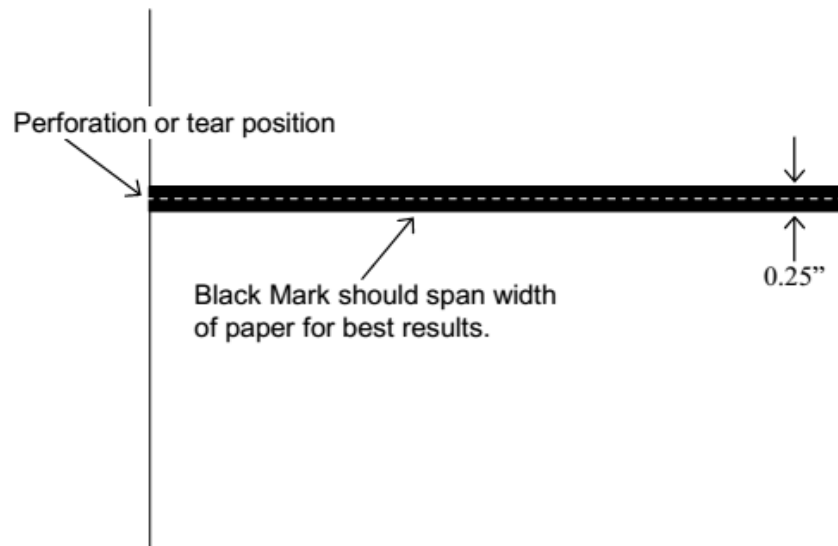
A. Standard Media

Printek offers a variety of media types. You may visit our website or contact your PrintekMobile sales representative for a complete and up to date description of our consumables and accessory products.

B. Black Mark Media Position

For automatic ticket printing, the Black Mark should be positioned as shown in the figure below. When using Mark Sensing mode (see [Configuration](#), earlier in this document), FieldPro printers will automatically position the output for tear-off and printing following a Form Feed command or by pressing the Paper Feed button.

For non-automatic paper positioning, refer to the *Integrator's Guide* for sensing and positioning commands.



Optimum Black Mark Position

Maintenance and Troubleshooting

A. Cleaning

In normal environments, the printer should be cleaned after printing a few rolls of paper or if there are voids in the printout. For optimum performance and life, you should clean the Print Head and Platen Roller whenever you load new paper.

To clean the printer areas as described below, use a Thermal Head Cleaning Pen and MCR Cleaning Card available from Printek, or you may use cotton swabs moistened with isopropyl alcohol.

- Turn the printer off. Open the Paper Door and remove the paper.
- Using a Thermal Head Cleaning Pen, clean the white ceramic surface on the Print Head.
Caution: Do not use sharp objects to clean the print head. This may damage the printer and require service. Such damage is not covered under the warranty.
- Clean the Black Mark Sensor below the print head.
- Clean the Tear Bar.
- Clean the Platen Roller. Turn the Platen Roller with your finger to clean the entire surface.
- If a Magnetic Card Reader is installed, pass an MCR Cleaning Card through the MCR slot to clean the head.

You may also experience a buildup of paper dust in the printer. This may be removed using a can of compressed air or by vacuuming.

To clean the exterior of the printer, turn the printer off and use a soft cloth moistened with a mild detergent.

B. Battery Care

I. Getting the Maximum Battery Life

New batteries are shipped in an “uncharged” state and must be charged for at least 4 hours prior to the first use. Maximum battery capacity is not reached until after completing a minimum of three complete charge and discharge cycles.

II. Charging the Battery

- Plug the power adapter into a power source appropriate for the adapter being used.
- Plug the power adapter into the power connector on the side of the printer. The printer’s battery charging circuitry will analyze the condition of the battery and begin charging it if necessary.
- If the battery is not fully charged, charging will begin and the Battery Indicator will illuminate.

- When the battery is fully charged, the Battery Indicator will turn off. Charging may take up to 8 hours (4 hours with external desktop charger accessory) depending on the condition of the battery.
- The printer may be used while the battery is charging, but this will extend the time required to fully charge the battery.
- The power adapter may remain connected to the printer to keep the battery fully charged and will not cause damage to the printer or battery.

III. Additional Battery and Safety Information

- The FieldPro 641 series printers use an 11.2 volt 4400 mAh Lithium-Ion battery.

Caution: Risk of explosion if battery is replaced by incorrect type. Dispose of used batteries according to the instructions.

- The recommended ambient temperature for charging is 68-77° Fahrenheit (20-25° Centigrade).
- Take the battery out of the printer when storing the printer for long periods of time. The battery storage temperature is 40-104° Fahrenheit (4-40° Centigrade). Do not store a fully charged battery at temperatures above this range for long periods of time or the battery may permanently lose charge capacity.
- Do not disassemble, short circuit, heat above 80°C, or incinerate the battery. The battery may explode.
- Only dispose of used batteries according to your local regulations. If you do not know your local regulations, the Rechargeable Battery Recycling Corporation (RBRC) is a non-profit organization created to promote recycling of rechargeable batteries. For more information visit www.rbrc.org.



IV. Testing the Power Adapter and Battery

To verify that the printer's internal battery charger is functioning properly, perform the following steps.

- Test the power adapter (100-240VAC/50-60Hz, 12/24VDC adapter) with a voltmeter to verify that its output voltage is 24 VDC.
- Connect the power adapter to a power source and then connect it to the printer.
- Verify that the printer's Battery Indicator is illuminated. If illuminated, the charging circuit is functioning properly.

Note: If the battery is already fully charged, the Battery Indicator may not illuminate.

- After the battery has been charged for five minutes, disconnect the power adapter.
- Perform a printer Self-Test.
 - Make sure the printer is turned off.
 - Press and hold the Paper Feed Button while turning the printer on.

- If the printer successfully prints the Self-Test, the battery is functional. If the Self-Test does not complete and the printer turns off, repeat this test with a known good battery.
- Once this test has completed successfully, allow the battery to fully charge. At the end of this time the Battery Indicator will turn off.

If the printer and battery do not appear to successfully pass these tests, refer to the [Troubleshooting](#) section for possible causes and solutions.

Note: This test only verifies that the power adapter, the internal charging circuit, and the battery are functioning properly. This test does not provide a valid indication of the relative capacity of the battery or how long it may hold a charge.

C. Troubleshooting

When encountering problems, the cause may be the printer or may sometimes be due to other problems with your system. Please review the following tables to solve common problems you may encounter with your printer. You may also visit www.printek.com for additional “FAQ’s” that may assist you.

If you are still unable to solve your problem, please contact the company from whom you purchased your printer since they are most familiar with your systems. If they are unable to help you, please contact Printek Technical Support at (800) 368-4636.

I. General Error Conditions

Whenever the printer detects an error condition the Alert (red) Indicator will either flash or stay on. In some cases, the audible alarm will also sound. Please refer to the following table for a list of what causes these conditions and how they may be corrected.

Error Indicator	Possible Cause	Solution
Flashes	Paper Out or Paper Door not fully closed	Make sure the door is fully closed by opening the door and closing it again until the door “clicks” closed. Check the platen roller for damage.
Stays On, With Alarm	Print job too large for printer memory	Divide long documents into individual pages. Printer power must be cycled to clear error.

II. Fault Description and Resolution

Problem	Possible Cause	Solution
Printer will not turn on.	Battery not installed properly	Remove and reinstall battery making sure the battery is seated with door closed.
	Discharged battery	Recharge battery.
Printer turns itself off.	Battery discharged	Replace or recharge battery.
	Electrostatic discharge	May occur in extreme low humidity conditions. Turn printer back on with power button.
Battery Indicator does not light or does not stay lit when power adapter is connected.	Battery already fully charged	No action required.
	Power supply not receiving power	Check building/vehicle circuit breakers/fuses.
	Faulty power adapter	Check output of power adapter with voltmeter. Should be 24 VDC.
Battery not charging.	Faulty power adapter or battery	Try new power adapter, or replace battery.
Poor print quality.	Low battery	Check and recharge battery.
	Print head dirty	Clean print head. Refer to " Maintenance " section of this document.
	Poor quality or "old" paper	Verify paper from approved source. Try new roll of paper.
Paper not feeding.	Obstruction in paper path, or paper improperly installed	Check paper path and reinstall paper (see " Quick Start Instructions ").
	Poor quality paper	Verify paper from approved source.
	Paper Door not fully closed	Verify door is closed.
Paper does not advance to black mark reliably.	Dirty Black Mark/Paper Sensor	Clean Sensor as described in " Maintenance " section of this document.
	Black Mark density/contrast	Adjust Mark Sensitivity as described in Device Settings Menu.
Paper not feeding reliably or print is compressed vertically	Poor quality paper	Verify paper from approved source.
	Heavy or thick forms; specialty paper with slick finish	Lower the Max Paper Speed as described in Device Config Menu.
	Paper Door not fully closed	Verify door is closed.

Problem	Possible Cause	Solution
Print Garbled.	Low Battery	Check and recharge battery.
	Improper Interface configuration	Verify printer and host settings match.
	Paper Door not fully closed	Verify door is closed.
Printer will not print.	Low Battery	Check and recharge battery.
	Paper not loaded correctly	Check paper path and reinstall paper (see " Quick Start Instructions ").
	Improper Interface configuration	Verify printer and host settings match. Print a self-test to verify printer settings and to verify printer is functioning properly.

D. Obtaining Service

If service is required for your printer, please contact the company where you purchased your printer.

If they are unable to assist you, contact Printek Customer Service at (800) 368-4636 to obtain a Return Authorization Number. Printers without Return Authorization will not be accepted.

APPENDIX

A. Appendix A – FieldPro 641 Printer Specifications



Printing Specifications

Printing Method: Direct thermal.
Printing Resolution: 203 dpi (8 dots per mm).
Printing Speed: Up to 6 ips.
Printing Width: Up to 4.25 inches (108 mm).

Fonts/Characters/Bar Codes

Fonts: Virtually all TrueType fonts, from 6 cpi to 34 cpi, depending on emulation chosen, plus scaling.
International Characters: All common sets available via UTF-8 encoding.
Unicode support.
Bar Codes: Virtually all 1D and 2D codes supported, depending on emulation chosen.
Downloadable firmware, fonts, graphics, and logos.

Connectivity

Standard (All Units): USB 2.0 PNP.
USB-C input connector.

Wireless Options:

Bluetooth

Fully qualified Bluetooth BT4.2 and support Bluetooth 5. Bluetooth pairing with NFC enabled devices.
Baseband and radio BDR and EDR packet types
Enhanced Data Rate (EDR) compliant for both 2Mbps and 3Mbps supported.
Wi-Fi 802.11 a/b/g/n/ac compatible

Software

Drivers and Utilities: Drivers for WIN 7, WIN 8, WIN 10 / 11.
Compatible with Windows, Android, and iOS.
Print utilities and SDK's for all platforms.

Printer Setup via an internal web page and onboard LCD panel. Access with browser from any host (tablets and smartphones included).

Emulations: Emulates many popular printer brands and languages including: Zebra CPCL and ZPL, Printek and ESC POS. Firmware can be upgraded as new emulations become available.
Supports printing of Postscript, PDF, JPG, PNG, BMP files.

Print Media

Paper Type: Direct Thermal Roll. Adjustable roll holder. "Clamshell" design for easy media loading. Dual serrated tear bar.

Roll Capacity

Roll Size: Maximum roll diameter 2.28" (58 mm), creating 150 labels(100mm/4" length), roll widths up to 4.45" (113 mm).
Core Size: 0.5" for receipt, 0.75 for label printers.

Power Management

Battery: Rechargeable 3 cell Lithium Ion, (11.2 V, 4400 mAh, 49.28 Wh).
AC Adapter.
Endurance:
Standby: 16hours
Standby(Sleeping mode): 36hours

Power Option: 100-240 VAC wall adapter or 12-24 VDC in-vehicle adapter. When plugged in, the printer can be used while recharging the battery or can be run without the battery.

Physical Specifications

W x D x H: 6.02" x 6.25" x 2.68"
(153 x 158.7 x 68mm).
Weight: 21 ounces (0.59 kg) without battery, 28 ounces (0.79 kg) with battery

Environmental Specifications

Operating Temp: 0° to 122°F (-18° to 50°C).
Storage Temp: -4° to 140°F (-20° to 60°C).
Humidity: 10% to 90% RH (non-condensing).
Rated IP54 per IEC 529

Operator Controls and Indicators

Light up buttons for power, paper feed, and menu navigation. Sensors for paper out, black mark detection, and door open. Full menu for printer settings via LCD display.

Memory Capacity

FLASH 4GB, LPDDR2 512MB. Standard memory supports large and graphic-intensive print jobs.

Durability and Reliability

Survives multiple 6-foot drops to concrete (each face) per IEC 68-2.
MTBF: 10,000 hours in normal use.

Regulatory Approvals

FCC Class B, CE/RED, UKCA, RoHS

Warranty

2-year printer warranty on the entire printer—case and print head included. 1-year warranty on the battery. Optional 3-year Extended warranty available.

Options and Accessories

- AC Wall Adapter, 100 to 240 VAC
- In-Vehicle Power Adapter, 12 to 24 VDC
- Shoulder Strap Option
- Soft carrying case w/shoulder strap
- 2 and 4-bay battery charger
- Belt Loop Option
- Data Cables, USB-C
- Spare Batteries in Multi-Packs
- Media in Case Quantities
- Wide range of Popular Mounting Systems
 - In-Vehicle Systems
 - Cart Mounting Systems
 - Fixed Mounting Systems

Glossary of Terms

802.11	Wireless networking communication standards created by IEEE.
Ad-Hoc	A Wi-Fi network consisting of only stations (no access point). Same as Peer-to-Peer.
authentication	The process a Wi-Fi station uses to identify itself to another station.
baud rate	The rate at which characters are transmitted over a serial interface. This is also often referred to as bits per second.
Bluetooth	A definition for short range radio frequency communications.
client	Any node on a network that requests services from another node (server).
character pitch	The horizontal spacing of characters. Measured in cpi.
cpi	Characters per inch.
default	Value or configuration assumed when the printer is powered on or reset.
DHCP	Dynamic Host Configuration Protocol. A method used to centrally control the assignment of IP addresses on a network.
dpi	Dots per inch. Generally used to refer to graphics density or resolution.
font	A group of characters of a given shape or style.
infrastructure	A Wi-Fi network consisting of stations connecting to a wired network or other stations via an access point.
interface	The connection between the printer and the host computer.
IP	Internet Protocol. A specification for packets, or datagrams, of data and an addressing method to allow the exchange of data with another system. Must be combined with another protocol such as TCP to create a complete connection with the other system.
LAN	Local Area Network.
LED	Light emitting diode.
lpi	Lines per inch.
margin	An area along any edge of a form where data may not be printed.

Peer-to-Peer	A network consisting of only stations (no access point or central server). Same as Ad-Hoc.
reset	Initialization of various operating features of the printer to the value or state assumed when the printer is powered on.
server	Any node on a network that provides services to another node (client).
SSID	Service Set Identifier. An identifier attached to packets on a Wi-Fi network that identify the particular network the packets are intended for.
TCP	Transmission Control Protocol. A specification that controls the connection between systems on a network.
top of form	The vertical position where the first line is printed on the paper. Also, the position the paper is advanced to when a form feed (FF) character is received from the host or the Form Feed button is pressed on the printer's control panel.
USB	Universal Serial Bus.
WAN	Wide Area Network. Refers to connections that allow one LAN to communicate with another LAN(s).
WEP	Wired Equivalent Privacy. A security protocol for wireless LANs designed to provide data security similar to a wired LAN.
Wi-Fi	Refers to any of the IEEE 802.11 standards.
WLAN	Wireless Local Area Network. A LAN made up of wireless nodes.

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