

Logitech io2™ Digital Pen with Bluetooth®

FREQUENTLY ASKED QUESTIONS



The following are Frequently Asked Questions (FAQ's) for Logitech's io2 Digital Pen with Bluetooth® wireless technology. These FAQ's can be communicated to the developer community and commercial customers that develop applications for the Logitech io2 Digital Pen with Bluetooth. Refer to the Logitech io2 Digital Pen with Bluetooth User's Manual for more information regarding the Logitech io2 Digital Pen with Bluetooth.

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BLUETOOTH COMPATIBILITY AND FUNCTIONALITY

Q. Which Bluetooth specifications is the digital pen compliant?

A. The Logitech io2 Digital Pen with Bluetooth wireless technology is compliant with Bluetooth specifications 1.1 / 1.2.

Disclaimer re: Bluetooth Compatibility

Interoperability between the Logitech io2 Digital Pen with Bluetooth and products with Bluetooth wireless technology (BT 1.1 / 1.2 specifications) is not guaranteed. This functionality should be validated before final mobile device selection and commitment.

Q. What are the Bluetooth profiles supported by the pen?

A. Bluetooth profiles include Object Push Profile (OPP), and Serial Port Profile (SPP).

Object Push Profile

Used to send objects such as Anoto PGC files to compatible phones and PC's.

Serial Port Profile

A Bluetooth serial port named, "ANOTO OBEX," can be used to transfer digital files, if push via the standard Object Push Profile is not possible or desired.

Bluetooth profiles, associated with the digital pen, are intrinsically linked with the Anoto communication protocol implementations. Please visit www.anoto.com for more information.

Q. Which Anoto communication protocols are supported by the pen?

A. The pen supports the following communication protocol:

- Anoto File push (Anoto PGC) to paired device (Bluetooth Object Push) or Serial Port Profile (SPP).

The protocols are selected by the Anoto paper templates.

Q. Which Bluetooth Security Mode is supported by the pen?

A. The security mode supported by the pen is Level 3: Authentication and Link Encryption.

Visit www.bluetooth.com or <https://www.bluetooth.org/> for more information on Bluetooth wireless technology.

Q. Are the PGC files pushed from the pen encrypted?

A. No. PGC files (PGC Objects) are not encrypted. Encryption is supported in the Bluetooth link level.

Q. Is the Bluetooth Passkey identifiable on the pen hardware?

A. No. Unlike other digital pen products, the Bluetooth Passkey will NOT be printed on the pen as part of the serial or other number. The Bluetooth Passkey will be delivered on an Identification Card which includes the Pen ID (ex. ATD-AAA-FG2-HH), Pen Identification Number (PID), Bluetooth Address and Passkey.

Q. What is the Bluetooth Passkey length?

A. The Bluetooth Passkey length is four (4) digits. The pin length is dictated by legacy Bluetooth phone stacks which do not accept more than four digits.

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Q. Can the Bluetooth Passkey be customized?

A. Yes. The Bluetooth Passkey can be set through the Digital Pen Software 4.0 or above. Please note that the Bluetooth Passkey can only be set and is not viewable from the software interface. Setting the Bluetooth Passkey clears the pen memory.

Q. What should be done if the Bluetooth Passkey has been lost or forgotten?

A. If you can not refer to the pen Identification Card supplied with the pen, then you can modify the pen's Bluetooth Passkey using the Digital Pen Software 4.0 or above. Please note that the Bluetooth Passkey can only be set and is not viewable from the software interface. Setting the Bluetooth Passkey clears the pen memory.

Q. Can the pen be paired with a PC and mobile device at the same time?

A. Yes. The pen can be paired with one mobile device (cell phone, smart phone, PDA, etc.) and one PC device concurrently.

Q. What are the methods to pair the pen?

A. The digital pen supports both initiating and responding to pairing requests from compatible Bluetooth devices.

Initiating pairing from the digital pen occurs when you 'tick' the Anoto pairing magic box. There are different pairing boxes for PCs and mobile devices.

The digital pen can also respond to a pairing request from a Bluetooth enabled device. The pairing respond state starts when the cap is removed. During this state, the digital pen is in discoverable, connectable, and pairable mode. Once started, the digital pen will remain in this state for a limited time of two minutes.

Q. Can the pen's pairing or discoverable mode be disabled?

A. Yes. Pairing can be enabled/disabled by setting the pen's Discoverable Mode in the Digital Pen Software 4.0 or above.

Q. What is the range of pen's Bluetooth wireless connection?

A. The pen is a Class 2 Bluetooth device. Typical range is up to 3 meters though range can vary depending on operating conditions.

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Q. What devices are compatible with the Digital Pen with Bluetooth?

A. Bluetooth device supporting Bluetooth specifications 1.1 / 1.2 and Bluetooth interface profiles (OPP and SPP) should be compatible and capable of interacting with the pen with the corresponding protocol.

For reference only, Logitech has conducted the following tests.

Device	OS	DAS/PGC Compatible	Comments
Nokia 3650	Symbian 6.1	Yes	
Nokia 6230	Symbian 7.0	Yes	
Nokia 7610	Symbian 7.0	Yes	
Sony Ericsson P900/P910	Symbian 7.0-UIQ	Yes	
iPaq 1945	MS 2003 Pro	Yes	
Palm One T3	Palm OS 5.4	Yes	Message will appear on PDA saying that data received in unknown format. This is because there is no application on the PDA to view the file.
Dell D600	WIDCOMM stack	Yes	
PC	Win XP SP2 stack	Yes	

Interoperability between the Logitech io2 Digital Pen with Bluetooth and products with Bluetooth wireless technology is not guaranteed. This functionality should be validated by the application developer or integrator before final mobile device selection is made.

It is the responsibility of the integrator to validate any system configuration as a variety of situation-specific parameters, (*such as, but not limited to, interface device Bluetooth stack version, mobile phone operator, etc.*) can have a direct effect on compatibility.

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DIGITAL PEN WITH BLUETOOTH HARDWARE

Q. How much memory does the pen have?

A. The pen hosts approximately 1.3MB of strokes memory and a maximum of 400 physical pages. The pen has a LED-based strokes memory indicator on the hardware. The software also offers memory and battery level indicators.

Q. What are the typical battery life values for the pen?

A. The typical battery life times for the pen using the following use cases is as follows:

- Writing (pen continuously down on Anoto paper): up to 3.4 hours
- Operating (cap off, pen not on paper): up to 18 hours
- Standby: (cap on): up to 1 year

In continuous Bluetooth transmission (pen not on Anoto paper), the battery life is up to three (3) hours. Also, note that the Bluetooth transceiver is powered down unless the pen is in discoverable mode or performing a Bluetooth transaction.

Q. Can data be lost if the battery runs out?

A. No, the data is stored in a non-volatile flash memory and is not lost if the battery charge is empty.

Q. What is the effect of a Master Reset on the pen strokes memory?

A. A Master Reset will erase the pen strokes memory and reset the Bluetooth Passkey to its default production value as indicated on the pen's associated Identification Card.

Q. What type of ink refills should I use with the io2 Digital Pen with Bluetooth?

A. The refills are ISO 12757-1 D1 compliant. Only use ink refills that do not contain carbon. Carbon ink can hide the dot pattern on the paper.

Q. Can I charge the digital pen without using my computer?

A. Yes. The digital pen can be charged using a wall or car charging adapter, which connects to the USB cradle. A qualified wall to USB socket charger is provided in the Logitech io2 with Bluetooth product package. These accessories are also available for separate purchase from Logitech. Contact your regional sales representative for more information about these products.

SOFTWARE AND DEVELOPMENT TOOLS

Q. How do I modify the Digital Pen settings?

A. The **Digital Pen Software version 4.x** is available to support pen configuration and setup including power management and customizable Bluetooth Passkey management. The software communicates with the pen through a connected USB cradle and supports only the io2 Digital Pen with Bluetooth firmware version 44.24 and above.

The software is part of the Logitech io2 Digital Pen Business Kit, which can be downloaded from the io for Business Solutions area of the Logitech.com website. Visit www.logitechio.com/iobusiness for more information.

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Q. Is the Logitech io2 Digital Pen with Bluetooth compatible with Logitech's io2 Enterprise and Retail Software?

A. The Logitech io2 Digital Pen with Bluetooth with firmware version 44.24 and above is compatible with the io2 Software versions 4.0 and above.

Note that the Logitech io2 Digital Pen with Bluetooth with firmware version 44.05 is **not** compatible with any of the io2 Software versions. A PC-based Configuration Utility is available to support this pen properties setup. This utility is known as the "Logitech io2 Digital Pen with Bluetooth Configuration Utility".

The Bluetooth Pen Configuration Utility can be installed side-by-side with Logitech io2 Enterprise software and will ignore the io2 USB pen if docked. This is ideal where solutions may encounter mixed deployments of different versions of Bluetooth pens and USB pens.

Q. Where do I obtain the Logitech io2 Digital Pen with Bluetooth Configuration Utility?

A. This utility can be downloaded from <http://www.logitechio.com/iobusiness>. Please contact iosupport@logitech.com if you need assistance with and/or obtaining this tool.

Note that this utility is not compatible with the Logitech io2 Digital Pen with Bluetooth with firmware version 44.24 and above.

Q. Where do I obtain an SDK for developing proprietary applications?

A. You can obtain information on developer support regarding Anoto Functionality, by visiting Anoto's website at <http://www.anoto.com/?url=/products/buyproducts/developmenttools/> or <http://partner.anoto.com/cldoc/3145.htm>.

Q. Which paper pattern is the io2 Digital Pen with Bluetooth compatible with?

A: The io2 Digital Pen with Bluetooth supports all Anoto enabled paper patterns. However, the proper pidget must be ticked to transmit the data from the pen to your mobile phone.

For other kind of transactions, the "PGC to phone" pidget must be used. Furthermore, an application handling PGC documents needs to be used on your phone to be able to use this data.

Q. Can the pen download data using the USB docking cradle?

A. Yes. The io2 Digital Pen with Bluetooth can be used exactly as the io2 Digital Pen and can download data on a PC through the USB port.

Q. Can the pen firmware be updated?

A. Yes, if required, the pen can be flashed with new firmware using an end-user software application. This application can be found in the business kit available for download from <http://www.logitechio.com/iobusiness>.

Note that this is the way to update a Digital Pen with Bluetooth from firmware version 44.05 to version 44.24. The functionality of the pen will be changed and the io2 Software 4.0 or above shall be used with the newly updated pen. Please refer to the firmware compatibility matrix available in the business kit for more details on firmware versions and functionalities.

Q. Can I redistribute the pen firmware updater utility to my customers?

A. Logitech firmware update utility can be redistributed, but please note that the end-user of the utility must accept the software license agreement and carefully follow the setup procedures and instructions; deviations may permanently damage the pen device. Logitech is not responsible for damaged pens as a result of misuse of the firmware utility.