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*Anoto*

# DIGITAL PEN

## DP-201

User's Guide



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# ANOTO DIGITAL PEN DP-201

## User's Guide

<http://www.anoto.com/>

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## About the digital pen

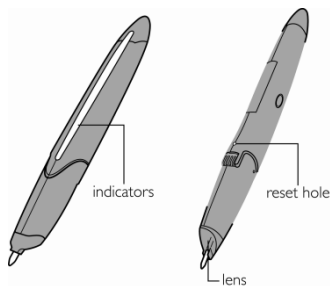
The Anoto Digital Pen DP-201 captures your pen strokes as you write or draw on a paper. Any paper product can be used as long as it has the unique Anoto dot pattern printed on it.\* Such a paper always has the Anoto functionality statement printed on it, reading “Paper enabling Anoto functionality” or similar.

The information captured by the digital pen can easily be transferred from the pen to, for example, a mobile phone or a PC. It can be transferred via Bluetooth to the device, or by docking the pen in the cradle connected to a PC.

Whatever you write or draw with the digital pen is saved in the digital pen memory until you transfer it. (There are applications where the information is continuously streamed from the digital pen via Bluetooth; the information is then not saved in the pen.)

Using Bluetooth for transferring of the information from the digital pen requires pairing for the digital pen to be able to communicate with the device (see section below). Using docking requires that the Anoto penDirector is installed on the PC.

For information about Anoto Digital Pen DP-201, the digital pen and paper technology, and Anoto AB, see the Anoto web site [www.anoto.com](http://www.anoto.com).



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\* If the pen fails to register the pattern it may be due to 1) the paper product has a restricted user group, 2) the pen needs to be updated, or 3) the quality of the printing is not appropriate. Contact your supplier for support.

## Charging the digital pen battery

The digital pen is charged by docking it in the docking cradle that is connected to a USB port on a running PC. The battery may be uncharged at the time of purchase. It should be fully charged before use.

Dock the digital pen in the cradle. Charging will start, and the battery indicator on the digital pen operation display will blink green to show that the battery is being charged. If the battery is completely discharged, it may take up to 20 minutes for the battery indicator to blink green after charging has started. If the battery indicator is still not lit after 20 minutes, reset the digital pen (see section below) and start charging again. It will take approximately 2.5 hours to completely charge the battery.

## Pairing the digital pen with a device


When you want to send data from the digital pen via Bluetooth to a device, the digital pen must be able to communicate with the device. When you pair your digital pen with your device, you make this communication possible.

You pair your digital pen once. The digital pen remains paired when you turn it off.


You can initiate the pairing in two different ways; from the digital pen or from the device. To initiate pairing from the device, see the user's guide for the device. To initiate pairing from the digital pen, do as follows:

1. Make sure Bluetooth is activated on your device (see its user's guide).
2. Tick the Pairing box on the card that comes with the digital pen in the box. When the digital pen has detected the device, a pairing dialog opens on the device.
3. Type the PIN code that comes on a sticker with the digital pen.
4. When the digital pen buzzes three times the pairing is ready.

## Turning the digital pen on/off

- Remove the cap to turn on the digital pen. Wait for the digital pen to vibrate once and the  indicator to turn green. The digital pen is now ready to use.
- Put the cap back on the digital pen to turn it off. To save power and to protect the lens from dust, always keep the cap on when not using the digital pen.




## Writing and drawing

When writing, a steady green  indicator on the digital pen indicates that the digital pen is registering the strokes. Vibration when writing indicates problems.

- Write and draw on the area with pattern on the paper; avoid writing too near the edges (7 millimeters).
- Hold the digital pen with the lens facing the paper.
- Do not block the lens when writing.

## Digital pen indicators

The indicators on the digital pen inform you of the status of the digital pen.

Indicator 	Status of digital pen
Off	The digital pen is turned off, or the battery is discharged.
Steady green	The digital pen is ready to use. All written data will be stored in the pen's memory.
Flashes green	The digital pen is in standby mode (battery saving mode).
Indicator 	Status of digital pen
Flashes green	The digital pen is communicating via Bluetooth or USB.
Flashes red	An error occurred during communication (for example, the communication between the digital pen and the device does not work).
Indicator 	Status of digital pen
Flashes green	The digital pen is docked in the cradle and the battery is being charged. (If the battery has no remaining charge, it may take up to 20 minutes for the battery indicator to flash green after charging has started.)
Steady green	Charging is complete.
Flashes green slowly	The battery has about 20 minutes of power remaining. Charge the battery as soon as possible.
Flashes red slowly	The battery is almost discharged. Recharge immediately. The strokes made before a discharge will remain in the pen memory.

## Resetting the digital pen

You can reset your digital pen if, for example, it freezes. Everything written or drawn before the reset will remain in the pen.

**Note:** Make sure the pen tip is not pressed on a surface when resetting.

1. Take off the cap.

2. Gently push the reset hole on the pen with a paper clip or another pointed object. The pen vibrates once when reset.

## Master reset

You can reset the digital pen to the factory settings. All data and everything you have written or drawn will be deleted from the pen memory.

1. Take off the cap.
2. Gently press the pen tip on a surface at the same time as you gently push the reset hole on the pen with a paper clip or another pointed object.
3. Keep the pen pressed to the surface for 15 seconds (the indicators flash green). When the reset is completed, two of the three indicators turn steady yellow.
4. Lift the pen from the surface. The pen vibrates three times.

## Exchanging ink cartridge

To exchange the ink cartridge in the pen, follow the steps below. The ink cartridge should only be removed when out of ink. Hold the pen in a horizontal position.

1. Use a pair of tongs to get a steady grip of the ink cartridge.
2. Pull the tongs away from the pen; the ink cartridge will slide out of the pen.
3. Slip a new ink cartridge into the pen by hand, until it cannot be pressed any further.



Only slip a new ink cartridge into the pen. An ink cartridge that has been removed may never be replaced into the pen. Using a previously used ink cartridge could cause ink leakage which may destroy the digital pen. Replace the used ink cartridge with a new one.



## Technical data

Models	Anoto Digital Pen DP-201
Weight	30g
Dimensions	157 × 21 × 18 mm (with a cap) 153 × 19 × 17 mm (without a cap)
Data communication	Bluetooth 1.2 standard USB 2.0 standard (transfer rate : 12Mbps)
Operating temperature	0 to 40°C (with no condensation)
Built-in battery	Lithium-ion rechargeable battery
Writing time	2 hours or longer
Standby time	10 hours (minimum) without a cap
Charging time	Approx. 2.5 hours
Charging method	Via cradle (using a USB connection on the PC)

## FCC warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Notice

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 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 device complies with Part 15 of FCC Rules and RSS-Gen of IC Rules.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

- This class B digital apparatus complies with Canadian ICES-003.

- Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

### **About the RF exposure**

-This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

-This equipment complies with FCC / IC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to

OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it is deemed to comply without testing of specific absorption ratio (SAR).

## Declaration of conformity

We, **Anoto AB**, of

**Traktorvägen 11, SE-226 60 Lund, Sweden**

declare under our sole responsibility that the production

**Digital Pen Model DP-201**

to which this declaration relates is in conformity with the following standards

- EN60950-1, 2001 (Safety), - EN55022:1998 Class B (EMI), - EN55024:1998 (EMS)
- EN301 489-17 V1.2.1:2002, EN301 489-1 V1.4.1:2002 (EMC)
- EN300 328-2 V1.6.1:2004 (EMI)



Following the provision of R&TTE Directive 1999/5/EC

**LED RADIATION**

**DO NOT VIEW DIRECTLY**

**WITH OPTICAL INSTRUMENTS**

**CLASS I LED PRODUCT**

## **Disposal of old electrical and electronic equipment**

(Applicable in the European Union and other European countries with collection systems)



This symbol on the product or on its packing indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.




## **Recycling**

For recycling of the digital pen, see [www.anoto.com/environmental](http://www.anoto.com/environmental).

## **Bluetooth information**

The Bluetooth Qualification information of this product could be referred to Bluetooth identifier B02173.

## Trademark notices

- "Anoto",  and  are trademarks owned by Anoto AB, Sweden.
- "Bluetooth" and  **Bluetooth** are the trademarks of Bluetooth SIG, Inc.
- "Windows" is the trademark of Microsoft Corporation in the United States and other countries.
- "Pentium" is the trademark of Intel Corporation or its subsidiaries in the United States and other countries.
- All company names, brand names and product names are trademark or registered trademark of each company.

ETA Certificate No:250/2009/WRLO



**TA-2009/1217 DIGITAL PEN DP-201**

**APPROVED**



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## PRODUCT SAFETY



- READ THESE SAFETY INSTRUCTIONS CAREFULLY. FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS COULD RESULT IN FIRE, ELECTRIC SHOCK, PERSONAL INJURY OR PROPERTY DAMAGE.
- Only use the digital pen and its accessories in accordance with the user's guide. Any other use may result in personal injury or property damage.
- Do not drop, throw, bend or deform, crush, disassemble or open, puncture, shred, microwave, incinerate, paint, or insert foreign objects into the digital pen or its accessories. Failure to follow these instructions could result in personal injury or property damage.
- The digital pen and its accessories contain small separable parts which may present a choking hazard. Choking could result in injury or death.
- Do not dispose of the digital pen or its accessories in a fire. The battery may explode or flame, which could result in personal injury or property damage.
- Cables are a strangulation hazard. Keep out of reach of children. Strangulation could result in personal injury or death.
- Pulling on a cable could cause the cable to break or a computer or other equipment to which the cable is connected to fall, with the possibility of personal injury or property damage. Disconnect cable only by gently pulling out the connector from the device it is attached to.
- In the event of a battery leak, do not allow the liquid to come in contact with skin or eyes. This may result in personal injury. If contact has been made, wash the affected area with large amounts of water and immediately seek medical advice.
- Do not attempt to charge the digital pen via any other means than the original charging device that came with the digital pen. Failure to follow these instructions could result in fire, explosion, electric shock, battery leakage or other injury or damage.
- Do not attempt to make any repairs except replacement of the ink refill. Do not open the digital pen, disassemble it, remove or disassemble the battery or attempt to replace the battery yourself. This runs the risk of personal injury or property damage. Contact point of purchase if the device needs repair.

## **CAUTION**

- Risk of eye damage - invisible infrared light emitted from the digital pen tip. Do not look directly into the tip. Do not view the tip with an optical device.
- Turn the digital pen OFF in areas with potentially explosive atmosphere. The digital pen is an electronic device. Sparks may cause fire or explosion resulting in personal injury or death or damage to property.
- Turn the digital pen OFF when in a blasting area, to avoid interfering with blasting operations.
- Do not use the digital pen while your attention also is required elsewhere, such as while driving.
- Turn the digital pen OFF when in an area where posted notices require radio transmitters to be switched off.
- Aviation regulations may prohibit using wireless devices while in the air. Turn the digital pen OFF when on an airplane.
- The digital pen may interfere with some hearing aids or other personal medical devices. If it does, consult the supplier for alternatives or remedies.

## PRODUCT CARE

### **NOTICE**

- READ THESE INSTRUCTIONS THOROUGHLY. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN DAMAGE TO THE DIGITAL PEN AND ITS ACCESSORIES, AND VOIDING THE WARRANTY.
- Only use the digital pen and its accessories in accordance with the user's guide.
- The digital pen is an advanced electronic device. It is not a toy. Treat it with at least the same care as any electronic device made for home or office use.
- The device is intended for indoor, dry location use only.
- Keep the cap on when not using the digital pen. This preserves power and protects the optics.
- Routinely check the digital pen and accessories for proper and safe condition. Do not continue to use the product if there is any damage or broken parts. Consult your point of purchase if the device needs repair.
- Do not expose the digital pen or its accessories to extreme temperatures or direct sunlight, neither during use nor during storage.
- Keep the device in a clean and dust free place.
- Keep food and beverages away from the device.

- Clean with a dry cloth. Do not use water, soap, detergent or other chemicals.
- Do not drop the device or allow any other kind of strong impact, which can severely damage it or prevent it from working properly.
- Do not expose the device to water or any other fluids. It is not waterproof or water resistant. Do not leave it in damp conditions.
- Do not use the pen near strong radio waves or magnetic fields. It may cause the pen to malfunction or destroy the pen.
- Do not dispose of this product in the trash. As with any electronic product, check with your local waste or recycling company to determine the correct disposal method and location in your area.
- Use the digital pen with ink refills specified by Anoto. Using any non-authorized accessories may damage the digital pen and voids the warranty.
- Do not reuse damaged ink refills as this could cause ink leakage. When replacing refills, take special care not to damage the tip of the pen or the refill itself.
- Connectors and cords used with the product must be regularly examined for damage to the cord, connector and other parts. In the event of such damage, the cable must not be used until the damage has been repaired.
- Use only cables provided by Anoto or its authorized resellers. Use of any other cable may exceed FCC and other regulatory emissions limits.
- Disconnect the digital pen from the cable(s) when it will not be used for some time.
- The product must be used only with the recommended USB connection.
- Do not open or disassemble the device except to replace the ink refill. There are no serviceable components inside. The warranty will become void. Changes or modifications to this unit could void the user's authority to operate the equipment.
- Always keep the digital pen charged. Recharge batteries immediately when notified by low battery warning.
- If left unused for some time, the digital pen may require recharging prior to use.



# LEGAL NOTICES

## Notice of Origin

The producer of this digital pen and the publisher of this document is Anoto AB, Traktorvägen 11, SE-226 60 Lund Sweden.

## Notices on Intellectual Property Rights

Copyright (c) 1997-2009 Anoto AB and its licensors. All rights reserved.

"Anoto", "Magic Box" and the Anoto logotype are trademarks owned by Anoto AB. All other trademarks are the property of their respective owners.

This product is based on Anoto Digital Pen and Paper Technology, which is covered by over 200 patents worldwide, including but not limited to US6663008, US7172131, US7248250, US7281668, JP3872498, JP3842283, CN1595440, SE17445, RU2256225, and AU773011.

## Firmware End User License Agreement

The digital pen contains firmware which is licensed and not sold. Anoto AB and its licensors hereby grants you as the user of the digital pen a world-wide, non-exclusive license to use the firmware as it is delivered with the digital pen. You may not copy, modify, disassemble, reverse engineer or decompile any part of the firmware unless expressly permitted by applicable law without possibility of contractual waiver.

You may transfer the right to use the firmware to a third party only in conjunction with a transfer of the digital pen as a whole, providing that the third party accepts these license terms.

Your license to use the firmware applies for the lifetime of the digital pen. However, it is terminated with immediate effect if you transfer the digital pen to a third party, or if you violate these license provisions.

All rights including the title and intellectual property rights to the firmware are owned by Anoto and/or its licensors. No ownership right or other proprietary rights is granted or conveyed to you under this agreement. To the extent the firmware contains code owned by a licensor, such licensor is a third party beneficiary under this agreement.

Notice to U.S. Government End Users: The digital pen and its documentation are "Commercial Items," as that term is defined at 48 CFR 2.101, also consisting of "Commercial Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 CFR 12.212 or 48 CFR 227.7202, as applicable. Consistent with 48 CFR 12.212 or 48 CFR 227.7202-1 through 227.7202-4, as applicable, the Commercial Computer Software and Commercial Computer Software Documentation are being licensed to U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all

other end users pursuant to the terms and conditions herein. Unpublished-rights reserved under the copyright laws of the United States.

### **Warranty, Service and Support**

This product is provided to its end users through a network of distributors and resellers. You should contact your point of purchase for warranty claims and to obtain service and support related to the product.

### **Limitation of Liability**

Circumstances may arise where you may be entitled to recover damages from Anoto AB because of a default on Anoto AB's part or other liability with respect to the digital pen and/or this document. In each such instance, regardless of the basis on which you are entitled to claim such damages (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), except and to the extent that liability cannot be waived or limited by applicable laws, Anoto AB is liable for no more than the amount of actual direct damages suffered by you, up to the amount you paid for the product. This limit does not apply to damages for bodily injury (including death) and damage to real property and tangible personal property for which Anoto AB is required by law to be liable.

This limit also applies to Anoto AB's licensors and other suppliers. It is the maximum for which Anoto AB and its licensors and suppliers are collectively responsible.

UNDER NO CIRCUMSTANCES IS ANOTO AB OR ITS LICENSORS OR SUPPLIERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY: (1) THIRD PARTY CLAIMS AGAINST YOU FOR DAMAGES; (2) LOSS OF, OR DAMAGE TO, YOUR DATA; OR (3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, BUSINESS REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.

### **Jurisdiction**

These legal notices shall be governed and construed in accordance with the substantive laws of Sweden.

### **Other Rights**

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## THE DECLARATION OF CONFORMITY

Hereby, **Anoto AB** declares that this **DP-201** is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

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[www.magicomm.co.uk](http://www.magicomm.co.uk)