

PRINTBRUSH XDR



Operating and Maintenance Manual

PrintBrush XDR
Mobile Printer

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Versions

Version	Date	Description
0.1	2018.06.15	Draft version by docu solutions
1.0	2018.08.09	Revised version
1.1	2019.03.25	Final version
1.2	2019.06.21	More details on Wi-Fi chapter

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1 INTRODUCTION

With the PrintBrush XDR printing device (PrintBrush XDR) you have a product that is exemplary in terms of safety for users and leading edge in terms of technology. Despite this, PrintBrush XDR may be hazardous if used incorrectly or as not intended. We refer to potential hazards in Section 2 'Safety' and with safety notices throughout the entire documentation.

1.1 Preface

This original documentation is intended to assure safety-aware work on and with the product. It contains safety notices that must be followed! All those working with the PrintBrush XDR must have access to this documentation and must observe the relevant specifications and instructions. The documentation must always be completely and easily legible.

COLOP Digital GmbH is not liable for technical or printing-related defects in this documentation, nor will it accept any liability for damage caused directly or indirectly by the delivery, performance or usage of this documentation.

1.2 Identification

The product is clearly identified on the packaging.

CE mark in acc. with Directive 2014/35/EU (Low-Voltage Directive)

1.3 Legal details

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A-4600 Wels
Austria

Phone: +43 (0) 7242 661 04

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E-Mail: info@printbrush.com

Homepage: <https://www.printbrush.com/>

1.4 Liability

The details in this documentation describe the properties of the product without assuring those properties.

No liability is accepted for damages that arise from:

- unintended use of the product.
- failure to follow the documentation.
- improper work on and with the product.
- operating the product while in a defective condition.
- defective monitoring of parts of the product that are subject to wear.
- improperly conducted repair work.
- unauthorized modification of the product.
- natural disasters, the action of foreign bodies and force majeure.

1.5 Intended use

The PrintDreams PrintBrush XDR, hereafter referred to as PrintBrush XDR, is a battery-operated mobile printing device. The device can be operated by smart phone, tablet or computer. It can make imprints directly on a variety of absorbent surfaces including paper or cardboard. The PrintBrush XDR is suitable for making individual imprints and for occasional multiple use.

The multicolor ink cartridge (CMY) uses inkjet technology. Surface navigation and/or speed control is managed by an optical sensor. The printing content is sent to the device directly from an application (APP) or computer software (SW). Transfer is via a WIFI connection from a smart phone or tablet or USB interface on a computer. Printing begins automatically if the PrintBrush XDR is in print mode and the device is moved over the printing background by hand. If rotation or height of the device above the surface exceeds a maximum range, printing is interrupted, and navigation continues. When returned to the normal range, printing restarts.

The PrintBrush XDR must be returned to the docking station after each use. Several imprints can also be saved on the device so that it can be used without the APP or software (offline mode). The rechargeable battery (supplied) is recharged using the charger (supplied). Only use original batteries and original replacement ink cartridges.

After extended periods between uses, the ink cartridge must undergo a cleaning cycle. The PrintBrush XDR should be used at least once a month.

1.6 Target groups and previous knowledge

Users of the PrintBrush XDR are non-professionals, aware of the hazards associated with using the device via the safety pictograms on the PrintBrush XDR and instructions in the Short Operating Manual and in this Operating and Maintenance Manual. Users can recharge the PrintBrush XDR with the charger (supplied) and change ink cartridges. Users are not authorized to carry out repairs on the product.

Inspection and maintenance and/or repairs should only be carried out by qualified personnel.

1.7 The content and purpose of this documentation

Users can download this original Operating and Maintenance Manual at www.printbrush.com for information.

This documentation contains the relevant information for PrintBrush XDR assembly, commissioning, operation, maintenance and disposal. This documentation is intended to ensure hazard-free work with the PrintBrush XDR.

Compliance with the instructions contained within this document enables hazard-free working and avoids damaging the PrintBrush XDR.

Limits of use

The limits of use for the PrintBrush XDR are defined as follows:

- The device is intended for use in enclosed, clean and dry areas (offices, warehouses, private residences).
- Horizontal or Vertical place of use on level, firm ground.
- Ambient temperature: +15 °C to +35 °C
- Humidity range 5 % to 100 % (storage 5 % to 80 %)
- The PrintBrush XDR is a printing device using images, graphics and text sent via a software application.
- It can print directly onto a variety of absorbent surfaces including standard paper, cardboard, fabric, wood, cork, dry wall, high-gloss paper, photo paper and other surfaces with special coatings.
- The PrintBrush XDR is fitted with an LED light strip.
- The PrintBrush XDR rechargeable battery is recharged using the power plug.

1.8 Principle

This product incorporates state-of-the-art technology and complies with applicable health and safety regulations. Nonetheless, the following hazards can arise as a result of incorrect transport, improper use, failure to observe the safety instructions contained in this Operating and Maintenance Manual or in the event of misuse:

- fatal or serious injury to users or third parties
- damage to the product and other items of capital equipment
- impairment to the efficient operation of the product

2 SAFETY

This documentation is structured in accordance with valid EU directives and contains safety notices. The user of the PrintBrush XDR is responsible for complying with safety-related information in this documentation.

This Section contains a general description of the warning and safety instructions, and important safety notices.

2.1 Signal words used in safety notices

 DANGER! DANGER!	A safety notice with the signal word DANGER points to an immediately threatening hazard to the life and limb of people. <i>This signal word denotes a hazard with a high level of risk which, if not avoided, can result in death or serious injury.</i>
 WARNING! WARNING!	A safety notice with the signal word WARNING denotes a dangerous situation that could cause personal injury (of a serious nature) and may also cause damage to items of capital equipment. <i>This signal word denotes a hazard with a moderate level of risk which, if not avoided, can result in death or serious injury.</i>
 CAUTION! CAUTION!	A safety notice with the signal word CAUTION denotes a potentially hazardous situation that can result in slight injuries or damage to items of capital equipment. <i>This signal word denotes a hazard with a low level of risk which, if not avoided, can result in minor or moderate injury.</i>
NOTICE NOTICE	A safety notice with the signal word NOTICE denotes a situation that could result in damage to items of capital equipment! <i>This signal word denotes a hazard which, if not avoided, can result in damage to items of capital equipment or damage to the device.</i>

2.2 Symbols used in safety notices



General warning symbol, this danger symbol warns of **risks of injury**. Follow all measures designated with this danger symbol to prevent serious or fatal injuries!



This safety notice draws attention to **the possible hazards of electrical voltage**.



This safety notice draws attention to **the possible hazards of hot surfaces**!



Reference to the obligation to read the Operating Manual!



Danger symbol for environmentally hazardous substances



Notice relating to additional information and/or to cross references!

2.3 Residual hazards

Even when the greatest care and attention is paid to the design and build of the product, and when full account is taken of safety-related factual content, residual hazards can still exist. These need to be evaluated in a risk assessment.



DANGER!



Hazard from electric shock. There is a risk of a fatal electric shock in wet conditions.

Never handle the charger mains plug with wet hands. Never use the device in humid areas. Never expose the battery and charger, including USB port, to water and/or rain.



WARNING!



Danger of asphyxiation from plastic film.

The packaging is not a toy. Dispose of packaging materials immediately and in an environmentally appropriate manner.



WARNING!



Risk of asphyxiation from small parts for children below the age of three.

The device is not a toy. Do not leave children alone with the device unsupervised.



WARNING!



Hazard from cleaning.

NEVER use inflammable substances near the PrintBrush XDR. This may cause a fire or an electric shock.

Cleaning the outside of the PrintBrush XDR:

- Ensure that the mains cable of the PrintBrush XDR charger has been removed from the socket and the device is switched off.
- Use neutral cleaning agent. Using liquids such as thinners or petrol damages the outer surface of the PrintBrush XDR.
- Do NOT use cleaning agents containing ammonia.



WARNING!



Hazard from damaged electrical components or damaged insulation.

In the event the device, housing or insulation is damaged, stop using the device and have it tested and repaired by an electrician or the manufacturer's customer service.



WARNING!



Hazard from rechargeable batteries (short-circuit, overheating, fire).

- Do not expose lithium batteries to heat, cold or water (do not leave in direct sunlight or charge or store outdoors).
- Do not (forcibly) open or expose to large impacts or shocks.
- Only use charging systems as recommended by the manufacturer.
- The manufacturer's safety instructions must be complied with throughout the entire disposal process.
- Battery contacts (outside the device) must not come into contact with metallic objects such as coins or keys to prevent a short circuit.
- The printing device and/or rechargeable battery must never get wet.
- Burning batteries can cause blow-outs, causing a battery to be blown away. Battery fires give off extremely thick, particularly toxic smoke.
- Following extended periods in storage or before taking to a collection point, the poles on lithium rechargeable batteries should be covered with adhesive tape to prevent short circuits. Maximum possible storage, e.g. in the original packaging and quick deposit in a collection point are recommended.
- Visually damaged, overheated or blown out batteries must not be recycled and must not be stored in the house, flat or garage.



WARNING!



Hazard posed by improper use.

Read the Operating Manual before switching on the device. Pay attention to all safety notices. Keep the Operating Manual in a safe location!



CAUTION!



Hazard from hot surfaces.

Immediately after using the PrintBrush XDR, certain parts can be hot. Do not touch the print head on the underside of the printing device. Leave to cool before replacing.



CAUTION!



Hazard from hot surfaces.

Only use the supplied wiper to clean the print head.



CAUTION!



Possible hazard from substances, slight eye and skin irritation from ink.

Do not direct the print head towards the eyes, face or skin. Do not open the ink cartridges. Do not swallow! Keep ink cartridge out of the reach of children.

NOTICE



Always return the PrintBrush XDR to the docking station to prevent the print head from drying out and damaging the PrintBrush XDR.

NOTICE



Packaging materials (paper, plastic) must be disposed of separately. Dispose of components of the device in accordance with legislative stipulations. Dispose of materials separately and recycle as much as possible. Electrical components of the product must be sent for recycling as waste of electrical or electronic equipment. Dispose of batteries at collection points in accordance with legislation.

NOTICE



The electrical components of the product must be sent for recycling as waste of electrical or electronic equipment.

2.4 General safety instructions and provisions

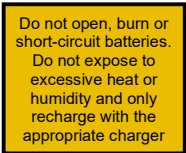
Without exception, observe the following safety provisions and obligations when working at or on the machine:

- The product must always be operated in operationally perfect and clean condition.
- It is prohibited to convert or modify the product.
- Faults must be remedied immediately.
- Always use genuine spare parts for repair work or when replacing damaged components.
- Always pay careful attention to the safety notices and operating instructions.

2.5 Safety notice panels on the product

Safety notice panels are fitted to the product to draw attention to potential hazards. Always pay attention to and comply with the safety designation instructions on the product. During the service life of the product, if the safety designation label fades or gets damaged, you must shut down the product.

Here are the pictograms for warnings, prohibitions and stipulations on the product, together with their meaning.

Pictograms	Location	Designation	Description
	Underside Printing device	Warning: hot surface.	The print head surface may become hot. Do not touch the print head!
	Underside Printing device	Prohibition: Do not touch.	Do not touch print head!
	Underside Docking station	Indications on reading the operating instructions	Read the Operating and Maintenance Manual.
	Underside Docking station	Indications on disposing of electronic waste	Dispose of the appliance in accordance with legislation and recycle wherever possible.
	Battery	Indications on handling batteries	Do not open, burn or short-circuit batteries. Do not expose to excessive heat or humidity and only recharge with the appropriate charger.

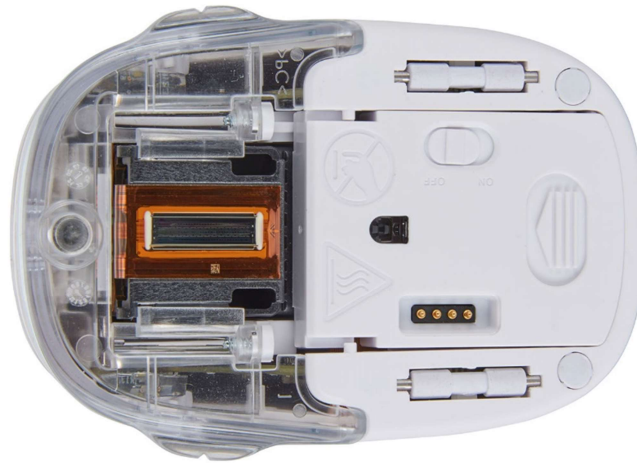


Fig. 1: Safety instructions on the underside of the PrintBrush XDR

3 DESCRIPTION

The following chapter presents an overview of parts, assembly and function including technical specifications and product components.

3.1 Scope of supply

The PrintBrush XDR printing device is supplied with a rechargeable battery (1), docking station (2), charger and cable (3), ink cartridge (4) and the Quick Setup Guide (5).

The printing device comprises the housing with opening top section (access to compartment for battery and ink cartridge), an on/off switch on the underside, a micro USB socket, an LED light guide, rollers on the underside for stable movement, 3 magnets for secure docking, contacts for charging on the docking station, a light sensor for position guiding, a WIFI module.

The docking station comprises a charging socket for the charger, contacts for charging the PrintBrush XDR, rubber lips and flap to prevent the ink cartridge from drying out, an opening to access the on and off switch on the PrintBrush XDR when docked, non-slip pads and a removable wiper to wipe the underside of the ink cartridge.

The rechargeable battery is supplied with a plastic pull tab on the contacts. This prevents short-circuiting the contacts during transport. This tab must be removed before use.

The ink cartridge is packaged separately and must be inserted before use. A Quick Setup Guide is also supplied.



Fig. 2: Package content

3.2 Layout

The following section contains an overview of the parts and main components of the PrintBrush XDR:

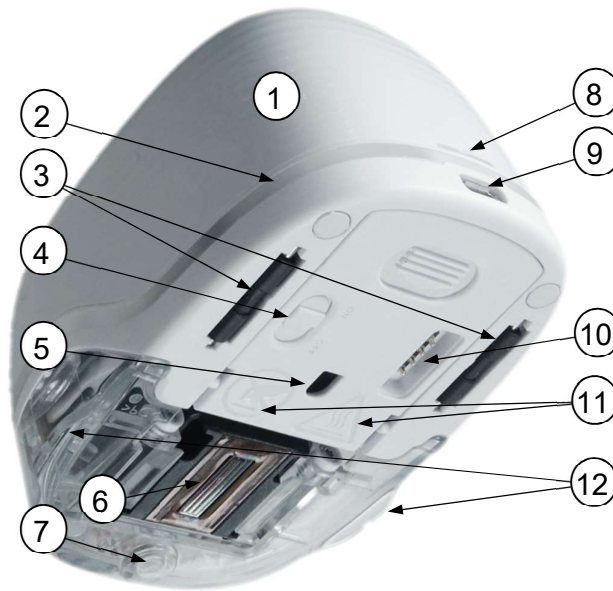


Fig. 3: PrintBrush XDR parts

Main constituent elements			
No.	Description	No.	Description
(1)	Docking station	(4)	Battery
(2)	Electronics compartment	(5)	Ink cartridge
(3)	Cover		

3.3 Components

Printing device:



Underside

Fig. 4: Printing device assembly

Main components of the PrintBrush XDR			
No.	Description	No.	Description
(1)	Cover	(7)	Magnet
(2)	Light guide	(8)	Cover opening
(3)	Rollers	(9)	USB port
(4)	On/off switch	(10)	Contacts (docking station connection)
(5)	Position sensor	(11)	Safety indications
(6)	Print head	(12)	Print position display lug

Docking station:

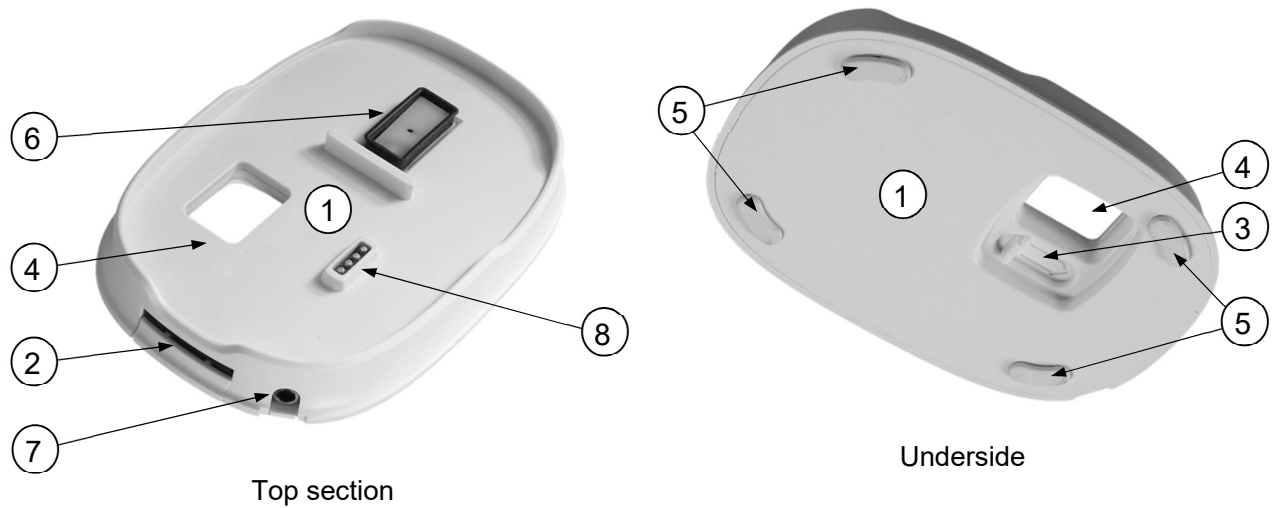


Fig.5: Docking station assembly

Main components of the docking station			
No.	Description	No.	Description
(1)	Docking station	(5)	Non-slip feet
(2)	Print head wiper	(6)	Print head cap to prevent drying out
(3)	Slider to extend the print head wiper	(7)	Charging socket
(4)	Opening for the on/off switch	(8)	Pogo-pin interconnector

3.4 Technical specifications and dimensions

Technical specifications of the PrintBrush XDR	
Weight	224.5 g (approx. 450 g incl. packaging)
Dimensions L x W x H	111.2 x 76.5 x 72.7 mm
Rechargeable battery	11.1 v Li-Po with min. 600 mAh (3 cells, each 3.7 v)
Power consumption while operation with battery supply	Max. 10 W
Power consumption while battery is charging (WIFI activated)	15 V, 400 mA
WIFI interface	WiFi IEEE 802.11bgn
USB interface	Micro USB
Optimum print speed	100 mm/s
Maximum print speed	300 mm/s
Print quality	600 dpi
Protection class	III, Extra low voltage
Mains connection charger	100-240 V, 50/60 Hz
Print head	3-color print head (cyan, magenta, yellow) 3-color Ink Cartridge C2P06AE
Storage temperature range	-40 °C to 60 °C
Operating temperature range	15 °C to 32 °C
Non-Operating humidity range	20 to 80 %

Range:

An ink cartridge lasts approximately 5,000 imprints (14 x 100 mm test imprint) in normal use and spitting frequencies before replacing.

The lithium polymer rechargeable battery lasts for up to 5 hours of continuous printing and can be recharged approximately 1,000 times (approx. 2,700 imprints per charge). Battery charging takes up to 2.75 hours from 0 % to 100 %.



Fig.6: Reference imprint 14 x 100 mm

Surfaces:

The PrintBrush XDR can print directly onto a variety of absorbent level surfaces including standard paper, cardboard, fabric, wood, cork, dry wall, high-gloss paper, photo paper, etc. Other types of surfaces can be printed but the standard ink can be easily wiped off.

3.5 Operating systems

The PrintBrush XDR APP is available on Android and iOS platforms and is compatible from the following versions:

- Android 5.0
- iOS 11

There may be issues with previous versions and certain functions may be limited.

4 INITIAL OPERATION

This chapter explains using the PrintBrush XDR for the first time and includes unpacking, visual inspection, assembly, switching on and performance testing the PrintBrush XDR.

4.1 Transport and unpacking

When transporting the product, please note the following points:

NOTICE



Battery contacts are protected against short-circuits with an insulating plastic tab. The plastic tab must be removed before using for the first time (*see chapter 4.2*).

NOTICE



The ink cartridge is packaged separately. It must be inserted before using for the first time (*see chapter 4.2*).

Unpacking

Carefully remove the PrintBrush XDR from the packaging. Dispose of the packaging materials appropriately. Never let children play with the packaging or with parts of it, since there is a risk of asphyxiation from small parts or plastic film.



WARNING!

Danger of asphyxiation from plastic film. Risk of asphyxiation from small parts for children below the age of three.



The packaging is not a toy. Dispose of packaging materials immediately and in an environmentally appropriate manner.

Packaging

Preparing the PrintBrush XDR in its original packaging for transport. See below before sending or transporting the PrintBrush XDR:

- Remove the rechargeable battery (*see chapter 6.2*).
- Protect the battery contacts against short-circuit with insulating tape.
- Return the battery back to the housing.
- Return the PrintBrush XDR to the original packaging (1) and secure it with the plastic ring (2). (Fig.7)



Fig.7: Packaging

4.2 Assembly and switching on

Check the following points before commissioning:

Visual inspection:

- Ensure that the Short Operating Manual is legible and is available in full.
- Are all product parts present (*see chapter 3.1*)?
- Are all parts required for assembly present?
- Is the product damage-free? Look for any deformations and cracks on the housing for cable damage, in particular.
- Is the USB connector OK?
- Are the charging cable, mains plug and charging plug OK?

The product must not go into operation if it has any visible defects or signs of damage.

Commissioning

- Remove the PrintBrush XDR from the packaging.
- Remove the inner card and remove the mains plug and separate ink cartridge packaging (print head and container with 3-color ink).
- Open the PrintBrush XDR cover and remove it.



Fig. 8: Opening and removing the cover

- Remove the battery from the battery compartment.



Fig. 9: Battery

- Press the lever on top of the battery to the rear



Fig. 10: Opening the battery compartment

- Lift the battery off



Fig. 11: Battery contact insulating tab

- Remove the plastic tab from the battery contacts and dispose of responsibly.
- Pull down the lower flap.
 - Slide the underside of the PrintBrush XDR in the direction of the arrow.
 - Press the panel downwards at an angle.

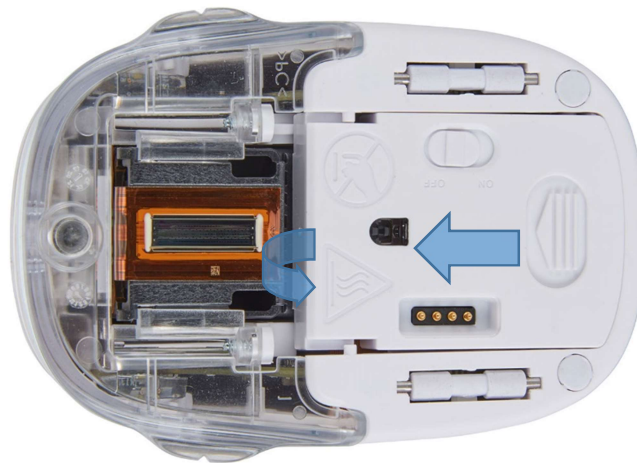


Fig. 12: Opening the sliding panel



Fig. 13: Sliding panel open

NOTICE



Always press open the lower panel first, otherwise the ink cartridge cannot be removed or inserted without damaging the PrintBrush XDR!

- Remove the ink cartridge from the packaging and dispose of the packaging responsibly.
- Pull out the strip from the print head and dispose of responsibly.



Fig. 14: Ink cartridge

- Insert ink cartridge
 - Press towards the front end of the compartment.
 - Cartridge clicks in.



Fig. 15: Insert ink cartridge

- Close lower flap cover
 - Close the cover (click).
 - The cover moves against the spring into the closed position in the opposite direction of the arrow.
- Insert battery
 - Push towards the ink cartridge.
 - Press the battery forward until the lever on the top clicks in.



Fig. 16: Insert battery

- Close cover.
- ALWAYS place the PrintBrush XDR in the docking station.

NOTICE



ALWAYS place the PrintBrush XDR in the docking station after use. Otherwise, the ink cartridge head dries out, affecting print quality. A warning signal sounds if the PrintBrush XDR is switched on and not placed in the docking station immediately. Return the PrintBrush XDR to the docking station. If the PrintBrush XDR is switched off, NO warning signal sounds, but the PrintBrush XDR should always be placed in the docking station even if switched off.

Download and run the APP ([see chapter 4.3](#)).

The QR code on the packaging is the link for downloading the APP.

Making the WIFI connection ([see chapter 4.4](#)).

The SSID and password can be found in the Short Operating Manual and are stored as an image in the PrintBrush XDR. Each PrintBrush XDR was tested individually before shipping using this test imprint.



Fig. 17: Example test imprint with SSID and password

Performance test:

- Is the battery properly inserted and can the battery be charged with the external charger (for more details on charging, [see chapter 6.1](#))?
- Does the LED light bar come on (color code [see chapter 5.3](#))?

An image is saved in the PrintBrush XDR before shipping, which also displays the SSID and password for making the WIFI connection.

- Does the print function work?
- For more details on making a test image, *see chapter 5.2*.

4.3 Software

Download the Android APP and install on a mobile device.

[Download page on the Google Play](#)

For more details on using the software, *see chapter 5.6*.

Download and run the PrintBrush XDR iOS APP: Install the TestFlight App and then go to the following link from your iPhone or iPad: <https://testflight.apple.com/join/yFPTirmd>

4.4 Wi-Fi connection

Making the Wi-Fi connection between the PrintBrush XDR and a host device for the first time (For detailed instructions, *see chapter 5.7*).

The SSID and password are automatically saved as the factory default image in the PrintBrush XDR and can be found in the Quick Setup Guide (make a note of the password or save it in a secure location. To change the password, see the software description)



Fig. 18: Example test imprint with SSID and password

If you are having trouble making the connection, refer to chapter 5.7 or to the troubleshooting chapter (*see chapter 6.4*) or visit our homepage and see the FAQ (Frequently Asked Questions).

Homepage www.printbrush.com

5 OPERATION

The product is designed for printing templates or content from smartphones and tablets.

Online mode: The PrintBrush XDR is controlled using software. Imprints can be loaded or created via the software, uploaded to the PrintBrush XDR and then printed. The software application (APP) displays status symbols for the PrintBrush XDR, including battery charge level, ink level, cleaning cycle request etc. Details can be found in the software description.

In **offline mode** the PrintBrush XDR is ready to print previously uploaded images at any time. Operating modes are displayed via the light guide ([see chapter 5.3](#)). Every printing operation follows these steps in the sequence below:

1. Switch on and wait until available (Light Guide, [see chapter 5.3](#)).
2. Take the PrintBrush XDR out of the docking station.
3. Wait until completion of the automatic self-cleaning cycle (spitting, [see chapter 5.4](#)).
4. Place onto the paper (or the printable background) and slide to the right or left ([see chapter 5.2](#)).
5. Printing starts and a signal sounds when the end position is reached.
6. Return the PrintBrush XDR to the docking station immediately.

If the print quality is unsatisfactory, complete a manual cleaning cycle (wiping, [see chapter 5.5](#)).

NOTICE



ALWAYS place the PrintBrush XDR in the docking station after use. Otherwise, the ink cartridge head dries out, affecting print quality. A warning signal sounds if the PrintBrush XDR is switched on and not placed in the docking station immediately. Return the PrintBrush XDR to the docking station immediately. If the PrintBrush XDR is switched off, NO warning signal sounds, but the PrintBrush XDR should always be placed in the docking station even if switched off.

Sleep mode:

If the PrintBrush XDR is switched on and is not used for 3 minutes, the device goes into sleep mode. If the PrintBrush XDR is placed in the docking station, it automatically goes into sleep mode.

Warning mode:

If the PrintBrush XDR is not in the docking station and is not used for one minute, a warning signal sounds to prevent the print head from drying out. The Light Guide ([see chapter 5.3](#)) flashes red and a warning signal sounds. Please return the device to the docking station immediately.

5.1 Image transfer

To transfer standard templates or customized imprints to the PrintBrush XDR, refer to the software description.

Prerequisites:

- The PrintBrush XDR is connected by Wi-Fi to a host device (*see chapter 5.7*).
- The Light Guide displays a steady blue light confirming a Wi-Fi connection.
- In the APP, the WIFI symbol  confirms a Wi-Fi connection. Additionally, battery icon and ink gauge and printer buttons become active.

Image transfer:

Refer to the software description for details.

Acoustic and optical signals:

- During image transfer to the PrintBrush XDR, the Light Guide (*see chapter 5.3*) flashes blue continuously and a long signal sounds when the transfer is complete.

NOTICE



Saving the image file can take several seconds. Do not switch off the PrintBrush XDR before you hear the double beep confirming the saving process has been successful, otherwise saving is interrupted.

Image saving:

The PrintBrush XDR takes time to save the newly transferred image to the internal Flash memory. During the saving time, the Light Guide (*see chapter 5.3*) displays a continuous purple flashing LED. Do not switch off the PrintBrush XDR during the saving process, otherwise the image will not be saved correctly. A brief signal sounds at the end of the saving process.

5.2 Printing

Switch on the PrintBrush XDR (in the docking station). The Light Guide shows that the PrintBrush XDR is powering up (flashing green LED).

The PrintBrush XDR is held in the docking station by magnets.

Switch on the PrintBrush XDR by sliding the switch from the OFF to the ON position.



Fig. 19: On/off switch

Wait until the Light Guide indicates that printing can begin (back left green light on continuously). Remove the PrintBrush XDR from the docking station.



Fig. 20: remove the PrintBrush XDR from the docking station

An automatic self-cleaning process starts when removed from the docking station (spitting, [see chapter 5.4](#)). Then place the PrintBrush XDR on the background to be marked.

Printing can be done from right to left or from left to right.

The PrintBrush XDR automatically detects the direction of movement (indicated by a white LED to the right or left) and starts printing. A signal sounds when printing is complete (end position reached).

Use the PrintBrush XDR for printing as follows:

- Position the PrintBrush XDR with the lugs on the left edge of the selected printing area. The recesses in the lugs indicate the middle of the printing area.

- Move the PrintBrush XDR slowly and in a straight line from left to right over the background. Optimum printing speed is 10 cm per second.



Fig. 21: Printing from left to right

- Position the PrintBrush XDR with the lugs on the right edge of the selected printing area. The recesses in the lugs indicate the middle of the printing area.
- Move the PrintBrush XDR slowly and in a straight line from right to left over the background. Optimum printing speed is 10 cm per second.



Fig. 22: Printing from right to left

- When the end position is reached (i.e. the limit of the printing area is reached) printing stops and a signal sounds.
- Return the PrintBrush XDR to the docking station immediately after printing.

Change saved imprints:

Changing imprints stored on the PrintBrush XDR:

The last imprint that was sent to the PrintBrush XDR, is always stored on the green position (green LEDs on the side of the PrintBrush XDR). In addition, three further imprints can be stored permanently on the PrintBrush XDR. These can be selected in the App ("Imprints on PrintBrush XDR") and can be deleted or

exchanged at any time. The imprints are indicated in the App by different colors which match the colors of the LEDs of the lightpipe on the side of the PrintBrush XDR. Thus, four imprints can be used even without connection to the App.

There are two possibilities to make one of these imprints that are stored on the PrintBrush XDR. The respective imprint can either be chosen in the App or you can tap twice double on top of the PrintBrush XDR (four times in total) to change between imprints. This functionality works best when the PrintBrush XDR is in the docking station. The color of the lightpipe changes (from green to blue, pink or orange) and after a short loading time and acoustic signal the imprint can be made.

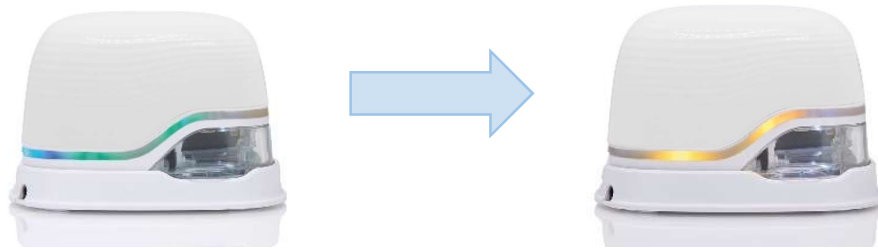


Fig. 23: Lightpipe changed from green to yellow (indicating one of the stored imprints as active position)

Multi-line imprint option:

The PrintBrush XDR can also make 2-line or 3-line imprints. Proceed as follows:

1. Starting from the left, move the PrintBrush XDR to the right until the signal sounds, indicating the end of the line has been reached.
2. Then move the PrintBrush XDR down until the signal sounds, indicating the next line has been reached.
3. Move the PrintBrush XDR to the left until the signal sounds, indicating the end of the second line has been reached.
4. and 5. For another line, repeat steps 1 and 2 until the signal sounds, indicating the end of the third line has been reached (6.).

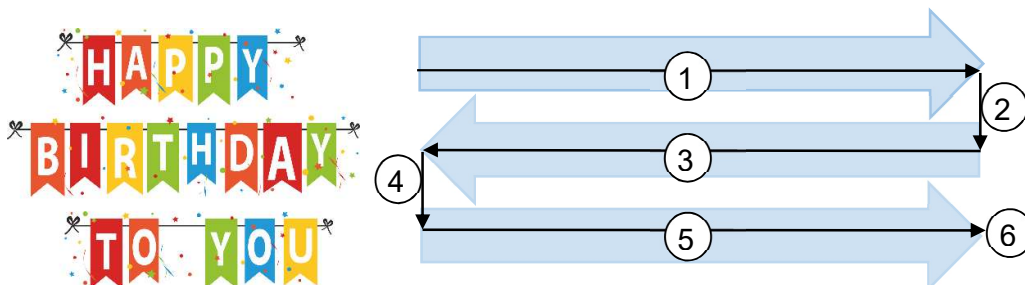


Fig. 24: Multi-line imprint procedure



Fig. 25: Place into docking station

NOTICE



ALWAYS place the PrintBrush XDR in the docking station after use! Otherwise, the ink cartridge print head dries out.

If the PrintBrush XDR is switched on and is not placed in the docking station for one minute, a warning signal sounds and the Light Guide displays a flashing red warning light. A warning is also displayed in the APP interface in online mode. Return the PrintBrush XDR to the docking station.

If the PrintBrush XDR is switched off, NO warning signal sounds. Even when switched off, the PrintBrush XDR must always be placed in the docking station, otherwise the ink cartridge print head dries out, considerably affecting print quality or it may be damaged.

NOTICE



Recommendation: Always place the PrintBrush XDR in the docking station first and then switch it off.

5.3 Light Guide and symbols



Fig. 26: Light Guide

Light Guide: Direction of the RGB LEDs and white bright light LEDs

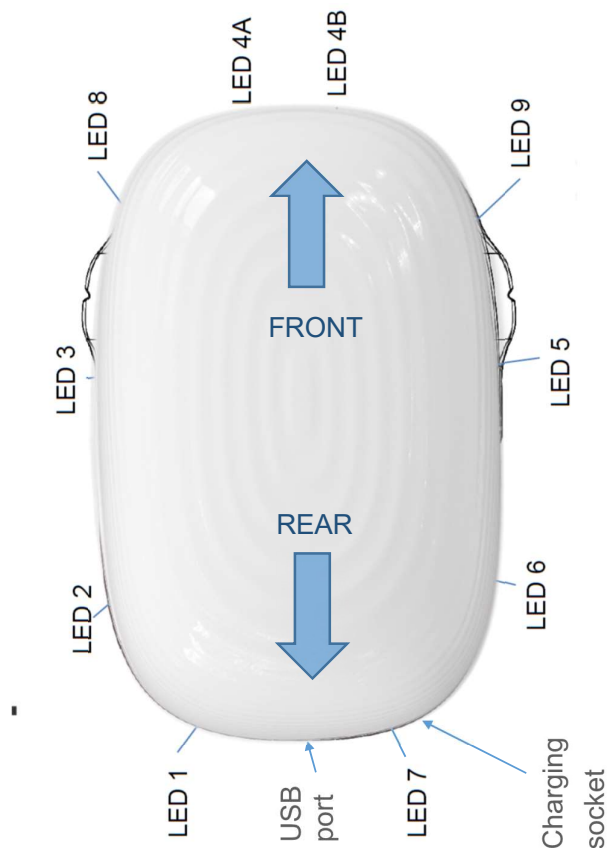


Fig. 27: Light Guide directions

The color LEDs 1 to 7 (right angle RGB LEDs) on the Light Guide indicate the PrintBrush XDR operating modes depending on the color, light position and light pattern (see table on the next page).

The white bright light LEDs 8 and 9 indicate the movement direction and light up through the viewing window rather than the Light Guide.

Light Guide and signal tone table:

Color code, flashing code, direction code, signal tones

Light Guide		Designation	Description
 LED7	Continuous green light next to the charging plug	Charge indicator light	The battery is fully charged (100%), the charging plug is still connected
 LED7 → 2 + 5	Flashing green light next to the charging socket forwards continuously (0.7 s, continuously)	Charge indicator light	The battery is charged (between 50% and 99%)
 LED7 → 2 + 5	Yellow flashing next to the charging plug forwards continuously (0.7 s, continuously)	Charge indicator light	The battery is charged (between 0 % and 49 %)
 LED2+5 → 7	Red flashing on the side direction charging plug continuously, followed by a signal tone (0.4 s, every 5 s)	Low battery charge	The device must be charged (Chap 6.1), battery charge lower than 10%
 LED 3+4+5	Short red flashing (0.2 s, every 1 s) forwards area	Low ink cartridge level	The ink cartridge must be changed (Chap 6.2), ink level lower than 10%
 LED3+5, LED4	Alternate red flashing (0.5 s) center and side in forwards area	No ink cartridge inserted	The ink cartridge must be inserted (Chap 4.2)
 LED3+5, LED4	Alternate yellow flashing (0.5 s) center and side in forwards area	Wrong ink cartridge inserted	The ink cartridge must be changed (Chap 6.2)
 LED1 - 7	All LEDs light up blue (1 s) and a long signal sounds, LED 1 and 7 light up blue (1 s)	WIFI connection	The WIFI connection has been made
 LED7	LED7 lights up blue	WIFI connection	The WIFI is connected
 LED1 → 7	Continues blue flashing, long signal tone at the end	An image is being transferred	An image is being transferred to the PrintBrush XDR via the WIFI connection. A long signal sounds when transfer is complete

Light Guide	Designation	Description
 LED7+1 → 4	Continuous blue flashing (0.8 s, continuously), long signal sounds when complete Several images are being transferred	Images are being transferred to the PrintBrush XDR via the WIFI connection. A long signal sounds when transfer is complete
 LED1-7	Short red double flashing of all LEDs with simultaneous rapid double signal tone (every 1 s) Warning: the cartridge is drying out	The PrintBrush XDR must be returned to the docking station immediately.
 LED9	White continuous light LED 9 Sleep mode	The PrintBrush XDR has gone into sleep mode automatically
 LED1 → 7	Continuous green flashing followed by continuous white flashing. Short signal sounds at start and long signal sounds when complete (approx. 6 s) Power up when switched on or leaving sleep mode	The PrintBrush XDR is powering up or has left sleep mode for normal mode. A signal sounds when complete.
 LED 8 + 9	White continuous light on both sides. Short signal sounds when complete Printing to the left/right	The light helps to see the imprint better through the transparent part in the front while printing
 LED 3	Short green flashing light left Becomes a continuous green light when printing is interrupted Printing to the right	Printing to the right. A short signal sounds when the end of the image has been reached If continuous light: Printing can continue
 LED 5	Short green flashing light right Becomes a continuous green light when printing is interrupted Printing to the left	Printing to the left. A short signal sounds when the end of the image has been reached If continuous light: Printing can continue
 green continuous light LED 1 and 7	Ready for printing	PrintBrush XDR has been removed from the docking station and powered up

Symbols in the App:

Symbol	Designation	Description
	WIFI symbol	Excellent WIFI connection to the PrintBrush XDR
	WIFI symbol	Good WIFI connection
	WIFI symbol	Poor WIFI connection
	WIFI symbol	No WIFI connection
	Battery level display green	Battery level between 91 and 100%
	Battery level display green	Battery level between 71 and 90%
	Battery level display green	Battery level between 51 and 70%
	Battery level display yellow	Battery level between 26 and 50%
	Battery level display orange	Battery level between 10 and 25%
	Battery level display red	Critical battery level, below 10%
	Ink level display full	Ink level between 76 and 100%
	Ink level display half full	Ink level between 51 and 75%
	Ink level display medium	Ink level between 26 and 50%
	Ink level display half empty	Ink level between 11 and 25%
	Ink level display critical	Critical ink level (below 10%)

5.4 Automatic cleaning cycle

Print head cleaning is required for optimum device performance. This can be run automatically and manually by pressing this button:



Spitting:

A print head cleaning cycle (spitting) is automatically activated when removed from the docking station. Ink drops in the picoliter range are released when the device is raised. These are dispersed as a thin mist in the air. This is necessary to ensure constant print quality. This process takes also place inside ordinary inkjet printers. Spitting is completed immediately after the device is raised so that the mist is released directly into the air. Try directing the PrintBrush XDR to the side while this happens. Do not let it spit on top of the docking station, neither on top of the print surface. Do not rotate the PrintBrush XDR towards your face directly after raising from the docking station. The automatic cleaning cycle (spitting) is run when the PrintBrush XDR is in a level position. No spitting is completed for safety reasons if the PrintBrush XDR is rotated more than 90°.



Fig. 28: Color sample released by spitting



Fig. 29: Do not direct towards eyes, face or skin. Light irritation possible

Do not touch the PrintBrush XDR print head. Do not place on or immediately above light backgrounds or light surfaces or clothing – ink stains can be hard to wash out!

If ink gets into the print head rest pad, it can stick together. This may happen if the PrintBrush XDR has just been removed from the docking station (spitting is activated) and is returned to the docking station without printing. Always print on a suitable background after removing.



CAUTION!



Possible hazard from substances, slight eye and skin irritation from ink.

Do not direct the print head towards the eyes, face or skin. Do not open the ink cartridge. Do not swallow! Keep ink cartridge out of the reach of children.

The print head and housing must always be placed in the docking station when not in use to prevent drying out. The docking station contains a special pad with rubber lips to prevent drying out.

NOTICE



ALWAYS place the PrintBrush XDR in its docking station after use! Otherwise, the ink cartridge print head may dry out.

Recommendation: Always place the PrintBrush XDR in the docking station first and then switch it off. If the PrintBrush XDR is switched off, NO warning signal sounds, but the PrintBrush XDR should always be placed in the docking station even if switched off.

The amount of ink drops during spitting depends on the previous downtime. The longer the PrintBrush XDR has not been in use, the more ink drops are required for spitting to ensure high quality imprints. The amount of spitting is controlled in the software and is subject to change.

5.5 Manual cleaning cycle

Wiping:

If printing quality drops and/or excessive ink can be seen on the print head, wiping is required. This cleans the print head

Proceed as follows:

- Before starting the manual cleaning cycle, place the PrintBrush XDR on paper which can be disposed of after the cleaning cycle.
- In the APP settings, press  to activate spitting – ink drops are released (drop size in picoliter range).
- Slide the print head wiper out (wiper, rubber lip) on the underside of the docking station. A lint-free cloth can also be used, moistened with distilled water.



Fig. 30: Slide print head wiper out

- Carefully wipe the print head from back to front once with the print head wiper (or with the damp cloth) as shown Fig.31.



Fig.31: Clean print head with the wiper

- Place the PrintBrush XDR on paper.
- Press the spitting symbol again in the app.
- The PrintBrush XDR is now ready for use again. A test image can be printed (*see chapter 5.2*) to test the print quality.

NOTICE



Do NOT wipe the print head with the wiper again after the second spitting cycle, otherwise it may dry out.

5.6 Software

After downloading the software and/or the application (APP) from the App Store or from [Google Play](https://www.printbrush.com/) or from the website (<https://www.printbrush.com/>) and installing on your tablet or mobile device (*see chapter 4.3*), you can start using the PrintBrush XDR. For configuration of the Wi-Fi connection (*see chapter 5.7*), and for connecting with the USB cable (*see chapter 5.8*.)

5.7 Wi-Fi connection

The Wi-Fi connection setup procedure between the PrintBrush XDR and a host device (Smartphone, tablet or PC) is slightly different depending on the Operating System running on the host device. Setting up the Wi-Fi connection for the first time can be slightly time-consuming. However consecutive times the process is done automatically and no need to repeat the setup procedure unless the printer's network connection is deliberately removed (forgotten).

For all Operating systems, the PrintBrush XDR must be switched on. Have in hands the SSID and password information found on the quick setup guide. Alternatively, the default factory imprint image loaded on your PrintBrush XDR contains this information so just print it out to have it in hands.



Fig. 32: Example test imprint found on the Quick Setup Guide with SSID and password

Select the SSID of your PrintBrush XDR in the Wi-Fi settings on your host device, click "Connect" and enter the password. The actual illustration of the activated Wi-Fi connection depends on the host device and the software installed and may differ from the example illustration below.

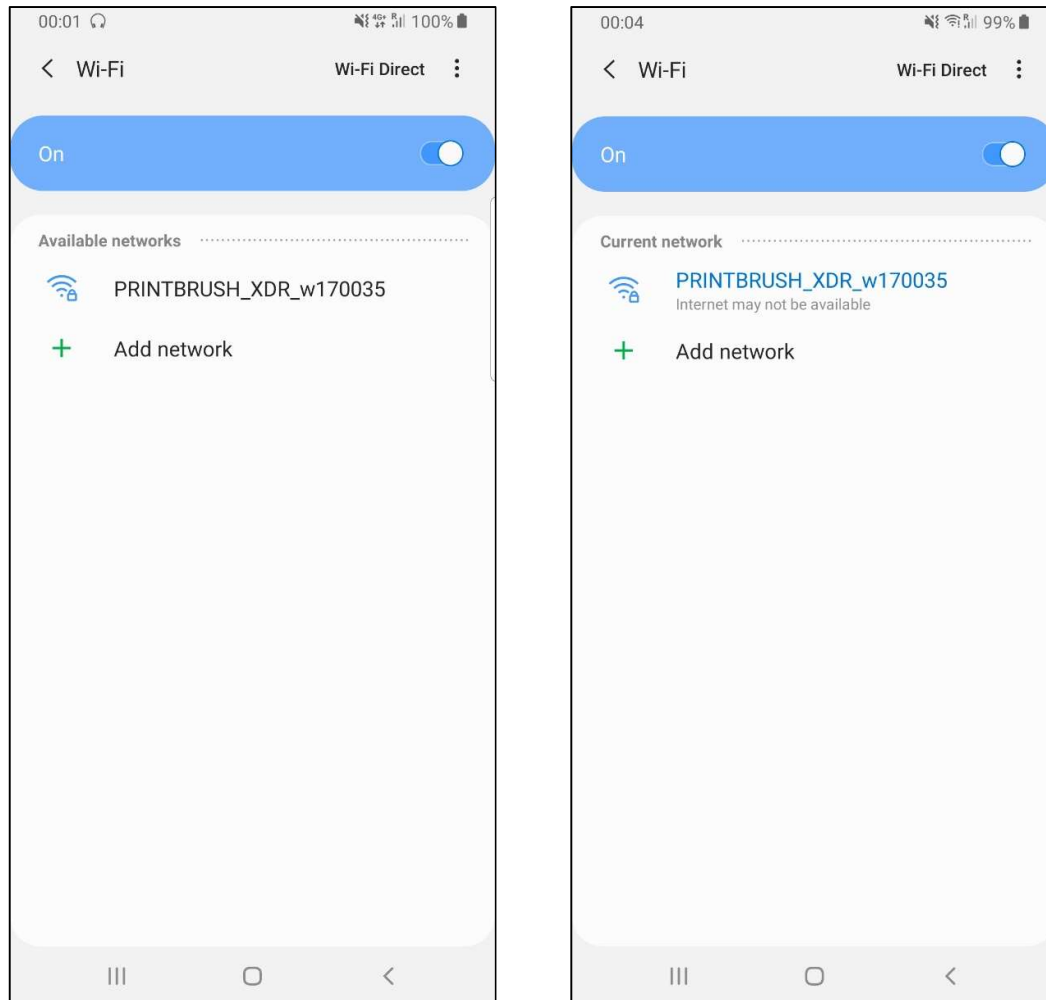


Fig. 33: Example images of WIFI connection connecting (left) and connected (right)

The PrintBrush XDR is now connected on a system level by Wi-Fi to the host device. This can be confirmed by the right rear LED turning blue and a short buzzer beep given by the PrintBrush XDR.

5.7.1 Considerations regarding the Wi-Fi connection

Few things you need to consider as a user regarding the Wi-Fi connectivity between your PrintBrush XDR and a host device:

- You don't need to be connected to a Wi-Fi router. The connection to the printer is exactly the same as connecting to a Hot Spot or to a Wi-Fi router.
- You only have to do the initial setup one time only. The settings will be automatically stored just as when you connect to a Hot Spot.

- Only one single device (Android, iOS or PC) can be connected to the printer at any given time. You can setup several devices to work with the printer but the first to connect is the one that holds the connection.
- If you have several PrintBrush XDR units, you cannot control all of them at the same time from the same handheld device. It will connect to the closest one (strongest signal) and retain the connection until that printer is switched off or goes into sleep mode.

5.7.2 Setting your PrintBrush XDR to work for the first time with an iOS device

For iOS devices (iPhones and iPads) this is a rather straight forward procedure. This procedure needs to be done once when setting up your printer for the first time with an iOS device. In the subsequent times, the connection will be established automatically. We have published an instruction video [here](#) in case the following written instructions are not clear enough or need re-assurance:

- Turn on your PrintBrush XDR printer unit and make sure it doesn't go into sleep mode.
- Launch the PrintBrush XDR APP on your iOS device. It will automatically show "Imprints" as the initial tab window (4 tabs are shown at the bottom of the APP).
- Jump to the "Printers" tab. A "Please wait..." text and an animated throbber will appear.
- After some seconds, a dialogue window will appear: "PrintBrush" Wants to Join Wi-Fi Network "PrintBrush-XDR- xXXXXXX" (Where x are digits or letters). This should correspond the SSID of your PrintBrush XDR.
- Click "Join".
- A text saying "Connection is OK" should display. You should also be able to get the readings of the battery- and the ink levels within few seconds.
- If a red text saying "Something is wrong" appears, then most probably your PrintBrush XDR has fallen into sleep mode. Wake it up by quickly lifting and putting back to docking station and wait few seconds.
- When the text "Connection is OK" is displayed then you are all set to start printing by going back to the "Imprints" tab.

5.7.3 Setting your PrintBrush XDR to work for the first time with an Android device

These first two steps you only need to do once when setting up your printer for the first time with Android device. In the subsequent times, the connection will be established automatically. We have published an instruction video of this procedure [here](#) in case the following instructions are not clear enough or need re-assurance:

5.7.3.1 Connecting to your PrintBrush XDR via Wi-Fi on a system level (STEP 1)

This is the most important step in setting up your printer to work with your tablet or your smartphone device. Please do NOT proceed to any other steps until you have successfully completed this initial step.

- Please ensure that your PrintBrush XDR APP is not open or active in the background before attempting the Wi-Fi connection on system level.
- Turn on your PrintBrush XDR printer unit.
- Open your list of available Wi-Fi devices. You can do this by holding your Wi-Fi icon pressed a couple seconds or by opening “Settings” and then “Connections”, “Wi-Fi” (Connect to Wi-Fi networks).
- You should be able to see a device called PRINTBRUSH-XDR-xXXXXX (Where x are digits or letters). This specific name is called SSID.
- Select the SSID as above and type in the password found on the Quick Setup Guide. The initial test imprint stored in the device will also print the SSID and the password just as a backup. The password is case sensitive so please be careful to type it in correctly. If no password indicated in the Quick Setup Guide or the test imprint, then you won’t need a password to connect to the printer.
- Click “Connect”. At this point, you should be able to hear a beep sound and see the right rear LED become blue. The other rear LED should remain green.
- If you don’t hear the beep or don’t see the right rear LED become blue, then most probably you have entered the password wrongly.
- Another possible reason is that your device has gone into sleep mode. This happens automatically after 3 minutes of inactivity. Just lift up the device and put it back again quickly on its docking station. You will see how it wakes up again with the lights going around and a beep.
- If you are not able to establish a Wi-Fi connection with your printer at this system level, please try connecting with another device or from a PC. If you are still not able to connect, then please contact our support.

5.7.3.2 Connecting to your printer via the PrintBrush XDR Android App (STEP 2)

Open the PrintBrush XDR app only after you have established a successful connection at system level. After starting the app, the connection will be lost (you will hear a beep from the printer and the blue LED will turn green). That’s the expected behavior as your app still doesn’t have the correct Wi-Fi settings. At this point the ink- and battery level icons and the printer icons will be inactive (grayish color and will not react to press). The blue Wi-Fi icon will be sort of scanning for a network. This section of the menu bar is the control dashboard of the printer and becomes active only when a proper connection with the printer is established.

Go to the menu button on the top left of the menu bar (the one with the three small horizontal bars). In the top spot of the drop-down menu there will be a green Wi-Fi icon called “Connection settings”. Press it. A dialogue window called “Printer name” will appear.

- Enter the same SSID and password information as at system level in the appropriate fields. (SSID will be pre-filled with PRINTBRUSH-XDR-)
- Click “OK”.
- Minimize and maximize back the app or restart the app for the new Wi-Fi settings to become active.
- At this point, you should hear a beep from the printer and the right rear LED turn blue again.
- You should also see the all the icons of the main dashboard become active.
- You are now ready to make your first own customized imprint

5.8 USB cable connection

The PrintBrush XDR can also be connected via the USB cable (NOT included) and a computer. Connect the USB cable to the PrintBrush XDR and to a computer.



Fig. 34: USB connection

The computer software can be downloaded free of charge from the PrintBrush homepage (www.printbrush.com).

5.9 Storage

Store the product in a dry place. When storing the PrintBrush XDR, always place in the docking station to prevent drying out the print head. Ensure the batteries are stored correctly: always charge before storing. When stored for extended periods, it is recommended to activate the PrintBrush XDR at least once a month to prevent the print head from completely drying out. Batteries should be charged, if required (*see chapter 6.1*). Complete the spitting process and make a test printing (*see chapter 5.2*). In the event the test printing quality is poor, complete a manual cleaning cycle (*see chapter 5.5*).

To protect the PrintBrush XDR from dust, other contamination and damage during extended storage periods, it is recommended to store it in the original packaging ([see chapter 4.1](#)) or in the transport case.

NOTICE



Always place the PrintBrush XDR in the docking station during storage. It is recommended to activate the PrintBrush XDR at least once a month and to complete the automatic cleaning process (or manual cleaning process, if required).

6 MAINTENANCE

The following sections describe the tasks required for maintenance purposes.

Inspection:

An inspection is required to ensure proper maintenance is carried out on the device. For more details on visual inspection and performance inspection at initial start-up, [see chapter 4](#).

- Product cleanliness (general condition, damage, contamination)
- General component inspection: Check the PrintBrush XDR housing, docking station, charger and cable, LED light bar, contacts and battery for any obvious signs of damage or excessive dirt etc.
- If any damage is detected, stop using the product. If damaged, please contact your distributor.

6.1 Charging the battery

Check the charge indicator light on the LED Light Guide ([see chapter 5.3](#)):

- The rear LEDs flash red when battery charge is lower than 10%

NOTICE



The battery must not be deep discharged. This may cause damage. Fully charge the battery before an extended downtime period.

Proceed as follows to charge the device battery:

- Remove the charging cable from the packaging and unwind.



Fig. 35: Power plug



WARNING!



Hazard from rechargeable batteries (short-circuit, overheating, fire).

Only use charging systems as recommended by the manufacturer. The battery must not be deep discharged!

The battery must not be short-circuited. Fire risk!

- Connect the charging cable to the docking station.
- The printing device must be placed in the docking station.



Fig. 36: Charge battery

- Connect the charger to the mains power supply.



DANGER!

Hazard from electric shock. There is a risk of a fatal electric shock in wet conditions.



Never handle the charger mains plug with wet hands. Never use the device in humid areas. Never expose the battery and charger, including USB port, to water and/or rain.

- The PrintBrush XDR can be charged when switched on or off. Charging starts whenever it is placed in the docking station.
- Observe charge indicator lights (charging cable is connected) on the Light Guide ([see chapter 5.3](#)):
 - yellow flashing next to the charging plug forwards continuously: Charge indicator light, battery charge between 0% and 49%, battery charging
 - green flashing next to the charging plug forwards continuously: Charge indicator light, battery charge between 50% and 99%, battery charging
 - continuous green light next to the charging plug Battery is fully charged (100%). Charging stops automatically and the charger can be removed.
- If the APP is on and there is a WIFI connection with the device, the charging process is also displayed in the APP:
- Disconnect the charger when fully charged.



WARNING!



Hazard from rechargeable batteries (short-circuit, overheating, fire).

- Do not expose lithium batteries to heat, cold or water (do not leave in direct sunlight or charge or store outdoors).
- Do not (forcibly) open or expose to large impacts or shocks.
- Only use charging systems as recommended by the manufacturer.
- The manufacturer's safety instructions must be complied with throughout the entire disposal process.
- Battery contacts (outside the device) must not come into contact with metallic objects such as coins or keys, to prevent a short circuit.
- The printing device and/or rechargeable battery must never get wet.
- Burning batteries can cause blow-outs, causing a battery to be blown away. Battery fires give off extremely thick, particularly toxic smoke.
- Following extended periods in storage or before taking to a collection point, the poles on lithium rechargeable batteries should be covered with adhesive tape to prevent short circuits. Maximum possible storage, e.g. in the original packaging and quick deposit in a collection point are recommended.
- Visually damaged, overheated or blown out batteries must not be recycled and must not be stored in the house, flat or garage.

NOTICE



Charging is only possible using the mains adapter and charger. Charging via the USB connection is not possible.

6.2 Changing the ink cartridge

An empty ink cartridge as indicated on the Light Guide and a red light and in online mode with the following symbol in the APP.



Change the ink cartridge as follows:

- Open and remove the PrintBrush XDR cover.



Fig. 37: Open and remove cover

- Remove the battery from the battery compartment.



Fig. 38: Battery

- Press the lever on top of the battery to the rear



Fig. 39: Open battery compartment

- Lift the battery and remove it
- Open the lower sliding panel.

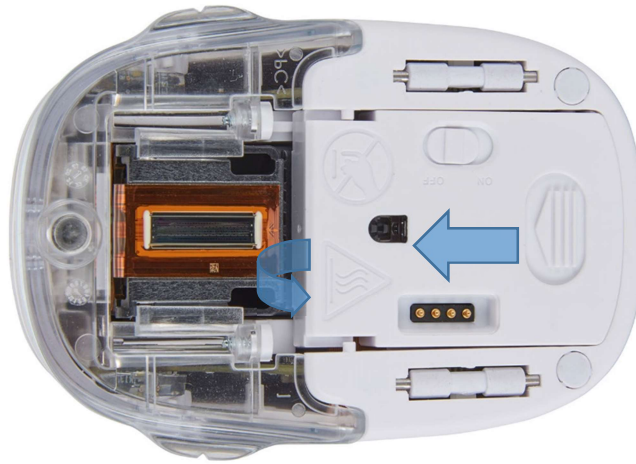


Fig. 40: Opening the sliding panel

- Pull down the lower sliding panel.
 - Slide the underside of the PrintBrush XDR in the direction of the arrow.
 - Press the panel downwards at an angle.



Fig. 41: Sliding panel open

- Remove the old ink cartridge and store it in a safe place for recycling.
 - Pull the ink cartridge to the rear using the ridges
 - Remove the ink cartridge from the PrintBrush XDR



Fig. 42: Pull out ink cartridge

NOTICE



Always press open the lower panel first, otherwise the ink cartridge cannot be removed without damaging the PrintBrush XDR!

- Remove the new ink cartridge from the packaging and dispose of the packaging responsibly.
- Pull out the strip from the print head and dispose of responsibly.



Fig. 43: Ink cartridge

New original ink cartridges are available directly from the app and from the PrintBrush XDR website www.printbrush.se. They will also be available at major retailer stores.

- Insert new ink cartridge.
 - Press towards the front end of the compartment.
 - Cartridge clicks in.
 -



Fig. 44: Insert ink cartridge

- Close lower flap cover
 - Shut with a click.
 - The cover moves against the spring into the closed position.
- Insert battery
 - Push towards the ink cartridge.
 - Press the battery forwards until the lever on the top clicks in.
 -



Fig. 45: Insert battery

- Close cover.



Fig. 46: Cover closed

- ALWAYS put the printer back into the docking station.
- Switch on the device. If red lights flash on the front part of the light pipe, the cartridge might not have been properly inserted or its protecting tape was not removed. Repeat all previous steps one more time.

NOTICE



ALWAYS place the PrintBrush XDR in the docking station after use. Otherwise, the ink cartridge head dries out, affecting print quality. A warning signal sounds if the PrintBrush XDR is switched on and not placed in the docking station immediately. Return the PrintBrush XDR to the docking station. If the PrintBrush XDR is switched off, NO warning signal sounds, but the PrintBrush XDR should always be placed in the docking station even if switched off.

Tip: Always place the PrintBrush XDR in the docking station first and then switch it off.

6.3 Cleaning



WARNING!

Cleaning could make electrical components damp, causing injury to people through electrocution.



During cleaning work, avoid any ingress of water, steam or cleaning agent in the electrical components of the product.

Wipe down the product with a damp cloth.

All cleaning work on the product must be carried out by people who have read this Operating and Maintenance Manual and who are informed of the hazards that can result from this product.

For cleaning purposes, the product can be vacuumed, brushed or wiped with a damp cloth that does not contain an aggressive cleaning agent.

Regardless of general cleaning activities, the following cleaning operations must be performed at the stipulated intervals:

Cleaning activity	Interval
Wiping/dusting	Daily and/or after every time in use
Cleaning	Every week or as required

6.4 Troubleshooting

Problems may occur with the product as listed in the table below, which includes their causes and actions to be taken.

More troubleshooting tips can be found on our homepage (www.printbrush.com). These are continuously expanded and updated.



WARNING!



Maintenance activities can be hazardous.

Problems and unexpected changes to the product must be resolved immediately. Refer to the instructions in this documentation.

Problem	Cause	Action
Print quality deteriorates or individual colors are pale or no longer printed	Ink cartridge empty	Change ink cartridge see chapter 6.2
Light Guide lights up red on the front		
Empty container symbol display in the APP		
Unsatisfactory printing color gradient/quality	Print head is (slightly) dried out	manual cleaning cycle see chapter 5.5
	uneven surface	use flat base for printing
Parts of printing missing and/or printing not straight	In cartridge contact problem	Remove ink cartridge and insert correctly see chapter 6.2
Printing too pale		
Individual thin lines are missing in the printing	Ink cartridge empty	Change ink cartridge see chapter 6.2
	Excessive printing speed	Adjust printing speed: Move the PrintBrush XDR by hand from right to left or from left to right 100 mm/s (max. 300 mm/s) see chapter 5.2
Printing blurred	unsuitable base, e.g. smooth plastic surface, glass etc.	use absorbent surfaces as a base only see chapter 3.4

Problem	Cause	Action
PrintBrush XDR leaves spots	Spitting	Place PrintBrush XDR in the docking station. After raising for the spitting cycle, hold in mid air and then return to the printing surface see chapter 5.4
Imprint is not printed even though it was sent and PrintBrush XDR is ready	Print head has dried out because PrintBrush XDR was not placed in the docking station	Clean print head with damp cloth or wiper, see chapter 5.5 Always place the PrintBrush XDR in the docking station.
Light Guide lights up red on the rear (USB connection) Empty battery symbol display in the APP	Battery almost empty	Charge battery see chapter 6.1
Light Guide flashes red at front and side Empty ink level display in the APP	No ink cartridge inserted or not inserted properly	Insert ink cartridge or check position See chapter 6.2
Light Guide flashes yellow at front and side Empty ink level display in the APP	Wrong ink cartridge inserted	Insert an original PRINTBRUSH ink cartridge
Can't remove ink cartridge	lower flap closed	open lower flap see chapter 6.2
No data transfer possible	No WIFI connection possible	Check APP wizard or WIFI settings on the mobile device See chapter 5.7
No WIFI connection possible	Other PrintBrush XDR already connected with the mobile device PrintBrush XDR is connected with another device via WIFI wrong password	Disconnect the other device and connect with PrintBrush XDR Enter right password
PrintBrush XDR password entry not possible	Password forgotten	Reset PrintBrush XDR to factory settings see chapter 6.5

Problem	Cause	Action
Data transfer taking too long	Poor WIFI connection between PrintBrush XDR and mobile device	Use the mobile device alongside the PrintBrush XDR
PrintBrush XDR signal sounds and flashes red	not placed in the docking station; PrintBrush XDR signal sounds after one minute	Always place the PrintBrush XDR in the docking station.
PrintBrush XDR sounds a signal and flashes red even though it is in the docking station	Contact problem PrintBrush XDR is not correctly positioned in the docking station	Change PrintBrush XDR position in the docking station
PrintBrush XDR does not switch on	Battery is completely discharged	Charge device See chapter 6.1 The print head also needs cleaning, depending on printing quality See chapter 5.5
PrintBrush XDR does not charge	Contact problem between PrintBrush XDR and docking station or mains adapter Battery is completely discharged or defective	Charge PrintBrush XDR for several hours and switch on again contact dealer if battery defective
No data transfer, even though PrintBrush XDR switched on Light Guide does not light up	PrintBrush XDR has gone into sleep mode	Remove PrintBrush XDR from the docking station, it switches on again automatically
Housing damaged	PrintBrush XDR has been dropped	Send device away for repair See chapter 6.6

For further details and more problems, click here:

www.printbrush.com

6.5 Reset

The PrintBrush XDR must be switched on for the reset to be successful. There is a small opening on the top next to the battery and ink cartridge compartment. Press here with a small thin object (e.g. paper-clip) to reset the PrintBrush XDR to its original factory settings (SSID and password are reset, the image memory is deleted).



Fig. 47: Opening for device research

6.6 Repairs & Return

Changing the USB port or other repairs should only be carried out by an electrician. Contact the manufacturer for information on spare parts and procedures.

In case of returning the PrintBrush XDR, the contacts of the battery need to be covered. A standard adhesive tape can be used for that. Put the battery back into the PrintBrush XDR and pack it ideally in its original packaging ([see chapter 4.1](#)) or in similar quality packaging. Ensure that the PrintBrush XDR is firmly secured and protected against impacts and other damage.



Fig. 48: Cover the contacts of the battery



WARNING!



Repair activities can be hazardous.

Repairs should only be carried out by an electrician. The PrintBrush XDR should not be dismantled further than is indicated in these instructions. The PrintBrush XDR housing and docking station must not be dismantled. The battery must never be dismantled!

6.7 Spare and wear parts

There are various spare parts available for the PrintBrush XDR which can be ordered from the manufacturer. More information is available here: www.printbrush.com



WARNING!



Unauthorized repairs on the product may be dangerous.

Repairs should only be carried out on the product by an electrician. Only original spare parts should be used. All modifications to the product are prohibited.

Spare part	Image
Ink cartridge	
Battery Black/white	

Electronics compartment Black/white	
Power adapter	
Docking station Black/white	
Cover Black/white	

7 DISCONTINUED USE AND DISPOSAL

This chapter contains information about discontinuing use and disposal of the product at the end of its service life.

Principal:

Before disposing of product parts, check to see whether they can be recycled. Send away as much as possible for recycling.

Negligent or improper disposal can result in unforeseeable consequences. Dispose of product materials and components in a manner that is verifiably compatible for mankind, the natural world and the environment.

Comply with details provided by the manufacturer and with corresponding legislation and regulations.

NOTICE



Packaging materials (paper, plastic) must be disposed of separately. Dispose of components of the device in accordance with legislative stipulations. Dispose of materials separately and send as much as possible away for recycling.

Electrical components of the product must be sent for recycling as waste of electrical or electronic equipment. Dispose of batteries in accordance with legislative stipulations.

NOTICE



The electrical components of the product must be sent for recycling as waste of electrical or electronic equipment.

Discontinued use procedure:

Dismantle the product down to component level as far as possible. Dispose of this material separately.

Product materials and parts:

Dispose of the segregated materials and components of the product separately:

- Plastics
- Return battery to collection point with taped contacts
- Send electrical and electronic components away for recycling as electrical scrap, in accordance with the Waste Electrical & Electronic Equipment Directive (WEEE).



Hazard from rechargeable batteries (short-circuit, overheating, fire).

The poles on lithium rechargeable batteries should be covered with adhesive tape to prevent short circuits before taking to a collection point. Maximum possible storage, e.g. in the original packaging and quick deposit in a collection point are recommended.

8 APPENDIX

EU – Declaration of Conformity

Directive 2014/35/EU to harmonize the laws of the member states relating to the provision of electrical equipment for use within certain voltage limits on the market (Low Voltage Directive)

Manufacturer:	COLOP Digital GmbH Dr.-Arming-Straße 5 A-4600 Wels
Device:	CODI Standard 1.0
Type:	PrintBrush XDR

Herewith is confirmed, that the device conforms to the health and safety requirements of the Low Voltage Directive 2014/35/EU and the technical documents were prepared in accordance with Appendix III A. This declaration of conformity also confirms the implementation of the 2014/30/EU (EMC-Directive), 2014/53/EU (RED-Directive), 2012/19/EU (WEEE Directive), 2011/65/EU (RoHS Directive) and that the following harmonized standards have been applied:

EN ISO 12100: 2013	General principles for design - Risk assessment and risk reduction
EN 62368-1: 2016	Safety requirements of audio/video, information and communication technology equipment
EN 61000-6-1: 2007	Electromagnetic compatibility (EMC) - Immunity for residential, commercial and light-industrial environments
EN 61000-6-3: 2007	Electromagnetic compatibility (EMC) - Immunity for residential, commercial and light-industrial environments
EN 61000-3-2: 2014	Electromagnetic compatibility (EMC) - Limits for harmonic current emissions
EN 61000-3-3: 2013	Electromagnetic compatibility (EMC) - Limitation of voltage changes, voltage fluctuations and flicker
EN 301489-1: 2017	Electromagnetic compatibility (EMC) - Common technical requirements for radio equipment and services
EN 301489-17: 2017	Electromagnetic compatibility (EMC) - Specific conditions for Broadband Data Transmission Systems as e. g. Bluetooth, WIFI
EN 300328: 2017	Wideband transmission systems - Data transmission equipment operating in the 2,4 GHz ISM band as e. g. Bluetooth, WIFI

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Wels, Austria, 19 January 2019

(Place, date)

(CEO Ernst Faber)