

Handjet®EBS-260A SAFETY AND IMPORTANT INFORMATION

DROP-ON-DEMAND Handheld, Portable, Cordless Printers



EN

You can find our user manuals at: manual.ebs-inkjet.de

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EN Safety and Important Information

EN

Safety and Important Information

(Original instructions)

There are icons on the device that indicate a warning of potential dangers.



Before using the



Handjet[®] EBS-260A printer, please read carefully the documentation that accompanies the printer as well as the material safety data sheets (MSDSs) for the consumables that have been or will be used.

This information brochure should be easilv accessible and ready to use whenever the need to do so arises over the entire service life of the printer.

The product delivered to you corresponds to your specific order, and it may happen that the options and functionality of your printing system differ from some descriptions or illustrations. As we need to keep pace with new technological advancement and wish to meet individual requirements of our clients, we reserve the right to introduce changes in the design and construction as and when necessary. Therefore, no claims can be made regarding differences in data, illustrations or descriptions contained in the accompanying documentation. Should your printer be equipped with options or software that are not illustrated or described in the accompanying documentation or should you have additional queries after having read the documentation, please contact any EBS Ink Jet Systeme GmbH authorized representative for more information.

These instructions in the English language are the original instructions. In case of disputes, the English language version shall prevail. The instructions in other languages are translation of the original instructions.

The printer is accompanied by the following documentation.

• User Manual*: it contains a description of the printer, the information on how to switch it on and off, start/pause printing, prepare a project for printing, set printing parameters, perform basic maintenance and fix problems, as well as the printer's technical data: the document can be downloaded from the EBS website following the link manual.ebs-inkjet.de or by scanning the QR code given on the first page,

- Basic User Manual*: it contains a basic description of the printer, the information on how to switch the printer on and off, start/pause printing, prepare a project for printing, perform basic maintenance and replace an ink container: the document can be downloaded from the EBS website following the link manual.ebs-inkjet.de or by scanning the QR code given on the first page,
- Safety and Important Information: it contains any information that is necessary for safe operation, transport and storage of the printer: the document is available in a printed paper copy supplied with the printer and also on the website at manual.ebs-inkjet.de.

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* The availability of language versions of the selected documentation and the method of its delivery with the device may vary depending on the country.

DEFINITIONS

Ordinary person: any worker (different from an instructed person) who can operate the printer, have access to the printer or be near the printer.

Instructed person: a worker who has been instructed and trained by a skilled person or is supervised by a skilled person.

Skilled person: a member of the manufacturer's authorized service staff, who has specialist knowledge and experience in operating, maintaining and servicing printers.

INTENDED USE OF THE PRINTER

The Handiet[®] EBS-260A printers are industrial DOD (Drop-on-Demand) ink-jet printers designed for marking objects manually. Any other application of the printer is forbidden. The user shall be responsible for any consequences of an undesigned application.

RESPONSIBILITY

EBS Ink Jet Systeme GmbH shall not be liable for damage or personal injury that might occur during operation or servicing of **EBS Ink Jet Systeme**'s printers due to the failure to follow safety provisions as well as the industry-wide good manufacturing practices and safety standards.

EBS Ink Jet Systeme GmbH shall not be liable for any failure or damage caused by modifications to the printer or the application of the printer to purposes other than those for which it is intended. The user shall be responsible for taking any safety measures that are required each time **EBS Ink Jet Systeme's** printers are used.

EBS Ink Jet Systeme's consumables, spare parts, accessories and cabling, hereinafter referred to as components, are designed for operation with **EBS Ink Jet Systeme**'s printers and they are tested together with these printers according to the relevant regulations and safety standards.

The application of components that are not manufactured by **EBS Ink Jet Systeme GmbH** or are not recommended by the firm for use in a particular printer may be inconsistent with the testing conditions and may affect the printer's compliance with certain standards. The use of such components may impair specified printer parameters, properties or performance, cause incorrect printer operation or lead to damage to the printer, and it will void any warranty claims.

Every user who modifies or repairs EBS Ink Jet Systeme's printers using components different than those supplied by EBS Ink Jet Systeme GmbH or whose specifications vary from the specifications provided by EBS Ink Jet Systeme GmbH, shall be aware that they do this on their own responsibility and therefore shall not be entitled to make claims under the terms and conditions of warranty.

EC DECLARATION OF CONFORMITY

This printer is accompanied by the EC Declaration of Conformity, which authorizes the manufacturer to mark the product with the mark

CE

The full text of the EC Declaration of Conformity is available at the client's request from EBS Ink Jet Systeme's authorized representatives.

SAFETY RULES

This equipment is not suitable for use in locations where children are likely to be present.

An ordinary person can only perform basic operations such as:

- Selecting project for printing,
- Starting/pausing printing,
- Replacing consumables.

Any maintenance operations, including:

- Cleaning the nozzle plate,
- Purging the nozzles,
- Tuning the printing unit

can be performed by instructed persons.

Any service operations, including the operations that require that any protective covers of the printer be opened or removed can be performed exclusively by **skilled persons**.

No efforts have been spared to design the printer diligently so that its operation is safe and reliable. However, the knowledge and observance of a few safety rules and precautions are the prerequisite for safe use of the printer.

- Do not print on objects whose temperature exceeds +100°C (+212°F) at the time of labeling.
- <u>Never</u> direct the printing unit outlet towards persons or animals. Do not do that even if the printer is shut down.
- Wear protective clothing, cleaner/ink-resistant gloves and safety goggles while maintaining the printing unit.



- While replacing consumables be careful not to get splashed and not to make the printer or its surroundings dirty.
- WARNING: Sharp elements! While replacing consumables be careful not to get wounded with the nee-



dle that is part of the consumable connection. **Do not touch the needle!** Avoid manipulations near the needle.

- Do not use plastic vessels for the washing. Metal vessels or other vessels that do not collect electric charges are recommended.
- If you need to disconnect the electricity supply while the printer batteries are being charged, remove the power plug from the mains outlet.



• Do not use the printer if it is not fully operational.

HEALTH / HYGIENE / ENVIRONMENT

IN CASE OF ACCIDENT

When ink/cleaner spills, wipe the spilled liquid with absorbent material and dispose of it following the fire and health and safety at work regulations.

Take the splashed clothes off as soon as possible.

When eyes and skin get irritated by ink/cleaner:

- EYES wash with running water until the irritant is removed, take out the contact lenses, if you are wearing them and can remove them easily, and continue washing, consult an ophthalmologist and show him/her the irritant MSDS,
- SKIN wash with water and pH-neutral soap.

When swallowed, do not induce vomiting, contact a physician and show him/her the product **MSDS**.

When inhaled, make sure that the sufferer has access to fresh air.

HAZARDS IN THE WORKPLACE

Pregnant women must not expose themselves to certain consumables (e.g. XI40102, XI40008, XI40001) whose **MSDS**s include the **H360D** hazard statement.

Certain consumables require that contact lenses should not be worn.

While cleaning with a cleaner, it is advisable to wear cleaner-resistant gloves and safety goggles.



All chemicals - including inks - can be dangerous and therefore shall be handled with care.

Maximum noise level emitted by the printer < 70 dBA.

LASER RADIATION SAFETY

Laser pointer is activated during printing for print positioning. The pointer emits class 2 laser radiation (according to IEC 60825-1) at the wavelength of **650 nm**, with a maximum output power < **1 mW**. The laser beam is not generated in pulses.

- No laser beam must be directed toward persons or animals, nor must it be stared at. The laser light may damage the sight.
- Do not stare at the beam or look directly through optical instruments (magnifying glasses, magnifiers, microscopes, binoculars, telescopes). The looking through certain optical instruments (e.g. loupes, magnifying glasses and microscopes) at an output laser beam from a distance of up to 100 mm may generate hazard to the eyes.
- Avoid directing the beam toward the planes that reflect laser radiation well (mirrors or other glossy surfaces) so that the reflected beam(s) does not shine in the eyes.

The **Handjet**[®] EBS-260A printer is marked with the following warning label in English, as standard. The label is put on the left-hand side of the printer on plug covering the hole through which electromagnets can be adjusted.



Labels in several languages come together with the printer. If you prefer a different language than English, replace the label with a more suitable one. If the label is not available in your language, translate the label contents into your language and hand it over to the printer users.

CONTROL OF ELECTROMAGNETIC INTERFERENCE

The **Handjet**[®] EBS-260A printer contains a high-frequency transmitter and receiver. When it is in the ON state, the printer receives and transmits high-frequency (HF) signals.

During operation, the printer control system monitors the emissions of the energy radiated by the printer so that no required limits are exceed.

The **Handjet**[®] EBS-260A printer complies with all the requirements of the regulations concerning the impact of the HF energy on humans in your country.

RADIO EQUIPMENT DIRECTIVE (RED) NO 2014/53/EU COMPLIANCE STATEMENT

EBS-IMS Ink Monitoring System (RFID@13.56MHz, ISO/IEC 14443 B):

- Working frequency: 13.56 MHz.
- Maximum magnetic field strength of the receiver at 10 m from the printer: -41.7 dBµA/m.

WIFI Module (interfaces/standards: IEEE 802.11 b/g/n):

- Working frequency: 2400 2483.5 MHz.
- Maximum value of effective isotropic radiated power (e.i.r.p.) measured in the printer:
 9.9dBm @ 11b; 7.8dBm @ 11g; 5.3dBm @ 11n.

Bluetooth[®] Module (interface/standard: IEEE 802.15.1 Bluetooth[®] 2.0 + EDR):

- Working frequency: 2400 2483.5 MHz.
- Maximum value of effective isotropic radiated power (e.i.r.p.) measured in the printer: -1.3 dBm.

IMPACT ON MEDICAL EQUIPMENT

Pacemaker and Other Medical Implants

The **Handjet**® EBS-260A printer contains built-in high-frequency transmitters and receivers. Persons having medical implants should not approach the printer to a distance smaller than **20 cm (8 inches)** from the implants not to disturb implant operation.

Other Medical Equipment

If you use a piece of medical equipment, please ask the equipment manufacturer whether the equipment is sufficiently shielded against electromagnetic radiation. In certain circumstances your doctor may help you gain the information you require.

FIRE PREVENTION



Follow strictly the instructions that are given in the data sheet (**MSDS**) for every type of ink and cleaner.

The **Handjet**[®] EBS-260A printer prints with flammable inks/cleaners whose physical and chemical properties are available in the relevant material safety data sheets (**MSDS**). A sheet contains the symbol, description, solvent base, min. boiling point, flash point and other properties of a given ink/cleaner.

While performing maintenance or a service, you should have access to a fire extinguisher whose extinguishing material is



fit to extinguish fires of electrical equipment and flammable cleaners.

Do not print in the areas where an explosion hazard exists.

Do not use open flames or sparking devices in the printer work area.



Do not leave ink or a cleaner in open containers.

Before coming near easily flammable liquids, touch a grounded, metal object to dissipate the electric charge that could potentially have collected on your body.

Provide good ventilation in the place where the printer is used and in the places where consumables are stored.

PROTECTING THE BATTERY PACK

The printer contains a rechargeable lithium-ion battery pack which accumulates high energy that can create potential hazards. The batteries can emit hazardous chemical products, and they can even explode in adverse conditions. If the battery pack is damaged, the printer housing can be opened by a **skilled person** only. To reduce the risk of fire or burns, the battery pack must not be crushed, punctured or thrown to a fire or to water.

The following principles need to be obeyed to protect the batteries:

- Protect the printer against fire and temperatures of over +50°C (+122°F).
- Do not expose the printer to sunlight or other thermal radiation that can heat up the printer to over +50°C (+122°F).
- Charge the batteries using only the power pack that comes together with the printer.
- Charge the batteries when the ambient temperature is below +40°C (+104°F).
- The printer is not fit for use (printing) while the batteries are being charged.
- Avoid a sudden change in temperature (cold
 → hot) that might cause vapor condensation
 inside the printer and thereby speed up bat tery discharge and electronic circuit corrosion.
 Condition the printer for about 1 hour before
 use after it has been moved from a cool place
 to a warm one.

OPERATION IN EXPLOSION HAZARD AREAS

If you work in an explosion hazard area, switch your Ink-Jet printer off and follow all instructions and precautions. In such an area, accidental sparks from the printer batteries can lead to an explosion or fire and thereby become the reason for injuries or even death.

The regions where a potential explosion hazard exists are usually marked appropriately. The examples of such regions are: solvent storage areas, fuel storage areas and petrol stations, below-decks onboard ships, storage areas for explosive gases, air mixtures, chemicals and metal or flour powders.

OPERATION IN AREAS OF BLASTING

In order to avoid disturbance during blasting operations, the printer should be switched off in the areas where such operations are performed or where the use of radio equipment is forbidden.

Follow the instructions and notices on the notice boards in the area where restrictions apply.

WASTE DISPOSAL



Disposal of waste electrical and electronic equipment (regulations in force in the countries of the European Union and other European countries where a selective waste collection system is used).



Disposal of waste batteries and rechargeable batteries (regulations in force in the countries of the European Union and other European countries where a selective waste collection system is used).

The above-given symbols mean that the waste electrical and electronic equipment or the batteries must not be considered as regular household waste.

The waste consumables must be managed in compliance with the local waste management and hazardous materials transportation regulations.

WORKING ENVIRONMENT

Operating temperature	+5°C to +40°C (+41°F to +104°F)
Humidity	10 to 95% RH with no condensation
Maximum altitude (above sea level)	2000 m (6561 ft)

The use of certain inks may limit the temperature and humidity ranges (see the data sheet for a given ink).

HANDLING	
Overall printer weight	≈ 1.58 kg (3.48 lbs)
Transport casing with print-	

er and accessories $\approx 3.7 \text{ kg} (8.16 \text{ lbs})$

The printer may be transported in any position. While transporting the printer, be careful not to damage the nozzle plate or touchscreen and ensure that the ambient conditions are the same as those for storage.

CONDITIONS OF USE

WORKPLACE

The lighting of the workplace must comply with local regulations.

POWER SUPPLY

The printer is not equipped with a disconnecting mechanism (a circuit breaker), so the outlet to which it is connected for charging should be easily accessible.

Connect the power pack to power supply to which the nominal voltage indicated on the power pack nameplate is applied If in doubt, contact the **EBS Ink Jet Systeme GmbH** service department.

IN: 100 to 240 VAC, 50/60 Hz OUT: 24V / 1.25A	Supply voltage when charging
II (while batteries are being charged) III (during operation)	Electric shock protection class
II	Overvoltage category (OVC)



Charge the batteries using only the power pack that comes together with the printer. The printer is not fit for use (printing) while the batteries are being charged.

The product is intended for use with **TN** power distribution systems.

The power supply circuit of the printer must be secured with a cut-out device, whose rated current is:

- max. 13 A for Great Britain and Ireland,
- max. 16 A for the EU countries,
- max. 20 A for the USA and Canada,
- for the other countries in compliance with the applicable regulations.

The type of plug that is part of a detachable power cord must be selected according to the type of sockets in use in a given country.

The wiring systems upstream of the printer's power supply module must meet the applicable standards.



The power supply module must not be repaired by the user or the service staff. When damaged, the power supply module must be replaced.

LOCAL USE REQUIREMENTS

Statements for China

The printer <u>is not designed</u> for operation at heights that exceed **2000 m** (**6561 ft**) above sea level.

仅适用于海拔2000米以下地区安全使用。

The printer <u>is not designed</u> for operation in tropical conditions.



仅适用于非热带气候条件下安全使用。

STORAGE

Store the printer in a dry place.

Printer storage tempera- ture	0°C to +50°C (+32°F to +122°F) optimal: +20°C to +25°C (+68°F to +77°F)
Consumables storage temperature	0°C to +50°C (+32°F to +122°F) optimal: +10°C to +25°C (+50°F to +77°F)
Humidity	10 to 95% RH with no condensation

The printer may be stored in any position.

The use of certain inks may restrict the range of temperatures at which the printer can be stored - see the **MSDS** for a given ink.

While storing consumables, the following should be avoided:

- direct exposure to sunlight,
- sources of heat, radiation and electrostatic charges.

When filled with ink, the printer can be stored for **3 weeks** (**2 weeks** if pigment ink is in use). If the printer is to be stored for a longer time, empty it of the ink and fill it with a cleaner. For detailed information about preparing the printer for storing see **The User Manual**.

With certain inks, the printer can be stored for a different period (see the date sheet for a given ink).

MAINTENANCE / FAULT FIXING

Maintenance operations should be performed by instructed persons, who wear suitable personal protection equipment (protective clothing, goggles, protective gloves, etc.). Any maintenance operations that are not described in **The User Manual** can be performed exclusively by skilled persons.

Any <u>service</u> operations that require that protective covers of the printer be opened or removed should be performed exclusively by **skilled persons**.

If the nozzle plate needs cleaning, use an appropriate cleaner supplied by **EBS Ink Jet Systeme GmbH**. To clean the plate with a cleaner, put the printer on its side, with the nozzle plate facing downwards.



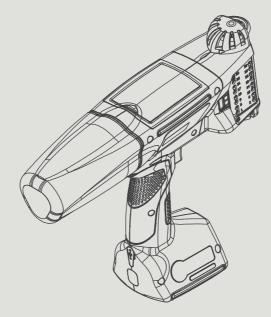
NOTE: The risk of printer damage! Washing the printer face in any other way than that described above can cause unintentional penetration of the cleaner into bearing-mounted moving parts or internal electronic components of the printer. This can lead to seizure or even permanent blockage of the guide rolls, damage to the travel sensor (encoder) and other electronic components of the printer.

No tools must be used for cleaning the nozzle plate. The nozzle plate should be dried gently with lint-free cloth. Contact with the nozzle plate should be limited to a minimum to avoid damage. Damage to the nozzle plate can reduce printing unit efficiency.

Version Control

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