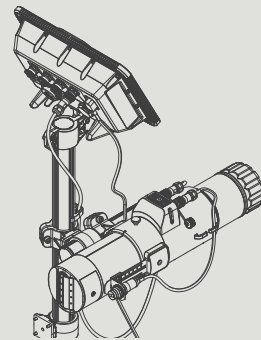
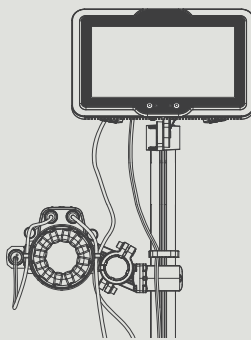
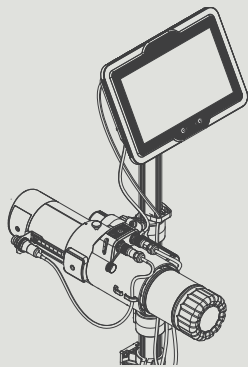


PicAS[®] II

EBS-1600 BASIC USER MANUAL

Industrial DROP ON DEMAND Printers
Original Instructions



Dear User,



Before using the **PicAS® II** EBS-1600 printer, please read carefully the documents that come together with the printer, especially the Safety Manual and the material safety data sheets (MSDSs) for consumables in use.



This User Manual should be easily accessible and ready to use whenever the need to do so arises.

This version of the document includes most of the modifications implemented to the **EBS Ink Jet Systeme GmbH** printers up to software version **1.02.41.0**, and the descriptions contained herein concern the printers on which this software version is installed.

The scope of delivery depends on the order, therefore it may happen that the actual equipment and functions of your printing system differ slightly from some descriptions or illustrations. As we need to keep pace with continual technical advancement and our customers' individual requirements we have to reserve the right to introduce changes in the design, version and technical solutions. Therefore, no data, illustrations and descriptions contained in this User Manual shall make grounds for any claims. Should your printer be provided with the parts of the equipment or software that are not illustrated or described in this User Manual or should you have additional queries after having read this Manual, please contact **EBS Ink Jet Systeme GmbH**'s authorized representative for more information.

The manufacturer shall not be liable for any damage caused to the printer by improper handling or operation, that is the failure to follow this User Manual, and by the consequences of editorial or publishing errors in the Manual.

The application and use of products are beyond our control and thus you apply and use the products exclusively on your own responsibility.

Original version.

The User Manual in the English language is the original instruction. In case of disputes, this language version shall prevail. The instructions in other languages are translation of the original instructions.

The following symbols are used in the manual:



*An important note, tip, piece of information on safety.
It is advisable to strictly follow the tips.*

This User Manual applies to the **PicAS® II** EBS-1600 printer.

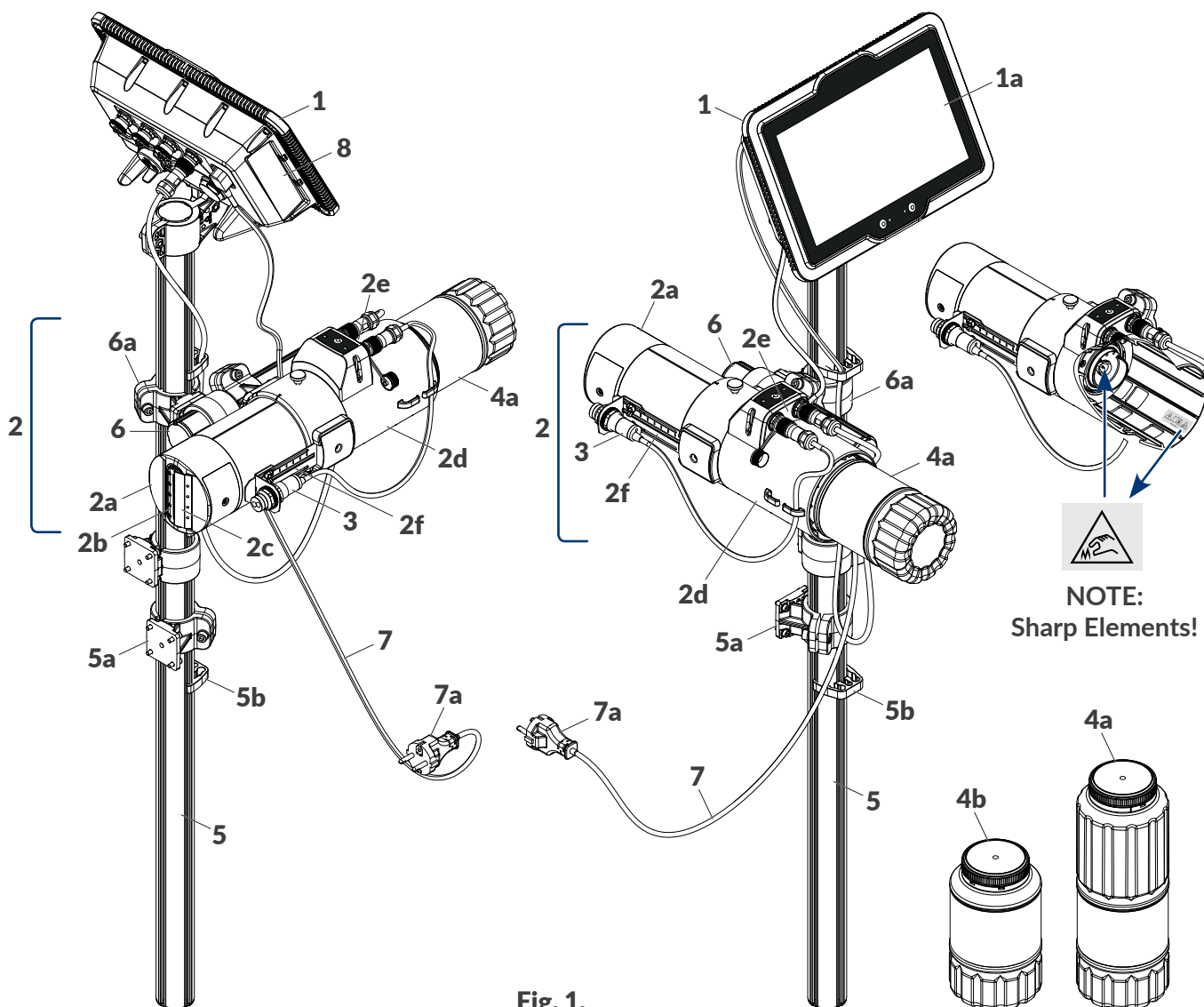


Fig. 1.

- 1 Control unit (1a: 10.1"/256.5 mm LCD display).

Integrated printhead (2a: printhead, 2b: nozzle plate, 2c: slide, 2d: ink system in the body, 2e: connections; 2f: photodetector holder with adjustable distance between photodetector 3 and an object to be labeled).

- 2 **NOTE: Sharp Elements!**



While installing/replacing consumables be careful not to get wounded with the needle that is part of the connection. **Do not touch the needle!** Avoid manipulations near the needle.



- 3 Photodetector.

- 4x 4a: 1l ink bottle; 4b: 0.5l ink bottle.

- 5 Printer support beam (5a: holder, 5b: cable retainer).

- 6 Integrated printhead support beam (6a: articulated holder).

- 7 Disconnectable power cord with plug 7a*.

- 8 Nameplate.

Cabling.



* - depending on a given country, power plug 7a may differ from that shown in Fig. 1.

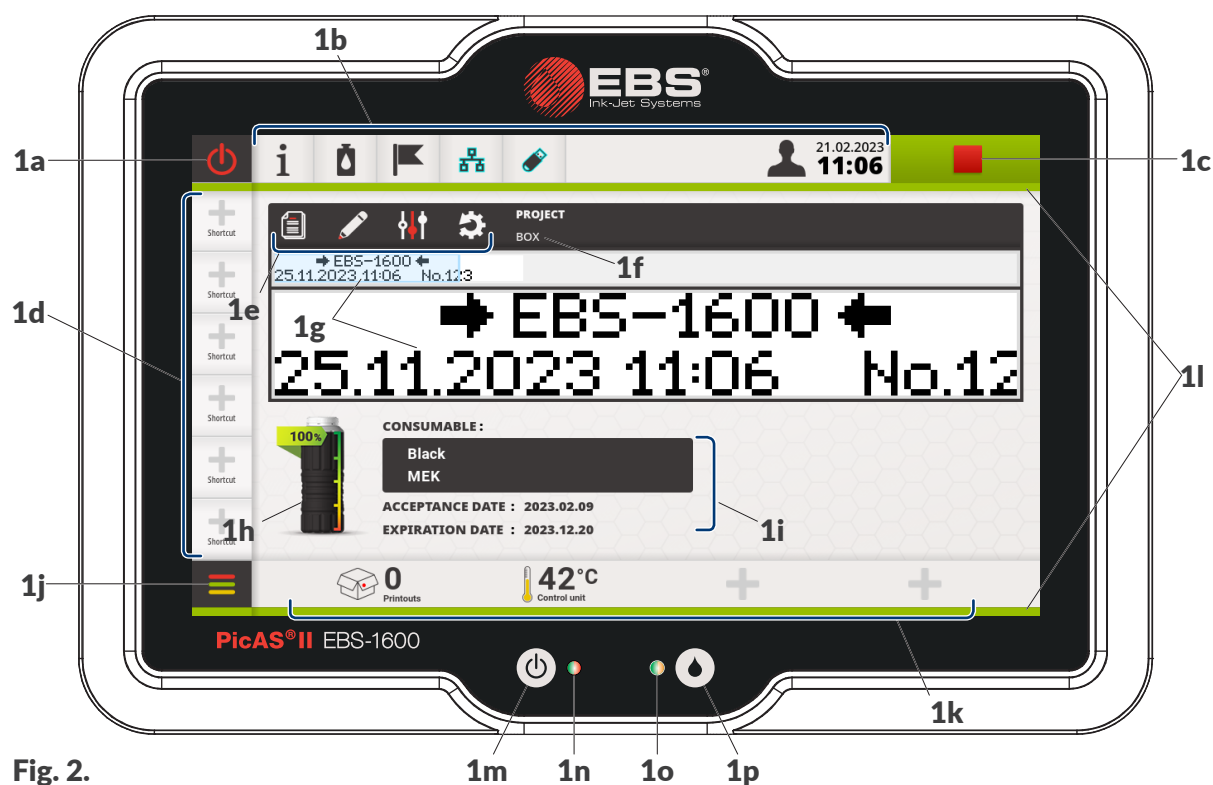


Fig. 2.

1a	Printer shutdown/restart icon.	
1b	Colored icon bar. Printer status. Date/time.	
1c	Printing start/pause icon. Printing status.	
1d	Editable user shortcut bar.	
1e	Function icons for the project that is open for printing/being printed:	
1f	Name of the project that is open for printing/being printed.	
1g	Preview of the project that is open for printing/being printed.	
1h	Ink level indicator.	
1i	Additional information on the ink bottle installed in the printer.	
1j	Menu icon.	
1k	Editable widget bar.	
1l	Neon sign.	
1m	Printer ON/OFF button.	
1n	Printer state LED indicator.	
1o	Printing status LED indicator.	
1p	Printing start/pause button.	

LED state marking, used further in this document

		the LED glows steady light
		the LED flickers

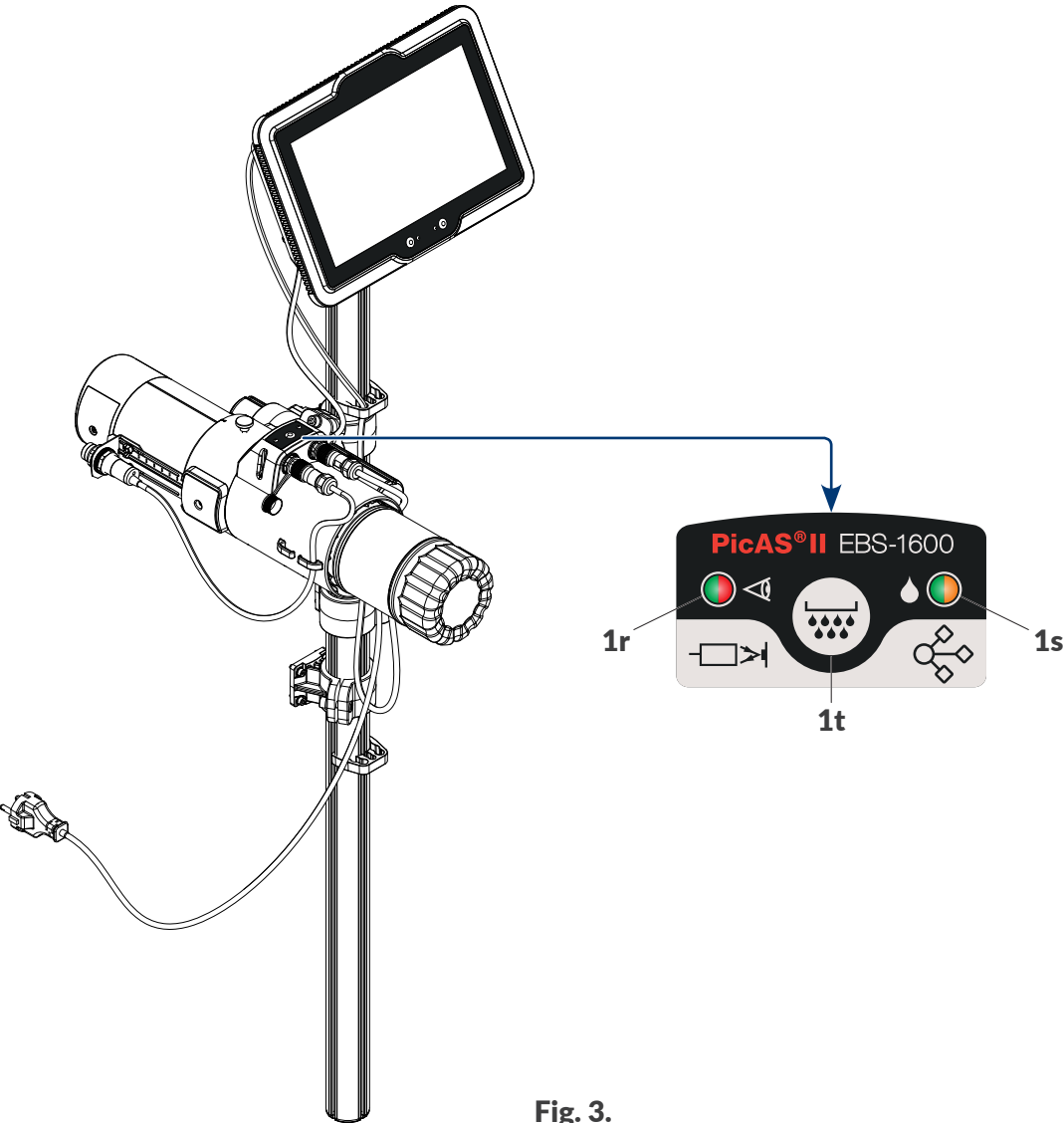







Fig. 3.

1r	Printer state and photodetector state LED.	
1s	Printing status LED indicator.	
1t	Rinse button.	

LED state meanings, used further in this document

		the LED glows steady light
		the LED flickers

Action symbols, used further in this document

	press the button/icon
00:00:05	wait the given time
1s	hold the button down for the given time
	step
	optional step

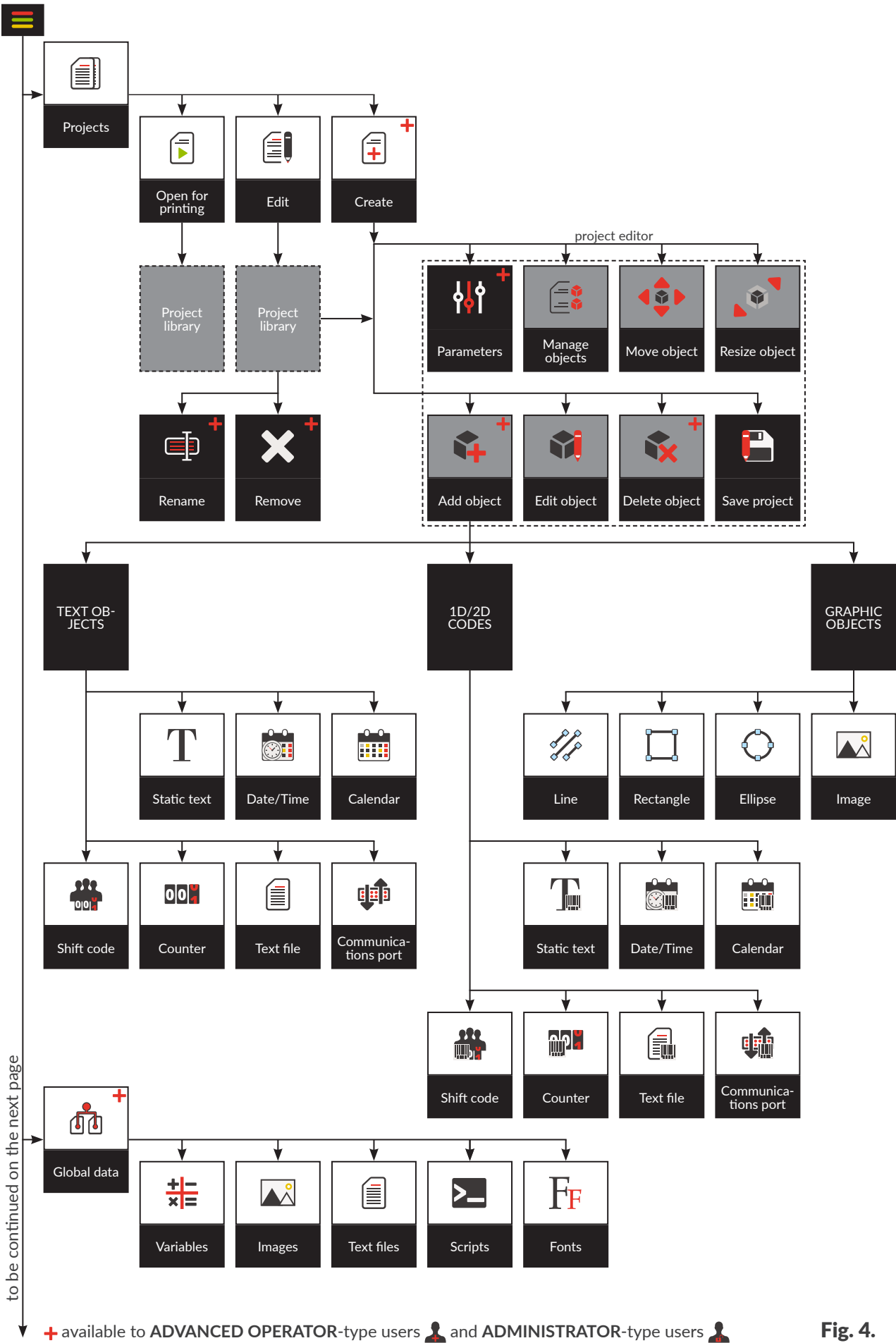


Fig. 4.

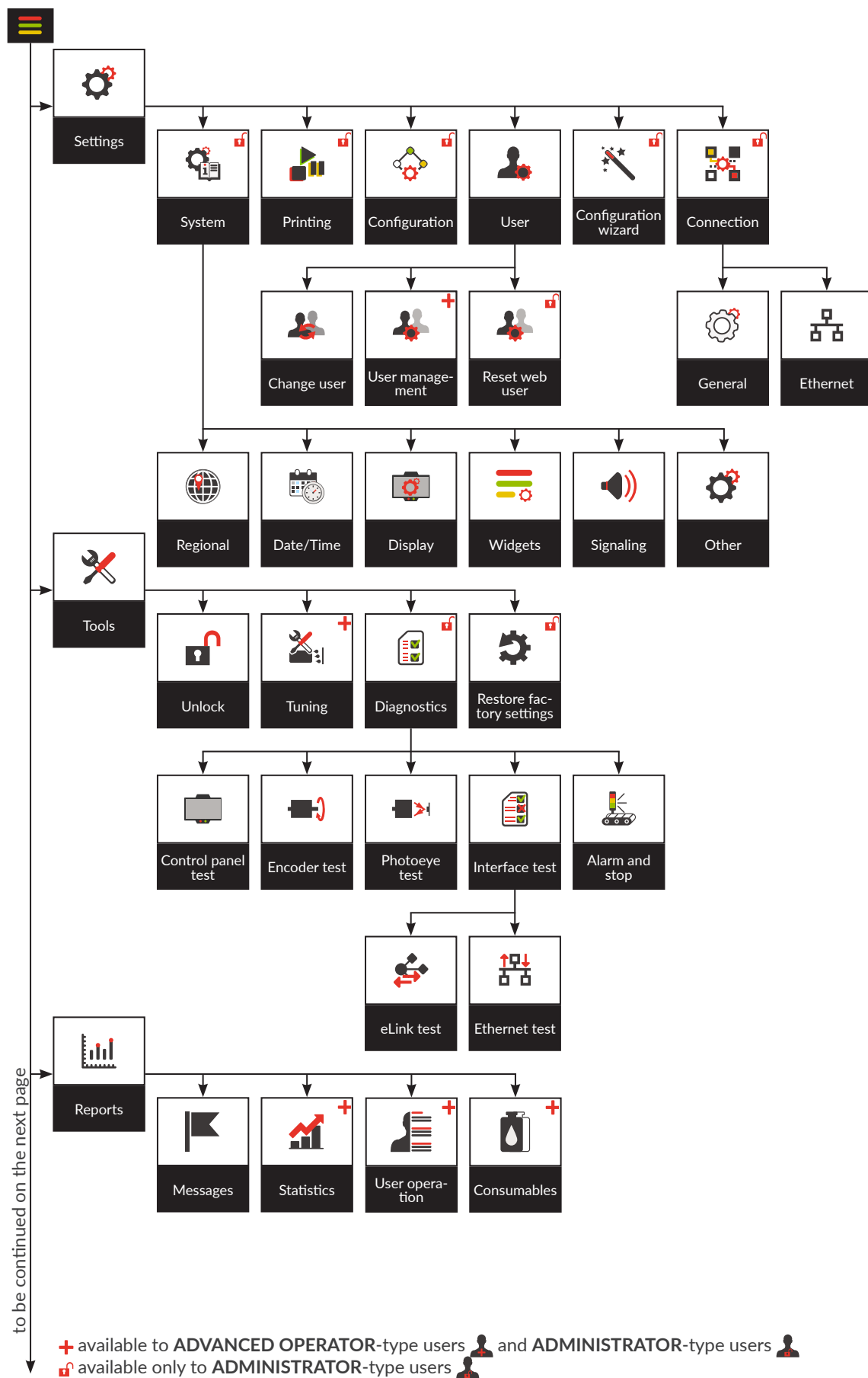
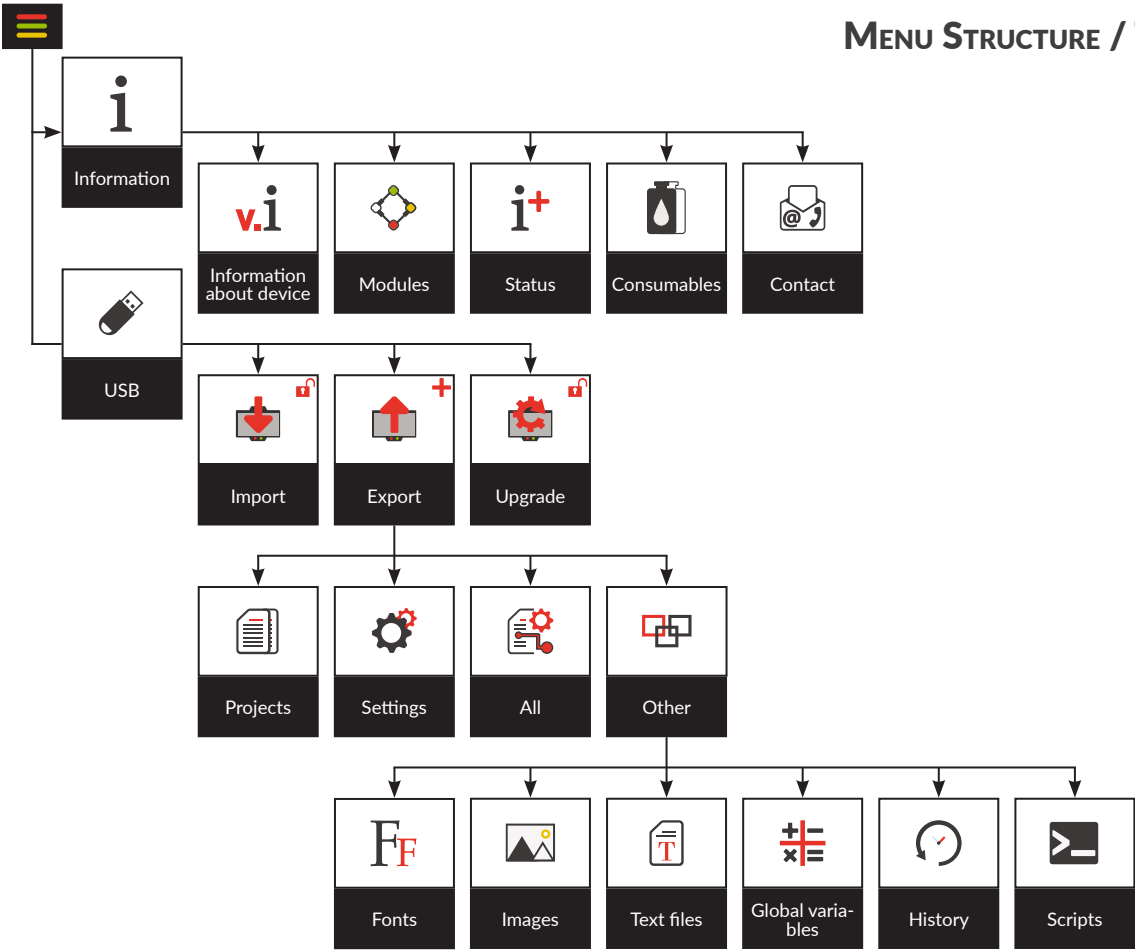


Fig. 5.

MENU STRUCTURE / TYPES OF USERS






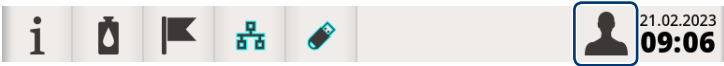






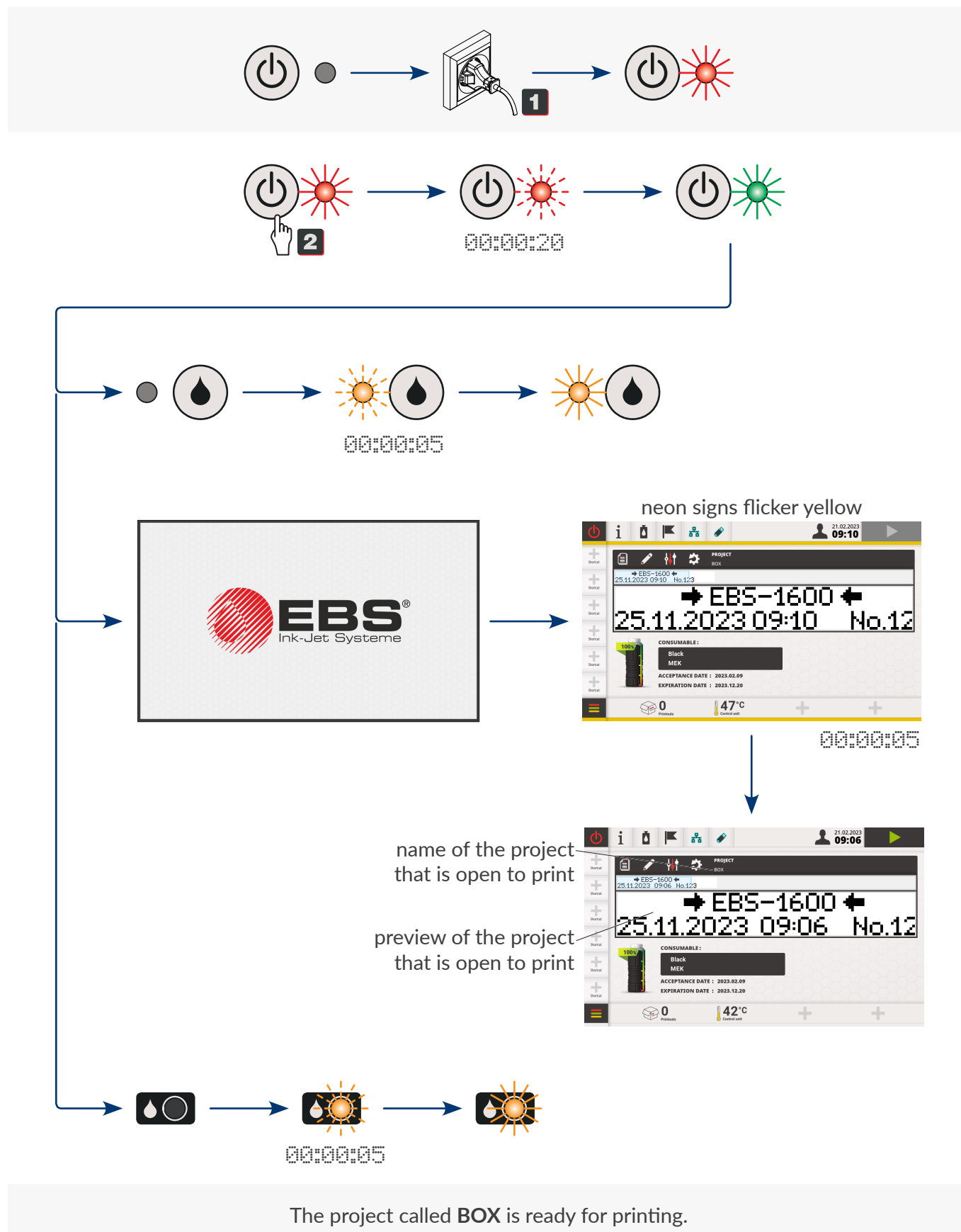
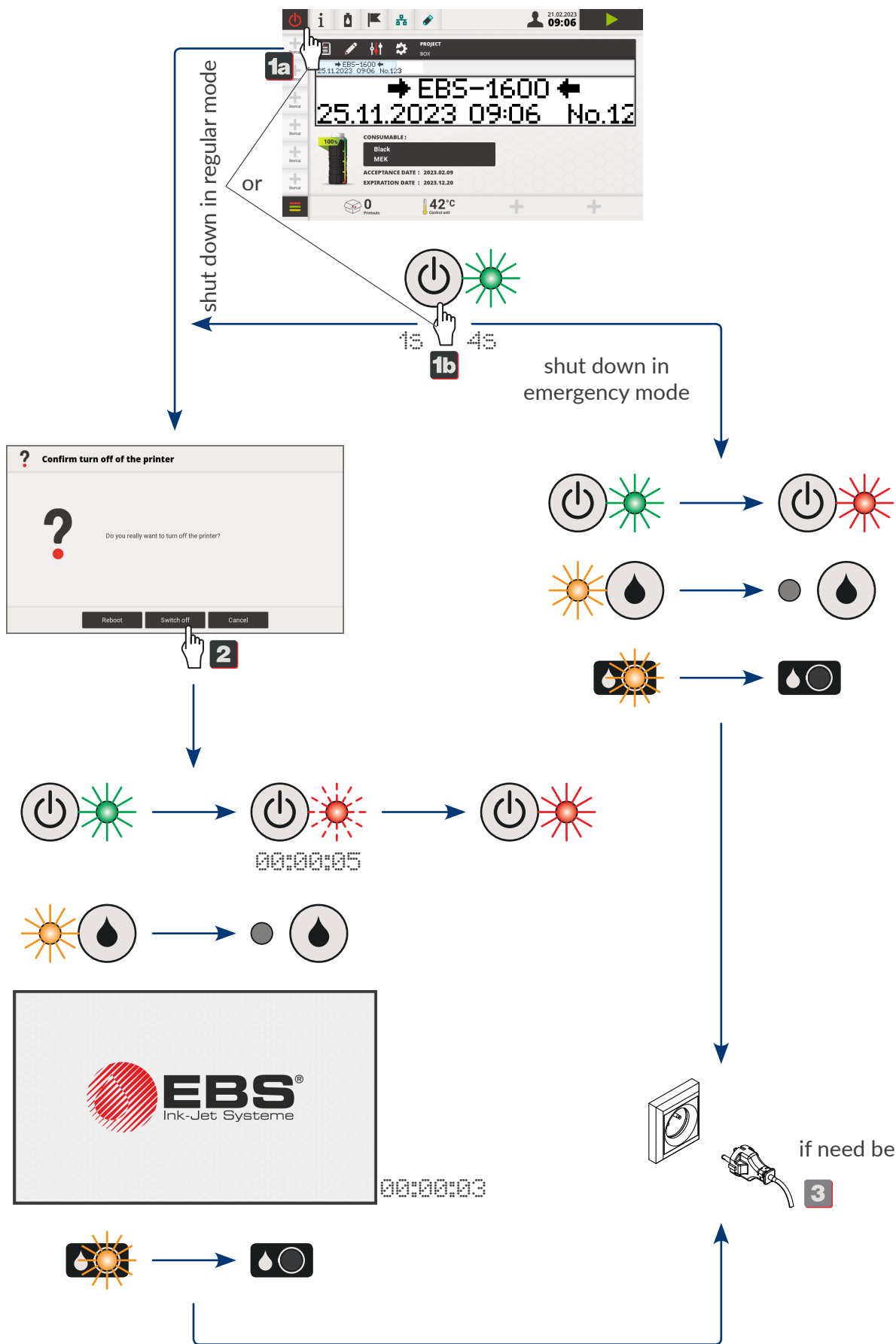
+ available to **ADVANCED OPERATOR**-type users  and **ADMINISTRATOR**-type users 
🔒 available only to **ADMINISTRATOR**-type users 

Fig. 6.

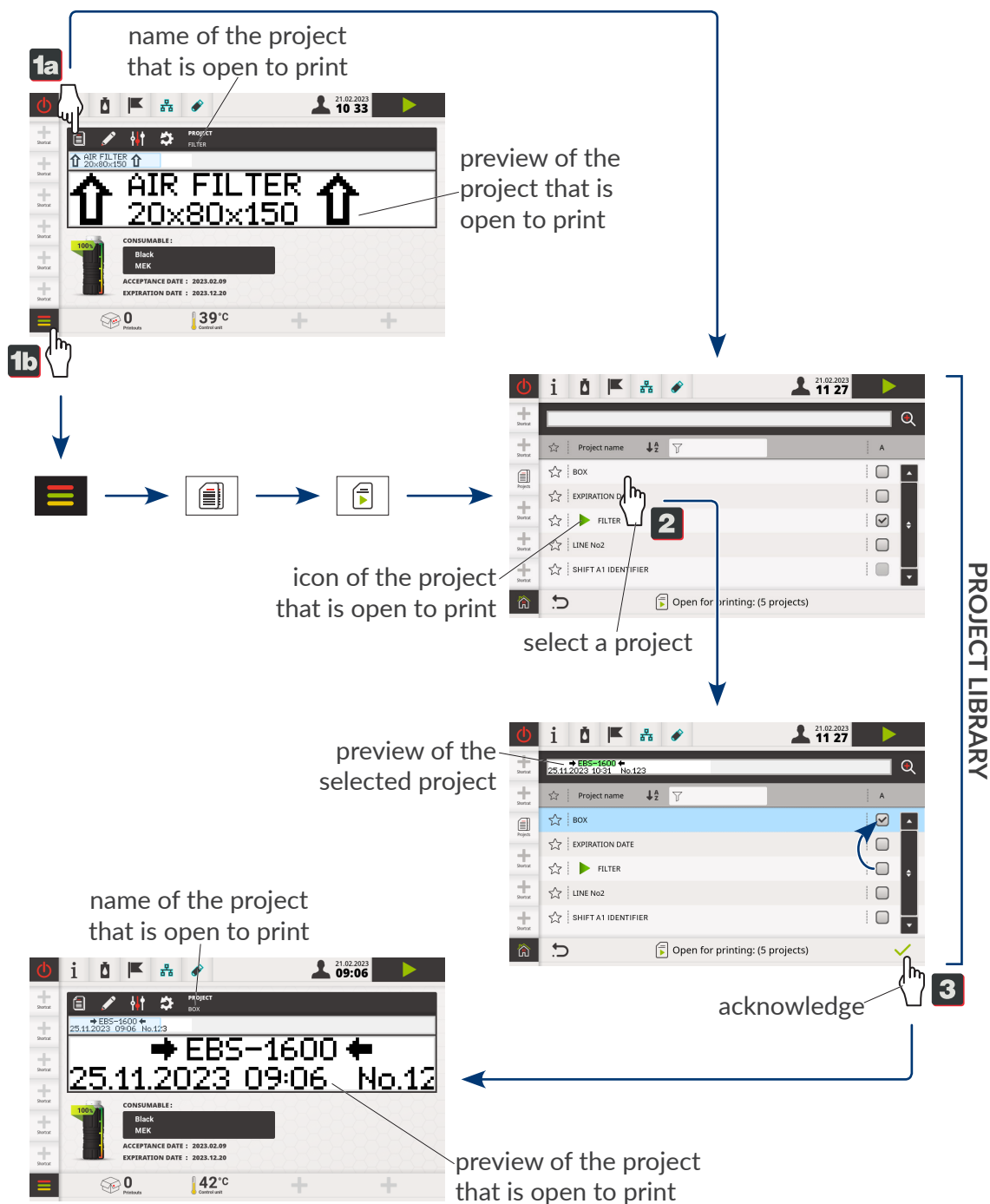


	OPERATOR	<ul style="list-style-type: none">- start/shut down the printer- open a project for printing- start/pause printing- edit enabled objects- access selected menu branches
	ADVANCED OPERATOR	<p>The privileges of OPERATOR-type users  and additionally:</p> <ul style="list-style-type: none">- create/delete/rename a project- edit any objects (except for global variables)- disable/enable objects in a project- add/delete objects to/from a project- tune the printing unit- export data from the printer via the USB- view global variables- access any printer information- create/edit/delete the accounts of ADVANCED OPERATOR-type users  and OPERATOR-type users 
	ADMINISTRATOR	Full range of privileges








The project called **FILTER** is open to print.



The project called **BOX** is open to print.

The printer is ready for printing when:

- A relevant project is open to print,
- The LED  in the control unit and the LED  in the integrated printhead glow orange,
- The start printing icon  on the screen is active.

state of readiness for printing
the project called **EBS** is open to print



start printing



1b

if need be, you can update objects
having the attribute **Edit before printing**

printing of the project called **EBS** in progress

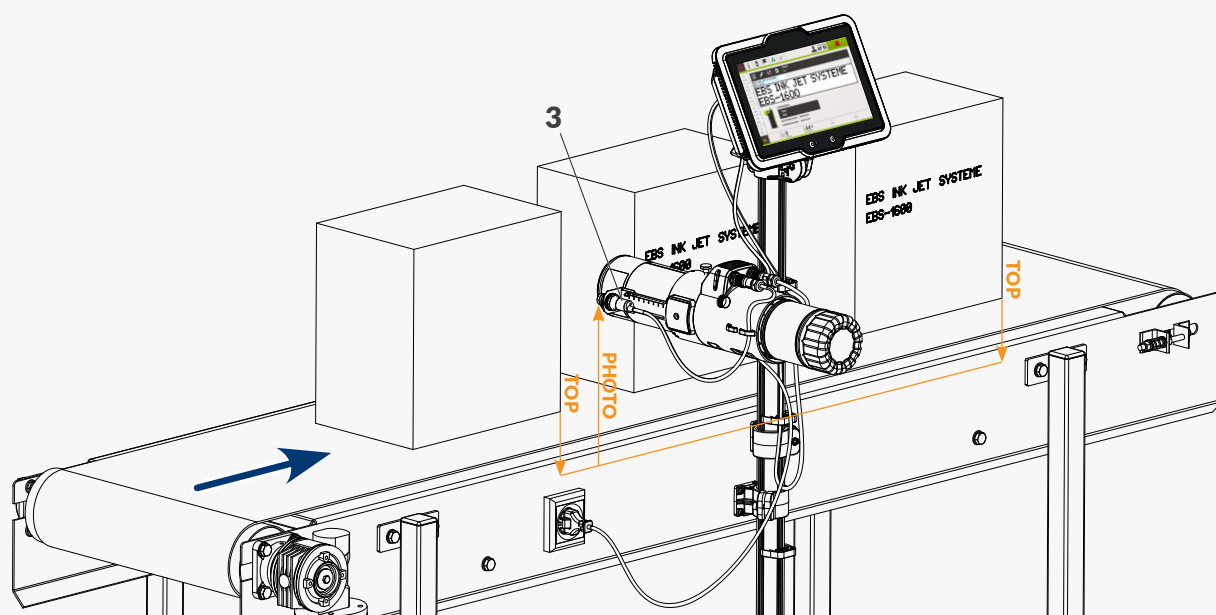


3a

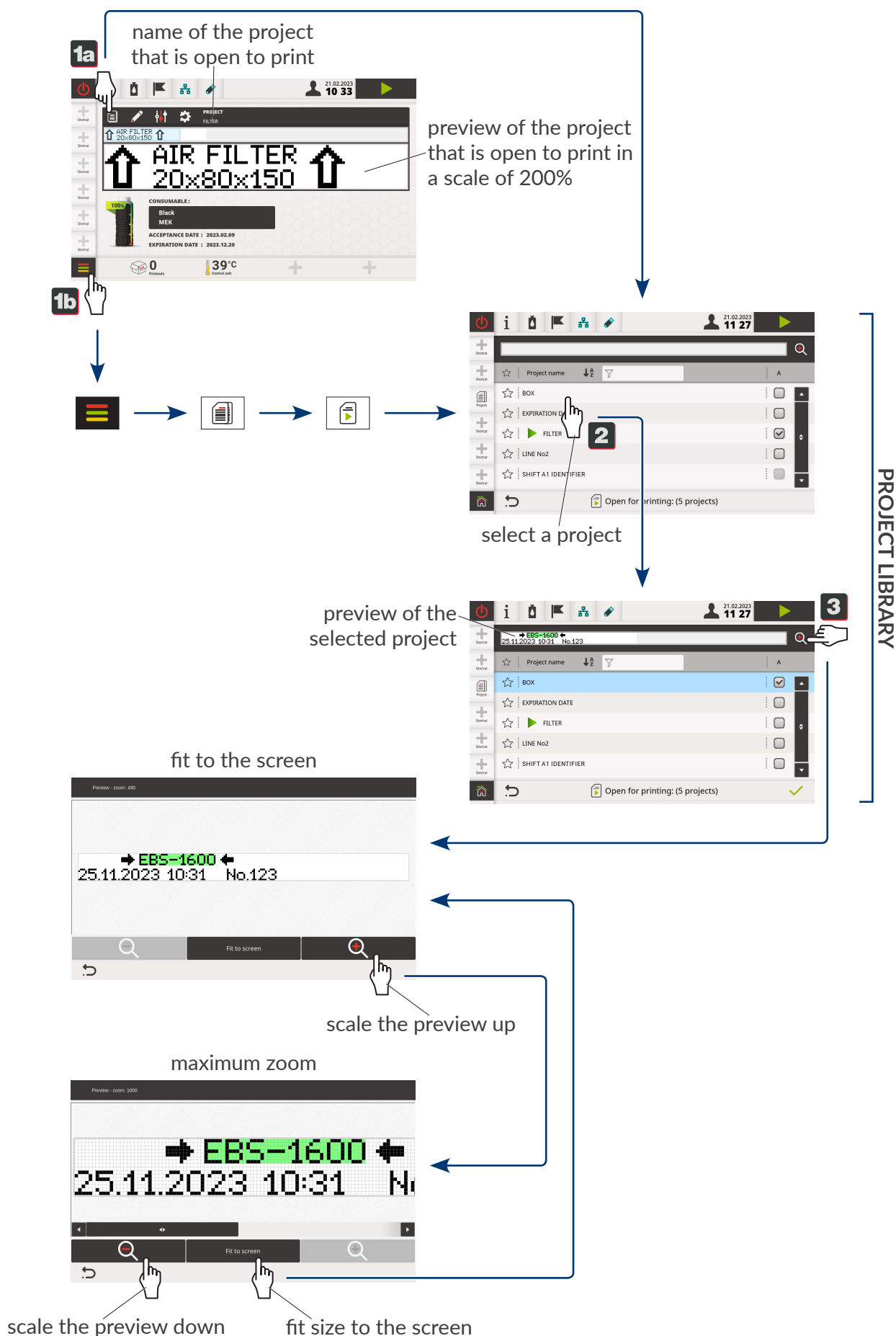


3b

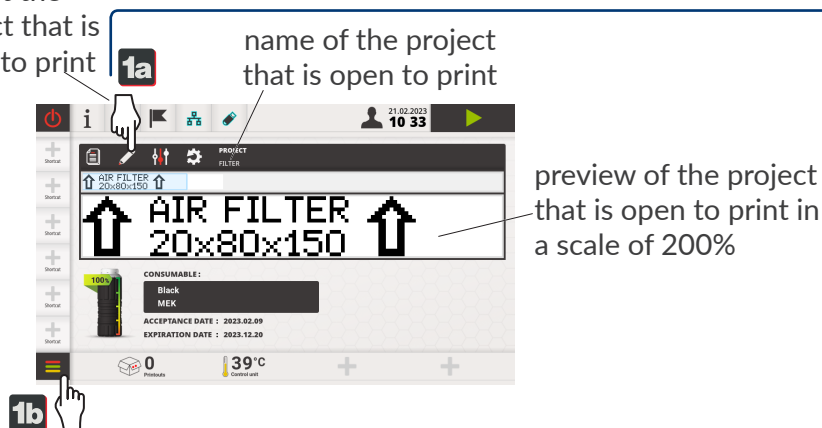
or
pause printing



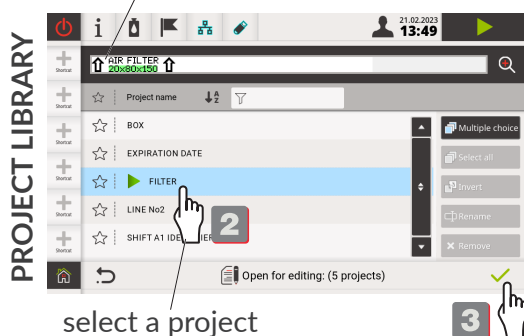
3 Photodetector selected as the source of the signal to trigger printing.



edit the project that is open to print



preview of the selected project



edit any library project

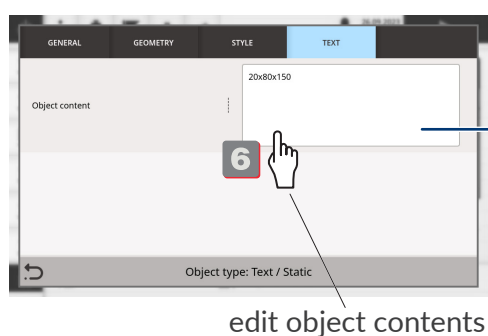
GREEN BACKGROUND:
object can be edited by OPERATOR

select an object for editing; the selected object is **FRAMED IN BLUE**

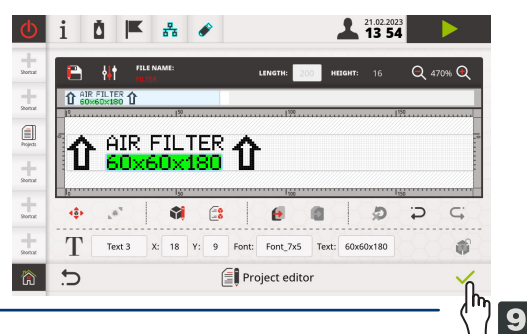
edit each of the object parameters



quick-edit a selected object parameter (name, contents, coordinates)



reload the project that is open to print



REPLACING THE INK BOTTLE

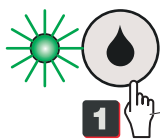
WARNING

bottle replacement is recommended
printing continues

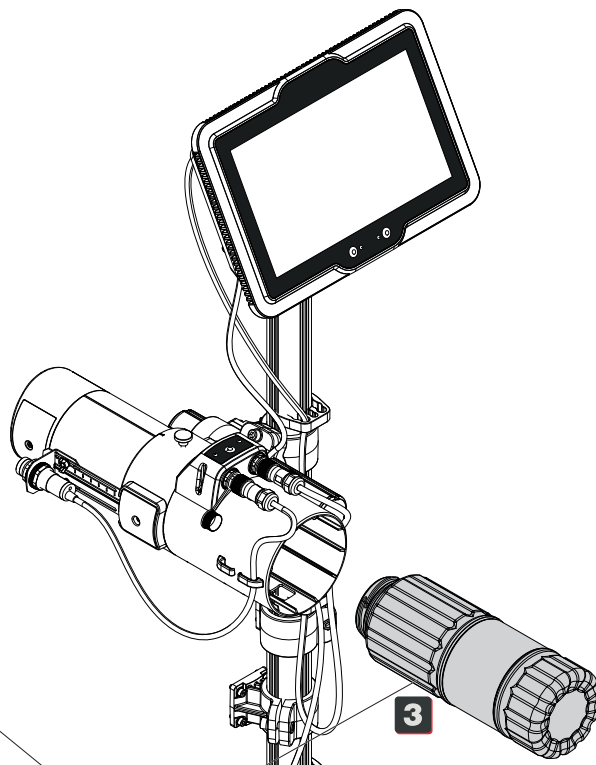
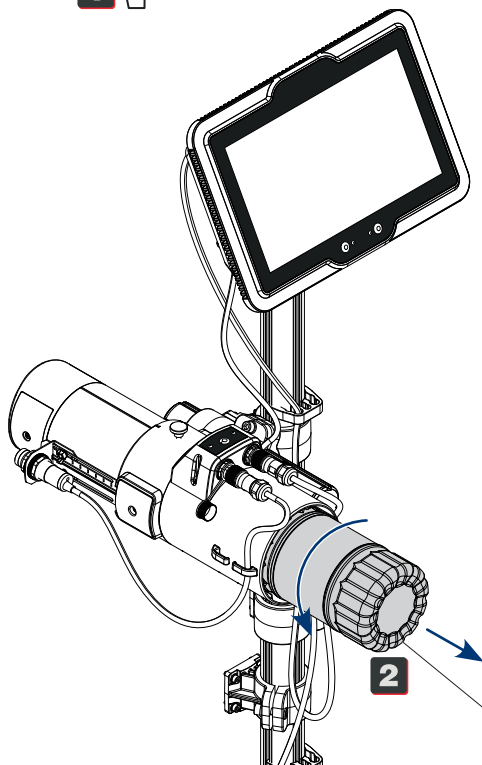


FAULT

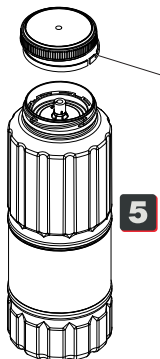
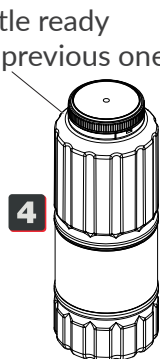
bottle replacement is necessary
printing disabled



if the printer is printing, pause the printing
(see *"Printing a Project"* on page 12)



make a new bottle ready
(compatible with the previous one)



unscrew and pull out
the ink bottle

unscrew the cap, breaking the seal

6

screw in a new bottle of ink

NOTE: Sharp Elements!

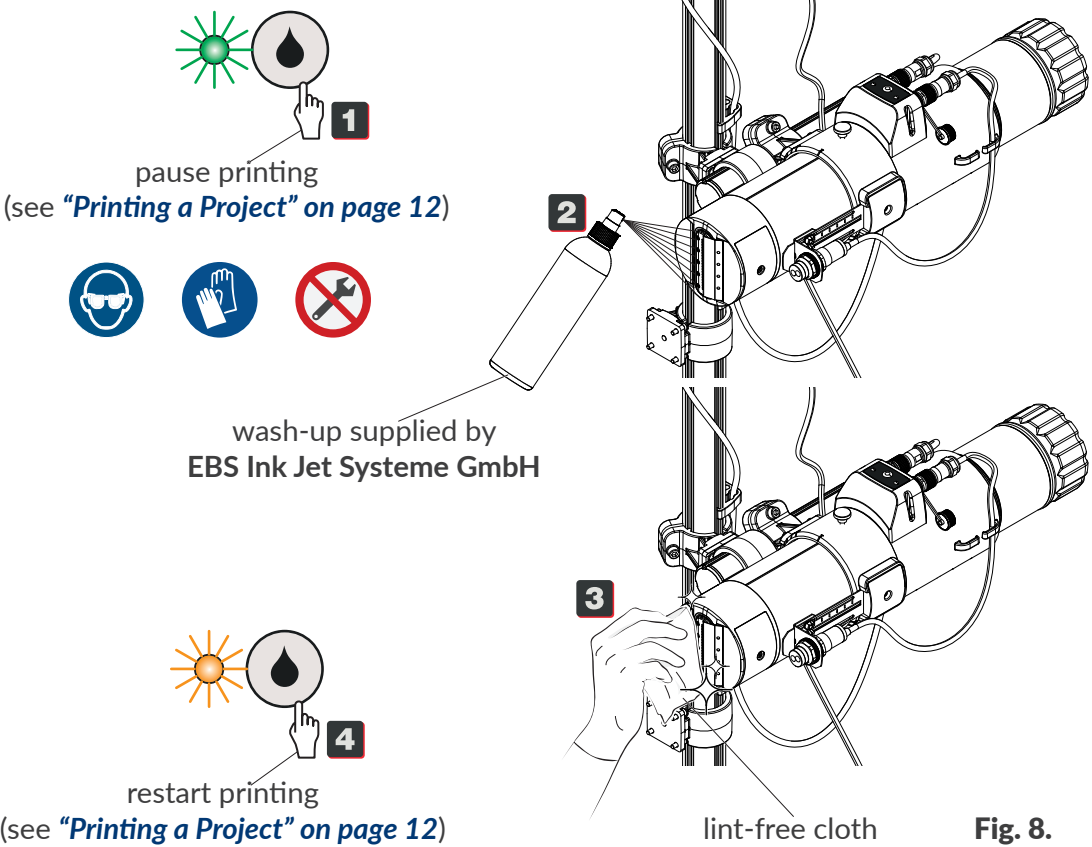
While replacing a bottle be careful
not to get wounded with the needle
that is part of the connection. **Do**
not touch the needle! Avoid manip-
ulations near the needle.



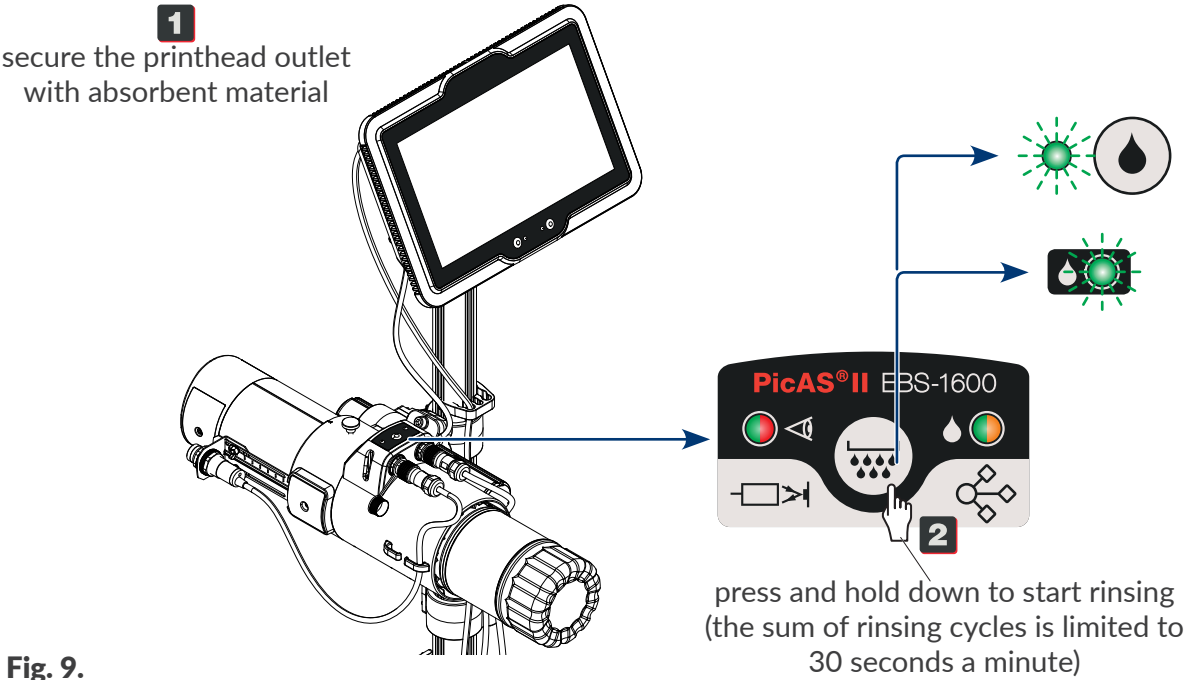
restart printing (see *"Printing
a Project"* on page 12)

Fig. 7.

CLEANING THE NOZZLE PLATE



RINSING/VENTING THE PRINTER



ERROR SIGNALING

Printing cannot continue/start.



the icon bar flickers red



the neon signs flicker red

The optional status beacon glows red.

The conveyor belt can be halted.

WARNING SIGNALING

Printing can continue/start.



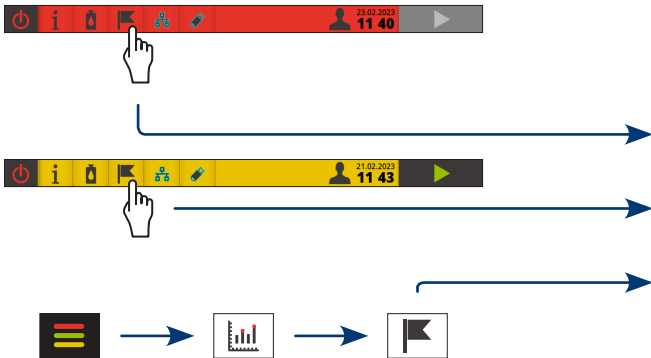
the icon bar glows yellow



the neon signs are off

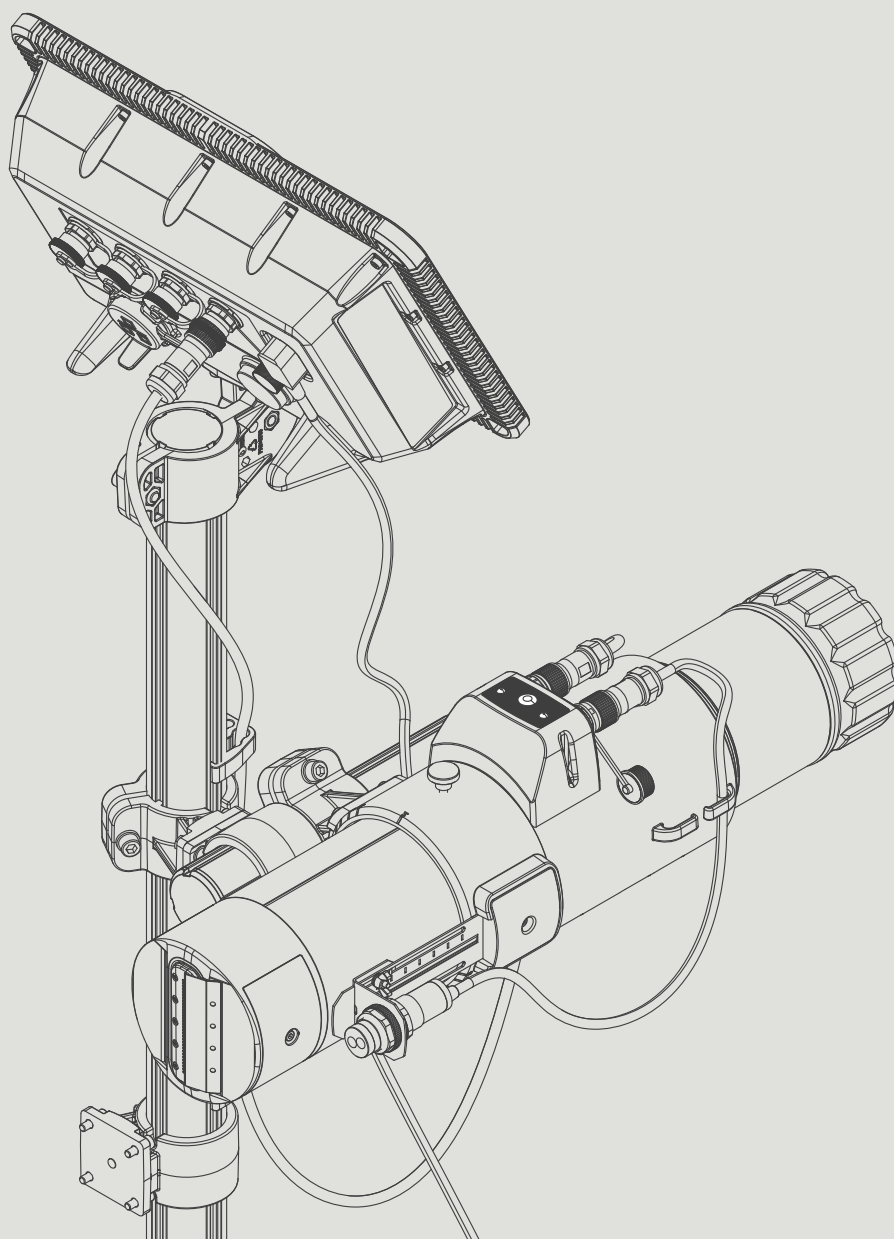
The optional status beacon glows yellow.

ADDITIONAL INFORMATION



ACTUAL (Z)	ALL (ES)	ERRORS (E)	WARNINGS (W)	NOTICES (N)
	MESSAGE	OCCURRENCE	ACCEPTANCE	SOLVED
	Pressure cannot be obtained	2023.01.25 11:26:19	2023.01.25 11:27:34	-
	Ink container removed - connect new ink container to continue operation	2023.01.25 11:26:18	-	2023.01.25 11:27:22
	Ink level low	2023.01.25 11:07:51	2023.01.25 11:07:54	2023.01.25 11:27:22
	Printer enabled by unlock code. Remaining operating time: 50:00	2023.01.25 10:58:47	2023.01.25 10:59:45	-
	Internal error: Modules has been reset	2023.01.20 10:13:00	2023.01.20 10:25:00	-
	Module connected:	2023.01.20	2023.01.20	-
	Messages			

Version of manual	Date of publication	Version of main control program
G2023/09/22_1EN	2023.11.13	1.02.41.0


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