

User Manual

MELAprint 60

Label printer



EN

Dear customer,

We thank you for your confidence demonstrated by the purchase of this MELAG product. As an owner-run and operated family concern founded in 1951, we have a long history of successful specialization in hygiene products for practice-based use. Our focus on innovation, quality and the highest standards of operational reliability has established MELAG as the world's leading manufacturer in the instrument treatment and hygiene field.

You, our customer are justified in your demand for the best products, quality and reliability. Providing **“competence in hygiene”** and **“Quality – made in Germany”**, we guarantee that these demands will be met. Our certified quality management system is subject to close monitoring: one instrument to this end is our annual multi-day audit conducted in accordance with ISO 13485. This guarantees that all MELAG products are manufactured and tested in accordance with strict quality criteria.

The MELAG management and team.

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1 General guidelines

Please read this user manual carefully before commissioning the device. The user manual includes important safety information. The functionality and value-retention of this device depends on the care accorded to it. Please store this user manual carefully and in close proximity to your device. It represents a component of the product.

Should the user manual no longer be legible, damaged or lost, please obtain a new copy from MELAG. State the device type and your address in an e-mail.

The device type is specified on the type plate on the lower side of the device.

Symbols used

Symbol	Explanation
	Draws your attention to a situation, which if not avoided, could result in damage to the practice fittings or the device.
	Draws your attention to important information.

Formatting rules

Example	Explanation
[Save]	Words in square brackets refer to the names of pushbuttons.
Settings	Words or phrases appearing on the display of the device are marked as display text.

Symbols on the device



This symbol indicates that the marked area becomes hot during operation. Contact with it during or shortly after operation can pose the danger of burns.



In affixing the CE mark, the manufacturer declares that this product fulfils the corresponding EU requirements.



The device may not be disposed as domestic waste. The vendor is responsible for appropriate disposal of the device - it must be delivered to the vendor to be disposed of.



This symbol indicates that contact with the surrounding surfaces or components can trigger device malfunctions or result in injuries.



This marking indicates an energy-saving device.

Disposal

MELAG devices are synonymous with high quality and a long life-span. When you eventually need to decommission your MELAG device, we offer a special disposal service. Simply contact your stockist.

Dispose of accessories and consumption media which you no longer require in the appropriate manner. Comply with all relevant disposal specification in terms of possibly contaminated waste.

The packaging protects the device against transport damage. The packaging materials have been selected for their environmentally-friendly disposability and can be recycled. Returning the packaging to the material flow reduces the amount of waste and saves raw materials.

2 Safety



When operating the device, comply with the following safety instructions as well as those contained in subsequent chapters.

Power cable and power plug

- Only the power cable included in the scope of delivery may be connected to the device.
- The power cable may not be replaced by a cable determined to be insufficient.
- Disconnect the device from the mains during long downtimes.
- Only connect the device to those devices intended for operation with this device.
- Only connect the device to a suitable power source.

Danger of short circuit

- Liquids may not be permitted to reach the interior of the device. This could result in an electrical shock or short circuiting.

Set-up, installation and commissioning

- Check the device after unpacking for any damage suffered during transport.
- The device is not suitable for operation in explosive atmospheres.
- Install and operate the device in a frost-free environment.
- The device is conceived for use outside the patient area. The device should be located a minimum of 1.5 m radius away from the treatment area.

Installation location and storage

- Setup the device on a stable, level surface.
- Set-up the device in such a way that it is protected against strong direct sunlight and heat.
- Store and operate the device only in a dust-free environment protected against heat and damp.
- Do not place the device directly on the steam sterilizer. The steam sterilizer will become hot upon operation. Non-compliance could result in restricted function and damage to the device.
- Set-up the device protected against blows or vibrations.
- Maintain sufficient access clearance to the surrounding surfaces during operation and maintenance.

Daily operation

- Always check whether a label roll has been inserted before printing. Otherwise, the print head and print roller could suffer damage.
- Never touch the label printer blade.
- Never touch the print head during or shortly after operation, as this can be very hot.
- The print head of the label printer is an sensitive component. Do not touch the print head so as not to damage it.

Maintenance

- Always allow the device to dry after cleaning before closing the housing cover.

Repair

- Never open the device housing. Incorrect opening and repair can compromise electrical safety and pose a danger to the user.
- The device may only be opened and repaired by authorised technicians. The guarantee and warranty are forfeited as soon as the device is opened by anyone other than a member of a MELAG-authorized technical customer service.

3 Description of the device

Scope of delivery

Please check the scope of delivery before setting up and connecting the device.

Standard scope of delivery

- MELAprint 60 label printer
- User manual
- Power cable
- Ethernet cable 1:1 (RJ45)
- USB cable
- Label roll, narrow
- Label roll, wide

Intended use

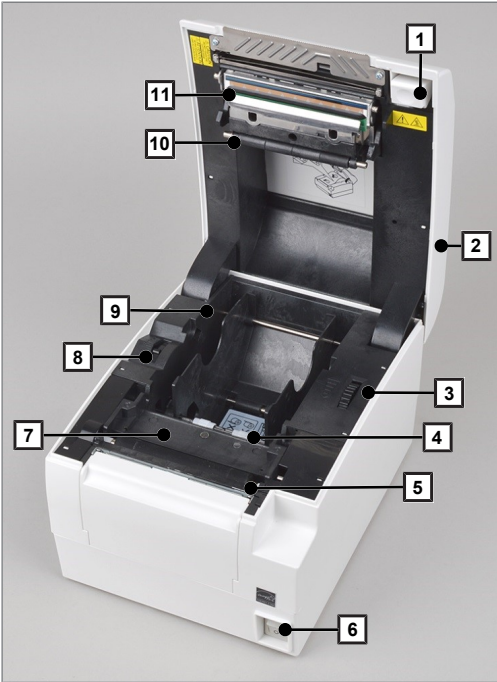
The label printer MELAprint 60 serves the direct output of labels for MELAG devices or indirectly via the documentation and approval software MELAtrace; it may only be used by trained practice or IT personnel. The labels for marking sterile goods packing can then be read-out with a barcode scanner (not included in the scope of delivery)

Compatibility with MELAG devices

Category	Product class	Device type
Cleaning and disinfection	MELAtherm	MELAtherm 10 Evolution ¹⁾
		MELAtherm 10 ²⁾
Steam sterilizers	Premium-Plus-Class (<i>Evolution</i>) ³⁾	Vacuklav 40 B+ Vacuklav 44 B+ Vacuklav 41 B+ Vacuklav 43 B+
	Pro-Class ²⁾	Vacuklav 23 B+ Vacuklav 31 B+ Vacuklav 24 B+ Vacuklav 24 BL+ Vacuklav 30 B+
	Euroklav ²⁾	Euroklav 23 VS+ Euroklav 29 VS+ Euroklav 23 S+
	MELAtronic EN/EN+ ²⁾	MELAtronic 23 EN MELAtronic 15 EN+ MELAtronic 15 EN / 17 EN
Large sterilizers	Cliniclave ³⁾	Cliniclave 45 Cliniclave 45 M Cliniclave 45 D Cliniclave 45 MD
	Cliniklav ²⁾	Cliniklav 25
1) only in connection with the documentation and approval software MELAtrace from v3.x 2) only in connection with the documentation and approval software MELAtrace from v3.x 3) from software version v3.100		

Views of the device

Log printer

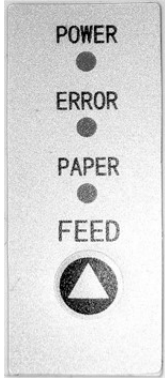


- 1 Button for opening the cover
- 2 Housing cover
- 3 Adjustment wheel
- 4 Paper guide
- 5 Printer roller
- 6 Power switch (ON/OFF)
- 7 Paper sensor
- 8 Paper end sensor
- 9 Side discs
- 10 Roller
- 11 Print head (thermocouple)



- 12 Power cable connection
- 13 Ethernet connection (RJ45)
- 14 USB connection not occupied

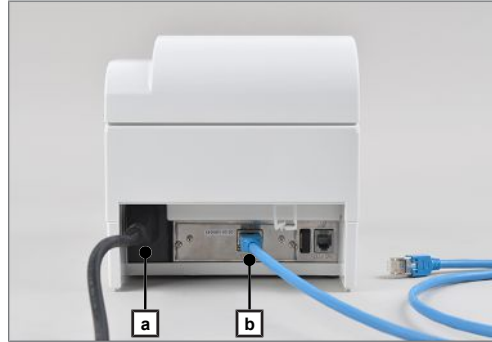
Table 1: Operating panel

Operating LED/ operating keys	Display/key	State	Meaning
	POWER	Illuminated green	Device is switched on.
	ERROR	Flashes red Illuminates red	e.g. if the housing cover is open, the print head overheated, deviations in the input voltage, cutting knife does not function correctly Malfunction (see section General malfunctions [► page 21])
	PAPER	Flashes red Illuminates red	Label roll almost empty The label roll has been used up
	FEED button		Label feed To navigate in the main menu

4 Commissioning

Connecting the label printer

1. Connect the power cable (pos. a) to the rear panel of the label printer.



2. Connect the Ethernet cable (pos. b) to the Ethernet socket on the rear of the label printer and connect the other end with the Ethernet connection on the steam sterilizer, a network socket or a computer in the network.

Inserting the label roll



PLEASE NOTE

To achieve a good printing outcome and to secure the longest-possible durability of the label printer, use only the label rolls available from MELAG.

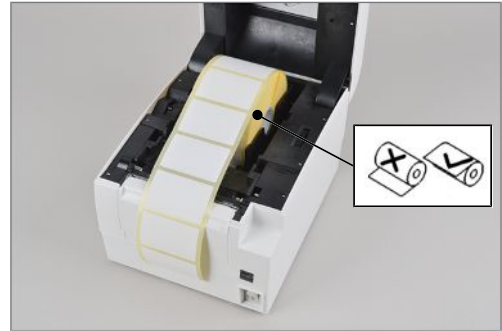
1. Open the housing cover by pressing the button on the right-hand side of the housing cover.



2. If necessary, open the side discs of the paper guide a little by turning the adjustment wheel (pos. c) forwards or backwards.



3. Take the label roll with the narrower labels (5 cm wide) and place it in the centre of the roll dispenser.



4. Close the housing cover.

Switching on the label printer

1. Switch on the label printer at the power switch (pos. d) at the right-hand lower corner.



2. Press the FEED button to activate the label feed as required.

Setting-up the label printer on the steam sterilizer

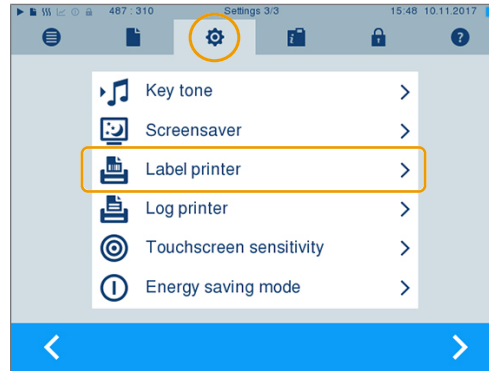
Method 1: The steam sterilizer is not connected to the practice network

Proceed as follows to set-up the label printer on the steam sterilizer as an output medium:

-
- ✓ *The label printer is connected to a power supply.*
 - ✓ *The Ethernet cable of the label printer is connected with the steam sterilizer.*
-

1. Switch on the label printer.
2. Switch on the steam sterilizer at the power switch.
3. Select **Settings** menu and use the arrow keys to navigate to **Label printer**.

4. Select menu item **Label printer**.



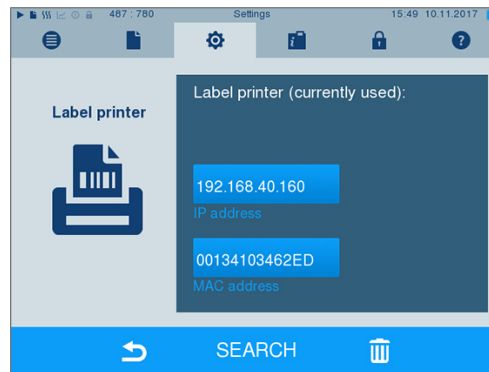
→ The display switches to the label printer window



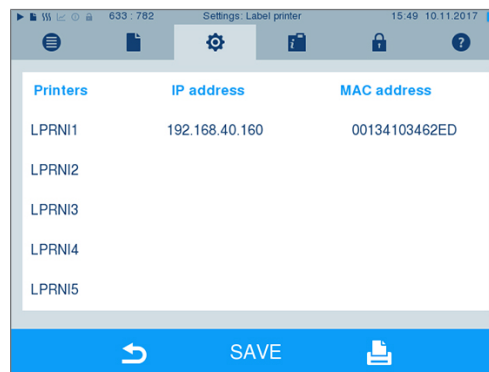
PLEASE NOTE

If a label printer was not previously setup, the IP address and MAC address field are empty.

5. Select **SEARCH**. If a label printer was not previously setup, the printer list is empty.



6. Press the  symbol to search for the label printer just connected.



7. Select the label printer from the list and confirm with **SAVE**. The display switches back to the label printer window.

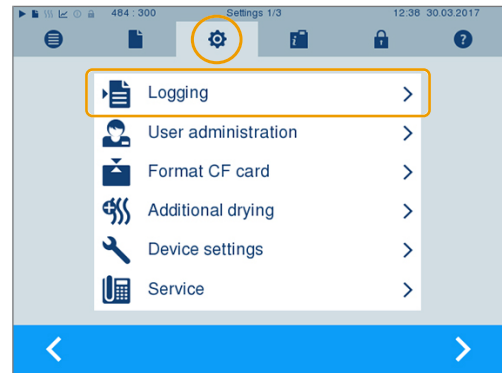


PLEASE NOTE

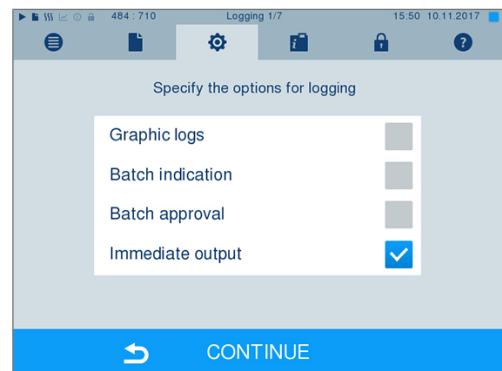
The reason for any failure to find the label printer connected in the printer list could lie in an incorrect setting of the IP address (see chapter [Troubleshooting](#) ▶ page 21]).

8. Wait for 3 seconds and then switch the steam sterilizer off and then on again with the power switch.

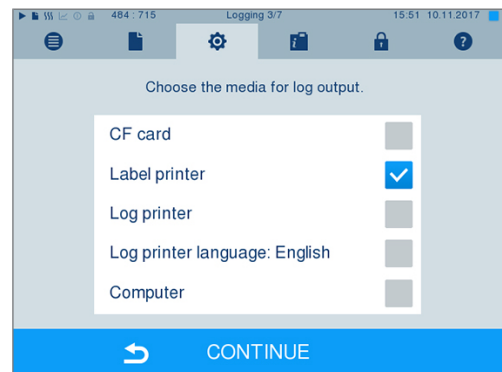
9. Working in **Settings** menu use the arrow keys to navigate to to action bar **Logging**.



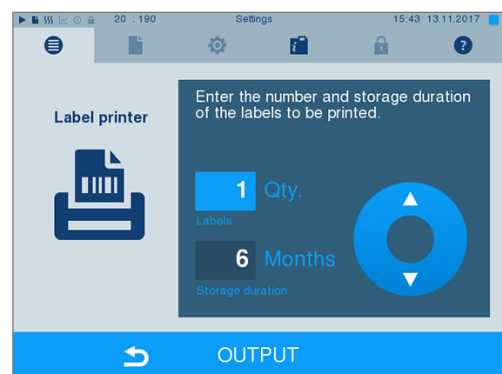
10. Activate immediate output.



11. Select the label printer as an output medium.



12. Follow the logging assistant with **CONTINUE** and accept the settings with **SAVE**.
13. You can start a Quick-Program B to check whether the settings have been performed correctly. The program can be aborted during drying. As soon as the steam sterilizer begins to output labels, the following window should be visible:



14. If necessary, change the number of the labels and the storage length via the  and  buttons.
15. Then press **OUTPUT**.

Method 2: Integrating the label printer in an existing practice network

You can connect the label printer directly to the steam sterilizer which is integrated in the network, or connect it to a pre-existing network socket.



NOTICE

Arrange for the IT company that services your network to integrate your label printer in the network. The various methods of network configuration mean that MELAG can only provide support for the direct connection of the label printer to the steam sterilizer.

Determining the network situation and changing the computer IP address (temporary)

To ensure that the label printer can be recognized by the steam sterilizer in the practice network, the label printer must be located in the same subnetwork as your MELAG device. The pre-programmed setting of the label printer IP address is **192.168.40.160**.

If this is not the case, the IP address of the label printer must be adapted as follows:



PLEASE NOTE

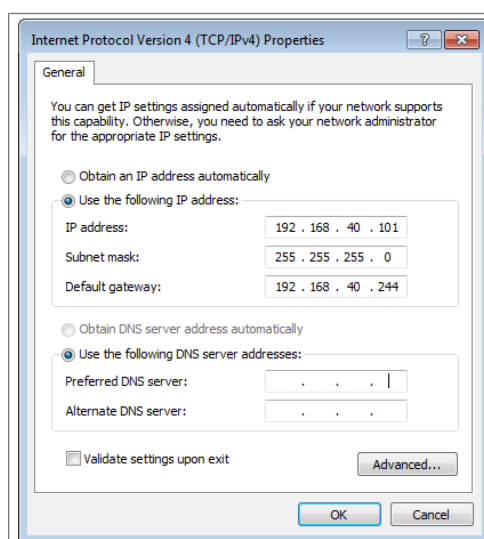
The following instructions apply to the procedure for a Windows operating system. Should a different operating system be installed on your computer, change the IP address manually in accordance with the relevant instructions.

✓ The label printer is connected to a power supply.

1. Connect the Ethernet cable to the Ethernet socket on the rear of the label printer and connect the other end with a computer.
2. Working on the computer **Start > Control panel > Network and Internet > Network and sharing centre**.
3. Select **LAN connection** and open the **Properties** window (right mouse-click).
4. Working in the list **Internet protocol version 4 (TCP/IP)** select **Properties**.
5. To change the IP address of the computer, select the applicable version:
 - The computer has a fixed IP address
 - The computer obtains the IP address automatically

The computer has a fixed IP address:

1. Click on the [Advanced] pushbutton.



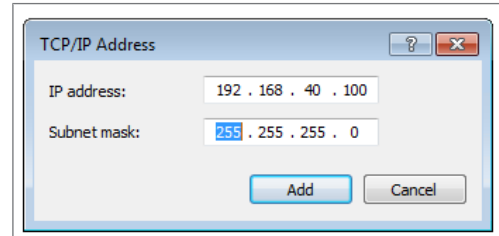


PLEASE NOTE

After concluding this configuration, reset the following settings to restore communication between the computer and the practice network.

- Note the data displayed before continuing with the configuration.

- Working under **IP addresses** select the [Add] pushbutton and enter the IP address **192.168.40.100**. The subnet mask is updated automatically.

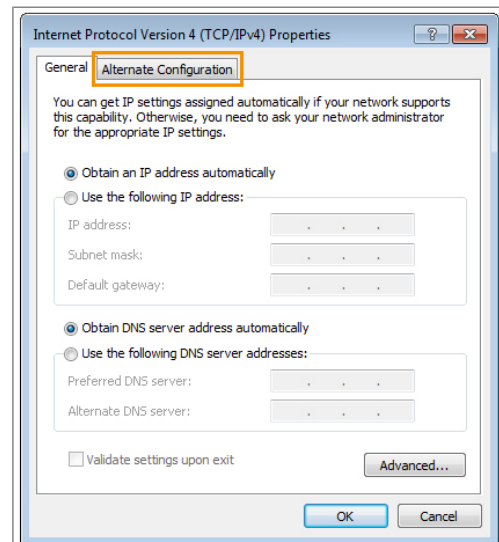


- Accept the settings with [Add].

The computer obtains the IP address automatically:

This configuration requires that the label printer be connected directly with the computer. See the section *The computer has a fixed IP address*.

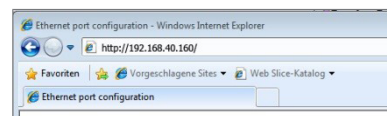
- Working in the tab, select **Alternative configuration**.



- Enter the IP address **192.168.40.100**. The subnet mask is updated automatically. Confirm with [OK]

Adapting the IP address of the label printer to the practice network

- Open a web browser and enter **http://192.168.40.160** in the address bar to access the website of the label printer.
- To adapt the IP address of the label printer to the practice network, select the desired version and proceed as follows:



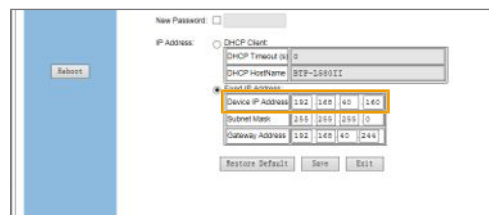
Assigning the label printer a fixed IP address:

1. Working in the left-hand navigation bar, select the `Configure Interface` menu.

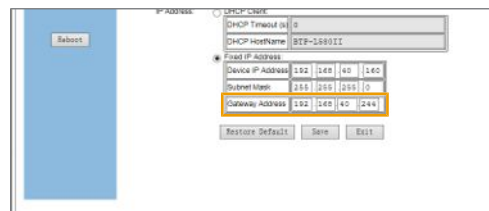


➡ A pop-up window will open.

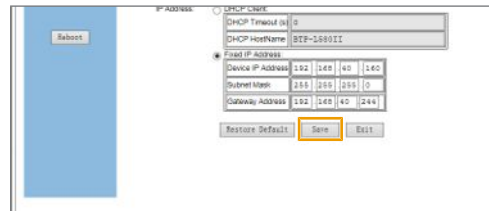
2. Enter the user name "admin". A password is not required.
3. Working under `IP address`, enter the first three number blocks of the practice network. The last number block is assigned to the device connected in the network. A unique number is assigned to every device connected in the practice network.



4. Working in `Gateway Address` enter the first three number blocks of the practice network and a corresponding number for the fourth number block, e.g. 244.



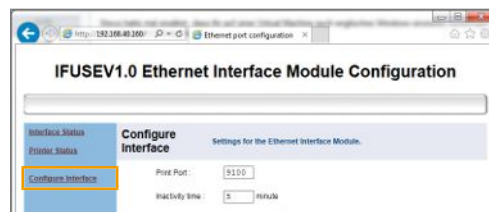
5. Accept the settings with [Save].



6. Then select [Reboot] from the left-hand navigation bar.

Assigning the label printer a dynamic IP address

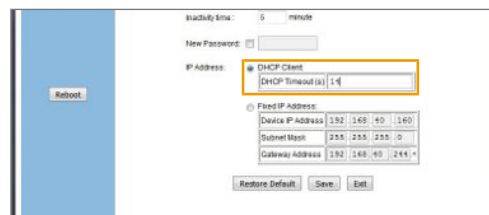
1. Working in the left-hand navigation bar, select the `Configure Interface` menu.



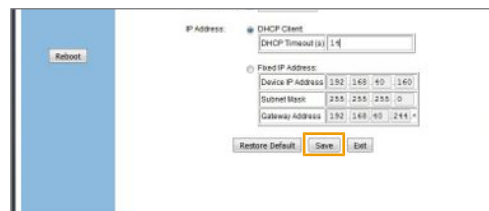
➡ A pop-up window will open.

2. Enter the user name "admin". A password is not required.

3. Select the DHCP Client.



4. Accept the settings with [Save].



5. Then select [Reboot] from the left-hand navigation bar.

Connecting the label printer in the practice network

1. Disconnect the Ethernet cable from the computer and connect the cable directly to the steam sterilizer integrated in the network, or to a free network socket.
2. The IP address **192.168.40.100** can be returned to the original IP address after configuration.

Method 3: Connecting in MELAtrace



NOTICE

Arrange for the IT company that services your network to integrate your label printer in the network.

To enable the label printer to be found in the search by MELAtrace, the label printer must be installed in the same subnetwork as the computer on which MELAtrace is installed. The factory setting of the label printer IP address is **192.168.40.160**.

Printing a test page



PLEASE NOTE

To save labels, we recommend inserting the roll with the wider labels to print menu items and settings.

- Adapt the width of the paper guide using the adjustment wheel.

You can print the main menu as a test page.

1. Hold the FEED button depressed and switch on the label printer simultaneously.
 - ➡ The label printer prints the main menu.
2. To leave the "Main menu", press the FEED button 1x short and 1x long.

For further information regarding the sub-menus, see section [Main menu](#) ► page 18].

Daily operation

In daily operation, first switch on the label printer and then the steam sterilizer. This ensures that the label printer is immediately recognized as an output medium.

The label printer should remain switched on during operation of the steam sterilizer in order to ensure faultless communication between steam sterilizer and label printer and to avoid repeated calibration after reactivation.

5 Settings

Main menu

You can enter the Main menu using the FEED button. The main menu is printed automatically.



PLEASE NOTE

To save labels, we recommend inserting the roll with the wider labels to print menu items and settings.

- Adapt the width of the paper guide using the adjustment wheel.

1. Hold the FEED button depressed and switch on the label printer simultaneously.
 - ➔ The label printer prints the main menu.
2. Navigate in the Main menu by pressing the FEED button for a short time.
3. Select a menu item (submenu) by pressing the FEED button for a long interval (c. 1 sec).

Menu structure

MAIN MENU BTP-L580II

Select a submenu:

Exit	-> 1
Print Self Test	-> 2
Calibration	-> 3
Select Print Mode	-> 4

Enter code, then hold button down at least 1 second to validate

Reading out the label printer configuration (print self-test)

If you do not know the IP address of the label printer, or this has been changed subsequently, you can print out a complete overview of the label printer settings including its IP address, MAC address, subnet mask and gateway:

1. Hold the FEED button depressed and switch on the label printer simultaneously.
 - ➔ The label printer prints the main menu.
2. Press the FEED button 2x short and 1 x long (c. 1 sec).



PLEASE NOTE

If the label printer is integrated in a network during installation, and the IP address has been changed, this should be recorded on the underside of the label printer.

Adapting the label infeed (calibration)

If the labels are not printed in their centres / parts of the print out are cut off, the label printer can be calibrated in the following fashion:

1. Hold the FEED button depressed and switch on the label printer simultaneously.
 - ➔ The label printer prints the main menu.
2. Press the FEED button 3x short and 1x long (c. 1 sec.) to navigate to the Calibration menu.
3. Press the FEED button 2x short and 1x long (c. 1 sec.) to execute the General Calibration submenu. The label printer prints the Calibration menu at the end of calibration.
4. Switch off the label printer and then on again.

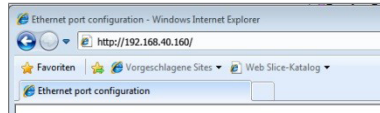
**PLEASE NOTE**

Even if the label printer does not print a label (because the steam sterilizer needs to search for the label printer after being activated) performing the calibration procedure can resolve the problem.

Resetting to the factory settings

Only reset the label printer settings in exceptional cases. When resetting to the factory settings, the pre-programmed IP address will be replaced by the factory settings saved in the device see: [Technical data](#) [▶ page 23].

1. Open a web browser and enter **http://192.168.40.160** in the address bar to access the website of the label printer.



2. If you do not know the IP address of the label printer, it can be read out, see section: [Reading out the label printer configuration \(print self-test\)](#) [▶ page 18].

3. Working in the `Configure` interface menu, click on the [Restore Default] pushbutton.

➡ Afterwards, the IP addresses have been reset to the factory settings.

6 Maintenance

- ▶ Switch off the label printer and pull the power plug before cleaning and/or maintenance.
- ▶ Do not use any solvents such as benzine or acetone.
- ▶ Should you use cleaning alcohol, wait until it has evaporated entirely before closing the housing cover.

Routine maintenance

Routine maintenance should be performed monthly and comprises cleaning of the following components:

Print head and print roller

Clean the print head and print roller as follows.

1. Open the upper housing cover.
2. Remove any soiling such as dust and stains from the print head or printer roller.
Use a soft, non-fuzzing cotton cloth.
3. Close the housing cover after cleaning.

Paper sensor

Clean the paper sensors as follows:

1. Open the upper housing cover.
2. Remove any soiling such as dust and stains from the sensors.
Use a soft, non-fuzzing cotton cloth and pure alcohol.
3. Wait until the alcohol has evaporated completely and then close the housing cover.

7 Troubleshooting

General malfunctions

Problem	Possible causes	What you can do
It is not possible to slide together the side discs, which are twisted	The small white rollers on the paper guide (fig. 1) are not sitting correctly in both guides	Press the white rollers into the guides.
The label printer does not print; the power LED is off	Power cable not connected or not connected with the power supply; the power switch is off	Connect the power cable and switch on the label printer.
The printout on the label is very pale, almost illegible.	The print head is damaged.	Consult your stockist or the nearest authorised customer services point.
The printout is not clear to read or is soiled.	The print head or print roller is soiled.	Clean the print head / print roller.
Paper jam Labels are not ejected correctly The labels are drawn in with a loud noise		1. Switch off the label printer and open the upper housing cover. 2. Check whether labels have adhered to the paper guide or to the roller and if so, remove them. 3. Remove any paper residue in the interior of the label printer and clean the running rollers with pure alcohol. 4. Wait until the alcohol has evaporated completely and then close the housing cover.
The label printer website is not displayed	The IP address of the label printer does not match the IP address entered in the web browser.	Print an overview of the configuration settings in order to read out the IP address of the label printer.
The PAPER LED illuminates and the signal sounds	Label roll empty	Insert a new label roll.
The ERROR LED flashes and the signal sounds	Insufficient input voltage Printer head overheated The label printer does not recognize the labels	Switch off the label printer and check the input voltage. Switch off the label printer and allow the print head to cool. Start a test printout and calibrate the label roll. Upon repeated incidence, consult your stockist or the nearest authorised customer services point.

Label printer is not recognized

If the label printer is connected and selected as an output medium, but the warning "No connection to the label printer" is displayed, the cause could be malfunctioning settings of the IP addresses.



NOTICE

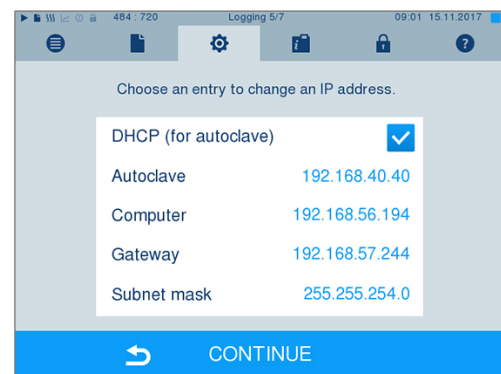
Entering an incorrect IP address can result in malfunctions in the (practice) network.

The steam sterilizer IP address may only be altered if the steam sterilizer is NOT integrated in the practice network.

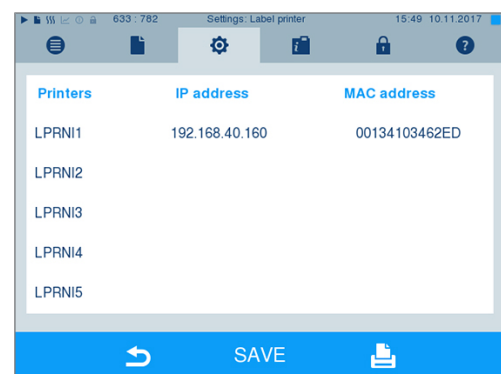
Perform the following steps to compare the IP addresses of the steam sterilizer and the label printer and change the IP address of the steam sterilizer if necessary:

- ✓ *The label printer is connected to a power supply.*
- ✓ *The Ethernet cable of the label printer is connected with the steam sterilizer.*

1. Print a test page, see [Printing a test page](#) [▶ page 16].
2. Disconnect the Ethernet cable from the label printer.
3. Output the configuration settings of the label printer, see: [Reading out the label printer configuration \(print self-test\)](#) [▶ page 18].
4. Working in menu **Settings** > **Logging**, check whether the following immediate output has been activated and the label printer has been selected as an output medium.
5. Check whether the first three number blocks of the label printer IP address, that of the steam sterilizer, the subnet mask and the gateway correspond.



6. Should the first three number blocks of the IP address differ, change the IP address of the steam sterilizer (consult the steam sterilizer user manual) The fourth number block may not be identical.
7. Working in menu **Settings** > **Label printer** start the search by pressing the  symbol in the printer list.



8. Select the label printer from the list and confirm with **SAVE**.

8 Technical data

Model name	MELAprint 60	
Device dimensions (HxWxD)	15.5 x 20.5 x 16 cm	
Electrical connection	AC 110-240 V $\pm$ 10 %, 50/60 Hz	
Ambient temperature	5 - 45 °C	
Relative humidity	20 - 90 % (at 40 °C)	
Printing method	Thermal printing	
Print resolution	203 dpi	
Printing speed	150 mm/s	
Print span	max. 80 mm	
IP address	Pre-programmed	192.168.40.160
	Factory settings	192.168.1.251
Subnet mask	Factory setting:	255.255.255.0
Gateway	Pre-programmed	192.168.40.244
	Factory setting:	192.168.1.1
Storage life of the label printer	White labels: 25 years under optimal conditions	
	Blue labels: 5 years, then renewed sterilization is required	
Manufacturer ¹⁾	Shandong New Beiyang Information Technology Co., Ltd No.169 Huoju Rd, Weihai, Shandong, China. 264209	
Importer	SNBC Europe B.V Meerheide 115, 5521 DX Eersel, The Netherlands	

¹⁾ The original manufacturer's operating instructions are available from MELAG on request.

9 Accessories

Consult your MELAG stockist regarding accessories and consumption media. When ordering consumption media, please state the serial number of your label printer and use the MELAG order nos listed below.

Article	Art. no.
6 rolls á 1,000 labels, white double-sided for manual documentation	41942
6 rolls á 1,000 labels, blue single-sided for electronic documentation	41943

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Original instructions

Responsible for content: MELAG Medizintechnik GmbH & Co. KG
We reserve the right to technical alterations

Your stockist