

Connecting the steam sterilizer to a network

The best way to connect the steam sterilizer to a network is with the aid of the computer support company with which your practice works. You can directly connect a computer to the steam sterilizer or over a network. A prerequisite is that the computer has a network card with a RJ45 connector jack (LAN). An FTP server (communications program) or an FTP service is required for connection over FTP. For log output via TCP there is no FTP program, but an applicable program, for example MELAtrace/MELAView is required.

Connect the Ethernet cable

1. a) Steam sterilizer – computer with 1:1 cable
b) Steam sterilizer – network with crossover cable
If a so-called “intelligent switch” is used in the network, the cable connection is the same. Every interface can be employed at the steam sterilizer.

Determining the IP address of the computer

Determine the network situation

2. Find out the IP address of the computer from the computer support administrator or determine this yourself (see question 6, page 27).
3. Fundamentally important: The chosen computer must always have a fixed IP address that is not dependent on automatically or manually configured networks.
For automatically configured networks, the DHCP server in the area must be informed of the range of the number or the number itself as a static IP address (es). The computer can also be assigned several IP addresses, in case the one already existing in the computer cannot be used.

The steam sterilizer and the computer must belong to a subnetwork. In most cases this means that the IP address of the subnetwork must be the same for the first three numbers sets (e.g. 192.168.40.xx). The IP address of the steam sterilizer and the computer must differ in the fourth number set (e.g.: IP of the steam sterilizer: 192.168.40.40 and IP of the computer: 192.168.40.140).

The default setting of the IP address in a MELAG steam sterilizer meets these requirements.

Entering a fixed IP address

4. Enter the fixed IP addresses for the steam sterilizer and the connected devices into the steam sterilizer (see **Verifying and changing IP addresses**, page 15).

Specifying the computer for the FTP server program

5. Because the steam sterilizer itself is equipped with a hub, direct connection to a computer creates a network. For this reason the procedures for direct connection only minimally differ from connection over a network. In a network a computer must be specified on which the small program FTP server can run. This program receives the logs via data transfer. The steam sterilizer seeks this computer using the IP address that is set in the steam sterilizer and logs on via the FTP server. The completed program logs are also later stored on this computer. In the selection of this computer, note that it is advantageous to have the stored logs included with the automatic data backup system of the practice.

Setting up the server (MELAG FTP server)

6. MELAG offers a free, specifically developed FTP program for this. With the MELAG FTP server, it is possible to log on as a user at several devices simultaneously and to receive data from the steam sterilizer and other devices, for example a washer-disinfector, in parallel. The FTP server supports the so-called multithread capability. You can determine for yourself the destination folders in which the device directory along with log data are stored in the FTP server program.

Connection to a practice network

Manually configured network

Automatically configured network (DHCP)



In the standard ex factory delivery, the steam sterilizer contains IP addresses that all belong to the network with the subnetwork mask listed in Table 2. To integrate the steam sterilizer into a medical practice network (and only then!), two possibilities are to be distinguished:

If the network is manually configured, then the subnetwork mask of the medical practice network must be known. If a subnetwork mask is used other than the one preset in the steam sterilizer, a software expert should adapt the IP addresses in the steam sterilizer. If the masks conform and the above-mentioned IP addresses are not assigned, then a log printer or label printer can be connected directly to the steam sterilizer.

The network is automatically configured in a dynamic network.

- In this case, in the **Settings** → **Logging** menu set the IP address of the steam sterilizer on DHCP.

If logging takes place over a computer via FTP, then a fixed IP address must be determined for the computer, which is then registered in the steam sterilizer.

NOTICE!

If a DHCP server cannot be located in the practice network, the steam sterilizer will automatically receive the pre-set static IP address.

The IP addresses for the following devices are saved in the steam sterilizer as parameters:

Device	IP address	Comment
Steam sterilizer itself	192.168.40.40	Default setting ex factory
Computer	192.168.40.140	Default setting ex factory
Log printer	192.168.40.240	Default setting ex factory
Label printer	192.168.40.160	Default setting ex factory
Gateway	192.168.40.244	Not relevant within a network
Subnet mask	255.255.255.0	Possibly take over from the customer network

Table 2: IP addresses saved in the steam sterilizer

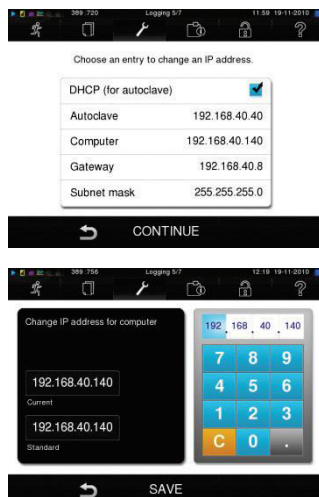


- **The input of false IP addresses can lead to disturbance of the practice network.**

Verifying and changing IP addresses

The IP addresses are changed in the **Settings** → **Logging** menu.

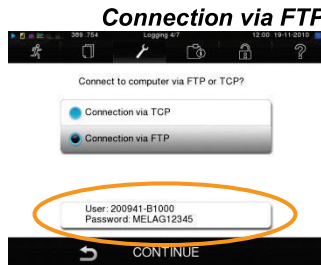
- Follow the logging assistance until you reach the window in which the IP addresses for the specific devices are listed.
- Select, for example, the steam sterilizer. It opens the next window.
- Select the numeric keypad which you wish to change directly by choosing each respective number.
- Delete the digits with the **C** button, then enter a new number and confirm with **SAVE**.
- Proceed in the same way with the other devices that are to be connected to the network.



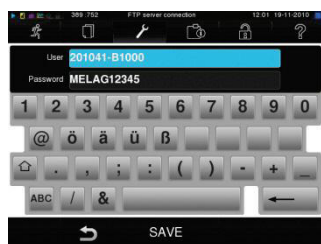
Connection via FTP or TCP

If you have selected the computer as the output medium in logging help (**Settings menu** → **Logging**), determine in the following window whether the connection will be via FTP or TCP.

For connection via FTP you must first set up a user name with password in the FTP program of the computer. The user name and password must then be registered in the steam sterilizer in the **Settings menu** → **Logging**:



- Select Connection **via FTP**.
- In the lower button you will see the currently set user data (**standard username**: year of manufacture + type + serial number; **password**: MELAG12345). If you wish to change this, proceed to the settings window by pushing the buttons.



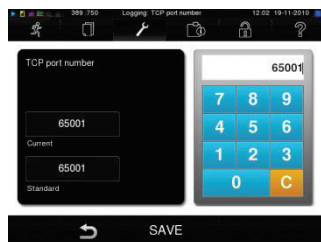
- Enter the user name and password and confirm with SAVE.

Connection via TCP



For connection via TCP you must register the TCP port number in the steam sterilizer:

- Select Connection **via TCP**.
- In the lower button you will see the currently set TCP port (**standard TCP**: 65001).
- To change the TCP port indicated at the bottom, press the button. If you wish to change it, proceed to the settings window by pushing the buttons.
- Use the numeric keypad to select the corresponding TCP port. The current TCP port must first be deleted with the **C** button.
- Confirm with SAVE.



To output logs via TCP, an additional special program, e.g. MELAtrace/MELAview is required.