Introduction

L-Acoustics Device Scanner is a network management tool for L-Acoustics electronic devices, available for Windows and macOS. This management tool scans and detects all amplified controllers, P1, LS10, and LC16D connected to the same network.

Download L-Acoustics Device Scanner on the L-Acoustics website.

L-Acoustics Device Scanner is not compatible with L-ISA Processor and L-ISA Processor II.

Using L-Acoustics Device Scanner

Computer requirements

- System:
  - Windows 10 or later
  - macOS Big Sur (11.7) or later

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Prerequisite

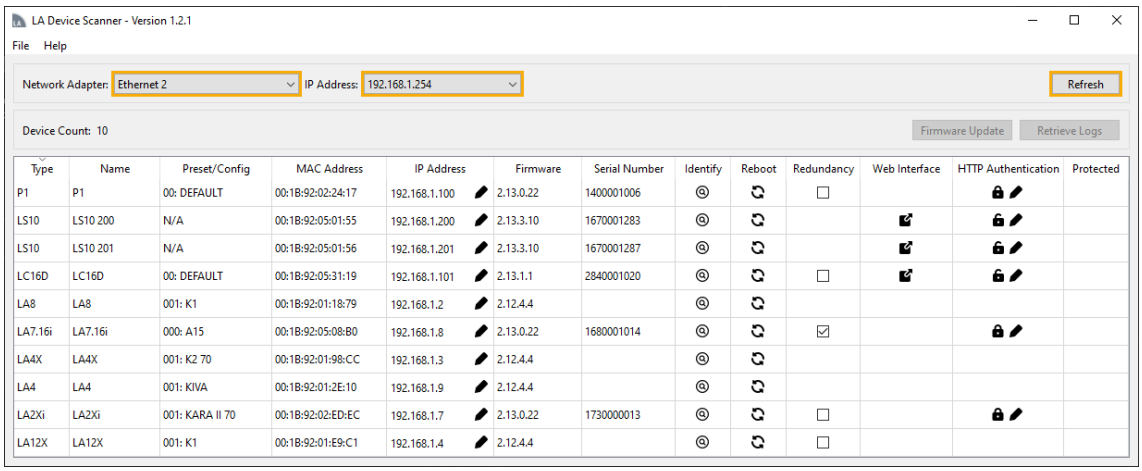
- Make sure all devices are turned on.
- Make sure all devices and the computer running L-Acoustics Device Scanner are connected to the same network.

Refer to the Owner's Manual of the devices.

Procedure

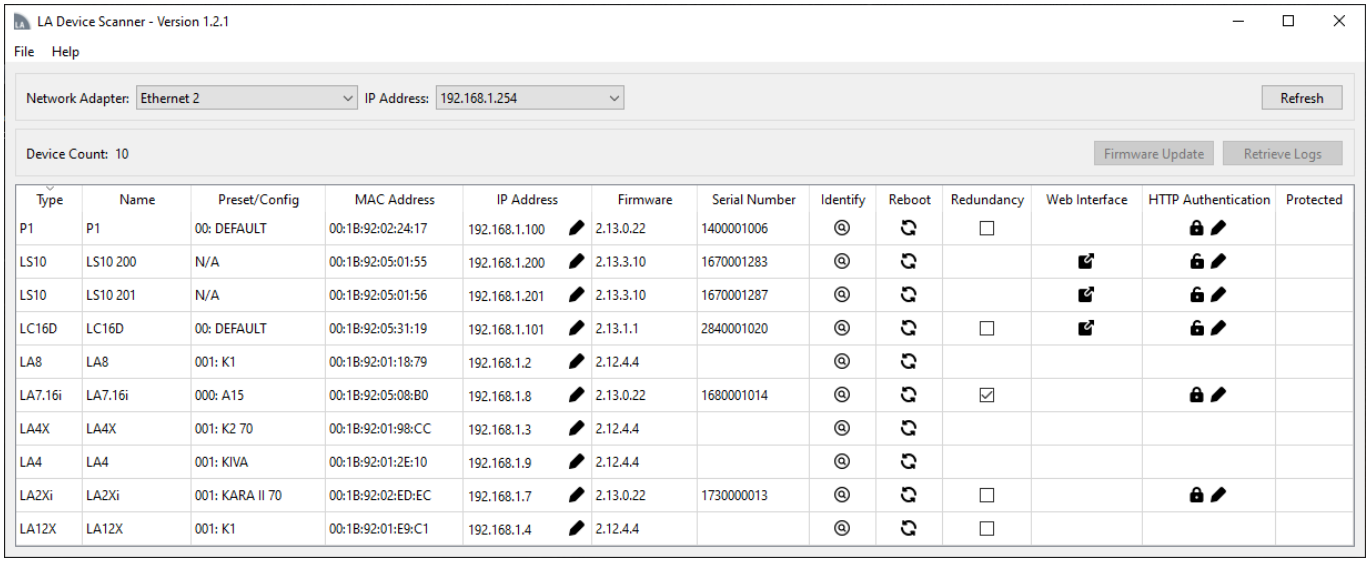
1. Run L-Acoustics Device Scanner.
2. Select the **Network Adapter** used to connect the computer.
3. Select the **IP address** to use on the network adapter, if it has multiple IP addresses.

   Devices are automatically scanned.
4. If necessary, click **Refresh** to refresh the table.



User interface overview

L-Acoustics Device Scanner lists all L-Acoustics amplified controllers, P1, LS10, and LC16D connected to the network.



Label	Description	Editable
Type	Type of device	no
Name	Device name (see Editing the name (p.3))	yes
Preset/Config	Device preset or layout (for amplified controllers), or configuration (for P1, LC16D)	no
MAC Address	Device MAC address	no
IP Address	Device IP address (see Configuring the IP settings (p.3))	yes
Firmware	Device firmware version	no
Serial Number*	Device serial number	no
Identify	Click to identify the selected devices (see Identifying a device (p.5))	—
Reboot	Click to reboot the selected device (see Rebooting a device (p.5))	—
Redundancy	Click to enable/disable the redundant network mode (see Changing the network operating mode (redundancy) (p.6))	yes
Web interface	Click to open the device's embedded Web interface (see Accessing the embedded Web interface (p.6))	—
HTTP Authentication	Click to set or edit a password for the selected device (see Configuring the authentication settings (p.7))	—
Protected	Device Settings Protection status (see Settings Protection status (p.8))	no
Firmware Update	Click to update the firmware of one or more LC16D and LS10 (see Updating the firmware (p.8))	—
Retrieve Logs	Click to retrieve the logs of one or more devices (see Retrieving the logs (p.9))	—

*The serial number is not available for LA4, LA8, early series of LA4X, and all devices which had their DSP card replaced during a service operation.

Multiple selection:

Hold **Ctrl** (Windows) or **Cmd** (macOS) and click on the devices to select.
Hold **Shift** and select contiguous devices.

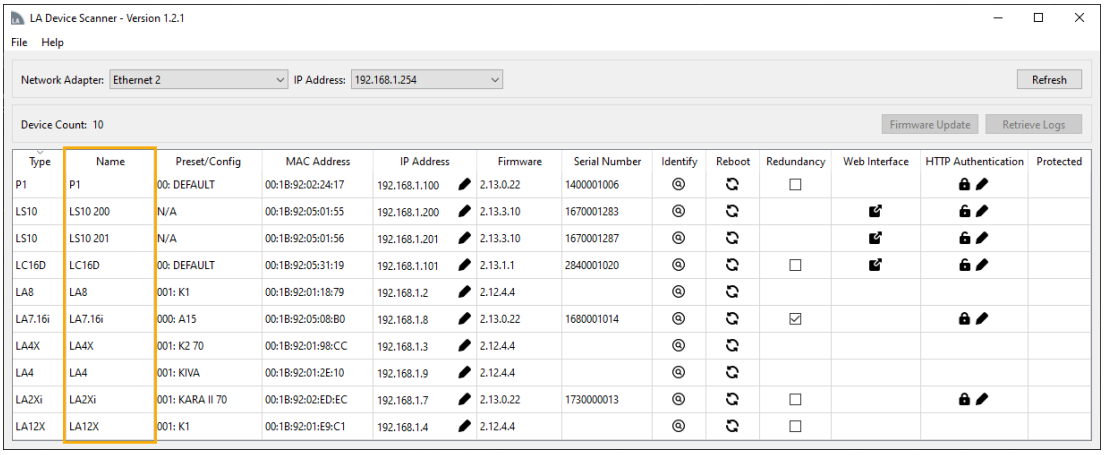
Editing the name

Use the **Name** column to define or edit a name.

This function can help distinguish different devices in the same system. The name is visible on all software supporting the device, except LA Network Manager.

The character limit is 64.

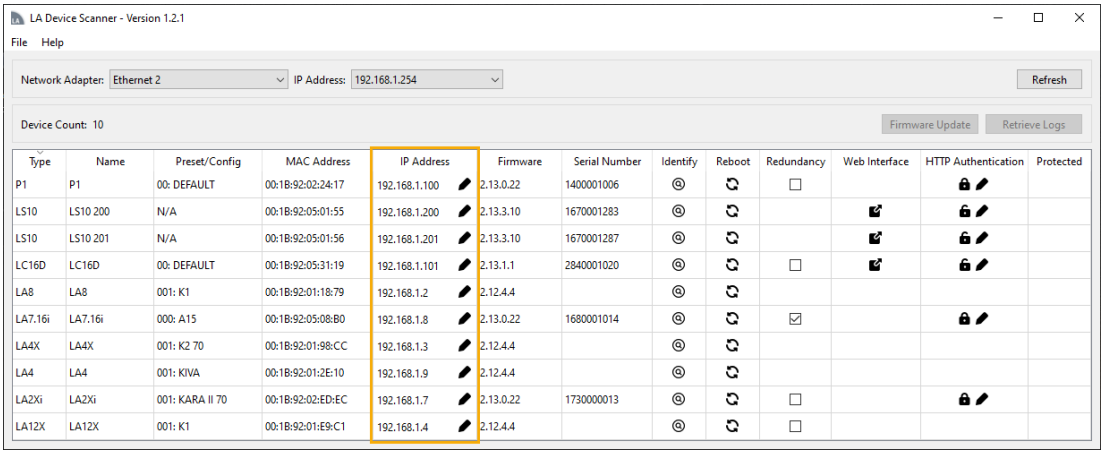
1. Double-click the field.
2. Enter the new name and press **Enter** to confirm.
   Alternatively, leave the field empty and press **Enter** to automatically name the device [type] [last IP number].

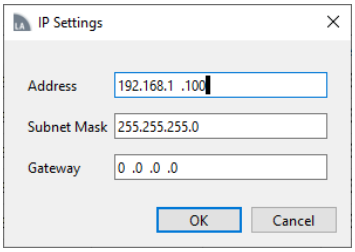


Configuring the IP settings

Use the **IP Address** column to configure the IP settings (IP address, Subnet mask, gateway).

1. Click .
2. Configure the IP settings.
3. Click **OK** to confirm.
4. If necessary, click **Refresh** to refresh the table.





Recommendations for IP settings

An IP address is a unique identifier for a network device on a given IP network. In IPv4 networking, it is made of 4 bytes (32 bits). An IP address is composed of a subnet address and a host address. The host address serves as a unique device identifier on the subnet. The subnet mask determines how many bits define the subnet address, and how many define the host address.

By convention, the first possible number of the host address is reserved to designate the subnet, and the last number is reserved to communicate with all devices of the subnet (IP broadcast address).

The factory default IP settings of all L-Acoustics devices are:

- IP address: 192.168.1.100
- Subnet address: 192.168.1.0/24
- IP broadcast address: 192.168.1.255
- Subnet mask: 255.255.255.0

With these settings, the first three bytes of the IP address (192.168.1) define the subnet address, and the last byte is the host address (100).

In general, it is recommended to:

- Use the default subnet address and subnet mask.
- Edit the device host address to provide a unique identifier to each unit: use consecutive IP addresses starting from 192.168.1.**1** up to 192.168.1.**253**.
- Set the control computer to 192.168.1.**254**.

However, it is possible to configure other IP settings when required by network administration. Subnet mask may be defined from 255.0.0.0 to 255.255.255.0, and the IP and gateway addresses must both belong to one of the following IP ranges (standards for Private Local Area Networks):

- 10.0.0.1 to 10.255.255.254
- 100.64.0.1 to 100.127.255.254
- 172.16.0.1 to 172.31.255.254
- 169.254.0.1 to 169.254.255.254 (not recommended)
- 192.168.0.1 to 192.168.255.254

The devices must be using the same subnet and Subnet mask as the control computer and the other units in the network.

In AVB redundant mode, the host address is always made identical for both the Primary and the Secondary network. The subnet address of the Secondary network is that of the Primary +1. For example, with default settings:

- Primary port: 192.168.**1**.100
- Secondary port: 192.168.**2**.100

The subnet mask setting always applies to both networks. When using smaller subnet masks, the host address is also made identical. For example:

- Primary port: 172.**16**.1.100
- Secondary port: 172.**17**.1.100

The Gateway address is only available for the Primary network.

Make sure that:

- The IP address is included in one of the supported IP ranges.
- The gateway is set to an IP belonging to the same subnet, or is set to 0.0.0.0 if not used.

The widest subnet mask that can be used is 255.255.255.0.

Wider subnet masks, such as 255.255.255.128, are not supported.

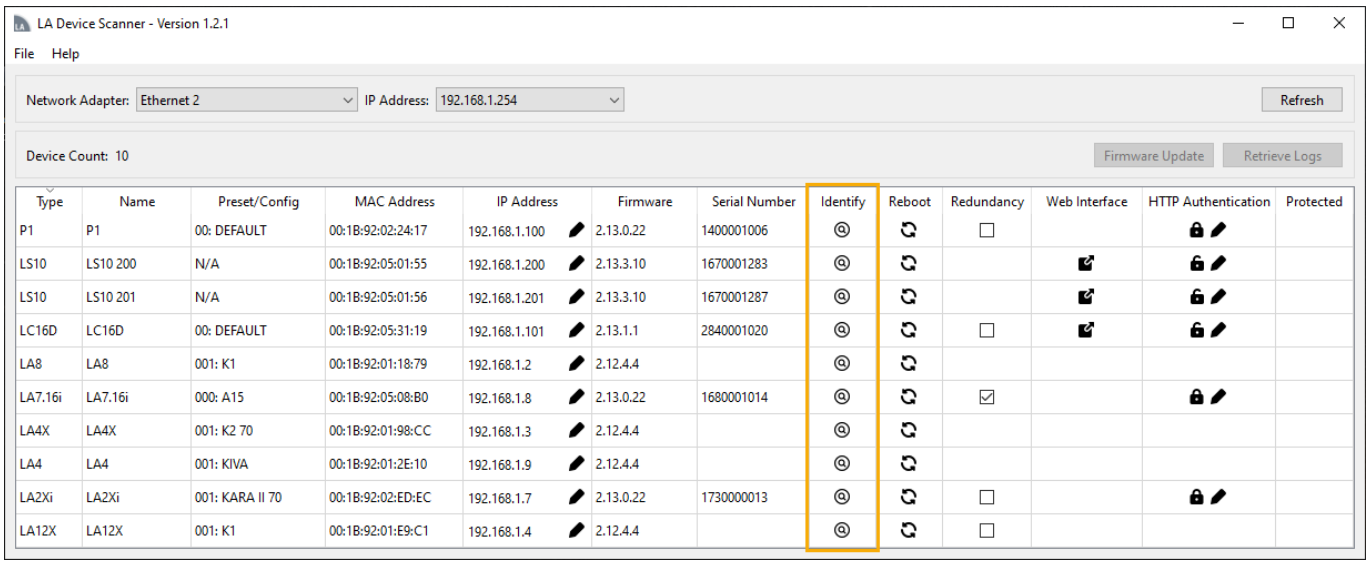
Identifying a device

Identify is a two-way process to identify a connected device in the table and the physical device in the system.

Click ⓐ / ⓐ to enable/disable the function.

- On the front panel of processors, the screen displays the name and the complete IP address on a blinking background.
- On the front panel of amplified controllers, the LEDs blink, and the screen displays `IDENTIFICATION` or the name and the complete IP address.
- Each identified device flashes if present and online in LA Network Manager.
- Each identified device appears in bold if present and online in Hive AVB Controller.

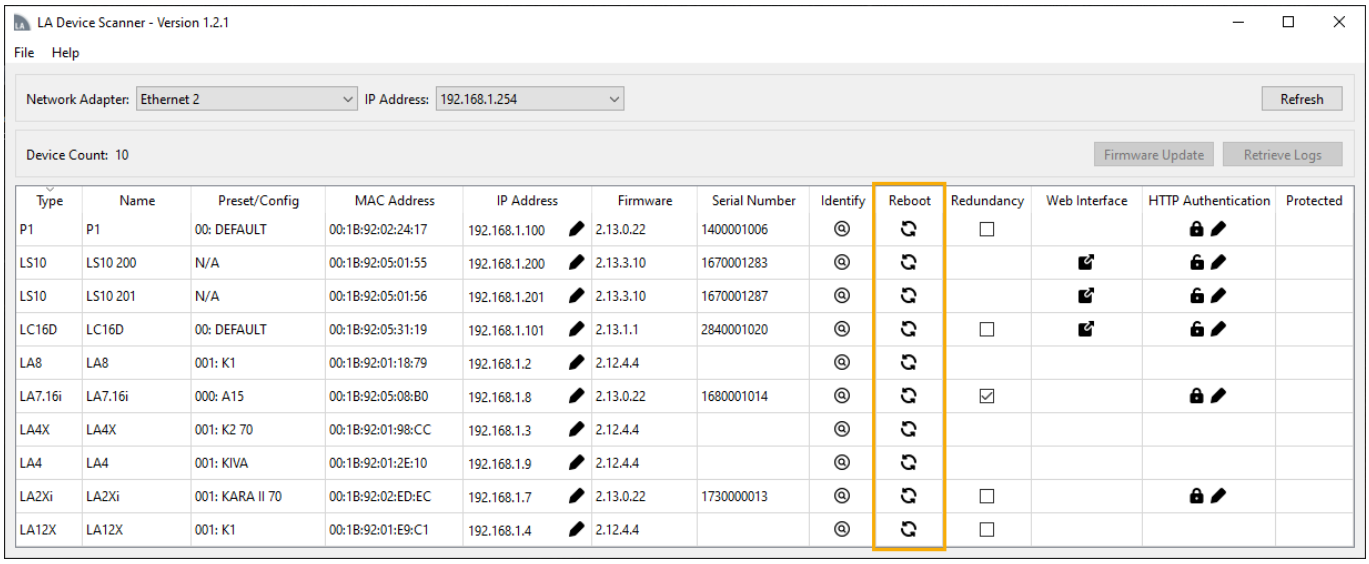
i Several devices can be identified at the same time.



Rebooting a device

Click ↻ to restart the selected device.

The device disappears from the interface during the restart. If necessary, click **Refresh** to refresh the table after the restart.



Changing the network operating mode (redundancy)

Use the **Redundancy** column to enable/disable the redundant network mode.

Risk of broadcast storms

To enable the redundancy mode: connect the Primary network cables in a Star topology, and first change the mode, then connect the Secondary network cables.

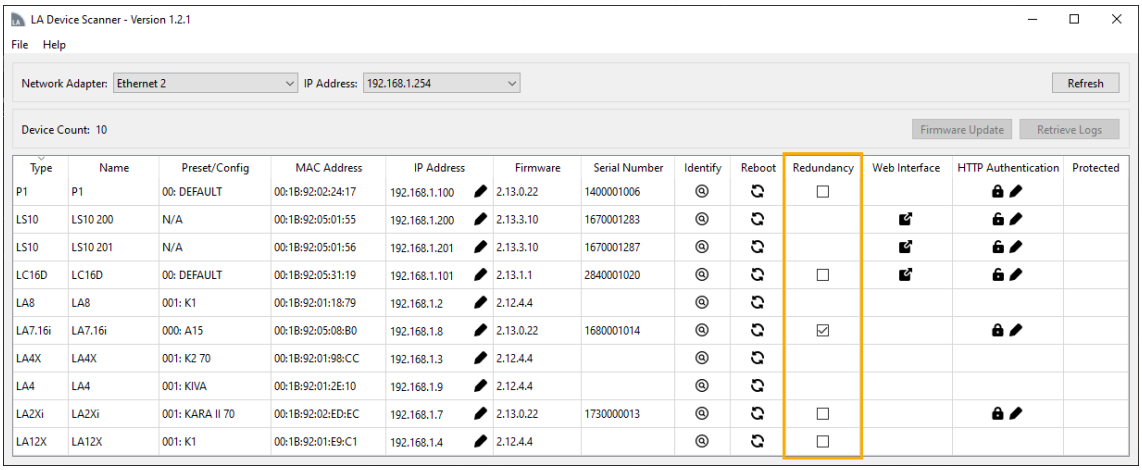
To disable the redundancy mode: always disconnect the Secondary network cables first, then change the mode.

When redundancy is enabled, each Ethernet port of the devices acts as a separate port with its own IP address. This enables the creation of two separate networks, one primary and one secondary, for seamless backup in case of failure.

The redundancy reduces the risk of sound cuts due to network failure: in case of failure in the primary network, the signal of the secondary network is automatically picked up and used as a replacement, with no interruption.

Changing the network mode requires rebooting the devices. In that case, a pop-up window appears to reboot the device.

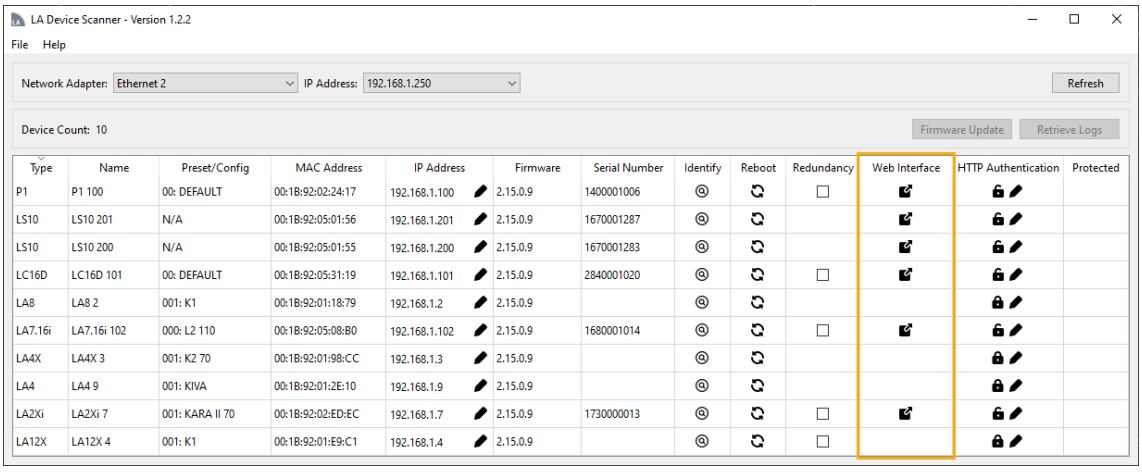
Check the box to activate redundancy for the selected device.



Accessing the embedded Web interface

Click to open the embedded Web interface of a compatible device in the default Web browser, or enter the IP address of the device in the address bar of a Web browser.

The Web interface button is only available for compatible devices using firmware version 2.15.0 or higher.



Refer to the **Owner's Manual** of the device for more information.

Configuring the authentication settings

Use the **HTTP Authentication** column to configure the authentication settings.

The authentication is available from firmware version 2.13.0.

The authentication applies to HTTP API clients only: Web interfaces and third-party interfaces that rely on the L-Acoustics HTTP API. The authentication does not apply to LA Network Manager nor the front panel. To set a password for LA Network Manager and the front panel, refer to the **Settings Protection Technical Bulletin**.

A default password is set for each device:

- For LA2Xi, LA7.16i, P1, LS10, and LC16D: **admin**. The authentication is disabled by default.
- For LA4, LA4X, LA7.16, LA8, and LA12X: contact your Systems Integrator or L-Acoustics: avcontrol@l-acoustics.com. The authentication is enabled by default.

Resetting the password

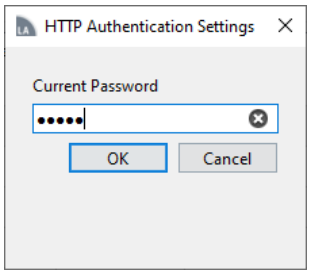
Use the USB Terminal tool to restore the devices equipped with a USB port to factory default settings. Refer to LA Network Manager **Help**.

For P1, use the touchscreen display to restore the device to factory default settings. Refer to the **P1 Owner's Manual**.

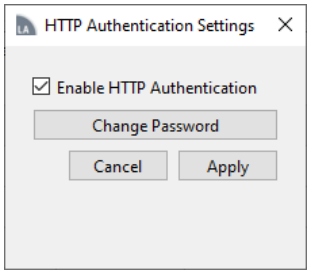
For LA12X and LA4X, contact L-Acoustics.

A padlock indicates the authentication status (unlocked: disabled, locked: enabled).

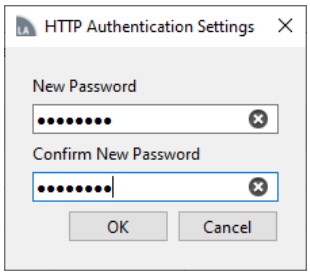
1. Click ✎.
2. Enter the default password and click **OK**.



3. Check **Enable HTTP Authentication** and click **Change Password**.



4. Enter the new password and click **OK**.

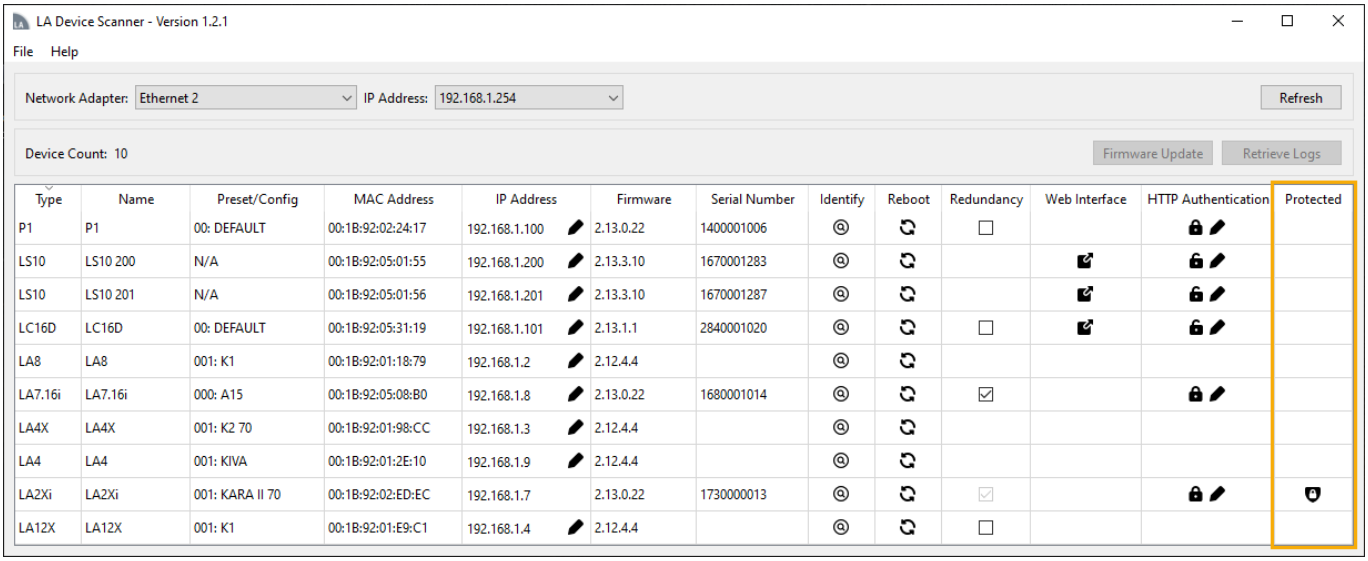


5. Click **Apply** to confirm the changes.

To disable the authentication, uncheck **Enable Authentication** and click **Apply**.

Settings Protection status

The **Protected** column displays the status of the Settings Protection. The padlock indicates that Settings Protection is enabled for the device. When the device is protected, the IP address and the network operating mode cannot be modified.



Settings Protection can be disabled from LA Network Manager. Refer to the **Settings Protection Technical Bulletin**.

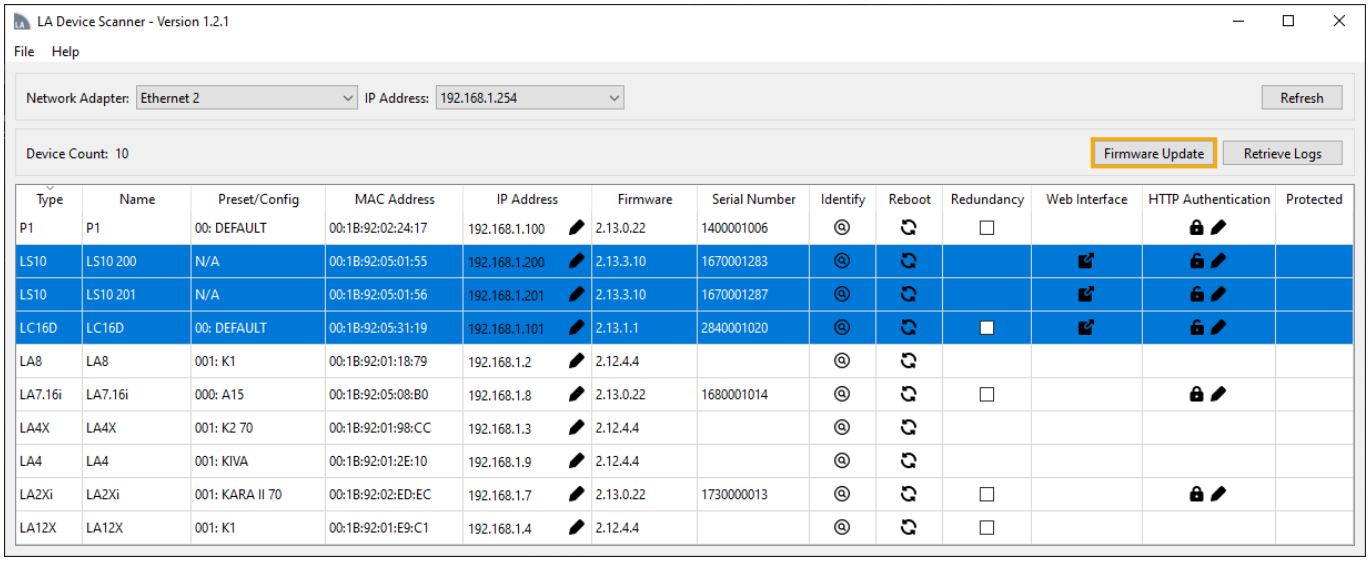
Updating the firmware

Use **Firmware Update** to update the firmware version of one or more devices.

This option is available for LC16D and LS10 only.
For other devices, use LA Network Manager to ensure firmware compatibility.

The firmware package `fw_vx.xx.x.x_LC16D_LS10.fwpkg` is included in the L-Acoustics Device Scanner release pack, available on the L-Acoustics website.

1. Select the device(s).
2. Click **Firmware Update**.
3. Select the FWPKG file.
   The devices restart when the firmware update is completed.
4. If necessary, click **Refresh** to refresh the table.



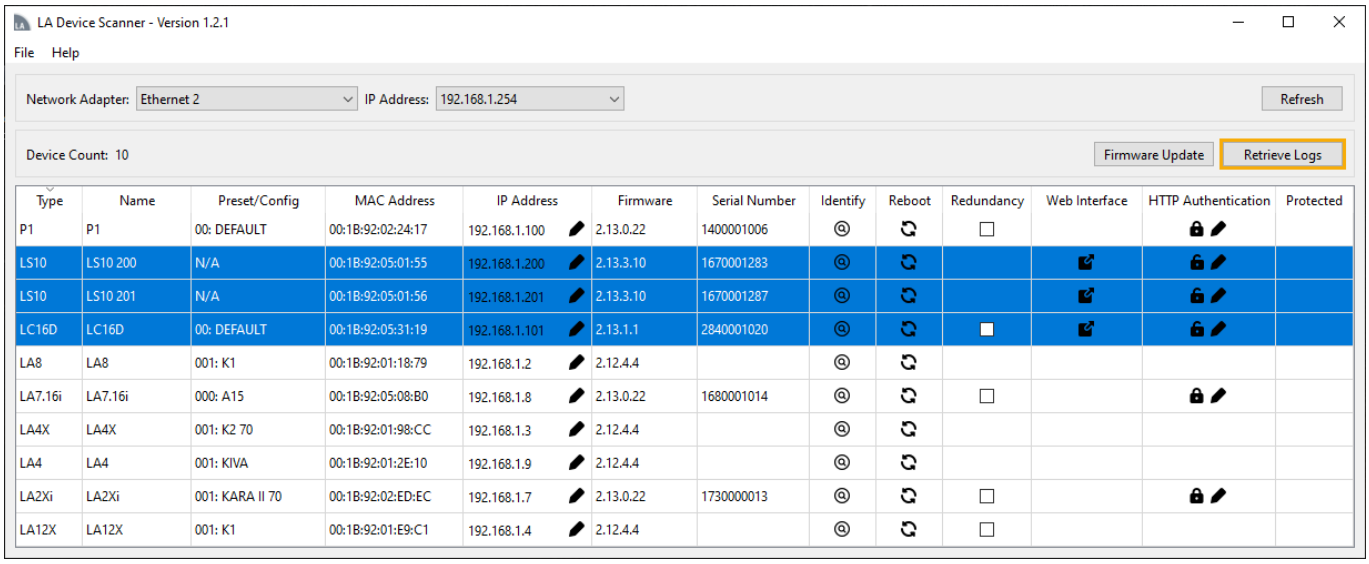
Retrieving the logs

Use **Retrieve Logs** to export the logs.

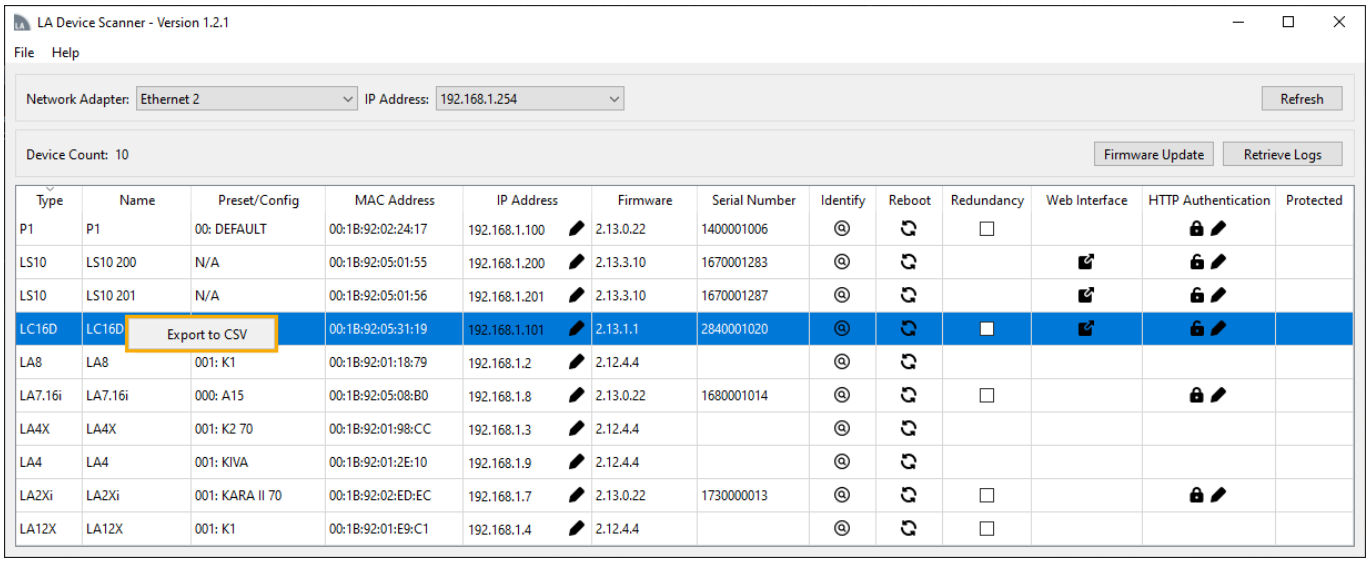
The logs are exported as ZIP folders named 'LA_LOG_', followed by the date and time of the retrieval.

For troubleshooting purposes, it can be useful to communicate these files to your L-Acoustics representative.

1. Select the device(s).
2. Click **Retrieve Logs**.
3. Select a location on the computer.



Exporting the table

Use **Export to CSV** to export the table displayed in the L-Acoustics Device Scanner user interface as a .csv file.

1. Right-click anywhere on the table and select **Export to CSV**.
2. Select a location on the computer.