

# 1. Firmware Revision History

*Firmware 2.3.1 (APR/26/2022) m1610\_fw\_ms\_2.3.1\_v139\_20220426.swu*

- fixed: MADI output menus could not be accessed on the device screen

*Firmware 2.3.0 (MAR/22/2022)*

- fixed: MILAN counters
- fixed: under specific circumstances, the previous 2.2.0 firmware could cause presets to get corrupted
- improved: MILAN compatibility
- improved: MIDI over MADI remote control

*Firmware 2.2.0 (AUG/22/2021)*

- feature: IEC 60268-18 scaling for levelmeters
- feature: display of muted output channels
- feature: show grandmaster of both PRI and SEC networks
- fixed: AVB redundancy failed when a primary stream was clock reference and interrupted
- fixed (webUI): presentation time offsets were not correctly displayed after change
- fixed: routings at single speed had an effect on soundness at double/quad speed
- improved: AVB redundancy
- improved: display of preset names in webUI and on the device display
- improved: CRF Stream support
- improved: MILAN compatibility

*Firmware 2.1.1 (DEC/07/2020)*

- feature (web): peak indicators in level meters
- feature (web): support consecutive channel naming with TAB key
- several additional fixes and improvements for the web remote



Existing presets will be updated to the new firmware and cannot be used with previous firmware versions. Please back up your existing presets in case there is a need to revert to an earlier firmware.

*Firmware 2.1.0 (NOV/04/2020)*

- feature: show IP address of secondary network port
- feature: upload and download presets
- feature: possibility to rename presets
- feature: automatic update checks
- feature: AVB: media locked counter for input streams
- feature: web: direct link to online manual
- improved: web: font rendering
- improved: web: error handling (WebGL)
- fix: web: memory usage in routing mode
- fix: web: several graphics issues
- and additional minor fixes and improvements

## *Firmware 2.0.0*

- Initial release


## 2. Firmware Update

New and improved features for this device, as well as bug fixes, are published on the RME website in the download section as a firmware update. The update is provided as a compressed file with a **.swu** extension and can be uploaded via web remote over USB or network.

*To update the M-1610 Pro:*

1. Connect the device by USB or network cable and open the Web Remote.

See: Section 2.1, "Finding the Device on a Network"

2. Download the current firmware from the RME website.
3. Unpack the compressed file.
4. Open the  **Settings** in the Web Remote.
5. Within the **Firmware Update** section, press the **Select .swu Firmware File** button and locate the unpacked file.
6. Press **Start Firmware Update**.



The unit retains all settings, including presets, when the firmware is upgraded.

## 2.1. Finding the Device on a Network

The M-1610 Pro has three integrated network adapters (USB 2.0 and dual ethernet).

The adapters can be used, individually or simultaneously, to control the device with HTTP ("web remote"). The web remote control works on any IP-based network, including wireless networks.

The ethernet connection additionally supports AVDECC 1722.1 remote protocol, which requires a physical connection (cables), but does not require AVB switches. Wireless routers are not supported for AVDECC.

*To enable web remote functionality over HTTP:*

1. Open the **remote** tab in the **STATE** section.



2. Ensure that the **HTTP Remote** setting is switched to  **ON**.

### 2.1.1. USB

When the device is connected with a USB 2.0 cable to a Apple macOS™ or Microsoft Windows™ computer, a network device is automatically installed in the background that assigns the M-1610 Pro the following IP address:

http://172.20.0.1



Only **one** of the following products can be connected to the host computer via USB at a time: RME M-32 AD Pro, M-32 DA Pro, 12Mic, AVB Tool, M-1610 Pro.

### 2.1.2. Ethernet

The integrated ethernet adapter will join an IP network when connected. If no DHCP server is found, for example when connecting the M-1610 Pro directly to a computer, an address is automatically self-assigned (in the 169.254.0.0/16 subnet).

*To find out the current IP address:*

1. Open the **remote** tab in the **STATE** section.



2. The current IP address is displayed.
3. Enter the IP address in the address bar.

### 2.1.3. Connecting to the Remote Interface without IP address

Instead of using the IP address, the **device name** can be entered in the browser window, followed by **.local/**.

By default, the name is m1610-pro, and the corresponding URL is therefore:

**http://m1610-pro.local/**



The length of the custom name should not exceed 63 characters. Spaces, underscores and other special characters in the device name should be written as hyphens ("-") when entering the URL.



on some operating systems or browsers, a trailing dot "." may be required after the 'local' domain: http://m1610-pro.local./



The device name is stored in a preset. Loading a preset can therefore change the device name and require a different address.