1. Firmware Revision History

Firmware 1.7.1 (NOV/01/2023) avbtool_1.7.1_v171_20231101.swu

- fixed: ATDECC: Closing a controller stopped notifications to other controllers on the network
- fixed: AVB Redundancy: Destination MAC address was not set correctly while other port active
- fixed: Update from firmware 1.2.4 or earlier to firmware 2.5.0 failed

Firmware 1.7.0 (JUL/12/2023)

- feature: Faster remote control and snappier web remote interface
- feature: Faster boot time
- feature: AVB: Entity model has been updated (for example: to reflect controls on jacks)
- further improvements under the hood addressing MILAN compatibility and minor bug fixes

Firmware 1.6.2 (APR/18/2023)

- fixed: Some 100 MBit/s devices did not connect properly

Firmware 1.6.0 (JAN/19/2023)

- feature: A static IP address can be assigned on the device
- feature: A dedicated CRF Stream has been added for MILAN conform AVB clocking
- feature: New stream configuration dialog (web ui)
- fixed: Sync issue when receiving signal from RME MADI Router
- improved: Error handling in JSON(SSC) API
- improved: ATDECC Counters and Notifications
- improved: MILAN compliance
- additional minor fixes and improvements

Firmware 1.5.1 (MAY/12/2022)

- fixed: AutoSet and Phase indicators were not displayed correctly

Firmware 1.5.0 (MAR/22/2022)

- fixed: MILAN counters
- fixed: under specific circumstances, the previous 1.4.0 firmware could cause presets to get corrupted
- improved: MILAN compatibility
- improved: MIDI over MADI remote control

Firmware 1.4.0 (AUG/22/2021)

- feature: IEC 60268-18 scaling for levelmeters
- feature: MIDI over MADI control
- 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: display of preset names in webUI and on the device display

- improved: CRF Stream support

- improved: MILAN compatibility

Firmware 1.3.0 (DEC/07/2020)

- feature: AutoSet Gain

- 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 1.2.0 (NOV/04/2020)

- 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 1.1.2 (AUG/18/2020)

- feature: web: remote tab shows device name in title

- improved: auto stream reconnect on format change

- improved: web: gain setting responsiveness

- fix: quick start preset routing for stream 2

- fix: web: touch compatibility

- fix: web: grid/snap behavior

- fix: USB: connection with Mac OS Catalina

Firmware 1.1.1 (MAY/15/2020)

- improved: performance of web app

- improved: release time of level meters now adheres to EBU Tech 3205-E

- improved: routings on the device now require a confirmation

- improved: web: channel indicators within input ports

- improved: display while booting the device

- fix: MAAP was not working

Firmware 1.1.0 (MAY/8/2020)

- new: load a quick-start preset by pressing first button next to display while booting (power on until LED pulsing)

- new: adjust stream size when setting higher sampling rate

- new: web: line level, phase switches

- new: improved boot logos with black background

- new: SSC / JSON API error handling

- improved: performance of gain pots

- improved: fine adjust gain by holding shift key

- improved: soft start of analog voltages after brief power supply interruption

- improved: visualization of clipping LEDs

- fix: AVB stream connections to Digiface are reestablished on boot

- fix: phase of analog outputs

- fix: gain setting of analog outputs in mono mode

- fix: temperature was not shown

- fix: web: level meters of AVB stream 8

- fix: pass through of incoming MIDI over MADI messages

Firmware 1.0.0

- initial release

> When downgrading to an earlier firmware version, presets and current settings will get lost.

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 AVB Tool:

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

   See: web remote

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 AVB Tool has two integrated network adapters (USB 2.0 and 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 ATDECC 1722.1 remote protocol, which requires a physical connection (cables), but does not require AVB switches. Wireless routers are not supported for ATDECC.

To enable web remote functionality over HTTP:

1. Open the **remote** tab in the **STATE** section. To enter the State section press the encoder twice while in the main screen, then select the remote tab.
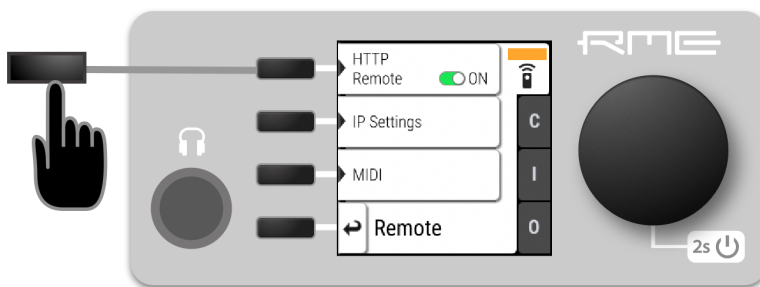
2. Ensure that the **HTTP Remote** setting is switched to **ON**.

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 AVB Tool 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 (II, II-D), M-32 DA Pro (II, II-D), 12Mic, 12Mic-D, 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 AVB Tool 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. While the device shows the default screen with levelmeters, press the button **[i]** as in 'Info'. Then, proceed to "LAN info".

2. The current IP address is displayed.

3. Enter the IP address in the address bar of the browser.

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**/.

The current device name is shown on the **Info** ⇒ **LAN Info** screen and also in the main menu, STATE section, System Information.

By default, the name is avb-tool, and the corresponding URL is therefore:

http://avb-tool.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://avb-tool.local./

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