MERGING+HAPI MkII
Release Notes
HAPI MkII **FIRMWARE**

Make sure that you are running the latest certified firmware:  
https://www.merging.com/hapi

Verify your Hapi firmware version by going to the Hapi Setup menu and open the System info page to verify the firmware version installed. Users can also verify the firmware by opening ANEMAN or MTDiscovery and rolling the mouse pointer over the MkII icon

**Update Procedure**
1) Check for new firmware in the «Docs & Downloads» section at www.merging.com/hapi  
2) Right click on the Hapi from MT Discovery or ANEMAN and select "Maintenance Page"  
   Note: Google Chrome is the recommended browser. Safari is not recommended.  
3) Do not abort the Firmware Update at anytime, until completion and until the "Reboot" message shows up.

Merging Technologies recommends to update to the latest available firmware. All details on the upgrade procedure can be found in the Hapi MkII User manual.

**Note:** Hapi MKII does not require Maintenance Mode updates.

**REQUIREMENTS**
- ANEMAN 1.3.0 and higher
- MAD 1.0.6 HotFix and higher (MAD 2.0 Recommended)
- MT Discovery 13.1 and higher

**CURRENT LIMITATIONS (Firmware)**
- RS422/BiPhase/GPIO not implemented
- No VU meters in DSD (refer to User Manual)

**FIRMWARE UPDATES HISTORY**

**Firmware_1.4.11b55319 – Release Date:** 01.06.2023

A complete shut down and restart of your Hapi after this firmware update is always preferred, this is in order to ensure that all your

- Improvement. Firmware update reliability until end of update procedure (reboot)
- Fixed. NMOS instabilities
- Fixed. Peering reliability
- Fixed. Low Buffer size (e.g. 16 samples) can create large latency with other devices
- Fixed. Recent ZMAN boot issue
- Fixed. ADAT reliability

**FIRMWARE UPDATES HISTORY**

**Firmware_1.4.6b53393 – Release Date:** 20.10.2022

A complete shut down and restart of your Hapi after this firmware update is always preferred, this is in order to ensure that all your modules are properly detected

- Improvement latest generation of AD modules will be muted when the device is not synced  
  This was implemented to avoid unwanted noise during re-sync. Impacted modules are:  
  - AKDv2
  - ADAv2
  - ADAv3 (run 5+)
- Improvement. Up to 64 streams are now supported (used to be 32)
- Improvement. Reliability of the PTP lock and Mute (when un-locked)
- Improvement. NMOS Nevion support
- Improvement. Peering reliability, timeout free
- Fixed. Stream listened on wrong interface for SAP single wire source when in ST2022-7 mode
- Fixed. SDP DUP bug when IF name has a space (RAV-1643)
- Fixed. THD-N noise issue solved
- Fixed. DC Offset potential issue with ADAv2 module generation
- Fixed. MADI optical streams could be corrupted (TX and RX)
- Fixed. Hapi: ADAT/SPDIF reliability at high sampling rates
- Fixed. ADAv2 (run 5>) DSD reliability over long periods

**Firmware_1.4.2b51894 – Release Date: 18.05.2022**

A complete shut down and restart of your Hapi after this firmware update is always preferred, this is in order to ensure that all your modules are properly detected

- New. ADA8S/P run 5 Premium support
- Improvement. Validate that address and gateway are on same subnet
- Improvement. Modules detection reliability
- Fixed. Dante SAP Source no longer discovered
- Fixed. ADA8S & ADA8P modules thermal stabilization
- Fixed. In Advanced pages multi-interface mode all interfaces reported link up

**Firmware_1.4.0b50895 – Release Date: 23.02.2022**

A complete shut down and restart of your Hapi after this firmware update is always preferred, this is in order to ensure that all your modules are properly detected

- New modules revision. ADA8S & ADA8P run 5 and above Support
- Improvement. NMOS reliability
- Improvement. D/A8 card sometimes not detected in slot 2
- Improvement. ADA8S & ADA8P module detection reliability
- Improvement. Advanced pages PTP tab, Audio Clock readings added
- Improvement. Hapi MkII Board detection issue (DA8 run 11 specifically)
- Fixed. Hapi MkII issue with MADI (sound clicks)
- Fixed. SPS two ports no longer advertise Bonjour after connection/disconnection
- Fixed. Device issue advertising itself after RJ45 disconnect/connect
- Fixed. ASIO clock not updated when PTP domain has changed
- Fixed. Peering reliability and dropout’s issues
- Fixed. Hapi MkII hosting DA (Run 6 and below) silent
- Fixed. Various SAP and SDP fixes
- Fixed. Display brightness setting control for the OLED

**Firmware_1.2.4.48118 – Release Date: 2nd July 2021**

A complete shut down and restart of your Hapi after this firmware update is always preferred, this is in order to ensure that all your modules are properly detected

- Improvement. Improved firmware update reliability for ADA8S/P modules
- Improvement. Peering reliability
- Fixed. Peering noise issue with modules in DSD
- Fixed. Peering reliability preventing disconnections
- Fixed. Wrong source's codec when set codec from DSD128 to PCM
- Fixed. DA8 run 5: Setup->Module->DA: "Max Level" disabled
**Firmware_1.2.1_47381 – Release Date:** May 4th 2021

*A complete shut down and restart of your Hapi after this firmware update is always preferred, this is in order to ensure that all your modules are properly detected*

- Fixed. AKDG8D module type not reported properly on OLED
- Fixed. AKDG8D module showing attenuation parameter on OLED
- Fixed. MKII cannot lock on Workclock input at some sampling rates
- Fixed. Wrong ST2022-7 streams’ status (during a short period)
- Fixed. Horus/Hapi/Anubis virtual MIDI ports fail to load, solves PreAmps remote and MIDI Din issues.
- Fixed. WebApp meter page: no AES peak meters present
- Fixed. NMOS null value activation time when patching an IS-05 receiver
- Fixed. Zhi and Zlo PreAmps parameter not enabled on some modules

**Firmware_1.2.1_47023 - Deployment firmware**

*A complete shut down and restart of your Hapi after this firmware update is always preferred, this is in order to ensure that all your modules are properly detected*

- Hapi MKII deployment firmware
HAPI MkII TROUBLESHOOTING

Merging Knowledge Database:
https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4821264/RAVENNA+Devices

If you cannot remotely open your Hapi web access page please follow the workaround here
https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4819040/Cannot+access+Horus+Hapi+i+Anubis+web+page

Rollback Firmware
Users that need to rollback to a previous firmware version can do so and simply update the previous Hapi MkII firmware.

Cannot access Hapi remotely for Firmware update
Procedure:
1. First launch ANEMAN (1.3.0 and above) or M Discovery (v13.1 and above)
2. If Hapi MkII entry does not show up, reboot your system and retry
3. Make sure your antivirus is disabled and your Public Firewall
4. If it still does not work, make sure that your Network card is set to Automatic IP addressing (see Hapi User Manual)

   In case none of the above works try to access the Hapi directly from your Chrome browser
5. First make sure that the Hapi is well connected to your system via Ethernet, be aware that the Port or Switch must be Gigabit.
6. Verify that you are using Ethernet cable category 5E or 6
7. On the Hapi OLED screen under SetUp>Network take note of the written IP Address
8. Type this address in your Chrome browser followed by :8080
Example: 169.254.182.31:8080

   You should now have access to the Horus remote Maintenance page and be able to update your Hapi firmware.

If you still cannot access your Hapi or have a problem performing a Firmware update contact the Merging Support support@merging.com

Firewall and Antivirus:
Windows Firewall:
The Windows Firewall can block communication between MassCore and Horus/Hapi. We recommend users to disable the Public Network Firewall
Procedure:
2. Click on ”Turn Windows Firewall on or off”
3. Go to the Public Network section and select ”Turn Off Windows Firewall”

Disable Antivirus:
Merging also recommends users to disable their Antivirus, some Antivirus as Avast and Sophos have been known to block the Horus & Hapi discovery and RAVENNA I/O Connections

RAVENNA
MassCore/RAVENNA NET-MSC-GBEX1 PCIe Ethernet card users might have to wait a little after their system startup/login before the Horus shows up online and in MT Discovery