AHM Release Notes
Firmware and System Manager V1.41

1. You can only run matching versions of System Manager and AHM firmware e.g. System Manager V1.02 will not connect to a unit running V1.00 without prior update.

2. The System Manager application includes firmware files for the AHM matrix processors. Refer to www.allen-heath.com for the latest version of the package.

3. Updating AHM firmware deletes Presets and current settings. Always save your settings as a Config before performing the update, and restore your Config or a Template Config after the update. Please ensure you update your Custom Control devices at the same time as / prior to updating the AHM processor.

4. Updating AHM firmware resets Email Notification settings.

5. Due to security improvements, AHM V1.30 firmware and higher will only connect to Custom Control app V1.3.0 or higher. Earlier versions of Custom Control will not connect, displaying an incorrect username / password error. Please ensure you update your Custom Control devices at the same time as / prior to updating the AHM processor.

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**V1.41**  July 2023

Maintenance release.

**Fixes**

ID1447  SLink cards would not connect to GX4816, DX Hub, gigaACE or other SLink ports after updating to V1.40.

**Known Issues**

ID1297  Hot-plugging DX expanders or DX Hub in a certain order can cause DC audio on some audio channels.

ID604  The Custom IP function in a multi-unit Custom Control config can sometimes generate errors in the AHM logs.

ID1094  Changing the number of crossover ways resets the Speaker Processing settings, but not the output level and polarity.

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**V1.40**  June 2023

Feature release.

**New features**

- Room combining
  - Room Combiner configuration
• Room level, Room level up / down, Room source select, Room combine added to SoftKey and IP controller functions
  • Support of Room combining in external control protocol (TCP)
  • Speaker processing improvements
    • 1-way speaker processing output
    • Addition of LPF and HPF to highest and lowest crossover output respectively
    • 48dB/oct Butterworth slope
  • Zone / Room source added to SoftKey and IP controller functions
  • Input and Zone meters added to front panel AHM16/32 display
  • Control of screen brightness for IP controllers
  • Support of DX88-P expander

Improvements
  • AHM16/32 playback now supports simultaneous playback of 2 tracks in Mono mode
  • System Manager workflow improvements
    • Cursor keys in Channels view navigate selected channel (up/down) or processing block (left/right)
    • Right click on channel name/colour block to set colour
    • Right click on channel fader block to set fader level
    • Ctrl-click channel processing block to toggle In/Out
    • Right click on channel name to Copy / Paste / Paste Multiple
      (allows multi-line text to name subsequent channels)
  • High temperature notification for AHM16/32
  • Support of latest AHM hardware following component changes

Fixes
ID1387 Waves cards in the I/O Port would not send or receive audio.
ID1440 Syncing from a 48kHz card in the I/O Port would generate errors in the log.
ID1414 Custom Control Layouts assigned to a Preset range would not recall correctly for the last Preset in the range.
ID1390, 1391, 1407, 1302 Various playback fixes and improvements.
ID1213 Restoring a very large Config file with audio files could cause the unit to crash.
Several other fixes and improvements.

Known Issues
ID1447 SLink cards can stop connecting to GX4816, DX Hub, gigaACE or other SLink ports after updating to V1.40.
ID604 The Custom IP function in a multi-unit Custom Control config can sometimes generate errors in the AHM logs.
ID1094 Changing the number of crossover ways resets the Speaker Processing settings, but not the output level and polarity.

V1.31 January 2023

Maintenance release.

Improvements
• Support of SQ Dante V3 cards.

Fixes
ID1370 The Custom IP function for buttons in Custom Control would not work.
ID1371 IP controller firmware would not update to the correct version when running AHM V1.30.

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**New features**

• Support of Custom Control V1.3 including multi-unit Configs.

⚠️ Due to security improvements, AHM V1.30 firmware and higher will only connect to Custom Control app V1.3.0 or higher. Earlier versions of Custom Control will not connect, displaying an incorrect username / password error. Please ensure you update your Custom Control devices at the same time as / prior to updating the AHM processor.

**Improvements**

• Email Notification settings (with the exception of password) are now included in Configs.

Fixes
ID1352 Outputs were unmuted on power up before a Startup Preset was fully recalled.
ID1320 AHM System Manager in Offline mode could hang when recalling a Preset with an mp3 track playback assigned.
ID1345 The Auto dim function for IP controllers would sometimes not work after a reboot.

Several other fixes and improvements.

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**New features**

• Ability to disable HTTP web interface for IP controllers.

Fixes
ID1340 The Release function of SoftKeys assigned to the AHM-16 and AHM-32 could sometimes be triggered on start-up.
ID1315 Setting a Source Selector fade time lower than 80ms could cause noise upon recall.
ID1308 Under very rare circumstances, some output channels would not pass audio correctly after start-up.
ID1288  Certain delay settings would incorrectly cause extra latency on AHM-16 and AHM-32.

ID1298, ID1293, ID1246  Several fixes to email notifications.

ID1289  Some GPO functions would not display correctly in System Manager.

V1.21 includes support of latest DX168 hardware following component changes.

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**New features**

- Support of AHM-16 and AHM-32
- Support of MADI and SLink card
- Email notifications
- Polarity control for crossover outputs
- User Libraries for all channel processing blocks
- Ability to import/export Libraries
- Auto dim option for IP controllers

**Improvements**

- Speaker processing settings now stored and recallable in Presets.
- IP control commands for Presets can now contain up to 1,000 bytes.
- Icons added to Preset list for external/IP control, audio playback, embedded recall, and warning icon when nothing selected in the Recall Scope.
- Mac address of the unit now displayed in the Status screen.
- ESC closes processing window.

**Fixes**

ID1143  Events scheduled for midnight would not start.

ID1250  The value for an external control Set Level message was inconsistent with the value returned by the Get Level message.

ID1107  External control commands assigned to IP controllers would not validate hex strings correctly.

ID1029  Cascade/redundant mode was not displayed for DX164-W and DX012 devices.

ID1001  Issues with firmware update of multiple DX expanders connected to a DX Hub.

ID975  The meters in the AEC Insert screen were under-reading.

ID1009  Unsupported SQ Dante V1 cards were incorrectly recognised as a valid option card.

ID1109  Level sensing functions would sometimes cause errors when restoring a Config.

ID1156  External control messages for levels could apply level values greater than 7F.

Several other fixes and improvements.
Known Issues

ID1094 Changing the number of crossover ways resets the Speaker Processing settings, but not the output level and polarity.

V1.12 February 2022

Maintenance release.

Fixes

ID1139 Compressor and gate sidechain were not reset correctly after a Zone configuration or Input stereo configuration change.

ID1101 Priority Input ducker settings were not stored in Config files.

ID1161 TCP control of Control Group level increment/decrement could apply the wrong level to a Group.

ID1180 Recalling a Preset with a crossfade time set for AEC Sound Reinforcement outputs could crash the AHM processor.

V1.12 includes support of latest DX012 hardware following component changes.

V1.11 December 2021

Maintenance release.

Fixes

ID753 IP Controllers could erroneously display information about the Shift function when not in Shift mode.

ID1013, ID1014 Issues with remote Embedded Recalls between units.

ID931 Accessing socket settings for a DX012 in the Assign screen could crash AHM System Manager.

ID942 Recall Scope for AEC Sound Reinforcement output assignments, levels and mutes was not set correctly.

ID1070 Removing the AEC module could sometimes cause System Manager to crash.

ID926 GPI controls could stop working after a power cycle.

ID914 The effective range of Digital Trim was erroneously limited to -24dB to +18dB.

ID812 A DX expander connected to a GX4816 could fail to auto update firmware.

Several other fixes and improvements, including support of latest DX164-W, DX32, AR2412, AR84 and AB168 hardware following component changes.

V1.10 July 2021

Feature release.

New features

- Support of AEC expansion module (M-AHM-64-A)
- External control and IP control:
TCP / UDP messages from SoftKey / GPI

- Custom IP strings can be entered as ASCII or decimal
- Custom External Control strings can be entered as decimal
- External Control TCP protocol additions
  - Preamp Gain, Pad and 48V
  - Digital Trim
  - Get Source Selector state
  - Get Last Recalled Preset
  - Get channel name and colour

- Static LED / GPO function
- Notch filters added to PEQ
- Option to store audio files and Custom Control Config as part of the AHM Config.
- Embedded Preset recalls:
  - Option to track embedded recalls
  - Enter target unit by IP address
- Support of latest AHM-64 and GX4816 hardware following component changes
- DNS settings added to Network setup

**Improvements**

- Priority Inputs
  - Ducking now affects Zone to Zone as well as Input to Zone
  - Gain reduction meter added
- Use of System Manager restricted to Admin user
- Several Help improvements including a contextual Help button
- More accurate real time clock
- JP1 On warning added to AHM System Manager

**Fixes**

ID658  An active ANC at the moment of restoring a Config could result in the Zone output level not recalled correctly.

ID786  The I/O Port Network Bridge state was accidentally stored and recalled in Presets and Configs.

ID735  A Preset recall assigned to an IP Controller in Offline mode could crash AHM System Manager if the Preset name was too long.

ID63  SLink sockets did not have valid / invalid indication in the input source window.

ID445  I/O Port inputs and outputs did not have valid / invalid indication in the Assign screen.

ID604  Adding multiple Control Groups to a channel could cause audio artefacts.

ID696  Sample rate options were missing for DX32 digital outputs.

ID652, 655, 735  Several issues related to offline connection of IP Controllers.

ID674, 718  Several issues related to IP Controllers and Source Selector.

ID641  IP Controllers would not update correctly after an Input Stereos configuration change.

ID649  Under certain circumstances, Presets could show incorrect Recall Scope parameters and cause errors in the Logs.

ID622  The TLS secure port would stop responding after 30 connection/disconnection events.
Lost TCP connections would cause other TCP and TLS sockets to stop responding.

The Monitor Point indication at the bottom of the screen would sometimes not update correctly after a Zones Configuration change.

A jumper reset would not reset the TCP External Control security settings.

Changes to Subnet mask or Gateway settings would not apply unless IP address or DHCP settings were also changed.

Channel names were not displayed in the Assign / Direct Out screen.

Several other fixes and improvements.

Known Issues

A DX expander connected to a GX4816 might be labelled in the System Manager software as ‘DX4’ and fail to auto update firmware.

The effective range of Digital Trim is erroneously limited to +18dB although the control correctly operates to +24dB.

V1.03 March 2021

Maintenance release.

New features

- Support of latest DX168 hardware following component changes.

Fixes

On some units, the Real-Time Clock would not remember date and time.

The Last Recalled Preset would not update with the recall of the Startup Preset.

Recalling a Preset would sometimes cause the level of a Zone to drop to the minimum level set in the ANC.

Wrong level displayed on IP controllers when duplicate channels are assigned.

Input Stereo configuration changes could apply the incorrect On level in Source Selectors.

Speaker Processing would sometimes display an incorrect state after a Zone Stereo configuration change.

Audio clicks could be heard on the monitor output when moving between some processing blocks.

Hot-plugging a dSnake AB168 or AR84 expander connected to an AR2412 could result in the AB168 / AR84 expander not working correctly.

The IP6 'View' button was not displayed in the IP Controller setup and simulator.

Several other fixes and improvements.
Known Issues

ID52 A DX expander connected to a GX4816 might be labelled in the System Manager software as ‘DX4’.

ID658 Active ANC at the moment of restoring a Config might result in the Zone output levels not recalled correctly. Recalling the Config a second time corrects the levels.

V1.02 September 2020

Maintenance release.

Fixes

ID671 Speaker Processing settings were incorrectly stored in Zone Libraries.

ID675 IP Controllers assigned to a Source Selector could sometimes get multiple controls linked.

ID635 Sometimes output levels were not recalled correctly after a Config restore, if the stereo settings were changed.

ID647 Clicking on the Control Group names or Crosspoint Zone destination names in the Assign screen, while holding down Shift+Ctrl / Shift+cmd, could cause System Manager to crash.

ID691 Zone selection would not work for certain level sensing functions.

ID611, 676 Fixes to Monitor point behaviour.

ID667, 647, 608 Several fixes to block assignments in the Assign screen.

ID603, 615, 636 Input and Control Group names would not update correctly in some screens.

ID89, 701, 703 Several fixes to gate and compressor sidechain related to stereo configuration.

Several other fixes and improvements.

V1.00 July 2020

This was the first public release of AHM-64 firmware and System Manager software.

System Manager system requirements

Minimum system requirements:

- Resolution 1280x960
- 250MB free disk space
- 2GB RAM (4GB recommended)
- 2GHz Dual Core processor