

4 Channel Digital Audio Processor - Multi Edition Image
 Applicable for D*AP4 FLX and D*AP4 LM Edition

Version 4.0.2 _____ 2016-09-12 _____

Changes:

- fixed (*System*) issue when the NTP server synchronization is set to higher than 1 minutes
- improved (*Audio*) Fail Over maximum fail wait and return times increased to 120 seconds

Version 4.0.1 _____ 2016-07-15 _____

Corresponding minimum software versions:

Remote Panel X*AP RM1	35375	X*AP RM1
J*AM - Jünger Application Manager	2.9.24	J*AM
Dante interface board DT-100	1.0.3.7	O_DAP_DANTE_a
Firmware	7.0.0.0	
Module Software	3.7.0	
Module MB App	1.0.3	
MADI interface board MX-164	9.0.0.0	O_DAP_MB_a
		O_DAP_MO_xx_a
SDI interface board SDI-150	51.0.0.0	O_DAP_SDI_a
AES interface board DD-188A	7.0.0.0	O_DAP_AES_a

Changes:

- improved (*Web UI*) minor FM Conditioner naming consistency
- fixed (*Audio*) FM Conditioner, Pre-Emphases Limiter overreaction on negative Setup Gain in rare cases

Known issues:

- A red status bar is showing a backup while J*AM software is connecting to the device. This happens because the software cannot distinguish between a user initiated backup and the status data that is retrieved by J*AM.
 Workaround: Just ignore this message

Version 4.0.0 _____ 2016-06-22 _____

Corresponding minimum software versions:

Remote Panel X*AP RM1	35375	X*AP RM1
J*AM - Jünger Application Manager	2.9.10	J*AM
Dante interface board DT-100	1.0.3.7	O_DAP_DANTE_a
Firmware	7.0.0.0	
Module Software	3.7.0	
Module MB App	1.0.3	
MADI interface board MX-164	9.0.0.0	O_DAP_MB_a
		O_DAP_MO_xx_a
SDI interface board SDI-150	51.0.0.0	O_DAP_SDI_a
AES interface board DD-188A	7.0.0.0	O_DAP_AES_a

Changes:

- new feature (*Audio*) Level Magic is now equipped with a response boost function that temporarily increases its reaction to incoming high level signals - please refer to the manual for details
- new feature (*Audio*) Level Magics initial response to already normalized audio material was significantly improved
- new feature (*Audio*) Level Magic is now equipped with an automatic Clear Processing History function that resets the system on long periods of disrupted audio. Please note, Below Threshold Mode needs to be set to Release
- new feature (*X*AP*) remote access via X*AP RM1 can now be restricted to certain function sets
- new feature (*Web UI*) important status messages are now shown on a red info bar
- new feature (*Web UI*) preset cleanup function helps deleting unused presets

- new feature (*Mobile UI*) configurable button matrix (please see Mobile UI side menu)
- new feature (*Mobile UI*) functions can now be locked or hidden from Mobile UI via Remote Access control page
- new feature (*System*) the real time clock can now be synchronized to NTP time servers
- improved (*Audio*) manual stereo routing is now carried out simultaneously for both channels
- improved (*Audio*) added ITU 1770-4 mode. This mode equals ITU 1770-3
- improved (*System*) status and front panel display turns red on DSP halt
- improved (*Firmware*) firmware files are internally checked for compatibility before update
- improved (*Factory Defaults*) default settings for the loudness recommendations are up to date again
- improved (*Backup*) added serial number to exported backup file name
- improved (*Web UI*) added comment to latency compensation setup
- improved (*Interface*) AN-108 analog interface stability at higher sample rates
- changed (*Metering*) removed maximum reduction hold function from MPX metering bar graphs
- fixed (*Audio*) True Peak Limiter is now forced to on when FM Conditioner is enabled
- fixed (*Web UI*) problem with reloading login page after a couple of seconds, when authentication is active
- fixed (*Web UI*) problem with occasional appearing script problem in some browsers
- fixed (*Web UI*) rarely occurring Web UI inaccessibility due to system overload
- fixed (*Web UI*) problem when importing single presets in Chrome and Firefox Browsers
- fixed (*Web UI*) Local SDI and MADI Routing now works properly
- fixed (*Web UI*) problem when modifying routings in preset section
- fixed (*Web UI*) black favicon in Internet Explorer
- fixed (*Web UI*) cosmetic problem with fail over preset graphics
- fixed (*Mobile UI*) deleting Hotkeys no longer stops Mobile UI from loading
- fixed (*Measurement*) problem with sorting of both measurement slots after page reload
- fixed (*System*) problem with manual voice over breaking when simultaneously activated via Web UI and Events
- fixed (*System*) occasionally empty system log
- fixed (*Presets*) problem when deleting presets while being loaded
- fixed (*Presets*) empty preset groups are no longer automatically restored to factory settings on reboot

Known issues:

- A red status bar is showing a backup while J*AM software is connecting to the device. This happens because the software cannot distinguish between a user initiated backup and the status data that is retrieved by J*AM.
 Workaround: Just ignore this message

Version 3.3.2 _____ 2016-03-22 _____

Changes:

- fixed (*Mobile UI*) deleting Hotkeys no longer stops Mobile UI from loading
- fixed (*Presets*) empty preset groups are no longer automatically restored to factory settings on reboot

Version 3.3.1 _____ 2016-01-19 _____

Corresponding minimum software versions:

Remote Panel X*AP RM1	32377	X*AP RM1
J*AM - Jünger Application Manager	2.9.10	J*AM
Dante interface board DT-100	1.0.3.7	O_DAP_DANTE_a
Firmware	7.0.0.0	
Module Software	3.7.0	
Module MB App	1.0.3	
MADI interface board MX-164	7.0.0.0	O_DAP_MB_a
		O_DAP_MO_xx_a
SDI interface board SDI-150	51.0.0.0	O_DAP_SDI_a
AES interface board DD-188A	7.0.0.0	O_DAP_AES_a

Changes:

- fixed (*Measurement*) rarely occurring problem with loudness measurement in Program 2 showing 0.0 LKFS
- fixed (*Dante and MADl*) rarely occurring problem with detection of option boards DT-100 and MX-164 on startup
- fixed (*MADl*) unwanted cpu load with unconnected MADl inputs

Version 3.3.0 _____ 2015-08-14 _____

Corresponding minimum software versions:

Remote Panel X*AP RM1	30314	X*AP RM1
J*AM - Jünger Application Manager	2.8.12	J*AM
Dante interface board DT-100	1.0.3.6	O_DAP_DANTE_a
Firmware	6.0.0.0	
Module Software	3.7.0	
Module MB App	1.0.3	
MADl interface board MX-164	5.0.0.0	O_DAP_MB_a
		O_DAP_MO_xx_a
SDl interface board SDl-150	51.0.0.0	O_DAP_SDl_a
AES interface board DD-188A	7.0.0.0	O_DAP_AES_a

Changes:

- new feature (*Audio*) automatic dual mono switching for incoming single channel signals as part of the failover system
- new feature (*Audio*) voice over functionality can now be triggered manually e.g. by X*AP, Mobile and Web UI or GPI
- new feature (*Firmware*) all option board firmwares are now automatically updated with the main system firmware and kept consistent to avoid any firmware mismatch
- new feature (*Web UI*) measurement setup page
- new feature (*Mobile UI*) functions can now be hidden from Mobile UI via Remote Access control page
- new feature (*X*AP*) remote control via X*AP RM1 is now prepared to restrict access to certain function improved (*Audio*) FM conditioner no longer adds system latency when not licenced
- improved (*Audio*) fail over and auto mono are now synced to assure smooth and glitch free switching between two single ended input signals
- improved (*Audio*) fail over switching remains on the last valid input if both inputs fail
- improved (*Audio*) disabled voice over sources now remain fully muted
- improved (*Audio*) routing handling for removed option boards
- improved (*Web UI*) bypass is now correctly displayed separately for Limiter and FM Conditioner
- improved (*Web UI*) channel naming is now shown in Spectral Signature
- improved (*Web UI*) bootloader version is now shown on firmware page
- improved (*Web UI*) missing presets in preset events are now marked clearly
- improved (*Web UI*) unauthorized logins are now collected into a single system message
- improved (*Web UI*) naming consistency for all input and output parameters
- improved (*Web UI*) preset name display within EQ diagram
- improved (*Web UI*) Spectral Signature expert mode now states the center frequency of each band
- improved (*Web UI*) system status page now features a Diagnostics File download button instead of the export log function
- improved (*Firmware*) incompatible option board firmware is now reported for lower and higher firmware versions
- improved (*Presets*) event and preset settings are now synchronized to avoid loss of changes made right before reboot
- fixed (*Web UI*) possible problem with shifting lines in Firefox 40 and above
- fixed (*Web UI*) menu labels no longer contain local typeset characters unintendedly
- fixed (*Web UI*) problems with metering bars when using Chrome browser and Windows 8
- fixed (*Web UI*) backup restore preset filter is now graphically separated from other restore filter options
- fixed (*Web UI*) Dante input channel 16 now shows correct subscription status
- fixed (*Events*) empty parameter events no longer appear as other event types
- fixed (*Events*) missing triggers can now be removed from actions without problems
- fixed (*Ember+*) possible race conditions for fragmented S101 packets causing VSM studio to crash

- fixed (*Ember+*) memory leak in Ember+ server when sending warning events
- fixed (*Device Front Panel*) problem displaying umlauts and special characters
- fixed (*Backup*) rare problem restoring backup files shortly after reboot or initialization
- fixed (*AES option*) AES option board DD-188A can now be used as system sync source

Version 3.2.0 _____ 2015-05-11 _____

Corresponding minimum software versions:

Remote Panel X*AP RM1:	30008	X*AP RM1
J*AM - Jünger Application Manager:	2.8.12	J*AM
Dante interface board DT-100:	Firmware 5.0.0.0	O_DAP_DANTE_a
	Module Software 3.7.0	
	Module MB App 1.0.3	
MADI interface board MX-164:	5.0.0.0	O_DAP_MB_a
		O_DAP_MO_xx_a
SDI interface board SDI-150:	51.0.0.0	O_DAP_SDI_a
AES interface board DD-188A:	6.0.0.0	O_DAP_AES_a

Changes:

- new feature (*Audio*) D*AP4 now features an optional auto switching Phase Rotator function for audio wave symmetry correction
- new feature (*Audio*) D*AP4 now features a high performance De-Esser derived from classic Jünger Audio De-Esser filtering technology
- new feature (*Audio*) De-Esser now features a sidechain listen function
- new feature (*Audio*) added more factory default presets
- new feature (*Dante*) support for Dante Audio-over-IP Option Board DT-100
- new feature (*Dante*) parameter triggers from Dante network states and audio conditions
- new feature (*MADI*) support for MADI optical/coaxial Option Board MX-164
- new feature (*MADI*) parameter triggers from MADI states and audio conditions
- new feature (*SDI*) redesigned SDI web interface for easy setup, routing and status overview
previous settings are preserved; please become familiar with the new SDI interface after updating!
- new feature (*Firmware*) system firmware now carries all option boards firmware
after updating the system firmware please take a look at the SYSTEM -> Firmware Update page to see whether an option board firmware is available
updating option boards may take a while, please be patient and refer to the Update Guide in the firmware package
- new feature (*Measurement*) measurement events now include MPX measures (if licensed)
- new feature (*Measurement*) MPX Power and MPX Max are now available in the measurement values dropdown
- new feature (*X*AP*) recent measurement results are now available
- new feature (*X*AP*) X*AP operation for D*AP4 FM Conditioner included
X*AP RM1 firmware update necessary!
- new feature (*Web UI*) real time processing latency display
- new feature (*Console*) added ctrl + c command to return to console main menu from submenu
- improved (*Audio*) analog outputs automatically mute on non audio signals
- improved (*Audio*) factory default Loudness Mode is now ITU 1770-3
- improved (*Audio*) Level Magic reaction to high level input signals when using Fast Recovery mode
- improved (*Audio*) processing latency display now includes routing delay of three samples
- improved (*System*) import of backup files created from older LM4 devices
- improved (*Dante*) Dante Sync Source display shows detailed info about *AP sync source
- improved (*Dante*) channel status detects all SMPTE non-audio types
- improved (*Measurement*) FM Conditioner graph time range is now stored for all browser sessions individually (multi user)
- improved (*Measurement*) MPX User Integration Time can be set for both programs independently
- improved (*Measurement*) metering data is not displayed (instead -/- is shown) until their values become valid
- improved (*Web UI*) Processing Profiles are now named equally in all applicable processors

- improved (*Web UI*) added Profiles headline to preset events for better intelligibility
- improved (*Web UI*) Voice Over block diagram for better intelligibility of signal flow
- improved (*Web UI*) Overwritten by FM Conditioner tooltip is shown in Limiter section
- improved (*Web UI*) minor graphic and naming consistency issues with Level Magic
- improved (*Web UI*) naming consistency for all input and output parameters
- improved (*Web UI*) input filters now have sliders instead of dropdowns like all other filters
- improved (*X*AP*) initial gain and clear history function for Level Magic now adjustable via X*AP
- improved (*Mobile UI*) related graphs are now visually connected by brackets
- improved (*Mobile UI*) user Operator now has access to all Mobile UI functions
- improved (*Mobile UI*) non mobile devices now show standard scroll bars for longer lists
- improved (*Mobile UI*) touch support for iOS devices
- improved (*Mobile UI*) users can now logout manually
- improved (*Mobile UI*) redirect to Mobile UI is now performed before password request preventing double logins
- improved (*Mobile UI*) metering on tablet devices
- improved (*Network*) stability by filtering broadcast and multicast network traffic
- improved (*Presets*) and fine-tuned some parameters within factory default presets and events
- improved (*Events*) audio processor triggers are now hidden for unlicensed processing blocks
- fixed (*Audio*) bypassing Voice Over becomes audible immediately
- fixed (*Web UI*) problem with Spectral Signature real-time graphic display when preset is selected and channels are unlinked
- fixed (*Web UI*) scroll bar problem in routing matrix
- fixed (*Web UI*) minor glitches in web interface graphics
- fixed (*Web UI*) graphical problems with routing matrix preset
- fixed (*Web UI*) issue with routing matrix displayed in downscaled browser windows
- fixed (*Web UI*) problem with bouncing mouse wheels when setting parameters to their boundary values
- fixed (*Web UI*) unauthorized changes made by user Operator are now correctly reset to last valid values
- fixed (*Web UI*) inconsistency in equalizer graph operation over independent programs
- fixed (*Web UI*) disappeared EQ curves in Internet Explorer
- fixed (*Web UI*) disappeared spectral signature graph curves and Firefox
- fixed (*Web UI*) problem with swapped channels when operating Spectral Signature and EQ
- fixed (*Web UI*) misplaced backup restore box with long file names
- fixed (*Web UI*) copy and paste operations now work flawlessly in preset events
- fixed (*Web UI*) problem with preset names in Spectral Signature when using Chrome or Internet Explorer
- fixed (*Web UI*) Clear Processing History is now set correctly in presets
- fixed (*Web UI*) minor consistency issues in fail over block diagram
- fixed (*Mobile UI*) occasionally unnecessarily reappearing authentication box
- fixed (*Mobile UI*) active firmware update message is now displayed properly
- fixed (*Measurement*) MPX measures are now shown in dBr
- fixed (*Measurement*) initialization issue in program measurement
- fixed (*System*) problem caused by long term network inactivity
- fixed (*System*) occasionally unavailable web interface although unit remains working normally
- fixed (*Device Front Panel*) monitor metering now shows correct values
- fixed (*Backup*) restoring backup files using Internet Explorer now works flawlessly

Known issues:

- (*MADI*) only sample rates that can be recognized by the system will be displayed correctly
- When updating the units firmware, coming from an earlier version the system may regret recognizing the new firmware file as a valid version. A message may appear stating that the file is not suitable for this unit or the MD5 checksum is wrong. This is caused by a change in firmware file structure and can be avoided by using a basic firmware file prior to updating to the final full version.
 solution: please see the Update Guide pdf provided in the firmware zip file for details
- some audio blocks may not turn grey on bypass (fixed in 3.3.0)
- umlauts and special characters cause problems on device front panel display - this problem is valid for all earlier versions (fixed in 3.3.0)

Version 3.1.0 _____ 2014-12-16 _____

Corresponding software versions:

X*AP:	27922
J*AM - Jünger Application Manager:	2.6.15
SDI interface board:	50

Changes:

- new feature (*Audio*) advanced FM Conditioner algorithm for MPX, Pre-Emphasis and Frequency Deviation control (optional license)
- new feature (*Measurement*) MPX measurement plot and bar graphs with current and recent values (part of FM Conditioner license)
- new feature (*Web UI*) Spectral Signature now offers a 1/f-balanced spectrum display option
- new feature (*Firmware*) all option boards firmwares are now included in the units main firmware file
- improved (*Web UI*) sliders are now updated in realtime (hear changes while dragging the slider)
- improved (*Audio*) additional timing profiles for dynamics and Level Magic
- fixed (*Web UI*) minor problems with audio processor overview
- fixed (*Events*) problems with input selection on Restore Factory Default Settings
- fixed (*Mobile UI*) now works on older Android browsers
- fixed (*Mobile UI*) login now works as operator
- fixed (*Web/Mobile UI*) minor graphical bugs in Web and Mobile UI

Known issues:

- MPX measurement reset in one program may delete recent measurement in the second program (fixed in 3.2.0)
workaround: reset twice in all programs, afterwards it should work as expected
- MPX user integration time is unintendedly independent for both programs (FM Conditioner) (declared as feature!)
workaround: set the same value in both programs
- when logged in as operator, the user is not allowed to load presets in Mobile UI (fixed in 3.2.0)
workaround: deactivate login for Mobile UI operation
- program 2 in audio processor filter is labeled 1L/1R (fixed in 3.2.0)
- X*AP control for FM Conditioner not yet implemented (fixed in 3.2.0)

Version 3.0.2 _____ 2014-06-11 _____

Corresponding software versions:

X*AP:	25105
J*AM - Jünger Application Manager:	2.5.14
SDI interface board:	50

Changes:

- new feature (*Audio*) set of factory presets, events and actions included
- improved (*Web UI*) handling when creating presets
- improved (*Web UI*) notifications for unconfirmed changes
- fixed (*Web UI*) minor glitches and typos in Web UI
- fixed (*Web UI*) error when creating actions
- fixed (*Mobile UI*) problem when entering wrong password
- fixed (*Mobile UI*) status indication on Mobile UI
- fixed (*System*) stability issue when creating a lot of presets in short time
- fixed (*Web UI*) removed triggers in actions no longer reappear when changing web UI page
- fixed (*Web UI*) Web UI remains responsive if backend is blocked by trigger/event/action loop conditions

Version 3.0.0 _____ 2014-04-30 _____

Corresponding software versions:

X*AP:	25105
J*AM - Jünger Application Manager:	2.5.14
SDI interface board:	50

Changes:

- new feature (*Audio*) up to 96 kHz sample rate supported
- new feature (*Audio*) sophisticated sync system with multi-step fail switching
- new feature (*Web UI*) mono routing matrix
- new feature (*Audio*) support for multiple loudness standards
- new feature (*Audio*) input and output delay now supports settings in coarse (milliseconds) and fine (samples) values
- new feature (*Web UI*) full Spectral Signature control with graphical interface via Web UI
- new feature (*Web UI*) 5-band equalizer with graphical user interface
- new feature (*Audio*) filter types for all EQ bands
- new feature (*Web UI*) comprehensive loudness measurement in Web UI
- new feature (*X*AP*) X*AP remote control
- new feature (*Mobile UI*) browser accessible Mobile UI

- improved (*Audio*) Level Magic now features an independent parameter for leveler and limiter processing profile
- improved (*Web UI*) trigger-event-action system