#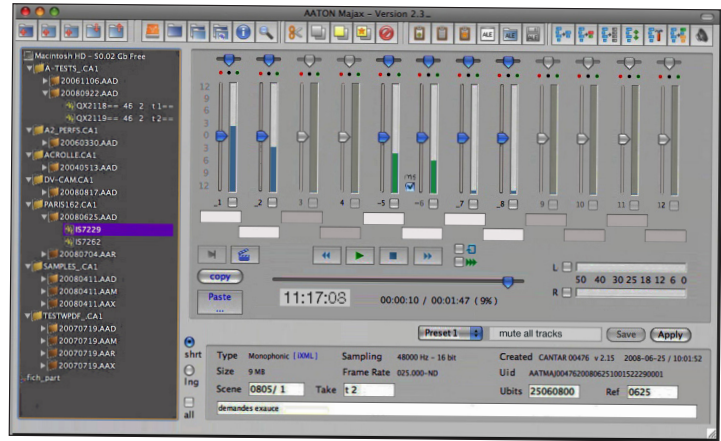 • plays Cantar tracks • interleaves Monos to Polys • edits scenes and track-names • converts WAV to Broadcast WAV• generates PDF sound-reports

Aaton audio: Majax 2.38 (r6)

Works under Mac-OS 10.5 and Win-XP

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Majax performs the many tasks sound recordists and post-production technicians must manage.
• plays ten tracks on a standard laptop audio card.
• seeks Cantar's auto-slate locators.
• edits Scene & Take IDs, track-names and comments.
• embeds metadata modifications into the iXML chunk.
• adjusts pans and levels of the monitoring mix.
• mixes eight monophonic files into two mono or poly files.
• interleaves monophonic file groups into poly files.
• extracts and makes copies of wild tracks.
• generates ALE and PDF sound-reports.
• converts any WAV file into Broadcast-WAV file.

+33 4 7642 9550
cantar@aaton.com

AATON®

Browser/Player

Browser

Two computers can't simultaneously control the same drive, you must 'unmount' the Cantar HDD from the CPU (see TECH.01) before connecting it by FireWire to the Majax host computer.

Aaton's Directory tree

Majax permanently scans the FireWire connected devices. As soon as a drive is connected, it appears in the Majax browser.

For clarity, only Cantar directories "Project.CA1/fulldate. AAD" stored at the drive root level are displayed (read FAQ-2 p.6).

SHAADOWS.CA1	: *Project name. Eight **qwerty only** characters*
2004 01 25.AAD	: *Working day folder of the iso files*
CA3885=A01/12 t4=	: *Filetag + sc&tk descriptor*
2004 01 25.AAX	: *Working day folder for polyphonic files*
CA3885QX	: *Filetag and polyphonic mix suffix*

Checking the upper left box '**Enable browse in all directories**' lets Majax access Cantar files wherever they are stored on the drives; clicking (42) shows the first subfolder level. Clicking (43) opens the file level. Whatever the number of tracks in a take, one filetag represents them all. The iso track rank appears in (26).
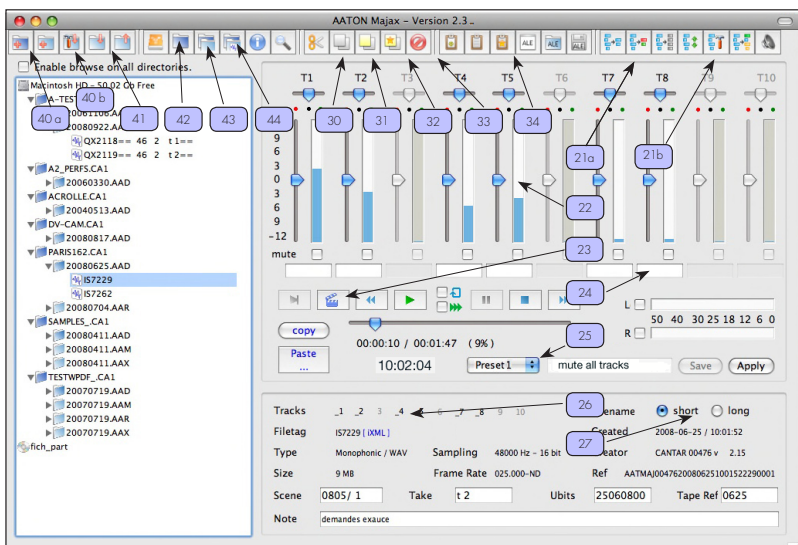

Read-only media import

To copy Cantar files from a read-only media (CD/DVD) to the Majax host PC hard drive, do not use the computer desktop tools which would also copy the *read-only tags* attached to the media, preventing their later editing; only use the Majax browser. Press [ctrl] [C] or [apple] [C] on the CD 'Project' folder, highlight the folder where you want to store the files, then [ctrl] [V] or [apple] [V]. If the files do not show in the Majax browser, click the 'disk refresh' icon (41) (see FAQ-2 p.6).

Wild sound extraction

To extract and copy wild tracks on the laptop HDD, (the ones 'w' stamped by Cantar or Majax), first click [40a]
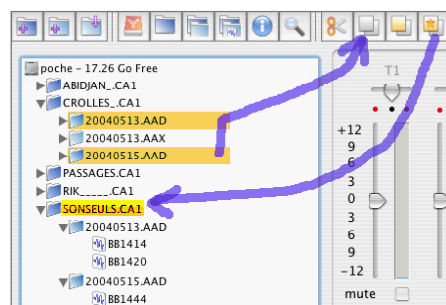
and create a project using qwerty only characters, e.g. WILDTR.CA1. Highlight the day folders from where you want to extract the w takes, [Apple•C] to copy them. Hilite the WILDTR. CA1 project and click the [31] 'Paste Wild Sound' icon. Alternatively to copy wild tracks onto an ext. drive, hilite the Project, click [30] and select the external drive target.

Adjustable player

To play a *monophonic* group (up to ten tracks together), either double click its filetag in the browser, or click the play button, or press the keyboard space bar. To be compatible with all audio cards, the output is 16bit truncated. If there is no sound out, click the tool bar loudspeaker icon and select 'audio card' (not 'modem'). If you still can't get sound out of a Mac-Intel, read FAQ-1 p.6. The white background modulometers show the recorded iso tracks. Faders [22] control the play level to the loudspeakers. The solo of each track is (de)activated by clicking its modulometer which turns red; you can also use the F1 to F8 keys (see 'Shortcuts', p.6). To monitor several solos together, read FAQ-12, p.6. Each iso track can be L/R paned, ±12dB adjusted, or muted. These settings are stored in an *.idg file* associated with the group and recorded on the computer root drive. Each time a DVD/CD is reintroduced, the audio files find their *.idg* settings which are reactivated for playback. When a project is copied onto a new media, its .idg files are copied as well.

Note: all of the above is not applicable to Polyphonics; the track modulometers appear on a grey background.

Metadata

Play presets

Seven 'gain–pan–mute' settings can be stored in the '*Preset*' menu [25]. Set them by using an actual audio recording or the Majax 'all track file' [21b]. Give them a name, and '*Save*'. You can later apply these presets to any other file(s) by clicking Crtl+Fn.
Select '*Default*' and '*Apply*' to put back the gains to 0 dB, to re-center the pans and uncheck the mute boxes.

MS pairs

The odd track carries the M (Mitte/Mid) channel, the even track the S (Seiten/Side). The pan buttons being centered, the pair is decoded as stereo: M+S goes to the left, M-S to the right. If the M channel is paned to L or R, the S channel is muted.

Metadata modification

Editing

Majax displays the metadata stored in each file: sample rate, scene & take, comments, track-names, etc. The [Tab] key browses the editable fields [24]. Use the 'track-name list manager' found in the toolbar 'Tools' to add, edit or delete track-names.

Rewritable media

Metadata editing should be performed on files stored on SSD, HDD or DVD-RAM re-recordable medias. If you edit read-only DVD files, the modified fields will appear in red to remind you that while the 'sound-report' carries your corrections, the metadata stored in the audio file iXML chunk doesn't.
Because of OS-X, Majax on Mac can't modify UDF formatted DVD-Ram disks. You must use FAT32 formatted DVD-RAM; if you work from a Mac laptop you must use the Cantar internal DVD-RAM burner after 'unmounting' it from the CPU in Cantar's TECHSET.01 position.

iXML upgrade

Files recorded under the early BWF format only had the Bext chunk to store user's metadata, Majax can update them to the latest iXML standard. The early v1.40 iXML should also be upgraded to the current v1.50a level in order to store the Rec&Play data. To trigger this update, click 'Bext to iXML' in *Tools*. You can batch select all the files of a day and convert them in one go.

Batch editing

To modify a batch of files, first highlight the desired ones in the browser, and edit the first one. Examples:
–To write an actor name into a given track of a set of files, select the master file, click [copy], then highlight the file batch and clik [paste]. *Already entered track-names are overwritten in the process.*

–To attach the scene & take IDs with the filetags to offer explicit filenames to the editors, select 'long' with the [27] buttons.
–To batch modify the audio 'Tape Ref' and make it identical to the video 'Reel ID', read FAQ-9 p.6.
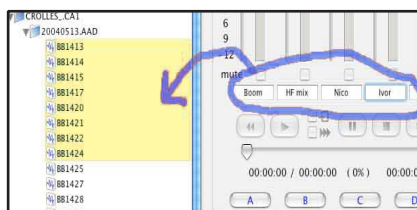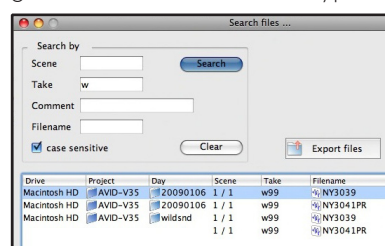

note: since the scene & take IDs are by their nature 'one- take-only' items, they can't be batch treated.

Event sorting

Highlight a Project (or a day, or several days by [Apple Click]) in the browser window, then click on the [44] magnifier icon.
For example, to extract the **wild tracks** of a project and gather them in one folder*, type 'w' in the '*Search by/Take*' field, click '*search*' and up pops a list of files carrying the 'w' descriptor (a double click on the filetag directly opens the file in the main screen).

Highlight all the filetags to copy, and click '*Export file*'. In the popup menu, select the folder in which you want them to be stored.
*For Majax to see this folder, it must be in a Cantar tree structure, i.e. PROJECT.CA1 / NAME.AAD. It is suggested to create it first as WILD-SND.AAD in the PROJECT.CA1 folder.

Library construction

To view the metadata associated with each take (comments, actors' names etc.), use the 'iXML viewer' in the tool box; hilite the track-1 screen, copy and paste its content into a TextEdit application: you are constructing a very complete sound library database that any fuzzy-logic search engine will easily exploit. This saves you hours in documenting your files with the pre-established grids of a criteria-oriented database.
Note: under MAC-OS 10.5.x, you must first [Ctrl click] within the iXML popup screen to get a 'Select all' menu ([Apple A] doesn't work, and there is no highlighting of the content), clik it, then [Apple C] to copy the whole iXML screen.

Mix, Rotate, Convert

MixDown

Monophonic mixdown
Cantar made mixdown tracks appear in orange and are '#' labeled. You should mute these tracks when performing a new mix on Majax, recorded on tracks T9 and T10. Click 'MixDown' in the [21] fields to apply the templates previously set in Play. The list of files to be remixed is on the left of the 'check mix settings' menu; levels and pans of the highlighted file are on the right. 'Mix Mono 9/10' stores the mix as a pair of iso tracks in the original .AAD folder. Placed before the channel rank, the '#' sign flags these files. For the mix to include sync-sound takes only, not the 'w' marked takes, check the box 'Exclude Wild Sound' [15].

Stereo mixdown
1–Click the Majax 'all tracks' icon [21b]. 2–Check the T1~T6 Mute boxes. 3–Pan T7 to the Left, T8 to the right. 4–Click on the drop-down Preset menu, select 'Preset-2', name it 'Stereo mixdown', then 'Save'. 5–Highlight the
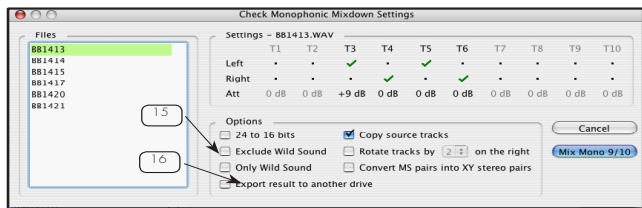
rest of the file groups in the Day Folder. 6–Select 'Preset-2' then 'Apply': all of the files have T1~T6 muted, and T7-T8 panned L/R. 7–Click the "Mixdown Poly" icon [21] in the menu bar. 8–Click "Mix Poly L/R", (select 16-bit truncation for vintage Avid Composers).
An MX suffixed file is stored in an .AAX folder carrying the same date as the .AAD multi-mono folder; it can be directly sent to another drive.

Non-recordable media
The mixdown must be sent to a rewritable media; if the monophonic files are carried on a non recordable media, Majax asks for a recordable one.

BWF file's Riff header correction
To repair a poly-mix in which the volume of the Riff header prevents Avid to use it, click 'Tools' and 'Check RIFF'. Select the whole day, it is a matter of seconds.

Track 'status' modification: select a file and click the status change: MS into Mono, Mono into Mix, etc.
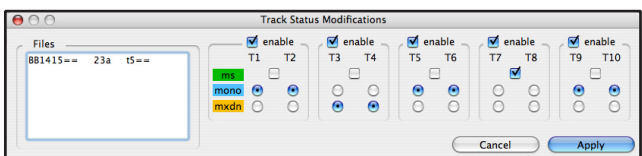
Track Rotate

To rotate iso tracks, highlight the files to be 'rotated'. Most often, *one* rank to put the T8 mix track in T1 position, or *two* ranks for T7-T8 to go to T1-T2. Click the 'rotate' icon in the [21] fields.

Monos to polys

Hilite the files to be interleaved and click 'Poly' in the [21] fields. A polyphonic file always embeds track pairs; to keep the sound report accurate, an empty track is created where an iso track is missing, e.g. isos 1, 3, 4, 5 give birth to a poly 1, 2, 3, 4, 5, 6 in which tracks 2 and 6 carry zeros only. (As said elsewhere, Poly is a nuisance!)
note1: For vintage Avid MCs which can only handle 2, 4 and 8 track poly files, Majax can add two empty tracks (7 & 8) to a six track recording. Deactivate the default "6 track forced to 8" setting if you are using recent Avid MCs software.
note2: Poly files are stored in an .AAX folder carrying the same date as the original .AAD multi-mono folder. The file suffixes are of two types: **SN** (AT1254**S8**.wav) is attached to a file made of N iso tracks interleaved into a single poly. **PX** (AT1254**PX**.wav) is attached to a file made of the interleaved Xa & Xb mixer outputs used for telecine rushes, basic editing, and playback on consumer machines.

WAV to B-WAV

Majax converts consumer WAV and Broadcast-WAV files coming from any professional recorder into Cantar-playable *monophonic* files carrying the sorting Filetag, the TC and sample stamps, plus all the iXML metadata fields of Cantar originated files.
Majax extracts the TC and frame rate from the original recording; if there is none, i.e. consumer WAV, Majax applies the host computer time or operator's keyed TC; metadata (scene & take IDs, track names, comments, etc.) can be edited or added later, the Majax way.
Instructions: first highlight a Project/Day target folder, then click the 'hammer tool' (40b) to open a browser letting you select the file(s) to be converted then stored in this folder; they receive a '2M' prefixed filetag starting at 2M0001 (with or without the sc&tk IDs); their original filename is kept and displayed in the 'comments' field.
Note: to first convert compressed audio files e.g. **MP3** or **FLAC** into 48kHz consumer WAV files, use www.dekorte. com/projects/shareware/SoundConverter/

Burning disks

The polyphonic files being gathered into AAX subfolders, drag them into the DVD/CD burner software of your laptop.

Sound Report & Ale

PDF sound report
Template
Several templates can be created [new], and selected [load]. Button [32] opens a default template made of *Headers'* and *Takes'* domains. Mobile frames can be dragged and droped from one place to the other within its domain *(it takes up to 3 sec. for a drag&droped frame to appear)*. To delete a frame, just drop it outside its domain.

The Import and Export buttons transport templates between Mac and PC desktops. Template files appear as nnnn-.xml.
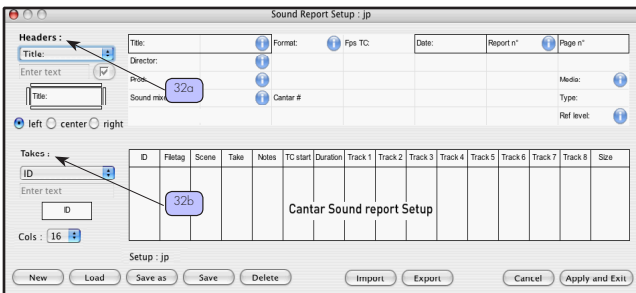

• Headers' domain [32a]
It carries the permanent data of the recording session. The blue (i) icon flagged frames are fed by the 'properties' menu [43].

Video ALE settings [43a] carry the camera fps and the video standard used for the proper digitization of the tapes.

The *Project properties* [43b] carry the film title, director and recordist names, etc., accessible by clicking the top of the screen (i) button while the .CA1 project folder is highlited. The *Working day* data [43c] is accessible by clicking the top of the screen (i) button while the .AAD day folder is highlited.

note: the Headers' domain lets you put some technical parameters which belong to the Takes' domain such as sample rate, bit depth, etc. which would clutter it for nothing since they do not change during a full session.
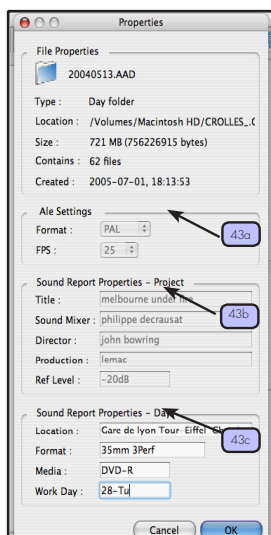
• Takes' domain [32b]
This domain carries the frames showing the dynamic data generated by Cantar (such as 'Freq' for sampling frequency, 'Tape' for tape/roll ID, Filetags, Start-TC, Duration, Size) or entered by the sound recordist himself (such as notes, track names, etc.).

As your best protection against error prone 'blind' corrections, modifications can be entered on opened files only. Majax operators are strongly invited to listen to the slates (23) and recognize actor's voice in solo mode (clicking a track level meter makes it solo and turns the meter red) before altering the Cantar given track-names.

Sync-sound report
Button [33] opens the sound-report builder. Like a handmade sound report, each page carries a complete header. Click [Export PDF] to save it as a .pdf in the Day folder of the .CA1 project at the disc root. It can be emailed to the post-facility or hard printed.

Gathering days Use the "Combine PDFs" freeware www.versiontracker.com/dyn/moreinfo/macosx/20286 to gather several days in one pdf document only.

PDF Printing Some printers can't print Mac-Majax generated .pdf files. Open them with the Mac Preview/ Aperçu app. (not with Adobe Reader nor Acrobat), and print them from there.

Wild-sound report
Clicking the right side sound report button extracts the 'w' marked takes and gather them in a different folder. SHADOWS-20060428-AAD_W_.pdf

ALE List
An ALE list can be built [34]. The 'description' column carries the track-names in slash-delimited spaces :
/ boom / RFmix / _ / james / paul / x / m river / s river / ; where (_) is a non recorded track and (x) a non entered trackname. The video-format and camera fps headers can be edited in 'Project info-properties' [43a].

Gathering all the project ALEs then sorting them by Scene ID is easy to do with BBEdit or MS Excell.

Q1: Impossible to get sound out of my Mac-Intel.
A: In the Mac Root disk –> Library –> Preferences, delete the file 'com.AATON.Majax.plist'. If you reopen the menu in which you see 'Built-in Mic', get out by [Cancel].

Q2: Majax can't see my audio files.
A: Click the refresh button [41]. If they still don't show, it is because they are not in a **'Project .CA1/Day .AAD'** tree. You must create or use an existing Cantar tree directory structure [40] to store them. Checking the left upper corner box displays of all your computer's folders in which you can store Cantar tree structured folders.
If Majax still can't see the files, it means it is unable to uncheck the Windows-XP default setting (50) which hides known extensions (.wav). Do it manually in Windows 'tools'.

Uncheck (50) in 'tools/folder options/view'

Q3: I can't edit CD files copied to the Majax HDD.
A: You probably made your copy with Windows-XP which keeps the files with their 'read-only' tags. Redo the copy by Copy/Paste within the Majax browser.

Q4: Can Majax modify Scene & Take IDs on files stored on the Cantar HDD or DVD-RAM drive?
A: First unmount these disks out of the Cantar CPU control but leave them powered by the Cantar on-board batteries (see Cantar TECH-01 'unmount'). Connect Majax through Firewire. As long as you do not activate the 'long names' option, all is OK. *MacOS-X is unable to edit a UDF formatted DVD-RAM; installl the 'WriteUDF' plugin by Soft-Arch. Or Run Majax under Windows-XP.*

Q5: Can Majax log slates like the Aaton IndawPass?
A: No, but thanks to Cantar's AutoSlate, they are already located! Click the slate icon (23) to go to the slate, listen to the announce, and correct the Sc&Tk IDs. The Indaw operator will only have to verify that the slate marks are laid down in the right place.

Q6: Compared to OMF export, conformation with an audio EDL is not sample accurate and takes hours.
A: It *was* inaccurate and time consuming with DAT tapes (one to two day conforming was usual). Now with a Mac-Book controlling a 120GB disk carrying six track audio files, and fed with a two hour worth audio EDL, Titan-3 builds a complete Protools session in less than six minutes! Furthermore, if necessary, Titan-FixSync ensures multitrack syncing with audio-sample accuracy.

Q7: I can't read the BWF timecode on Protools.
A: During import, while you move your audio files from the input bin to the Protools timeline, switch to 'spot mode', a menu opens, select 'go to original time stamps'.

Q8: BWF files can't be exported to Avid v7/Mac-OS9.
A: They must be BWF-to-OMF converted. Read 'Cantar Post Chain' on www.soft.aaton.com/swcantar/ and download the free AtonXfer app. from there. Installed on the Mac-OS9 host computer, AtonXfer converts Aaton files. only

Q9: How can I conform Cantar files to the videotape audio tracks using their common TC?
A: Use Titan3. Verify that your audio file 'TapeRef' (e.g. 0722 for July 22) match the first four characters of the Tape/Roll ID of the corresponding video tape , e.g. 0722A4 for July 22, camera A, 4th cassette in this camera for this day (see Cantar Post Chain).
A very fast operation knowing that Cantar files are sorted by working day in which a few video tapes are recorded. In the browser menu, highlight the audio files* which have been recorded alongwith the video tape 0722A4 then key in 0722 in the TapeRef field botton right of the screen. Do the same with the audio files recorded with the video tape 0722B2 (camera B, second cassette), etc. For your peace of mind, check at random that the files are correctly labeled.
* [click] on the first file of the desired list, then [shift clik] on the last one, they all become highlighted.
Change the TapeRef, it will be applied to the selected ones.

**Q10: I create a project for wild tracks, Majax crashes.**
A: You probably are keying accentuated letters, only use **qwerty** characters.

Q11: My printer can't print Mac-Majax's .pdf.
A: Open your reports with 'Preview' (Aperçu) , not Adobe Reader, nor Acrobat, and print them from 'Preview'.

Q12: How can I listen to 'additive' solos?
A: First Apply the 'all mute' Preset-1 (p.2) to your file(s), then successively activate the tracks you want to hear by unchecking their mute box with a mouse click or the keyboard Fn buttons.
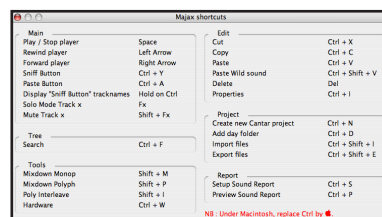
Shortcuts
They are described in the shortcut menu opened with the toolbar 'Help' button.

Software Versions

Version 2.38 Feb. 2009
- All WAV files can be converted (Filetag, TC, metadata) into Cantar «Rec&Play» compatible iso files. - Files contained in a Cantar tree directory can be played wherever their folder/subfolder is on the disc (no longer at the root) by checking 'Enable browse in all directories'.

Version 2.34 Jan. 2008
- Files carrying Majax made trackname modifications are interpreted by the Cantar PDF generator. - iXML 1.50a handles REC&PLAY parameters.

Version 2.33 Dec. 2006
- Handles Autoslates locators and correlated iXML metadata. - Operator triggered Autoslate TC appears in black, while self-triggered Autoslates appear in gray in the PDF sound-report. - Accepts poly-rotated files generated by Cantar. - A 'User TapeRef' field is added into the sound-report header.

Version 2.30 Aug. 2006
- The TC-end exact frame calculation and display no longer depends upon the operator entered ALE header but from the combination of the three root sample rates (iXML v1.5) stored in each individual file.

Version 2.27 April 2006
- Universal binary compiled Majax natively runs in Intel powered Macs. - Blank spaces ahead of the Scene ID are erased to help ALE sorting in speadsheet applications.

Version 2.24
- Bext to iXML v1.4 converter inserts an XML meradata chunk in the files; the 'BEXT to iXML' conversion and insertion of pre-iXML files should be done after the sc&tk, comments and trackname modifications have been completed on all files. The process can be batch performed on all hilited files of a working day. - An 'iXML viewer' in the tool box opens a frame in which the iXML content of each track can be verified and mouse hilited then copied in a spreadsheet for sound library management.

Version 2.21   Oct. 2005
- Compiled for Mac-OS 10.4.2 Tiger. - Trackname manager (tools menu) deletes/preloads tracknames used in the open project. - while on an activated trackname field, the vertical arrows show the list of stored tracknames. - Ctrl-C / Ctrl-V to copy/paste track names.

- The Copy-Names button catches all the tracknames of the opened file; the Paste button apply them to the hilited file(s). Shortcut: CtrlY to copy, Ctrl-A to paste; Ctrl shows the library of already stored names. - The search window is kept active while the operator performs other jobs and is instantly recalled. - Double click on a found file directly opens it in the Majax main screen. - Search by filetags is activated.   - Direct export of found files to a folder. - Case sensitive search. - A multitrack group individual track can be erased ('track status' tool). - The Track Presets can be described, and Copy/Paste operations are easier. - The project-name is added to the day in the pdf report filenames to avoid same day/different jobs overwriting;   wild sound report folder is labeled .AAD-W. - Paste Wild Sound no longer opens a folder if there is no wildsound in it, the day metadata goes with wild sounds too. - A window of all shortcuts is added in the help menu.- A file export button is available in the menu bar.

Version 2.19
- The PDF sound report is created by Majax for both Mac & Win OS; this .pdf file is stored close to its working day folder in the Project directory tree at the HDD root. - Up to 40 char. notes show in the Majax note field and in pdf (truncated in the preview screen only). - A track-status button to change the track 'type', e.g. MS into Mono, or Mono to Mix etc. - Solo track monitoring is activated by clicking the track bargraph or F1-F8 keys (laptops Fn + F1 to F8), bargraph turns red. - Mute is activated by Shift + F1 to F8 keys (laptops Fn + Shift + F1 to F8). - Track-names entered while playing tracks in solo. - Track-names stored in both iXML and the ALE 'description' col.   - Track-names completed by already used names. - Track names from file n-1 are previewed in green by [Option] on Macs, and by [CTRL] on PCs. - Track name batch spread : a copy button applies the file n-1 track names to the files n to n+m.
- No more [edit] button, a mouse click in a field opens editing, TAB scrolls / opens all editable fields. - No more [edit-out]. Quitting stores modifications. - PAL/NTSC and fps of cameras can be entered in the Project 'info-properties' menu.

Ray Mc Owen's last review: v2.37 (r3), 2009 Jan.27