

# Axial/MX

THE WINNING COMBINATION  
FOR THE HYBRID ONLINE SUITE



# Abekas

# AXIAL<sup>®</sup>/MX ... Editor's Choice

Maintaining a competitive edge in the on-line editing environment demands speed, sophistication, power and flexibility. With Axial/MX you have the power to interface and edit with today's High Definition (HD) gear and the flexibility to switch back to Standard Definition (SD) at any time. Designed in a sleek, compact chassis, Axial/MX combines all of the editing capabilities and features found in the industry-standard Axial 3000, into a system which is capable of visual editing in SD and all common HD formats, including 24P. Providing maximum performance for today's hybrid tape/disk, SD/HD, non-linear/on-line edit suite, Axial/MX's superior device control, auto-caching, auto-assembly, slow motion effects, visual editing and RAVE provides unrivaled control to every on-line operator, making this baby the Editors' Choice.

While real-time DDRs can greatly enhance the post-production process, most television material that starts on tape, ends up on tape. With the emergence of HD, there are many new tape formats. Tape simply holds more data at a drastically lower cost-per-minute and in much less physical space than any other medium, especially hard or removable disk drives. So let's face it, various formats of tape will still be an integral part of post-production for many years to come. DDRs can speed up most on-line work, but single-stream digitizing of all material often introduces inefficiency into an already complex post-production process. For a lot of on-line work, it simply doesn't make sense to put everything on disk before starting work. Enter Axial/MX's UN-Linear editing solutions.

Long recognized as the leading on-line editing system worldwide, and having introduced RAVE, the first non-linear editing solution for the traditional on-line suite, Axial/MX editors are "disk-smart". Its use of DDRs ranges from automatic background caching to full-throttle non-linear editing, all within the hybrid VTR/DDR on-line environment. You don't have to choose between "linear" or "non-linear". With Axial/MX you work UN-Linear, using VTRs or DDRs as the job dictates – all with the full power of your existing on-line suite. It is the only on-line editing system that edits comfortably in both linear and non-linear environments – you choose the style of work that best fits the job. Axial/MX is the UN-Linear solution that offers the best of both worlds for today's hybrid tape/disk on-line edit suite.

## EXPERIENCE VISUAL EDITING IN SD OR HD

Edit more intuitively. Use the Live Video option to see live and still video images on the Axial/MX screen. Visual editing offers quicker, more intelligent edit decisions, rather than relying on timecode lists. And Axial/MX's video windows will pass video in either SD or HD. The Serial Digital Interface (SDI) handles SD video in NTSC and PAL as well as HD video in interlaced (i), progressive (p) and progressive segmented (psf) formats. The windows are sized at normal SD (720X486) format with HD pictures letterboxed in the 4:3 frame.

**Graphical Timeline** – In addition to a traditional numeric Edit Decision List (EDL), Axial/MX offers an exciting graphical user interface for editing operations. The Graphical Timeline (GT) display of EDL data uses multiple timelines for displaying all video and audio information. Trimming, sliding, rippling, splitting and exchanging edits along the GT is simple and immediate. Timeline displays may be instantly scaled and scrolled with various display options, allowing operators to view what they want, when they want it. The Live Video option integrates a picture-based Storyboard in the GT, which displays video images representing each video clip.

**TrimClips** – allows accurate and immediate visual trimming. Multiple fields or frames of video are captured before and after a mark point. This video clip is immediately available to select the In and Out points. With Trim Clips, marking edit points is faster and easier than ever before.





**Clip Library** – A visual Clip Library is used to automatically capture a head frame, in-point, duration, notes and other associated information, maintaining a visual reference for each edit.

**RAVE™** – Random Access Visual Editing – represents the culmination of Visual On-Line Editing: RAVE, the first uncompressed, non-linear editing environment for on-line edit suites, offers random access digital storage of digital video (SD or HD) and analog or AES audio. The RAVE option combines the flexibility and control of Axial/MX with the non-linear capabilities of digital disk recorders (DDRs) integrating directly with your existing on-line edit suite. It allows for control of VTRs, DDRs, video switchers, audio mixers, DVEs and other peripheral devices resulting in a dynamic environment for previewing, adjusting and re-arranging complex edit sequences.

A RAVE Timeline can roll through complex edits, synchronizing all devices in real-time non-linear playback or stepping through a field or frame at a time. Picture-based adjustments are fast and simple with the RAVE Transition Editor which uses two live windows to view and adjust “from” and “to” video sources. Video clips may be arranged or re-sequenced at will without having to re-record anything. No compromise, no rendering – the highest quality real-time video results viewed immediately!

### UNSURPASSED SPEED, CONTROL AND POWER

Axial/MX sets the new performance benchmark for today's hybrid SD/HD on-line editing systems. No other editor completes assemblies faster, provides more comprehensive external device control, or offers a broader range of features specifically tailored for the most demanding on-line applications.

Lightning Fast Auto-Assembly is a hallmark of Axial editors. Roll-through auto-assembly cues machines ahead of upcoming edits, allowing the master recorder to continue to roll and record without the need to stop and re-cue after each event – as long as source machines are available and cued. The multi-tasking capabilities of Axial/MX provides users the ability to perform

multiple, simultaneous auto-assemblies. Users are not “locked out” of the system during an assembly and may continue to create new edits, add comments, or start an additional assembly. And for the ultimate in long-form assembly performance, the ShowCase option harnesses the power of Axial/MX to simultaneously digitize four source streams, followed by real-time auto-assembly of the EDL.

Superior Device Control of video switchers, audio mixers, DDRs, DVEs, VTRs, routers and more (all in SD or HD) is provided with direct access to



every function in a device's RS-422 serial protocol. Extended control functions like switcher auto-transitions and key/wipe parameters, mixer levels, DVE registers, TBC adjustments and router connections are immediately available using Axial/MX's easy to operate User Menus. A different customized menu appears for each device controlled and additional capabilities can easily be added by users at any time. For total flexibility, Axial/MX provides access to all commands of each serial device in an easy-to-use Device Command (DCcmd) menu. DCcmds are like a set of sophisticated “serial APIs” which can be added directly to any edit. No code to write, no wires to run.

Spec File Interfaces for device control are a key to all this power. Axial/MX's patented Spec Files are editable text-based device interfaces that users can customize and manipulate to suit their needs. Editors have never before had so much power and flexibility at their fingertips. “Help” on creating Spec Files and updates are available on the Abekas website at [www.abekas.com](http://www.abekas.com).

**Audio** – New enhanced user handles capable of editing 8-channel audio. Users can select to edit audio channels 1-4, 5-8 or 1-8. In Audio 1-4 mode, audio channels 1-4 are record enabled in the usual manner with channels 5-8 disabled. In Audio 5-8 mode, audio channels 5-8 are mapped to buttons A1-A4 and channels 1-4 are disabled. For Audio 1-8 mode, audio channels 1-4 are record enabled in the usual manner and audio channels 5-8 are enabled via the User Menu.

**Powerful Auto-Caching** – Imagine never having to set up another B-roll... Axial/MX automatically clones (caches) video and audio material to other devices to streamline effects creation. Axial/MX uses a DDR or a VTR to freely move source material where it is needed. While VTRs may be used for caching, the performance using Abekas' DDRs provides unmatched speed.

All caching, no matter how simple or elaborate, is handled transparently by Axial/MX, without requiring operator input. Axial/MX caches as necessary, including user-specified head and tail handles, which allow trimming without re-caching original source video. Original source timecode information is always maintained with a cache trace indicated in the EDL for reference.

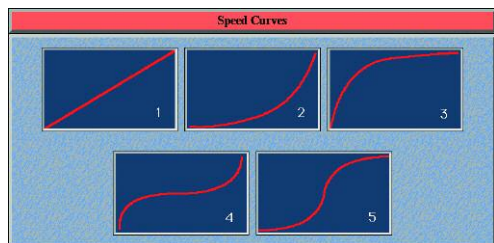
Comprehensive PRE-READ Control of A/B transitions and layered effects is an integral part of the Axial/MX. Pre-read functions of VTRs may be enabled edit-by-edit or for a range of edits, depending on your preference. Our SMPTE EDL even lists the pre-read information for each edit event.

Advanced Motion Control via Axial/MX provides the most powerful variable-speed motion effects available. For maximum flexibility, linear and curvilinear Speed Ramps and Speed Learn allow unparalleled control of speed changes during edits. Axial/MX provides unsurpassed flexibility for all your motion effects: field accurate, speed accurate and automatic.

**Advanced Edit Workspace and EDL** – Axial/MX can perform multiple edit segments like cuts, dissolves and wipes as a single edit. Events may include a wide range of edit actions, such as device commands (e.g. auto-trans triggers and TBC controls), snapshot recalls, speed ramps, and

GPIs. Axial/MX flexibly groups control of all devices involved in an edit along a common timeline, enabling frame-by-frame previewing of complex effects before committing them to the recorder. In addition, Device Data (DData) upload/download stores complex switcher effects to simplify project changes and updates.

Nine independent EDLs can be viewed as normal text or as a graphical timeline with Dynamic List Display. They provide list sorting, cleaning, and other view preferences as simple display options, while retaining all original list data. The Axial/MX EDL comprehensively displays and maintains data to recreate even the most complex editing sessions. This includes DData, source timing advances, switcher on/off control, edit versions, sync groups, slave recorders, ripples enables, audio information and cache trace, all of which may be optionally transferred over a network or saved onto a removable USB device.



### SHOWCASE

Merge the power of Axial/MX's roll-through Auto-Assembly and RAVE with a RAVE capable Abekas DDR. Add a software module that computes the most efficient loading sequence, along with a Machine Room Display that tells the operator exactly what, when and where to load source tapes and end up with the fastest way to auto-conform program length material.

When your job requires speed, ShowCase, an option on Axial/MX, will load four streams of video/audio material at the same time, dramatically reducing the time required to digitize source material. For long form editing in SD or HD, ShowCase can greatly speed up your production and work flow.

### AXIAL RELIABILITY

Axial/MX uses the same user interface as its predecessors, the Axial 2010, 2020 and 3000.

As the on-line editing system of choice throughout the post-production community, Axial/MX offers a complete upgrade path so your existing Axial can grow with you. By providing the most power, flexibility, speed, control and ease of use in a state-of-the-art package, Axial/MX is the smart solution for your facility's on-line needs.

The screenshot shows the "Axial 3000 Visual On-Line Editor" interface. At the top, it displays "SESSION: Dave's World ( 896 full )" and "Thu Mar 6 18:28". Below this is a table of effects and a list of tracks. The main area shows a multi-track editing timeline with video, audio, and control tracks. The tracks are labeled A: Rdl1a, B: Rdl1b, C: 3062A, D: 3062B, E: Vt23, and F: Etc. The timeline shows various edit points and durations. At the bottom, there is a table of edit data.

EDIT	EFFECT	REEL	CHAR	SEC IN	SEC OUT	SPD	REC IN	REC OUT/DUR	DISPOSED	CACHE/RAVE TRACE
403	Cut	D 3062B	V1234	17,14,40,22	17,14,43,26		01,05,53,15	01,05,55,19		Mstr
404	Cut	D 3062B	V1234	17,14,51,13	17,14,55,25		01,05,55,19	01,06,00,03		Mstr
405	Cut	D 3062B	V1234	17,16,45,18	17,16,50,28		01,06,00,03	01,06,05,13		Mstr
406	Cut	D 3062B	V	14,50,11,29	14,50,15,20		01,06,04,13	01,06,08,04		R Mstr Rdl1a 00,00,31.00
407	Cut	D 3062B	_1234	14,50,12,29	14,50,15,20		01,06,05,13	01,06,08,04		R Mstr Rdl1a 00,00,32.00
408	Cut	D 3062B	V1234	14,49,44,06	14,49,46,29		01,06,08,04	01,06,10,27		R Mstr
	From	D 3062B	V1234	14,49,46,29	14,49,46,29		01,06,10,27	01,06,10,27		Mstr
	W023	8 D 3062B	V1234	17,14,20,03	17,14,24,08		01,06,10,27	01,06,15,02		Rdl1b 00,00,00.00

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