



## Xencode™



The agm-XEncode™ system is based within a networked server structure that manages encoding and transcoding jobs in the most efficient manner possible. The basic system contains a complex but rugged database structure that manages encoding jobs as well as DRM asset management (content) and also secure receipt and delivery of both unencoded and encoded data. Within this basic architecture various modules are installed to which audio data can be directed for processing.



The first of these encompasses DTS® encoding for both CD and DVD and is the first commercially available implementation of DTS-ES 6.1 encoding. The code necessary for this DTS encoding has been rewritten especially to take advantage of dual processing available on the servers to expedite encoding times to offer many times shorter than real time encoding as well as added reliability in the actual encoding process.

The philosophy and aim of this technology is to process audio at high speed and save valuable studio time. Extreme emphasis has been placed on the accuracy of the encoding processes and utilities are available in addition to the server technology to give facilities the additional ability of checking the actual data to be used in authoring in perfect picture synchronisation with video. There is no longer a need to burn DVDs and halt the authoring process whilst checking is being carried out.

agm digital arts GmbH has carefully examined the workflow of many major authoring houses and has designed this system to offer major advantages in DVD encoding for high speed authoring and content security. Access to the Xencode is via a convenient client web interface allowing access from many studios within a facility. Files are prepared for delivery on the client desktop or transferred from other storage sources and packed for delivery. The user interface allows programming of batches of encoding jobs and the close monitoring of progress.

dotAGM™ is a utility programme that is available for both Apple™ Macintosh™ and Windows™ platforms which collects data on the desktop that is destined for processing. In this way content is checked for completeness and integrity before being submitted for processing. The dotAGM™ packaging offers a convenient and later secure transport format for data across networks destined for Xencode™ processing.





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Further processes are in development and licensing. Dolby® Digital encoding to 5.1 should be available by quarter 2 2003 and MLP shortly thereafter (subject to licensing) and these operate in a similar job queued manner to the DTS encoding processes. The transfer of high bitrate/resolution PCM audio to DSD format is envisaged as well as a highly developed algorithm for the conversion of transferred audio from film (24 frame telecine) correcting harmonic and pitch information for 25 frame replay. All of these process at a fraction of real-time as a no fuss professional solution to encoding needs.

Resulting bitstreams from DTS encoding can be transferred to a local machine equipped with the agmBSP (BitStream Player), a timecode and SPDIF audio-out solution that allows synchronisation of video to freshly encoded material for checking purposes. There are convenient replay controls, loop setting and marker logging of potential problems allowing a swift creation of encode commands for reencoding or editing of bitstreams to newly edited video for example. The player software reconstructs SMPTE Timecode from the encoded bitstream and outputs linear TC to supply any suitable synchroniser system.

**About the rental concept:**

Xencode systems are only available as a rented system, they are not available for purchase. This business model allows us to develop systems continuously and offer the support needed to guarantee the survival of both our company as well as the integrity of the products. This is not unusual in certain other media fields such as film (Panavision for example). It allows us to supply at no capital cost to facilities a working system that can generate revenues far in excess of rental charges. Continual development and the adding of functionality as well as the protection of the potential for even upgrading the hardware are important to us. Such a complex and beneficial system available in a purely sale fashion would not allow this type of development or encourage its further development.

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