

Miranda Technologies Ltd

Release notes

Imagestore 2/3 Software Release Notes

Oxtel internal reference numbers are given in parenthesis where applicable.

Software upgrade to v2/3.25

Copy the file *Is225.exe* onto a PC then insert a blank 3 ½ floppy disk into the A: drive. To create an install disk, simply run (double click) the Is225.exe program. Insert the v2.25 install disk into the Imagestore and perform a restart (do not perform a clean restart which removes previously saved settings).

Use Is225.exe to upgrade all Imagestores, IS2, IS-SOLO, IS-2U and IS3. Front panel versions are now controlled via installed licences. The latest software downloads can be found at http://www.miranda.com/software.php

Release history

2.25 release (13th September).

Bug #1036. Fixed memory leak in the R6 automation command, which is also used by the GetFileInfo OxSox command.

Bug #1036. New memory manager to prevent system slow down caused by memory fragmentation.

Bug #1036. Up to 20% decrease in load times due to software optimization.

Bug #937. New advanced logging option under Set-up->System->Advanced Logging->Off/On (Off by default). When enabled the Imagestore will log the time of cut/fade/load commands, and also when a load has finished. The load logging also includes the size of the animation it is trying to load and how many seconds it has taken when it finishes.

Bug #990. MPEG hard disk startup time now set correctly on newer cards.

Bug #989. XK automation commanded now supported. (Request serial number/machine type).

Bug #143. now supports multi-loop animation end modes (stops or cycles)

Bug #765. Fix for Intuition clip-on communication problems under Harris automation **Bug #599.** Count down clocks which use the number of days before an event will now work

if the date is beyond the current month

2.24 release (4th April).

Squeezy 2000 DVE Presmaster preview alignment with program output fixed.(**Bug #578**) setup_sys_data used by Production no longer defaults the subnet to 255.255.0.0 (**Bug #609**)

The message "remote_list_head is NULL" is no longer logged on start up (Bug #616) Fixed misleading log error message with the Squeezy 3D (**Bug #580**)

2.23 release (3rd March).

Modified network driver to resolve loss of network communication (present in 2.22) Reduced OxSox TCP Window size to prevent dropped packets (more reliable transfers). OxSox worker task now checks for invalid commands before trying to process them. Modified 3D DVE alpha mask value to be correct (slightly miss aligned before). Minor modification to unsolicited serial command mechanism (more secure).

2.22 release (11th January). Users of this version may experience loss in network communication.

Fixed animation playout jitters while file transfer. Problem was introduced in 2.21

2.21 release (13th December 2005) Users of this version will experience animation jittering during file transfers and or with networks which have devices broadcasting data.

Fix to fully check if a file is present before trying to load it and log if it's not. (Bug #175) If automation attempts to load a file which is not in the image database, the Imagestore will now still try to load it as a fail safe.

It is now logged if a file is deleted while being transferred (previously a log error was produced just with an error number).

Switching DVE modes on the Squeezy DVE, with tallies enabled now works correctly. Previously no tally was sent out.

Firmware to support the new **Squeezy 2005 DVE** hardware board.

Squeezy 3D DVE play and reverse sequence now works with durations over 255 frames. Squeezy 3D range checking added for play sequence (for sequence number and duration). Imagestore network driver (VxWorks) patched to prevent "ring buffer overflow" problem during file transfers.

UDP broadcast packets are now automatically ignored at the network driver level (instead of being processed by the Operating System which can have performance implications).

2.20.7 release (3rd November 2005)

Fully compatible with Squeezy 3D cards running v16 firmware (Ross S&T3D card).

V2.20.4 release (14th October 2005)

Changed voltage/temperature alarms to match Presmaster (**Bug #242**)

OxSox simple directory call now limited to 1024 entries to match OxSox2.dll and IS300.

Now logs an error if an OXT is missing image data (corrupt).

File transfer to the Imagestore via OxSox are now better handled if something goes wrong. This includes:

- 1. The Imagestore hard disk reaches capacity during the transfer.
- 2. Network connection is dropped.
- 3. Client software which is copying the file crashes.

In all cases an error log is produced, and if a file is left half written it will automatically be deleted (the deletion will be logged). This will hopefully prevent corrupt files being left on the hard disk.

V2.20.3 release (8th August 2005)

n3 Set EAS text command now works with characters such as a colon sent using escape sequences (e.g. 10:03 is sent as 10:\3A03). (**Bug #195**)

Imagestore settings (state file) now saved in a more reliable manner to prevent corruption if the power is removed, or a power cut occurs. (**Bug #84**)

Fix for Intuition command pass through mode, where single character commands with no space after the command ID were failing. (**Bug** #199)

Fixed the problem with Squeezy 2D/3D sequence upload failing on certain files. (**Bug #194**) If the Imagestore has a problem loading a file it now logs if the file is missing or corrupt (**Bug #175**).

SDI reference timing now only goes down to 10.6666

V2.20.2 release (7th June 2005)

Improved accuracy of audio values that are returned in tallies (for Presmaster).

V.2.20.1 release (15th April 2005)

R6 automation command now correctly returns if a file exists, plus the information returned regarding clocks and Easytext files is now more accurate. Improved information returned by OxSox FILEINFO CMD.

V2.20 release (30 March 2005)

First version to fully support Intuition Clip on mode.

New automation command added to enquire Intuition layer status from the Imagestore (XA-see automation protocol).

Squeezy 3D tallies fully implemented allowing automation systems to use it to perform transitions (automation manual updated).

Improved Y6 enable tally command so it responds with commands in the correct order (same order as IS300/HD).

Improved OxSox reliability when writing files to disk.

V2.19.7 release (11 February 2005)

When easyplay follows video is set to off, loading an image file will no longer attempt to load the associated audio file.

Fixed animation bug caused when a multi-loop animation is loaded with no loops.

Fixed Easytext hang caused when trying to load a non-embedded image referenced within a template which did not exist.

Re-enabled image drive free space on the front panel.

Trial Intuition clip-on mode. The mode is accessible via front panel under the RS232 protocol menu. When the mode is active a new Intuition Setup menu becomes available next to Presmaster Setup.

New OxSox command added to request free disk space (requires OxSox.dll v2.29)

V2.19.5 release (20 January 2005)

Easyplay play out no longer gets delayed if activated while loading an animation. Please note the animation will take longer to load in this scenario, this is because easyplay streams high quality uncompressed audio from the hard disk, at the same times as the animation is loading from disk.

Virtual GPI's no longer hold off automation while running.

V2.19.4 release (23 December 2004)

New feature added to choose whether Easyplay is triggered when a keyer is faded/cut up or down (on by default). The front panel menu is under "Set-up->Audio->Audio Follow Video->Easyplay->Audio Follow On/Off".

New Squeezy 2D firmware to fix a glitch seen in production.

Audio De-embedder delay now set up correctly if a DVE is installed.

V2.19.3 release (15 November 2004)

Added a log error if an image file fails to load

Removed R3 debug reporting (Enquire file exists)

New trial AB-Mix menu which allows Imagestore to cut on one of the following: any field (default), field 1 or field2.

Changed default store test iterations from 2 to 1

Removed debug which says how many loops an animation has when it's loading

New Squeezy 2D firmware to fix a glitch seen in production.

New store design firmware (xla162.exo) to fix random zits on grab.

V2.19.2 release (3 November 2004)

Modified the Xilinx flash driver to improve flash checksum checking. It now retries the checksum a number of times if it happens to fail.

retries the checksum a number of times if it happens to fail).

V2.19.1 release (27 October 2004)

Modified Xilinx flash driver to improve loading of flash files on boot up (same method as used in Imagestore 2.16 and lower).

V2.19 release (20 October 2004)

First version to be compatible with dual channel 2D DVE. Front panel now says Squeezy 2D/3D instead of just Squeezy 3D.

First version to support single sequence upload/download of Dual channel Squeezy 2D/3D presets. DVE editor version 1.1 required to use it.

Bug fix to prevent hang when unzipping a corrupt image file from floppy disk.

R8 Automation command added to query if an audio files exists (similar to R3).

Fixed OxSox GetFileInfo command (broken since 2.18).

UA command (Asymmetric Transition) now functions correctly if automation sends a U6 (set transition type) command at the same time.

R3 command (Enquire File Info) now works on audio files, however the file extension has to be included in the command for audio, e.g. song1.oxw or song2.wav. If the extension is not set it just looks for an image file.

Squeezy 3D single sequence upload/download now working.

OxSox, CopySocketToFile now more robust (long file name/out of memory check).

Added automation command to enable 2nd DVE channel on Squeezy 2D/3D.

Fixed Oxsox crash when trying to create a thumbnail of an animation created by Gallery (which was also causing Prespanel to hang).

Imagestore thumbnail browsing using the PresPanel will no longer show up blank spaces on files which have no thumbnails/are corrupt. Instead a thumbnail is created which contains text to show what is wrong with the file.

Squeezy 3D mode tally now works with Y6 tally command.

New firmware. The store design was amended to fix a problem with random zits on grab when preview is assigned to store 0.

Removed log error when Imagestore fitted with ILIB 40 and 32Mb playout mem.

Timer clocks now have an option to be reset when cut/faded up. The option is selectable via clock builder (MCS 4.98 onwards).

Improved Easytext image compositing, correctly renders images when the background is transparent (20% speed increase as well).

Increased the size of dynamic borders around text.

Improved Image library size checking.

V2.18 release (16 June 2004)

EAS Message Protection added as a front panel option (prevents keyer being cut down & overwritten by automation).

Added support for count down clocks to stop at a non zero value (e.g. 00:05)

Added support for count down clocks to stop to at a particular time everyday (e.g. 9pm every day).

You can now load CLP files via GPI (by naming the CLP file V001.CLP etc)

Ability to select whether Line 23 is passed or not in PAL (closed captions) via syscodes.txt Seven new Squeezy 3D modes added to the Imagestore. All modes can be used via DVE Editor/Front Panel/GPI/Automation.

Border, transparency, layering, defocus and mosaic control of Squeezy 3D now implemented. Automation support for X,Y,Z position/rotation & Keyframe duration retrieval.

Ability to upload/download Squeezy 3D sequence files for transferring sequences between Imagestores/offline storage.

Pan Engine added. This adds the ability to move animations/templates around the screen via GPI/Automation, along with various mask wipes to reveal animations/templates.

Ability via the front panel to switch the AUDIO USE bit when using a data path via

Easysound. I.e. switches the bit between Audio and Non-audio

Implementation of planned automation R4, R5, R6 file based commands. Automation manual has been updated (they have been implemented differently to the planned commands).

Automation can now control physical GPI's as well as Virtual GPI's.

Network code change to improve reliability

Re-enabled the test remote for serial port testing by production

Added new code to correctly configure Imagestore 3 playout memory size based on licence code

A fix added to Oxsox thumbnail creation

On the front panel, under system information it now displays the percentage of free space on the hard drive per partition (thumbnails/audio).

Fixed easytext crash caused by cutting up a crawl as it's rendering.

Fixed EAS automation bug where by it would only display the first word of an emergency message.

Voice over now turned off when an mpeg clip is no longer active (i.e. another file loaded) Pink Flash prevention for Logo's.

Buffering of network data from Imagestore Automation.

V2.17.3 release (20 Jan 2004)

Correct setup of audio shuffles for clip-on users.

Support for new Squeezy filter chips

Improvements to internal scheduler (duplicate colons fixed)

V2.17.1 release (11 Dec 2003)

DVE status request added for Presmaster V3.

V2.17 release (04 Dec 2003)

Extra LTC command added to internal Scheduler

Automatic Bios settings with Install.

Now supports TFT EAS 911 receiver

Front panel menu item added to change RS232 protocol when EAS licence is present.

Options are 'Automation, Sage Endec, TFT EAS 911'.

RS232 baud rate only selectable when automation is selected

EAS OFF now waits for crawl to finish

EAS ON now waits for entire EAS message to be received before showing the alert on screen

Reverted to selecting SDI inputs by default for non ESSA/PLAYSTORE systems

Fixed problem with long EAS messages (250+ chars)

Squeezy 3D now supports video layering and transparency

New automation commands added to support above

Improvements made to W6 squeeze tally for the presmaster

IS2 and IS3 combined - IS3 now set by IMS3 licence code

MPEG serial port is now the CPU's RS232 port in IS2 + Clip-On systems

Added GPI events for start and end of clip playback

Fixed store swap issue with k* automation commands (audio)

Added rate parameter to run Squeezy3D sequences

In swap-pvw and presmaster-pvw, PVW output mix is opposite to PGM output

OxSox server back to working with multiple clients

New P191 FPGA code (Squeezy 3D) to prevent noise when using the Squeezy 3D

Various changes relating to int locks and task priorities for linux builds

Squeezy zero size bug fixed

Automatic dependencies in makefile

LTC improvements

Scheduled automation commands

Added GPI actions to allow selection of audio sources

Passive mode reporting of strap loop counts

Easytext transparency bug fixed

Squeezy 3D support for both NTSC and PAL

Polyphoto light now active on the RCP-200.

Added MPEG clip slow-motion commands

EAS string length increased to 2048

Improved store size / image library size checking

Squeeze 3D removed from Swap/Preview menu

Squeeze 3D PAL field swap corrected

Squeeze 3D Sequence creation automation commands added

Added SQZ3 licence to Xicor

Squeezy 3D sequence improvements

Squeeze 3D Firmware added to disk build

Fixed left to Right crawls

Fixed multi-loop animations not resetting bug

Added Squeezy 3D sequence creation code

Squeeze 3D code added

Added GPI Audio Mutes

Fixed EAS off command to restore FG keyer value

Fixed front panel GPI edit to allow 9th item

V2.16 release (14 May 2003)

The passive mode audio tallies for voice over 1 have been fixed

Code modified to allow compilations under Linux.

De-embedder audio delays now set and reported correctly

IS3 MPEG Clip loads now don't require second animator task

New automation commands for image library information

Improvements and fixes for EAS

Added Zd command to update an Easytext text box in a defined template

Added Ze command to update an Easytext image in a defined template

Added ZA command to set transparency of Easytext composited images

Easytext file format tag added to make text fitting an option

Passive mode DVE status message corrected

Thumbnails now use standard Windows BMP format

Symbol table stripped from final link - jupiter.st file now smaller

Fixed DVE arm glitches

Can change B input preselects without needing AB Mix licence

Passive mode Yc command changed to Yd - already used.

Easyplay now works with 32MB (or larger) CPU memory fitted

Image File Browse moved to File menu

OxSox file transfer block size reduced to improve MDS reliability

32-bit HDD access mode enabled in BSP. Adds 125KB/s to file reads

Added de-embedder delays to system information menu

R0 command now returns name of file loaded if no file specified

Improvements to EAS support

File Browse added to FP menu

Removed reporting during load of multi-loop animations

Fixed Eaytext strap corruption bug

Added labels to 'print audio' console command

Added EAS support

v2.15 release (07 January 2003)

2.14 versions have been skipped to keep version numbering in line with IS3

v2.13.2 release (16 December 2002)

XLA147 firmware added to create single disk installation.

v2.13 release (02 December 2002)

Don't check store memory size against image library size in IS3

Presmaster mode now puts audio model into AB Mix mode

IS3 Firmware upgrade crash - SemTake on 0 semaphore for Adtec reset

Fixed MPEG clip starting / end modes / voice overs etc.

New digital clock mode added for hour counter

Added passive mode rate change tally 'Yc'

Corrected passive mode squeeze tally

Fixes for SOLO licensing issues

Changed operation of System Informtion menu to prevent Page Faults

Fixed passive mode initialisation and tallies

Fixed wipe transition type selection missing from front panel menu

Added passive mode on/off control via automation and FP menu

IS3 units with no MPEG clips caused clip play serial comms to fail

Included firmware upgrade xla152 - fixes grab to store 0 lockup

Improved IRQ handler

Unified serial port driver to enable Easysound UART

Fix 32KB block size bug in Easyplay

Fix end of audio data bug in Easyplay

Fixed deferred image state save bug caused by passive mode

Fixed front panel audio gain rounding errors

Added code changes for SOLO

Added IP gateway support

Improved RCP-200 initialisation

Fix Easyplay stopping bug when loading large images

Improved task scheduling

Cleaner system reboot method

Audio file lists (delete and load) now alphabetically sorted

System information menu improved - now bidirectional

Added audio metering to front panel menu

Added GPI status to front panel menu

Added fader status to front panel menu

Fixed Easytext problem caused when loading corrupt or missing fonts

Added automation command Zc to retrieve how many times a crawl has cycled.

Aspect ratio of analogue bug clocks fixed

Fix to animation multi loop mode

Animation multi loop functions added.

Fix to Sequence load code

Sequence of animations loaded from GPI

Virtual GPIs 'read' function added Presmaster Passive mode enabled Virtual GPIs added Fix to stop UART from freezing on error condition

v2.12.2 release (24 June 2002)

Prevents lock-out of received automation commands during loading of animations.

v2.12.1 release (07 May 2002)

Serial comms lockup fixed, caused by break interrupt.

Note:

If upgrading an Imagestore that is part of a Presmaster installation, please remember to perform a '*Clean Restart*' followed by a '*Presmaster set-up*' before restarting the Presmaster Control System from the control panel.

v2.12. release (28 March 2002)

Transmit wakeup packet when setting Presmaster mode.

Fix repetition of single-shot straps.

Strap masking bug fixed.

New Xilinx firmware (xla147) to fix green flashes.

Uninitialised grab mask bug fixed.

Default directory changed from floppy to images directory.

v2.11 release (15 March 2002)

Long serial number support

Long serial numbers (32 bit) now work correctly. Logfiles record the lower 5 digits. The serial number reported via automation returns the lower 4 digits, which should be enough for uniqueness. Machine names allocated in production should not include the full serial number as this may corrupt the Oxtel RCP display.

View licenses

On the front panel "Set-up/View Licenses" will list all licenses installed on the machine.

System information

On the front panel "Set-up/System Information" now provides additional information about firmware versions, DSP code, etc.

Enquire License code

New automation command implemented.

Coloured V-fades

V-fades now fade through a selectable colour. The colour is set up on the front panel in Manual/Operate/AB Mixer/V-fade Colour". An automation command to set the colour also exists.

Tally mixer/keyer state on front panel

In the "Mixer Operate" menu, an 'A', 'B' or '-' (intermediate) is shown at the RH end of the top line. In the Program Operate and Midground/Foreground Operate menus, an arrow indicates if that keyer is up or down. Additionally, a 'B' is shown if the layer is faded to Black.

One shot animations cut down the keyer

Running a single shot animation, which finishes entirely off-screen, will cause the keyer to be cut down automatically, allowing simple re-triggering. This happens regardless of how the animation is triggered.

Easytext Enhancements and Performance Optimisations

A variety of internal improvements to Easytext give dramatically improved speed and performance with complex pages and long straps. Additionally, minor bugs within Easytext (small memory leaks, text alignment issues) have been rectified.

Easytext – new features

Rolls are now provided as well as crawls – not supported however in Text Builder. Rolls and crawls can be correctly masked and positioned.

Easytext bug fixes

Bug preventing auto-save of image parameters when straps were loaded has been addressed.

Easytext - PAL artefact removal

Easytext character generation has frequency content which is too high to be passed through a PAL encode/decode process without generating artefacts. This is fixed with the addition of a selectable software 'notch' filter accessed via the front panel menu.

Easytext video memory allocation checking

Video memory allocation for Easytext is now robust, previously it could cause serious instability.

Image preload

Implemented internally, but needs automation command interface. This allows automation to notify IS2 of next load command in advance. When load command is issued, the image then "loads" instantly.

Presmaster Setup

Selecting setup/system/Presmaster Setup will force the setup of Cascade mode, 57600 baud automation,. Presmaster preview, audio model, audio follow OFF and both FTB off.

Presmaster preview improvements

New video firmware release providing correct keyer functionality on Presmaster preview – specifically clip, gain, transparency & key invert. Also addresses the preview of additive logo's employing a separate key.

Serial communications

A new serial port driver has been implemented which improves reliability of RS232 and RS422 automation, in particular in conjunction with Easyplay. The serial FIFO depth has been increased by 512 characters and the ability to select different baud rates for RS232 and RS422 has been added. The RS485 multi-drop protocol is no longer supported.

Easysound DSP improvements

The DSP code has been optimised in order to guarantee spare processing time.

Easyplay buffer control and bug fixes

Major improvements to Easyplay buffer control have been implemented. These fix occasional audio left/right swaps, and provide a much more stable and responsive system. Audio clips no longer get truncated at the end of playout.

Easyplay front panel control

The ability to load and play audio clips associated with each video keying layer has been added to the front panel menu.

Easyplay instability

Easyplay was creating instability with the Audio layer, externally this manifested itself as Easyplay or all audio becoming silent, the DSP being reset, pitch change on Easyplay caused by playout being set to 20-bit mode, or an embedded audio group change on the Programme video output. This has been addressed but requires a PROM update on the audio layer.

GPI control of audio shuffles

New GPI commands have been added which allow control of audio shuffle assignments.

Audio file deletion from front panel

Accessible from "Set-up/File/Delete audio files". Use of this should be self-explanatory. No bulk delete is provided.

Imagestore explorer compatibility

This requires IS explorer to prove it. Check operation with existing MDS/MCS to confirm that older functions still perform correctly.

v2.10.1 release (4 March 2002)

Support for long (Miranda style) serial numbers.

v2.10 release (6 July 2001)

Improved serial port performance at 38400 and 57600 baud – essential for Presmaster. AES inputs selected for VO2 when B input module not present. Rebranded to Miranda.

v2.09 release (19 June 2001)

Includes support for Oxtel Easytext

Added "Squeeze Mix" mode – squeezes Background under both DSK layers – useful with mortices.

Easysound GPI I/O now available when new audio model enabled.

Uses new Video Store allocator giving improved packing and no wastage.

"R3" automation command allows filename inquire.

Automation "fade to position" commands now can be deferred (For Presmaster V-fade)

"Front Panel Mirror" now handles key press & release.

"LOADLIVE.OXW" selected when "Load Live" taken to air (if present).

48KHz 16-bit WAV file support for Easyplay.

Audio Delay compensation when Squeezy is in circuit (Embedded only).

System Aspect ratio (4x3, 16x9) now available as global option (was Bugclock-specific).

"BINP" license added for cascaded Presmaster Preview.

"Strict" and "Relaxed" automation modes for STX problems with certain automation systems.

Includes finger server (not externally visible).

Improved image load speed over 2.08 (big buffer, faster cycles).

Corrections to output AES channel status.

Automation network tasks now use TCP/IP keepalive timers.

Modified startup procedure if CPLD fails to respond.

Improved thumbnail creation speed for unkeyed images.

Timecode setup moved from Bugclock menu to its own menu.

V2.09 Bugs Fixed:

Easyplay handling of load live.

Incorrect STX handling on Automation ports now fixed.

"Playlist full" message when adding to playlist.

Playlists handle filenames with spaces.

Playlist number on polyphoto shown incorrectly.

Squeeze Preset zero is now read-only.

Improved squeeze mode switching.

Fixed flicker on small digital clocks.

AB Mix wipe softness now non-volatile.

Presmaster preview of DVE presets works when height/width are negative.