



Multicam 8.03.12 Release Notes

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1. NEW FEATURES SINCE 08.02.48

- Online Rebuild of the video disk RAID (only XT[2])
- Server monitoring screen
- HD VC-3 codec integration
- New management of the load/save of setup parameters to distinguish operational settings from technical settings
- Unicode support
- Audio swap in 8 tracks mode
- Possibility to overwrite VITC on the output
- Management of network priorities per channel on the server
- Support for 334M ancillary data packet information
- OSD for input channels monitoring
- Timeline audio configuration 2+6 in 8 audios mode
- Ability to display duration in Drop Frame mode with working in Non-Drop frame mode
- Remote train access in AVSP

2. BUG FIXES SINCE 08.02.48

- In 1, 2 and 4 tracks mode, only the first group of embedded audio is active
- Embedded audio is disabled when the base configuration is set to AES or analog
- Correct handling of 20-bit vs 24-bit audio
- Undo/Redo in Timeline mode was sometimes corrupting some tracks
- The distribution of keyword files across the network is now correct
- Corrected Airbox playout when chaining two live to train items in a playlist
- Interactivity bug fixing in paint/target on COHX
- Interactivity bug fixing for tablet use on clip screen
- Bitrate adjustments
- The from date field in the sort-tc function was sometimes reset when activating the sort-tc from the browse button
- The fill playlist function was sometimes not inserting all the clips in the current playlist
- In split audio mode, inserting two swaps in the same clip was sometimes causing an audio glitch
- Correction in split audio : when removing clips the transition were not correct
- Corrections in split audio with start on cut and end on cut transitions
- Converting a playlist with split audio into a timeline was causing problems on the transitions
- When pushing clips to a full page, the server stores now the clip on the first available empty position
- The loop playlist functionality was not working correctly when the remote was operating in parallel with a Sony protocol
- If the freeze on cue point was set to yes, clips were played until the out point, not the short out.
- In Dolby E on XT1, the audio processing was not deactivated causing mute on the transitions
- Paint is now available on XT1 with HCTX

3. KNOWN ISSUES & LIMITATIONS

3.1. Issues

- On XT1 HD, the parameter PGM+Mon in the EVS is not taken into account in 0rec configurations – OSD is displayed
- When playing a clip with the remote, when the clip reaches the short out, it freezes. If you then bring the lever to 0, the image will jump of one field.
- The default display mode is VGA. When upgrading, the default mode is retained. When pressing ALT-Backspace to toggle between VGA and Video mode inside the multicam application, this might in some cases causes the system to disconnect from the network. The only solution to reconnect is to exit the application and restart it. This problem



does not occur systematically, but avoid using ALT-Backspace inside the multicam application when possible. Using ALT-Backspace while the multicam is running can also cause a 00:00:00:00 TC to be marked on the video field recorded at that time.

- In parallel mode (Remote with another protocol) : as soon as a remote train is loaded on a channel and a cueing is requested to a TC, any further TC request is locked even for a local clip or train
- PUSH to a client system : the clip will be copied on the right machine, but in the receive page defined in the setup of the original machine rather than the one defined in the setup of the destination machine.
- It is not possible for a client to push a clip to another client.
- On a server XT, create a playlist and load it. If you go back to live and move to another machine the clip that was last loaded on the player, it will be impossible to reload the playlist anymore.
- In two PGMs mode, when the automake clip is set to yes, loading cam A and marking in/out points set those points to CAM B. It is impossible to retrim Cam B afterwards from PGM2. The workaround is either not to set the automake clip to yes or to control both PGMs when first marking the in/out points.
- Occasionally the clip TC displayed on the remote in timeline mode may not be accurate.
- Setup Menu, Audio Meters Adjustment : when this parameters is set to 10 or 12dB, the audio meters on the OSD disappear.
- CONNECT window : occasionally, when the CONNECT window is called while the stylus is laying on the tablet, the network list appears empty. Simply remove the stylus from the tablet and the list will appear.
- When loading a clip or playlist after a network train, then marking a cue live, the cue is marked on the local trains, not on the previously loaded network train.
- Freeze on OUT point in record trains in target tracking doesn't work, in PLAY VAR only. OK in normal play.
- When pressing BROWSE in PL DIFF mode, this can cause the AUX clip to start playing. If the user pushes the play key or moves the lever immediately after that, the playlist will start while the AUX clip is already playing, thus they will not be synced properly. To avoid this, before starting the play again, press the PLIST key first to recue the playlist, or move the jog dial.
- We noticed sometimes that after upgrading, the "Audio IN/OUT" field (type of audio connectors installed on the system) has been reset to "None". Always check that the value of this field is the same before and after the upgrade. Adjust the value after upgrading if necessary !
- In ADA Adjustment mode, Output 4 actually shows the video incoming on Input 2 rather than Input 4 (bug not present in XT[2])
- In Load Playlist conditional, when a different playlist is loaded on 2 PGMs, the playlist name displayed on the first PGM corresponds to the name of the playlist loaded on PGM2. The images are correct.

3.2. Limitations

- Internal loop : in audio embedded, you always get the embedded audio, whether the loop mode is set to video+audio or video only.
- Timeline limitations in this version
 - o Inserts and extends are in overwrite mode only
 - o 3 points edits only.
 - o It is necessary to have minimum two outputs
 - o When the playlist is converted into a timeline, all videos and audio transitions are set to cut only
 - o All video and audio transitions inside a timeline are cut only
 - o The speed is always 100%
 - o The duration of the timeline can not be modified
 - o The timeline feature is only available to the first remote of an XT server
- In Playlist mode on the first PGM of the first remote if the Aux Track Parameter is set to PGM, when no aux clip is defined for the current playlist, the audio is not automatically replaced by the playlist's original audio. This is not a bug. The setting "Aux track to PGM" should only be used when an aux track is defined for the current playlist.
- Clear Video Disks from EVS Maintenance Menu is necessary when upgrading from version 04.xx.xx, 5.03.xx or lower ! This is not necessary when upgrading from version 05.04.16 or higher.
- If you change the value of "operational disk size" or start the multicam with a line that has a different value for this parameter, a message appears at the end of the Bootwins to ask you whether or not you want to format the video drives. If you answer "Yes", all clips will be cleared. If you want to keep the existing clips, answer "No" and restore the value of this parameter to the one that was last used.
- In interlace mode, IN and OUT points can only be marked on even field to avoid parity violation when chaining clips. If the operator marks an IN/OUT point on an odd field, the LSM will actually mark it to the next/previous even field, and jump to this field. In progressive mode, IN and OUT points can be marked on all fields.
- When playing a playlist, Next, Skip not accepted during transition effects, or if the next transition is a split audio (different audio and video IN point, or different video and audio effect durations).
- F7 to test mix/wipe effects in setup not yet implemented.
- When adjusting YUV parameters to define a custom colour for wipe border, the corresponding colour is not displayed on main output.
- Impossible to switch to another camera while searching with the jog. Stop jogging, switch to the new camera, then start jogging again.
- On remote record trains, it is not possible to switch to another camera in play on the same PGM : the new camera will always appear in pause.
- Live on remote record trains is about 2-3 sec behind the actual live.
- Playlists of Page 10 are not available from the EVS remote because they are dedicated to the other RS422 protocols.
- The internal loop mode is not available with HCTS HD systems or with Super Motion systems.



- To be able to rename or delete remote clips, the parameter "Clip Edit by Network" must be set to "Enable" on the server where the clip is stored.
- The keyword file must be distributed to all systems on a network by the Network Server. However, if this machine is disconnected for any reason, another server will automatically be designated as Network Server and will now be in charge of distributing the keyword file. If the "old" Network Server is reconnected to the network but does not recover automatically its Network Server status, the machine acting as the current Network Server must be disconnected in order to allow the "old" one to take back that job and distribute the keyword file again. This will be resolved in a future version by allowing a system not acting as Network Server to distribute keyword files as well.
- When playing HD Super Motion material through the network with the default settings (HD video bitrate 100Mbps and network speed 540Mbps), the network is close to its performance limit and this may cause occasional "freezes". Playback at 50% is OK. If you want to play super motion material on air at 100% speed, you should make a local copy of the clip first, or work with the 1485Mbps network.
- Display of audio levels of all channels on the OSD : if some tracks are directed to several outputs simultaneously (ex : analog and digital), the indication of the audio output on the OSD will be the first one found by the software, which might not match the original audio configuration in the AVCFG interface.
- Resetting the "Protect Clip Pages" parameter in the setup does not reset the protect status of existing clips
- It is not possible to flag a clip for archive before it is created.
- Setup Screen (Shift+F2) : the number of local and network clips is only refreshed when entering the screen.
- Delay Screen (Shift+F7) : when working in NTSC NDF mode, the time codes in this screen are still calculated on a DF basis.
- In Playlist Edit mode, copying a playlist exits that mode to return to live mode
- Clearing the clips from the EVS menu, clears also the record trains and the camera names.
- The phase field in the configuration screen is not editable. Phase must be defined with the corresponding option in the maintenance menu. Not a bug.

4. COMPATIBILITY

4.1. Hardware

- **Multicam 8 requires DOS 6.22 and 64 MB of RAM on the MTPC board. Using version 8 without DOS 6.22 or 64 MB may cause the system to crash.**
- This version is only compatible with LSM XT and XT[2] chassis and corresponding audio codecs.
The HCT-S or HCT-X boards must be equipped with the SDTI chipset to be able to use network options. This version is not compatible with HCT-2, HCT-4 and HCT-S chassis, nor with XT chassis with external Audio Disk Recorder (ADR). An SIO3 board can not be installed on the MTPC board.
- This version is compatible with XTs equipped with an audio codec A2/X.
- Audio codecs A2/X must use Multicam 7.00.51 or later.
- The MTPC board must have been upgraded to A1/R2. This can be checked in the "hardware revision" area (auto-detect) of the EVS application currently installed on the system, or by checking the label at the front side of the board itself. **DO NOT INSTALL MULTICAM 08.02.47 ON THE SYSTEM IF THE MTPC BOARD HAS AN OLDER VERSION (A1 or A1/R) AND CONTACT AN EVS REPRESENTATIVE FOR UPGRADE.**
- The Frame Buffer board is no longer necessary for mix, wipe and split screen. It should only be installed when Target or Painting functions are required (SD systems only) and must have been upgraded to A3/R2. The revision appears on the label at the front side of the board (no auto-detect in the EVS application).
There is no frame buffer board for XT[2].
- The STXX Jumper on the backplane must be removed !
- Codec channels selection (SD) :
 - o 2-ch : A - - - - D
 - o 3-ch : A - - E - D
 - o 4-ch : A - B E - D
 - o 5-ch : A - B E F D
 - o 6-ch : A C B E F D
- HCT-S board : older boards are equipped with 64MB CPU RAM, newest boards are equipped with 128MB CPU RAM. Each requires a specific microcode. This is automatically detected and managed by the software during the Bootwins process. A video disk tray that has been used with a 64MB microcode can not be re-used on a system running a 128MB microcode (and vice-versa) without clearing video disks in the maintenance menu. Otherwise, the Bootwins will display the message "Loading Tables : error [0xf]".
- **The use of COHX requires an HCTX**
- **The use of HCTX requires a new disk controller (RCTL)**

Special note for HD 4U

- Backplane : all JPY jumpers (16) must be installed !
- COHD and COHU HD Codec (not applicable to COHX) :
- Check that ST1 jumper is installed (same as on the 6RU frame)
- Check that the jumper for terminating the inputs is set to 110Ohms instead of Hi-Z
- Check that the jumper to assign the codec position is set to 1



4.2. Software

Compatible EVS software with version 8.03.12 :

- Xfile 01.09.03
- Xstream 01.01.02
- Air Box 03.04.01
- Air Edit 03.04.01
- CleanEdit Package 02.00.00
- IP Director 03.22.20
- MediaXchange 1.09.05

SDTI Network and XHub

- SDTI Network in Multicam 08.03.12 is not compatible with previous versions. All systems in the network must run v. 08.03.12 to be able to connect. If a system has a wrong software version, an error message will be displayed when trying to connect to the network.
- Compatibility with XHub SDTI hub : Multicam 08.02.47 is only compatible with v. 2.05 or 2.06 of the XHub. If unsure, you can check the version with the following procedure :
 - o Turn off the hub
 - o Move all 4 dip switches on the front panel to the lower position.
 - o Turn on the hub
 - o The 7 branch status LEDs will light according a binary pattern, as described in the table below.

Branch LED #	1	2	3	4	5	6	7
v. 1.06		green	red		green	green	
v. 1.07		green	red		green	green	green
v. 2.03	green		red			green	green
v. 2.04	green		red		green		
v. 2.05	green		red		green		green
v. 2.06	green		red		green	green	

- o Turn off the hub
- o Move all 4 dip switches back to the upper position.
- o If you need to upgrade the hub, please contact EVS to get the upgrade software and procedure.

4.3. Clips

All clips created with Multicam 5.04.16 or higher are compatible with version 08.03.12.

Important note : if you downgrade from Multicam 08.03.12 to Multicam 08.00.xx or Multicam 08.01.xx, clips will still be present but the system will show that 1 video disk is disconnected → you have to start a disk rebuild (if you need to keep the clips), or clear clips to reconnect this disk.

Clips created on XT[2] in configurations not available on XT servers will not play correctly on XT servers ! Those configurations are :

- SD Mjpeg 625i 608 lines
- SD Mjpeg 525i 480 lines and 512 lines.
- SD IMX D10
- SD MPEG2 i-field
- HD 720p with horizontal resolution of 640 and 1280
- HD 1080i with horizontal resolution of 1536 (only incompatible in NTSC), 1600 and 1920.
- HD VC-3

It is required to do a "CLEAR VIDEO DISKS" from the EVS Maintenance Menu when upgrading from any version lower than 05.04.16 to version 08.03.12 !



4.4. Configurations

When upgrading to version 8.03.12, it is advisable to check the avcfg parameters of the application that are used. Keep in mind that the embedded audios are numbered taken into consideration 8 audio tracks, even if started in 4 tracks mode.

5. SOFTWARE MODULES

Previous version :

- Multicam 08.02.47
- EVS 00.15.18
- AVCFG 03.01.17
- Microcode HCTS 34.20
- Microcode HCTX 34.20
- Bootwins 03.30.11

Current version

- **Multicam 08.03.12**
- **EVS 00.16.03**
- **AVCFG 03.02.03**
- **Microcode HCTS 35.13**
- **Microcode HCTX 35.13**
- **Bootwins 03.40.05**