



## MULTICAM

### RELEASE NOTE **VERSION 15.3.44**

Date: July 2018



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## WARNINGS

- > Multicam 15.3 supports XT4K, XS4K XT3, XS3, XTnano, XS servers with H3X or H3XP controller board
- > ST 2110 operations require both PTP and genlock+LTC to be valid and synchronous
- > Multicam 15.3 does not support the 10GbE Gateway PC
- > First install of Multicam 15 must be done via the USB key
- > Multicam 15 requires 1GB of memory on the MTPC board
- > Multicam 15 requires MTPC board A3/A5 (HS-873) or higher
- > Multicam 15 requires TGE as GBE interface
- > Dual LSM mode is supported in Multicam LSM mode ([Limitations](#))
- > XDCAM-only encoding is supported in Server, Spotbox and Xsense modes ([Limitations](#))
- > V3X modules with SN between 98 and 259 do not allow to output in 3G-SDI on J2 connector, which is mandatory to use the 8-channel layout of the Quad-MTPC
- > Multicam 15 is recommended to be used with version 4.00 and above of the XHub

## NEW FEATURES

### IN 15.3.42

- > Support of Live IP Connection Management according to BESS v1.1
- > A new operational parameter "Make Local Auto" has been added, allowing to make local copies of all elements included in active playlists

### IN 15.3.35

- > Support of Live IP according to SMPTE 2110-10, 2110-20, 2110-30 and SMPTE 2022-8 as well as NMOS IS-04 and BESS v1.0
  - For details, see the XT4K configuration manual, section 5

### IN 15.3.29

- > Support of XAVC class 480 codec for UHD-4K on XT4K / XS4K
- > Support of SMPTE 334M packets on XT4K / XS4K
- > Support of Wide Color Gamut (WCG) metadata identification
- > New configurations
  - XT4K
    - New 8 channels configuration in 1080p
    - New ChannelMAX configuration in 720p / 1080i / 1080p
  - XT3 6U
    - New ChannelMAX configurations in 720p / 1080i / 1080p
- > Monitoring screen for SDI signal quality in SHIFT+F5 pages from VGA, on XT4K / XS4K
- > Accept LinX connection from DYVI without requiring LinX license code

**IN 15.2.28**

- > Support of High Dynamic Range (HDR) metadata identification
- > On XT4K / XS4K
  - Support of 12 channels of HD
  - Support of JPEG internal Proxy on XT4K / XS4K
  - Support of XAVC codec for HD configurations
  - Support of Dual LSM in 720p / 1080i / 1080p
  - Support of split screen replay
  - Support of timeline editing with UHD-4K
- > In Dual LSM mode
  - Possibility to switch from 1 to 2 LSM Remote dynamically
  - Asymmetric configuration: Operators can be assigned a different number of recorders
  - Ability to configure which operator has access to the timeline editing engine
  - Support of the Replay-Only base config
- > Improvement of the local playout protection
- > Improvement of SDTI bandwidth for transfers between H3XP-equipped servers
- > New configurations
  - XT4K
    - New 8 channels configuration in 720p / 1080i / 1080p
    - New ChannelMAX configuration in 720p / 1080i / 1080p
  - XS4K
    - New 8 channels configuration in 720p / 1080i / 1080p
    - New 10 channels configuration in 720p / 1080i / 1080p
    - New 12 channels configuration in 720p / 1080i / 1080p
  - XT3 6U
    - New 6 channels configurations in SD / 720p / 1080i
    - New ChannelMAX configurations in SD / 720p / 1080i

**IN 15.1.36**

- > Support for 12G-SDI on XT4K / XS4K
- > Support for SMPTE 2022-6 native IP IO on XT4K / XS4K

**IN 15.1.29**

- > Support of XS4K series server
- > On XT4K/XS4K
  - Support of 8 HD channel configurations (720p, 1080i, 1080p)
  - Support for AVC-I, DNxHD and ProRes 422 HD codecs
  - Support of protocol control
- > Improved Timeline engine when controlled by AVSP
- > Support of SLSM 16X on 3G

> New configurations

- XT4K
  - New 8 channels configuration in 720p / 1080i / 1080p
- XS4K
  - New 8 channels configuration in 720p / 1080i / 1080p
- XT3 6U
  - New ChannelMAX configurations in SD / 720p / 1080i / 1080p
- XT3 4U
  - New ChannelMAX configurations in 720p / 1080i
- XS3 4U
  - New 8 channels configuration in SD / 720p / 1080i

## BUG FIXES

### IN 15.3.44

- > Playing a local growing clip created from a distant train could result in freeze on local material (MUL-10767)
- > Via LinX it was not possible to display on the OSD the recorder name for REC7 and higher (MUL-11220)
- > SDP format corrections
  - the PTP clock information was not correctly mentioned (MUL-9926)
  - the PTP clock domain was displayed in the wrong format (MUL-10561)
  - the video format (interlaced/progressive) was not in the correct syntax (MUL-10639)
- > On XT4K/XS4K the input monitoring screen in Shift+F5 menu was not complete in UHD-4K (MUL-10537)
- > Additional protection was added to prevent rare crash dumps when working with playlists (MUL-10073)
- > EVS Rest Services Host was occasionally crashing, resulting in a disconnection from Xplore (MUL-10860)
- > Epsio Live was not accessible from the LSM remote (MUL-10569)
- > On XT4K, occasionally the ember\_ipswitcher service provoked a Multicam dump (MUL-8836)
- > Embedded audio channels configured to None in VGA cannot be unmuted from Web Configuration (MUL-10061)
- > On XT4K/XS4K proxy frames were occasionally dropped when bitrate was set to 3Mbps (MUL-10784)
- > Proxy streaming could stop if proxy frames were dropped and audio streaming was activated (MUL-10678)

### IN 15.3.42

- > Live IP based on SMPTE 2110-20 was only supported in 720p and 1080i resolution (MUL-9747)
- > Crash dump could occur when converting a playlist to a timeline with transition split audio (MUL-9681)
- > Responses to PTP management messages were sent as multicast messages (MUL-9635)
- > With EditREC, if the result of an edit generated elements shorter than 3 frames the edit was creating an unplayable element (MUL-8544)
- > With SMPTE 2110-20, loss of video stream after audio reconfiguration (MUL-9638)
- > Changing the destination of AES67 audio stream (SMPTE 2110-30) provoked short audio glitch on all audio channels (MUL-9745)
- > Latency in packet timestamps when using PTP according to SMPTE 2110-10 (MUL-9288)
- > The PTP clock ID was not updated dynamically after Multicam start (MUL-9789)
- > PTP demon was activated on all SFP+ modules resulting in a burst in PTP management messages on the network (MUL-9820)
- > Crash dump could occur when operations were applied on playlists that were not loaded on PGM (MUL-8940)
- > In Dual LSM, under heavy load, when loading clips there is sometimes a significant delay before the clip starts to play (MUL-9257)
- > After Multicam upgrade from M15.2 XT serial links were lost in IPDirector (MUL-9845)
- > Internal decoding issue could sometimes occur with XAVC on UHD-4K images (MUL-9779)
- > Crash dump could occur when popup message was displayed on LSM Remote while configuring Multicam from the LSM Remote (MUL-8925)
- > When clips were restored with XTAccess without guardband and inserted in a playlist using Hard Cut transition with IPDirector, the audio of the last field was muted (MUL-7721)
- > Additional protection has been added to prevent crash dumps generated by MainBgTask (MUL-10027)

### IN 15.3.35

- > Crash dump was generated by an IPDP disconnection/reconnection (MUL-9520)
- > Clips failed to load when cueing elements of playlist via ABRoll (MUL-9388)
- > Ingest-only servers (0 PLAY) were not displayed correctly in IPDirector (MUL-9664)

- > Clips could sometimes not be retrieved on XT3 due to SDTI network issues (MUL-9665)
- > Read timeout could cause backup to fail in XTAccess (MUL-9689)

**IN 15.3.29**

- > TGE board on servers running for a long time with MultiReview or Xplore can lose GBE connectivity (MUL-8360)
- > With AVC-I codec in 1080i, distant playout over XNet could be corrupted with a mix of XT3 and XT4K on the network (MUL-8607)
- > When switching between 1 and 2 LSM Remote controllers per operator, Cue Points were not kept on the 2<sup>nd</sup> controller (MUL-8459)

**IN 15.2.32**

- > LSMConnect cannot connect to XT3 (MUL-8941)
- > Embedded audio was sometimes missing when using 12G-SDI (MUL-8922)
- > "HD output phase" parameter was reset after change of Multicam version (MUL-8298)
- > Under heavy load, RSAS buffer would not be cleaned optimally, thus reducing RSAS bandwidth (MUL-8897)
- > Write operations to internal storage from XNet or GBE was limited to 5 simultaneous accesses (MUL-8792)
- > On XT4K and XT4S odd fields were badly encoded in DNxHD with 1080i (MUL-8825)

**IN 15.2.29**

- > The server crashed sometimes during the connection to Epsio Zoom (MUL-8651)
- > In Dual LSM, the cams mapping wasn't matching the trains mapping when an asymmetric configuration was used (MUL-8631)
- > Clips were sometimes corrupted when played in a playlist with AUX clip and black picture at the same time (MUL-8578)
- > On server XT4K, the encoding with the ProRes codec was sometimes wrong (MUL-8530)
- > On servers configured in XDCAM only and controlled by IPDirector, clips were shortly freezing after a "back to start" operation (MUL-8504)
- > When inserting quickly clips into a playlist the remote was sometime switching from 2PGM mode to PGM/PRV mode if the call channel option is set to "No" (MUL-8233)
- > On a server fit with A3X audio boards, the audio outputs generate sometimes an unexpected noise (MUL-2110)

**IN 15.2.28**

- > The color parameters were not available for the wipe on XTNano servers (MUL-8245)
- > Video flashes displayed on the PGM1 when entering the Epsio Live mode (MUL-8058)
- > Some servers with a too high serial number were not reachable via the Gigabit push (MUL-7896)
- > The parameter "Effect duration for take" was not available in Replay-only base config (MUL-7862)
- > The export - import of configuration lines with SLSM configuration between Multicam 15.x was not working (MUL-7857)
- > It was impossible for IPDirector to select primary or user TC on channels in parallel mode (MUL-7850)
- > With frame-based codecs (AVC-I, XAVC, DVC Pro, MPEG2-Intra) and SLSM content, some frames were sometimes jumping when starting the playout after a fast browse (MUL-7837)
- > When the lever is in the lowest position, sometimes the play was not sent when the lever was moved up too fast (MUL-7818)
- > Audio peaked to 100% when using a Timeline with an aux track and clips with a different number of monos (MUL-7789)
- > On channel controlled by the LSM Remote with IPDirector in parallel, going to live on the first channel via IPDirector affected the playout of the second channel (MUL-7787)
- > The parameter "Insert SLSM native speed" wasn't working when a clip was added to a playlist in edit mode via the insert function or 'Take' (MUL-7210)

- > The server crashed when the maximum of keyword file (100) was reached (MUL-7137)
- > On a configuration with 5 PGM and 2 LSM Remotes, the 2 x 2PGM mode was not available when the last PGM was controlled by a protocol (MUL-7135)
- > On servers fit with MV4 board, the OSD disappeared on all the outputs of the multiviewer (MUL-6764)
- > On a server with MV4 multiviewer, Swap audio OSD are not visible if the advanced audio setting is off (MUL-6666)
- > The image was sometimes corrupted in DNxHD 10 bits (MUL-6649)
- > On an LSM Remote controlling 3 PGM, the playout on the PGM1 was stopped when replacing a playlist by a clip on another PGM (MUL-6569)
- > On a remote controlling 3 PGM with IPDirector in parallel control, the content and the OSD of the PGM2 were impacted when loading a playlist on the PGM1 via IPDirector (MUL-6576)

### **IN 15.1.36**

- > It was impossible to recreate a connection with the same couple of IP address/port after a crash of the TGE configured in LACP (MUL-7265)
- > When a "clear all clips" is performed, some clips could sometimes not be cleared and cause duplicate ID problems after Multicam restart (MUL-7095)
- > Audio quality improvement for the LoRes essence (MUL-7122)
- > On servers equipped with MV4 and internal LAN, when playing a train with IN and OUT points set, and when displaying a picture between the preset, a duration was displayed instead of a counter (MUL-7013)
- > The AVSP command to load a recorder took too much time (MUL-6903)
- > On XT3 servers equipped with MV4 with internal-LAN, a green line appears on the multiviewer when working in UHD-4K (MUL-6890)
- > Hypermotion control via IP protocol in hypermotion-only mode could not be used (MUL-6889)
- > An encoding issue leading to freeze on air was affecting the V4X working in UHD-4K with the XAVC class 300 codec (MUL-6835)
- > The Epsio protocol menu was not working on the remote (MUL-6768)
- > The speed of playlist elements could not be edited when operating XSense (MUL-6697)
- > On servers equipped with MV4 without the internal-LAN, boot time was abnormally long (MUL-6695)
- > On server with MV4 board, the first of the 24 character of the clip name was missing on the small layouts (MUL-6690)
- > The OSD of the PRV are incorrect when playing a playlist in a 1080p Dual-Play configuration (MUL-6685)
- > OSD were sometimes missing on J4 when running a Dual-Play configuration (MUL-6680)
- > Crash dump when the remote source of an idle channel is disconnected and reconnected (MUL-6669)
- > Crash dump can sometimes occur when managing the cue points (MUL-6260)
- > On servers equipped with MV4 and internal LAN, OSD of IN point on the multiviewer could be wrong (MUL-6120)
- > Multicam failed to start when hypermotion control was enabled and too many LSM Remote controllers were configured (MUL-5509)

### **IN 15.1.29**

- > On a MV4 multiviewer, with 16 audio tracks, the OSD was partially overwritten when swapping the audio tracks (MUL-6618)
- > It was not possible to load a train from LSMConnect (MUL-6525)
- > In PGM/PRV, Loop clip on non-controlled channels was deactivated by a live command (MUL-6320)
- > The audio of the even elements of a playlist were sometimes muted after an edition with IPEdit (MUL-6314)
- > The quality of the MV4 multiviewer was not optimal for the full layout with 1080i output (MUL-6172)
- > Audio was played on SLSM clips played via DD35 even when the Audio slow motion parameter was set to "no" (MUL-6074)
- > Play commands sent from GPI did not freeze on Cue Point (MUL-6032)





## MULTICAM RELEASE NOTE

- > LSM remote was sometimes blocked when entering the EPSIO mode and leaving it quickly (MUL-5803)
- > Empty tally messages were discarded without color interpretation (MUL-5756)
- > With a Channel Max configuration in 1080p with two remotes, assignment of two PGM per remote was not allowed (MUL-5743)
- > VPI packets were not present on the 3G-SDI output of MV4 multiviewer (MUL-4873)

## **KNOWN ISSUES & LIMITATIONS**

### **ISSUES**

#### **SINCE 15.3.44**

- > With CODA75 and I/O configs with 8 tracks the audio tracks are assigned to the wrong video channel (MUL-10060)
- > Embedded audio channels configured to None in VGA cannot be unmuted from Web Configuration (MUL-10061)
- > For ProRes422 HQ the bit depth is indicated as 10b instead of 8b in the metadata information (MUL-9582)

#### **SINCE 15.3.35**

- > When merging distant playlists, it is possible to build a playlist made of 1000 clips even though the number of clips is limited to 999 (MUL-8982)
- > Replace Timeout occurs in IPDirector when having both GPI and swap audio used in Timeline (MUL-8972)
- > Audio is distorted on XT3 with CODA75 when clip playout is stopped using the jog wheel (MUL-9841)

#### **SINCE 15.3.29**

- > Genlock and LTC signals are required for operations with Live IP. PTP synchronization is used for ST 2110 packet timestamping (MUL-8739)

#### **SINCE 15.2.32**

- > ST 2022-06 output streaming can be stopped by Genlock instability (MUL-8732)

#### **SINCE 15.2.28**

- > Dump during Multicam startup when TGE card is not properly detected (MUL-8628)
- > When the OSD tally is set to "Char OUT + MVW" and triggered through GPI, the tally is not present on the Char OUT (MUL-8733)
- > Crash dump on servers running for a long time (more than 60 days) (MUL-8320)
- > In 1080p, when SLSM recorder are configured, it can have a short latency after a fast jog (MUL-7824)

#### **SINCE 15.1.36**

- > When using an Aux Track output on PRV channel, loading a playlist on an odd PGM may impact audio of the next even PGM (MUL-6035)

#### **BEFORE 15.00**

- > Video Delay base config requires a Remote D to be configured (MUL-739)
- > Modification of a playlist using Advanced Audio Editing on a server without this feature is allowed and causes problems (MUL-554)

### **LIMITATIONS**

#### **SINCE 15.3.44**

- > Improvement of preload may induce a slight delay when loading a distant record train (MUL-10665)

#### **SINCE 15.3.35**

- > On XT3 in Dual-Play 1080p 4 PLAY, the audio on PGM 3 and PGM 4 are duplicates of the audio of PGM1 and PGM2 respectively (MUL-9613)

#### **SINCE 15.3.29**

- > Pushing a clip fails, if pushed to the same XT multiple times simultaneously (MUL-9291)

#### **SINCE 15.2.32**

- > Split screen with UHD-4K is only supported on XT4K with 2 sample interleaved mode (MUL-7652)

**SINCE 15.2.29**

- > On XT3 / XS3 fit with MV4 multiviewer with Internal LAN, in a Dual-Play configuration, if the first channel of a codec module must switch to the legacy OSD mode, the second channel switches too (MUL-6588)

**SINCE 15.2.28**

- > It is impossible to set an In point on a distant train when the horizontal split is activated (MUL-8053)
- > XT4K and XS4K present some limitations in 1080p
  - Configuration with more than 8 channels of 1080p are limited to a bitrate of 250Mbps per channel
  - Configuration with more than 8 channels of 1080p do not support Mix-on-one-channel
  - Mix-on-one-channel is not supported on configurations with high number of PGM with high bandwidth codec

**SINCE 15.1.29**

- > Timeline editing is supported in UHD-4K, but only on XT4K/XS4K and only with AVSP control
- > The old OSD are displayed on the MV4 multiviewer for the second channel of a module when the EPSIO mode or Paint/target is activated on a Dual-Play configuration (MUL-6587)
- > Servers equipped with MV4 and operating in UHD-4K should configure the output of the multiviewer as 1080p to benefit from optimal quality (MUL-6331)

**SINCE 15.00.49**

- > On the XT3 server fit with a MV4 multiviewer, , sometimes the offset phase parameter cannot correct the problem of a green line which can appear on the multiviewer of the recorder when the server is configured in UHD-4K. (MUL-6890)

**SINCE 15.00.43**

- > On XT3 / XS3, there are no OSD on the J1 output on CVBS monitors with the MV4 multiviewer (MUL-4424)
- > With the hypermotion camera ForA\_FTOne 6.50 in 4 blocks mode, the blocks 1 and 2 switch to ReadyToRecord when browsing in blocks 3 and 4 (MUL-4057)
- > USB key can disappear during the install with USB key JetFlash Transcend batch A850130373 (MUL-3040)

**BEFORE 15.00**

- > When HD SD autosense is activated with an XDCAM codec, the switch between SD and HD can lead to GOP corruption (MUL-8303)
- > The HS-873 MTPC does not support the USB HID component devices (MUL-6104)
- > In UHDTV-4K on XT3, the AUX clip function in playlist is working only with 1 IN – 1 OUT configuration (MUL-4038)
- > On servers fitted with a CODA75 audio board and configured in Dual-Play, the audio of the first recorder is wrongly associated with the last PGM (MUL-3631)
- > On XT3 / XS3, Timeline editing is not supported with 1080p with Dual-Play configurations (MUL-3612)
- > ChannelMAX configurations with 1080p support mix effects only when configured with 2 PGM (MUL-3250)
- > Operations in Dual LSM mode are subject to some limitations:
  - Timeline is available only on the first remote
  - Only an LSM Remote is allowed as primary controller, parallel control is supported
  - Replace function is only available on the first PGM
  - Epsio Live operation are only available on the first PGM
  - Hypermotion camera control is available only on the second remote in toggle mode
- > It is not possible to create local clips during the connection phase to the XNet network (MUL-2461)
- > In 1080p freeze can occur with a local playlist filled with local SLSM 6X or 8x clips (MUL-2065)
- > On XT3 / XS3, operations in 12 channels mode are subject to some limitations:
  - Available on 6RU servers
  - The server must be equipped with H3XP, V3X and A3X
  - Individual CHAR OUT output is not available for the second play channel of PLAY modules. The OSD are available in the internal multiviewer.
  - SD-downconverted outputs are not available
  - Regular mix with 6 IN + 6 OUT is available between PGM 1 & 2 and PGM 4 & 5

- > 1080p XRec configurations with 3G-SDI Level-A does not allow to monitor the audio from the IN B channels in the internal multiviewer (MUL-2058)
- > Dual-SLSM6x 720p/1080i and SLSM8x 1080p configurations can be configured by users with too high a bitrate to always ensure smooth operations; Operators are advised to choose the preferred balance between image quality and responsiveness of operations (MUL-1822)
- > On 6RU server, operations with more than 12 channels of 720p/1080i or with more than 6 channels of 1080p are only available with DNxHD  
On 4RU server, operations with more than 8 channels of 720p/1080i or with more than 4 channels of 1080p are only available with DNxHD
- > No VITC embedded on the loop through of the recorder modules (MUL-836)
- > When video disks are full and the number of inputs is reduced in configuration, recorders may not start automatically upon Multicam restart (Bug ID 89602)
- > Operations in XDCAM-only mode are subject to some limitations:
  - Mix on one channel is mandatory
  - 3D is not supported
  - Preload of clip may take between 0s and 2s
    - May impact Preload, Goto TC, ...
    - Next command in playlist
      - 1st Next command is performed normally
      - Following Next command is available when the clip is loaded (2s max)
      - Next commands issued during preload are discarded
    - Skip command in playlist
      - Skip is applied without freeze if issued at least 2s before the end of the current element
      - Otherwise, a cue up time (2s max) will apply on the following element
      - Skip commands issued during preload are discarded
  - Playlist elements must be at least 1.5s
    - Short elements will be skipped but remain editable
  - Playlist speed is limited between 0 and 100%
    - No support for negative speed
  - TimeLine editing is not supported in XDCAM-only mode
- > From machine A, play a clip of machine B. It is possible to delete the clip from B although the clip is on air (MUL-844)
- > Internal Loop is not supported with 3G-SDI Level-B (Bug ID 86751)
- > When working in UHDTV-4K, XNet content may be copied over SDTI but not played remotely (Bug ID 84906)
- > When working in UHDTV-4K with 2 PGMs, playing faster than 100% on one PGM may affect playback on the other PGM (Bug ID 84322)
- > On XT3 / XS3, in UHDTV-4K, wipe effects longer than 2 seconds do not render nicely (Bug ID 84367)
- > Cross-fade is not applied when swapping audio tracks on the Short IN of a clip in a playlist (Bug ID 83621)
- > Mix on 1 channel cannot be used in combination with Epsio Live (Bug ID 35001)
- > OSD disappears after deactivation of the IPDP secondary controller while there is a playlist loaded and end of playlist is reached (Bug ID 32516)
- > Some Playlist OSD information can be missing when LSM remote and IPDirector are controlling PGM channels in parallel and OSD is set to a controller different than the one loading the playlist (Bug ID 32533).
- > When in the Multicam Setup page, technical OSD can be corrupted when focus is set to configuration lines for which the video standard does not correspond to the genlock of the server (Bug ID 32791).
- > With Hypermotion cameras, wrong OSD color for 1 or 2 seconds when pressing LastCue button (Bug ID 14021)
- > Clips are not logged in AsRunLog when the playout is interrupted (Bug ID 13241)
- > "Other Angle" functionality in Playlist edit mode does not work with clips with timecode more than 24h behind the head of the record train (Bug ID 13826)
- > With 3 PGM channels, the SDTI F9 connect window is not displayed when there is an IPDP TimeLine loaded on PGM1/PGM2 (Bug ID 14074)
- > Push gigabit:
  - Cannot push a SDTI network clip through gigabit to a gigabit only server (Bug ID 12864)
  - When pushing on the fly before saving the clip, changes made on the clip information (name, keywords, rating) are not pushed (Bug ID 12847, 12848)
  - Gigabit push clip ID destinations start from 0 (110, 111, 112,...) while SDTI destination IDs start from 1 (111, 112,...110). (Bug ID 12811)
- > Clip creation from different PGMs controlling distant trains and local trains : mark in/out point successively on the various PGM may reset in/out points (Bug ID 8176)
- > Going into the Remote menu may deactivate a secondary control (Bug ID 8439)
- > Using the VDR panel while in TimeLine edit mode may result in loss of audio on the PGM (Bug ID 31441)
- > Sony VITC time code is not available in Sony ganged mode, only Sony LTC and Sony Timer mode

- > Keyword filename is limited to 8 characters
- > Retrimming clip in IP Director only affect the IP Director, not the Remote operator and vice-versa (Bug ID 6651)
- > Do a sort-TC, get the list of results, loading a playlist without first pressing Live. Using the browse button will bring the user back to the browsing in the search result, not in the playlist. (Bug ID 6276)
- > The Undo command in playlists does not apply to the "Make Local" command (Bug ID 5515)
- > It is impossible to load a TimeLine in load playlist conditional (Bug ID 5365)
- > When editing a playlist, the duration of all playlists in the playlist screen is temporarily affected (they are calculated like in cut mode) (Bug ID 5333)
- > In split screen mode, audio meters only appear on PGM1, not PGM2 (Bug ID 5056)
- > On the SDTI Network, if a network cable is removed from a slave XHub where no server is connected, the master XHub can temporarily disconnect the XHub slave, causing a network disruption.
- > VDCP protocol cannot be set as a secondary control of a remote.
- > 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:
  - It is necessary to have minimum two PGM
  - The TimeLine features are 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.
- > 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 are not accepted during transition effects, nor if the next transition is a split audio (different audio and video IN point, or different video and audio effect durations).
- > When adjusting YUV parameters to define a custom color for wipe border, the corresponding color is not displayed on main output.
- > Impossible to switch to another camera while searching with the jog dial. 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.
- > 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 Super Motion configurations.
- > 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.
- > 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.
- > It is not possible for a client to push a clip to another client.
- > On a XT server, 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.
- > 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.
- > After having done a search on the remote, the browse function always browses in the results of the clip search, it is not possible to browse in the clips of the remote anymore without pressing "live".

## COMPATIBILITY

### SOFTWARE

- > Multicam 15.3.44 is compatible with version 1.3.3 (or newer) of the Multicam USB Creator

### HARDWARE

- > Multicam 15 requires 1GB of memory on the MTPC board
- > Multicam 15 is only compatible with CODA75 or A3X audio boards
- > Multicam 15 is only compatible with MTPC board A3/A5 (HS-873) or higher
- > Multicam 15 is only compatible with XT4K, XS4K, XT3, XS3, XTnano and XS servers equipped with TGE
- > XDCAM encoding requires an XT3, XS3 or XS equipped with H3X or H3XP and XDCAM MVP modules
- > Dual-codec encoding Intra + Lo-Res requires an XT3, XS3 or XS equipped with V3X modules and H3X or H3XP
- > Dual-codec encoding XDCAM + Lo-Res requires an XT3, XS3 or XS equipped with V3X modules, H3XP, TGE and HS-873
- > On XT3 or XS3, configurations with more than 6 channels of 1080p or UHDTV-4K requires at least the following hardware:
  - > MTPC A3/A5, A3/A6 (HS-873)
  - > V3X modules with Serial Number higher than 1300
  - > V3X base with Serial Number higher than 4130 (revision A4 or higher)
  - > SAS disks with revision 10K5 or higher
  - > RAID array configured in (5+1) mode
- > H3X board is only compatible with V3X video board, CODA 75 audio board and SAS drives
- > H3XP board is only compatible with V3X video board, A3X audio board, HS-873 and SAS drives
- > CODA 75 is only compatible with H3X, NOT with HCTX
- > V3X compatible with H3X are NOT compatible with HCTX
- > MTPC rev A3/A5 (HS-873) is supported since Multicam 11.00.71
- > USB keyboard is supported since Multicam 11.02
- > H3X is supported since Multicam 10.05
- > TGE (1GbE or 10GbE) is supported since Multicam 12.05
- > H3XP is supported since Multicam 14.00
- > SAS drives are supported since Multicam 10.01.73
  - > Only SAS drives provided by EVS are supported
  - > RAID array with 10K3 drives can be fitted with 10K5 or 10K6 drives for maintenance
  - > RAID array with 10K5 drives can be fitted with 10K6 or 10K8 drives for maintenance purposes
  - > RAID array with 10K6 drives can be fitted with 10K8 drives for maintenance purposes
  - > All disks in the RAID array must have the same capacity.
- > 1.8TB drives are supported since Multicam 15.00
- > Multicam 15 is not compatible with XT1, XT2, XT2+, XS 5U nor XSnano chassis
- > The touch screen is not supported since Multicam 14
- > Gigabit H3X is not supported since Multicam 15
- > COHX base is not supported since Multicam 15
- > The Wacom Tablet is not supported for navigation purpose since Multicam 14
- > The STXX Jumper on the backplane must be removed!

## XNET

- > SDTI network in Multicam 15.3.44 is only compatible with 15.3.29 and above. It is not compatible with ANY OTHER lower version
- > The same multi-essence configuration must be applied on all servers inside the SDTI network
- > Multicam 15.3.44 is not compatible with XFile2. XFile3 should be used instead.
- > Multicam 15 is compatible with V4.00 and above of XHub3
- > If you need to upgrade the XHub, please contact EVS to get the upgrade software and procedure
- > If unsure, you can check the version with the following procedure for XHub3:
  - o Move up the version switch  
(This does not require switching off the XHub and it maintains normal operations during the version check)
  - o The branch status LEDs show the software version in a binary pattern

Branch LED #	1	2	3	4	5	6	7	8
v. 3.03		green	green	red			green	green
v. 3.04		green	green	red		green		
v. 4.00	green			red				

- o To return to normal LED behavior, move down the version switch

## CLIPS & PLAYLISTS

- > A clear clip (clearing the video disks content) is mandatory when upgrading from any version older than Multicam 12.02
- > Upgrading from Multicam 14 does not require to clear the video disks
- > Downgrading from Multicam 15.3 to Multicam 14.02 or lower will delete the playlists

## HYPERMOTION

- > Multicam has been validated with Vision Research Phantom firmware 776b
- > Multicam has been validated with Vision Research Flex 4K firmware 87
- > NAC Hi-Motion II recommended firmware is I/F PART FW 01.08.26 or above, PROC PART : FW 02.02.10