



# VCube Release Notes



**Updates:** Please check our Web site <http://www.merging.com> periodically for information, patches and updates.



## VCUBE 5.1 Release Notes

### NEW FEATURE:

- Blackmagic design Video Cards Support:

As of VCube 5.1, Merging now supports Blackmagic design Video Cards thru the DeckLink SDK. This covers DeckLink, UltraStudio and Intensity product lines. **TBD : Only Decklink Studio 4K has been validated so far. If no more validation is done, it's the only board that will be supported.**

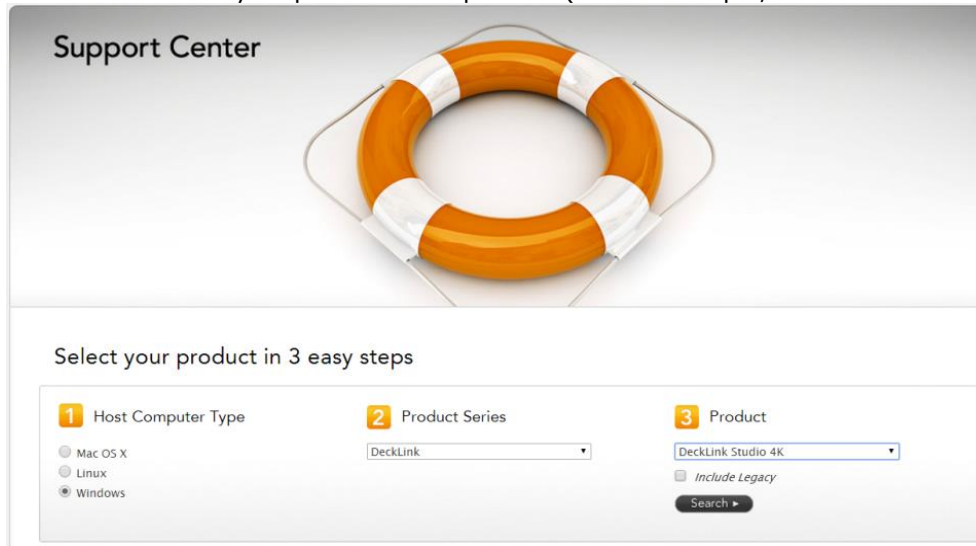
Blackmagic design installer version must be 10.1.1 or higher.

#### **Limitations:**

Most Blackmagic design cards support 4K video format. This hardware will work properly, but not with video size bigger than 1080x1920.

#### **Installation/Setup:**

1. Go to <http://www.blackmagicdesign.com/support>
2. Follow the 3 easy steps to select a product (in this example, DeckLink Studio 4K on Windows)




The screenshot shows the 'Support Center' page with a lifebuoy icon. Below the icon, it says 'Select your product in 3 easy steps'. The interface is divided into three columns:

- 1 Host Computer Type:** Radio buttons for Mac OS X, Linux, and Windows (selected).
- 2 Product Series:** A dropdown menu showing 'DeckLink'.
- 3 Product:** A dropdown menu showing 'DeckLink Studio 4K', a checkbox for 'Include Legacy', and a 'Search' button.

3. Download the Desktop Video package.



## Support Center

DeckLink Studio 4K for Windows





Change your product >

### Downloads

-  Desktop Video Manual  
06 June 2014  
Size: 13.36 MB  
[Download](#)
-  Desktop Video 10.1.1 for Windows  
Date Added: 06 June 2014  
Size: 121.9 MB  
[Download](#) [Readme](#) > [Archived drivers](#) >

### Online Resources

-  DeckLink FAQs  
Some of the most frequently asked questions.  
[View](#)
-  Support Notes  
Search our library for DeckLink support notes.  
[View](#)

#### 4. Register and Download your Software:

**Note:** you don't have to register to download the Desktop Video package. Just press **"Download now"** to get the package download started.

### Register and Download your Software

Product Information	Owner Information
<p>Product model: DeckLink Studio 4K</p> <p>Host Computer Type: <input type="checkbox"/> Windows XP <input type="checkbox"/> Windows Vista <input type="checkbox"/> Windows 7</p> <p>Serial: <input type="text"/> <a href="#">Find serial number &gt;</a></p> <p>How do you use this product? <input type="text"/></p> <p>What features should we urgently add? <input type="text"/></p>	<p>First Name: <input type="text"/></p> <p>Last Name: <input type="text"/></p> <p>Company: <input type="text"/></p> <p>Email: <input type="text"/></p> <p>Phone Number: <input type="text"/></p> <p>Country: <input type="text"/></p> <p>City: <input type="text"/></p> <p>State: <input type="text"/></p>

[Register & Download](#) OR [Download Now](#)

5. Once downloaded, un-zip the package.

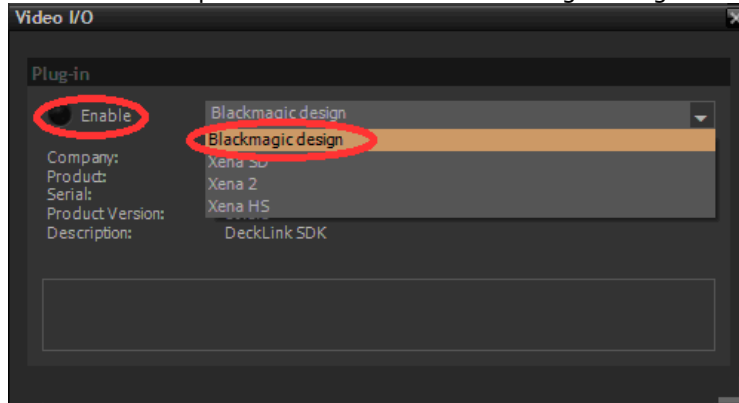
6. Run the DesktopVideo\_x.x.x.msi installer and follow the specific instructions.

7. Restart your system once the installation is completed.

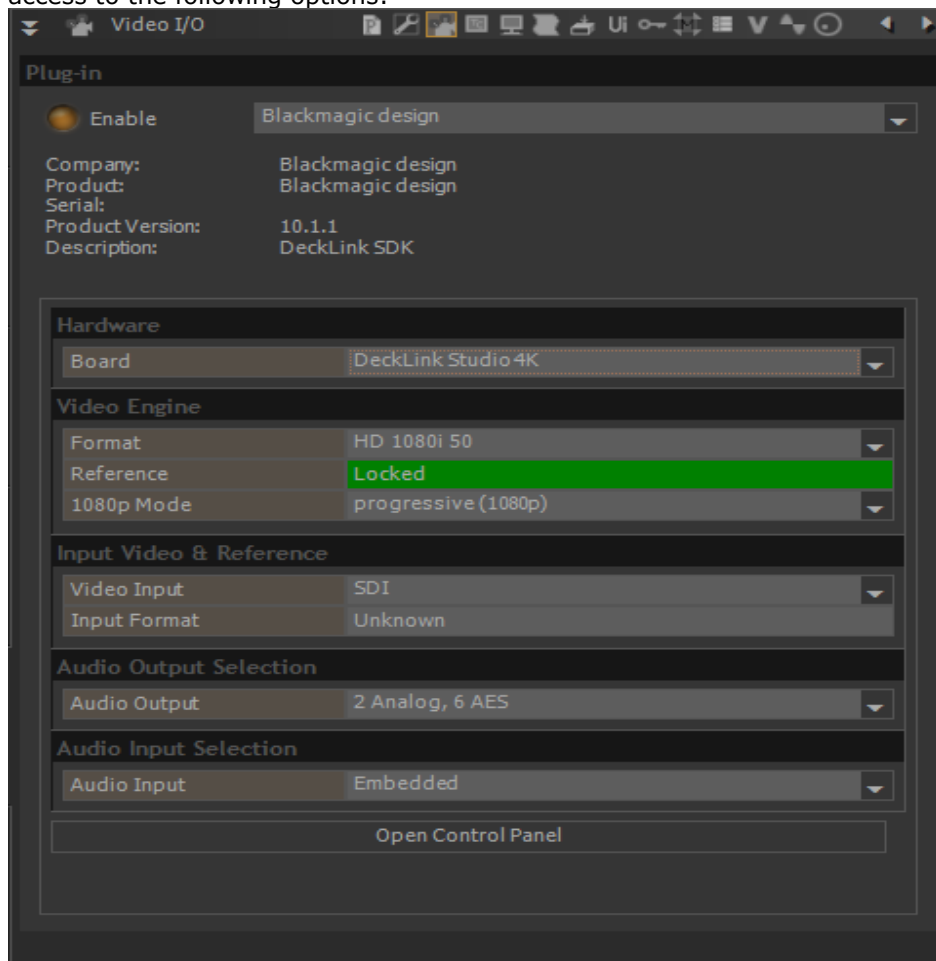
## Behavior description

### **Enable Blackmagic design video I/O in VCube.**

1. Start VCube.
2. Prompt the Video I/O setting tab (SHIFT-ALT-P).
3. From the drop down menu select "Blackmagic design" and enable the card



The Video I/O Plug-in tab gets populated. Depending on options and card properties, you'll get access to the following options:





---

## Hardware

If several Blackmagic design cards are installed, you can select the one you control from the Board dropdown.

## Video Engine

Format: Choose video format / resolution. HD formats will require the proper keys.

Reference: Indicator of the video reference. Note: Some cards might not support this

1080p mode: Segmented frame mode; Progressive or segmented (for VTR supporting Interleave).

*Note: We recommend users to use the VCube quick SD (ALT+F5) and quick HD settings (ALT+F6) in order to automatically configure the format and 1080p mode.*

## Input Video & Reference

Video Input: Only valid for some Blackmagic cards supporting input. Note that this option is only available for VCube SE users. Allows users to select video input source (connector); Choices can vary from; SDI, HDMI, Component, Composite, S-Video

Input Format: Only available on some Blackmagic cards. Indicates the input video format. Only active when in record Mode.

## Audio Output Selection

Audio Output: Choice can vary with different Blackmagic cards. Users must select their audio output source. Available possible physical output choices (example: DeckLink-Studio); 4 analog, 2AES or 2 Audio, 6AES

## Audio Input Selection

Audio Input: Choice can vary with different Blackmagic cards. Users must select their audio input source. Available possible physical input choices (example: DeckLink-Studio); Embedded, AES/EBU, Analog.

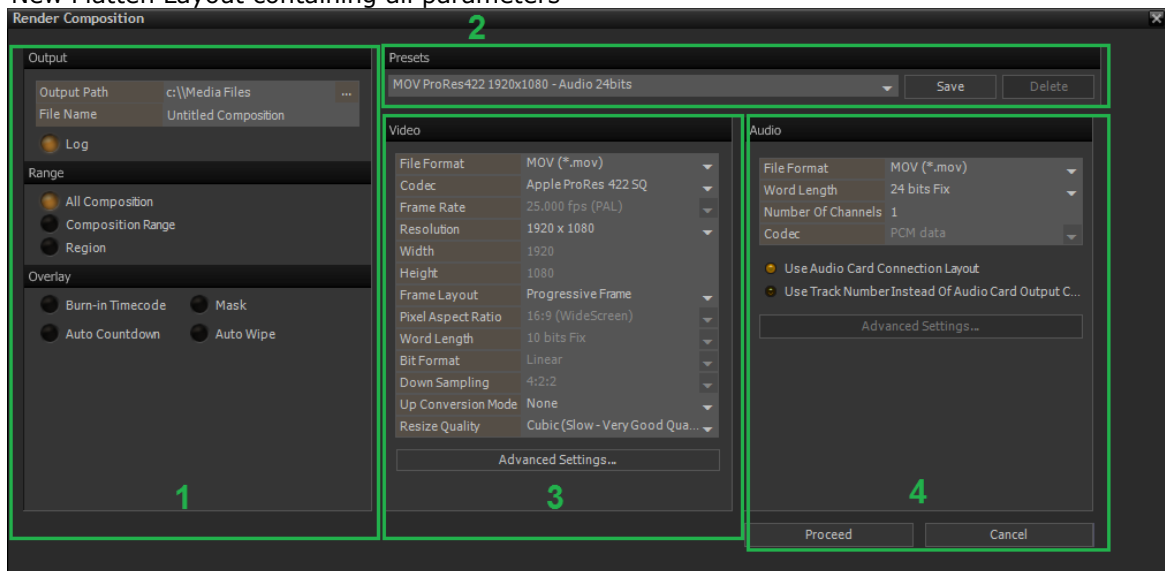
## Open Control Panel:

Will open the Blackmagic Design control panel

## IMPROVEMENTS:

- **Faster Playback performance improved for:**
  - ProRes
  - DNxHD
  - AVC-Intra
- **Improved compatibility with QuickTime:**
- **Improved compatibility with IRT MXF, Sony MXF:**
- **Recording rendering in ProRes proxy, LT, HQ:**
- **VCube Quick HD/SD setting conformity:**
- **MXF:**  
VCube MPEG2-SD/D10/IMX (Sony XDCam SD) key required when reading MXF below:
  - D-10
  - EVS
  - MPG2
- **ADR:**  
Improvement: Display ADR text in the Countdown and Wipes
- **Simplified preset based mechanism:**  
for the following VCube operations (Subject to changes)
  - Record
  - Convert Media Files
  - Render Composition
  - Import Still images Sequence

New Flatten Layout containing all parameters



- 1- Output, Range and Overlay (previously known as the "Main" tab)
- 2- Presets to define Video and Audio profiles (section 3 & 4)
  - Last video and audio settings parameters are preserved at reload
  - Presets can be configured starting from the custom (default) parameters
  - To create a new preset
    1. Configure your Video and Audio Parameters



2. Select Save
3. Enter a preset name and click OK
  - Presets can be renamed by selecting the preset and doing save, if a user wishes to change the parameters of a preset he can then simply press save to overwrite them
- 3- Video parameters (Auto-filled according to format and profile selection)
  - More codecs profiles and rearrangement
  - The displayed profiles are valid ones at selection
  - Additional bit rates per codec available
- 4- Audio parameters

### **V5.1.5 HotFix BUGS FIXED:**

- MT5831: Fixed. On convert media user go back to setting window if he refuses overwrite
- MT5612: Fixed. VCube Output tab : debug messages when playing mov files
- MT6088: Fixed. IMX encoder inside xcCodec part 1. Initial setup. Encoding to mov possible
- Fixed. VCube: Changing from 'presets' to 'profiles' and Adjusting geometry
- Fixed. VCube: Load closest default profile as close as previous default profile upon change
- Fixed. VCube: IMX XCodec encoder: Added security
- Fixed. VCube: corrected validation rule violation for IMX
- Fixed. VCube: More accurate time-stamp accuracy with AV.hpp. Affect principally H264 files
- Fixed. VCube: enabling dnxhd interlaced in render
- Fixed. VCube: MXF correctly wrap IMX between containers
- Fixed. VCube: Correct Metadata AVCintra 50 in MXF
- Fixed. VCube: MXF DNXHD write handler conforms to vc3 label
- Fixed. VCube : Marking targa files in mov as rawvideo
- Fixed. VCube: Fix I/O capture and Output check. LE XE can output to BlackMagic.

### **V5.1 RC1 BUGS FIXED:**

- MT5251: Fixed. VCube: Synchronise Edting with Pyramix setting lost at VCube start
- MT5971: Fixed. BlackMagic design one frame offset in Record
- MT6001: Fixed. Render MOV RGB 720x486 wrong colors conversion
- MT6062: Fixed. VCube render Gop 12 B frames not processing whole file
- MT6087: Fixed. FFMpeg: first decoded audio frame is corrupted.
- MT6093: Fixed. Render to MOV - RGB or YUY2 NTSC tagged 25 FPS instead of NTSC
- MT6094: Fixed. Codec list cleanup in Render or Record
- MT6096: Fixed. MPEG render broken
- MT6098: Fixed. AVCIntra 100 1080 : added interleaved mode
- MT6102; Fixed. Render MOV AVCI wrong aspect ratio
- MT6113: Fixed. Display ADR text in the Countdown and Wipes
- MT6114: Fixed. VCube should play silence at end of truncated mov files
- MT6115: Fixed. VCube VS3 Chase Memory leak with BlackMagic Design
- MT6116: Fixed. Render Audio only not working: if user selects "none" in video page we should not check if the audio is correctly defined.

### **V5.1 Beta 2 BUGS FIXED:**

- MT6083: Fixed. VCube: Import consecutive Media file "load" will crash VCube
- MT6060: Fixed. VCube: H264 / MP4 crashes - hang or Pink line

### **V5.1 Beta 1 BUGS FIXED:**





- MT6055: Fixed. VCube: Open one-file-per-track pmf can crash VCube
- MT6051: Fixed. VCube: Prores, audio playback drop
- MT6044: Fixed. VCube: Overlay. Added timecode offset value option.
- MT6043: Fixed. VCube: Overlay. Nominal T/C and alternate TC should be left aligned
- MT6042: Fixed. VCUBE: Avoid folder creation when opening Wrap (Render)
- MT6036: Fixed. VCube: Seeking followed by Play causes 3-4 sec pause
- MT6015: Fixed. PyraCube - VT2 : VCube does not follow correctly in FFWD/REW
- MT6032: Fixed. AJA router panel missing
- MT5966: Fixed. Align Audio Read on frames turned off when starting VCube
- Fixed. VS3 Control Panel: Rename mode « No Audio » to « No VS3/ASIO Audio »
- Fixed. Quick HD/SD setting conformity
- Fixed. MXF XDCAM RDD09 compliance fixes: Index tables fixes for multiple Body Partitions

## **LIMITATIONS/PRODUCT CHANGES:**

- Mykerinos not supported under a 64bit OS
- SD2 support removed
- QuickTime replaced by the FFMPEG technology

## **V5.1 Known issues**

- Export Render & Import Convert Still images: Under development, GUI subject to changes.
- Render: MPEG available with either audio only or video only
- MT5936: DVCPROHD 720p encoding issue
  - Corruption on first frame
  - Wrong metadata encoded
- MT6084: VCube:MTASIO Bridge Buffer size changes mute audio coming out of VCube  
Workaround: Toggle the output assignments in the VCube track headers.
- MT6068: VCube instabilities when playing Files with variable frame rate
- MT5992: VCube can't read MXF containg VANC track
- MT5921: Midi TimeCode sync only works in non VS3 mode VCube does'nt lock to incoming Midi TC  
Workaround: switch to non-VS3 Mode (No Audio) in VS3 Control Panel.
- MT5888: Render: Waveform not correct at end of some NTSC file





---

## VCUBE 5.0 Release Notes

### NEW FEATURE:

- VCube 64 bit OS support.
  - VCube now comes with two different installer
    - VCube 32bit
    - VCube 64bit

#### Notes:

- Make sure you download and install the proper VCube version for the appropriate OS
- Mykerinos not supported under a 64bit OS.

### IMPROVEMENTS:

- **VCube configuration:**
  - Launch mode and engine selection must be set from the VS3 Control Panel
  - The ASIO engine configuration must be set from the VS3 Control Panel (removed from VCube settings)
  - VS3 control panel added a new platform 'No Audio' (VS3Less) for VCube
- **Virtual Transport 2:**
  - Removed or replace since VT2
    - VT1 Settings have been removed from VCube (Clock Master, Follow VT ,
  - Transport Window now indicates which Pyramix it being controlled, by displaying its name.
  - The VT2 configuration must be done from the Pyramix Virtual Transport 2 Settings
  - VCube will be seen as a VT2 client at application start
- **VCube Support with RAVENNA ASIO**
- **QuickTime no longer required nor installed along VCube. This was replaced by the FFMPEG technology (for .mov files)**
- **Updated Video Encoder and Decoder**
- **Updated Realtime Resize engine**
- **Alpha Channel Support**
- **AJA & ASIO can now be activated simultaneously**
- **Render DVCPROHD support in; Mov, MXF & AVI**

### V5.0.8 HOTFIX BUGS FIXED:

- MT6018: Fixed. Playback glitch in some MOV file (MT6005)
- MT6030: Fixed. VCube: Chinese characters .mov files are not readable
- MT6028: Fixed. When VCube is chasing Pyramix, VCube doesn't go in day -1 when Pyramix does it
- MT5748: Fixed. VCube can crash on exit if in Mykerinos mode
- MT6010: Pyra-Cube: Video does not load in VCube when reopening projects
- MT6011: Pyra-Cube: Import video clips not working if using a mapped network drive



---

## **V5.0.7 HOTFIX BUGS FIXED:**

- MT5964: Chase mode of second and following external machines behaves incorrectly at launch and at active machine change.
- MT5963: Fixed. VCube + MXF Handler: AVCIntra files can't be read by external programs
- MT5962: Fixed. Pyramix Mixdown non-realtime fails (ADR too) if VCube is chasing
- MT5960: Fixed. VCube chase offset display - 1 frame
- MT5944: Fixed. VT2 going out of record in Pyramix makes VCube stop
- MT5928: Fixed. VCube Rendered / Recorded files shows Metadata wrong writing application
- Fixed. MXF XDCAM RDD09 compliance fixes
- Fixed. VCube. Now Remembers some Settings parameters

## **V5.0.6 BUGS FIXED:**

-- RC1 --

- MT5859: Fixed. VCube: Pyramix system name identification in Transport not always displayed
- MT5920: Fixed. USBSync Control Panel in Windows CP not working
- MT5910: Fixed. VCube: Added a quick fix for mov XDCAM
- MT5818: Fixed. VCube mov DV25 NTSC files are not decoded with FFMpeg
- MT5770: Fixed. VCube: AVCIntra in 32 and 64 bits (mov, mxf)
- MT5909: Fixed. VCube: Potential crash at end of XDCAM playback in MXF
- MT5902: Fixed. Cursor not auto-playing if a VCube is chasing (VT2)
- MT5773: Fixed. VCube Render: DVCPROHD support
- Fixed. VCube: Added Export option for MXF and AVI

-- Beta4 --

- MT5722: 720p playback broken

-- Beta3 --

- MT5889: Fixed. Remove MP4 from render / record / convert formats
- MT5877: Fixed. VCube Reset now available for x64
- MT5883: Fixed. VCube NTSC Audio Glitch when rendering from MXF
- MT5884: Fixed. VCube Render MXF missing second frame DV/DVCPRO/AVCI/DNXHD
- MT5836: Fixed. VCube Instead of hanging, return false when audio frame is out-of-range.
- MT5874: Fixed. VCube crash when load & Auto-config WAV 2398 file
- MT5865: Fixed. VCube auto edit crash fix MT5865
- MT5844: Fixed. VCube DolbyE not decoded into mov
- MT5842: Fixed. VCube Some DV files cannot be wrapped
- MT5840: Fixed. VCube Corruption in Wrap MXF IMX/XDCAMHD to MOV
- MT5838: Fixed. VCube MXF: MPEG HD encoding is too slow : less than realtime
- MT5837: Fixed. VCube MXF: Main Concept encoding missing last frame
- MT5829: Fixed. VCube Final Check not working
- MT5806: Fixed. VCube: Import Video Clips into VCube not working with VT2

-- Beta2 --

- MT3497: Fixed. VCube: import from "Still Images" caused wrong colors
- MT5452: Fixed. Uncompressed AVI files modified by VCube when opening



---

## **OTHER KNOWN ISSUES**

-> First playback when configured with a Mykerinos (VS3 Control Panel) could crash.

Workaround: simply select the desired sampling rate under the VCube settings.

-> AJA LHi or 2K GUI: "Audio Source" selection under construction

-> Installer: upgrades can at time end up with a repair process or rolling back to the previously installed version. In such case Merging recommends that you un-install the current VCube version prior to installing VCube v5.0, instead of doing an upgrade.

-> Canopus ADVX1000 is no longer supported in Vcube

-> VCube Runtime C++ Error when playing video file  
Merging recommends that all VCube 5.0 configurations have at least 2GB of Ram (memory).

-> Remote: The first time 9 pin remote and/or machine control is used, you have to confirm that you use e.g. COM3 in the 9pin settings.

-> MT4478: Audio track numbers ignored by Dolby E decoder  
Dolby E decoder will only work on the first Audio track group (a1).  
*Workaround: Make sure the Audio Files are all in the same Audio Track Group. Add Audio Layers if you need more audio tracks (Ctrl + Shift + N)*

-> MT4463: Dolby E does not decode in 720p timeline  
Due to FPS (x2) Dolby E signal cannot be decoded

-> MT4343: AJA/Mykerinos audio output is delayed by 6 samples  
When playing back, audio out is delayed by about 6 samples (~ 120 us). This can cause the Dolby E start code to be out of range  
*Workaround: A Sample Audio Read offset can be used as a registry key. Contact support@merging.com for further details*

-> MT3468: VCube: Composition with too many MXF (MPEG-2 HD) clips may crash VCube due to memory load  
*Workaround: We recommend not to use more than 10 MXF containing MPEG2-HD/XDCAM-HD files simultaneously to avoid such a problem*

-> MT3266: VCube high memory consumption when searching media

-> MT3530: VCube playback may flicker at very high speed (>60 fps)

-> MT3533: VCube could crash if Audio Meters are detached at UI launch  
Workaround: Make sure Audio Meters are attached at launch

-> MT3561: MT USB Sync Board with AJA not locking in CrossLock mode (e.g. 9pin Remote 24fps + composition 25fps )  
*Workarounds: Merging recommends the use of a Mykerinos & AJA in order to work in CrossLock Synchronization*