

# **VCube Release Notes**



*Updates*: Please check our Web site <a href="http://www.merging.com">http://www.merging.com</a> 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 recommended is 10.3.7 and above (latest certified 10.5) (Known issue is that the Settings panel must be opened under Windows)

#### **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 <a href="http://www.blackmagicdesign.com/support">http://www.blackmagicdesign.com/support</a>

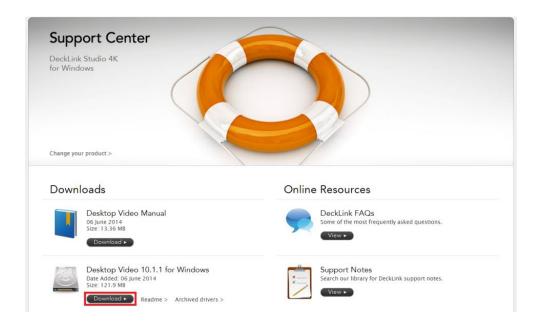
2. Follow the 3 easy steps to select a product (in this example, DeckLink Studio 4K on Windows)



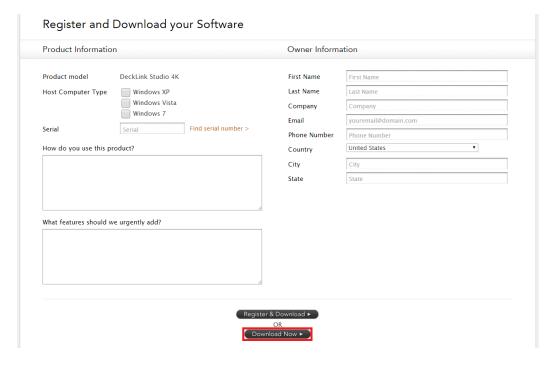
3. Download the Desktop Video package.







4. Register and Download your Software: <u>Note:</u> you don't have to register to download the Desktop Video package. Just press "**Download now"** to get the package download started.



- 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.

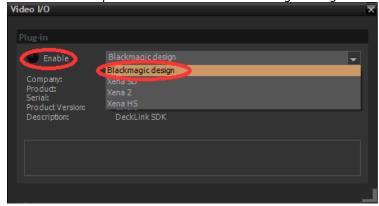




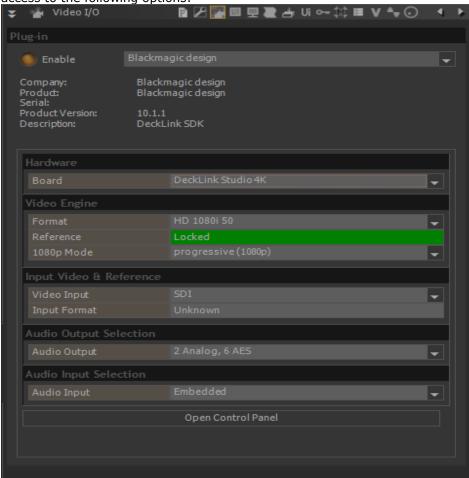
#### **Behavior description**

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

- 1. Start VCube.
- 2. Prompt the Video I/O setting tab (SHIFT-ALT-P).
- 4. 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

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#### **Open Control Panel:**

Will open the Blackmagic Design control panel





## **IMPROVEMENTS:**

- Faster Playback performance for:
  - ProRes
  - DNxHD
  - AVC-Intra
- Improved compatibility with QuickTime:
- Improved compatibility with IRT MXF Analyzer, 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 Export profile based mechanism:

for the following VCube operations (Subject to changes)

- o Record
- Convert Media Files
- o Render Composition
- o Import Still images Sequence

Render Composition

2

Output Path
File Name
Untitled Composition
Uncode: Apple ProRes 422 59 Vorded
Range
Region
Overlay
Burn-in Timecode
Auto Countdown
Auto Wipe
Auto Countdown
Auto Wipe

Profiles
MOV ProRes422 1920x1080 - Audio 24bits

Profiles
MOV ProRes422 1920x1080 - Audio 24bits

Noverlay
Profiles
MOV ProRes422 1920x1080 - Audio 24bits

Audio
File Format
MOV (\*.mov)
Code: Apple ProRes 422 5Q
Frame Rate
25.000 fps (PAL)
Resolute
Number of Channels 1
Code: PCM data
Word Length
Use Audio Card Connection Layout
Use Audio Card Connection Layout
Use Track Number Instead of Audio Card Output C...

Noverlay
Bit Format
Unear
Down Sampling
Advanced Settings...

Advanced Settings...

Advanced Settings...

Advanced Cancel

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





- 2. Select Save
- 3. Enter a profile name and click OK
- Profiles can be renamed by selecting the profile and doing save, if a user whishes
  to change the parameters of a profile 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

## **V5.1.10 HotFix BUGS FIXED** (includes all v5.1.9 fixes):

Components in front with Pyramix v 9.1.10 HotFix

## V5.1.9 HotFix BUGS FIXED (unreleased):

- MT6525: Fixed. MXF IMX render missing SMPTE TC in System Metadata
- MT6446: Fixed .MXF support filenames in all character sets
- MT6543/GAIA-315: Fixed. VCube Crash with some Chinese characters .mpg files.

## **V5.1.8 HotFix BUGS FIXED:**

- MT6416: Workaround Fix. VCube project don't always open in day 0 (registry key to activate the fix via Support)
- MT6460: Fixed. VCube missing media window crash
- MT6469: Fixed. VCube: .mpeg original TC not correctly retrieved (some exceptions remain)
- MT6449: Fixed. Render\Record: profile with separate audio and video load as audio video embedded (except MPEG file format)

#### **V5.1.7 HotFix BUGS FIXED:**

- MT5117: Fixed. Black Magic Card potential Green frame Output issue
- MT6432: Fixed. VCube Some MOV files cannot be read
- MT6394: Fixed. VCube AVI: cannot read some MJPG files.
- MT6371: Fixed. Quicktime Reference file doesn't open in VCube 5 QT (One File Per Reference)
- MT6351: Fixed. XDCAM HD RENDER video quality
- MT6301: Fixed. Video Card delay compensation not working for BMD card
- MT6320: Fixed. Black Magic delay compensation for video projector
  - Warning: Playback Buffer Size should be at least 12 frames for fluid playback
- MT6326: Fixed. VCube MXF: incorrect resolution in wrapped IMX D10
- MT6355: Fixed. Exported to VCube cannot be reopened
- MT6357: Fixed. Unknown Crash importing mp4
- MT6347: Fixed. PMX Mixdown Place in VCube removes VCube video track
- MT6382: Fixed. allow\fix H264 Wrap (only) in mov
- MT6204: Fixed. VCube: Image sequences with spaces in file name not correctly imported
- Fixed. Avoid crash when disabling BMD VideoIOPlugin
- Fixed. MXF correctly wrap IMX between mov to mxf, mov to mov and mxf to mxf

#### V5.1.6 HotFix BUGS FIXED:

- MT6098: Fixed. AVCIntra 100 1080 interleaved support
- MT6212: Fixed. MXF: Wrapped XDCAM-HD with body partition have incorrect Index





- MT6219: Fixed. RDD09 Compliance: Footer partition repetition is now enabled by default; MXF body partition size depends on frame rate
- MT6279: Fixed. Still Image load as sequence only on network
- MT6285: Fixed. Memory leak using mov files (waveforms, muted tracks)
- MT6244: Fixed. Improved ARD ZDF Compliance when exporting in MXF (AVCI, XDCAM HD)
- MT6279: Fixed. Still Image load as sequence only on network
- Fixed: VCube. Choosing DNXHD 220 produced 10 bits and 220x produced 8 bits in interlaced only
- Fixed: VCube: Render XDCAMHD sometimes missing audio essence

## 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 can be exported or wrapped to MOV, MXF and AVI.
- MT6164: Fixed. Import still images crash
- New. VCube: IMX Key allow Recording and exporting IMX\D-10 to MOV or AVI
- Fixed. VCube: Export Changing from 'presets' to 'profiles' and Adjusting window geometry
- Fixed. VCube: Export Closest profile is loaded if default profile mismatch composition Fixed. VCube: Export enabling dnxhd interlaced Fixed. VCube: Export Better Metadata for AVCintra 50 in MXF

- Fixed. VCube: Export MXF DNXHD conforms to vc3 label
- Fixed. VCube: Playback More accurate seeking for H264 files
- Fixed. VCube: Import A still-image with range index is imported as sequence for all types
- Fixed. VCube: I/O 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**

#### Wrap\Render h264 VCube 5.1 Status:

- The Wrap is available v5.1.7
- The Render cannot be available in any version 5.1.X. Merging is working with third party providers in order to have the Rendering in VCube V6.

#### Other 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
  - o Corruption on first frame
  - Wrong metadata encoded
- MT6084: VCube:MTASIO Bridge Buffer size changes mute audio coming out of VCube Workaround: Toggle the output assignations 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.
  - o VCube now comes with two different installer
    - VCube 32bit
    - VCube 64bit

#### Notes:

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

## **IMPROVEMENTS:**

- VCube configuration:
  - o 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,
  - o 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
  - o 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.
- -> A1A 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

