

Mar 16th 2022

Australian Videocamera

**This week's major industry news stories
plus ...**

You Never Stop Learning

**Review: Blackmagic Design ATEM Mini Pro
Technique: Creating Lower 3rds for ATEM Mini Pro**

Review: GoPro Media Mod

Overview: Major Vegas Pro 19 Update



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Cover: The Southern Forests, Manjimup, Western Australia shot on Canon 5Ds

EDITORIAL

If we ever gave out an accolade for product of the year, then I think without doubt it would go to the fabulous Blackmagic Design ATEM Mini Pro.

And obviously lots of other people think so too, as stories and tutorials on our web-site referring to it, on a weekly basis, are almost always in the top 3.

If you are new to us – and over the last weeks since we re-started this weekly newsletter subscriptions have surged – then briefly the Blackmagic Design ATEM Mini Pro is to video switching and streaming what the mouse is to current computing practice.

Yes, you can get away without it, but once you have used it, you wonder how the hell you ever managed before!

So in this edition of the Australian Videocamera e-Magazine, along with the news of the week and extracts from other major stories we have published, are an introduction to the Blackmagic Design ATEM Mini Pro and a tutorial on creating lower thirds for it.

On that note, as streaming is such a Big Thing at the moment we are talking to a number of vendors involved in the area with a view to doing a special edition in the near future deeply covering the how's, whys and wherefores of streaming so stay tuned.

Feel free to email me via david@auscamonline.com with your suggestions please, including any ideas on content you'd like to see.

As always, thanks for your support!



David
Publisher / Managing Editor

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Industry news from Australia and overseas

Abridged versions of press releases and stories. The full stories can be seen on our website by clicking the link at the end, of each story.



MediaHub chooses broadcast compliance and monitoring solution from Actus Digital and Magna Systems

Actus Digital provides the industry's most intelligent broadcast media platform for broadcast recording, monitoring, and compliance, live

clipping for OTT and social applications and VOD and catch-up TV clipping.

Recently, MediaHub Australia had a requirement for a new compliance-based recording and storage solution as part of a new mux based DTT broadcast headend they will be providing later this year and for that they turned to Magna Systems and Actus Digital.

Magna Systems & Engineering Business Development Manager, David Herridge, explained, "Actus is a channel partner of Magna's and we have deployed several successful Actus solutions within the Asia Pacific region. In consultation with the MediaHub team regarding this refresh project, Magna proposed the Actus solution which met every MediaHub requirement and more."

MediaHub required their new solution to record native 132 services

in 34 muxed transport streams of mixed SD/HD for 7 days. They also required proxy transcoding and storage of the same set of services for 120 days.

You can read the complete story here



SXSW Film Awards

The SXSW Film Festival is kicking off on Friday and concluding March 20th, Here are a few of the entries. Incidentally, all of these projects were cut on Adobe Premiere Pro.

Adobe is once again offering its Adobe Editing Award as part of the SXSW Film Awards on Tuesday, March 15th. Last year, Lam T Nguyen was honored for his editorial work on R#J. Additional info on Adobe's activities at SXSW are available here:

<https://blog.adobe.com/en/publish/2022/03/09/creativity-comes-to-life-at-2022-sxsw-film-festival>

Special DJI Pricing



If you have a hankering for a DJI MAVIC Air 2, DJI has a special on the Fly More Combo with 20% off until March 25th.

See more here.

Invitation: Content Velocity

You're invited to attend:

Content Velocity

Empowering team collaboration with new on-premise, cloud and hybrid workflows22 Mar 22, Sydney Producing content with fast-paced deadlines and mixed remote and on-premise teams is a reality for many organisations.

Producing content with fast-paced deadlines and mixed remote and on-premise teams is a reality for many organisations. How do you achieve maximum content velocity while empowering team collaboration with on-prem, cloud and hybrid workflows and media? How do you keep control of your media and allow maximum creativity without compromising quality?

You can read the complete story here



You Never Stop Learning...

There is one thing about this writing caper that never ceases to amaze me. But before I continue down that line, let me, as is my wont, describe something I saw many, many years ago.

My memory of this was triggered by a news story this morning on ABC 24. Apparently original photographic prints from NASA taken on the Apollo missions sold for monster amounts of money.

As I recall, these shots were all taken on Hasselblad cameras (including that famous one of the very first Earthrise and all the shots of the astronauts kangaroo-ing around on the lunar surface).

Anyway, one of the best visuals I have ever seen was at the now de-

molished Perth Entertainment Centre using a huge bank of slide projectors to show on a big screen a 20 minute (or so) sequence of slides from the Apollo 11 landing. It included shots from inside the lunar nodule of the landing sequence as well as the Earthrise image all set to music from Mike Oldfield (the Exposure album which is one of my favourites).

And it was mesmerising.

Remember, this was a bunch of slide transparencies (hi-res stills if you are under 30), not video, but the effect of it will stay with me forever. It showed me the power of the still image, especially when married with the right music.

The producer Ken Burns also discovered what can be done with a static

image with his iconic Ken Burns effect of slow panning across a still.

So back to what never ceases to amaze me, and it is connected.

It is the fact we never stop learning. Staying on the astronomical theme,



many are aware I am playing with an MSM Star Tracker and various cameras (Canon XP and Fuji GFX50SI) along with my own Canon 5DS.

In the shots I have taken so far (not worthy of displaying at this point I hasten to add) one of the annoying things is the time taken to get the sequences you need.

To explain to those who have no idea

of this branch of photography, those gorgeous high-resolution shots you see of galaxies such as Orion or the Horsehead Nebula are generally not a single shot.

Instead they are "stacked" photographs – using 60 is not unheard of – of the same subject along with what are known as "darks" and "lights". A technical explanation in depth is here.

Specialist software is then used to analyse all these photos and merge them into a single composite image. I am using Deep Sky Stacker for my attempts.

Each individual frame can be 30 seconds or even a minute of exposure and as you can imagine, sitting out there pressing the shutter for sixty shots (plus darks and lights) and also waiting for 30 seconds or more before the next is tedious and boring.

There had to be a way of somehow

automating this process I perceived.

I did some digging and on Amazon found this gizmo, called an Intervalometer.

Requesting in the MSM Facebook group if anyone had bought one and used it, I was asked what camera I was using.

When I told them a Canon 5DS, I was told in no uncertain terms to have a quick read of my owner's manual as the 5DS among many other makes had models had this function built in!

Now in all my years I had never seen the term "Intervalometer" – that is not to say it didn't exist, just that I wasn't familiar with it.

But I DID understand "time lapse".

Duh!

It just for some reason, had not even occurred to me.

Review: GoPro Media Mod

Not a day goes by without me being asked a single question. "Is the GoPro Media Mod worth buying?"

Not quite true, but from time to time the question has popped up. Well it did once anyway. A while back.

So I thought I'd answer it here.

So what is the GoPro Media Mod?

The Media Mod is a casing that the GoPro 8, 9 or 10 fits into but leaving access to the front and rear screens.

It works similarly to shell cases that previous GoPro models used, with a snap down hinge to lock it into place. One major difference with the Media Mod though is that the battery / SD card cover needs to come off thus rendering any waterproofing inoperative.

The reason for this is that inside the Media Mod a USB-C connector marries in with the USB-C port on the GoPro camera.

Audio

Built into the Media Mod is an external polar pattern microphone covered in a foam windbreaker. In my testing this works best when the subject is in front of the camera and close to the mic (as you'd be when Vlogging for instance).

When recording from behind, or indeed at a distance, there seems to be some reverb inserted into the audio which is not ideal.

All is not lost though as there is also a 3.5mm socket letting you plug in an external mic, and with either a RØDE Videomic or Sennheis-

er MKE400 the sound was much, much better. There are not one but two cold shoes on which you can mount a mic or other device such as the GoPro Light Mod.

USB-C

Above the external mic port is a USB-C port. The most obvious choice for this is to charge the GoPro camera battery meaning you have no need to remove the camera from the casing, but it can also be used to transfer data from the SD card to a computer.

In my usage, I found the USB port also ideal for connecting an external powerbank to give longer shooting times, and depending on the power rating, have managed up to 6 hours + on a GoPro Hero 9 Black. You do need to go into the



menu settings on the camera and tweak a few things though.

HDMI

This has been the most problematic part for me and gives a mixed bag of results depending on what I am do-

ing. My primary function is to send data to an external monitor when shooting.

A typical scenario is to have a number of GoPros connected to my Blackmagic Design ATEM Mini Pro with a single OSEE field monitor

acting as a control monitor for all 4 cameras (with the Blackmagic Design ATEM Control Software) or a 7" OSEE monitor acting as an external monitor for a single GoPro.

The main problem is that once connected (after being suitably configured in the GoPro menus to act as a clean feed), you lose the GoPro screens and have to do everything in menu changes / camera settings by a little bit of guesswork.

I also get a fair percentage of drop out where for some unbeknownst reason, the GoPro just stops sending the HDMI signal.

The only almost common denominator I can find is that using cheap HDMI cables can be a culprit.

Of course your mileage may vary.

You can read the complete story here

Vegas Pro Updates

VEGAS Creative Software (www.vegascreativesoftware.com) has announced a significant update to its flagship VEGAS Pro product line, its fourth major feature update since launching VEGAS Pro 19 last summer.

With this update, VEGAS Creative Software adds a number of new features to enhance color correction and visual effects workflows, as well as support for the popular Apple ProRes codec.

ProRes is one of the most well-known and widely used video file formats for the content creation community and combines extremely high image quality with small file sizes for efficient editing and playback.

The new update to VEGAS Pro offers support for all ProRes formats, including:

- ProRes 4444 XQ: The highest-quality version of ProRes for 4:4:4:4 video sources. It includes an alpha channel for visual effects work;
- ProRes 422 HQ: This version of ProRes gives the same high level of image quality as ProRes 4444 but for 4:2:2 image sources. The codec will remain visually lossless even after multiple generations of decoding and re-encoding during post-production;
- ProRes 422: Offers nearly all the benefits of ProRes 422 HQ but at only 66% of the data rate. As a result, ProRes 422 offers even better real-time editing performance;
- ProRes 4444: An extremely high-quality format for 4:4:4:4 video with an alpha channel;

- ProRes 422 LT: This version of the codec has 70% of the data rate of ProRes 422 and 30% smaller file sizes;
- ProRes 422 Proxy: Delivers full-resolution video but is even more highly compressed with a target data rate of 45 Mbps.

The update also includes a number of new features and workflow enhancements, including:

- Color Grading Panel is now available at the media, track, and video output levels;
- VEGAS Hub and Hub Explorer Windows are now included in the default layout for quick, simple access to media;
- Optical Flow Slow Motion is now available for velocity curves and playback rate settings;

- Timeline clip events can now be set to automatically adjust in order to show all frames, particularly when playback rate changes (fast or slow motion) require the event to resize
- New AI Tab in the Video Plugins Window helps organize all Artificial Intelligence plug-ins as a group for quicker, easier access;
- Option in Mesh Warp to more smoothly morph image between mesh points. Users have the ability to specify how moving one mesh point will affect surrounding mesh points, which can result in more organic stretching;
- Unquantized Frame Indicators help users avoid unexpected results of event edges on the timeline which are edited off of a video frame;

- Turn Off Video Preview during render helps render performance for those users whose machines may be under-powered or are not ideally optimized for rendering.

Additionally with this update, VEGAS Creative Software released a new BETA feature for testing and review:

- Speech to Text functionality, including automatic subtitle generation and export of SRT, SUB, and TXT files.

The VEGAS Pro Lineup and Pricing

VEGAS Creative Software offers a focused product lineup that provides the tools users need for their specific workflow requirements and budget.

The calibre and breadth of the software provides content creators all

the tools they need to “finish” using the VEGAS lineup without the need to launch third-party apps. VEGAS Pro 19 is available in three options:

VEGAS Edit

Ideally suited for aspiring editors, novices and even consumer/enthusiasts, VEGAS Edit includes:

VEGAS Pro 19

20GB of cloud storage (available with subscription plan)

VEGAS Content: 20 royalty-free HD video and/or audio clip downloads per month (available with subscription plan)

You can read the complete story [here](#)

Review: Blackmagic Design ATEM Mini Pro



Many years back, I did a live recording from the Great Hall of Parliament House in Canberra via the internet.

Well, when I say "live" I mean that while viewers watching it thought it was "live", it was really a succession of short clips captured using the then fledgling Real Video format, sent to a server via ftp and placed for others to stream via downloading.

And the setup was crude. On a balcony on one of the long sides of the Great Hall I teetered on the edge with a pair of Sharp tape based DV cameras on tripods, with one facing the stage in a close up of the speaker(s), and the other covering a wide shot of the audience. I had a basic vision switcher to cut between cameras as and when I felt like it. Audio was a feed from the stage via a

bloody long cable.

The event as I recall was the awarding of the most popular University Chancellor or some such thing, and it lasted 4 long, long hours. In 10 minute blocks, that was a lot of encoding and uploading.

I didn't even get paid for it in the end, as the promoter – the bastard – told me afterwards I had "promised" a freebie for exposure ...yeah right.

Anyway.

Fast forward to today and a parcel that has arrived has been unpacked and plugged in to mains power.

This new toy is the brand spanking, shiny Blackmagic Design ATEM Mini Pro – and in case you didn't know, and you should, Blackmagic Design is an Australian company based in Melbourne that has developed a world-wide reputation for innova-

tion and brilliant – while relatively inexpensive – products in the video broadcast industry.

Indeed, their DaVinci Resolve and Fusion software, top of the range packages in their respective fields, are given away.

The ATEM Mini Pro is the latest of Blackmagic Design's products and expands on the original ATEM Mini, a hardware vision switching panel, by adding extra features for both recording and streaming. And more besides.

For my purposes and testing, I have hooked up the ATEM Mini Pro to Panasonic HC-PV100 and Panasonic HC-VXF1 camcorders via HDMI. For the fun of it, I have also connected a GoPro Hero 7 and a Sony RX0 Mk II using Mini HDMI connectors.

For audio, I have plugged a Sennheiser XS Wireless Digital Lav mic kit into one of the 3.5mm input ports, and again for the sheer fun of it, into the second 3.5mm port, output from my laptop with some music playing.

This allows me to also mix into the video feeds a voice over AND a music background.

Pretty nifty hey?

But there is more. By connecting the ATEM Mini Pro via its USB C output port into a PC or laptop, any webcam software you have will see the input as coming from a webcam letting you have a multicam Xsplit, Skype or ZOOM type session and easily switch between cameras.

There are many, many more party tricks in the Blackmagic ATEM Mini Pro and by page 10 of the 154 page manual I have only just scratched the surface.

For instance it can do keying, has built in transitions and can even act in concert with other equipment higher up the broadcast chain.

And very importantly, the Blackmagic Design ATEM Mini Pro will live stream to YouTube, Facebook, TwitchTV and more. Or connect a computer and stream a PowerPoint presentation as a camera feed.

I suspect I am in for a an exciting journey learning the ins and outs of the Blackmagic Design ATEM Mini Pro, and also suspect in this time of "Beer Virus" shutdowns and lockdowns with people relying on streaming for communication for work, leisure, entertainment and worship among other things, this could be one of the most important devices those boffins at Blackmagic Design have ever nailed together.

For what it does – and I'll explore this further in Parts 2 and above of this review series – at AUD\$1185 the Blackmagic Design ATEM Mini Pro is an incredibly inexpensive piece of equipment to say the least.

There is no way I can get to the full potential and possibilities of the Blackmagic Design ATEM Mini Pro in my allotted 10 days review time. It'll be fun trying though.

If you want more immediate info on the Blackmagic Design ATEM Mini Pro, <https://www.blackmagicdesign.com/> is the place to go.

Tutorial: ATEM Mini Pro Lower 3rds

One of the brilliant things about the Blackmagic Design ATEM Mini Pro (and its derivate versions such as the ISO) is the Media

the scope of this particular tutorial.

For people new to this stuff, there are some spooky magic tricks they haven't quite grasped, and one of the major ones is creating lower thirds with transparency to overlay their live broadcast.

So here I have put together a quick and dirty step-by-step creating a simple lower third in Adobe Photoshop. If you follow this to the letter, you shouldn't go wrong! If you do have any issues, feel free to email me!

Step 1: Create a blank document with the custom dimensions of 1920 x 1080 in landscape mode (this is for the max resolution the Blackmagic Design ATEM Mini Pro currently allows

Step 2: Double click the padlock icon in the Layers panel to unlock the layer.

Step 3: Add a new layer by clicking the "hamburger menu" in the Layers panel and choosing Add Layer.

Step 4: In the Layers panel, drag this new level BELOW the original layer (VERY important).

Step 5: Click on the top (original) layer in the Layers panel to make it the "live" layer.

Step 6: Choose the Rectangle tool from the Toolbox.

Step 7: Double click the Colours swatches and set the colours you want. We use black for both the outline and interior of the rectangle (To use Black, set R, G and B to 0, 0, 0 as shown).

Step 8: Draw the rectangle on the page where you want your lower third to appear.

Step 9: Choose the Text tool from the Toolbox and set the colours desired the same way you did the colours for the rectangle. We use white and white (which is 255 for each of the R, G and B fields).

Step 10: Choose your font and size (We use Impact at 48 point).

Step 11: Type your text eg. your name and title, or the title of the subject etc.

Step 12: Click the Move tool in the Toolbox and move the text to the desired location inside the rectangle.

Step 13: Choose the Magic Wand tool from the Toolbox. Click anywhere on the white background and a marquis (dotted lines) will show you the selection. If you need to add an area, hold SHIFT and click that area not previously selected.

Step 14: Press Delete. This creates your transparent background shown by the "Checkerboard" fill.

Step 15: We previously created our Australian Videocamera logo as a separate image with a transparent background. To import it into this document we use File > Place Embedded and then drag it to the left hand side of the rectangle with the Move tool. You may need to size it using the Selection tool and dragging the handles.

Step 16: When the logo was imported Photoshop added it to a new layer. This layer MAY be behind the others already in the document. If so, simply select the Logo layer in the Layers panel and drag it to the top of the layer hierarchy.

Step 17: The page is now complete. We just need to export it in the right format to be able to import it into the Blackmagic Design ATEM Mini Pro Software Control program. Choose File>Export As and the panel that opens, make sure that the format is PNG and the Transparency box is ticked. Click Export, choose a file-name and save location.

Step 18: In the Blackmagic Design ATEM Mini Pro Software Control program, click the Media button down the bottom and then in the file system hierarchy at left, drill down to find the file you just created. We keep all ours on an external Seagate drive in a folder called Titles, Lower Thirds etc.

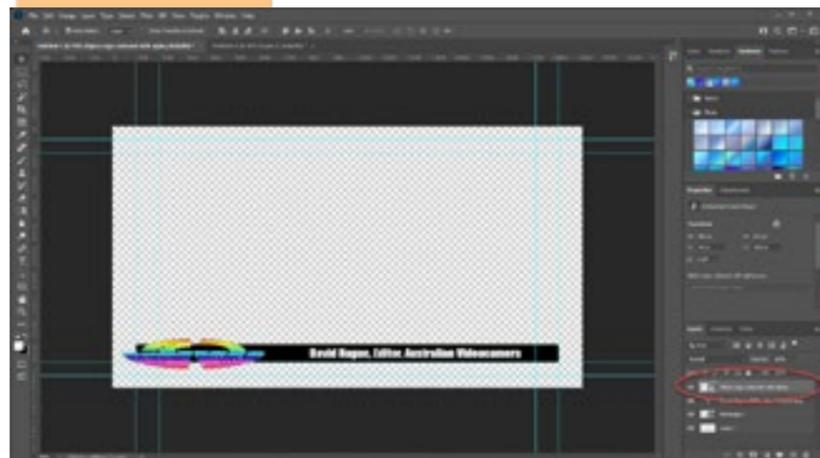
Step 19: Once selected the file image will appear in the bottom left. ust drag this into an empty slot.

Step 20: To create the overlay on your live image, drag the file image from its slot to the Media Player window.

Job done.

Whilst this might initially seem an awful lot of steps (and work), once you have the hang of it, you'll find you can create fantastic looking lower thirds, bugs, titles and graphics in seconds!

You can read the complete story here complete with step-by-step screenshots.



Pool. This is an area in memory of the Blackmagic Design ATEM Mini Pro where up to 20 graphics can be stored for recall on the fly into your live production.

The most efficient way of doing this is via a macro, but this is not

