



The British Amateur Television Club

CQ-TV

Your Magazine!

Editor:
Frank Heritage
MOAEU

- ❖ Published 4 times a year
- ❖ Averages between 36 and 52 pages (exceptional!)
- ❖ Still traditionally printed 4 colour litho
- ❖ 8 pages of colour – rest is black and white
- ❖ PDF version for cyber members – full colour throughout

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❖ File Formats:

- Word
- Open Office
- Plain text
- PDF (if necessary)

❖ Please DO NOT send Microsoft Publisher

❖ Separate Photos from Text file – highest resolution possible please

❖ Please reference your photos in your text

Open Broadcaster Software with DATV Express

Much has changed since I wrote about using **EEmpag** to generate a DVB-S transport stream for DATV Express. Most notably Charles GAGUO, the DATV Express software author, has now incorporated the **EEmpag** encoding process into DATV Express program. This now takes as its input the **yMix** (or other) DirectShow virtual video and audio devices. For myself I have been researching and using alternatives to **yMix**, in part because I was frustrated by the limits of the basic version of the program and couldn't afford a full licence but mostly because I have found that one program in particular is much better at colour keying than **yMix**. That program is Open Broadcaster Software or 'OBS'. OBS is described on their web site at obsproject.com as "free and open source software video recording and live streaming." I have long subscribed to the open source model for software. In general, although there is a lot of unfinished software out there, there are numerous open source applications which offer comparable (or better) functionality to commercial software and are continually refined and updated by an enthusiastic community - for the benefit of the community. **EEmpag** is a good example of a very powerful piece of open source software albeit with a steep learning curve. OBS, in my view, is rapidly becoming another essential piece of open source software in the field of live video production and streaming.

What does OBS offer?

Borne out of the desire to stream gameplay for viewing online using services like YouTube, Twitch and others, at its core OBS offers a simple way to capture live windows or desktops and generate a suitable stream for sending to a Flash Media Server (or more recently Adobe Media Server) video streaming service. A variety of input devices are supported, filters including chroma and colour keying are provided, "unlimited" scenes and sources (limited only by your computer capacity) and a flexible plugin architecture which adds things like video playback and onscreen text from a variety of sources. The GPU is used to do the hard work leaving plenty of resource for running games or in our case DATV Express software! OBS comes in two versions at present: OBS 1 (or Classic) was developed for Windows with a separate development "OBS Multipatform" (recently renamed OBS Studio) being developed for Windows, Mac and Linux platforms. The classic version offers a basic capture and stream tool which is optimised to be lightweight and very efficient at what it does. OBS Studio is developing into a much more comprehensive tool and is starting to offer features more like **yMix** such as transitions, a preview window and multiple outputs.

Why did I start using OBS?

I first came across OBS when I was trying to achieve a good colour key using **yMix** and suffering all sorts of fringing and fluttering around the edge of my keyed image. OBS offered better control over the keying, particularly the availability of edge filtering and blending to reduce fringing effects. Newer versions of **yMix** have improved the colour keying and now offer similar performance with careful setup.



PDF





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Adobe InDesign CC interface showing a magazine layout for CQ-TV. The layout includes a header with the BATC logo and the magazine title, followed by a main article titled "The Principia Mission - Give us a wave Tim!" by Frank Heritage. The article text describes the UK Space Agency's ARISS mission and the live video reception at Goonhilly Earth station. The layout also features a sidebar with a "Swatches" panel and a "Character" panel.

The Principia Mission - Give us a wave Tim!

Working with the UK Space Agency, ARISS (Amateur Radio on the International Space Station) developed a programme enabling a number of schools to speak directly to Tim Peake, the first British ESA astronaut to visit the station, during the duration of his stay.

This enables live interaction between pupils and Tim and has already turned out to be one of the highlights of the Principia STEM outreach programme. The prearranged schools contacts are taking place between January and May 2016 and students are able to put a number of questions directly to the astronaut using amateur radio VHF and UHF radio equipment specially installed at the school for the occasion.

For Tim Peake's mission, the ARISS team of licensed UK Radio Amateurs, led by Ciaran Morgan M0XTD, also planned a world first by receiving live video from the ISS during the contact. Using the HamTV transmitter, which has recently been commissioned on board the ISS, Tim will be the first astronaut to use this equipment during a two-way schools contact.

As well as building a vehicle-based receive system, which is installed at the school on the day of the contact, the team are utilising Goonhilly Earth Station in Cornwall to receive the 2.4 GHz HamTV transmissions from the ISS with a 3.8 metre dish linked to the antenna by Satellite. The output from the system is fed across a dedicated VPN network and display

Swatches

- [None]
- [Registration]
- [Paper]
- [Black]
- BATC Blue
- C=0 M=0 Y=100 K=0
- C=0 M=100 Y=0 K=0
- C=0 M=31 Y=100 K=0
- C=100 M=0 Y=0 K=0
- C=100 M=90 Y=10 K=0
- C=15 M=100 Y=100 K=0
- C=63 M=22 Y=0 K=0
- C=63 M=22 Y=0 K=100
- C=75 M=5 Y=100 K=0
- Dark Blue
- PANTONE 123 C

Character

- Intro Para
- [Basic Paragraph]
- Cover story
- Article date Opt+Num 4
- Article Author Opt+Num 8
- Article Headline Opt+Num 7
- Bodycopy Opt+Num 1
- Table header
- Intro Para Opt+Num 5
- Body Headline Opt+Num 2
- Body D...ading Opt+Shift+Num 1
- Late news author
- Advert headline features
- Pricing bullets
- advert bullets
- Contents



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- ❖ Heidelberg B2 4 colour Speedmaster
- ❖ 4 pages to view in printers pairs
- ❖ 6,000 sheets an hour
- ❖ File is printed 'straight to plate' – no film work anymore
- ❖ Pages are collated, folded, stitched and trimmed.





❖ Covers:

- Printed on thicker stock
- Gloss laminated
- Occasional 'specials' ie silver foil block

❖ The sales window to the BATC at Rallies

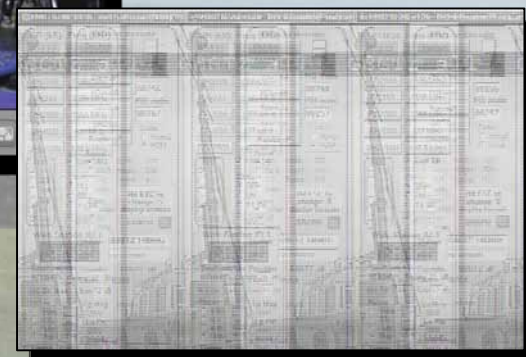
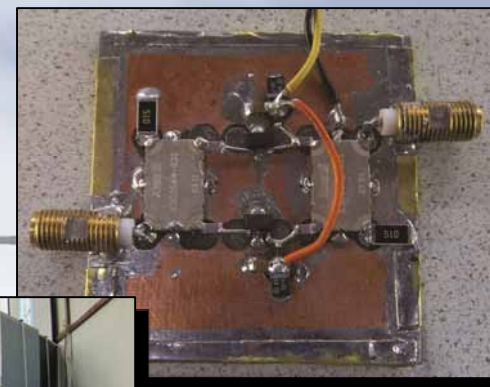
❖ Hardest part to do

❖ Please send in your photos!



❖ We need your input!

- Technical articles
- TV Production articles
- 'Your Station'
- Activity photos and reports
- Local Repeaters and Groups
- Cover photos





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Thank you...
Any Questions?