



Video & AV in Education

Holdan is a value added distributor of broadcast, video & AV equipment.

We work with resellers to supply, configure and install video equipment and AV solutions in

organizations nationwide.

Recent projects include Edge Hill University, the University of the West of England and Bournemouth University.

ALPHATRON
Alphatron Broadcast

Blackmagicdesign

CAMRADE

datavideo

datavision

grass valley

harmonic

hp

Intra Tec

metus

JADRUS

SONNET

TERADEK

tvONE

VITEC

HOLDAN

Ingest Solutions, Tapeless Workflows...

Disk Recorders

The natural VTR replacement is the hard disk recorder.

Blackmagic Hyperdeck

The Studio range gives users SSD recording in ProRes or DNxHD codecs. This makes Hyperdeck recorders ideal for users that need the highest quality video files for post production.



Datavideo Recorders

Capturing to inexpensive 2.5" hard drives, Datavideo's recorders offer excellent value for money and huge capacity media.

The units capture MPEG-2 at up-to 100Mb/s, with files instantly ready for playback or import into an NLE.



Thunderbolt Express

Thunderbolt connectors on computers and laptops open up huge expansion options, thanks to Sonnet Echo Express.

Attach professional PCI cards via Thunderbolt for a professional workflow. Compatible with video capture and monitoring cards, storage adapters, sound cards, graphics devices and much more.



While VTRs and disk recorders are usually limited to capturing a single channel, new software solutions offer a tantalizing alternative.

Multi-channel Multi-codec Capture

Metus Ingest excels in the versatility and flexibility of its toolset.

Users can capture up-to 6 independent HD channels in formats including MPEG-2, H.264, AVC-Intra, XDCAM HD, MXF and WMV.

Each channel is captured as a single or dual codecs, with files stored locally or on a network.

Ingest enables Adobe and Grass Valley EDIUS editors to edit during capture.

Transcoding

With Ingest, clips and assets can be manually or automatically transcoded, with support for watch folders.

Media Management

Ingest works closely with Metus MAM for a complete media workflow.

Metus MAM is a fully scalable media system, running on standard Windows server. It has excellent integration with NLEs and Ingest.

MAM organizes assets into logical files and enables users to manage, process, track and control multiple versions of each clip.

Users manage the system via a desktop client while remote users can access content



over IP. Wherever media is stored and whatever the format, MAM tracks each file. The system allows access to each clip and project according to security rights.

MAM supports everything from small workgroups to thousands of global users.

...Archive & MAM Solutions from Holdan

XDCAM/AVC-Intra 4-Channel Recording



Monisys recording system has excellent integration into Proxsys Asset Management and Archiving systems.

- Monisys MR is a multi-channel IP stream recorder, able to capture the output of multiple decoders and IP cameras.
- Monisys MC captures up-to 4 channels XDCAM (MPEG2) or AVC-Intra (H.264).



IPTV Playout

EZ TV is the most deployed H.264 enterprise IPTV delivery system in the world.

Transmit live and recorded video, scheduled or on-demand to computers, TV screens and mobile devices over LAN, WAN, WiFi and cellular networks, or over the public internet.

Enterprise Media Management

Proxsys PX offers full MAM features including archiving, proxy generation, clip searching, transcoding and playout.

- Secure browser-based interface with Active Directory integration and access rights
- Auto-proxy generation; support for XDCAM, XDCAM EX, AVC-Intra, AVCHD, DNxHD, ProRes 422, H.264 and MPEG-2
- Archiving and retrieval of entire projects from popular NLE programs
- Full metadata management
- Transcode, export & playout options

Mini Server



Sonnet's xMac mini Server turns a Mac Mini into a full, low cost server.

Add RAID, eSATA controllers, capture cards, and much more to turn the device into a storage server, MAM server or ingest server.



Pair with the Fusion R400S RAID for up-to 16TB storage.

Broadcast Approved HD & 4K Editing System



grass valley

Grass Valley's EDIUS Pro NLE software is the first choice editor for fast turn around programming, whether it's for HDTV, UltraHD, live events or even YouTube.

As a 10-bit, 64-bit editor, it's very high quality and completely stable. This reliability gives broadcasters - from Reuters to NBC - confidence to use EDIUS in the heat of live broadcast.

Speed Editing

While some packages require files to be transcoded or re-wrapped into an intermediate codec, with EDIUS, it's a completely different story.



New codecs, legacy formats and files in any standard can all be imported onto the timeline, no matter what frame

rate, aspect ratio or resolution. EDIUS editors can simply get on with the job.

Integration

EDIUS supports 3rd party hardware for video capture and monitoring. It supports live editing with Metus Ingest and Grass Valley's T2. And it integrates seamlessly into 4K workflows.

HD Camcorders...

Professional HD

Panasonic's AVCCAM models capture AVCHD to SD cards. They feature full manual control and advanced controls for focus assist, image control and audio. Built to last, they are a great introduction to broadcast technology.

Shoulder-mount Models

The new **AC8** is a very low cost shoulder-mount 1080 50p system. Image quality is very good thanks to its 5-axis stabiliser, 21x zoom. Also available: HMC81.

Hand-held Models

Incredibly popular, the **AC90** has 3 imaging sensors for excellent quality 1080 50p shooting and great low light performance. XLR inputs cap an impressive feature list.

With larger 1/3" sensors, **AC-160a** also adds SDI out, variable frame rate recording and a 22x zoom. Also available: AC130a.



AC8



AC90



AC160a

www.holdan.co.uk

Broadcast HD

Panasonic's AVC-Intra HD models record to rugged P2 and microP2 cards. Built to endure and with an industry leading warranty, the range is used by broadcasters and news organizations worldwide.



The 250

Recording at 100Mb/s and with a 22x zoom, **HPX250** is an incredibly cost-effective broadcast camera. It's been tested in extreme conditions, accompanying the latest attempt to trek across the Antarctic.

Studio Adaptable Cameras

Models such as **HPX371**, **HPX600**, and **HPX255** can be easily adapted for integration into a TV studio, with camera control, 2-way signal management, tally and intercom.



Panasonic Innovations

The latest systems incorporate networking features, wireless options and the new AVC-Ultra codec family, including the new 25Mb/s 4:2:2 HD format.



Multi-core studio system

Panasonic

...HD Studio Cameras

Dedicated HDTV Studio

This [AK-HC3800](#) HD camera features optical fibre capabilities for long-distance signal transmission, remote control over IP and 16-bit A/D image processing.



Studio Systems

[HCU200](#) Camera Control Unit manages video, prompter and intercom signals, and optical to HD-SDI conversion.

Camera Controller

The [AK-HRP200G](#) panel controls image and iris settings to match each camera in the studio.

Remote PTZ Cameras



Used for television studios, live events and AV applications alike, Panasonic and Datavideo HD camera heads are discrete and versatile. Multiple units can be controlled by a single operator.

Wireless PTZ can instantly turn any lecture hall into a TV studio or AV installation. Turn Panasonic HD PTZ cameras into untethered remote devices. Control and video signals are transmitted wirelessly. Please ask us for details.



Sky News Courts Wireless Cameras

Sky News now places cameras in London's High Court without running a single cable.

Adapted Studio Camera

Panasonic's [HPX255](#), [HPX371](#), [HPX500](#) and [HPX600](#) cameras can be adapted for studio use with Nipros.

Rigging a camcorder for the studio

[HDS-300](#) provides an external chassis for mounting a monitor and control unit. It has accessible audio / video and power connections.

Adapting camcorders for studio signals and communications

[ES-500P](#) multi-core system attaches to the camera to provide HD signals (output and return), remote control, tally and timecode, intercom, and more.

Integrating camcorders into the studio gallery

[ES-600P](#) connects with the [ES-500P](#) and interfaces with the remote controller and the production desk.



Controlling camera and lens settings

The camera is linked to an external unit - the [AG-EC4](#) - for remote control device.

Large Sensor Cameras



Broadcasters and post production facilities shudder at the thought of video shot with DSLRs.

Nearly every model suffers issues such as moire and aliasing artefacts that cannot be resolved in post.

Dedicated large sensor cameras from Panasonic and Blackmagic Design deliver far more controlled images.

What's more, the focus on video means professional codecs, digital i/o, image controls, metadata support and much more.



Panasonic AG-AF101a

A 4/3" sensor produces beautiful 1080 50p video that looks truly outstanding when paired with a high calibre lens.

Importantly, it has XLR connectors for capture of professional audio and a 10-bit HD-SDI output. With this, users can record externally at very high bitrates.



Pocket Cinema Camera

Blackmagic's diminutive camera produces HD video with impressive dynamic range.

Capturing ProRes 422 and CinemaDNG 12 bit RAW at up-to 30 frames per second, it's a great choice for low-cost film production.



Cinema Camera

The Blackmagic 2.5K Cinema Camera is pure disruptive technology. So is its sister, the 4K Production Camera.

Capturing ProRes and CinemaDNG 12 bit RAW at up-to 30 frames per second, both have set the production world alight.



Finishing Polish

Nothing grades and colours a project like DaVinci Resolve.

Supporting full 12 bit RAW files, it's the programme used by Hollywood to produce the stunning cinema look. It's a must have, especially at its new low price.

Wireless Transmitters & WiFi encoders



The Teradek revolution:

- Cut the cable between camera operator and director
- Enabled streaming to the Internet over WiFi
- Facilitated live remote video contribution using 3G & 4G networks.

Bolt

With Bolt, SDI and HDMI video can be sent with virtually zero latency over wireless. There's no compression with no encoding.



Bond II

Bond II aggregates the bandwidth of multiple 3G & 4G mobile network dongles to send live video over any distance.



Cube

These mini H.264 encoders send video to iPads or decoders. Streams can be viewed locally or transmitted over the Net to global audiences.



Clip

A tiny and very low-cost WiFi H.264 encoder. Small enough to mount on aerial models but lacking the on-board recording and webstreaming of Cube.



Further still & further

IntraTec Bridge sends WiFi signals over extreme distances - up-to 500 metres.



The Bridge Duo unit increases that distance and includes the ability to share incoming wireless signals with local users.

Duo also incorporates a V-mount battery to power third party devices such as encoders and cameras.



Switchers & Vision Mixers



Compact panels from Blackmagic Design, Datavideo and Panasonic are intuitive and utterly reliable. Ingest, mix, switch and output SD or HD signals for live television-style production. Ideal for video or AV environments. Best-sellers include:

- [Datavideo SE-2000: 5-channel HD switcher](#)
- [Panasonic AV-HS410 9 channel HD switcher](#)
- [Blackmagic ATEM 2 M/E 16 channel HD switcher](#)



Portable production units (PPUs) centre around a core switcher. Datavideo develops rack units, with integrated power supplies. Users can specify each module for monitoring, recording, encoding, intercom and much more. Datavideo manufactures:

- [MS-2800: a low profile 8-12 channel HD unit](#)
- [MS-3000: an integrated PPU with up-to 16 channels](#)
- [OBV-2800: a versatile PPU for use in an van or studio](#)



Datavideo's handheld production units can be carried to any venue. With an integrated monitor and switcher, producers are always ready to produce multicam programming and events.

- [HS-600: 8 channel SD studio](#)
- [HS-2000L: 5 channel portable HD studio](#)
- [HS-2800: 8-12 channel portable SD/HD studio](#)

Enterprise Class Live Encoders

Most encoders are best suited to occasional use and for low-bitrate streaming to small screens.

Vitec encoders are tough and reliable, with very low latency. They are designed to run for extended periods and deliver the highest video quality.

Its new devices are ideal for video streaming or as a point-to-point video sender where speed, quality and reliability are critical.

- **MGW Sprint** with around 4ms latency, this HD encoder has no visible delay.

- **MGW Pico & MGW Premium** both have 3G-SDI, DVI, HDMI, composite and S-Video inputs. They have built-in scalers, metadata support and secure encryption.



- Pico is a small, low-latency (<70ms) 1080p encoder.
- The Premium model goes further, being capable of encoding a single HD source or 4 SD streams. Alternatively, it can encode 1 source at 4 different resolutions and data rates in parallel.

Video Walls & Display

Video walls are extremely versatile, being crucial in control rooms, making a huge impact for front of house and delivering real-time updated information in live events.



With TVOne equipment, you can display a single video onto multiple screens... Or display multiple feeds onto a single screen... Or even create dynamic multi-format, multi-display, multi-input video walls.

Systems such as the **CORIO-**



master handles digital video, computer graphics or analogue feeds, processing and manipulating each stream in real-time.

HDBaseT

HDBaseT has huge potential for AV. With the new protocol, you can use Cat5/6 cable to send uncompressed video over 100m, power to remote devices and control signals.

With TVOne, HDBaseT is now here. See our website for details.

For more information on any of the solutions highlighted, please call us on 01457 851000 or email Jill: sales@holdan.co.uk.

Streaming Encoders

Stream H.264 live to content delivery networks such as YouTube Live, Ustream and Livestream.

Datavideo NVS-20

A true all-rounder: take digital or analogue feeds and stream HD H.264 at up-to 6Mb/s using RTSP, RTMP or HLS protocols.

The unit also records the stream to USB storage.



Teradek VidiU

An inexpensive H.264 encoder, VidiU streams HDMI signals over WiFi, Ethernet or a single 3G/4G USB dongle.

Supporting RTMP, this device delivers single click webstreaming.



Solid Chrome

Datavideo DVK-300HD

Getting green screen right in live video is tricky. With DVK-300HD every parameter of the foreground and background can be controlled for excellent results.

Portable Backgrounds

Datavision's new chromakey booths are light, portable, quick to erect and deliver excellent keying results. LED strip lights are available to complete the kit.

