AV essentials

We have well and truly entered the era of digital-first communications and high-quality audio-visual capabilities are no longer a nice add-on – they're crucial to making a professional impression with key stakeholders.

With video conferencing replacing in-person meetings and broadcasters conducting more live TV interviews via Zoom and Teams, grainy video and tinny, distorted audio make organizations look amateur.

And with video creating the highest engagement on social media such as LinkedIn and Twitter, companies have to ensure that their AV output is as polished as every other aspect of their sales, marketing and communications efforts.

a context content guide

sound thinking

It's telling that the first letter in AV refers to audio because sound is at least as important as vision. While our eyes can cope with low-quality images, our ears won't tolerate poor sound, which is why it's critical to get the audio right.

Built-in computer microphones and cameras may be fine for internal meetings, but not for online communications with a client, prospect, reporter, regulator, investor, vendor or other stakeholder.

Laptop microphones and preamps are usually poor quality, causing audio to lag, lack presence or, worse, to distort or cut out. Moreover, the mic is usually too far away from the audio source (your mouth), and too close to the keyboard, creating irritating clacking and fan noise.

So the starting point for better audio is an external microphone, for which the options are 3.5mm, USB and XLR connections.

The Zoom F2 includes a tiny 32-bit floating point recorder for $150 to $200 less than the comparable $350 Tentacle Sync Track E, while the new $300 Rode Wireless Go II includes two transmitters and a receiver to allow two people to be separately and simultaneously recorded on a stereo channel.

lavalier

A smart 3.5mm lavalier such as the **Deity V.Lav** (top) can be plugged directly into a computer, camera or even a phone or be used with an audio interface via an inexpensive adapter. Wireless systems such as the **Rode Wireless Go** (below left) enhance flexibility, while lavs such as the **Zoom F2** (below left), **Zoom F1-LP** and the **Tascam DR-10L** come with palm-sized recorders, making them a good option for video and podcast recordings.

Budget: Deity V-Lav $50, D-XLR adapter $25, audio splitter $10, Zoom F1 $150, Tascam DR-10L $200, Rode Wireless Go $200

Background photo: Alain Santschi, Pexels

USB

USB mics plug directly into computers without the need for additional hardware but they can be bulky because the necessary digital encoders and coverters are inside the device. They're therefore best suited to conference calls and for recording podcasts and other presentations using applications such as Audacity or Adobe Audition. Popular options include the Rode NT-USB Mini, Blue Yeti and the Audio-Technica AT2020 (right). USB mics are less suitable for TV interviews because they need to be close to the subject to get the best results, which can put them in shot.

Budget: $100-$150 per mic

interface

To work with a computer, XLR mics need to first pass through a USB audio interface. For every-day purposes, low-cost devices are perfectly sufficient and perhaps one of the best is the Audient EVO 4 (left), as it can set the microphone gain automatically for optimum quality.

Other good options for less than $200 include the Focusrite Scarlett range (top right), the Motu M2 (right), the Native Instruments Komplete Audio 1 and the M-Audio Air series. M-Audio recently introduced the M-Track Solo and M-Track Duo, which are good value entry-level options at $49 and $69 respectively.

Budget: $130-$200

recorder

An XLR microphone in conjunction with a USB audio interface will provide a noticeable step up in quality. XLR shotgun mics are highly versatile and can be used for TV interviews, conference calls, corporate video recordings or podcasting. Good mid-price options include the Rode NTG5 (left), Rode NTG3 and the Sennheiser MKE600. Large diaphragm dynamic mics such as the Shure SM7B and Electro-Voice RE20 have been the standards for radio stations globally for decades because of their rich sound. Dynamic mics excel at eliminating background noise, but need more amplification than condenser mics, which require 48 volt "phantom" power from a recorder or audio interface to work. Large diaphragm condenser options include the sE Electronics 2200, the Rode Procaster and the Shure MV7.

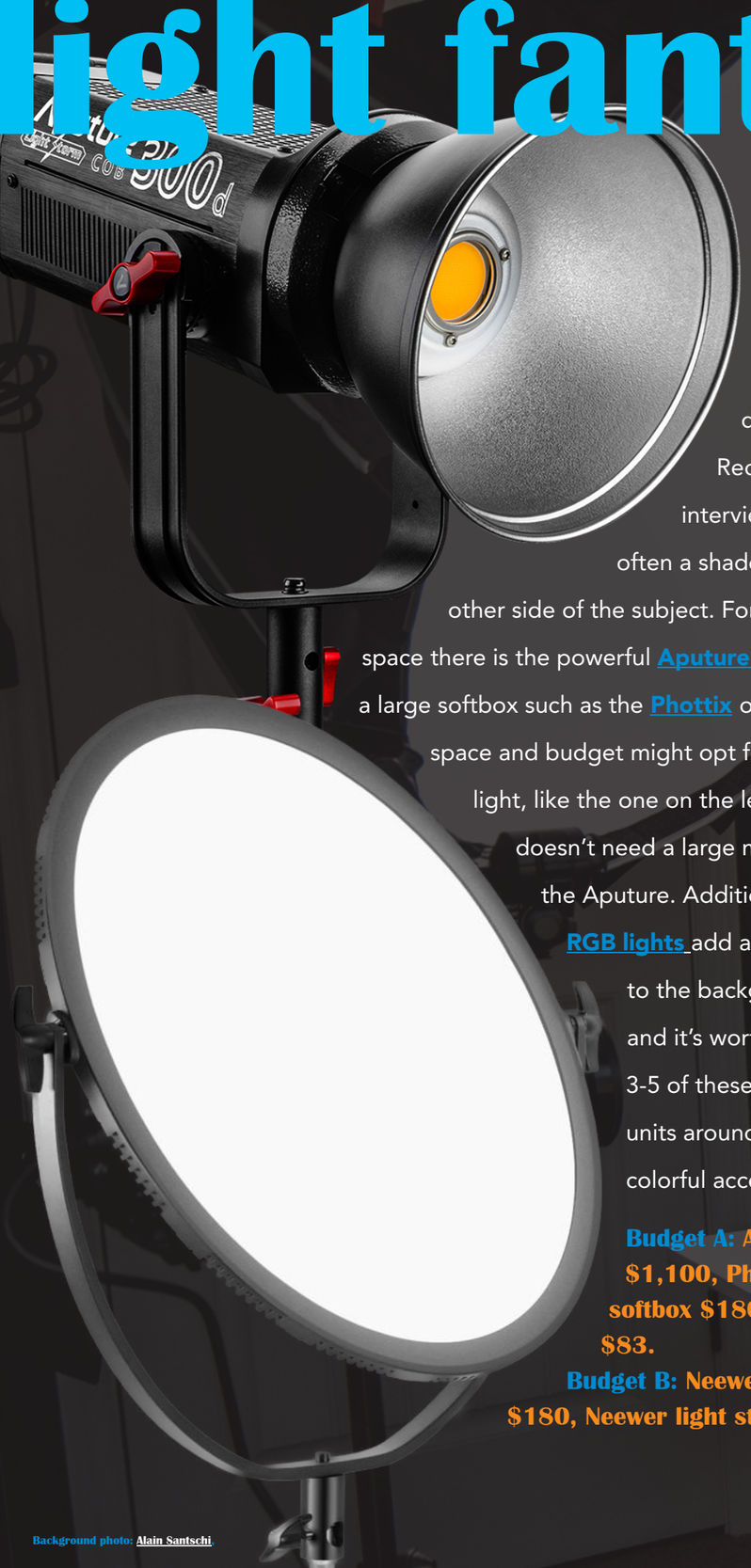
Budget: $140-$500 per mic

XLR

Plugging a microphone straight into a camera to record audio for corporate videos won't yield the best results. Clear, crisp sound is attainable by using an XLR mic with a separate audio recorder. A solid inexpensive choice is the Tascam DR-60D II (below), which can record up to four mics simultaneously on separate channels. In the mid-range, the Zoom F6 (left) provides broadcast quality results with carefree 32-bit floating rate recording (which removes the need to set the mic gain and eliminates the risk of "clipping" or distortion), while serious audiophiles can trade up to high-end pro gear such as the $1,500 MixPre-10 from Sound Devices.

Budget: $200-$1,500

light fantastic



Good quality video requires even, soft and diffused daylight-balanced lighting. Recorded video and TV interviews need a main key light and often a shadow-reducing fill light on the other side of the subject. For those with more budget and space there is the powerful **Aputure 300D** (above left) fitted with a large softbox such as the **Phottix** on the right. Those with less space and budget might opt for a **Neewer flapjack** LED light, like the one on the left, which doesn't need a large modifier like the Aputure. Additional small **RGB lights** add ambiance to the background and it's worth having 3-5 of these sub-$100 units around to provide colorful accents.

Budget A: Aputure 300D $1,100, Phottix 90cm softbox $180, Neewer light stand $83.

Budget B: Neewer 21-inch flapjack light $180, Neewer light stands $70 for two.

Background photo: Alain Santschi

Laptop cameras are typically 720p, which is one reason why they produce washed out and sickly images. Webcams are hardly better. They pretty much universally have small, low-end sensors that produce fuzzy, badly exposed, noisy images with poor color, contrast, depth of field and white balance.

To get your AV game right, step up to a mirrorless or DSLR camera. A good entry-level option is the **Canon SL3** paired with an inexpensive **Canon 50mm f/1.8 STM** or **Canon EF-S 24mm f/2.8 STM**. A versatile, high-end lens and a favorite of Canon snappers everywhere is the **Sigma 18-35mm f/1.8 Art** zoom.

Fuji's **X-T3** and **X-T4** cameras provide exceptional quality and value, especially when paired with the **Fujinon XF 16-55mm f/2.8** zoom, while other popular cameras are Panasonic's **Lumix S5** and **Lumix G9**, and Sony's **A7S III** or high-end **Alpha 1**.

A final piece of equipment often needed to use a DSLR or mirrorless camera with video conference apps is a capture card, which takes the HDMI signal from the camera into the computer via USB and from there into Zoom or Teams. The $129 **Elgato Cam Link 4K** (right) is the default choice, although there are reliable options from companies such as **Mirabox** and **AverMedia**.

Budget: Canon SL3 $400 (refurbished), Canon EF 50mm F1.8 $125, Canon EF-S 24mm F2.8 $150, Sigma 18-35mm F/1.8 DC HSM Art $720. Fujifilm X-T3 $1,500, Fujifilm X-T4 $1,700, Fujinon XF 18-55mm F/2.8 R LM WR $1,200

snap happy

bundle up

Here are clickable links to entry level, intermediate and high-end bundle ideas for essential gear, along with a fourth option that looks to optimize value and performance per dollar spent. These bundles focus on DSLR and mirrorless cameras and exclude dedicated cinema cameras such as Sony's PX range, Canon's EOS C series and super-premium movie cameras by Arri or Red.

entry level

Camera: Canon SL3 (refurbished) $400
Lens: Sigma 18-35mm F1.8 DC HSM ART $720
Microphone: Rode NT-USB Mini $100, Deity V.Lav $50, Blue Yeti $130
Audio recorder: Tascam DR-60D II $200
Lighting: Neewer 21-inch Flapjack $180, Neewer Light Stands (3-pack) $90
Video capture: Elgato Cam Link 4K $130

intermediate

Camera: Fuji X-T3 or X-T4 $1,500-$1,700
Lens: Fujinon 16-55mm F2.8 $1,200
Microphone: Rode NTG5 $500, Deity V.Lav $50, Deity D-XLR adapter $30
Audio interface: Audient EVO 4 $129
Audio recorder: Zoom F6 $650
Lighting: Godox UL150 $390, or Weeylite Ninja 400 $370, Nicefoto 90cm parabolic softbox $129, Neewer 13-foot light stand with boom $99

premium

Camera: Canon EOS C70 $4,500, or Blackmagic Pocket 6k Pro $2,495
Lens: Canon EF 24-70mm F2.8 II USM $1,900 (for Blackmagic), Canon RF 28-70mm F/2L USM $2,999 (for C70)
Microphone: Schoeps CMIT 5 $2,300, DPA 6061 Lavalier $650
Audio interface: Universal Audio Apollo Twin Duo Heritage $1,000
Audio recorder: Sound Devices MixPre-10 $1,500
Lighting: Aputure 300D II $1,100, Aputure Light Dome II softbox $270, Manfrotto 126BSUAC light stand $260
Video capture: Elgato Cam Link 4K $130

hybrid: best bang for buck

Camera: Fuji X-T3 $1,500
Lens: Fujinon 16-55mm F2.8 $1,200
Microphone: Rode NTG4+ $350, Deity V.Lav $50, Deity D-XLR adapter $30
Audio interface: Motu M2 $170
Audio recorder: Zoom F6 $650
Lighting: Aputure 120D II $745. Nicefoto 90cm parabolic softbox $129. Neewer 13-foot light stand with boom $99. Aputure MC RGB Light $90.
Video capture: Elgato Cam Link 4K $130
Additional items: Davis & Sanford Provista tripod $262, XLR cables $25, K&M Mic boom stand $90

There are so many options when it comes to gear and getting the right kit to suit your budget and needs is only the start of the AV adventure.

Learning how to set up and use the equipment is the next stage. Then comes scripting and planning shoots, followed by the elements of post-production – editing, audio mixing, color grading and motion graphics creation.

So as you can see, there's much more to AV than can be discussed in this guide, which is intended as a jumping off point for organizations that understand the need to be as professional as possible in their digital interactions with key constituents including clients, prospects, journalists, vendors, investors and regulators.

Click here to watch the video below for some guidance on how to avoid the mobile-phone-up-the-nose-in-front-of-a-bookcase cliché.

Reach out to start a conversation about optimizing your digital communications, including content creation, media relations and corporate communications. As a full-service marketing communications company with clients across the US and Europe we have deep experience in a wide range of sectors including finance and technology.

Contacts

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