

JERRY IBBOTSON grows more and more impressed by Olympus' recorder in which audio and video run side by side in the excellence stakes.

I'm having a chicken and egg moment right now. As I sit down at my laptop, I've got an Olympus LS-20 sitting next to me and I'm trying to figure out what is. Okay, so I do know that it's a high quality handheld audio recorder with a built in HD video camera, but which came first? Is it a camera with better than average sound, or an audio machine with video capability? That's all academic because it's actually a really clever, well designed, and brilliantly executed little device.

thread underneath, so you can fit a separate grip if need be to further isolate it. Levels are set by pressing the Left and Right sections of the main round button, while the Up and Down sections control the camera zoom. All the buttons respond well and the smaller LCD, which shows the level settings and meter, is backlight and easy to read. Overall, there's a nice quality feel to it. And a neat trick is the ability to flick the video image on its head, so that you can hold the LS-20 aloft, with the screen pointing downwards (good for live events).



OLYMPUS LS-20

PCM Digital Recorder

First Look

Before delving into the electronics, it's worth having a look at the overall design and ergonomics. It looks like one of the other LS models (I've previously tested the 11 and 5) that's been rolled flat and thin. This makes it easier to grip and tends to make less handling noise – something I've harped on about in the past. There's a small grey scale LCD screen on the top deck, which shows the settings, and above that is a much more exciting colour one. This shows what you're filming.

The buttons for Record, Play, and Stop are all right under your thumb and there's a slider switch on either side of the body: one for Power and one to select Video or Audio recording modes. In the base is a panel for the USB connection and mini HDMI output (though you'll need to buy your own lead for this). There's also an SD card slot and min-jack sockets for external microphone and headphones.

At the top end of the device is the really interesting stuff. Firstly, there's a pair of mics that work in stereo configuration and can be set to low or high sensitivity. Record levels are set manually through the thumb buttons on the main section of the machine and I'd suggest leaving the mics set to low, to avoid pre-amp hiss, and simply boosting the recorded files later in your DAW. Sound wise, the LS-20 can record either as an MP3 at 320 or 256 kbps or as a PCM wave file, at sample rates up to 96k/24-bit.

Sitting between the capsules is the lens for the video camera, which has an electronic zoom. The exposure can't be set manually but there is an exposure compensation feature to alter it incrementally up or down. As standard, the white balance is set automatically but you can do this yourself or use a range of presets e.g., daylight, fluorescent light, etc. There's also the capability of changing the exposure metering from a matrix to spot, allowing you expose for a key part of a scene.

The LS-20 can record video at three rates. 640x380 is recommended for use on the web. At this setting the audio is an MP3. Next comes 1280x720, which comes with PCM sound, and finally there's 1920x1080, also with PCM audio. The video is processed and stored as .MOV files.

I've just re-read that last paragraph and it sounds rather geeky. But it's important to point out that this machine is capable to produce proper HD video and high quality sound.

Getting A Grip

It handles like any modern portable audio recorder should. It feels good in the hand and there's a standard mount

I've used the LS-20 mainly in Video mode and the results have been impressive. Here's one example: on my way home from work recently I stopped at a railway crossing. There was a steam train coming down the line, so I grabbed the Olympus out of my bag and hurried to the barrier. The video image I recorded was clear and sharp (I had it set to 720p at the time) and way above the kind of picture you'd get from a smartphone camera. Even when I later uploaded it to Youtube it remained of a higher than average quality.

As for the sound: well I dropped the .MOV file into Adobe Audition when I got home and extracted the stereo track. That's when the LS-20's main chink became apparent. It hadn't been a particularly windy day but there was a lot of wind roar on the recording, particularly when the train was rushing past. Other models in the LS range come with foam windshield and you can also fit a Rycote Windjammer. But with the camera sitting between the two capsules, a similar solution won't work on the LS-20, leaving the mics unprotected. Granted, a bit of filtering cleaned things up and the recording was clean and sharp; the audio is now in my fx library. But it is something to bear in mind. Hopefully some clever people are even now working on something with two fluffy cups and some elastic that will get over this issue.

Finding A Buyer

Who would use one of these? It's not something that leaps out as having an instant "I need to one of those for..." appeal. But in recent days I can imagine situations where a camera that doesn't look like a camera, and isn't held at eye level like one, could be useful to news teams. In the midst of the riots in London and other English cities something like this could have been a powerful but discrete reporting tool. For the age of 360° media, the video of the interview is a useful asset, as well as the interview itself. Or what about considering it as an audio recorder with built-in log of what exactly it was that you were recording and from where?

Olympus says that its target markets are "film makers, musicians, sound recordists, students, and journalists." In any case, I think Olympus has to be applauded for raising the bar with a small video device that also has 'proper' audio. Or should that be a proper audio machine with high quality video? **TM**

THE REVIEWER

JERRY IBBOTSON runs Media Mill, a York-based audio production company started in 2000 that specialises in sound for video games. Prior to this, Jerry was a BBC journalist for ten years, ending his spell with the Beeb as a reporter and newsreader at Radio One Newsbeat.

INFORMATION

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