

Digital Audio Recorders

If you will be doing strictly voice recordings, a pocket digital voice recorder (DVR) will suffice. For reasonably high quality audio files at an economic price (\$100-\$200), the Olympus models are the best bet. Attached is a table that highlights the specifications for the *Olympus WS-311M* and the *Olympus DS-40*.

The Olympus models utilize WMA format for high quality files. You will need to download separate media players and converters to play and edit the files that you capture.

If you or your students will need to record music, ambient sound and voice, a more advanced digital audio recorder (DAR) is recommended [see additional pdf Digital Audio Recorder Comparison Chart]. These models are high quality and versatile, but will place you in the \$300-\$400 range.

Additional Software:

Free Media Players:

Mac users will need to download media players to play back the high quality files WMA files.

Windows Media Player [<http://www.microsoft.com/mac/products/flip4mac.mspix>]

VLC media player [<http://www.videolan.org/vlc>]

Audio Converters:

For audio editing, it will be necessary to download a WMA converter:

Flip for Mac [<http://www.microsoft.com/mac/products/flip4mac.mspix>]

EasyWMA [<http://www.easywma.com>].

Free audio editing software:

Audacity [<http://audacity.sourceforge.net>]

External Storage:

Uncompressed 16-Bit audio takes 10 MB per stereo minute (one-hour translates to 600 MB!) Depending on the size and scope of your audio project you may need to invest in an external hard disk drive for storage space.

Digital Voice Recorder Comparison:

Below are the specs for two digital voice recorders that can be utilized with both the PC and Macintosh computers. The included software is incompatible for Mac, but the device will register as a drive on the desktop for access to the files.

	<i>Olympus WS-311M</i>	<i>Olympus DS-40</i>
Recording Format	WMA (Windows Media Audio)	WMA (Windows Media Audio)
Recording Media	Built-in 512 MB flash memory	Built-in 512 MB flash memory
Recording Time	Stereo XQ Mode: 8 hours, 50 minutes Stereo HQ Mode: 17 hours, 40 minutes Stereo SP Mode: 35 hours, 25 minutes HQ Mode: 35 hours, 25 minutes SP Mode: 69 hours, 40 minutes LP Mode: 138 hours, 30 minutes	ST XQ mode: 8 hours 40 minutes ST HQ mode: 17 hours 20 minutes HQ mode: 34 hours 45 minutes SP mode: 68 hours 30 minutes LP mode: 136 hours 15 minutes
PC Interface	USB 2.0	USB 2.0
Display	Backlit LCD screen; Rec/Play LED	Backlit LCD screen; Rec/Play LED
Sampling Rate and Encoding	Stereo XQ Mode: 44.1kHz Stereo HQ Mode: 44.1kHz Stereo SP Mode: 44.1kHz HQ Mode: 44.1kHz SP Mode: 22.0kHz LP Mode: 8.0kHz	STXQ/STHQ/HQ: 44.1 kHz SP: 22 kHz LP: 8kHz
Frequency Response	Stereo XQ Mode: 50-19,000Hz Stereo HQ Mode: 50-15,000 Hz Stereo SP Mode: 50-9,000Hz HQ Mode: 50-13,000Hz SP Mode: 100-7,000Hz LP Mode: 100-3,000Hz	STXQ: 50-19000Hz STHQ: 50-16000Hz HQ: 50-13000Hz SP: 100-8000Hz LP: 100-3000Hz
Voice Activated	Yes	Yes
Speaker	18 mm round dynamic speaker	23 mm diameter round dynamic speaker
Microphone Jack	3.5mm (1/8")	3.5mm, impedance 680 ohms
Earphone Jack	3.5mm (1/8")	3.5mm, impedance 8 ohms or more
Power Supply	One AAA battery	Two AAA batteries
Battery Life	21 hours	32 hours
External Power	No	Available
Size	3.7"L x 1.5"W x 0.4"D	4.4L" x 1.5W" x 0.6D"
Weight	0.7 oz., including battery	2.8 oz., including battery
Price (as of 1/25/08)	\$99	\$199