



Desktop USB amplifiers

Thursday, June 9, 2016
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It all started when someone said it was hard to find compact amplifiers that you could plug into the USB output of a computer and use with a pair of small speakers on the desktop. It turns out that this is a relatively rare breed and the selection we have gathered represents a fair proportion of what's on the market. Presumably the desktop audio market is dominated by powered speaker systems and headphone amplifier/DACs, but there is clearly some benefit to be had from using decent amps, DACs and speakers with computer sources. Even if you are using iTunes or the Windows equivalent the quality of anything above base level MP3 warrants a decent system, and if you are playing lossless FLAC or ALAC (Apple Lossless) files then the difference between a basic system and one costing not a huge amount more is going to be quite dramatic.

We tested four alternatives from Denon, TEAC, ProJect Box Design and NuForce, all of them being small yet equipped with digital to analogue converters and enough power to drive the Triangle Elara, Dali Royal Menuet II and Q-Acoustics 2010i speakers used for this review. The source was a Macbook Air running Audirvana Plus software with Vertere Dfi USB cable and Supra Ply 3.4 speaker cable. Nothing too fancy in other words, we tried to keep things real given the price of equipment under scrutiny.

If you want to get more out of your desktop listening experience, or for that matter need a compact amp with Bluetooth then there will be a model in this group for you.

Music used

Barenboim, Symphony No.7 in A, Op.92 Beethoven For All (24/96, Decca)

Red Hot Chili Peppers 'Walkin' on Down the Road' from The Uplift Mofu Party Plan (Manhattan)

Aaron Freeman 'Covert Discretion' from Freeman (Partisan)

Dave Holland and Pepe Habichuela 'Hands' from Hands (Universal)

GoGo Penguin 'All Res' from Man Made Object (Blue Note)

TEAC AI-301DA £399

TEAC has a long reputation for making attractive and well built compact separates, one that this amplifier maintains with its all aluminium construction and good detailing. The AI-301DA has a good feature set with DSD compatibility, two analogue inputs and the biggest remote handset in this group. The sockets and connections are all good quality and you get proper binding posts for the speaker cables alongside an IEC mains inlet, allowing power lead upgrades should the notion appeal.

In the system this TEAC proved to be the most entertaining amp in this group thanks to a degree of transparency to the source that meant you heard more of each piece of music. So Aaron Freeman was a bit mellower than usual but the doubling of vocals was easy to hear and the guitar strings sounded lovely and crisp. The Pepe Habichuela sounded excellent and reflected the quality of the recording well, the result being just that bit more sophisticated and revealing than its nearest rival the Denon. The Beethoven had good depth of image and lovely musical flow while there was real power on tap for the Chili Pep-

pers despite the low specified 15 Watt output. This TEAC can do lively and engaging as easily as it can deliver a relaxed, effortless tune, this combined with the high build quality makes it our group winner.

Conclusion

This group proved that small can indeed be beautiful when it comes to amplification, all of these boxes fit comfortably under the screen of my 27inch iMac and the least powerful in spec terms (TEAC) proved to be the most enjoyable. It was a close fought battle however and all of the contenders deliver a result that makes budget powered speakers sound lame. You need to add speakers to these amps to get sound of course but these do not need to be huge or expensive, indeed the Q-Acoustics 2010i are neither (£90) but deliver an engaging, wide band sound that will make your music addictive. The option exists to add a subwoofer on most of these amps but as a rule they are better off left alone, you get more thump for sure but timing and ultimately musicality tend to suffer unless you spend more than these amps cost.



Supplier

TEAC

www.teac-audio.eu

	Denon PMA-50	NuForce DDA120	Pro-Ject MaiA	TEAC AI-301DA
Price	£399	£350	£399	£399
Digital inputs	4	4	4	3
Analogue inputs	1	1	2	2
Phono stage	N	N	Y	N
Rated power 8 Ohm	30W	50W	30W	15W
Max sample rate	192kHz	176.4kHz	192kHz	192kHz
DSD	DSD128	N	N	DSD128
Bluetooth aptX	Y	Y (dongle)	Y	Y
Headphone out	Y	N	Y	Y
Subwoofer out	Y	N	Y	Y
NFC	Y	N	N	N
Size HxWxD cm	8.6x20x24	5.1x24.1x21.6	3.6x20.6x20	6.1x21.5x25.4
Weight kilograms	2.68	1.2	1.85	2.1
Rating	4/5	4/5	3/5	5/5