

# Ifi Audio Pro iCan Desktop Headphones Hybrid Amplifier

By koolpep - 16/05/2016

## Equipment used:

Headphones: Sennheiser HD800S, Hifiman Edition X, Hifiman HE-560, AKG K7XX, Audeze LCD-2f, Sennheiser Momentum, HD-650, Oppo PM-2, PM-3, Aurisonics ASG 2.5, Noble K10U, LZ-A3, plenty of other IEMs.

## Music used:

From Röyksopp to Amber Rubarth, Diana Krall to Apoptygma Berzerk, Tom Jones to Sphongle, Yello to Camouflage, mostly FLACs 24/96 or 16/44.1 – some mp3 320kbps, some AAC 256kbps

Depending on headphone high or low gain – no EQ



**Disclaimer:** [samma3a.com](http://samma3a.com) provided me with a demo unit of the ifi Pro iCan. I am not affiliated with ifi or Samma3a.com Though I really highly appreciate

what samma3a is doing for the audiophiles in the region!! Thank you so much for letting me test and review this amazing amp. I do own the iUSB2, iDSD nano and iDSD micro from ifi.

## TL;DR

### Pros:

- 3 operating modes (solid state, tubes, hybrid)
- Connections for nearly every headphone under the sun
- Full balanced amp with balanced input
- X-Bass switch with 3 levels
- 3D – switch with 3 levels
- Balanced and single ended inputs and outputs.
- Add on for electrostatic headphones in the future.
- Incredible good sound quality.

### Cons:

- Price (well I always complain about that)
- The amp is so lightweight that it moves around easily when using balanced cable etc.



**Conclusion: I called the ifi iDSD micro the Swiss Army Knife of portable/desktop DAC/amps. The Pro iCan is that times 1,000 in the desktop amp range. Versatile, tube-sound, solid state sound, hybrid sound, power to drive an HE-6 and highly sensitive 8 Ohm IEMs, fully balanced mode, connectors for ANYthing. And a sound quality that you usually have to pay at least double the amount for. I so want this amp. This amp is pure endgame material. There is no reason to own anything else. If you can afford this beauty.**

**Now, the longer version:**

## Packaging & Accessories

As usual – clever packed by ifi with all essentials in the box. Power supply (iPower Plus) the amp it self, a remote, manual, warrantee card and a set of cable (RCA cable).



## Technical Highlights

Balanced headphone amplifier. Two system amplification stage, one tubes, one pure class A solid state. 2 GE 5670 new old stock tubes are the heart of the tube stage, ultra low noise, J-Fets are the core of the solid state stage.

### Output:

- 16,000mW @16Ω (peak, constant 6,000mW)
- 240mW @600Ω
- Dynamic Range: > 117 dB
- THD: <0.003%
- Analogue processing: X-Bass in 3 levels, 3D Sound in 3 levels
- Gain: 0dB, 9dB, 18dB

### Headphone outputs:

- 3.5mm single ended
- 3.5mm balanced
- 6.35mm single ended
- 3 pin XLR balanced (left and right) right connector works as well as single ended 6.35mm)
- 4 pin XLR balanced



### Outputs:

- balanced 3pin XLR (left /right)
- RCA output – single ended

### Inputs:

- 3 x RCA single ended in
- 3 pin XLR balanced input



### Sound effects:

- X-Bass in 3 levels (OFF, 10Hz, 20Hz, 40Hz)
- 3D Sound in 3 levels (OFF, 30, 60, 90 headphones)

## Usability and Build Quality

Build quality is great. every knob feels solid and every dial is weighty and smooth. The volume knob is motorized and can be operated via remote (I didn't have the remote for the test though).

The iCan has a special power supply unit that is of the ultra low noise variant. You can't fault ifi on their power supplies, they are always amazingly clean. Another add-on part for this amplifier will be the Electrostatic Headphone Energizer. A separate box that can be connected to the Pro iCan that delivers up to 1,700V Peak – with Bias selectable for Stax, HiFi/Pro, Sennheiser and other manufacturers. It's not yet clear when it's coming.

The switches and knobs from left to right:

1. **Power button:**

Press it and the iCan starts the boot up procedure. Relays click, laser needle stitched logos light up and change color, once in operating temperature, depending on mode (solid state or tube) the light changes and let's you know it's ready.

2. **Input selector:**

Large dial on the left. The same size as the volume knob on the opposite side. Choose between 3 analogue inputs and balanced input.

3. **Bass selector:**

Switches the XBass from OFF to 10Hz,20HZ,40Hz – increases the bass response of headphones or speakers to your liking purely in the analogue domain.

4. **Amp mode switch:**

3 mode switch that selects solid state operating mode of the amp, tube mode or a special hybrid mode.

5. **Headphone outputs:**

3.5mm single ended, balanced, 6.35mm single ended, 3pin XLR and 4pin XLR

6. **3D selector knob:**

Selects the analog 3D/soundstage enhancement effect in 3 levels plus OFF

7. **Gain stage selector switch:**

0dB, 9dB and 18dB selector.

**8. Volume knob:**

motorized knob turn it to change the volume.







## Build Quality

The enclosure is aluminum – it feels great to the touch – Interesting cutouts that let the lights of the LEDs and tubes shine through the housing as well as ensure the device has enough heat escape ports. It does get quite hot in operation.

Everything feels solid and nice – however my only real negative with this amp is: it's too light. Yes, I really mean it. You cannot plug in a XLR or even a normal headphone without making sure you hold the amp with your other hand. It has a large antiskit rubber pad on the bottom of it but thanks to it's really low weight it happily moves around very easily. A small pull from a headphone cable and it moves. I believe this amp should be at least 1kg heavier. It's meant for desktop use, so really shouldn't slither along like a snake. But that is it. That's all of my criticism.



## Sound Quality Comparisons & Usage

### General

### Using the Pro iCan

For an amp that is as powerful as the iCan Pro – it's important that it's safe. You can switch everything while the amp is in operation without causing anything to break. Changing the gain, makes some relays tick and before the new gain engages you have a few seconds to react to your input before your ears might get blasted with too much power

Switching from solid state to tube mode, creates a small break of 20-30 seconds until the tubes have reached operating temperature. When switching from tube mode to solid state mode the tubes don't immediately switch off – they stay on for some time longer, to not expose the tubes to many on/off cycles. Only when not used in a longer period do the tubes switch off. Every other command is done immediately and you hear the result.



## Sound quality

### **Solid state mode:**

Detailed, neutral and balanced solid state mode. Plenty of power to even drive the most demanding headphones. I was quite impressed that this little thing can drive the HE-6 well and loud. In general Hifimans seems to sound better to me in this mode while Sennheiser and Audezes sounded better in tube mode.

### **Tube mode:**

In tube mode you get that addictive bottom end. Just recently I declared that the WA8 from Woo audio drove my T90 best ever. Now I have to announce that my LCD-2 never sounded better than on this ifi amp in tube mode. Brilliant mids, lovely bass, the way Audezes should sound. Confirmed on LCD-3 – just magical. slightly warmer sound in general with a tad treble (but not detail) roll-off. Silky smooth, sound. Like velvet.



In all modes the iCan Pro drives IEMs as well when connected via 3.5mm plug. I also connected

## Conclusion & Issues

Having just reviewed the WA-8 and found it to be one of the best sounding amps, I have yet another absolute hit product to report on. The crazy thing is that this time we have an amp that costs about the same – offers crazy amounts of peak power (up to 16,000mW peak and 6,000mW constant) – so it can drive even the most demanding planar magnetic headphones with ease. It also offers 3.5mm outputs with IEM match technology so you can run sensitive IEMs from it without hiss. This amp is a technological marvel. It's well put together and sounds just brilliant.

It also saves you a lot of money as you have a tube amp, a class A solid state amp and a hybrid amp in one. you can drive everything from IEMs to Planars (and with an add-on in the future even electrostatic headphones).

Here is a tear down video I found: <https://youtu.be/qla2KXNXfdw>

Take a look at the design and how well the PCBs are designed. The lovely tubes in it...it's a joy to look at such a well put together amplifier in such a small housing.

ifi came out to assault the "state of the art" and to my ears – they fully succeeded. It's an amp that can seriously push any kind of headphones to its limits.

One very welcomed consequence from using this amp: Having heard my headphones with this amp: PM-2, HE-560, LCD-2f etc. made me appreciate them even more. I thought I am ready to move to TOTL (top of the line) headphones, like the Edition X or HD800S. Now I know there is still so much life in my headphones and so many areas I haven't yet explored – I should rather keep them and listen a few months or years longer with an endgame amp like this. And an endgame amp this amp is. I am pretty sure there is not much in the same price range that comes close. And if it comes close sound quality wise, it won't offer the versatility.

As an alternative and if you don't have really hard to drive headphones, or need balanced outputs, the WA-8 is in the same price range and also sounds sublime, has a smaller footprint but lacks the versatility and future proofing to a certain extent.

Rating: 5 stars (would give it 7 if possible).

THANKS to [www.samma3a.com](http://www.samma3a.com) for the review loaner! This is my new dream amp (again).

# 9.8



OVERALL SCORE