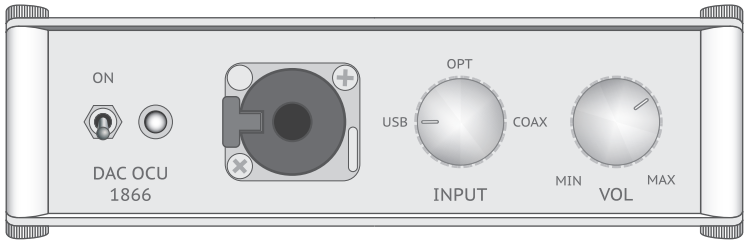
Mycroft ЭЛЕМЕНТАРНО!

upBac

DAC 1866 OCU

Operating Instructions



DAC 1866 OCU is a Hi-Fi digital-to-analogue audio converter. In accordance with Russian state standard specification 24388-88, its output amplifier belongs to zero (highest) complexity group. The device is based on precision 16-bit R2R DAC from Analog Devices — AD1866.

Specifications:

Frequency response	10—20 000 Hz
THD	4,6 dB
Signal/noise ratio	93 dB
Harmonic distortion	0,005 %
Stereo crosstalk	–60 dB
Minimal impendance	8 Ω
Mains voltage	220 V +10 %

Digital inputs:

- optical S/PDIF;
- coaxial S/PDIF;
- USB 1.0.

Analogue inputs:

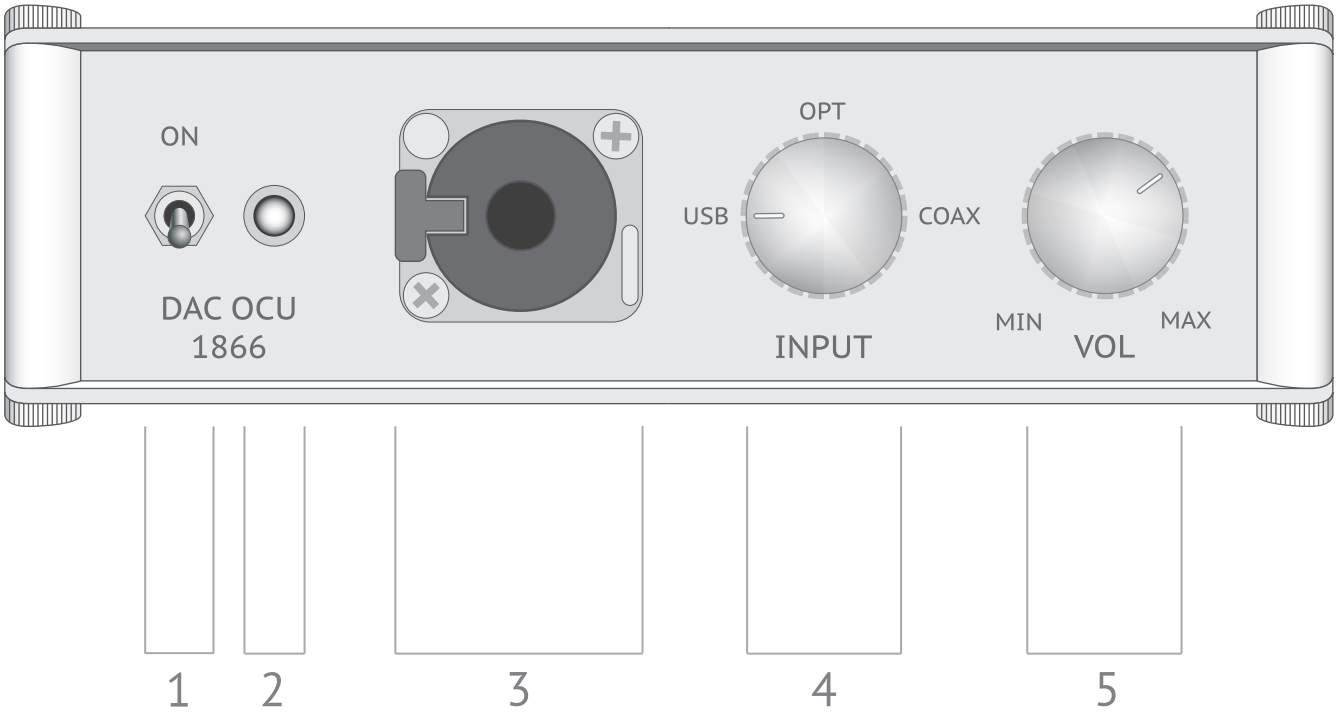
- linear (max voltage 2V RMS);
- headphone output (max voltage 5V RMS).

Technical features of the DAC 1866 OCU

DAC 1866 OCU has an active filter with cutoff frequency 40kHz which can be turned off (about turning off the filter see P.6). Power supply is external and has it's own ON/OFF switch. Analogue and digital parts of the unit has separate powering. Digital outputs has galvanic isolation from the main scheme. Linear and headphone outputs are protected from electric damage by power delay when turned on. Headphones are plugged with a reliable Neutric connector.

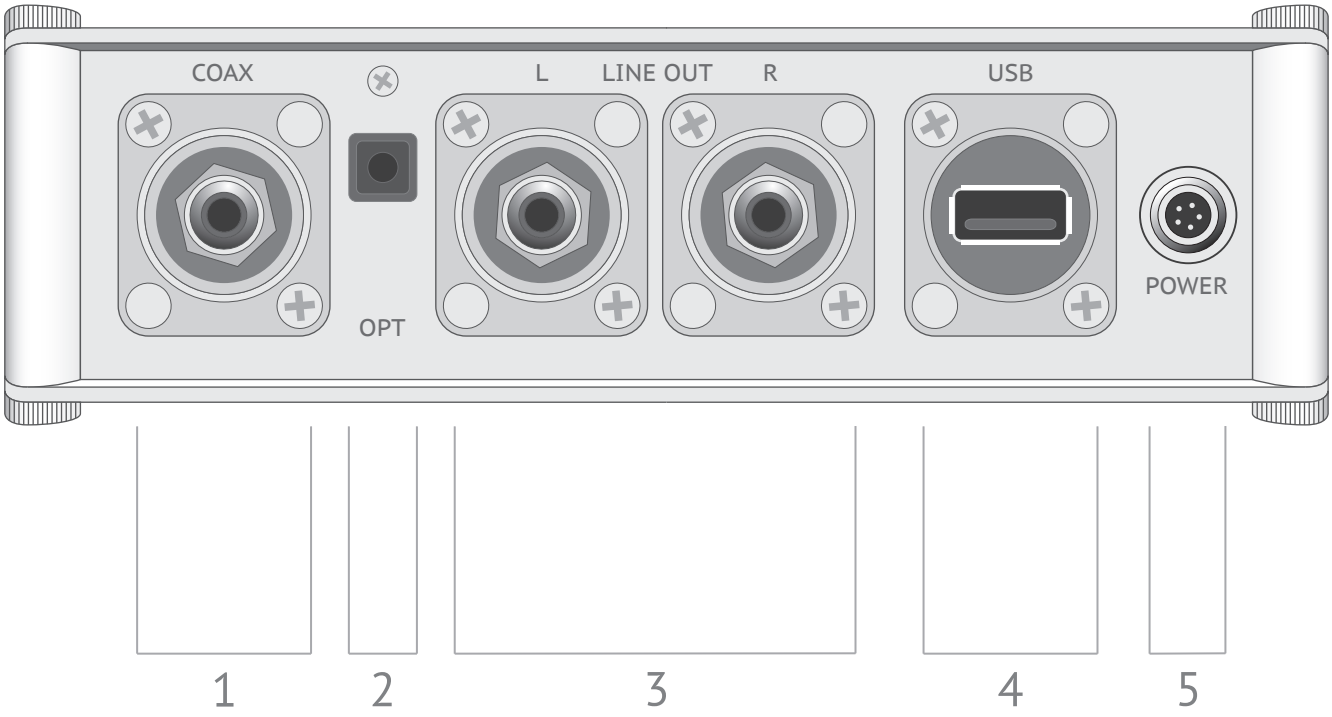
In order to preserve the maximum speed and precision of attacks in sound the Bessel's filter of the 4th order is used. Multibit R-2R DAC was chosen to obtain maximum clarity and precision in transitional characteristics of the sound. Unlike the widely used delta-sigma DACs, multibit DAC is capable of producing fast attacks in a single step, while delta-sigmas use multiple steps which leads to blurred and distorder attacks. Besides, multibit DACs are capable of more detailed and faithful presentation of high frequencies.

Front panel:



1 — ON/OFF switch;
2 — power indicator;
3 — headphone input;
4 — input selector;
5 — volume control.

Rear panel:



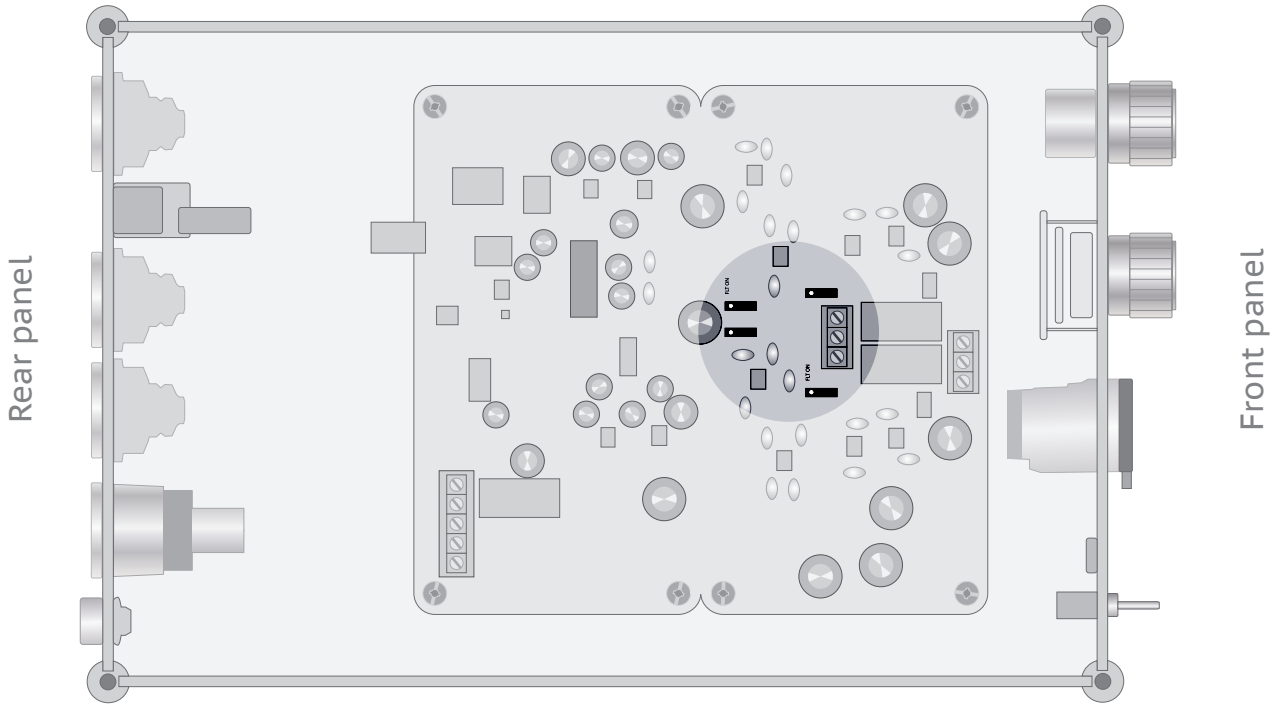
1 — coaxial S/PDIF output;
2 — optical S/PDIF output;
3 — linear output;
4 — USB connection;
5 — power supply.

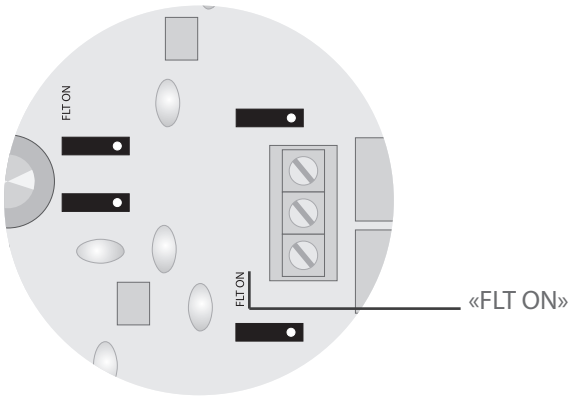
Installation

1. Plug the power adapter in the appropriate jack.
2. Plug your sound source inputs (several input connections can be plugged in simultaneously).
3. Attach headphones to a front panel jack and/or audio receiving device to the linear output.
4. Plug your power cord into 220 V wall socket.
5. Turn on the power supply, light indicator on the power supply should turn on.
6. Turn on the ON/OFF switch on the front panel of main unit, the light indicator on the front panel should be on.
7. Choose appropriate input with input selector.
8. Set up desired volume level using volume control.

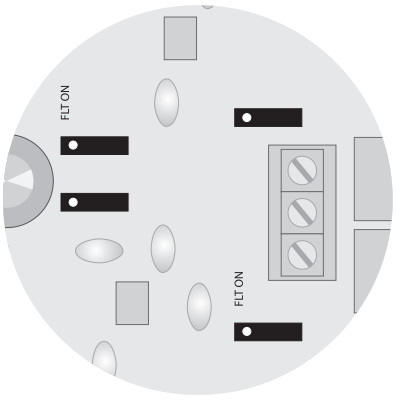
Turning off the filter

DAC 1866 OCU has an active filter with cutoff frequency 40kHz which can be turned off if nessesary. The filter is turned off and on by setting jumper position according to the scheme below.





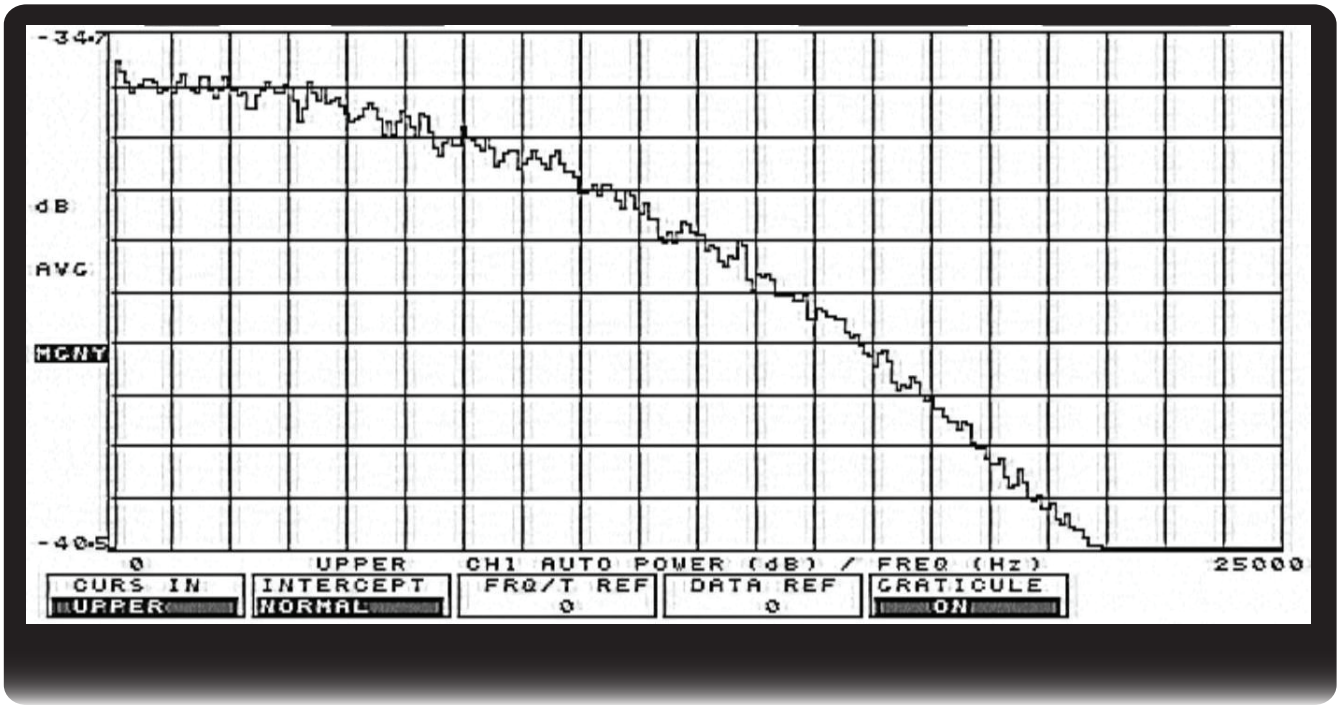
The filter is on when all jumpers are on the left position — closer to the "FLT ON" marking.



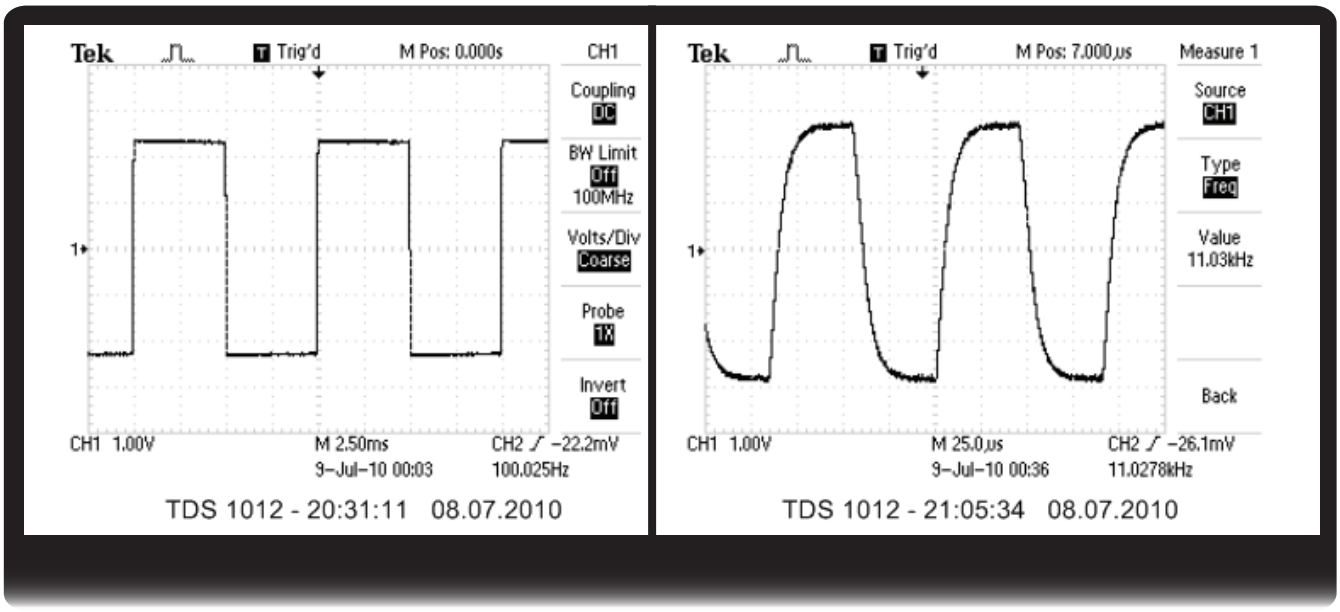
When jumpers are positioned on the right the filter is turned off.

Attachment

Graphical presentation of DAC 1866 OCU characteristics



AFC (SOLARTRON INSTRUMENTS 1201 FFT SPECTRUM ANALYZER)*



Меандр(?) 100 Hz (at the left) and 10 kHz (Tektronix TDS1012)

* Instruments used in these measurements are indicated by asterisk.