



HiFiBerry DAC+ ADC

The HiFiBerry DAC+ ADC is a high-resolution digital-to-analog converter for the Raspberry Pi (newer models with 40 pin GPIO connector). It is specifically designed for applications that need not only playback, but also recording functionalities.

Features

- Stereo input and output
- Dedicated 192kHz/24bit high-quality Burr-Brown DAC
- Hardware volume control for DAC. You can control the output volume using “alsamixer” or any application that supports ALSA mixer controls.
- Balanced input supported with optional XLR connectors
- Connects directly to the Raspberry Pi, no additional cables needed
- No soldering, comes as a pre-fabricated kit. You just plug it onto the Raspberry Pi, it conforms to the Raspberry Pi hardware-attached-on-top (HAT) specification.
- Compatible with all Raspberry Pi models with a 40-pin GPIO connector
- Directly powered from the Raspberry Pi, no additional power supply
- Gold plated RCA output connectors
- Comes with all components required to mount it. We include 4 M2.5x12mm spacers to fix the board onto the Raspberry Pi

Dimensions without package	5.5 x 6.5 x 2 cm
Dimensions including package	9.5 x 7.5 x 2.5 cm
Weight	0.02 kg
GTIN	4260439550583

Use Recommendations

- Music playback on the Raspberry Pi
- Connect devices such as mobile phones, MP3 players, Amazon Alexa, or other gear.
- Music processing (connect synthesizer and process audio on the Pi)
- Karaoke devices

Connectors and Jumpers *

- 1 Analogue input, phone jack
- 2 Analogue output, RCA
- 3 Analogue output (p5)
- 4 Input configuration jumper (j1)
- 5 Connector for balanced inputs

Balanced Input Connector (P6)

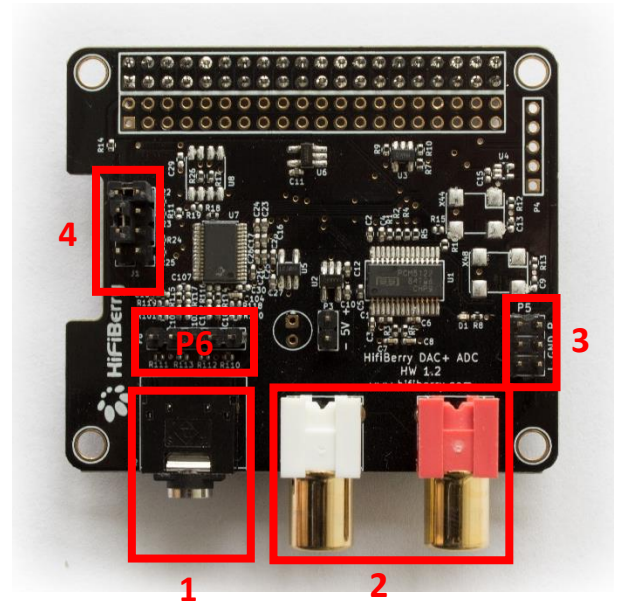
This 5-pin connector can be used to connect a balanced input (e.g. XLR or 6.5mm jacks). Pin 1 is on the left.

1	Right +
2	Right -
3	GND
4	Left -
5	Left +

Output Connector P5

This connector can be used to connect to external components, e.g. an amplifier. The output is connected in parallel to the RCA jacks. Pin 1 is on the top left.

1	+5V
2	Left
3	GND
4	GND
5	+5V
6	Right



Input Gain Settings

The jumper block is used to configure the input stage. In most cases it is recommended to the the default setting without additional input gain. 32dB gain can be used to connect dynamic microphones. Jumpers are numbered from top to the bottom.

1	2	3	4	Function
1	0	0	-	0dB gain
0	1	1	-	12dB gain
0	1	0	-	32dB gain

Specifications:

Maximum Input Voltage	2.1V rms	4.2Vrms for balanced input
Maximum Output Voltage	2.1V rms	
ADC Signal to Noise ratio	110dB	Typical
DAC Signal to Noise ratio	112dB	Typical
ADC THD+N	-93dB	Typical
DAC THD+N	-93dB	Typical
Input voltage for lowest distortion	0.8V rms	Typical
Input gain (configurable with jumpers)	0dB, 12dB, 32dB	
Power consumption	< 0.3W	
Sample Rates	44.1 - 192kHz	