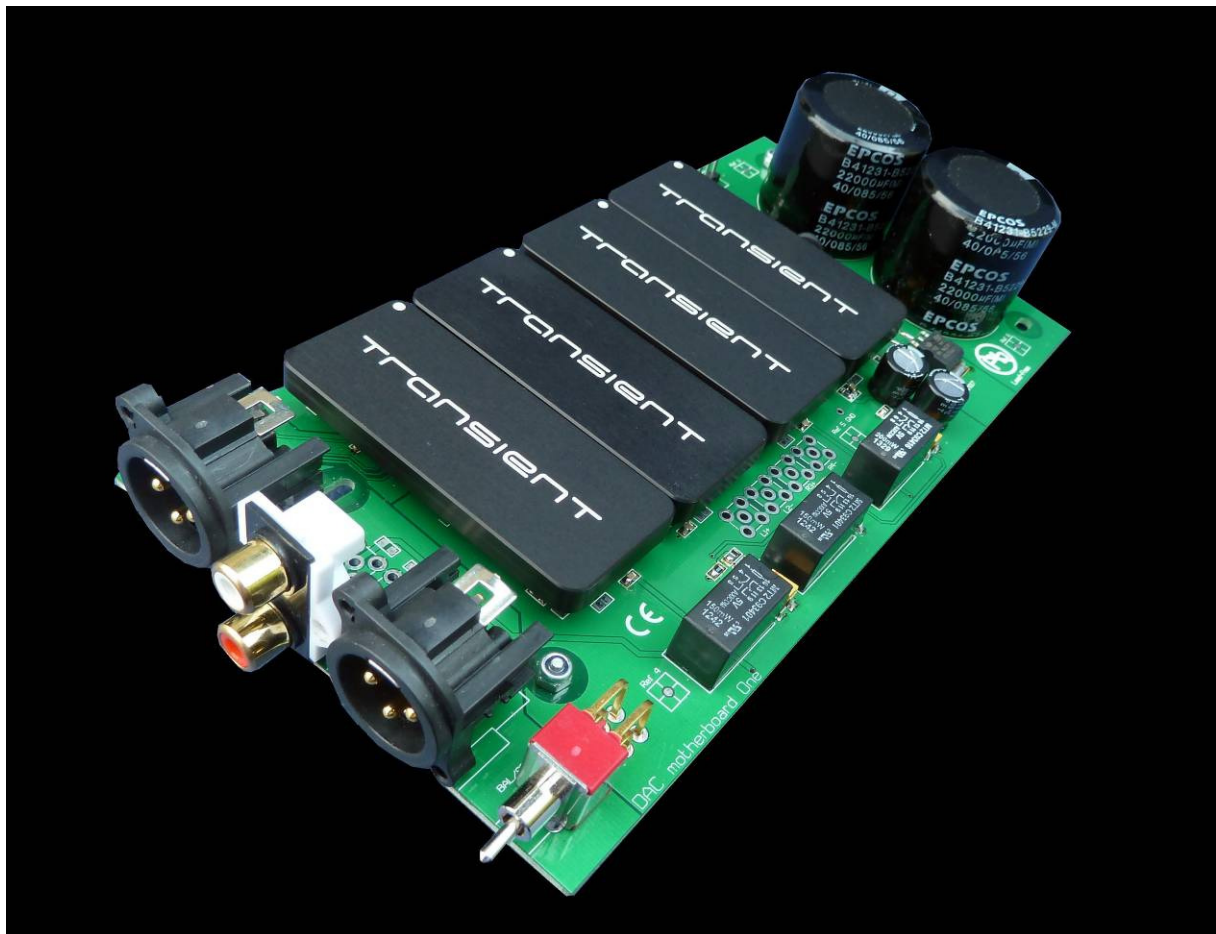


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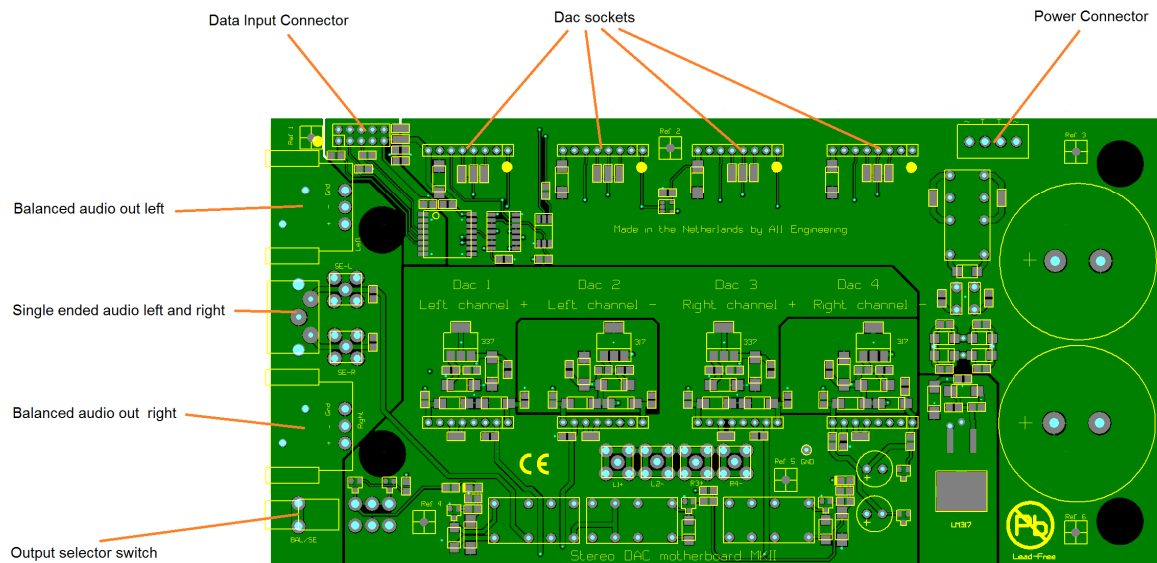
Stereo Dac Motherboard application information



Introduction

The "Stereo Dac Motherboard" is a high end solution to create a complete dac system. Just one board is needed to create a stereo system . Several settings are available to match the board to your digital source. For instance I2S data coming from a CD player can be used as a digital source. Four "Dac One" or "Dac Two" modules can be used to get optimal performance. The board can set for several audio input formats like RJ16, RJ24 or I2S. Both "DAI One" or "DAI Two" digital interface boards are optimized to control the "Stereo Dac motherboard". Just connecting the board to a transformer having two 10 – 12 VAC output windings and a ribbon cable between the DAI boards(or other digital sources) and the board is ready for use.

Possible connections and settings

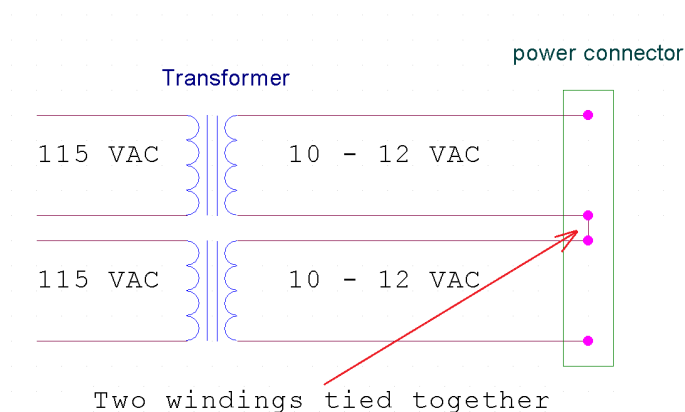


Power connection.

The power connection accepts 2x 10VAC as a minimum voltage. This voltage is based on optimal regulation of the voltage regulators. If necessary a dedicated transformer can be delivered, having both 115 Volts and 230 Volts primary windings and both 10 Volts secondary windings. The use of an alternative 2x 12 Volt creates more heat but has no further advantages. Total power consumption is max 7 Watts so the use of a 15VA transformer will be convenient.



The "Stereo Dac Motherboard" module will connect both secondary windings together so watch the polarity of both windings to avoid damage to the transformer!!



Power relay option

In conjunction with our "DAI" digital interface boards, the board can be switched on and off via the data input connector. If not used the relay contacts can be bypassed with tin drops on both sides of the power relay.

Dac module sockets

The "Stereo Dac Motherboard" will be delivered with four dac slots which are compatible with both Dac One or Dac Two modules. At least two dac modules should be used (only single ended mode) For balanced mode four dac modules are required.

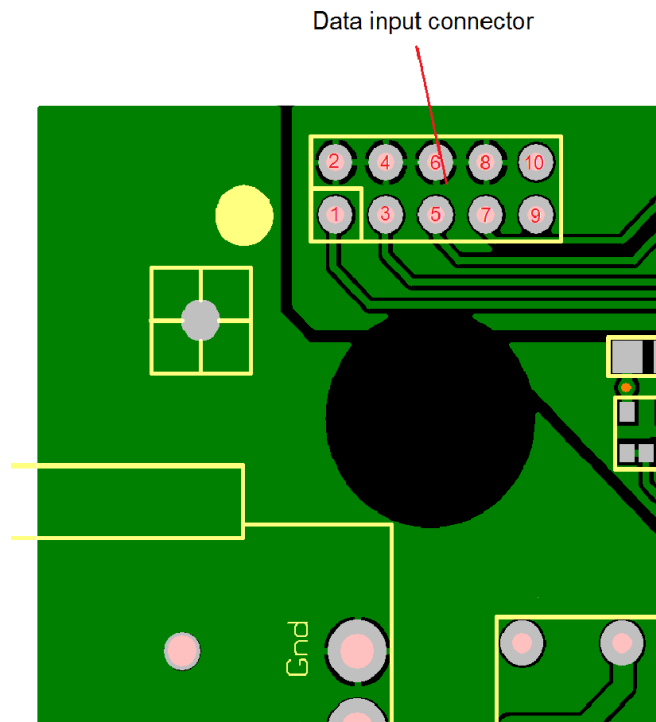


By placing the dac modules in 180 degrees position you will create a permanent damage to both mother board and dac modules!!

Output selector switch

The output selector switch will select between "single ended RCA" or "balanced XLR" output. Both outputs are never available at the same time.

Data input



The data input has the following connections:

- pin 1 Clock input.
- pin 2 Ground.
- pin 3 Frame Sync.
- pin 4 Ground.
- pin 5 Data 1 Input.
- pin 6 Ground.
- pin 7 Data 2 input. Not used in case of the Stereo Dac Motherboard
- pin 8 Ground.
- pin 9 Power relay control line.
- pin 10 Power relay control line.

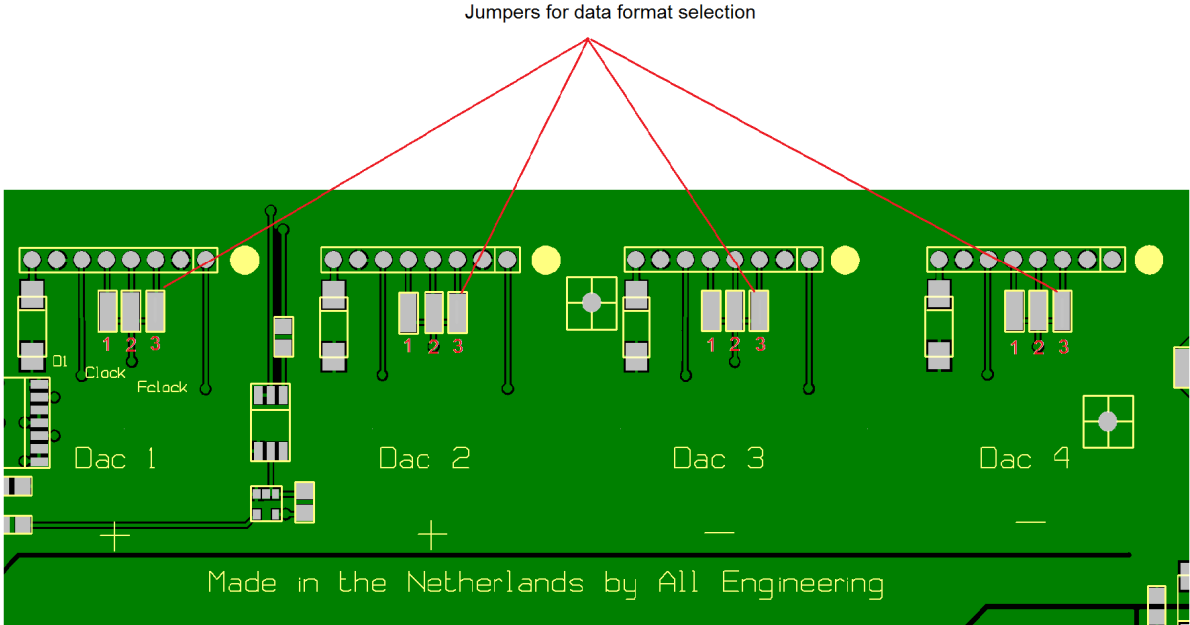
On every Transient device, pin "1" of the data connector is marked with a dot to avoid wrong installation of the ribbon cable.

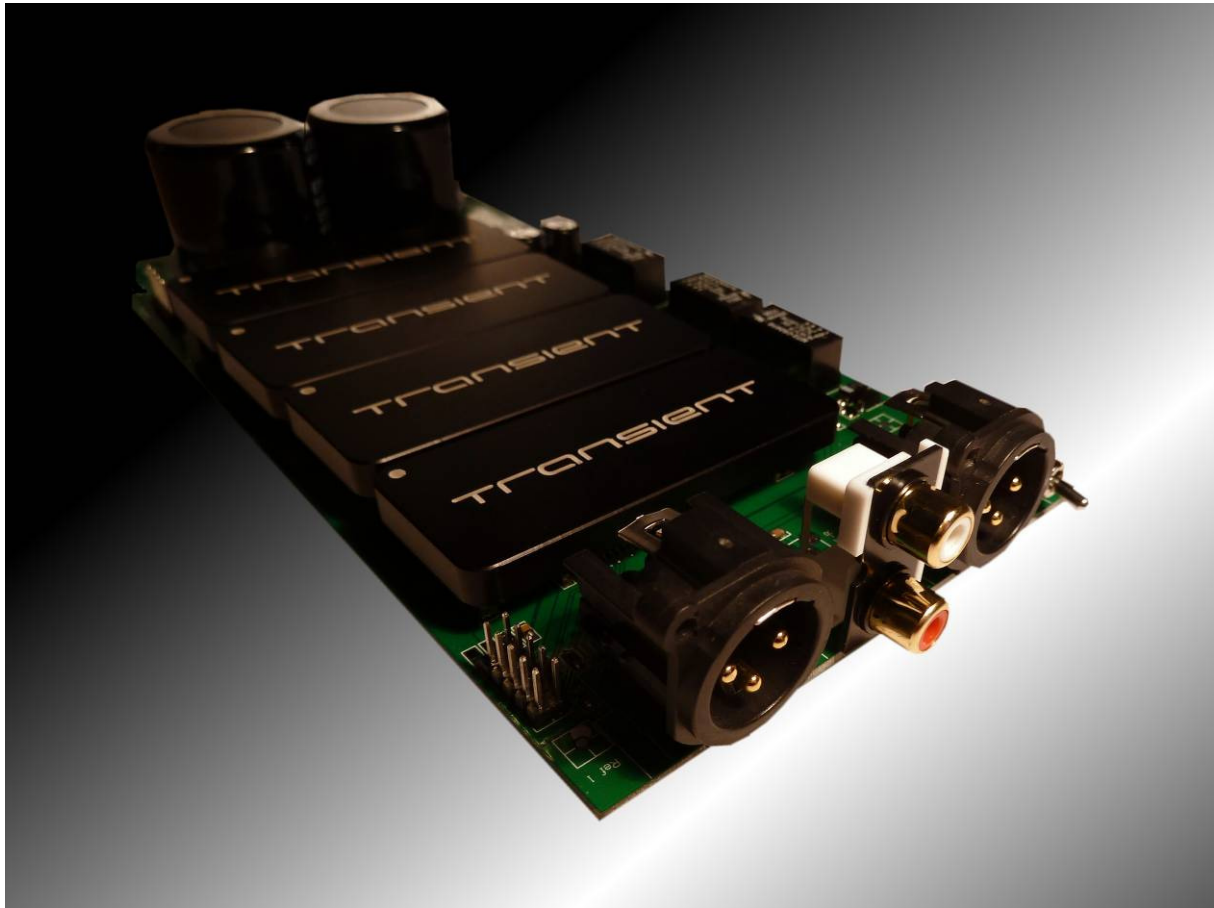
! Never turn the data connector for 180 degrees as it can damage connected devices!!

DAC jumper settings

The following dac jumper settings can be used:

- 1 I2S
- 2 RJ24
- 3 RJ16





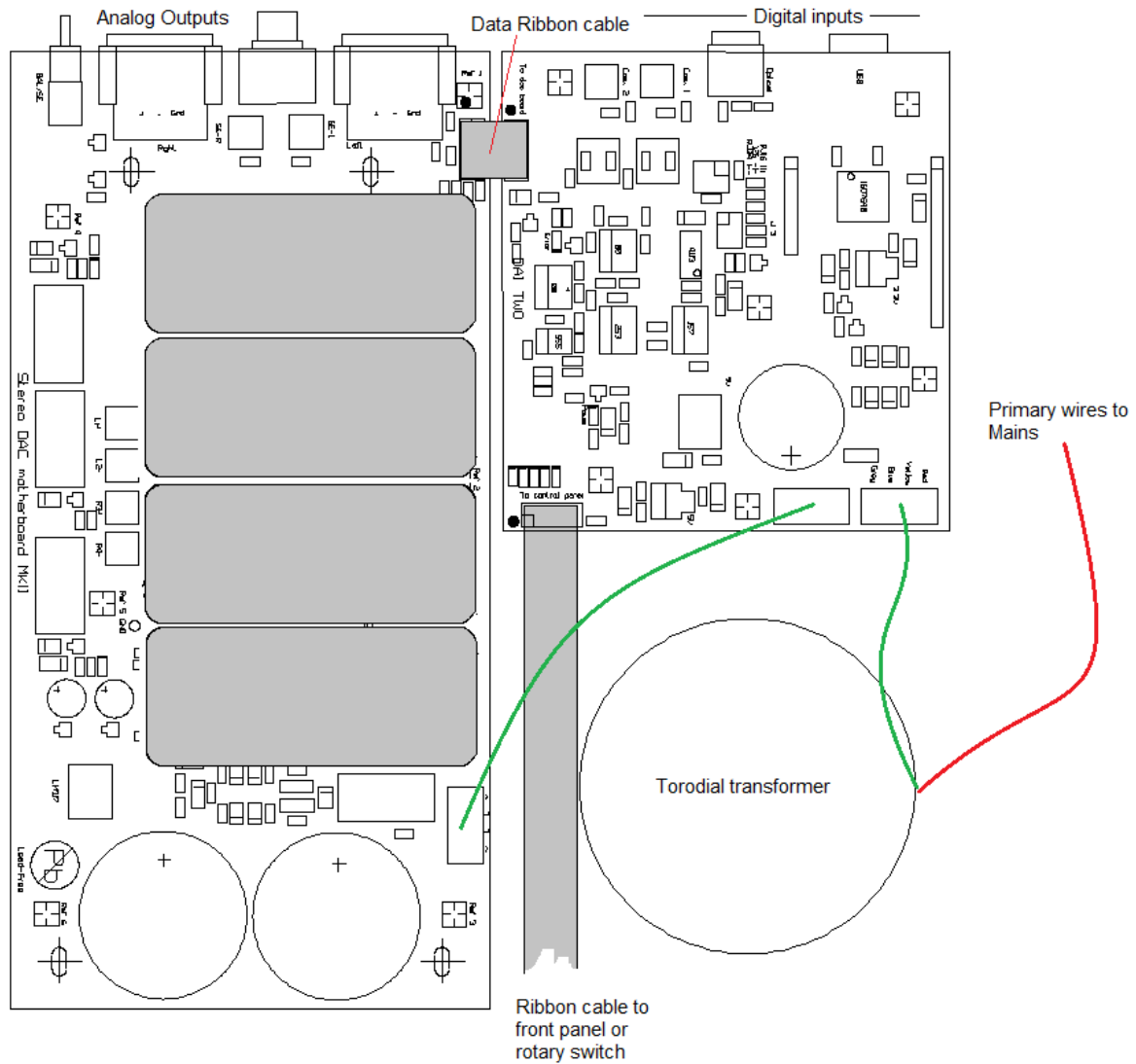
The "Stereo dac Motherboard" will be delivered without dac modules. Connectors can be delivered separately.

Special OEM versions of the Stereo Dac Motherboard

In case of quantities of 25+ , the board can have your own logo and pcb color.

Application sample

"Stereo Dac Motherboard" in conjunction with "DAI Two" digital interface



Specifications

Description.	Full balanced Stereo DAC Motherboard.
Power requirements.	2x 10 -12 VAC
Power consumption.	less than 4 Watts with dac modules installed
Recommended transformer.	10VA or more. A dedicated power transformer of 15VA is available for global use.
Data input standards.	I2S ,RJ24,RJ16
Analog output	2 Volts RMS at single ended output. 4 Volts RMS at balanced output.
Channel separation	100dB (measured with Dac One module)
Muting circuit	Analog outputs available after four seconds. Will mute immediately if control data is switching on standby. (option only with DAI One or DAI Two)
Size.	200 x 100 mm

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