

## Specifications

<b>Type:</b>	<b>push-pull ultra-linear class AB - 45mA, balanced cathode feedback</b>
<b>Output Power</b>	<b>2x35W, 4-8 Ohm</b>
<b>Inputs:</b>	<b>4x line RCA</b>
<b>Input Sensitivity:</b>	<b>Line 1-3 0.775V/35W Line 4 2.0V/35W</b>
<b>Input Impedance</b>	<b>15000 Ohm</b>
<b>Signal Distortion</b>	<b>1W @ 0.1% THD 30W @ 1.0% THD</b>
<b>Signal to noise ratio</b>	<b>85dB/20Hz-20kHz</b>
<b>Stereo crosstalk</b>	<b>68dB/1kHz</b>
<b>Frequency Range</b>	<b>20Hz-20kHz/-1dB</b>
<b>Damping Factor</b>	<b>min 6</b>
<b>Power Supply</b>	<b>230VAC, 50 Hz</b>
<b>Power Consumption</b>	<b>max. 200W</b>
<b>Tubes</b>	<b>4xJJ6L6GC, 4xJJECC81</b>
<b>Exterior Finish:</b>	<b>front panel Al silver covers: black comaxit</b>
<b>External Dimensions (including speaker terminals)</b>	<b>446x108x430 mm</b>
<b>Transport Dimensions</b>	<b>560x200x500 mm</b>
<b>Weight/with transport packaging</b>	<b>23kg/28kg</b>

JJ Electronic 543 is an integrated tube amplifier. Used in conjunction with high quality input signal sources (CD, PHONO) and high quality speakers (min sensitivity of 89dB/1W/lm), this amplifier is intended for medium sized listening rooms.

The operation of the amplifier is controlled by a microprocessor. The user communicates with the amplifier via a remote control unit, all functions are shown on the amplifier display.

JJ543 has four linear inputs. Inputs 1,2 and 3 have sensitivity 0.775 V, input 4 has sensitivity of 2V. Input 4 is intended for sources with a higher level of signal, in order to get the full output power.

In addition to the speaker outputs L and R, the JJ543 also has three low power level outputs. The first stereo output is level controlled by the main attenuator. The second output is not level controlled. The third output is L+ R sum to be used for sub-woofer applications.

The level control is accomplished by special internal circuitry (a resistor matrix controlled by the microprocessor). The level is shown on the display.

Only high quality components from reputable manufacturers were used throughout the signal path.

The signal path comprises four active stages. Only the last two stages are within the balanced negative feedback loop.

The first stage amplifies the signal 10 times. The second stage is a split load phase inverter. This phase inverter was designed using high accuracy anode and cathode resistors (0.1%), in order to guaranty excellent phase balancing. The first and second stage are not part of the global feedback loop. The third stage is the power tubes driver. Its cathodes are fed from a balanced feedback loop comprising the bifilar OPT secondary winding. The feedback loop is also symmetrically connected to the cathodes of the power tubes. The driver is not connected differentially, which eliminates the cancellation of even harmonics. Total feedback is only 10 dB (3x).

The output transformer is of a highly sophisticated design. The transformer is wound on a double C-core made of laminations 0.15 mm thick, with air-gap of 4x0.05 mm. The transformer has 8 primary and 4 secondary bifilar windings, the UL tap is at 25% which together with the cathode feedback results in a feedback ratio of 30%.