

EB-703/259 DUAL, WIDE-BAND, LOW-NOISE ALL-FET PS/REGULATOR

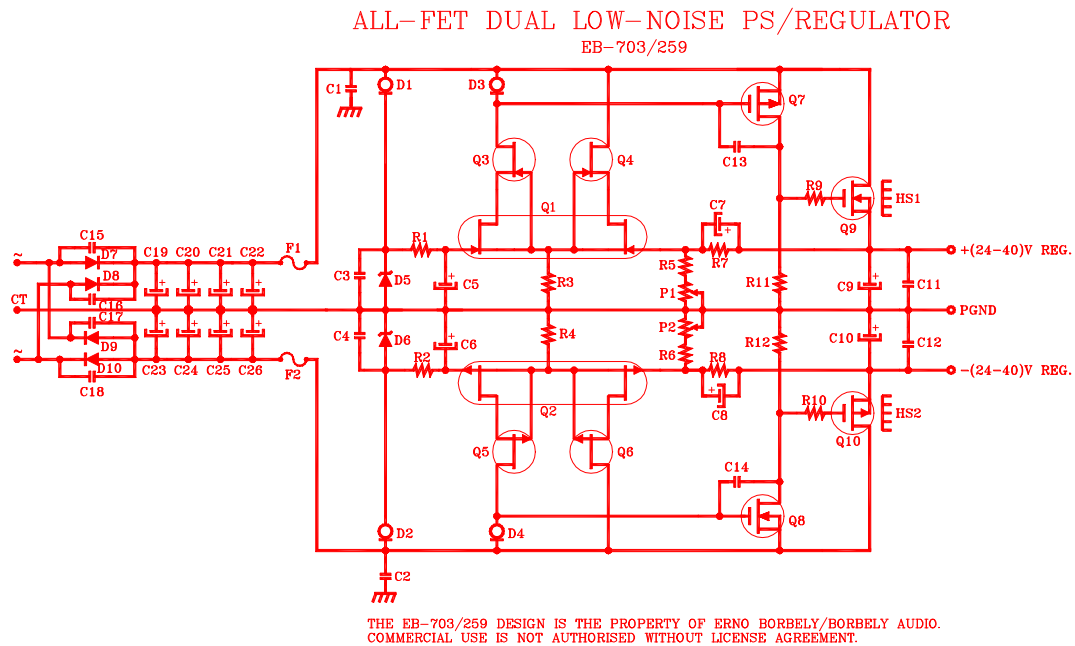


Fig. 1. The EB-703/259 wide-band, low-noise PS/regulator.

Set-up procedure

The EB-703/259 is a very high quality, wide-band, low noise PS/regulator, using fast recovery diodes in the power supply and only FETs (JFETs and MOSFETs) in the regulators. Maximum input voltage is $\pm 45\text{V}$ and maximum output voltage is $\pm 40\text{V}$. Maximum output current with 5V input/output voltage difference is $\pm 200\text{mA}$.

The set-up procedure consists of adjusting the output voltage to the desired value. Connect 2x220 Ohm/5W resistors to the outputs when the desired output voltage is $\pm 24\text{V}$ and 330 Ohm/5W resistors when it is $\pm 36\text{V}$. Connect a DVM across one of the resistors. Connect the appropriate AC voltage to the power supply (should produce approx. 5V higher DC than the expected output voltage) and check the output with the DVM. Adjust the output voltage to the desired value with trim pots P1/P2. If you have an oscilloscope and/or an audio μV meter, connect them across the load resistors and check the residual hum/noise. The scope should not show any ripple and the mV meter should show less than $5\mu\text{V}$ of noise over the audio bandwidth.

NOTE: The kit is delivered with C19-C26=35V caps for +/-24V regulated voltage. For higher output voltage 50V caps are recommended!

The EB-703/259 design is the intellectual property of Erno Borbely/BORBELY AUDIO. Commercial use and duplication in any form is prohibited.