

50 WATT

AUDIO POWER

AMPLIFIER DESIGN

The Elcom PT93 power transformer and T1-61 driver are featured components in the Delco Radio 50-watt audio power amplifier design, fully described in Delco Application Note 36.

The circuit shown was developed by Delco to demonstrate the capability of the Elcom ES21 transistor in a low-cost, high performance amplifier. It is designed to fit into commercial home entertainment systems as a "slave" power amplifier to follow tone control or pre-amplifier stages, and provide a 50-watt RMS output to an 8-ohm load at low distortion levels.

The II-61 driver uses a high turns ratio (6:1:1) for maximum circuit efficiency and gain, and is fabricated with a split primary. The high coupling coefficient provided by this latter feature, and the low output impedance of the driver, combine to provide a voltage drive to the output transistors across a band width exceeding the audio spectrum.

