

CROSSOVER COMPONENTS

As an accommodation to those desiring to construct their own crossover networks, arrangements have been made to furnish the inductor-transformer components for such a network. The type of network is that described in Electronics, November, 1945; several design changes have been made to reduce impedance variations and transient effects, and the components have been through several redesigns to minimize distortion. The result is a network that will handle the full output of a 10 watt amplifier with an overall distortion too low to measure. Bridge measurements on the various components lead to computed distortions of less than 0.1% for the inductors and less than 0.5% for the transformers.

This network substitutes for the conventional output transformer thus saving the cost of that component and avoiding the distortion due to its exciting current. Filter components are at the 5000 ohm level thus saving the large cost of capacitors required at lower impedances. Only the 2 inductor and 2 transformer components are offered. It requires about \$4.00 worth of small capacitors to complete the network which should be mounted in or as near the amplifier as possible. Transmission at 18 ohms from network to speakers may be 50 feet or more with #18 to #20 conductors.

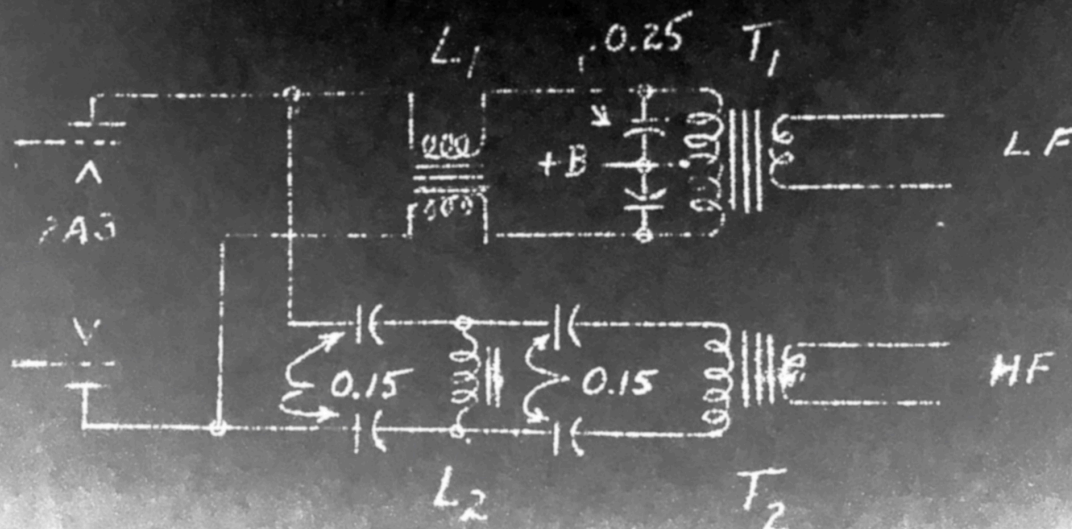
Crossover frequency is 500 cycles to serve the KLIPSCHORN speakers; some 25% variation may be accomplished if desired by varying the air gaps and specified capacitor sizes. The LF transformer has over 300 henry primary inductance thus minimizing exciting current with its harmonic generation; the HF transformer has under 0.04 henry leakage inductance permitting transmission beyond 15,000 cps.

Deck space of 5" x 7" will accommodate the parts. The appended figure shows the circuit of this network with specified capacitor sizes for 500 cps crossover frequency.

Price, components, \$61.00, net FOB Hope. Discounts for quantity.

KLIPSCH AND ASSOCIATES
HOPE, ARKANSAS
10 October 1946

Network: Pat. Pending.



CROSSOVER COMPONENTS

As an accommodation to those desiring to construct crossover networks, arrangements have been made to furnish motor-transformer components for such a network. The type work is that described in Electronics, November, 1945; several sign changes have been made to reduce impedance variations and transient effects, and the components have been through several designs to minimize distortion. The result is a network that will handle the full output of a 10 watt amplifier with an overall distortion too low to measure. Bridge measurements on the various components lead to computed distortions of less than 0.1% for the inductors and less than 0.5% for the transformers.

This network substitutes for the conventional output transformer thus saving the cost of that component and avoiding the distortion due to its exciting current. Filter components are at the 5000 ohm level thus saving the large cost of capacitors required at lower impedances. Only the 2 inductor and 2 transformer components are offered. It requires about \$4.00 worth of small capacitors to complete the network which should be mounted in or as near the amplifier as possible. Transmission at 16 ohms from network to speakers may be 50 feet or more with #18 to #20 conductors.

Crossover frequency is 500 cycles to serve the KLIPSCHORN speakers; some 25% variation may be accomplished if desired by varying the air gaps and specified capacitor sizes. The LF transformer has over 300 henry primary inductance thus minimizing exciting current with its harmonic generation; the HF transformer has under 0.04 henry leakage inductance permitting transmission beyond 15,000 cps.

Deck space of 5" x 7" will accommodate the parts. The appended figure shows the circuit of this network with specified capacitor sizes for 500 cps crossover frequency.

Price, components, \$61.00, net FCB type. Discounts for quantity.

KLIPSCH AND ASSOCIATES
HOPE, ARKANSAS
10 October 1946

Network: Pat. Pending.

