MAGNETIC & ELECTROMAGNETIC INDUCTION - LR Circuits

A decade inductor and a resistor are connected in series to the output of a radio. The LR circuit acts as a low pass filter.

Ref: hb x63; w/ tape 4-04:07:40
MAGNETIC & ELECTROMAGNETIC INDUCTION - LR Circuits

Low-Pass

RL AND RC RADIO FILTER (COMBINATION DEMO)
MAGNETIC & ELECTROMAGNETIC INDUCTION - LR Circuits

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September 3, 1987

X63. Frequency Response of LR Circuit - Radio Filter - 8F
Purpose: Demonstrate that an LR circuit can act as a low-pass filter in a radio. [Needs work.]

Equipment: Radio with low-pass LR filter (in speaker circuit?); variable resistor and variable inductance; speakers sufficient to be clearly heard throughout hall.

Procedure:
Play radio (music and voice); vary L and R
High frequencies cannot get through LR circuit.
[This was a bust in 1987; needs work. Volume not loud enough could not hear pitch distinctions when L or R changed. Maybe resistor had inductance. Was OK in '86!]
Ref: w1 video V52, Tape 4; 04:37:40, 3rd of 14.

RL - RADIO FILTER

B63

(10 Ω H/square)
GR DECADE INDUCTOR

LOGIC.Diagram

12.5V

BOOAN AMPLIFIER

R2
H24a RL TAPE PLAYER FILTER H24a
E11 + H24
RC and RL Radio Filter (Combination)

Purpose: To show High-pass RC filter and
Low-pass RL filter.

Equipment / Procedure:

Settings:
RC: 20Ω, 1μF
RL: 20Ω, 20mH