

BE-479 Technical Description

MIC circuit

After transforming the tonal signal to audio signal via the MIC, the output is sent to amplifier made up with Q3, R7, R5, R8 and C8 via C5, the signal is amplified and output through C7.

A high frequency oscillator and a frequency selection circuit is formed by Q4, R11, R12, C15, X1, T2, TD1 and T3. The signal output from C7 via R10 and TD1 tunes the high frequency oscillator signal. The tuned high frequency signal selects frequency through T3 (the resonance frequency of T3 is three times of X1). It is output via C17.

The signal from C17 is sent to the high frequency resonance amplifier formed with Q5, T1 and R13. It is amplified and output via C13 and emitted via antenna.

Base circuit

The base circuit including 2 parts:

- 1) Wireless MIC receiver
 - 2) Audio mixer/effector
- 1) Wireless MIC receiver

The high frequency signal received by the receiver antenna AN1 (or AN2) selects its frequency via T301 (or T304) and is sent to amplifier formed with Q301, T302, R301, R302, C303 (or Q302, T305, R313, R314, C323) and is amplified. The amplified high frequency signal is sent to the 16 feet of IC301 (or IC302) via C305 (or C325).

Inside the IC, the signal is mixed with the original frequency formed with X301, C306, L304, C308 CT301 (or X302, C328, L308, C326, CT302) to form the medium frequency 455Hz. It is amplified in the interior of IC and is monitored. It is output via the 9 feet IC.
 - 2) Audio mixer/effect

The frequency signal output from IC301 (or IC302) is sent via Q304 (or Q303). It is amplified and sent to IC1 (ECHO EFFECT). The frequency signal from IC1 is amplified by the amplifier formed by Q4 and Q5. It then enters the function selection circuit formed with D8, 9, 12, 13. It is mixed with CD or cassette signal and sent to the amplifier C4. After amplified by C4, it is sent to Speaker.