# Wireless 912 Headphone With PLL Transmitter

# WHP-175

## RF Headphone System WHP-175

### THOMSON wire-less system

The RF/FM headphone system WHP-175 consists of a transmitter in a desk-top sized housing and a receiver unit which is incorporated in a headphone.

The transmitter has the possibility be connected to any sound source by a HiFi connecting cable. Sound sources intended to be used are: E.g. CD, HiFi audio systems, TV and multi media sound.
The system is intended to be used around the house.

## Transmitter

The transmitter is a stand alone product, with a rectangular sized box with built in antenna. The box contains the printed circuit board a conducted charger. A channel knob is integrated in the housing.

## Circuit description

The stereo audio input signal is amplified and passing an Automatic Level Control circuit. This makes the input signal for further processing independent from input levels of the sound source.
Before the signal is pre-emphasized is passing an impedance matching circuit to avoid to be a too big load for he amplifier. In the next step the stereo signal is multiplexed and modulated (IC: NJM2035).
In the Tx module the signal is mixed with the RF oscillator signal. The RF oscillator frequency is PLL in order to obtain a steady RF output signal. (911.95MHz,912.65MHz,913.35MHz). The RF signal is amplified and loaded by the antenna.