

MDR-RF930

INTENDED USE AND CIRCUIT DESCRIPTION

INTENDED USE:

MDR-RF930 is a Wireless Receiver (Headphone) for Sony RF Transmitter, TMR-RF930 that is operated within 913.0 - 915.0MHz.

MDR-RF930 and TMR-RF930 compose Sony Wireless Stereo Headphone System, MDR-RF930K.

CIRCUIT DESCRIPTION:

- RF signal (A) received by the built-in antenna, ANT1 is amplified by Q1, RF AMP and goes to Q4, MIXER in the FE unit.
- 433.92MHz, X1 SAW oscillator is doubled into 867.84MHz. 867.84MHz (B) signal goes to Q4, MIXER.
- At Q4, the above (A) and (B) are mixed and 1st IF (between 44.5MHz and 48.0MHz) is generated. If Receiving frequency of 913.0MHz, 1st IF is 45.2MHz. If 915MHz, 1st IF is 47.2MHz.
- This 1st IF goes to IC301, Detection IC.
- At 2nd OSC in IC301 is generated by selecting channel, between 55.2MHz and 58.7MHz.
- 1st IF (between 44.5MHz and 48.0MHz) and 2nd OSC (between 55.2MHz and 58.7MHz) are mixed and 2nd IF (10.7MHz) is generated.
- After passing through the ceramic-filter, 2nd IF (10.7MHz) is detected. This detected output is the signal which L+R signal and Sub-Carrier (50kHz) frequency-modulated by L-R signal are mixed.
- One of the above detected signal passes through 75 μ s de-emphasis and L+R signal is generated. Another is amplified at Q302 and is detected at IC303,304, Sub-Carrier Detection circuit. And L-R signal is generated after passing through 75 μ s de-emphasis.
- L+R signal and L-R signal go to MATRIX circuit.
- At MATRIX circuit, L, R signals are generated. These signals are amplified at IC302 and go to Driver Unit of headphone.

The Status of Technical Report for Model(s) MDR-RF930
in Regards to Compliance with the Rules

The technical report is being submitted in pursuant to:

[☒] the rules effective June 23, 1989

[☐] Sec. 15.37, Transition Provisions

- () The equipment will be made to comply with the rules effective June 23, 1989 after June 23, 1994.
We will make another application for re-evaluation of the equipment in accordance with new rules effective June 23, 1994.
- () This equipment will not be manufactured/imported after June 23, 1994.