

## MDR-RF950

### INTENDED USE AND CIRCUIT DESCRIPTION

#### INTENDED USE:

MDR-RF950 is a Wireless Receiver (Headphone) for Sony RF Transmitter, TMR-RF950R that is operated within 913.0 - 915.0MHz.

MDR-RF950 and TMR-RF950R compose Sony Wireless Stereo Headphone System, MDR-RF950RK.

#### 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 1<sup>st</sup> IF (between 44.5MHz and 48.0MHz) is generated. If Receiving frequency of 913.0MHz, 1<sup>st</sup> IF is 45.2MHz. If 915MHz, 1<sup>st</sup> IF is 47.2MHz.
- This 1<sup>st</sup> IF goes to IC301, Detection IC.
- At 2<sup>nd</sup> OSC in IC301 is generated by selecting channel, between 55.2MHz and 58.7MHz.
- 1<sup>st</sup> IF (between 44.5MHz and 48.0MHz) and 2<sup>nd</sup> OSC (between 55.2MHz and 58.7MHz) are mixed and 2<sup>nd</sup> IF (10.7MHz) is generated.
- After passing through the ceramic-filter, 2<sup>nd</sup> 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  $\mu$ 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  $\mu$ 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-RF950  
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.