

## **FM300 WORKING THEORY**

(Refer to FM300 Functional Block Diagram):

Right channel audio signal and left channel audio signal are input to the COMBINER through audio cable. From the COMBINER, L+R and L-R signals are formed. The L+R and L-R signals are undergone 38KHz amplitude suppression and amplitude of signal is suppressed to 1%. 1% suppressed signal and the 19KHz frequency are input to the TUNER.

LOCAL OSCILLATOR of FM300 can generate 12 different frequencies (88.1MHz, 88.3MHz, 88.5MHz, 88.7MHz, 88.9MHz, 106.7MHz, 106.9MHz, 107.1MHz, 107.3MHz, 107.5MHz, 107.7MHz and 107.9MHz) with the help from a microprocessor IC and these 12 different frequencies can be selected by a push button on the side of product. Two red colour LED will show the channel number (1 ~ 12) on the front side of product.

LOCAL OSCILLATOR frequency is input to the TUNER and then the signal is input to the RF AMPLIFIER. The RF output signal from the RF AMPLIFIER will be transmitted through the RF ANTENNA. This RF transmitted signal can be received by a stereo FM radio.