

AM1032US Operational description

AMS 900MHz wireless hand-free headset system is consist of base unit and headset. The system was designed to provide wireless full duplex audio communication between any cell-phone or audio devices equipped with audio output/input interfaces and users who wearing AMS 900MHz wireless hand-free headset. AM1032US is the base unit. The base unit was designed to connect to any cell-phone or devices equipped with audio output/input interfaces. The base unit has 900MHz transmitter and receiver circuitries with two built-in antennas. Also, the base unit is equipped with a stereo 2.5 mm audio connector and powered on single AAA battery.

The output audio signal from the cell-phone or audio devices, which the base unit was connected to, will wakeup the base unit and turns it on. Once the base unit is turned on, the transmitter is picking up the audio signal and modulating the audio signal directly with 903 MHz RF carry signal, then delivering the modulated 903MHz RF carry signal to transmitter antenna. Meanwhile, the receiver antenna is picking up the modulated 927MHz RF carry signal from the AMS 900MHz wireless hand-free headset and delivering the RF carry signal to RF front amplifier. After that, the RF signal is down converted to 10.7 MHz IF band and demodulated back to original audio signal. The recovered audio signal goes through the audio amplifier to the audio input interface of cell-phone or audio devices. That implements a fully duplex audio wireless communication between the base unit and headset. The base unit goes back to sleep mode automatically in about 25seconds after the audio signal disappears.