

## **Operation principle description**

RFM-W1, the wireless FM modulator, mixes the audio by modulating IC when the audio inputs. After transposing into RF, the H.F.AMP will increase the power of signal and transmit through the ANT.

There is a Lock FREQ with a crystal OSC and the frequency multiplier, which stabilize and amplify the frequency, inside RFM-W1.

As for the power supply, the power is directly transferred to the circuit when using battery 3V (AAA-2). If the user adds 12VDC additive, the electric current will go through the Voltage Regulator. The voltage will be stable to 3VDC and the battery power source will be cut off. That can avoid consuming the battery power and damaging the modulator.

### **Remark :**

This device intends to operate frequency range 88.2MHz-89.1MHz, but the test sample has two channels 88.7MHz and 89.1MHz frequency band for test.