

## SHENZHEN BAICHUAN SECURITY TECHNOLOGY CO., LTD.

The theory of WIFI Network Video Recorder (Model SRNVW-470LCD-US):

1. MCU Module: Processor running the embedded software, It can deal with all information after it communication with WIFI module. MCU module's crystal oscillator frequency is 20 MHz and 27 MHz.
2. Transmitter module: Transmit data by modulating on a 2412-2462MHz carrier. Wi-Fi module's crystal oscillator frequency is 40 MHz. The module used IEEE 802.11 b/g/n. IEEE 802.11b used DSSS technique, IEEE 802.11g/n used OFDM technique. IEEE 802.11b has 11Mbps data rate, IEEE 802.11g has 54Mbps data rate, IEEE 802.11n(20M) has 65Mbps data rate and IEEE 802.11n(40M) has 135Mbps data rate.
3. USB port: This is used to update the firmware via USB disk for main board only, it can't connect to PC.
4. HDMI port: This is an output port. It used to display the information on other monitor.
5. Earphone Module: This is an output port. It used to play the voice. Earphone module's crystal oscillator frequency is 32.768 kHz.
6. TF Module: This is used to save the audio and video information.
7. LAN Module: This is used to connect to the router to transmission data. LAN module's crystal oscillator frequency is 25 MHz.
8. Antenna is used an integral antenna. The antenna gain is 2.0dBi. The another antenna of the product is unused.
9. Power supply: A wall-plug-in accessory that provides +5V at 2A.
10. DC/DC converter: Provide the power to battery.
11. Battery: Provide the power supply to MCU and Wi-Fi Module.