

The brief of the principle of work

1.

1. The LE-906 radio station is part of the launcher. The standard DMX512 inputs signal (485) and goes through the bidirectional 485 transceiver SN75176 transforms into 232 signals, delivers to 8051MCU STC12C5608 P3.0 (RXD) foot, MCU would send in the P3.0 foot's signal through the SIP connection transmission for the 2.4G wireless module (CC2500+PA+LNA), the wireless module launch the sent signal with the GFSK demodulation system.(Frequency: 2400MHZ-2483MHZ)

2. Power unit

The external power unit supply adapter connects the DC 9V 500MA power source to the radio station, and the linear constant voltage IC 7805 transforms the sent DC 9V voltage into DC5V voltage, which supplies use to MCU (STC12C5608) and the bidirectional 485 transceivers (SN75176), then LDO (7333Q) transforms DC5V voltage into DC3.3V voltage supplying wireless module use.

3. **Dial key board**

A dial key board mainly composed of a tickle dial key and a LED.

A tickle dial key is mainly used in pairing.

A LED is mainly used in the status indicator.

This radio station supports to communication of one spot to multi-spot as well as the frequency-hopping simultaneously (the launch radio station scans receive radio station's frequency automatically and pairs with it.)