

Operation Description

The Home Weather Station is powered by 2 x 1.5V “AA” size battery for transmitter and AC120V/DC6V adaptor or 4 X 1.5V “AA” size battery for receiver. The transmitter and receiver is operation at 433.920MHz.

The transmitter unit is located at outdoor and it has three difference sensors for measure out door Temperature, Rain & Wind Speed, and transmit a radio signal to receiver unit.

The receive unit is located at indoor, and it can receive the transmitter signal and indicate at the LCD display. It has another three difference internal sensors in the unit for measure indoor Temperature, Humidity and Pressure.

Refer to the circuit design, the circuit description is listed as below:

Tx unit

- ❑ Y1, Q1 and associate circuit act as oscillator for RF.
- ❑ X1 and associate circuit act as oscillator for transmitter IC.
- ❑ Y1 and associate circuit act as oscillator for wind sensor IC.
- ❑ U1, Q3(A1505A2Y) and associate circuit act as temperature sensor + data encoder.
- ❑ U1 and associate circuit act wind speed & direction sensor.
- ❑ Q2, Q3 and associate circuit act as rain sensor.
- ❑ Q2(TC3566S), and associate circuit act as RF transmitter.