

2 General Product Information

2.1 Product Function and Intended Use

The equipment under test (EUT) is an electric air pump operating at 433.920MHz.

FCC ID SVYAP619DWT

Model	Product description
AP619DW	Electric Air Pump

2.2 Circuit Description

After voltage is dropped through R and C, and is stabilized (12V, 5V) by the voltage regulator, this control board is power supplies to the control IC. The receiver module adopts a piece of single chip IC RX 3310A which receives ASK (Amplitude-Shift-Keying) wireless digital signal transfer. The antenna receives the carrier signal which is then filtered through R and C, then the signal is amplified by RF amplifier and mixed by the mixer, the oscillating signal from the oscillator is to be compared with the received signal, the intermediate frequency (1.8MHz) signal is gained as a result. The signal is then to be amplified by the IF amplifier in the emitter coupled pair with dual input symmetrically and single output, filtered by the IF filter, Limited by the voltage limiter. The message is decoded by the special chip F9444zz, the solenoid valve and the motor switches are controlled by the pins, and cycling self-lock control of the motor is done by the chip F9444zz, auto-off control of the motor is realized with RC delay circuit.

2.3 Ratings and System Details

	Receiver
Frequency range	: 433.920MHz
Crystal Tolerance	: +/-100kHz
Number of channels	: 1
Type of antenna	: Integral antenna
Power supply	: AC 120V
Ports	: AC mains
Protection Class	: I
Classification of device	: B