

Arduino Distance Measuring Transducer Sensor

Model: AJ-SR04M

User Manual



Operating Mode:

After connecting the ultrasonic ranging module with 3-5.5V power supply, the module has five working modes:

Mode 1: Common Pulse Width Square Wave (Minimum Power Consumption 2.5mA)

Mode 2: Low Power Pulse Width Square Wave (Minimum Power Consumption 40uA)

Mode 3: Automatic Serial Port (Minimum Power Consumption 2.5mA)

Mode 4: Serial Port Trigger (Minimum Power Consumption 20uA)

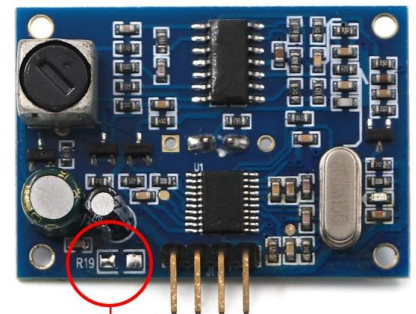
Mode 5: ASCII Code output (Minimum Power Consumption 20uA)

Module Output Format Description:

* The method of switching mode. In case of power failure, the mode can be changed by changing the resistance value of R19 above the module.

* Patterns Selection Method:

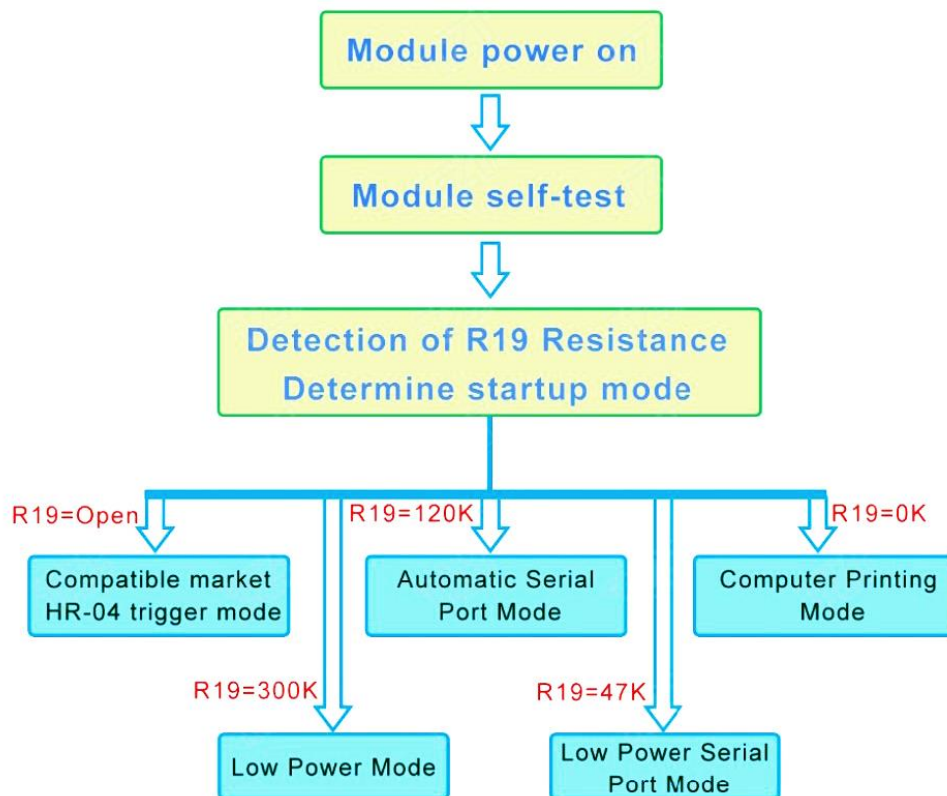
1. Compatible market HR-04 trigger mode
2. Low Power Mode
3. Automatic Serial Port Mode
4. Low Power Serial Port Mode
5. Computer Printing Mode



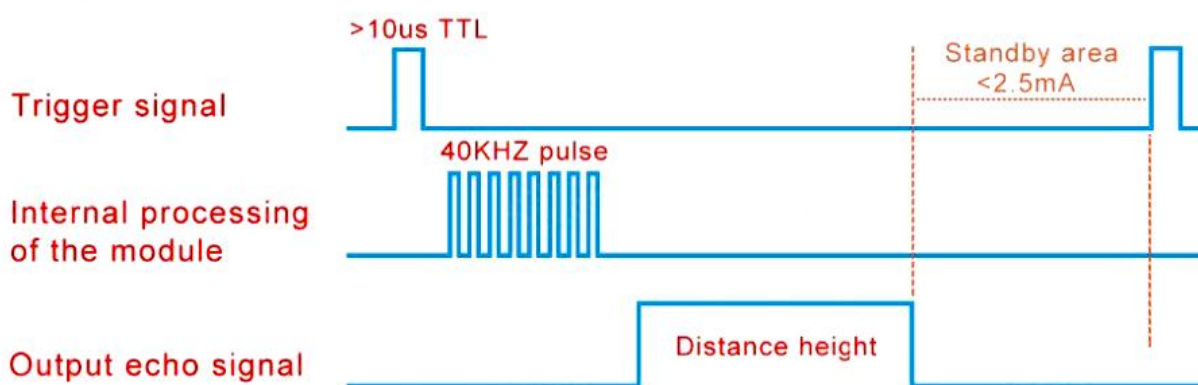
Replacement of R19 Change Mode

Pattern	Mode Corresponds	Standby Current	Low Power Current	Blind Area	The Furthest Distance
Compatible market HR-04 trigger mode	Open circuit	<2mA	-----	20cm	8m
Low Power mode	300K Ω	<2mA	<40 μ A	20cm	8m
Automatic Serial Port Mode	120K Ω	<2mA	-----	20cm	8m
Low Power Serial Port Mode	47K Ω	<2mA	<20 μ A	20cm	8m
Computer Printing Mode	0K Ω	<2mA	<20 μ A	20cm	8m

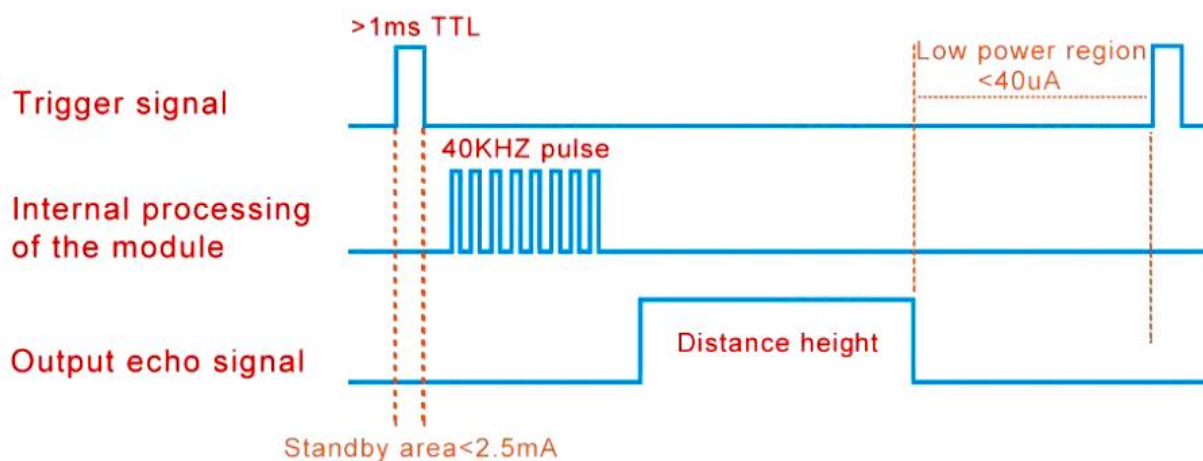
Module Startup Flow Chart:



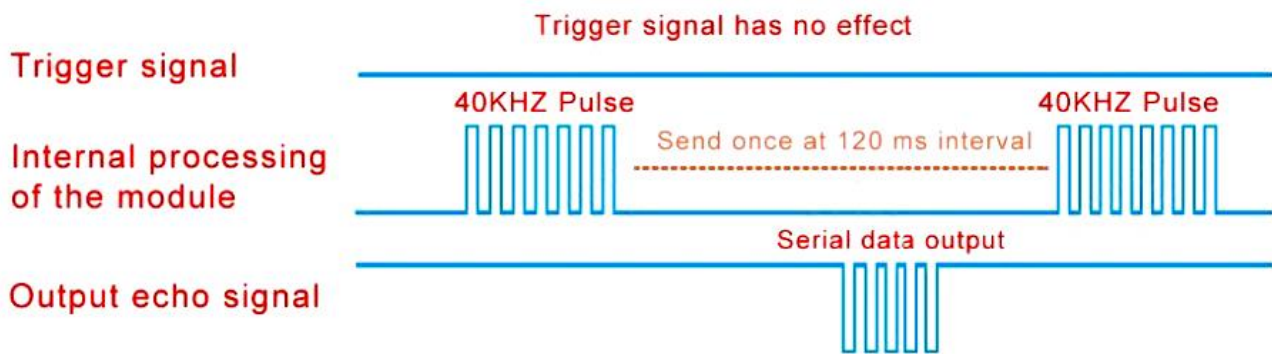
Mode 1: Standby current < 2.0mA, working current 30mA



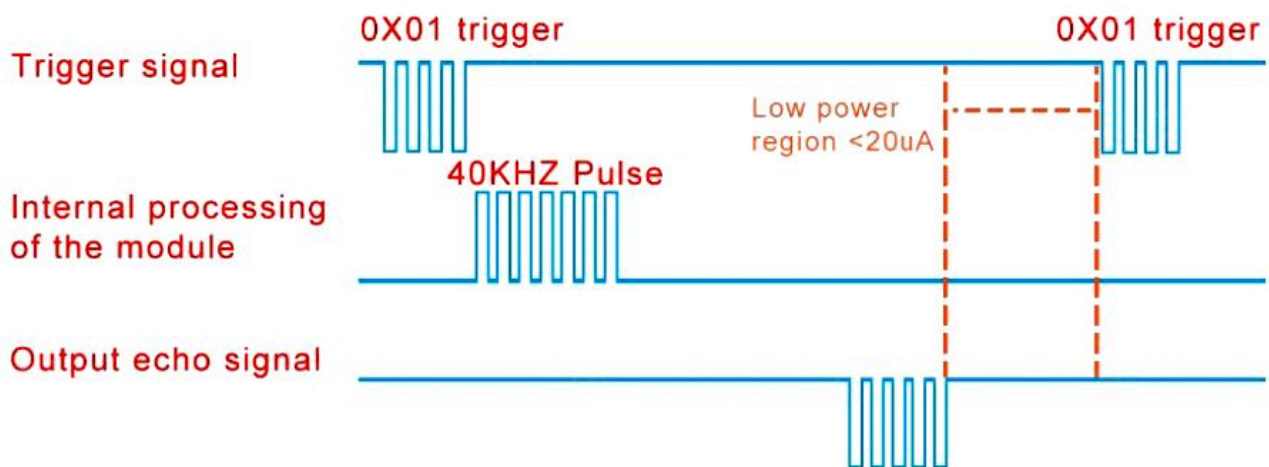
Mode 2: Low power consumption < 40uA, working current 30mA



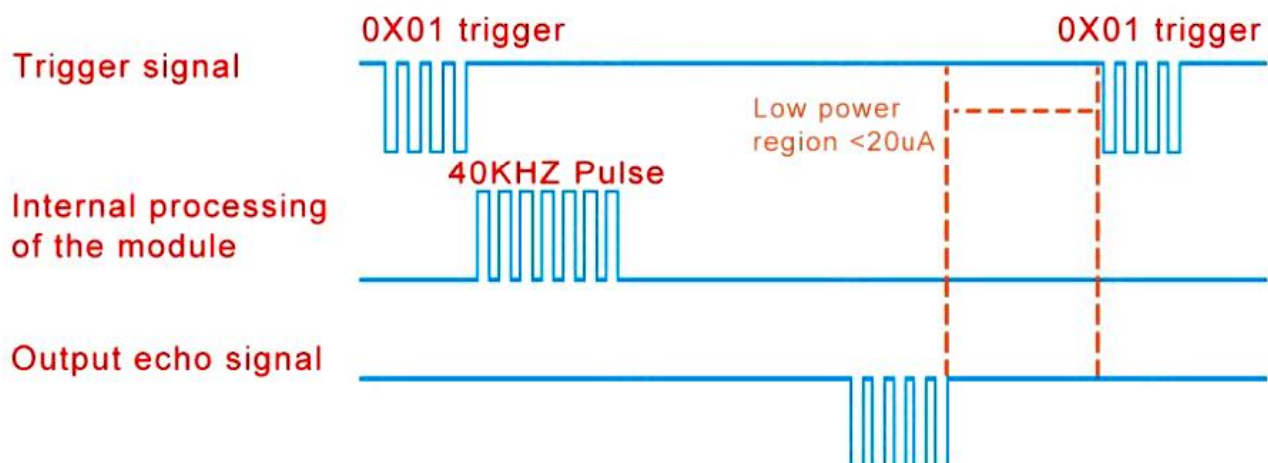
Mode 3:Serial port automatic mode, average current 5mA



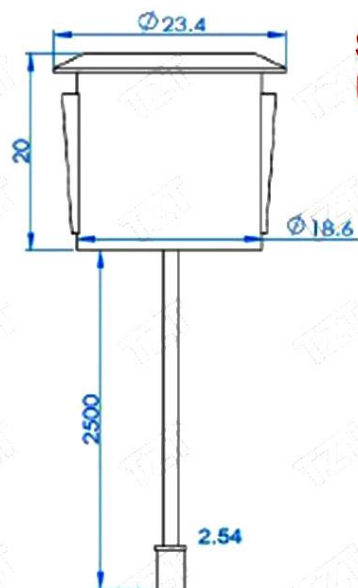
Mode 4: Serial low power mode,low power<20uA,standby 2mA



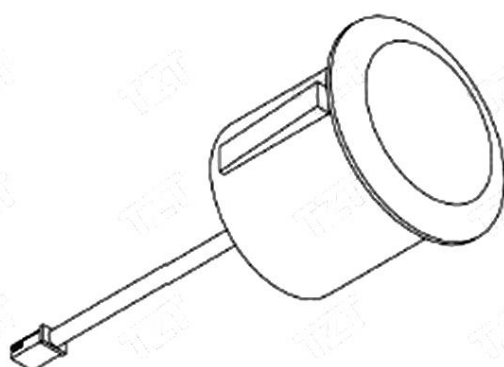
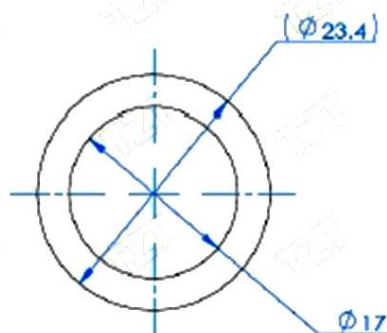
Mode 5: Serial low power mode, standby < 20uA, working 30mA



Size Chart:



Size of Strip Line Ultrasound Transducer



Strip control motherboard size

