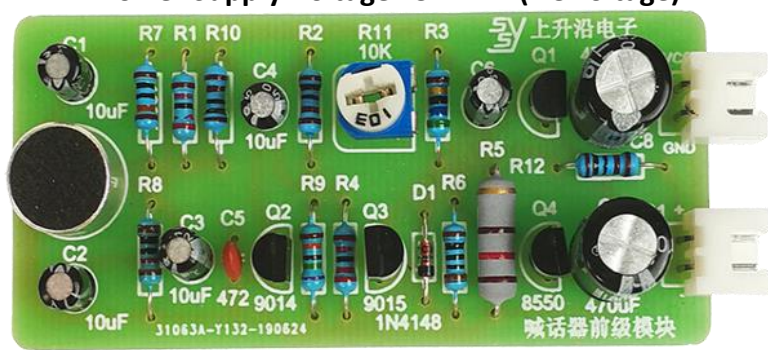
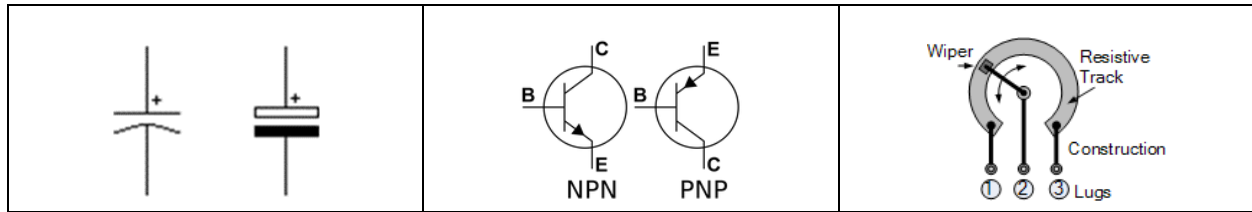
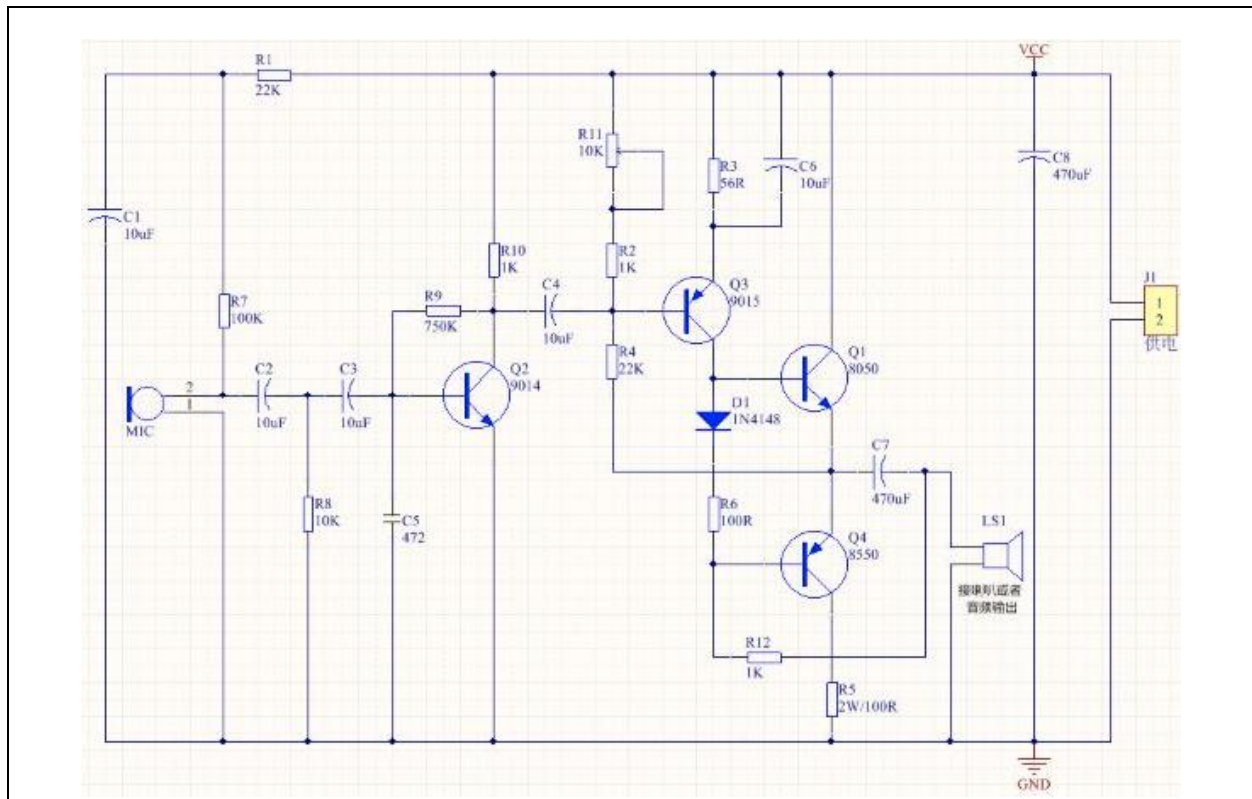


## STS-105B: Volume Amplification Microphone Module DIY Kit

|  |  |
|--|--|
| <p><b>Power Supply Voltage : 5V-12V (DC voltage)</b></p>  <p><b>PCB Full Assembly</b><br/>(Board size: 30*66MM)</p> | <p><b>Component List</b></p> <p>R1 &amp; R4=22kΩ, R2, R10 &amp; R12=1kΩ, R3=56Ω, R5=100Ω, R6=100Ω, R7=100kΩ, R8=10kΩ, R9=750kΩ, 10kΩ=R11, D1=1N4148, Q1=Transistor 8050, Q2=Transistor 9014, Q3=Transistor 9015, Q4=Transistor 8550, MIC=Mic, C1-C4 &amp; C6=10uF, C7 &amp; C8=470uF, C5=472 Ceramic Capacitor, J1 &amp; LS1= XH2.54-2P Connector.</p> |
|--|--|



### Schematic Diagram



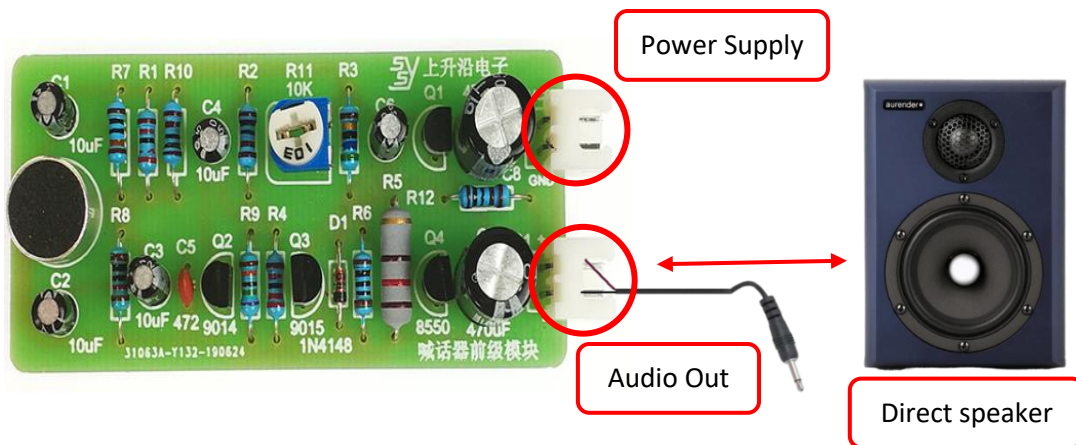
## Introduction:

This Mic Module will amplify the input volume and it can be applied to megaphones, broadcast systems, intercom systems, and more. This module also can be drive directly within 10W speaker with an internal resistance of 4 to 8 ohms. The audio output from this module also can be connected to the power amplifier module, so that the volume become louder.

## Component List:

| Component               | Quantity | Reference     | Component                   | Quantity | Reference  |
|-------------------------|----------|---------------|-----------------------------|----------|------------|
| 56 Ω Resistor           | 1        | R3            | Transistor 8050             | 1        | Q1         |
| 100 Ω Resistor          | 1        | R6            | Transistor 9014             | 1        | Q2         |
| 1K Ω Resistor           | 3        | R2, R10 & R12 | Transistor 9015             | 1        | Q3         |
| 10K Ω Resistor          | 1        | R8            | Transistor 8550             | 1        | Q4         |
| 22K Ω Resistor          | 2        | R1 & R4       | Mic                         | 1        | MIC        |
| 100K Ω Resistor         | 1        | R7            | Electronic Capacitor 10uF   | 5        | C1-C4 & C6 |
| 750K Ω Resistor         | 1        | R9            | Electronic Capacitor 470uF  | 2        | C7 & C8    |
| 100 Ω Resistor (2W)     | 1        | R5            | Ceramic Capacitor 472       | 1        | C5         |
| 10K Ω Variable Resistor | 1        | R11           | XH2.54-2P Connector & Cable | 2        | J1 & LS1   |
| Diode 1N4148            | 1        | D1            | PCB Board                   | 1        | -          |
| <b>Total Item = 29</b>  |          |               |                             |          |            |

## Connection Setup:



Connect this module audio output with DIY kit STS-105A audio input to make Cordless Audio Level Meter.