

HU-016

Small Amplifier Audio Upgrade Version

Scan the QR code to view detailed graphic instructions.

I.BOM



AMP_Main BOM

Name	Label	Number	Note
3mm Red LED	D1	1	
104 monolithic capacitor	C4, C2	2	
Dial potentiometer	RP1	1	
1K resistor	R1, R4, R5, R2	4+1	
4.7K resistor	R3	1+1	
105 monolithic capacitor	C3, C1	2	
220uF E-CAP	C5	1	
2 inch speaker	SP1	1	
Rocker switch	/	1	
1P power cord	/	1	
3.5mm single head audio cable	/	1	
Single head USB cable	/	1	
Speaker wire	/	1	
3P power line	/	1	
4-core audio cable	/	1	
Heat shrink tube	/	1	
8002A power amplifier chip	U1	1	
PCB	AMP_Main	1	

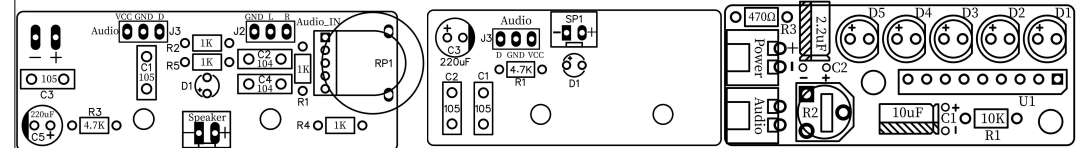
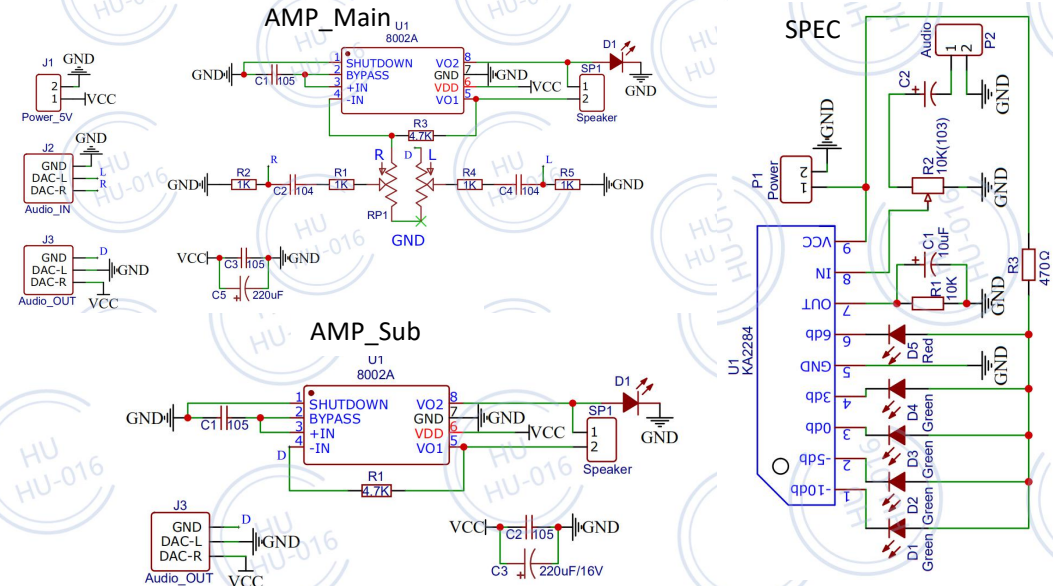
AMP_Sub BOM

Name	Label	Number	Note
3mm Red LED	D1	1	
4.7K resistor	R1	1+1	
105 monolithic capacitor	C1, C2	2	
220uF E-CAP	C3	1	
2 inch speaker	SP1	1	
3P power line	/	1	
Speaker Cable	/	1	
8002A power amplifier chip	U1	1	
PCB	AMP_Sub	1	

SPEC BOM

Name	Label	Number	Note
Blue and white potentiometer	R2	2	
10K resistor	R1	2	
470 Ω resistor	R3	2+1	
10uF E-CAP	C1	2	
2.2uF E-CAP	C2	2	3. 3uF replace
5mm blue LED	D4, D1, D2, D3	8	
5mm red LED	D5	2	
KA2284 chip	U1	2	
PCB	SPEC	2	

II.Schematic&Component map

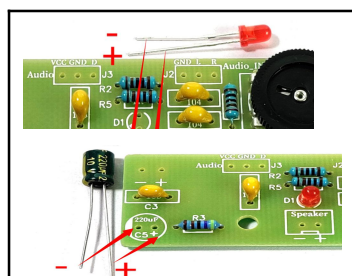

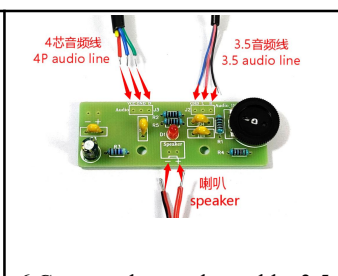
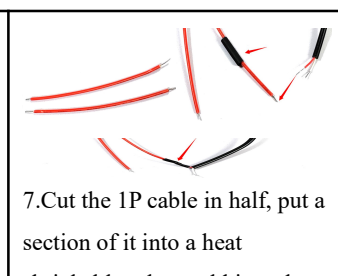
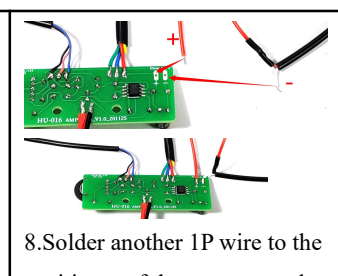
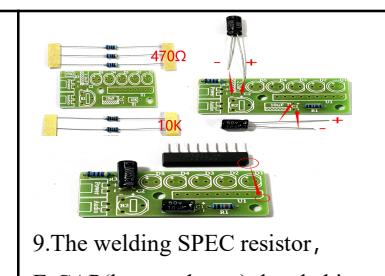
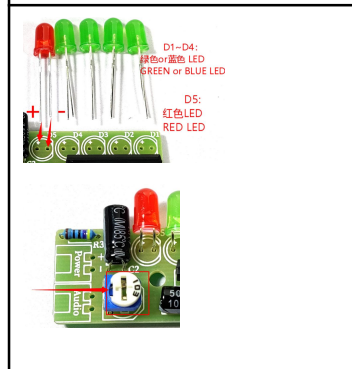
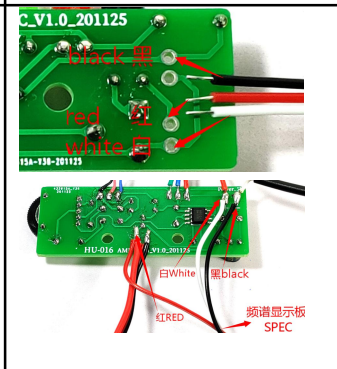
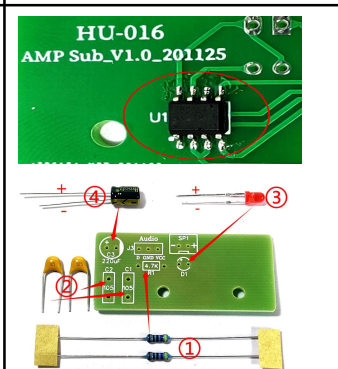
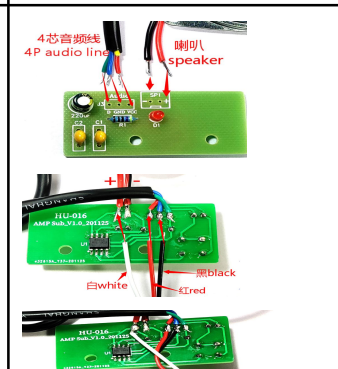

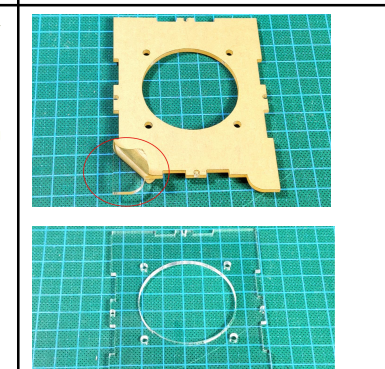
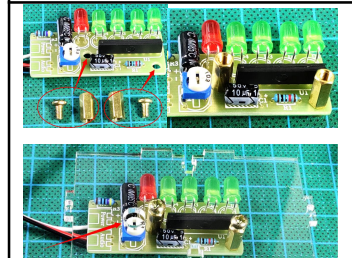
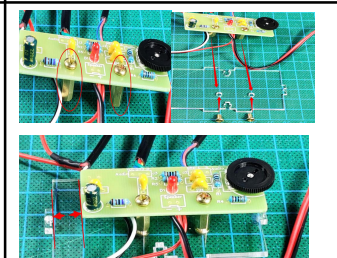
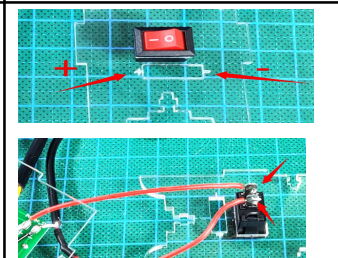
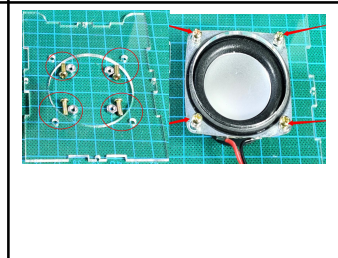
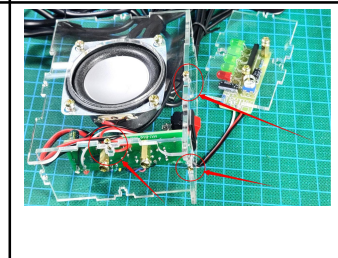
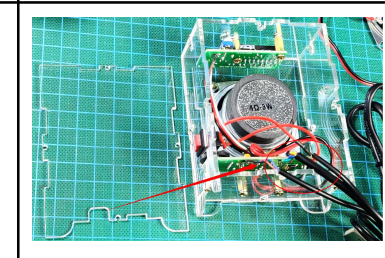


1.Weld the power amplifier chip on the back of the motherboard (corresponding silk-screen logo).

2.Welding DIP resistor 4.7K, 1K(no polarity).

3.Weld 104 and 105 monolithic CAP potentiometers.

For detailed welding & shell assembly steps, please scan the QR code to view the graphic tutorials.

 <p>4.Solder LED, E-CAP (pin: long + short -).</p>	 <p>5.Strip the insulation layer at both ends of the 4P audio cable and choose 3 wires to use.</p>	 <p>6.Connect the speaker cable, 3.5 audio cable, and 4-core audio cable.</p>	 <p>7.Cut the 1P cable in half, put a section of it into a heat shrinkable tube, weld it to the red USB power cable, and heat it to tighten.</p>	 <p>8.Solder another 1P wire to the positive + of the power supply, and the white end of the USB to the negative -.</p>	 <p>9.The welding SPEC resistor, E-CAP(long + short -), level chip (corresponding to silk).</p>
 <p>10.LED upside down welding (pin: long + short -, D1 ~ D4 are green or blue LED), welding adjustable resistor.</p>	 <p>11.Solder 3P parallel wires to connect the spectrum board to the main board.</p>	 <p>12.Use the same method to weld the power amplifier sub-board, as shown above.</p>	 <p>13.Weld the 4P audio cable and speaker to the sub-board, and connect the 3P cable to SPEC.</p>	 <p>14.The initial welding of the main board and sub-board of the power amplifier is as shown in the figure above.</p>	 <p>1.Tear off the protective film on both sides of the acrylic shell.</p>
 <p>2.Assemble the SPEC board with M3*5mm screws and copper posts</p>	 <p>3.Assemble the AMP_Main board with M3*5mm screws and copper posts</p>	 <p>4.When installing the rocker switch, pay attention to the "+" on the left</p>	 <p>5.Fix the speaker with M3*8 screws and M3 nuts.</p>	 <p>6.Assemble the shell on all sides and fix it with M2*8 screws and M2 nuts</p>	 <p>7.The speaker cable is inserted into the card slot on the rear panel.</p>