Fm Receiver D.I.Y Kit

<u>Manual</u>



Fm Receiver D.I.Y Kit

Installation Tips:

- 1. User needs to prepare the welding tool first.
- 2. Please be patient until the installation is complete.
- 3. The package is a D.I.Y kit. It needs to be installed by user.
- 4. The soldering iron cannot remain in contact with the components for extended periods of time, otherwise it will damage the components.
- 5. Pay attention to the positive and negative of the components.
- 6. Strictly avoid short circuits.
- 7. User must install the LED according to the specified rules. Otherwise, the LEDs may not work
- 8. Install complex components preferentially.
- 9. Make sure all components are facing the right direction and in the right place.
- 10. It is strongly recommended to read the installation manual before starting the installation!!!
- 11. Please wear anti-static gloves or anti-static wristbands when installing the electronic components.

Installation Steps:

- Step 1: Install 1pcs 4.7ohm Metal Film Resistor at R7.
- Step 2: Install 1pcs 220Kohm Metal Film Resistor at R3.
- Step 3: Install 11pcs 10Kohm Metal Film Resistor at R1, R2, R4,R5,R8~R14.
- Step 4: Install 1pcs TEA5767 Audio Receiver at TEA5767. Pay attention to the installation direction.
- Step 5: Install 1pcs 13.56MHz Crystal Oscillator at Y1.
- Step 6: Install 2pcs 22pF Ceramic Capacitor at C1, C2.
- Step 7: Install 1pcs DIP-8 IC Socket at LM386. There is a mark on one end of the IC Socket and there is a mark on PCB where the IC Socket can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC Socket.
- Step 8: Install 1pcs DIP-40 IC Socket at U1. There is a mark on one end of the IC Socket and there is a mark on PCB where the IC Socket can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC Socket.
- Step 9: Install 1pcs 50Kohm Potentiometer at R6.

- Step 10: Install 3pcs 0.1uF Monolithic Capacitor at C4, C5, C6.
- Step 11: Install 4pcs TO-92 S9012 Transistor at Q1~Q4.
- Step 12: Install 2pcs 10uF 25V Electrolytic Capacitor at C7, C8. Pay attention to distinguish between positive and negative. The Longer pin is positive pole.
- Step 13: Install 1pcs Blue 2*5*7 LED at D13.Pay attention to distinguish between positive and negative. The Longer pin is positive pole.
- Step 14: Install 1pcs Red 0.56" 4Bit Common Anode Digital Screen at 056SMG_4. Pay attention to the installation direction.
- Step 15: Install 1pcs DC-005 Power Socket at 5V.
- Step 16: Install 3pcs 100uF 50V Electrolytic Capacitor at C3, C9,C11. Pay attention to distinguish between positive and negative. The Longer pin is positive pole.
- Step 17: Install 1pcs Self-locking Button at S4.
- Step 18: Install 2pcs 6*6*20mm Black Button at S1, S2.
- Step 19: Install 1pcs DIP-8 IC LM386. There is a mark on one end of the IC and there is a mark on PCB where the IC can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC.
- Step 20: Install 1pcs DIP-40 IC STC89C52. There is a mark on one end of the IC and there is a mark on PCB where the IC can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC.
- Step 21: Install 1pcs Antenna at ANT. Note that the antenna should be installed on the back of the PCB.
- Step 22: Connect speaker to PCB at SP by 10cm red/black Cable. The speaker does not distinguish between positive and negative.
- Step 23: Tear off the protective film on the surface of the acrylic shell.
- Step 24: Fixed speaker on acrylic bottom plate by 4pcs M3*8mm Screw and 4pcs M3
- Step 25: Install 4pcs M3*8mm Screw and 4pcs M3 Nut on PCB.
- Step 26: Install 4pcs M3*10mm Copper Pillar on PCB.
- Step 27: Install 4pcs M3*8mm Screw and 4pcs M3 Nut on acrylic front plate.
- Step 28: Install PCB module on acrylic front plate.
- Step 29: Fix other acrylic plate by 12pcs M3*8mm Screw and 12pcs M3 Nut.
- Step 30: Connect to power supply and enjoy receiver.

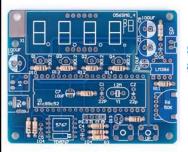
<u>Installation Steps (Photos):</u>



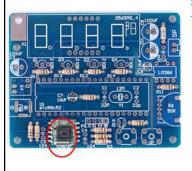
Step 1: Install 1pcs 4.7ohm Metal Film Resistor at R7.



Step 2: Install 1pcs 220Kohm Metal Film Resistor at R3.

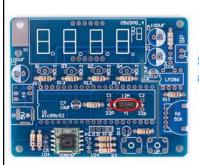


Step 3: Install 11pcs 10Kohm Metal Film Resistor at R1,R2,R4,R5,R8~R14.

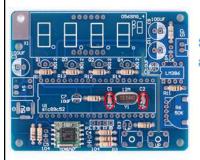


Step 4: Install 1pcs TEA5767 Audio Receiver at TEA5767.Pay attention to the installation direction.

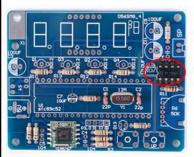




Step 5: Install 1pcs 13.56MHz Crystal Oscillator



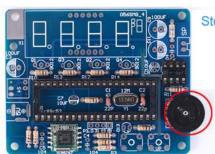
Step 6: Install 2pcs 22pF Ceramic Capacitor at C1,C2.



Step 7: Install 1pcs DIP-8 IC Socket at LM386. There is a mark on one end of the IC Socket and there is a mark on PCB where the IC Socket can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC Socket.



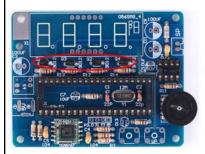
Step 8: Install 1pcs DIP-40 IC Socket at U1. There is a mark on one end of the IC Socket and there is a mark on PCB where the IC Socket can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC Socket.



Step 9: Install 1pcs 50Kohm Potentiometer at R6.



Step 10: Install 3pcs 0.1uF Monolithic Capacitor at C4,C5,C6.



Step 11: Install 4pcs TO-92 S9012 Transistor at Q1~Q4.



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Step 13: Install 1pcs Blue 2*5*7 LED at D13. Pay attention to distinguish between positive and negative. The Longer pin is positive pole.



Step 14: Install 1pcs Red 0.56" 4Bit Common Anode Digital Screen at 056SMG_4.

Pay attention to the installation direction.



Step 15: Install 1pcs DC-005 Power Socket at 5V.



Step 16: Install 3pcs 100uF 50V Electrolytic Capacitor at C3,C9,C11. Pay attention to distinguish between positive and negative. The Longer pin is positive pole.



Step 17: Install 1pcs Self-locking Button at S4.



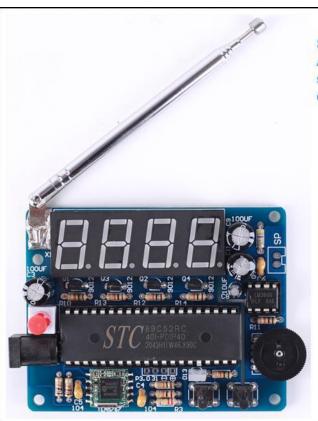
Step 18: Install 2pcs 6*6*20mm Black Button at S1,S2.



Step 19: Install 1pcs DIP-8 IC LM386. There is a mark on one end of the IC and there is a mark on PCB where the IC can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC.

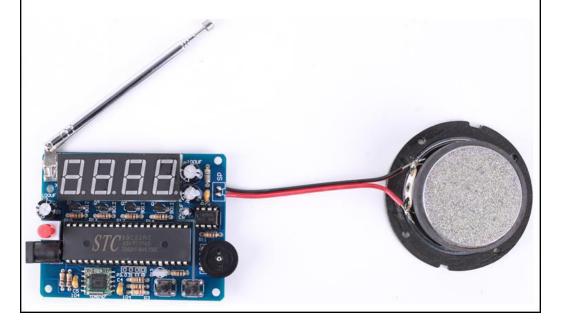


Step 20: Install 1pcs DIP-40 IC STC89C52. There is a mark on one end of the IC and there is a mark on PCB where the IC can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC.



Step 21: Install 1pcs Antenna at ANT.Note that the antenna should be installed on the back of the PCB.

Step 22: Connect speaker to PCB at SP by 10cm red/black Cable. The speaker does not distinguish between positive and negative.



Step 23: Tear off the protective film on the surface of the acrylic shell.

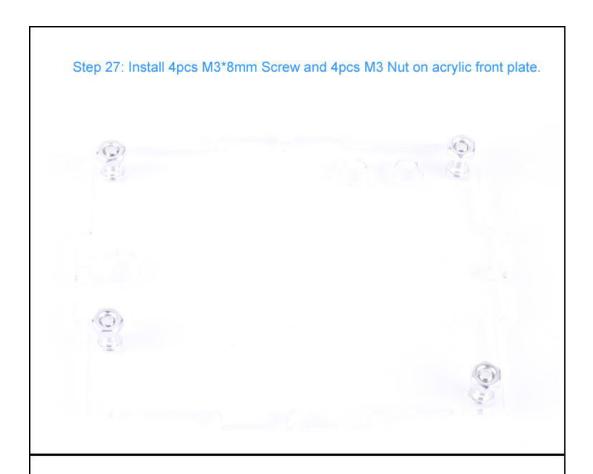


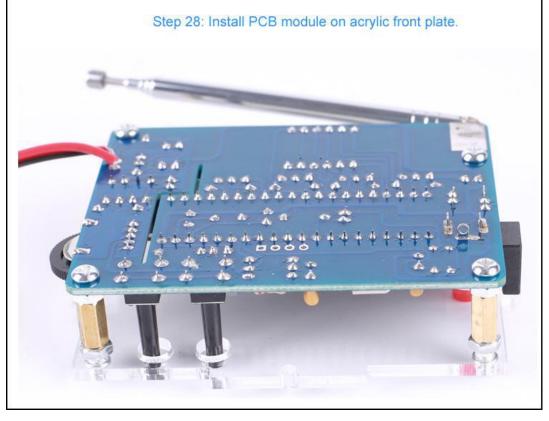
Step 24: Fixed speaker on acrylic bottom plate by 4pcs M3*8mm Screw and 4pcs M3 Nut.

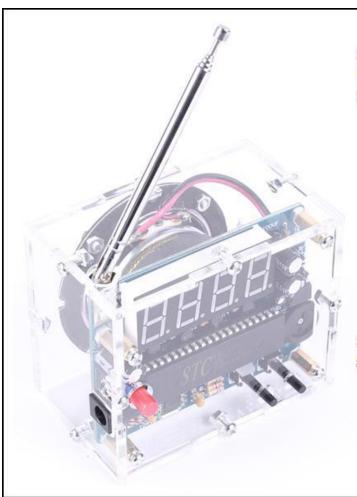












Step 29: Fix other acrylic plate by 12pcs M3*8mm Screw and 12pcs M3 Nut.

Step 30: Connect to power supply and enjoy the effect.