

Soldering Projects FM Radio Kit with LED Lights

Feature:

- 1>.Built-in volume adjustment
- 2>.RGB spectrum indicator flashing automatically
- 3>.Support 87Hz-108MHz receiver frequency
- 4>.Built-in 5W power amplifier
- 5>.LCD1602 display screen

Parameter:

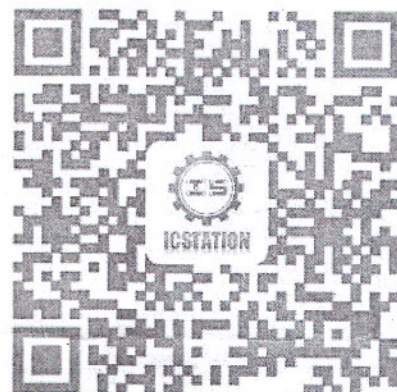
- 1>.Product Name: FM 87-108MHz Radio Receiver LCD1602 DIY Kit
- 2>.Work Voltage: DC 4.5V~5.5V
- 3>.Output impedance: 4ohm
- 4>.Output power: 5W
- 5>.Output channel: Mono
- 6>.Receiver Frequency: 87.0MHz~108.0MHz
- 7>.Frequency accuracy: 0.1MHz
- 8>.Equivalent noise: $\geq 30\text{dB}$
- 9>.Work Temperature: $-40^{\circ}\text{C}\sim 85^{\circ}\text{C}$
- 10>.Work Humidity: 5%~95%RH
- 11>.Size(Installed): 90*70*55mm

Use Methods:

- 1>.Press left button to turn ON/OFF power supply.
- 2>.Press right button to turn ON/OFF spectrum indicator.
- 3>.Press S+ or S- to adjust volume.
- 4>.Press P+ or P- to adjust receive frequency and FM station.

Component Listing:

NO.	Component Name	PCB Marker	Parameter	QTY
1	Metal Film Resistor	R6	10ohm	1
2	Metal Film Resistor	R19,R20	100ohm	2
3	Metal Film Resistor	R12,R15	6.8Kohm	2
4	Metal Film Resistor	R9,R13,R16,R17	1Kohm	4
5	Metal Film Resistor	R1-R5,R7,R8,R11,R14,R15,R18	10Kohm	11
6	RDA5807 FM Receiver	U2	SMD	1
7	Crystal Oscillator	Y1	11.0592MHz	1
8	IC Socket	U3	DIP-8	1
9	IC Socket	U1	DIP-40	1
10	Ceramic Capacitor	C1,C2	22pF	2
11	Monolithic Capacitor	C10,C12,C13	0.1uF 104	3
12	KA2284 LED Driver	KA2284	ZIP-9	2
13	RGB LED	LED1-LED10	5mm	10
14	DuPont Female Socket	LCD1602 J9	16Pin	1
15	Male Pin	LCD1602	16Pin	1
16	Electrolytic Capacitor	C3,C5,C6,C7,C8,C11,C14,C15,C16	4.7uF	9



User Manual



Icstation Store

17	Electrolytic Capacitor	C4,C9	100uF	2
18	1N4148 Diode	D11	DO-35	1
19	1N4007 Diode	D12,D13	DO-41	2
20	DC-005 Power Socket	J1	5.5*2.5mm	1
21	Self-locking Button	S4,S6	5.8*5.8mm	2
22	Self-locking Button Cap	S4,S6	Red	1
23	Black Button	S1,S2,S3,S5 or S+/S-/P+/P-	6*6*20mm	4
24	LM386N	U3	DIP-8	1
25	STC89C52RC	U1	DIP-40	1
26	LCD1602 Display Screen	LCD1602	Blue	1
27	75ohm Antenna	ANT	25cm	1
28	4ohm 5W Speaker	SP	22mm	1
29	Red/Black Speaker Wire	SP	20cm	1
30	USB-DC005 Power Wire		100cm	1
31	Acrylic Board			6
32	M3*10mm Copper Pillar			4
33	M3*10mm Screw			4
34	M3*8mm Screw			4
35	M3*6mm Screw			14
36	Nut			18
37	PCB		82*64*1.6mm	1

Note: Users can complete the installation according to the PCB silk screen and component list.

Schematic Diagram:

