

Parts List**AD200P Transmitter Part List**

Description	Qty	Comps
1pF 50V 20% COG Chip Ceramic Capacitor 0603	2	C30;C36
3pF 50V 20% COG Chip Ceramic Capacitor 0603	1	C43
8pF 50V 20% COG Chip Ceramic Capacitor 0603	2	C26;C39
10pF 50V 20% COG Chip Ceramic Capacitor 0603	1	C34
15pF 50V 20% COG Chip Ceramic Capacitor 0603	1	C38
33pF 50V 20% COG Chip Ceramic Capacitor 0603	1	C11
47pF 50V 20% COG Chip Ceramic Capacitor 0603	2	C24;C40
68pF 50V 20% COG Chip Ceramic Capacitor 0603	2	C25;C37
100pF 50V 20% COG Chip Ceramic Capacitor 060	3	C5;C7;C16
1000pF 50V 20% X7R Chip Ceramic Capacitor 06	6	C23;C27;C31-32;C35;C41
0.1uF 50V 20% X7R Chip Ceramic Capacitor 0803	2	C13;C18
220pF 50V 20% X7R Chip Ceramic Capacitor 060	1	C21
0.022uF 50V 20% X7R Chip Ceramic Capacitor 06	1	C17
10uF 10V 20% Chip Tantalum Capacitor Size A	8	C1;C9;C12;C14-15;C19;C22;C28
2.2uF 10V 20% Chip Tantalum Capacitor Size A	4	C2-4;C8
4.7uF 10V 20% Chip Tantalum Capacitor Size A	2	C6;C20
FEMALE HEADER	1	CN1
MALE HEADER	1	CN2
LED 3/RED	1	D3
RLR4004	1	D2
SVC208	1	D1
TRIMMER 10pF	2	C33;C42
TRIMMER 30pF	1	C29
COIL 3.8/2.5T	2	L3;L5
COIL 3/9.5T	1	L4
I.F.T 5X	1	L1
I.F.T 5R	1	L2
ANT BRK	1	H3
9V INPUT JACK	1	H1
MIC IN CONNECTOR	1	H2
2SC1412K Chip Transistor	3	Q1-3
MPS5179 Chip Transistor	2	Q4-5
27ohm 0.1W 5% Chip Resistor 0805	1	R24
33ohm 0.1W 5% Chip Resistor 0805	1	R28
100ohm 0.1W 5% Chip Resistor 0805	1	R23
10Kohm 0.1W 5% Chip Resistor 0805	3	R15;R21;R26
100Kohm 0.1W 5% Chip Resistor 0805	2	R8;R10
1Mohm 0.1W 5% Chip Resistor 0805	3	R9;R13-14
1.2Kohm 0.1W 5% Chip Resistor 0805	1	R7
12Kohm 0.1W 5% Chip Resistor 0805	2	R2;R4
18Kohm 0.1W 5% Chip Resistor 0805	1	R18
22Kohm 0.1W 5% Chip Resistor 0805	2	R6;R11
470ohm 0.1W 5% Chip Resistor 0805	1	R27
4.7Kohm 0.1W 5% Chip Resistor 0805	1	R17
47Kohm 0.1W 5% Chip Resistor 0805	4	R3;R12;R19-20
5.6Kohm 0.1W 5% Chip Resistor 0805	1	R5
68Kohm 0.1W 5% Chip Resistor 0805	1	R1
75Kohm 0.1W 5% Chip Resistor 0805	1	R16
820ohm 0.1W 5% Chip Resistor 0805	1	R22
8.2Kohm 0.1W 5% Chip Resistor 0805	1	R25
POLY SWITCH MFR010	1	SW2
SLIDE SWITCH	1	SW1
TEST POINT	4	T1-4
LP2951	1	U3
MC4558D	1	U2
NE571D	1	U1
POTENTIOMETER100K	1	VR1
POTENTIOMETER20K	1	VR2
X-TAL	1	X1

2.983 (d) (9) Tune-Up Procedure

- A. SW1 to OFF, VR1 to midrange and VR2 to midrange.
- B. Solder a 50 ohm coaxial cable (RG174) to the antenna terminal.
- C. Split this cable three ways to feed a spectrum analyzer, modulation analyzer and frequency counter
- D. On the modulation analyzer select 50 uS deemphasis, 15 kHz LPF, FM mode and connect its audio output to an audio analyzer for distortion measurement.
- E. Solder a shielded cable to the preamplifier output.
- F. Connect the other end of the shielded cable to an AC voltmeter.
- G. Apply 9 volts to the battery terminals and switch SW1 on. Adjust C29, C33, C42 and L2 for maximum power.
- H. Adjust L1 for the proper frequency (nine times the crystal frequency) and repeat step G.
- I. Apply 30 mV of audio at 1 kHz to the microphone terminals. Adjust VR2 for 775 mV preamplifier output.
- J. Adjust VR1 for 12 kHz deviation. Adjust L2 and C29 for minimum distortion and maximum power.