

1% Resistors		Must be 1%
4.7 meg	1 (8)	8 for offset null - FIT IF NEEDED
120K	2	
100K 1%	15	
51K 1%	6	
33K 1%	1	
27K 1%	1	FOR BUCHLA 1.2v/ Octave use 21.5K
15K 1%	1	FOR BUCHLA 1.2v/ Octave use 18.2K
10K 1%	3	
3.9K 1%	8	
1K 1%	11	
330R 1%	9	
Resistors		Can be 5%
3.3 Meg	2	
150K	1	
100K	7	
68K	4	
47K	2	FOR 15volt supply use 33K
18K	2	FOR 15volt supply use 12K
1.5K	8	R-LED use size appropriate for your LEDs
Ferrite Bead	2	
Capacitors		
10uf electrolytic	2	Power bypassing 10-25 ufd
.33uf poly	2	
.1uf poly	1	
.1uf ceramic	20	bypass capacitors
.01 uf	3	
.022uf poly/metal	8	sample and hold output caps
30pf	2	
22pf	8	
Semiconductors		
1N914	4	Any standard diode
BAT42	4	Schottky diode
TL074	4	Quad Op Amp
TL072	2	Dual Op Amp
TL071	1	Single Op Amp
ADG408	2	8 input Multiplex
CD4013	1	Dual D Flip Flop
MCP4921	1	12 bit DAC **THIS IS MIS-LABELED ON THE CIRCUIT BOARD**
LM4040AIZ-2.5	1	2.5 volt Precision ref voltage TO-92 case
LM78L05	2	5 volt voltage regulator
	1	PIC Microcontroller SENT WITH THE BOARD
20mhz xtal	1	20 MHZ Crystal
TRIMMERS		cermet multturn trimmer pots
5k Multiturn trim	2	
100K Multiturn	1	
100K Multiturn *	8	offset Null S&H TL074s * don't install unless needed
MISC		
SPDT switch	1	Hold/ S&H switch
SPST switch	1	Bank switch
50K Linear Pot	6	
LED	6	
Blue Banana	19	
4pin tactile switch	1	RESET, PCB mount momentary close
2pin .1 header	1	CALIBRATE, PCB mount connector
(1 pin header)	2	Wire or pin to make test point connectors
Programming connector		There is room for 2 types of connectors for programing the PIC. RJ11 and 6 pin .1" In-Line You can ignore them if you don't want to do in-circuit burning of the PIC chip