POWER SUPPLY PARTS

(Related to: https://qsl.net/nf4rc/2021/SolderingPart1.pdf
and a portion of https://qsl.net/nf4rc/2021/SolderingPart2.pdf)

D1 Diode -- watch polarity!	C1 Capacitor 47uf WATCH POLARITY Negative side is marked - opposite of + on the board	**9VDC POWER** U1 9V 3 terminal regulator LM5809 BE SURE METAL TAB IS TOTHE OUTSIDE
C2 Capacitor 0.01 - 0.1 uF No polarity to this ceramic capacitor. Any value within this range works fine.	**5VDC POWER** U20 5 V 3 terminal regulator LM5805 BE SURE METAL TAB MATCHES THE SCREEN PRINT	C20 Capacitor 0.01-0.1 uF No polarity to this ceramic capacitor Any value within this range works fine

AUDIO POWER AMPLIFIER PARTS
Related to: https://qsl.net/nf4rc/2021/SolderingPart2.pdf

R1 500 ohm potentiometer (volume control)	R7 100 ohms There is no polarity to resistors	C6, C5 47-50uF Capacitor WATCH POLARITY!!
C4 10 uF WATCH POLARITY!!	C7 0.1 uF There is no polarity to this ceramic capacitor	R3 10 Ohm There is no polarity to resistors.
R2 4.3 ohms There is no polarity to resistors	C3 47-200 uF Capacitor WATCH POLARITY	8 pin LM386 socket The NOTCH must go toward the outside (top) of the board. Pin 1 is shown with a SQUARE pad which helps you know the top of the socket.
LM386 Integrated Circuit The pin 1 or top notch of this part MUST MATCH the socket.	Phono Plug socket	

ON BOARD MICROPHIONE

(Related to: https://qsl.net/nf4rc/2021/SolderingPart3.pdf)

R3 (100 to 200 ohm resistor, value not critical)	C17 WATCH POLARITY 47-50 uF capacitor, value not critical	C8 Watch Polarity 1-2 uF capacitor, value not critical
Electret Microphone Note carefully which pin is grounded to the case; this is the "negative" pin. The other is the "positive" side.	Pins for ends of jumpers "R5" and "R6"	

AUDIO PREAMPLIFIER PARTS

(Goes with: https://qsl.net/nf4rc/2021/SolderingPart4.pdf)

Transistors Q10, Q11, Q12 2N3904 -- note the FLAT FACE	Capacitors C14, C16, C11 47 uF -- WATCH POLARITY	Capacitors C13, C12 1-2uF WATCH POLARITY
R17 47K	R11 56K	R10, R13 10K
C15 0.1 (or 0.01) uF (no polarity)	R16 47 or 50 ohms	R12, R15, 2200 ohms (2.2K)
R14 4.7K or 5K (4700 or 5000)		

PRODUCT DETECTOR / BALANCED MIXER

(Goes with: https://qsl.net/nf4rc/2021/BalancedMixer.pdf

Ferrite Cores Size is not critical but Type 43 material is important Typically FT-50-43	Magnet wire for winding toroidial transformers (see instructions)	Matched set of 1N4148 small signal diodes D13, D14, D15, D16 1N4148 MATCHED DIODES (your instructor may have pre-matched them or may have you be involved in matching these diodes Don't overheat when soldering in.
D10, D11 1N4007 (protective diodes) These are overkill and may reduce the sensitivity but will definitely help protect the receiver	C10 100 pf capacitor There is no polarity	Phono Plug socket
J10 J11 sockets Your instructor will provide the instructions for these parts These may be replaced by a short wire going from pin 1 of J10 to pin 1 of J11 if no bandpass filter will be used.		