

Parts List for the Octal Tri-Bander Transceiver

C1, C14	Dual air variable, 100 pf per section
C2, C5, C6, C15, C18, C32, C33	Ceramic trimmer, 8-50 pf
C3, C7, C9-C13, C16, C19, C24, C30	Ceramic trimmer, 5-30 pf
C4, C8, C17, C20, C34, C35	Ceramic trimmer, 5-25 pf
C21, C31	Miniature air variable, 10 pf
C22	Air variable, spacing suitable for 1200 volts, 280 pf, straightline frequency (offset rotor shaft) used here
C23	Air variable, receiving type, triple sections connected in parallel, 450 pf per section
C25, C26	Miniature air variable, 15 pf
C27	Command Xmtr VFO variable, rear unit, 150 pf
C28	Command Xmtr VFO variable, range set, 180 pf
C29	Original dogbone cap on C28, 5 pf ceramic
D1-D3, D12, D13, D15, D16	1N914 or 1N4148
D8-D11	1N914 or 1N4148, matched with ohmmeter for forward resistance
D4-D6, D14, D17	50 PRV minimum GP silicon, 1N4001 or similar
D7	400 PRV minimum GP silicon, 1N4004 or similar
FL1	Crystal filter, eight pole, 2.1 kHz BW, 9.000 MHz center freq, 500 ohms in/out, INRAD #2309
J1	Phone jack
J2, J3, J5	RCA phono jack, chassis mount
J4	SO-239 UHF Jack
J6	Microphone jack, Collins type used here
J7	11 pin chassis mount plug to mate with power supply cable
K1, K4, K5, K6	Miniature DPDT relay, DIP form factor, 24 VDC coil, 2880 ohms coil, low signal level type, OMRON P/N G6A-274P-ST used here
K2, K3	4PDT, 2 amp contacts minimum, 24 VDC coil, ~700 ohms coil
L1	42 turns #26 on T50-2 toroid form, link 5 turns #26 over cold end
L2	31 turns #26 on T50-2 toroid form, link 4 turns #26 over cold end
L3	21 turns #24 on T50-2 toroid form, link 3 turns #24 over cold end
L4, L12, L15, L23, L24	42 turns #26 on T50-2 toroid form
L5, L13, L16	31 turns #26 on T50-2 toroid form

L6	21 turns #24 on T50-2 toroid form
L7 thru L10, L20	22 turns #24 on T50-2 toroid form, link 5 turns #24 over cold end
L11	22 turns #24 on T50-2 toroid form
L14, L17	17 turns #24 on T50-2 toroid form
L18	7 turns #8 tinned copper, .625 in I.D., 2.0 in long
L19	Rotary inductor, 10 μ H, Johnson P/N 229-0201 or L-0201
L21	14 turns #24 on T50-2 toroid form, link 3 turns over center of winding
L22	VFO Coil from 7.0-9.1 MHz Command Xmtr, original tap removed, hot end tapped $\frac{3}{4}$ turn from top end of winding.
L25, L26	25 turns #24 on T50-2 toroid form
L27	18 turns #24 on T50-2 toroid form
M1	0-1 ma meter
PC1, PC2	4 turns #18 space wound on 56 ohm, 2 watt carbon resistor
R1, R3-R5, R7, R8	Panel mount, linear taper, composition
R2, R6	Panel mount, audio taper
RFC1, RFC2, RFC7, RFC9, RFC10	Miniature epoxy encapsulated choke
RFC3, RFC4, RFC6, RFC8	Pi-wound choke
RFC5	Pi-wound plate choke, 400 ma minimum. Heathkit plate choke from SB-xxx radios used here.
S1	Multiple sections, 18 poles total, three position rotary switch.
S2	Three pole, four position rotary switch
S3	Two pole, two position rotary switch
S4	Three pole, three position rotary switch
T1	Audio output transformer, 5k ohms to voice coil, primary DC current 30 ma minimum, Stancor P/N A3823 used here
T2	Output transformer from Command Rcvr, P/N ES-691027
Y1	9.0015 MHz crystal, McCoy used here, INRAD suitable
Y2	8.9985 MHz crystal, McCoy used here, INRAD suitable
Y3	21.5 MHz crystal

General Notes:

1. Fixed capacitors: Capacitors marked with an asterisk are silver mica, 300 volt minimum rating. Capacitors with a plus sign are electrolytic. AGC and ALC time constant capacitors are mylar or polyester film, 100 volts rating. Bypass capacitors are disc ceramic, 500 volt rating except as noted. Other capacitors may be mylar or polyester film.
2. Fixed resistors: Unless otherwise noted, all resistors are 0.25 watt, 5 percent tolerance, carbon composition or carbon film. 0.5, 1.0 and 2.0 watt are 5 or 10 percent tolerance, carbon composition or carbon film. 3 watt and greater are wirewound.

Parts List for the Octal Tri-Bander Power Supply/Speaker Unit

CB1	4 amp circuit breaker
D1-D8	1000 PRV GP silicon, 1N4007
D11	200 PRV minimum GP silicon, 1N4003 or similar
D12	Yellow LED
D13	Green LED
D14	Diode bridge module, 2 amp, 100 PRV suitable
J1	11 pin chassis mount jack to mate with power supply cable
J2	RCA phono jack, chassis mount
L1	Filter choke, Triad C-14A used here
S1	SPST toggle switch, 10 amp contacts
S2	DPST toggle switch, 10 amp contacts
SP1, SP2	4 inch PM speaker, connected in phase
T1	Plate transformer, secondary should be 540-600 VAC end to end, with center tap, capable of about 400 ma or more of current
T2	Filament transformer, 6.3 VAC at 10 amps
T3	Filament transformer, 25.2 VAC at 1.2 amps used here, smaller type suitable (e.g., 24 VAC at .5 amps)
T4	Filament transformer, 12.6 VAC at 1.0 amps

General Notes:

1. Fixed capacitors: Capacitors with a plus sign are electrolytic. Bypass capacitors are disc ceramic, 500 volt rating.
2. Fixed resistors: All resistors are carbon composition or carbon film. LED dropping resistor is .25 watt.