





FOUR STATE QRP GROUP
Bayou Jumper Receiver

N5IB & NM0S	revD	Page 1 of 2
	6 AUGUST 2022	

Bayou Jumper rev D (Red Panel) Bill of Materials (12 May 2022)

Inv√	Quant	Part ID(s)	Description	Marking	Notes
			CAPACITORS		
	1	C31	22 pF NP0 ceramic, 0.1" LS	22J , 22, or 220	Optional do not install yet
	2	C21,C30	4-20 pF trimmer capacitor	pink body	Note orientation of flat side
	3	C4, C18, C26	100 pf NP0 ceramic, 0.1" LS	101, tan body	
	1	C20	120 pF NP0 ceramic, 0.2" LS	121, blue body	
	1	C16	220 pF NP0 ceramic, 0.2" LS	221, blue body	
	1	C23	390 pF NP0 ceramic, 0.2" LS	391, blue body	
	1	C22	470 pF NP0 ceramic, 0.2" LS	471, tan body	
	3	C8, C14, C15	0.001 μF 200V NP0 ceramic, 0.2" LS	102, tan body	
	1	C28	0.0033 μF NP0 ceramic, 0.2" LS	332, tan body	
	4	C1,C2,C11,C17	0.01 μF ceramic, 0.1" LS	103, tan body	
	1	C24	0.033 μF ceramic, 0.2" LS	333, tan body	
	8	C5,C7,C19,C25 C27,C29,C32,C34	0.1 μF ceramic, 0.1" LS	104, tan body	
	1	C10	1 μF 50V electrolytic, 0.1" LS	1 μF, black	Note polarity
	4	C3,C6,C9,C13,	4.7 μF 16V electrolytic, 0.1" LS	4.7 μF, blue	Note polarity
	1	C12	47 μF 16V electrolytic, 0.1" LS	47 μF, black	Note polarity
			DIODES		
	3	D1, D2, D3	1N5819 Schottky diode	1N5819	Note polarity
	1	D4	Red/Green bi-color LED, 5 mm, common cathode, water clear lens		Note polarity, installed under top panel
	1	D5	1N914 Silicon small signal diode	1N914	Note polarity
			CONNECTORS		
	1	J1	BNC jack		Antenna
	1	J2	2.1x5.5 mm coaxial power jack		Power input
	1		2.1x5.5mm coaxial power plug		Mates with J2
	1	J3	1/8" mono jack, metal frame		Key
	1	J4	1/8" stereo jack, plastic housing		Phones
	2	J5, J6	Molex® female pins		Crystal socket
			INDUCTORS		
	1	L1	T68-7 iron powder toroid core	White body	
	1	L2	1.0 μH molded choke	Silver-Brown- Gold-Black-Silver	L2 is the physically larger choke
	1	L4	470 μH molded choke	Silver-Yellow- Violet-Brown- Silver	L4 is the physically smaller choke
			TRANSISTORS		
	2	Q1, Q3	2N3904 NPN BJT, TO-92	2N3904	
	1	Q2	J-310 JFET, TO-92	J-310	
	2	Q4, Q6	IRF510 MOSFET, TO-220	IRF510	Static sensitive
	1	Q5	2N7000 MOSFET, TO-92	2N7000	Static sensitive
	1	Q7	IRF-9640 MOSFET, TO-220	IRF-9640	Static sensitive, PC board is marked "IRF9Z24"

RESISTORS					
1	R16	100 Ω 1/4W 5% resistor	BRN-BLK-BRN		
2	R17, R19	1.0 K 1/4W 5% resistor	BRN-BLK-RED		R19 is installed under the top panel
1	R20	2.2 K 1/4W 5% resistor	RED-RED-RED		R20 is installed under the top panel
1	R3	2.7 K 1/4W 5% resistor	RED-VIO-RED		
2	R7, R12	3.3 K 1/4W 5% resistor	ORG-ORG-RED		
1	R5	33 K 1/4W 5% resistor	ORG-ORG-ORG		
1	R15	100 K 1/4W 5% resistor	BRN-BLK-YEL		
1	R13	330 K 1/4W 5% resistor	ORG-ORG-YEL		
4	R9,R11,R14,R18	470 K 1/4W 5% resistor	YEL-VIO-YEL		
2	R2, R4	1.0 M 1/4W 5% resistor	BRN-BLK-GRN		
1	R21	4.7 K 1/4W 5% resistor	YEL-VIO-RED		
1	R22	10 K 1/4W 5% resistor	BRN-BLK-ORG		
POTENTIOMETERS					
1	R1	5.0 K potentiometer	B5 02		$50 \times 10^2 = 5,000$
3	R6, R8, R10	50 K potentiometer	B5 03		$50 \times 10^3 = 50,000$
SWITCH					
1	SW1	4-pole 3-position rotary switch			
INTEGRATED CIRCUITS					
1	U1	NJM2113 audio amp DIP-8	NJM2113		Use supplied socket
1	U2	78L06 voltage regulator TO-92	78L06		
CRYSTALS					
1	X1	7030 kHz quartz crystal HC-49	7030		
1	X2	7122 kHz quartz crystal HC-49	7122		
2		Crystal Adapter PC board	Cajun Crystals		
OTHER HARDWARE					
1		Top panel PC board	Rev C		red solder mask
1		Main PC board	Rev C		green solder mask
2		Nylon screw insulator/bushing			Use with J5 & J6
1		“chicken head” pointer knob, will require an Allen wrench, 1.5 mm			OFF-Rx-Tx switch
3		Small control knob			VOLUME, REGEN, ATTEN controls
1		Large dial knob			Main tuning
4		2” long x 3/8” square wood post			For box mounting
15		3/8” #6-32 machine screw			For standoffs
6		5/8” #6-32 F-F hex standoff			Board-to-board
1		1/2” #6-32 M-F hex standoff			For xtal test post
1		3/16” #6-32 machine screw			For xtal test post
1		3/8” #6-32 F-F hex standoff			For CW key
1		Key knob			For CW key
4		#6-32 hex nuts			For CW key
1		PCB ”leaf spring” lever			For CW key
4		#6 flat washers			For CW key
1		3/8” #8-32 BRASS screw			For CW key
4		#6-32 sheet metal screws			joins panel to box
1		#4-40 x 1/2” machine screw			For Q7 mounting

	1		#4-40 nut		For Q7 mounting
	6 ft		AWG #24 enameled magnet wire		For toroid L1
	9 in		AWG #22 tinned bus wire		For jacks and jumpers
	6 in		AWG #10 bare copper wire		For crystal pins
	3 in		Red and Black insulated wire		For power jack
	12 in		“Dupont” female-female jumper wire		LED connections
	5	TP1, V-reg, GRN/RxVcc, RED	Header pins, 1 conductor		1 spare supplied
	1		DIP socket 8 pin		Socket for U1
			Optional parts for modifications Parts identified with * are NOT Supplied with the kit		See manual appendices
	1	*R5a	TBD, could be potentiometer		
	1	*C33	TBD, approx. 560 pF		
	1	*Filter switch	SPST miniature toggle		For Soup’er Up’er
	1	*Fine Tuning	1K potentiometer Bourns series PV09, 25 mm shaft, center detent Bourns PTV09A-4225F-B102		For Soup’er Up’er Same physical size & type as R1
	1	*C20a	10 pF NP0 ceramic, 0.2” LS	10	if needed to move tuning range lower
	1	C35	0.22 μ F ceramic	224	alternative C34 for softer keying option
			Components for the modification described in APPENDIX R:		
	1	R23	200 Ω 1/4W 5% carbon film	RED-RED-BRN	
	1	R24	10 K 1/4W 5% carbon film	BRN-BLK-ORG	
	1	D6	Zener diode 5.6V	1N4734	note polarity
			Components for the modification described in APPENDIX Q: To be installed on the underside of the top panel		
	3	C1, C3, C6	0.01 μ F 50 V ceramic, 0.2” lead space	103	
	1	C2	150 pF 50 V NP0/COG ceramic 0.2” lead space	151	
	1	C4	200 Pf or 220 pF 50 V NP0/COG ceramic, 0.2” lead space	201 or 221	
	1	R1	4.7 K 1/4W 5% carbon film	YEL-VIOL-RED	
	1	R2	22 K 1/4W 5% carbon film	RED-RED-ORG	
	1	R3	2 K 1/4W 5% carbon film	RED-BLK-RED	
	1	R4	100 Ω 1/4W 5% carbon film	BRN-BLK-BRN	
	1	R5	1 K 1/4W 5% carbon film	BRN-BLK-RED	
	1	Q1	2N3904 NPN BJT, TO-92	2N3904	
	1	L1	22 μ H molded choke	RED-RED-BLK	
	1	Wire Jumper	4” long, with header socket at one end		
	2	# 4-40 x 1/2” Phillips head machine screw			
	2	# 4-40 nut			