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IF AMPLIFIERS
INSTRUCTION MANUAL
IF-212-500

ASTRO COMMUNICATION LABORATORY
9125 Gaither Road
Gaithersburg, Maryland

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IF AMPLIFIERS

Introduction:

This manual is a supplement to the SR-209 VHF/UHF Receiver Instruction Manual. It contains a parts list, and a schematic diagram of the IF Amplifier(s) modules supplied with your SR-209 VHF/UHF Receiver.

Additional information on these modules is contained in the SR-209 Instruction Manual. This includes; Specifications, Section II, Theory of Operation, Section IV, Maintenance, Section V and data required for parts procurement, Section VI.

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SYM OR ITEM	NOMENCLATURE OR DESCRIPTION	MFR	PART NO.	QTY REQ
C1	Capacitor, Fxd, Ceramic Die. 0.001 μ f \pm 20% 1000 vdc	81349	CK60AW102M	2
C2	Capacitor, Fxd, Ceramic Die. 0.01 μ f \pm 80-20% 50 vdc	56289	19C214	24
C3	Same as C2			
C4	Same as C2			
C5	Same as C2			
C6	Capacitor, Fxd, Mica Die. 15 pf \pm 5% 500 vdcw	84171	DM10-150J	6
C7	Capacitor, Fxd, Composition 0.22 pf \pm 10% 500 vdc	95121	MC-0.22	1
C8	Same as C2			
C9	Same as C6			
C10	Capacitor, Fxd, Mica Die. 150 pf \pm 5% 500 vdcw	84171	DM10-151J	1
C11	Same as C2			
C12	Same as C2			
C13	Same as C2			
C14	Same as C2			
C15	Same as C2			
C16	Same as C6			
C17	Capacitor, Fxd, Composition 0.75 pf \pm 10% 500 vdcw	95121	MC-0.75	1
C18	Same as C6			
C19	Capacitor, Fxd, Mica Die. 220 pf \pm 5% 500 vdcw	84171	DM10-221J	1
C20	Capacitor, Fxd, Mica Die. 33 pf \pm 5% 500 vdcw	84171	DM10-330J	1
C21	Same as C2			
C22	Same as C2			
C23	Same as C2			
C24	Same as C2			

Courtesy of <http://BlackRadios.terryo.org>

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SYM OR ITEM	NOMENCLATURE OR DESCRIPTION	MFR	PART NO.	QTY REQ
C25	Same as C2			
C26	Same as C2			
C27	Capacitor, Fxd, Composition 4.7 pf $\pm 10\%$ 500 vdcw	95121	MC-4.7	1
C28	Capacitor, Fxd, Ceramic Die. 8.2 pf $\pm .25$ pf, NPO ± 60 ppm	72982 81349	301-COH-829C CC20CH8R2C	1
C29	Same as C2			
C30	Same as C2			
C31	Same as C2			
C32	Capacitor, Fxd, Mica Die. 12 pf $\pm 5\%$ 500 vdcw	84171	DM10-120J	1
C33	Same as C1			
C34	Same as C2			
C35	Same as C2			
C36	Capacitor, Fxd, Composition 1.5 pf $\pm 10\%$ 500 vdc	95121	MC-1.5	2
C37	Same as C36			
C38	Same as C6			
C39	Same as C6			
C40	Capacitor, Fxd, Mica Die. 82 pf $\pm 5\%$ 500 vdcw	84171	DM10-820J	2
C41	Same as C40			
C42	Same as C2			
C43	Same as C2			
C44	Same as C2			
CR1	Semiconductors			3

Courtesy of <http://BlackRadios.terry.org>

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SYM OR ITEM	NOMENCLATURE OR DESCRIPTION	MFR	PART NO.	QTY REQ
CR2	Same as CR1			
CR3	Same as CR1			
L1	Inductance Variable	19905	AC-257-3	8
L2	Same as L1			
L3	Same as L1			
L4	Same as L1			
L5	Inductance Fixed 5.6 uh	96906	MS75008-37	1
L6	Same as L1			
L7	Inductance Fixed, 12 uh	96906	MS75008-41	3
L8	Same as L1			
L9	Same as L7			
L10	Same as L1			
L11	Same as L1			
L12	Same as L7			
Q1	Transistor	19905	SA-395	10
Q2	Same as Q1			
Q3	Same as Q1			

Courtesy of <http://BlackRadios.terryo.org>

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SYM OR ITEM	NOMENCLATURE OR DESCRIPTION	MFR	PART NO.	QTY REQ
Q4	Same as Q1			
Q5	Same as Q1			
Q6	Same as Q1			
Q7	Same as Q1			
Q8	Same as Q1			
Q9	Same as Q1			
Q10	Same as Q1			
R1	Resistor, Fixed, Composition 100 ohms $\pm 5\%$ 1/4 w	81349	RC07GF101J	16
R2	Resistor, Fixed, Composition 68 ohms $\pm 5\%$ 1/4 w	81349	RC07GF680J	1
R3	Same as R1			
R4	Resistor, Fixed, Composition 10 k ohms $\pm 5\%$ 1/4 w	81349	RC07GF103J	6
R5	Same as R4			
R6	Same as R1			
R7	Resistor, Fixed, Composition 47 ohms $\pm 5\%$ 1/4 w	81349	RC07GF470J	1
R8	Resistor, Fixed, Composition 2.2 k ohms $\pm 5\%$ 1/4 w	81349	RC07GF222J	3
R9	Resistor, Fixed, Composition 1 k ohms $\pm 5\%$ 1/4 w	81349	RC07GF102J	1
R10	Same as R1			
R11	Not Used			
R12	Same as R1			
R13	Resistor, Fixed, Composition 150 ohms $\pm 5\%$ 1/4 w*	81249	RC07GF151J	1
R14	Same as R4			

Courtesy of <http://BlackRadios.terryo.org>

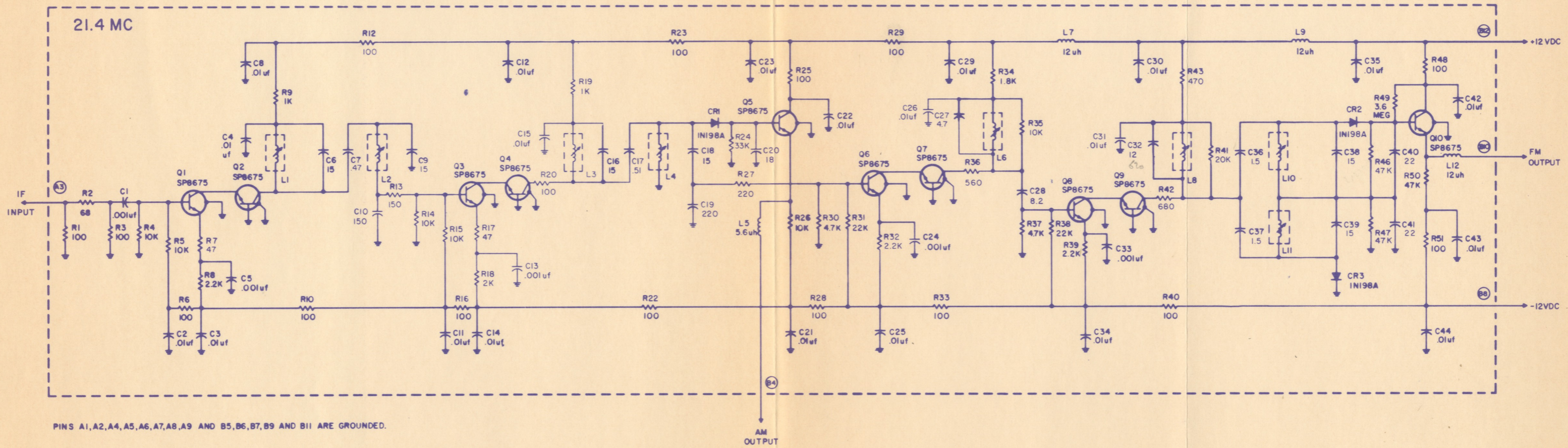
*Nominal Value

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SYM OR ITEM	NOMENCLATURE OR DESCRIPTION	MFR	PART NO.	QTY REQ
R15	Same as R4			
R16	Same as R1			
R17	Resistor, Fixed, Composition 22 ohms $\pm 5\%$ 1/4 w	81349	RC07GF220J	1
R18	Resistor, Fixed, Composition 1.5 k ohms $\pm 5\%$ 1/4 w	81349	RC07GF152J	1
R19	Same as R1			
R20	Resistor, Fixed, Composition 270 ohms $\pm 5\%$ 1/4 w	81349	RC07GF271J	1
R21	Not Used			
R22	Same as R1			
R23	Same as R1			
R24	Resistor, Fixed, Composition 33 k ohms $\pm 5\%$ 1/4 w	81349	RC07GF333J	1
R25	Same as R1			
R26	Same as R4			
R27	Resistor, Fixed, Composition 220 ohms $\pm 5\%$ 1/4 w	81349	RC07GF221J	1
R28	Same as R1			
R29	Same as R1			
R30	Resistor, Fixed, Composition 4.7 k ohms $\pm 5\%$ 1/4 w	81349	RC07GF472J	3
R31	Resistor, Fixed, Composition 22 k ohms $\pm 5\%$ 1/4 w	81349	RC07GF223J	3
R32	Same as R8			
R33	Same as R1			
R34	Resistor, Fixed, Composition 1.3 k ohms $\pm 5\%$ 1/4 w	81349	RC07GF182J	1
R35	Same as R4			
R36	Resistor, Fixed, Composition 560 ohms $\pm 5\%$ 1/4 w	81349	RC07GF561J	1
R37	Same as R30			
R38	Same as R31			

Courtesy of <http://BlackRadios.terryo.org>

UNLESS OTHERWISE SPECIFIED:
ALL RESISTOR VALUES ARE IN OHMS, 1/4 W, 5%.
ALL CAPACITOR VALUES ARE IN pf.



500KC BANDWIDTH IF AMPLIFIER IF-212-500

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