

OPERATING NOTES

Switch S1 is power, LED indicates Power ON

Switch S2 ON will set the 1.7V Bias for MAXTRAC/RADIUS programming when using RJ45 jack with no other changes. Switch should be OFF for other models that use the DB25M connector. Use regular Patch Cable for RJ45 connection to radio.

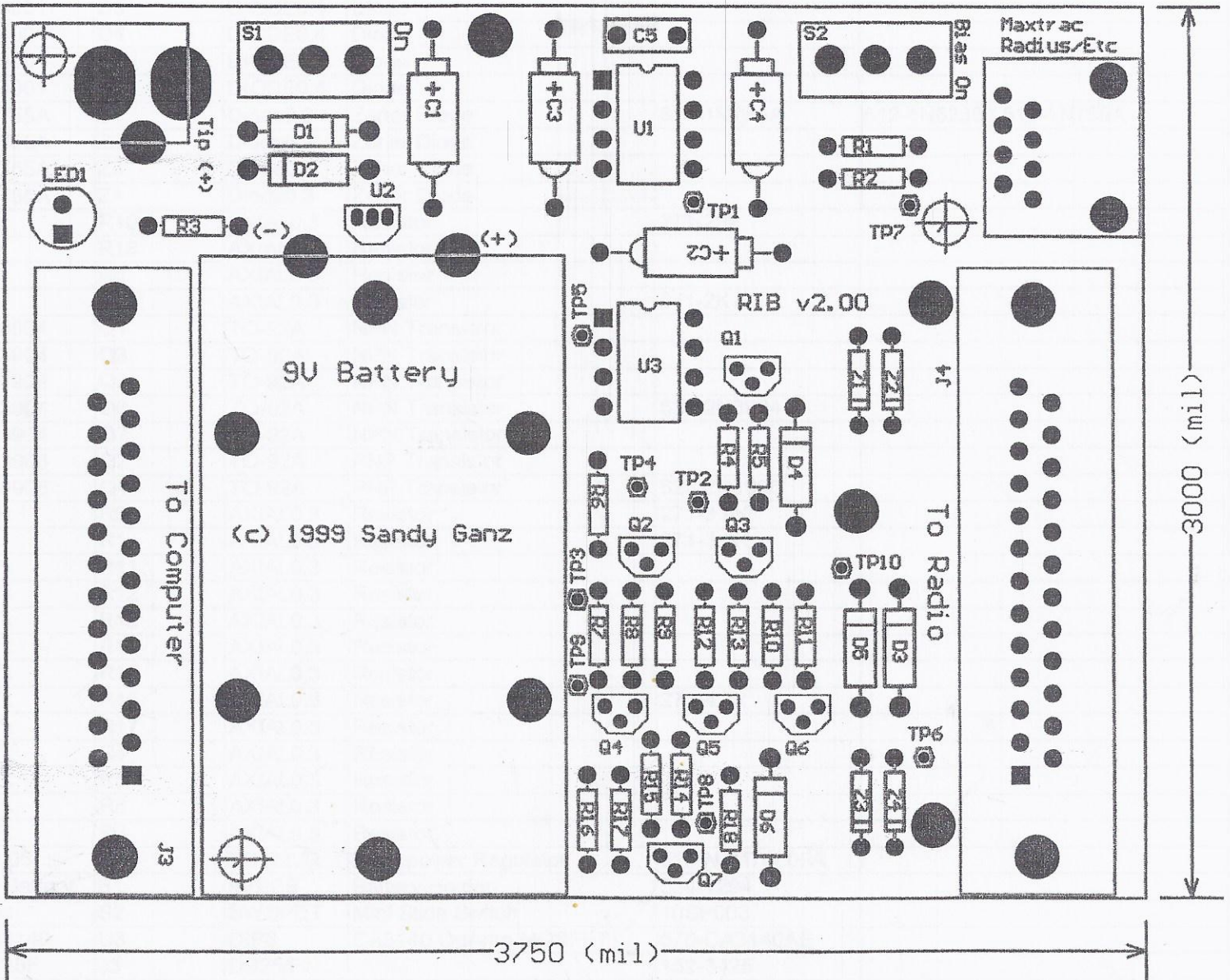
Use 9V battery or 9-12V Positive Tip DC adapter, OK to leave battery with adapter connected.

05/01/1998 v1.00 Initial Try
 05/13/1998 v1.01 Change 1uf to 10uf, 0.001uf to 0.01uf in pwr supply section
 01/28/1999 v1.02 Added missing port for BUSY on Q6

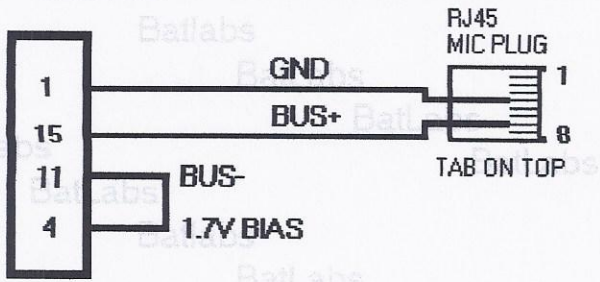
Title		Revision: v1.02	
Radio Interface Board (RIB)		(C)1998,1999 Sandy Ganz	
Size: Letter	Date: 9-Mar-2000	Sheet 1 of 1	
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Sandy Ganz

Top Overlay



RIB to MAXTRAC/RADIUS/GM300/ETC.



TO RIB
25 PIN "D"

RIB Card Parts

Part Type	Designator	Footprint	Description	Mouser Part#	Notes/Alternate Part Numbers
0.01uF	C5	RAD0.2	CAP	581-SA105E103M	581-SA105E104M
1.5k	R2	AXIAL0.3	Resistor	271-1.5K	
10uF	C1	POLAR0.6	Electrolitic	140-XAL50V10	
10uF	C2	POLAR0.6	Electrolitic		
10uF	C3	POLAR0.6	Electrolitic		
10uF	C4	POLAR0.6	Electrolitic		
1N4001	D1	DIODE0.4	Diode	583-1N4002	1N4001-1N4004 All Work OK
1N4001	D2	DIODE0.4	Diode		
1N4001	D3	DIODE0.4	Diode		
1N4001	D4	DIODE0.4	Diode		
1N4001	D5	DIODE0.4	Diode		
1N4001	D6	DIODE0.4	Diode		
1N755A	Z1	Diode0.3	Zener Diode	610-1N755A	512-1N5236 / 512-1N755A
1N755A	Z2	Diode0.3	Zener Diode		
1N755A	Z3	Diode0.3	Zener Diode		
1N755A	Z4	Diode0.3	Zener Diode		
20k	R10	AXIAL0.3	Resistor	271-20k	
20k	R18	AXIAL0.3	Resistor		
2k	R6	AXIAL0.3	Resistor		
2k	R7	AXIAL0.3	Resistor	271-2K	
2N3904	Q1	TO-92A	NPN Transistor		
2N3904	Q3	TO-92A	NPN Transistor		
2N3904	Q5	TO-92A	NPN Transistor		
2N3904	Q6	TO-92A	NPN Transistor	625-2N3904	
2N3904	Q7	TO-92A	NPN Transistor		
2N3906	Q2	TO-92A	PNP Transistor		
2N3906	Q4	TO-92A	PNP Transistor	625-2N3906	
3.9k	R3	AXIAL0.3	Resistor	271-3.9K	
3k	R1	AXIAL0.3	Resistor	271-3.0K	
4.7k	R11	AXIAL0.3	Resistor		
4.7k	R12	AXIAL0.3	Resistor		
4.7k	R13	AXIAL0.3	Resistor		
4.7k	R14	AXIAL0.3	Resistor		
4.7k	R15	AXIAL0.3	Resistor		
4.7k	R16	AXIAL0.3	Resistor	271-4.7k	
4.7k	R17	AXIAL0.3	Resistor		
4.7k	R4	AXIAL0.3	Resistor		
4.7k	R5	AXIAL0.3	Resistor		
4.7k	R8	AXIAL0.3	Resistor		
4.7k	R9	AXIAL0.3	Resistor		
78L05	U2	TO-92VR	Micropower Regulator	513-NJM78L05A	
9V Battery	B1	9VPCB	Battery Holder	534-1294	
Bias	S2	SWSPDT	Mini Slide Switch	10SP003	
CA3140	U3	DIP8	CA3140 OpAmp MOSFET	570-CA3140AE	
DB25F	J3	DB25/F		152-3425	
DB25M	J4	DB25/M		152-3325	
EXTPWR	J1	PWRJACK	Power Jack	16PJ031	
ICL7660	U1	DIP8	Capacitor Switched Converter	513-NJU7660D	
LED	LED1	LED1	Light Emitting Diode	604-L53ID	Most any LED will work <i>604-WP 7119</i>
RJ45-JACK	J2	RJ45PCB	RJ45 Connector	571-5551641	
SPST	S1	SWSPDT	Mini Slide Switch	10SP003	

REF.	Qty	PART No	DESC	PRICE EA
B1	1	534-1294	BATTERY HOLDER	1.00
C1-4	4	140-XAL50V10-RC	ELECTROLYTIC CAP	.25
C5	1	581-SA105E103M	CAPACITOR	.09
D1-6	6	512-1N4002	DIODE	.06
J1	1	16PJ031	POWER JACK	.93
J2	1	571-5551641	RT45 CONN.	.66
J3	1	152-3425	DB-25 FEMALE CONN.	1.79
J4	1	152-3325	DB-25 MALE CONN.	1.75
LED1	1	604-WP7113IT	LIGHT EMITTING DIODE	.14
Q1,3,5,6,7	5	610-2N3904	NPN TRANSISTOR	.10
Q2,4	2	610-2N3906	PNP TRANSISTOR	.10
R1	1	271-3.0K-RC	3.0K-1/4W-1%	.09
R2	1	271-1.5K-RC	1.5K-1/4W-1%	.09
R3	1	271-3.9K-RC	3.9K-1/4W-1%	.09
R4,5,8,9, 11-17	11	271-4.7K-RC	4.7K-1/4W-1%	.09
R6,7	2	271-2K-RC	2K-1/4W-1%	.09
R10,18	2	271-20K-RC	20K-1/4W-1%	.09
S1,2	2	10SP003	SPDT SLIDE SW.	.36
U1	1	513-NJU#7660D	VOLTAGE CONVERTER	.54
U2	1	511-L78L05ACZ	VOLTAGE REG.	.27
U3	1	837-CA3140E	MOSFET OP AMP	.47
Z1-4	4 OR	610-1N755A	7.5V-1/2W	.18
	4	512-1N755A	ZENER DIODE	.09

LED L = 0.339 DIA - BASE = 0.232, BULB = 0.197
 ITEM NUMBER
 604-WP7113IT