

Dear OM:

Here is a simple Gunnplexer hookup that WA2ZKD and I have been using for several months now. It has been very easy to use, and we have had a lot of fun "hilltopping" with them. I suggest you make one or both of your units portable, as the spots you have to get to for line of sight paths are not always accessible by road (even with 4-wheel drive). Hi!

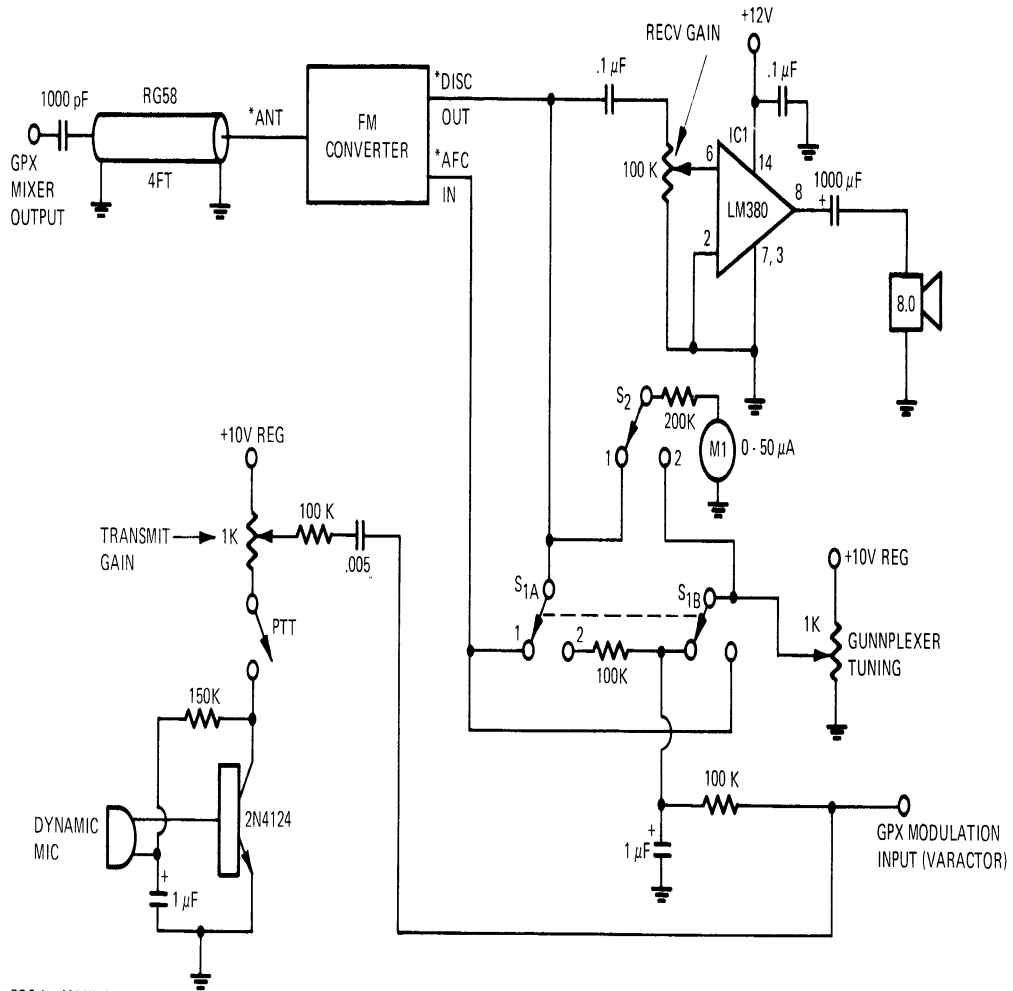
Start your initial tune-up with the units only a few hundred feet apart. Set the varactor bias on the free running unit to about 4 volts. On the "AFC/D" unit set S_1 to position 1 (manual) and S_1 to position 2 (tuning voltage). Tune the bias pot until you hear the converter noise quiet, and note the M_1 reading. If it reads between 2.5 to 5.5 volts, you can switch S_1 to the AFC position and you should be "locked". If not, adjust the GPX manual tuning until you can acquire signal in the 2.5 to 5.5 volt range. Then move the S_1 to "AFC" and lock the two units. Now switch S_2 to read AFC voltage and tweak the GPX manual tuning until M_1 reads exactly 4 volts. Now you should be "locked" at exactly center tuning on your converter. If the FM receiver on the other end is now tuned to the same frequency as yours, you will have a two-way audio path.

If your units won't lock with the above procedure, it means you are tuned to the wrong side of carrier. Just tune the manual frequency adjust until you get another signal, and try again.

Once these adjustments are made, you need only set up at your "DX" location, aim your antenna, switch to manual and tune near 4 volts until you acquire signal. Then flip S_1 to AFC and you are in communication!

Good luck and good DX.

73's
Paul Jacobs W21OG
46 Valley Brook Drive
Fairport, NY 14450

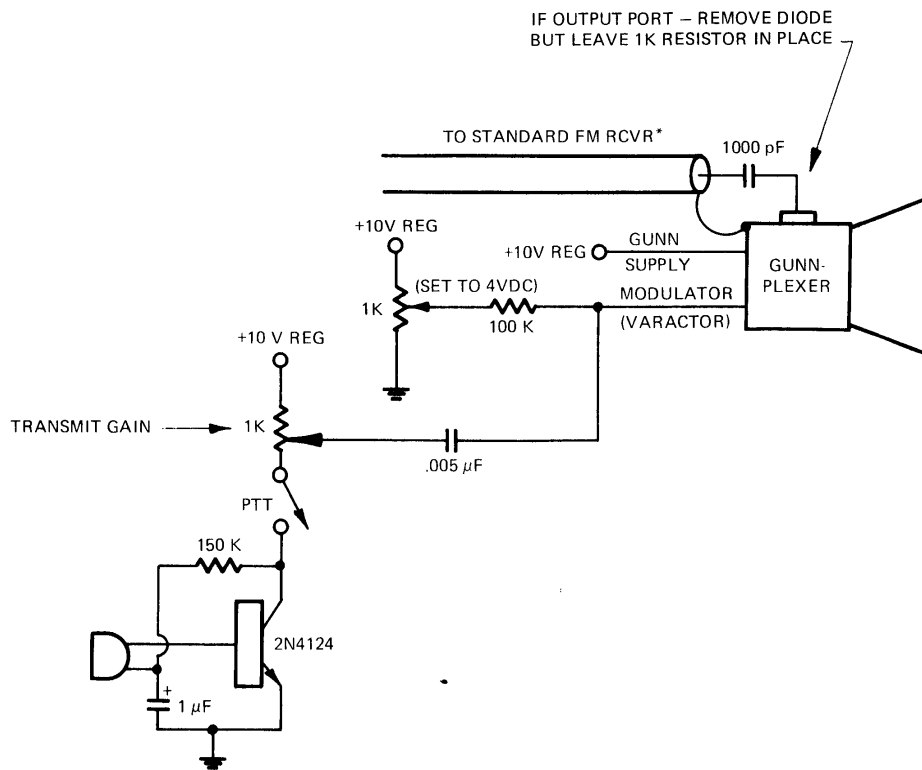


S₁ POS 1 = MANUAL TUNE
 S₁ POS 2 = AFC

S₂ POS 1 M₁ READS AFC VOLTAGE
 S₂ POS 2 M₁ READS TUNING VOLTAGE

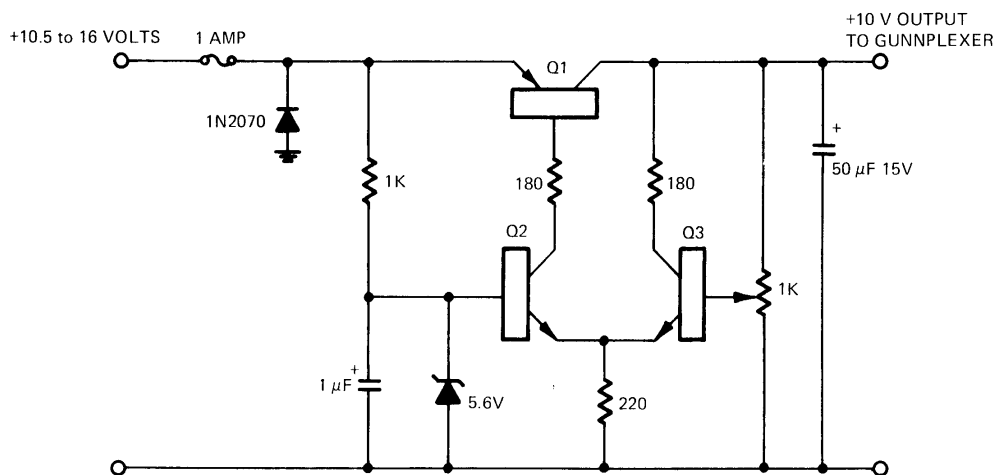
*SEE CONVERTER SCHEMATIC

GUNNPLEXER IF, AUDIO, AFC, AND MODULATOR Use on one end of link only.



*AUTOMOBILE TYPE FM RECEIVERS ARE FAIRLY WELL SHIELDED AND THUS GIVE THE BEST IF REJECTION.

**HOOKUP FOR OTHER END OF SIMPLE GUNNPLEXER LINK
(Free Running)**

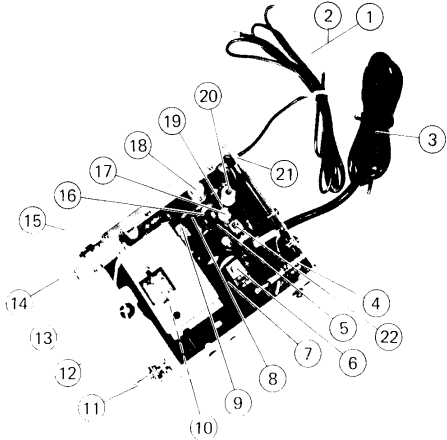


Q₁ – 10 AMP PNP SILICON – 2N3789 OR OTHER

Q₂, Q₃ – ANY SMALL SIGNAL SILICON NPN (2N4124)

**10 VOLT REGULATOR FOR GUNNPLEXER
WILL HOLD REGULATION DOWN TO 10.5 VOLTS ON INPUT**

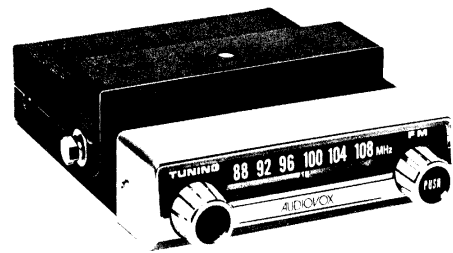
• ASSEMBLY



• PARTS LIST

NO.	SYMBOL	DESCRIPTION	PARTS NO.
1.		Fuse Holder	
2.		Fuse (1 A)	
3.		Output Cable	
4.	J1	Antenna Jack	
5.	IC1	IC TA7130P	
6.	L6	AM OSC TRANS	
7.	FET2	Transistor 2SK44	
8.	TR3	Transistor 2SC785/2SC460	
9.	IFT1	IF Transformer	
10.		Dial Drum	
11.		Tuning Shaft	
12.		Dial Pointer	
13.	PL-1	Pilot Lamp	
14.	S1, S2	Push Switch	
15.		FRONT END	
16.	CF-1	Ceramic Filter	
17.	C23	100/10 V Electrolytic	
18.	C21	100/16 V Electrolytic	
19.	D2	Diode WZ-081	
20.	L7	Filter Choke	
21.		U Bushing	
22.	IFT2	IF Transformer	

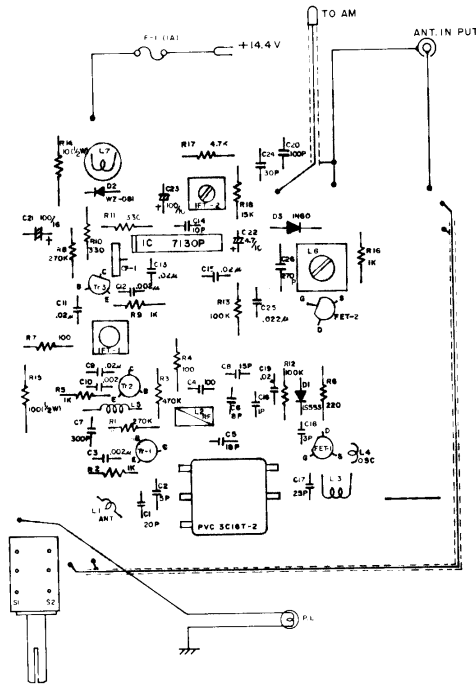
**FM-CONVERTER
SERVICE INFORMATION
MODEL FMC-IC**



AUDIOVOX

SM 13411

• PRINT CIRCUIT BOARD



• SCHEMATIC DIAGRAM

