

INCREASING THE GAIN OF MODEL PV

Resistor R3 is a 47 ohm resistor that has been added in the PV Preamplifier to insure complete stability of the unit. The gain of the Preamplifier with this 47 ohm resistor is approximately 20 db. Without it, the gain can go up as much as another 10 db. However, in some installations, the absence of the 47 ohm resistor will cause serious instability and/or bandwidth problems. This is due to the fact that the antenna coil in any converter is tightly coupled and the addition of another tightly coupled tuned circuit may produce extreme over-coupling, which may result in oscillation, low gain, poor bandwidth, poor image rejection, etc.

If the user is technically inclined, he may experiment by gradually increasing the value of R_3 to a point where he gets optimum gain while maintaining good stability.

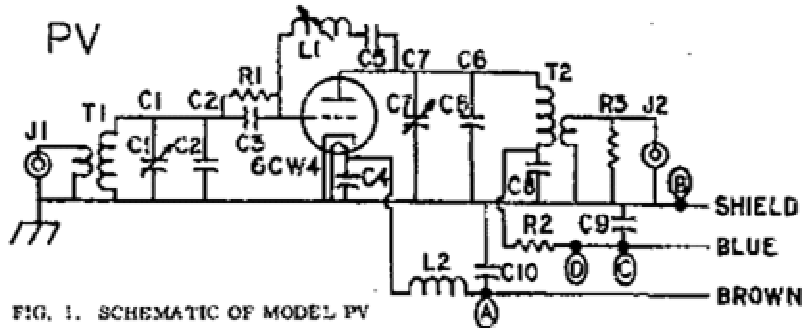


FIG. 1. SCHEMATIC OF MODEL PV

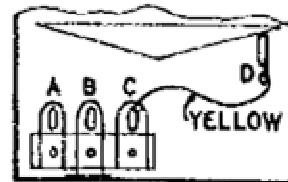


FIG. 2. TERMINAL STRIP IN PV

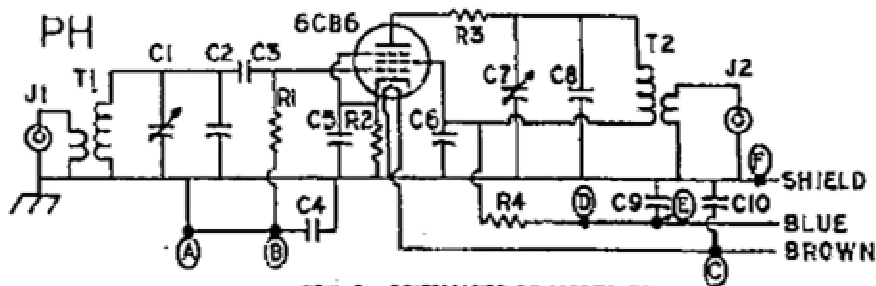


FIG. 3. SCHEMATIC OF MODEL PH

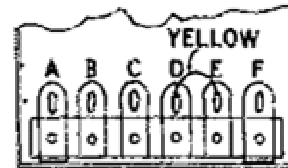


FIG. 4. TERMINAL STRIP IN PH

PARTS LIST

	PV	PH		PV	PH		PV	PH
C1	1-8 mmfd.	8-50 mmfd.	C8	.001 mfd.	Same as C2	R1	47K	470K
C2	Depends on freq. if used		C9	.005 mfd.	.005 mfd.	R2	5.6K	100
C3	100 mmfd.	100 mmfd.	C10	.005 mfd.	.005 mfd.	R3	47	10
C4	.001 mfd.	.005 mfd.				R4	---	1000
C5	100 mmfd.	.005 mfd.	L1	Neutralizing	---			
C6	Same as C2	.005 mfd.	L2	Fl. Choke	---	T1	Antenna transformer	
C7	1-8 mmfd.	8-50 mmfd.				T2	Output transformer	