124-TYPE AMPLIFIERS — DESCRIPTION

1. GENERAL

1.01 This Addendum gives information as to the arrangements to be employed to operate the 124B Amplifier with a G-4-0 bridge connected to its output. Such an arrangement might be used to establish bridging points for special or emergency services on high quality program facilities and for bridging points on medium quality services.

1.02 The connections to be employed are shown in Fig. 1. It will be noted that under these conditions the amplifier is connected for a 92-ohm load and the impedance looking back into the amplifier output terminals will be in the order of 60 ohms. The 130-ohm shunt between the amplifier output and the bridge input makes the impedance presented to the amplifier approximately 90 ohms, and also furnishes the proper termination for the bridge input.

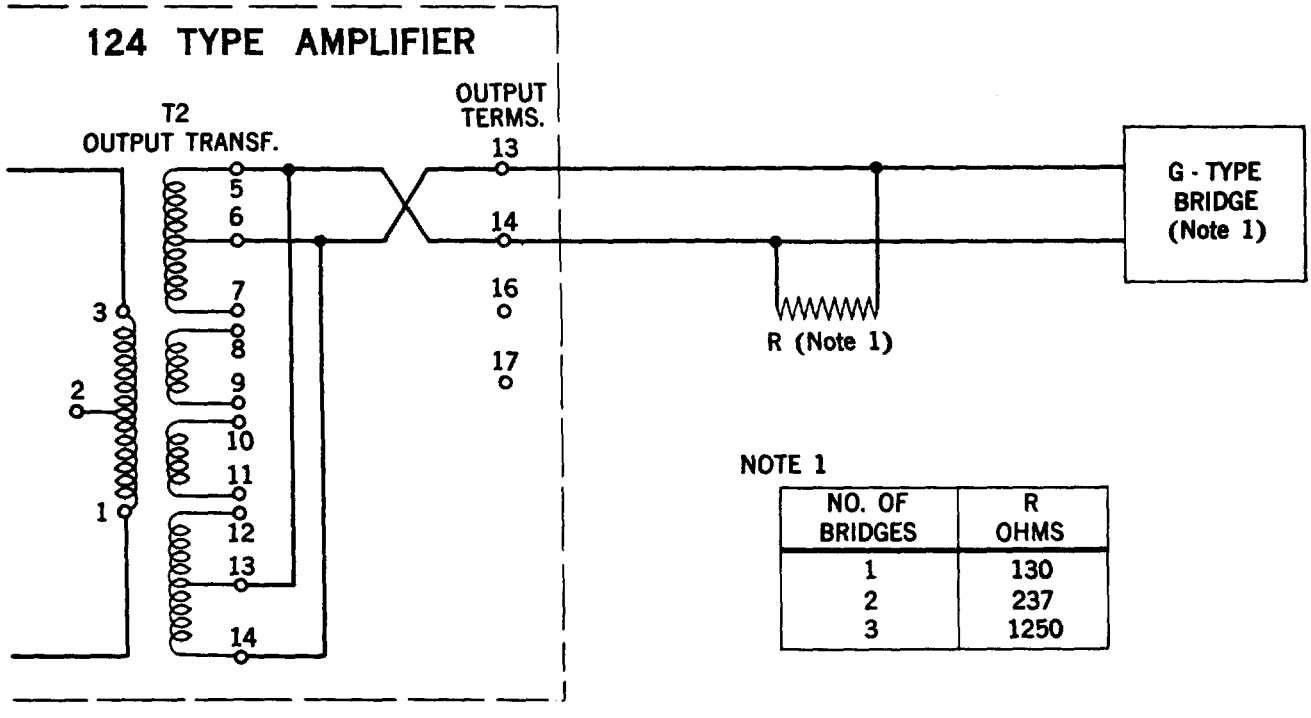
1.03 If additional high level outputs (+14 vu) are required, they can be furnished by additional bridges, in which case the shunt resistance will be

No. of Bridges	Shunt Resistance
2	237 ohms
3	1250 ohms

1.04 The above arrangements can be used also with other G-type bridges in cases where only low level (+8 vu) or combinations of high level and low level outputs are desired.

1.05 With the arrangements described in this Addendum, the transmission performance will be substantially the same as that of the 124-type amplifier alone except that the gain and output noise, as measured at a bridge outlet, will be affected as follows -

Type of Outlet	Effect on Gain and Output Noise
+14 vu	Reduced by 14 db
+ 8 vu	" " 20 db



NOTE 1

NO. OF BRIDGES	R OHMS
1	130
2	237
3	1250

Fig. 1