



VITAVOX

TYPE GP 1

PRESSURE UNITS

The VITAVOX Type GP.1 Pressure Unit is designed particularly as a general purpose unit having the minimum size and weight consistent with a high standard of performance and reliability. It is eminently suitable for incorporation in outdoor installations, for which purpose a range of circular and multicellular horns is available but also finds application in the high frequency section of medium quality dual-channel loudspeaker systems. It can be used with any horn having the Vitavox "E" entry thread. To ensure best results from the unit it is desirable that the output of the amplifier should be attenuated at frequencies below the cut-off of the horn with which it is being used. The following are among the outstanding features of the design:

Magnet System The Magnet, made of the latest high efficiency alloy material, is of the centre pole variety. There is no external field and consequently the unit will not act as a collector of steel parts and filings.

Diaphragm and Voice Coil The Diaphragm is made of non-corrodible Duralumin alloy — proof even against salt-laden atmospheres. The diaphragm has a tangential surround and is formed in one piece so that the voice coil former is part of the diaphragm. This results in a very robust assembly and it is virtually impossible for the coil to become detached under

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FOR SPECIFICATION AND
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normal operating conditions. Phosphor bronze lead-out strips are fitted, arranged so that they offer no resistance to the movement of the diaphragm.

Accuracy of Assembly The width of the voice coil gap is maintained within .001" by the use of an accurately machined locator registering the top plate with relation to the pole cap. It is impossible for the assembly to go out of centre. A rubber gasket between the throat and the top plate prevents the entry of dust and moisture.

Phase Corrector To ensure maximum H.F. response, the die-cast throat incorporates a device to preserve the phase relationship of sound waves generated at different parts of the diaphragm.

Finish The forged magnet housing and the die-cast throat are both finished in a wear resistant thermo-setting plastic enamel after Bonderizing and zinc-chromating respectively. All other steel parts are chromium plated.

S P E C I F I C A T I O N

Power handling capacity (peak) - - - - -	20 watts
Effective flux - - - - -	80,000 maxwells
Voice coil impedance - - - - -	15 ohms
Voice coil diameter - - - - -	1.96" (5 cm)
Effective area of diaphragm - - - - -	3.02 sq. ins. (19.6 sq. cm)
Throat diameter - - - - -	0.625"
Throat thread - - - - -	Vitavox "E" (1.362" x 18 T.P.I. Whit. form)
Net Weight - - - - -	6 lbs. (2.7 kg)
Weight in stowage box - - - - -	7 lbs. (3.2 kg)
Finish - - - - -	Bronze Hammertone

GP.1 Pressure Unit (complete in stowage box) - CN147
 GP.1 Pressure Unit (without stowage box) - CN148
 Repair outfit (contains two diaphragms, screws, etc.) CN159

