

DESCRIPTION

The Electro-Voice TL606Q low frequency loudspeaker system is a vented-box (bass-reflex) design with gross internal volume of 12.8 cu. ft. The system has been designed for use with four of the Electro-Voice EVM-15L 15 inch loudspeakers. The usable frequency range of the TL606Q is roughly 36 to 600 Hz. The efficiency of the TL606Q is 18% (half-space load, 80 to 800 Hz, 8 ohm nominal impedance) and as a result will generate outputs of 72 acoustic watts at the rated input of 400 watts.

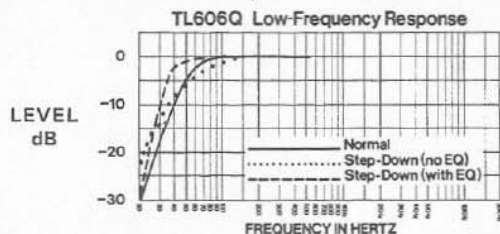
The design provides a selection of two different low frequency response curves by the optional use of a removable port cover. In the normal configuration (port cover off) the response is flat down to the lowest possible frequency. In the step-down configuration (port cover on) the response exhibits a sloping gradual low frequency rolloff but with about a one-half octave extension of low end response. The step down mode of operation is intended to be used with simple before-the-power-amp equalization to flatten the response (only 6 dB maximum boost required). For equalizer details request a copy of E-V Pro Sound Facts No. 1.

The following table lists the box resonance frequency (f_B), the 3 dB down frequency (f_3) and the usable lower limit frequency (f_{LL}) for both configurations.

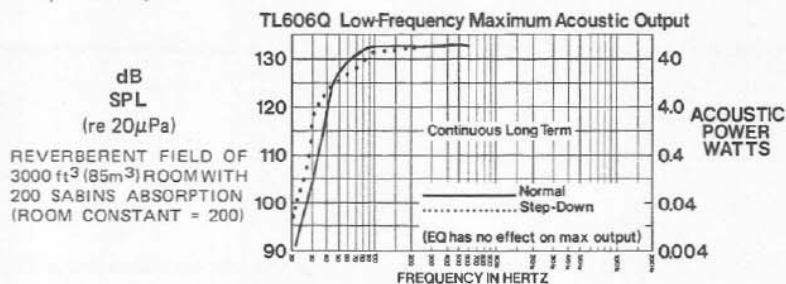
FREQUENCY	NORMAL	STEPDOWN
f_B	53 Hz	40 Hz
f_3	55 Hz	73 Hz
f_3 (with EQ)	—	38 Hz
f_{LL}^*	42 Hz	36 Hz

*The system can generate 8 acoustic watts or more down to f_{LL} .

The following graph shows the system's power output low frequency response in both the normal and step-down modes.

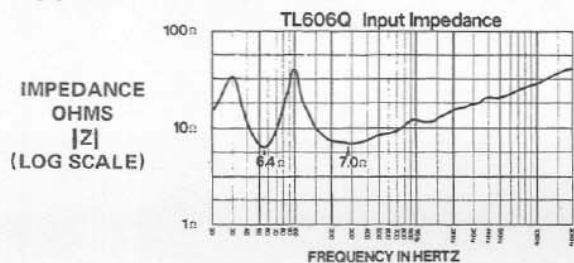


The curve which follows shows the system's low frequency maximum acoustic power output versus frequency. The maximum output is limited by either (1) the thermal power handling capacity of the speaker, or (2) the speaker's maximum linear cone excursion capabilities, whichever occurs first.



Note that some 2 to 3 dB of maximum output in the 60 to 90 Hz range is sacrificed when the step-down mode is used.

The TL606Q input impedance versus frequency is shown in the following graph (normal mode).

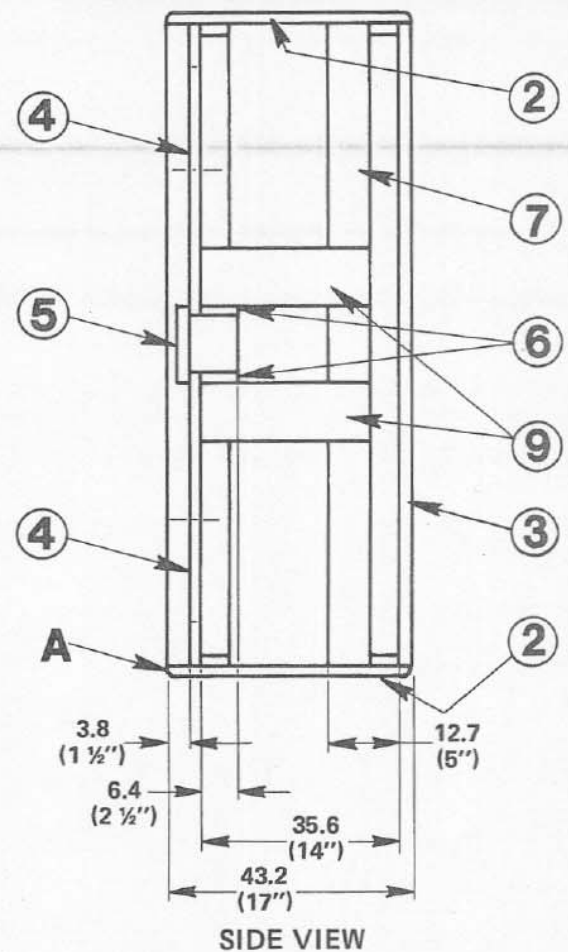


TL606Q

BUILDERS PLANS

(4) EVM-15L,

12.8 cu ft BASS BOX



CONSTRUCTION NOTES:

- All joints should be securely glued and nailed (or
- All joints must be airtight. Seal questionable joint
- Use 1/2" wide weather stripping tape around port
- Speaker must be mounted from front of cabinet. SMH-1 mounting kit or 8 each 10-32 x 1 1/2" bolts
- Handles, trunk corners, and furniture glides or ca
- Input connector should be selected by builder an
- Grille not shown.
- Parts listed and dimensioned in chart below must proper cabinet tuning.
- The builder may select material and dimensional
- Line top, bottom, both sides, and back with 3" f block port opening on inside of cabinet.

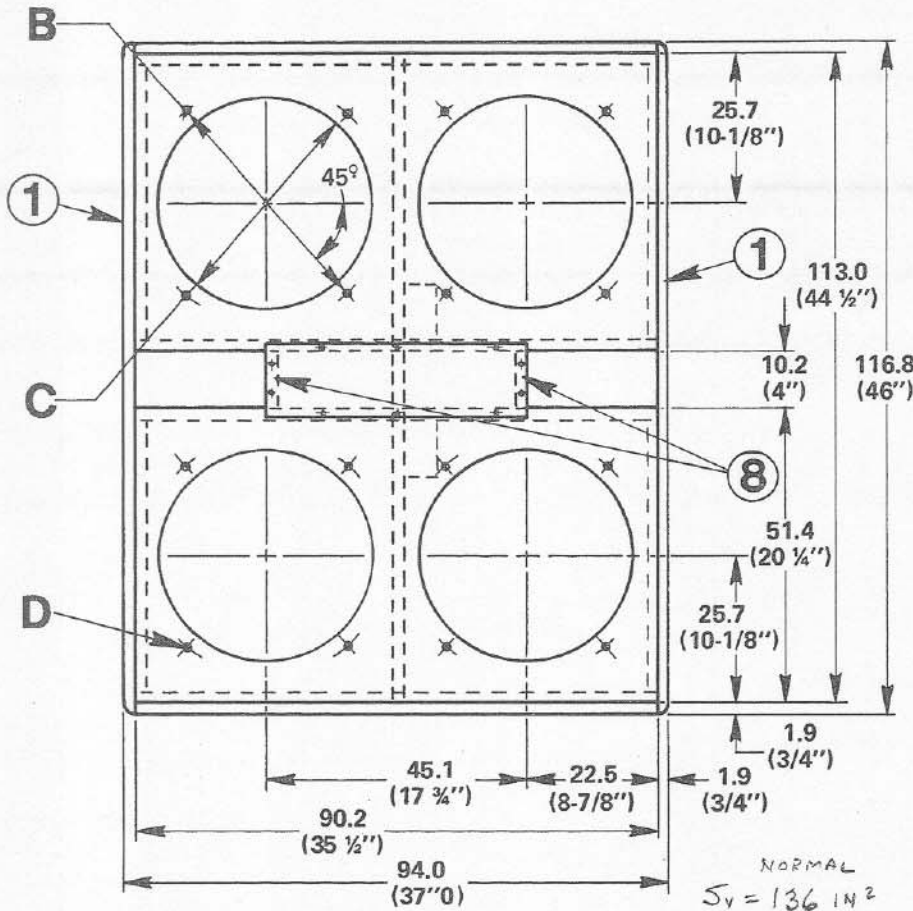
PARTS LI

ITEM	MATERIAL	SIZE
1		43.2 (17") x 17"
2		43.2 (17") x 17"
3	1.9 (3/4") PLYWOOD	90.2 (35-1/2") x 17"
4	OR PARTICLE BOARD	51.4 (20-1/4") x 17"
5		13.3 (5-1/4") x 17"
6		6.4 (2-1/2") x 17"
7		12.7 (5") x 17"
8	1.9 (3/4") x 8.3 (3-1/4") Fir	10.2 (4") x 17"
9	5.1 (2") x 10.2 (4") Fir	35.6 (14") x 17"

Electro-Voice®

a gulton company

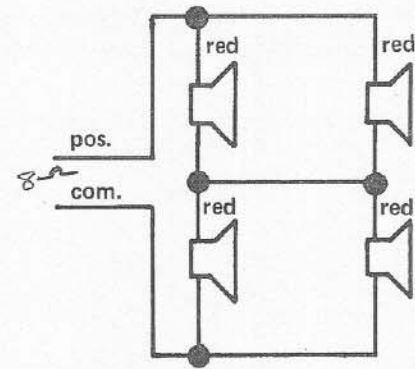
Buchanan, Michigan 49107



FRONT VIEW

ILLUSTRATION NOTES:

- A 1.0 R (3/8") on all 12 edges
- B 42.4 (16-11/16") B.C.
Typ. 4 places
- C 35.7 (14-1/6") dia. thru
Typ. 4 places
- D #1/4-20 Long prong tee nut,
inserted from backside,
(16 places) equally spaced



WIRING DIAGRAM

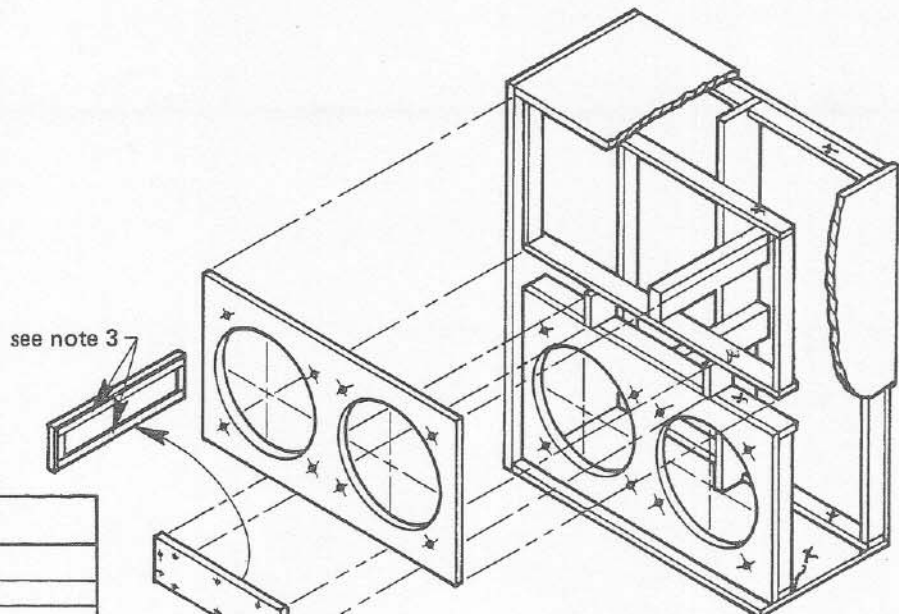
pled).
with silicon based caulking compound.
over (item 5) for airtight seal.
ch speaker may be secured by using the
id teenuts on 14-9/16 inch B.C.
rs may be added at builders option.
mounted on rear.

Inform to dimensions on drawing for

for parts not listed in chart.
erglass insulation. Insulation must not

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	QTY.	REMARKS
116.8 (46")	2	Sides
90.2 (35-1/2")	2	Top and bottom
113.0 (44-1/2")	1	Back
90.2 (35-1/2")	2	Speaker mounting board
45.1 (17-3/4")	1	Port cover
10.2 (35-1/2")	2	Port top and bottom
113.0 (44-1/2")	1	Back panel cleat
	2	Port Divider
	2	Brace



CONSTRUCTION VIEW

$V_B = 12.1 \text{ ft}^3 \text{ (NET) } (20910 \text{ IN}^3)$
 $S_V =$
 $L_V =$

All Dimensions shown in centimeters and (inches).

Part No. 1628 - 622

Litho in U.S.A.