



The VX.1 High Resolution Monitor



Design by Al Wooley - Crossover template by Meniscus Audio



Introduction

This speaker kit is the next one (after the Triton) using the new CSS Next Generation drivers and it was introduced at the 9th Annual Vancouver Island DiyFEST in late August. The VX.1 also won its class in The Puget Sound DIY Speaker Contest in early September. They were designed using the Parts Express cabinets and this provides an easier way for many people to do their own speaker builds.

The drivers are one of our VWR126X very wide range mid woofers and our low distortion LD25X. Both of these use the XBL™ motor topology under license and the VWR also uses the RevSurround™ under the same licence.

The crossovers included in the kits use good entry level components. Al believes in working with simple crossovers not dozens of crossover components plus protection networks to obtain a far superior sound.

The complete construction manual with numerous pictures will be included with the kit. Given the relatively small driver opening the crossover will be split into 2 parts and self adhesive templates for these are also included.

This design was done with the slot port which is preferred by many designers. Sealed the F3 would be 97Hz and with a 1.5" round port at 2" the tuning would be 67Hz. Please contact CSS for further details.

Options

Please contact CSS before ordering if you require any of these. These will be included at a minimal shipping cost increase.

Parts Express Cabinets - 2 styles, 3 finishes - rectangular are \$140 and curved \$175 per pair, including shipping if ordered with the kit

Bi wire binding posts (second set plus links) - \$4

Grill cloth and magnets (if you are building your own cabinets) - several colors

Finished Parts Express Grills and magnets



Extra uncut PE blank baffles in case of serious errors in cutting driver holes

Vibration damping sheets - \$5 and \$31

We believe that most of the typical cabinets benefit from adding a thin layer of self adhesive Sonic Barrier. Two sizes are stocked and we recommend putting this on all inside surfaces including under the crossover boards before mounting.



Acoustic absorption sheets (both 1/2" and 1" available) - \$10 and \$14

The acoustic absorption sheets are also beneficial on top of the Sonic Barrier. This is also self adhesive and should be attached everywhere except where the crossover boards are mounted. Even the brace in the PE cabinets benefits.

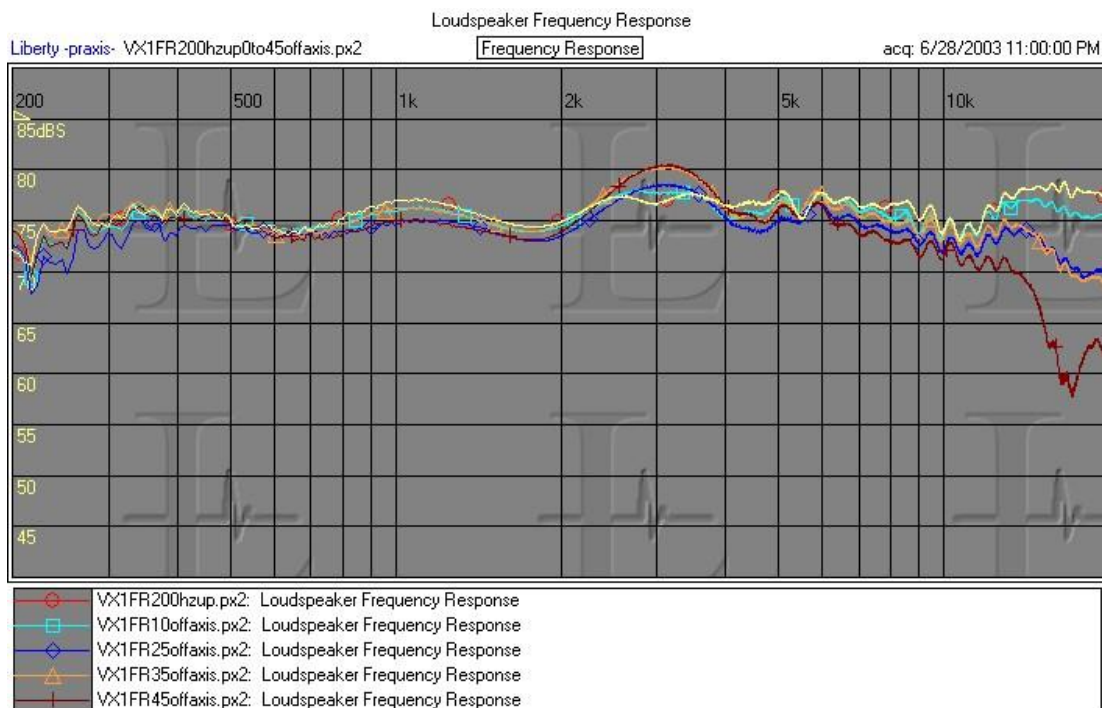
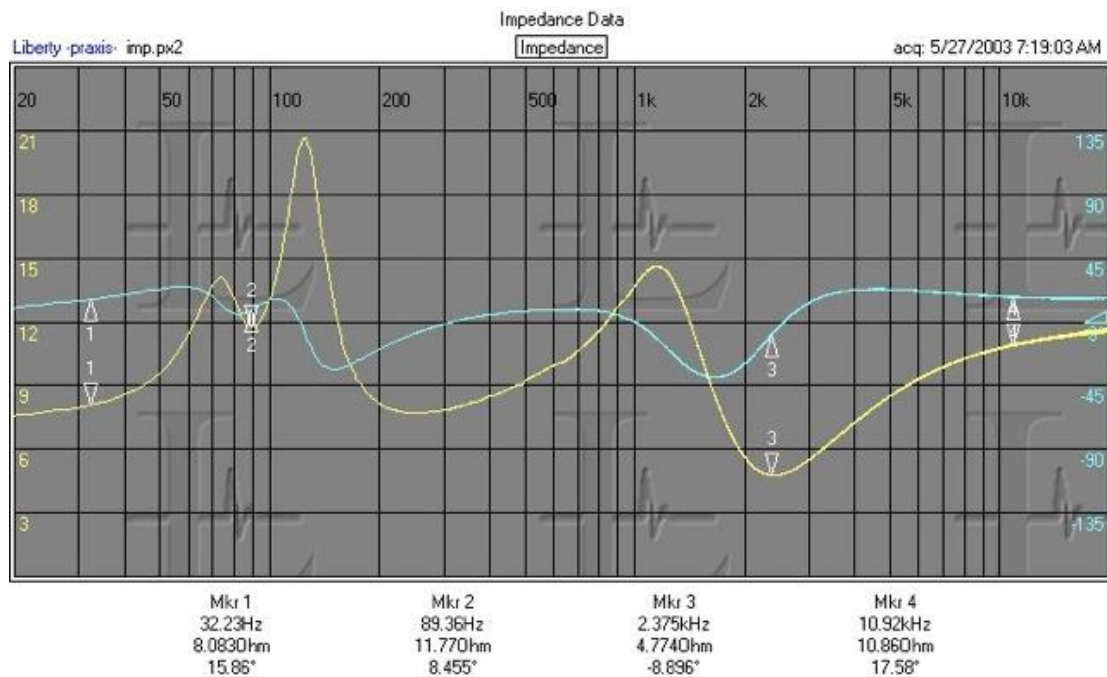


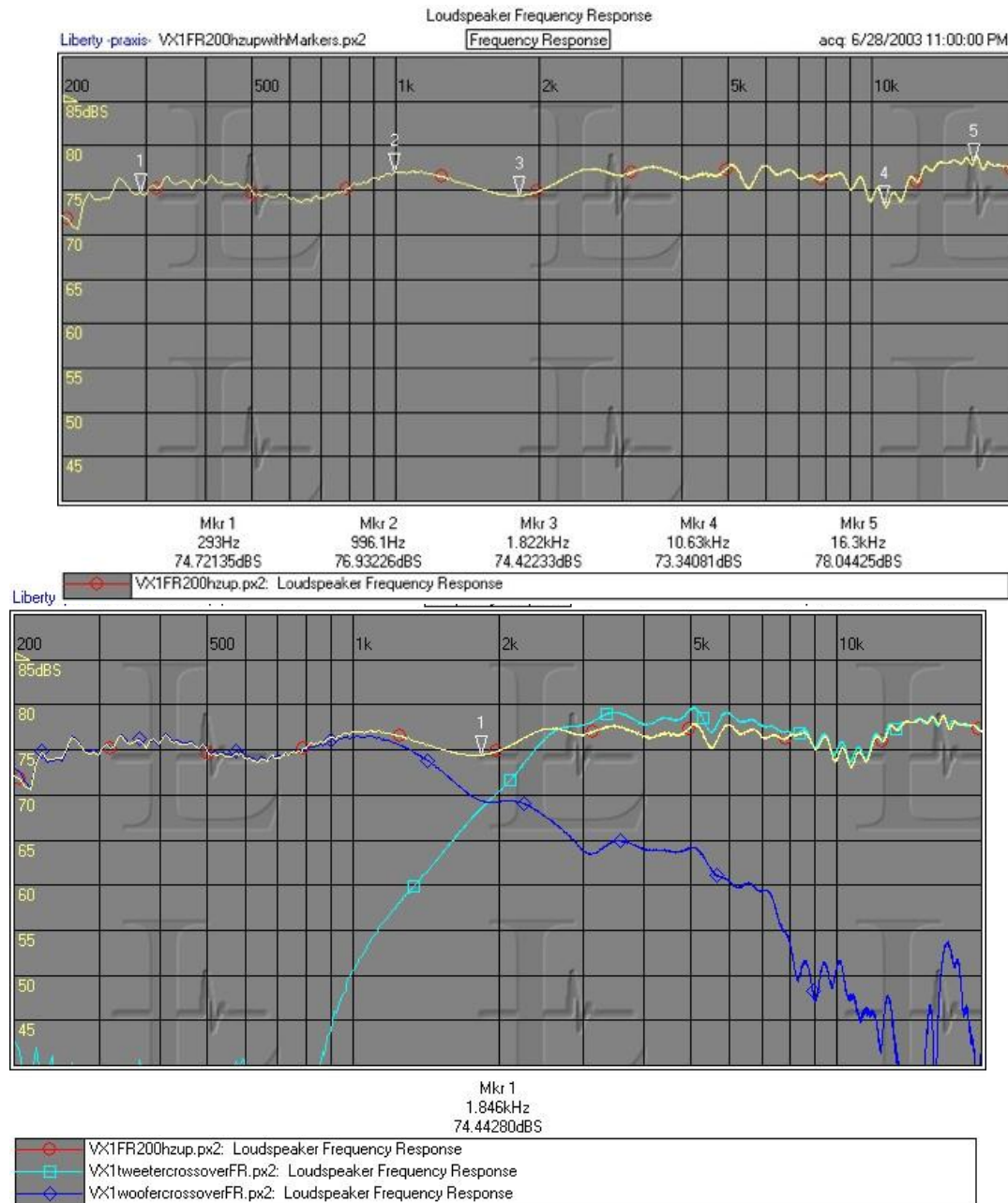
Assembled crossovers

Round ports



Measurements





Cabinets

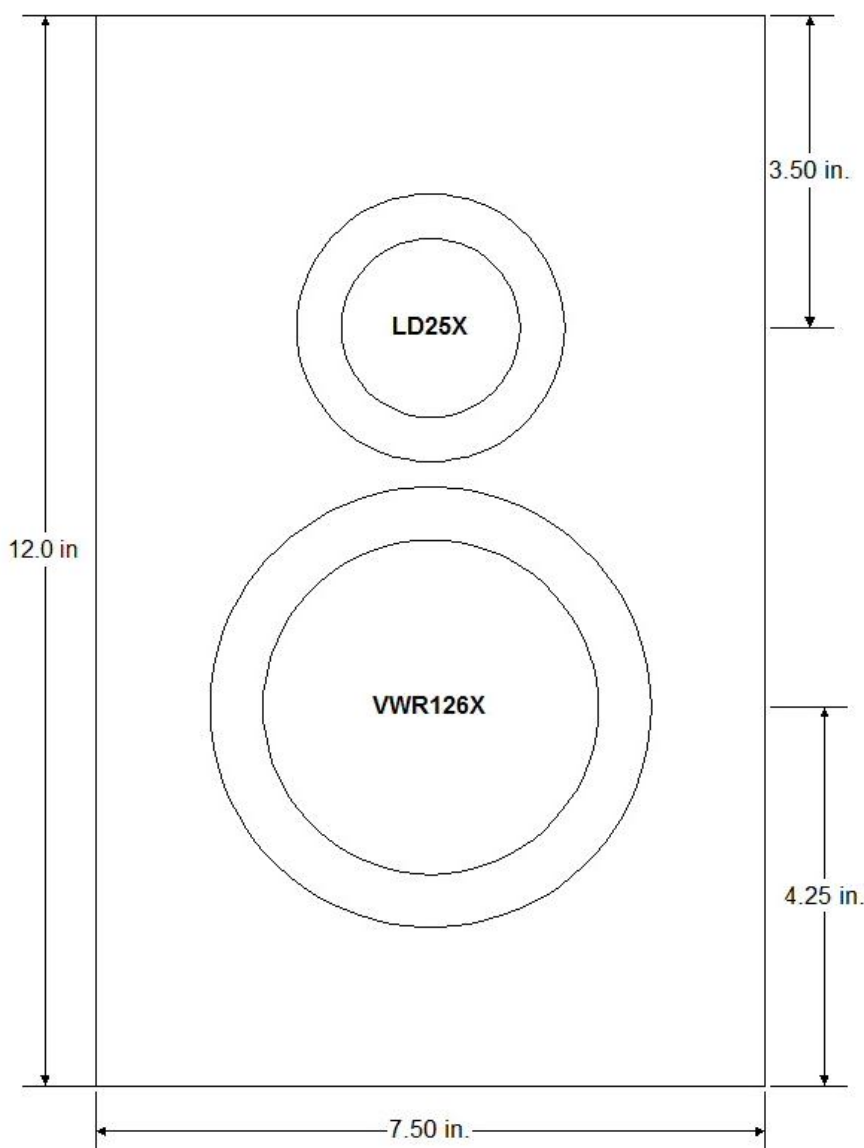
Any of the Parts Express .25 cu ft cabinets will work. The driver spacing shown below also applies to your own cabinet, though you could make the cabinet taller. If you do, then you should adjust the depth.

THE WIDTH SHOULD REMAIN THE SAME

Also, if you are building your own, then please put the bracing **front to back** rather than the way it is in the PE cabinets. This will allow for easier slot integration and possible lower tuning. It also affects the crossover boards placement.

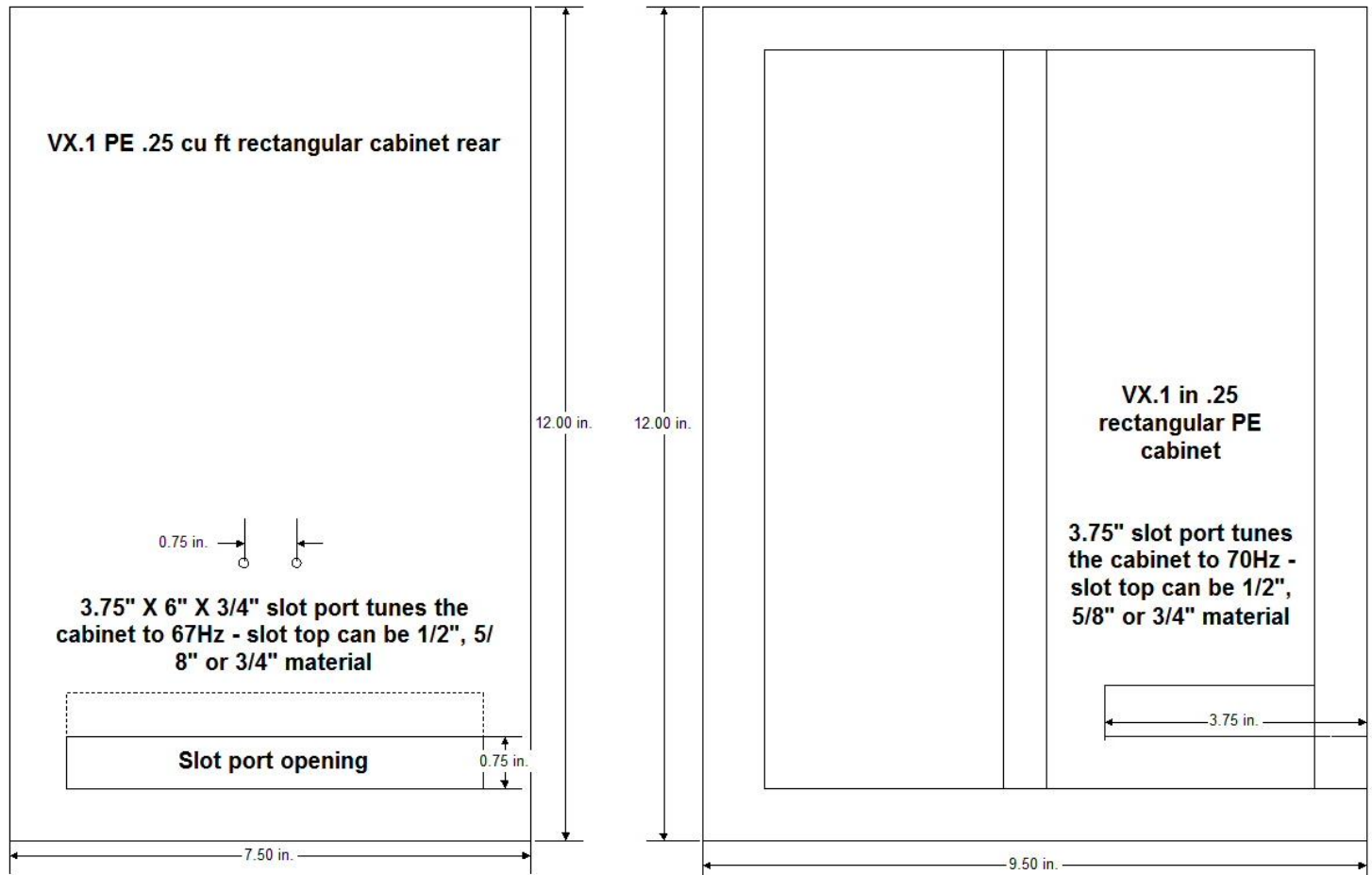
Porting to the front is also possible but the drivers would have to be mounted higher.

Driver spacing

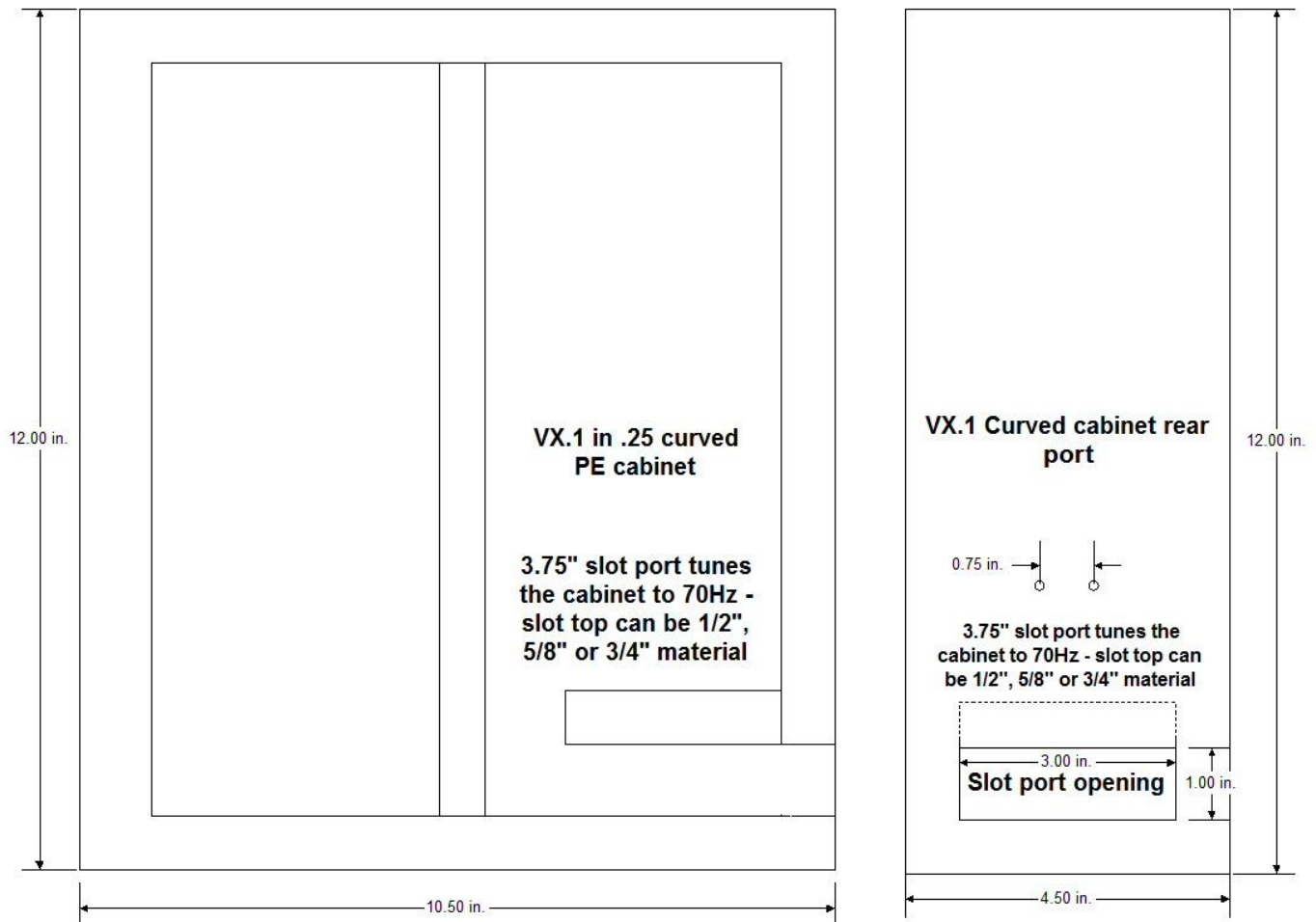


Porting

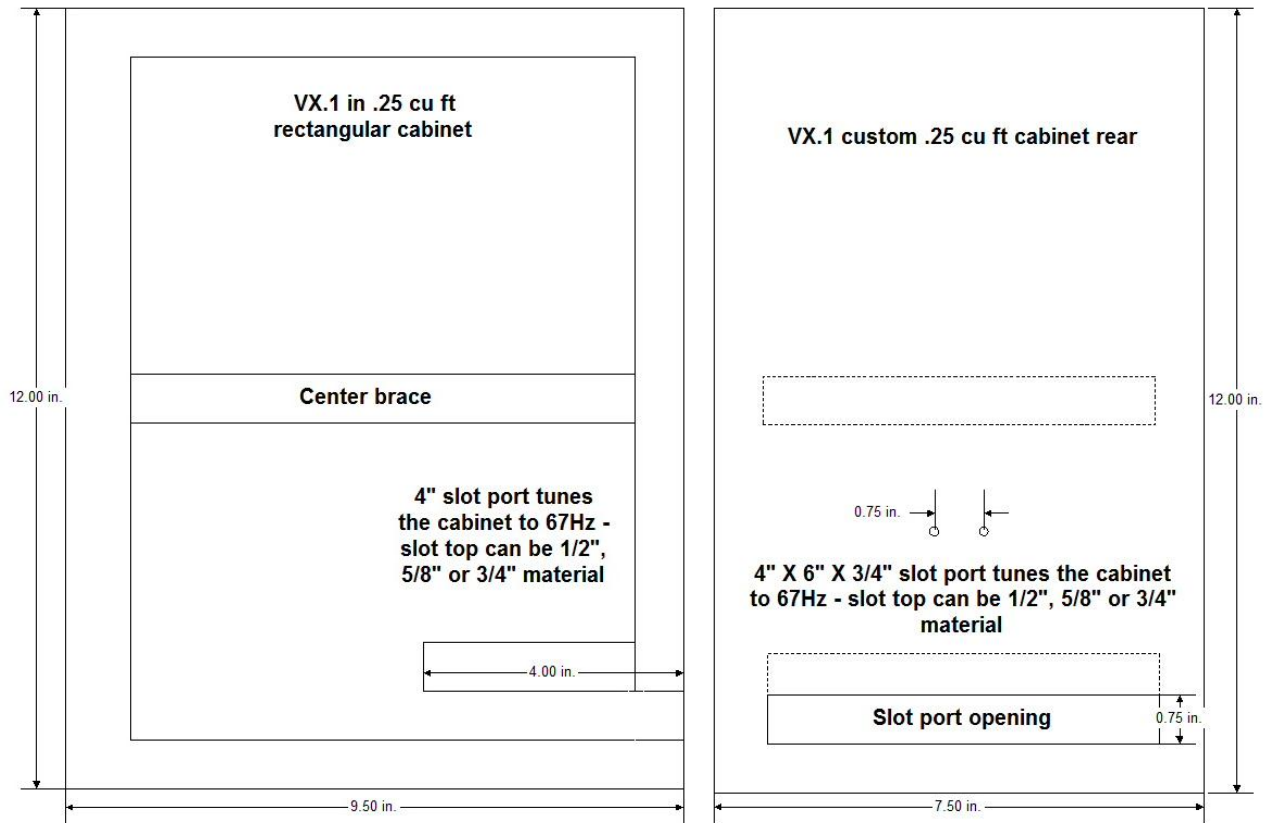
Rectangular PE Cabinet



Curved Cabinet



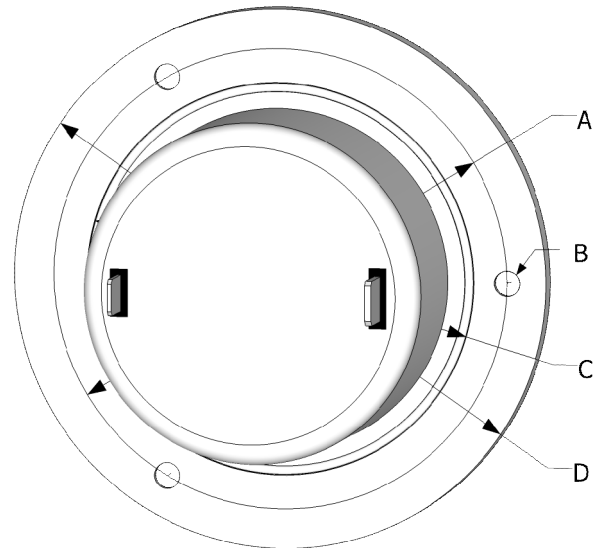
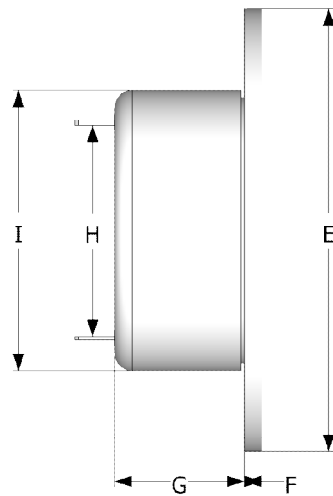
Custom Cabinet



Apart from the front baffle width, which should be maintained, different dimensions are possible.

LD25X Dimensions

- A** 64mm - 2.5"
B 3.6mm - 0.140"
C 56mm - 2.187"
D 75mm - 3"
E 75mm - 3"
F 3mm - 0.118"
G 22mm - 0.866"
H 36.5mm - 1.437"
I 47.5mm - 1.87"

**VWR126X Dimensions**