APPLICATION NOTE

HIGH PERFORMANCE 12” 2 WAY LOUDSPEAKER SYSTEM
KEY FEATURES

- An effective, high performance and easy to build two way loudspeaker system for high performance in a very compact and portable enclosure.

- An “already optimized” passive crossover network greatly simplifies the system setup.
KEY FEATURES

> The enclosure should be made out of Baltic birch plywood (15mm thick);

> The vents can be made with standard PVC plumbing pipe connection with internal diameter of 74mm;

> M5 T-Nuts in conjunction with M5x35mm Bolts is recommended;

> Handling, rigging and connectors are user’s choice;

> It’s recommended to well damping the cabinet as show in the example;

> An high density dampening material, such as Dacron or other synthetic fibers, is required for best acoustic performance
MEASUREMENTS: 12W750 + HD1050 ON XT1086

MAGNITUDE RESPONSE

PHASE RESPONSE

IMPEDANCE
HORIZONTAL POLAR RESPONSE
## Crossover Schematics

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 – Inductor</td>
<td>2.0 mH</td>
<td></td>
</tr>
<tr>
<td>C1 – Capacitor</td>
<td>12 uF</td>
<td>5% - &gt;250V</td>
</tr>
<tr>
<td>L2 – Inductor</td>
<td>0.33 mH</td>
<td></td>
</tr>
<tr>
<td>C2 – Capacitor</td>
<td>3.0 uF</td>
<td>5% - &gt;250V</td>
</tr>
<tr>
<td>C3 – Capacitor</td>
<td>1.6 uF</td>
<td>5% - &gt;250V</td>
</tr>
<tr>
<td>R1 – Resistor</td>
<td>8 Ohm</td>
<td>20W</td>
</tr>
<tr>
<td>C4 – Capacitor</td>
<td>3.00 uF</td>
<td>5% - 250V</td>
</tr>
<tr>
<td>L3 – Inductor</td>
<td>0.33 mH</td>
<td></td>
</tr>
</tbody>
</table>
EXPLODED VIEW
DETAILS: FRONT PANEL
SIDE VIEW

part F

part A

part D

part H

part G

part C

part E

620mm

190mm

170mm

270mm
TOP VIEW
TOP SECTION: HORN HEIGHT
TOP SECTION: WOOFER HEIGHT
BACK VIEW