**APPLICATIONS**
A Reflexed Longthrow Bass Bin or Upper Bass/Low mid Cabinet for use in Multiway Systems.

**LOUDSPEAKERS**
Classic 15's or 15 C models. Specialist Bass 100. Crescendo 15/200 E, Colossus 15 E. Studio 15 B, L or G.

**PERFORMANCE**
From between 40-50 Hz to 5 KHz at a sensitivity within the range 97 dB-104 dB for 1 Watt, 1 metre depending on the model selected. Good Bass with good longthrow mid-band coverage.

**CONSTRUCTION**
Very complex. Panels need mitreing accurately. The curved panels are best laminated in position using several thin sheets of plywood.

**MATERIALS**
1 1/2 sheets of 18mm (5/8") Board in 8' x 4' size (2438 x 1219). 2 x 24" x 32" 3 mm (1/8") plyboard.

<table>
<thead>
<tr>
<th>Resonance of Loudspeaker</th>
<th>Total Area of Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 Hz</td>
<td>15 square inches</td>
</tr>
<tr>
<td>45 Hz</td>
<td>24 square inches</td>
</tr>
<tr>
<td>55 Hz</td>
<td>36 square inches</td>
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<tr>
<td>60 Hz</td>
<td>50 square inches</td>
</tr>
<tr>
<td>65 Hz</td>
<td>68 square inches</td>
</tr>
<tr>
<td>70 Hz</td>
<td>88 square inches</td>
</tr>
</tbody>
</table>

![Graph](image-url)
APPLICATIONS
An angled 2 x 12 short-throw mid-range cabinet for use in multiway systems.

LOUDSPEAKERS
Classic 12’s or 12 C models.
Studio 12 L, B or G.

PERFORMANCE
Useable frequency response from 400 Hz to 5 KHz at a sensitivity relative to the loudspeakers selected.

CONSTRUCTION
Fairly straightforward. Some parts need mitreing accurately. Mark our bottom panel as section ‘xx’ to guide assembly.

MATERIALS
\( \frac{3}{8}'' \) sheets of 18mm (\( \frac{3}{8}'' \)) Board of 8’ x 4’ sheets size (2438 x 1219).

SPECIAL NOTES
Use with HP X5. For the Studio Models an improvement in sound quality can be achieved by increasing the depth to 22\( \frac{1}{2}'' \).
2 CUTOUTS FOR 12" LOUDSPEAKERS

SECTION 'X-X'
APPLICATIONS
2 way Mid/High Cabinet for use with Bass Bins for systems up to 500 watts.

LOUDSPEAKERS
Classic 10's or 10 C models.
Studio 10 M or G.
Bullet Tweeters or J Horns with their associated crossovers.

PERFORMANCE
Frequency response from 400 Hz to 20 KHz and sensitivities from 99 dB to 104 dB related to the models selected.

CONSTRUCTION
Fairly straightforward.

MATERIALS
\(\frac{3}{8}\) sheet of 18mm (\(\frac{3}{8}\))'' Board of 8' x 4' size (2438 x 1219).

SPECIAL NOTES
Use with HP X5 crossover.
LARGE HORN CABINET

APPLICATIONS
Horn Cabinet for use in Multiway systems.

LOUDSPEAKERS
HF 100 Flare with 1 or 2 drivers.
Bullet Tweeter.

PERFORMANCE
From 1.2 KHz to 20 KHz of smooth clean mid and treble.
Sensitivity of 100dB for 1 Watt at 1 Metre.

CONSTRUCTION
Straightforward.

MATERIALS
$\frac{3}{8}$ sheets of 18mm ($\frac{3}{8}$") Board in 8' x 4'
sheets size (2438 x 1219).

SPECIAL NOTES
Use HP X 3A (Level adjusted) with HP X 4 for 1.2
and 5 KHz crossover or HP X 1 with HF100 Driver
on output marked HP X 3A and Bullet on
output marked HP X 3AR for 5 KHz crossover
only.
CUTOUT FOR BULLET TWEETER

CUTOUT FOR H.F. 100F HORN

SECTION 'X-X'
'W' TYPE BASS CABINET

APPLICATIONS
A Bass Bin for use with Mid/High Cabinets or Bass Guitar where a Bass emphasis is required.

LOUDSPEAKERS
Most suitable for lower resonance loudspeakers without Aluminium Domes.

PERFORMANCE
From 60 Hz to 4.5 KHz at sensitivities up to 104 dB for 1 Watt, 1 Metre depending on the model selected.

CONSTRUCTION
Fairly complex. Panels need mitreing accurately. Mark out side panel as section 'xx' to aid assembly.

MATERIALS
1½ sheets of 48mm (3/8") Board in 8' x 4' sheets size (2438 x 1219).

SPECIAL NOTES
HARDWOOD EDGE BATTEN

HORNS MAY BE ADDED HERE FOR FULL RANGE SYSTEMS

CUTOUT FOR 12” OR 15” LOUDSPEAKER

SECTION 'X''X'

REMovable BACK

FANE
Toward Perfection
1 x 15" LONGTHROW

APPLICATIONS
15" Bass Bin for use with other cabinets in P.A. or musical instrument applications.

LOUDSPEAKERS
Most suitable for lower resonance loudspeakers without Aluminium Domes.

PERFORMANCE
From 60 Hz to 700 Hz at a sensitivity of 104 dB for 1 Watt, 1 Metre dependant on model selected.
High Efficiency Long throw fundamenta Bass.

CONSTRUCTION
Fairly complex. Panels need mitreing accurately. Mark out side panel as section ‘xx’ to aid assembly.

MATERIALS
1 1/8 sheets of 18mm (3/4") Board in 8' x 4' sheets size (2438 x 1219).

SPECIAL NOTES
REMOVABLE BACK
WITH CENTRE
WEDGE ATTACHED

HARDWOOD
EDGE SURROUND

CUTOUT FOR 15"
LOUDSPEAKER

ENDS OF CENTRE WEDGE
MUST BE SEALED.

SECTION 'X-X'