

HDS-150 SATELLITES

Satellite speaker shielded
 Stand or shelf mounting
 Recommended Amplifier
 Power = 10Watt to 70Watt
 8ohm nominal
 Sensitivity 88db
 Rear vented
 Frequency 50hz to 22khz
 H270 x W182 x D286mm
 5.5" Peerless HDS Mid-Woofer
 1" HDS Soft Dome Tweeter
 Choice of wood or vinyl finishes.
 Premium quality grill, curve edges
 for minimal edge diffraction.
 Midi-System Speaker Upgrade
 Satellite System matched with our
 8" or 12" Subwoofer Systems.
 Surround Speakers for DVD.



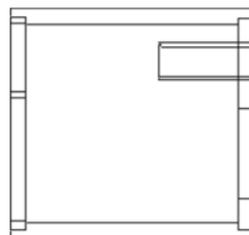
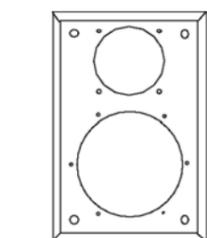
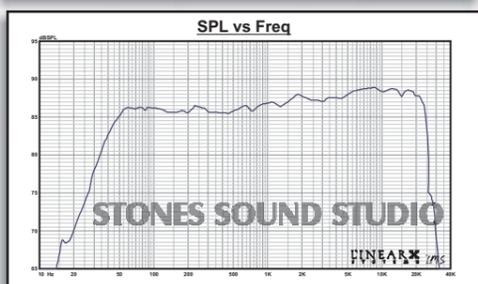
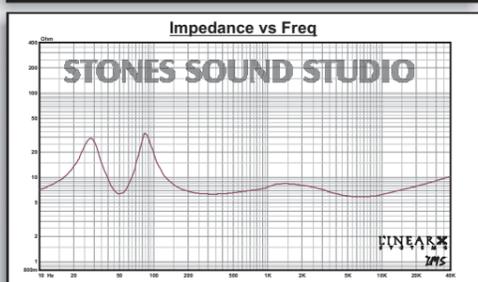
HDS150 COMPLETE KIT
 Sold Individually, Singular,
 Two required for stereo.
 Requires Assembly.
KIT150TO Tasmanian Oak
KIT150JA Jarah
KIT150BV Black Vinyl

Includes:
 Built Cabinet with Speaker Grill
 5" Mid-Woofer 850528
 1" Tweeter 810653
 Crossover Kit (Requires Construction)
 Assembly Hardware
 & Instructions

PEERLESS HDS/XLS SERIES OF SPEAKER SYSTEMS

Designed By Russell Storey of Stones Sound Studio.
 Welcome to our new range of speaker systems available in kit form. Every aspect of the cabinet design has been customized to suit the Peerless drivers specifically with port and box volume tailored to maximize the performance of the HDS and XLS range of premium drivers.

A new improved tweeter has been developed in conjunction Peerless Denmark and Russell Storey, our audio consultant, to closely match the HDS series of mid-woofers. Cabinet development has been achieved using the latest in computer analysis software including LEAP and LMS along with the design experience of Stones Sound Studio who specialize in premium, exotic, custom speaker design. All cabinets are precision made from medium-density custom wood (MDF) with a choice of veneers and the best in computer controlled cabinet manufacturing processes. The Peerless HDS range of drivers and matching XLS range of subwoofers, offer incredible performance and value for money. When correctly developed with our custom designed cabinets, precision crossover matching and premium quality components, the result is a finished speaker that rivals the best musical audio available in the world, and also giving fantastic dynamics and realism to the new digital DVD home theater of today. Thank you and enjoy.



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 sales@wes.net.au

WES COMPONENTS Aust Asia **ALL NEW**
 Phone (02)9797-9866

HDS-150 SATELLITES

The Peerless HDS150 audiophile high definition satellite speaker is a very capable and compact unit designed to reproduce both music and home theater in small to medium rooms. Quality made, 18mm thick MDF construction, rear firing tuning port, curve edged front grill fascia, and other design detailed specifics, gives you fantastic performance from a compact system. Computers or video, music or DVD, it is all possible as the HDS150 uses shielded, digital ready, top-of-the-line, Danish made drivers from Peerless. This exceptional speaker is designed to make positioning easy and convenient, with Home Theater, the HDS150 can be used in any of the positions (front/rear/centre), giving a fast dynamic sound stage. Especially ideal as rear monitors for larger THX type set-ups. For music, it is an excellent up-grade to any Midi or HiFi system, improving your sound with the latest in technology. We highly recommend the HDS150s be used as satellites in conjunction with our XLS800V or XLS1000 subwoofers. You will be impressed by the full, rich sound from these compact monitors, suitable for a large range of applications.

Fully Shielded for TV or PC.
Big sound, Compact box.
HiFi Midi-System Speaker Upgrade
Satellite System Matched with our
8" or 12" Subwoofer Systems.
Surround Speakers for DVD.

Frequency 50Hz to 22KHz
H 270 x W 182 x D 286mm
Recommended Amplifier
Power 10Watt to 70Watt
8ohm nominal
Sensitivity 88db

Speaker Stand or Shelf mounted.
Rear vented.
Attractive, Compact, Practical.



danish sound technology

Australian Made Boxes With Danish Speakers



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Designed By Russell Storey

HDS

High Definition Series



Peerless HDS150 2-Way Book-Shelf Speaker System

Contents of HDS150 Kit:

- CAB150-xx Cabinet (xx=Colour Code) With Speaker Grill
- XOK150 Crossover Kit 2-Way
- Woofer 5" 850528 Peerless Shielded
- Tweeter 1" 810653 Peerless Shielded
- Screws x14 STS7B (7mmx20mm)
- Gasket Tape Approx' 1 meter
- Felt cotton waste (Supplied with box)



Kit Contents Plus Box

Tools You Require:

- Screwdriver Philips 1 point.
- Power Drill (Battery drill with Torque setting recommended)
- Drill bits (2mm for pilot holes)
- Center punch and/or pen
- Hammer
- Ruler

Before You Start:

Check the contents of the kit and that all is supplied and in good condition.

Make sure you have a clean work area. It is recommended you use a drop sheet of some kind so that your work does not scratch the cabinet.



CAB150-TO
(Tasmanian Oak)



WES Components 90 Paramatta Rd Summerhill 2130 PH (02)9797-9866

Storey - Stones Sound Studio - www.wes.net.au

CONNECTION TO YOUR AMPLIFIER

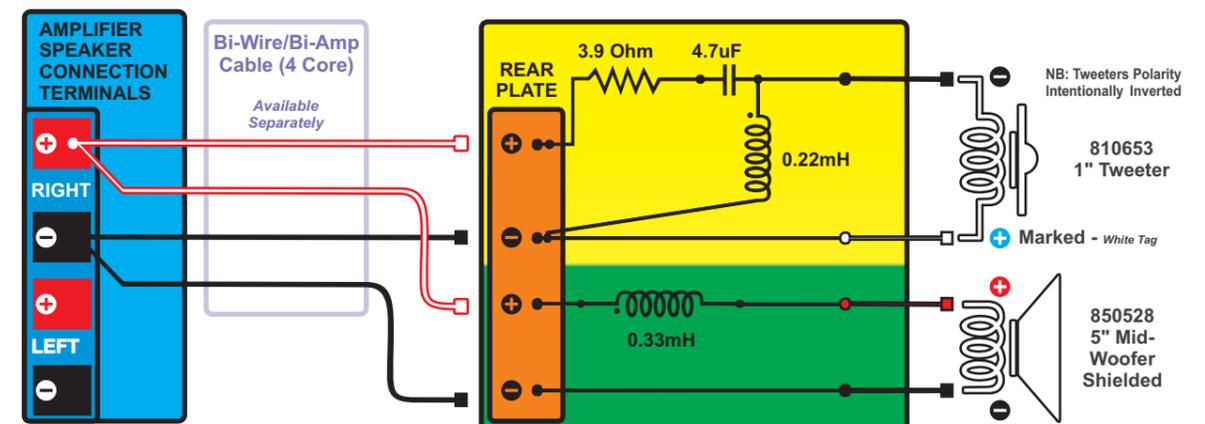
WHY A DUAL PAIR TERMINAL CUP ?

Our premium grade HDS Series of speaker systems come with dual pair terminal cups. This facilitates connection to both the upper and lower frequency drivers separately. Generally this is not required for a normal audio system set up but is given as an option for Audiophiles who wish to take advantage of the improvements from Bi-Wiring or Bi-Amping.



BI-WIRE CONNECTION

This refers to the running of separate cables from the amplifier to both the high range and low range drivers. This arguably improves definition and focus by improving the amplifiers damping and reducing intermodulation crosstalk between the woofer and the tweeter. "A popular and inexpensive tweak for getting the best sound quality from your investment".



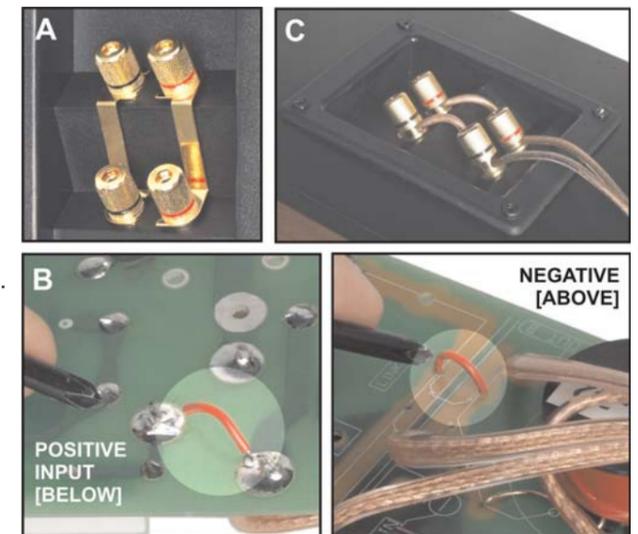
NORMAL SINGLE WIRE CONNECTION

A) If you do not wish to use Bi-Wire or Bi-Amping, then simply leave the supplied "Shorting-Straps" in place on the rear terminal block and use a standard speaker wire pair to connect your speakers to your amplifier system. Please note that the Gold plated terminals must be tightened securely so the straps don't accidentally slip loose over time with the speakers vibration and one driver stops functioning due to being disconnected.

B) As an option to stop this from happening, you could solder in the shorting links on the Crossover Circuit Board (Shown as "Links 1" & 2).

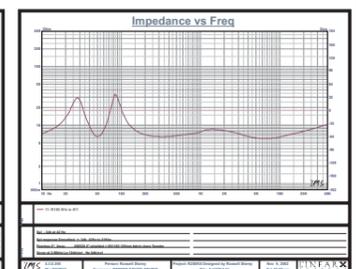
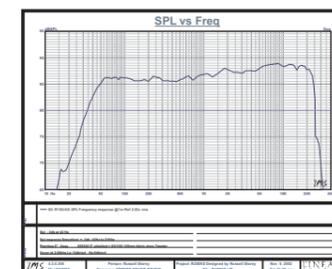
C) Alternatively you could connect the input speaker cable from your system to both terminals.

DOUBLE CHECK ALL WIRING AND PAY PARTICULAR ATTENTION TO POLARITIES AS THIS IS THE MOST COMMON ERROR.



XON150 TO SUIT SPEAKER KIT HDS150

- Bessel - Butterworth 2 Way Crossover
- Acoustically time aligned with cabinet
- Matched to Peerless drivers;
- Tweeter 810653
- Woofer 850528
- Crossover Frequency 1392Hz
- Low Pass Filter 6dB/Octave
- High Pass Filter 12dB/Octave



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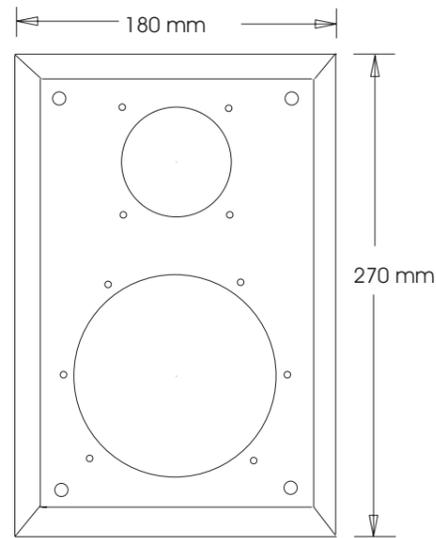
Designed by Russell Storey - Stones Sound Studio - www.wes.net.au

Stones Sound Studio

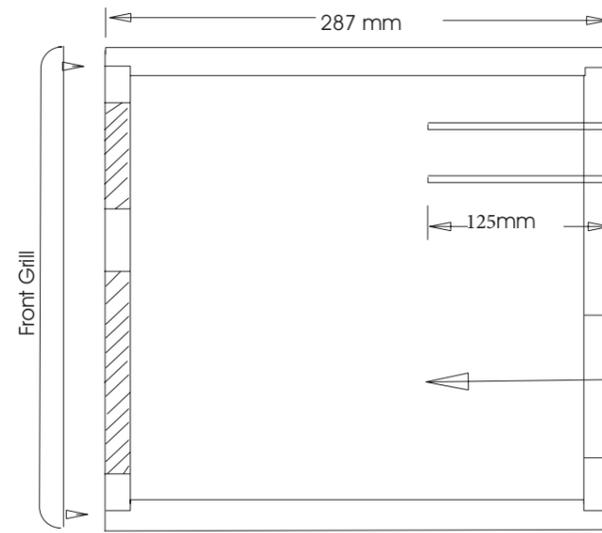
High Definition Series

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

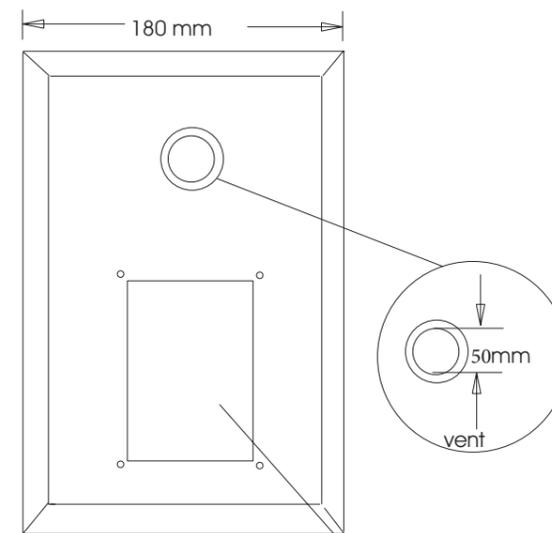
AUDIOPHILE MONITOR 2-WAY SATELLITE & SURROUND SPEAKER



Front View

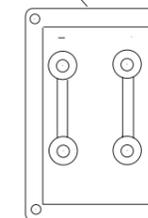


Side View



Back View

Terminal Cup Crossover



Terminal Cup

Construction Notes

Cabinet Thickness varies with thickness of chosen material

Internal Dimensions W x D X H mm (146 x 253 x 236)

Top /bottom / Left/Right side panels mitre joints

Front and rear baffles rebated in 17mm

Outside Dimension = Inside Dim + 17mm raw MDF

Peerless 5" Hole Cut out = 120 mm

Vent ID = 50 mm

Vent length = 125 mm

ITEM NO.	PART NUMBER	General Dimensions Diagram	MATERIAL SPECS.	QTY.
1x	Peerless 5" Shielded Bass-Mid Driver 850528		WES Components Dual Terminal Cup Code J708 BI-Wire/BI-Amp Type	
1x	Peerless 1" Shielded Fabric Tweeter 810653			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETRES TOLERANCES ARE +/- 5mm		CAD DRAWING, DO NOT MANUALLY UPDATE.		STONES SOUND STUDIO SATELITE KIT SPEAKER HDS150
MATERIAL High Density Particle Board (MDF) Laminated/Painted		APPROVALS	DATE	
FINISH Vinyl or Wood Veneer		DRAWN Russell Storey	13-01-2002	
NEXT ASSY.		USED ON	CHECKED Jim Ryan	10-09-2003
APPLICATION Satellite, Surround, Mains				
			SIZE DWG. NO. A3	Leap 0003
			SCALE XX:XX	CAD FILE: HDS150_INS.cdr
				SHEET 1 of 1

HDS150 - Speaker Box Instruction Sheet

1
2
3

Locate all parts and check condition of each item.
Familiarise yourself with the instructions and parts.
Review how it all fits together before commencing.
Double check your work before final assembly.
Check all connection polarities (*Most common error*).
Insert Crossover 1st, hang the leads out each hole.
Attach connectors and screw in the rear terminal cup.
Position the cables away from the Woofer and port.
Attach connectors and screw in each of the drivers.
Attach speaker cables to amplifier and enjoy!

Please double check your work for best results will achieve best sound.

CROSSOVER CONNECTION:

Ensure all connections are tight and secure with all polarities correct.

If you have a Soldering Iron, a drop of solder makes for excellent reliability.

Velcro strips are supplied as a quick and easy solution for affixing the

Crossover Circuit Board directly to the inside bottom of the speaker box.

Attach the Velcro strips to the underside of the Crossover Circuit Board.

We suggest positioning flat onto PCB where there is no solder blobs to

distort the tape and its adhesive surface. Use all six for a most secure fit.

Ensure Bottom Inside of the Box is clean of dust, etc. (with a damp cloth).

Familiarise yourself with the boards connections and where they should go.

Identify the leads to be connected to the rear plate from the diagram below.

Remove Velcro tape to expose the sticky and Insert the Board into the

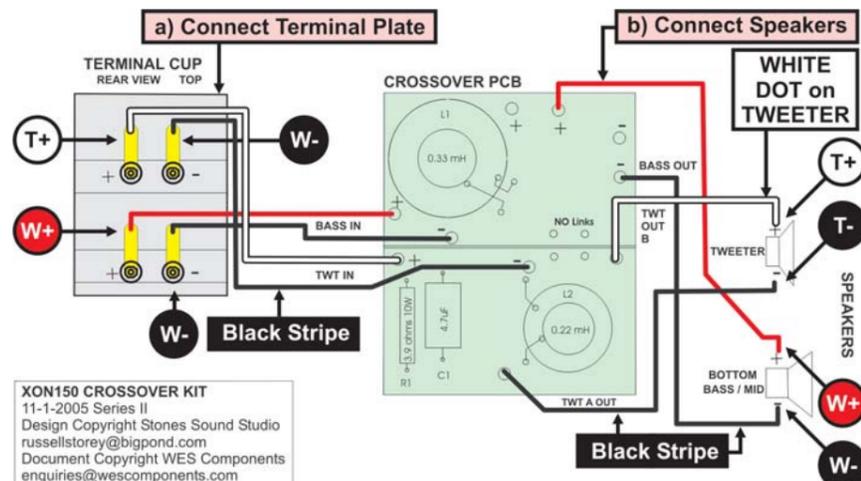
speaker through the woofers hole and stick down on the bottom side.

Now attach the four appropriate leads to the rear terminal plate.

Insert the rear terminal plate into the cabinet with the supplied screws.

Take care not to over tighten and crack the plastic.

Next stage is to install the drivers.....



XON150 CROSSOVER KIT
11-1-2005 Series II
Design Copyright Stones Sound Studio
russellstorey@bigpond.com
Document Copyright WES Components
enquiries@wescomponents.com

HDS150 - Speaker Box Instruction Sheet



Place your speaker cabinet on a non-slip, non-scratch surface for working....

Attach the rear speaker terminal panel. Aim the terminals UP.

(This stops the plugs falling out!).

Internal speaker cables thread thru the Internal Damping Cloth.

Check the cables have sufficient length to reach each speaker and don't catch anywhere or obstruct the port openings.

Ensure they wont touch the woofer either.



Apply the gasket tape. This is essential for an air-tight seal.

Use the speaker drivers packaging to hold and protect the face and dome/surround when applying the gasket tape. For the tweeter, carefully run the tape around the outer circumference, once. Cut off excess.

For the woofer, keep to the inner rim of the drivers mounting flange, again, only once around then cut.



Drilling pilot holes for the woofer:

Drop in the driver and align it to the bottom edge of the cabinet making sure it is absolutely square.

Hammer in center punch for the six screw holes.

Remove the driver and drill a 2mm pilot hole for each screw.

If the felt is supplied separately, insert it now. The speaker box designer recommends a modest amount on the rear panel only. This gives the best sound and response.

Ensure the felt is secured and will not touch any moving part of the woofer or obstruct the port tube on the back panel. Affix using heat glue or a small staple gun.

Check the run of the speaker cables for ample reach and that they too will not touch the woofer nor obstruct the port or rattle against the cabinet walls, etc.



Attach the drivers.

Apply the spade connectors to their respective drivers, ensuring you have the correct polarity. We recommend you also solder these connections for excellent long-term reliability. BEWARE not to apply too much heat to the tweeter contacts or damage to the plastic mounts can occur. Only a small amount of solder is required for a secure connection.

Screw in the drivers, carefully, moving to opposing screws and tightening until the driver is flush with the cabinet and not too tight as to thread the screw. If using an electronic screwdriver, set it to a medium torque setting, and use your hand for the final tightening.

HDS150 Positioning and usage:

The HDS150 speaker system has been developed, and is suitable, for many applications. These competent little monitors will upgrade a mini-hifi system, vastly improving the sound over budget speakers and with minium volume loss due to their impressive efficiency. The use of shielded drivers enable the HDS150 to be placed near TVs for excellent movie and home theater reproduction. Also, with the compact size too, these units can also be used as PC multimedia speakers for those who get right into their games or are doing production work on their computer. These drivers are also matched for use with other speakers in our HDS range. This means they are very suitable as surround sound speakers or as satellites with our XLS sub-woofers for a full impact sound. Although compact, these speakers reproduce remarkably good sound that will satisfy for many, many years.