# Glasshouse Speaker Kit No. 1 - Booklet





This booklet is designed to accompany the instructional YouTube videos you can find on the <u>HiFi Collective YouTube channel</u> or embedded on the <u>content page</u>.

The kit has been designed with ease in mind. Please use a combination of the videos and this guide to assemble the kit most efficiently.

If you have any further questions, please do not hesitate to contact us at <a href="mailto:info@hificollective.co.uk">info@hificollective.co.uk</a>

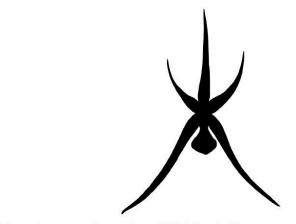
## **Equipment Required**

Soldering iron
Pliers
Cutters
Vice
Masking tape
Allen Key set
Wood glue
Wet cloth
10mm box spanner
Adjustable spanner
Band clamp, example here
Hammer
Piece of scrap flat wood
Drill and 6.3mm drill bit
Stanley knife
Multimeter
Tape
Paintbrush
Pencil
Pack of blue tack (optional)

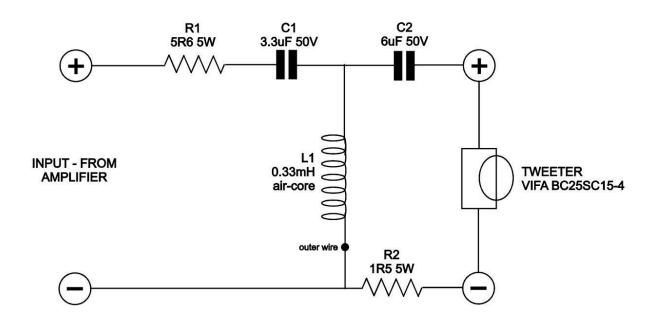
## **Components List**

Part	Use
Vifa TC14WG67 8 ohm Woofer	bass unit
Vifa BC25SC15 4 ohm Tweeter	tweeter
000-2279: 1.6mH Jantzen Iron Core Coil AWG21, 0.7mm diameter wire	LF crossover
000-1743: 0.33mH Jantzen Air Core Wire Coil AWG21, 0.7mm diameter wire	HF crossover
AG5J5R6E: 5R6 5W Ohmite Audio Gold AG5 Resistor	HF crossover
001-1015: 4.7uF 70Vdc Jantzen Premium ELKO Smooth Electrolytic Bipolar Capacitor	LF crossover
001-1010: 3.3uF 70Vdc Jantzen Premium ELKO Smooth Electrolytic Bipolar Capacitor	HF crossover
ECAP70-6.0: 6uF 50Vac / 70Vdc Mundorf ECap AC PLAIN electrolytic bipolar capacitor	HF crossover
Duelund DUAL DCA16GA tinned copper multistrand wire in cotton and oil	crossover board to bass unit wiring
Duelund DUAL DCA20GA tinned copper multistrand wire in cotton and oil	crossover board to tweeter wiring
Glasshouse small turret tag board	hold crossover parts
014-0410: Jantzen Polyester Dampening Cloth - 50cm x 200cm	cabinet internal dampening
012-0180: Jantzen Binding post, M6 / 27mm, Gold plated, red / black, a pair	speaker - amplifier connection
M4x25HS-BSS: M4 x 25mm Full Thread Cap Head Screws, Black Stainless Steel	fitting of tweeter
M5x25HS-BSS: M5 x 25mm Full Thread Cap Head Screws, Black Stainless Steel	fitting of bass unit
M4 Tee Nut - 4 Pronged	fitting of tweeter
M5 Tee Nut - 4 Pronged	fitting of bass unit
Push-on Connectors, fits 2.8mm spades	crossover to tweeter connection
Push-on Connectors, fits 4.8mm spades	crossover to bass connection
MSOL.SG-5M: Mundorf 3.8% silver/gold solder	soldering parts

HTSB6.4: Black heatshrink 2:1, 6.4mm diameter	prevent fraying of Duelund wire
HTSR3.2: Red heatshrink 2:1, 3.2mm diameter	to mark the positive connection of internal wiring
Small tie wraps	to fit components to tag board
PTFE sleeving, for 1mm dia wire	insulating component leadouts



Glasshouse Speaker Kit No.1 Crossover circuit diagram



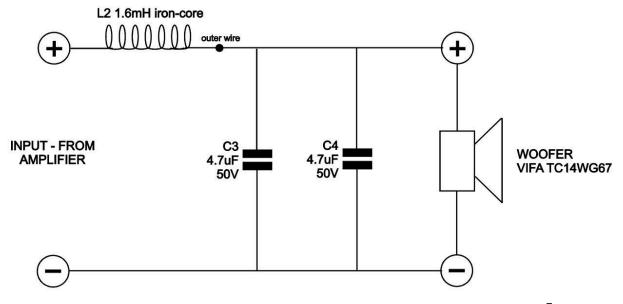
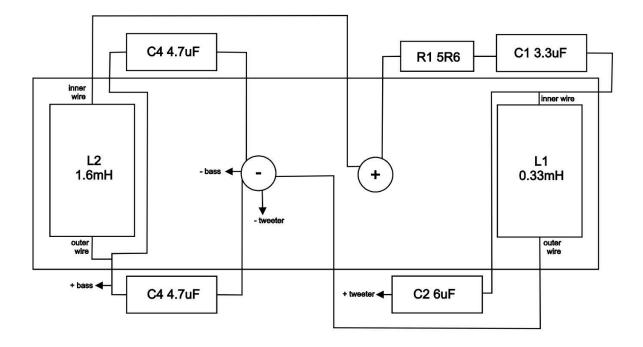
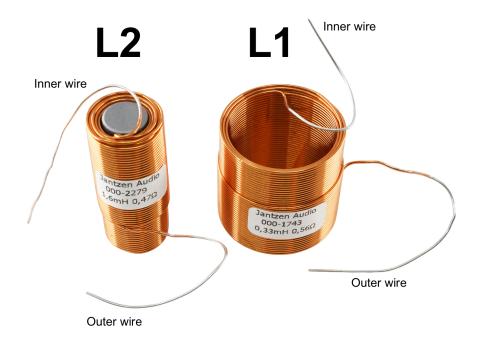


Diagram shows the layout of Glasshouse speaker kit No. 1 crossover tag board. Cross reference with the images below. Use PFTE tubing to insulate longer leadouts. Allow room for 10mm box spanner over the fixing nuts of the binding posts.





#### Drilled crossover board



L1 and L2 are labelled for inner and outer coil. Make sure you wire them the correct way round for optimum performance.



## Crossover board with binding posts attached



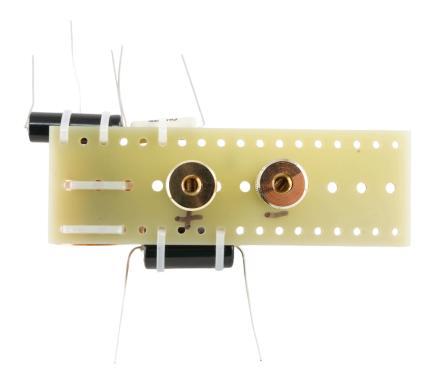
R1 and C1 attached to crossover board, tweeter section



### L1, R1 and C1 attached to crossover board, tweeter section



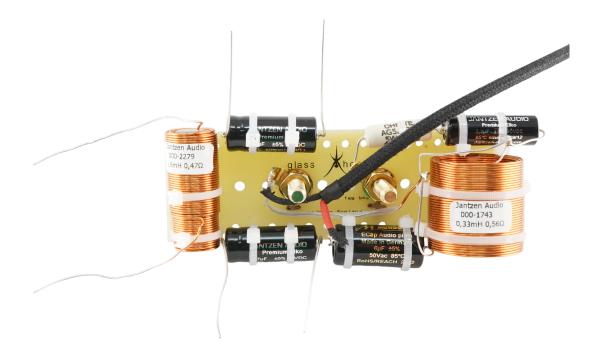
Tweeter section components attached



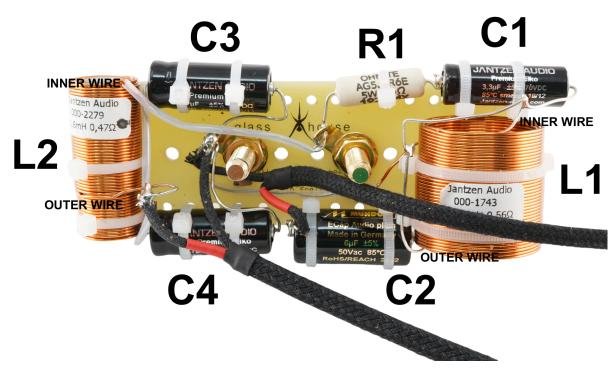
Rear side of tweeter section



Fully built tweeter section



Bass section components attached



Completed crossover. Make sure you wire the inductors the correct way round for optimum performance.



## Completed crossover with leadouts



Rear completed crossover