



# HiVi DIY2.2-A Speaker Kit Manual

## Preface

Thanks for purchasing this DIY kit! We hope you have a lot of fun building and listening.

Please read the manuals carefully first. If you ever have any problems, feel free to email us at [support@hivi.com](mailto:support@hivi.com). There is also a great community of DIY builders at [www.reddit.com/r/diyaudio/](http://www.reddit.com/r/diyaudio/).

If you're ever looking for completely built speakers please check out our website at [www.swanspeakers.com](http://www.swanspeakers.com).

You can also find many of our products on Amazon.com, including our award winning M200MKIII audiophile bookshelf speakers, and our warm sounding M50W full wood 2.1 surround sound system.

Happy Listening! HiVi Acoustics & Swan Speakers.

**Warning:** Keep safe when making this kit! Wear protective eye wear when soldering and clipping component legs.

**Suggested tools:**

- |                    |                   |                            |
|--------------------|-------------------|----------------------------|
| 1) Wood clamps     | 5) Scissors       | 9) Cross point screwdriver |
| 2) Wood glue       | 6) Solder         | 10) Brush                  |
| 3) Diagonal pliers | 7) Soldering iron | 11) Sandpaper              |
| 4) Hammer          | 8) Allen wrench   |                            |

**I、Package contents**

**Note:** Crossover components may be substituted with parts of equal or higher quality depending on stock.

**Components:**



1      2      3      4      5      6

- |                         |                             |
|-------------------------|-----------------------------|
| 1) 1.5Ohm resistor (R2) | 4) 6.8uF capacitor (C1)     |
| 2) 6.8Ohm resistor (R1) | 5) 1.5mH air inductor (L2)  |
| 3) 8uF capacitor (C2)   | 6) 0.35mH air inductor (L1) |



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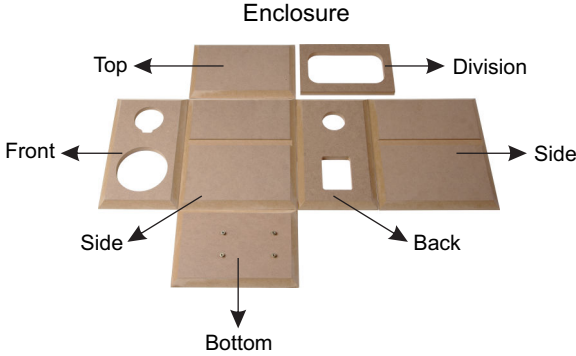


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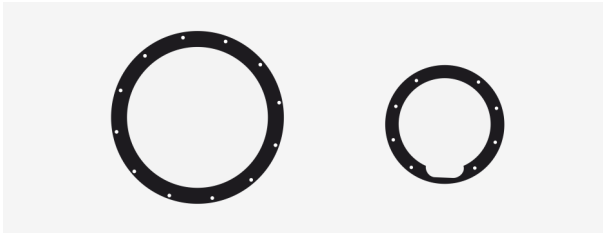
- 7) HiVi LB-D6.8-IIB woofer
- 8) HiVi LB-Q1R tweeter
- 9) Vent tube and paper tube



10) Cabinet front (x2), Back (x2) Bottom (x2), Side (x4), Division (x2)



11) Grill and frame

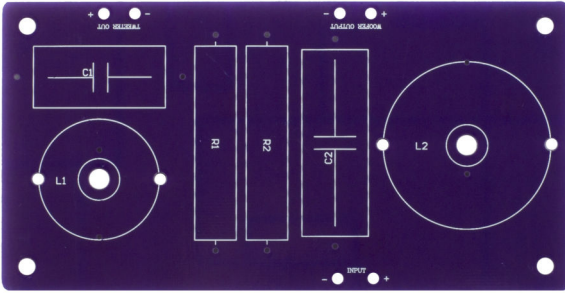


12) Cushions for drivers



13) Screws

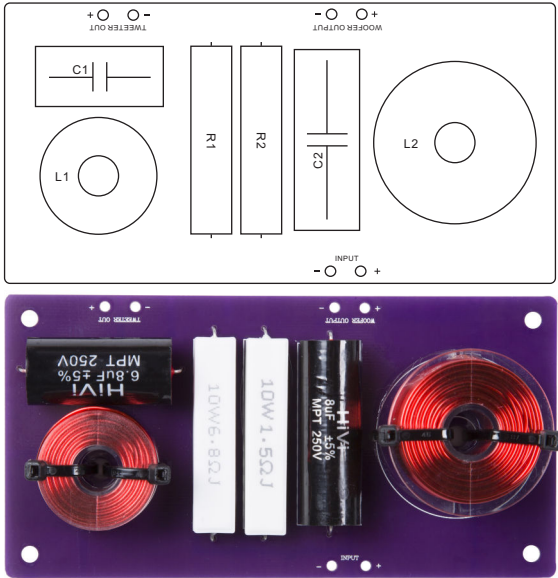
- |   |        |                   |      |
|---|--------|-------------------|------|
| A. Screws for woofer/ tweeter/ terminal box | 32 PCS | D. Male threads   | 8PCS |
| B. Screws for crossover                     | 8 PCS  | E. Female threads | 8PCS |
| C. Retainers                                | 8 PCS  | F. Holding pegs   | 8PCS |



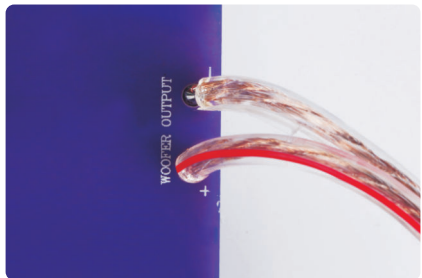
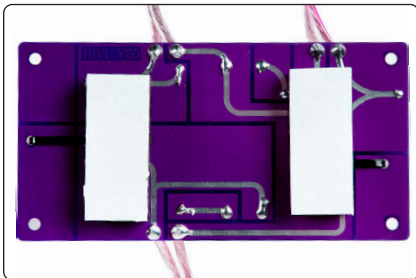
- 14) PCB(Printed Circuit Board)
- 15) Veneer surface
- 16) Terminal box
- 17) Cotton acoustic stuffing
- 18) Speaker wire
- 19) Rubber feet 8 PCS
- 20) Swan tape
- 21) Double sided foam tape 4 PCS
- 22) Swan logo and label

## II. Crossover Assembly

1. Arrange the components as illustrated in the figure below. With a soldering iron, apply solder to the connections between the components and the board. Remove the excess components legs and secure the inductors with cable ties. **Note:** Remove the coating on either end of the inductors to ensure good contact. And apply glue to all the contact surfaces between the components and PCB to ensure steadiness.

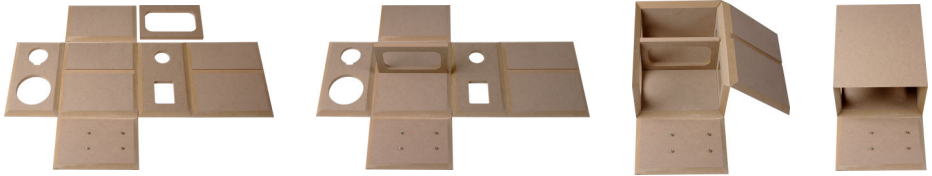


2. Cut 3 lengths of 2-conductor speaker wire, slightly longer than the distance from the crossover to the corresponding speaker openings. Solder them respectively at the outputs of the crossover. Cut one length of 2-conductor speaker wire and weld it at the input of the crossover. Make sure the polarity is correct. Generally, the red wire is positive. Paste the double sided foam tape at the back side of the crossover to support the crossover.

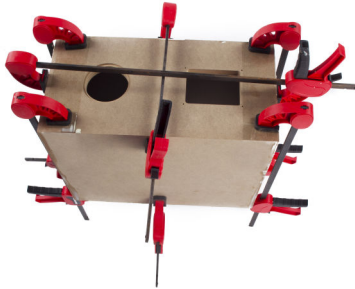


### III、Enclosure Assembly

1. Set the enclosure parts out on a flat level surface. Apply some wood glue to the locating groove in the side panel and install the division panel into the groove. Then apply glue to all the contact surfaces between the panels. And place all the other panels in place. Install the 4 retainers into the holes in the bottom panel.



2. Apply clamps to the enclosure. Wipe away any glue squeeze-out on the outside of the enclosure. Allow to dry according to the glue manufacturer's recommendation.

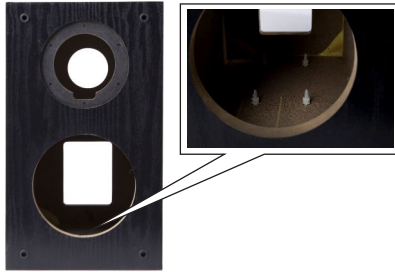


3. Once the glue is dry, remove the clamps. Sandpaper the panels smooth before you finish them. Apply a thin layer of glue to wood veneer and paste it on the enclosure. Press hard and evenly to make sure the veneer is flat and smooth. A piece of wrung hot wet cloth is recommended here to help make the veneer soft enough to be pasted evenly.

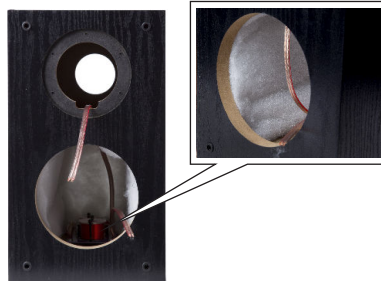
**Note:** In case you don't like the finish provided, you can finish enclosure to your liking. Finishing is not only used to beautify your speaker but also keep it from damping and prolong its life.



4. Turn the 4 holding pegs onto the retainers or just knock the nails into the them. Then install 4 female threads into the holes on front panel which will be later used to hold the grill.



5. Insert crossover through woofer hole and install it onto the holding pegs on the bottom panel. Have the wires outside through the corresponding speaker openings to avoid confusion and make it easier for driver connection. Add some cotton acoustic stuffing into the enclosure and press it hard against the side panels.



6. Insert the vent tube into the paper tube and apply some glue to it. Then install it into the tube hole.





7. There are two sets of lugs on one side of the terminal box and two sets of connected terminals on the other. Weld the input wire on crossover to either set of lugs through the terminal box hole. Again the polarity must be correct. (red = positive) Make sure that there is no short circuit or false welding. Screw the terminal box and its cushion on the cabinet with terminals upward.



8. Weld the tweeter wires to the its terminals and set the tweeter with its cushion in place. Press them into opening and secure them with screws. Weld the woofer wires to its terminals and set the woofer with its cushion in place. Press them into opening and secure them with screws. Make sure the polarity is correct. Bigger terminals on the drivers are positive.



9. Apply a layer of glue to the frame of the grill and tuck the grill fabric into the groove in the frame cut the excess fabric. Knock the 4 male threads into the holes in the frame. If you wish, attach the logo on the bottom edge in the circle slot.



10. Paste the rubber feet to the bottom panel and the label to the blank place between the tube and terminal box.



11. You are now ready to enjoy your speakers.



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