



惠威车用扬声器系统 (T SERIES MANUAL)

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※ 因设计变更等原因，所示资料可能与实物不符，恕不另行通知。
Due to the reasons in the change of design or others, product information contained here may not be in conformity with product itself. We reserve the right of no prior notice before change.

产品说明书
www.hivi.com

型 号	T1500	T1600
系统组成	5 1/4 " +1 " 分体式	6 1/2 " +1 " 分体式
中 低 音	5 1/4 " 中低音	6 1/2 " 中低音
高 音	1 " 软球顶高音	1 " 软球顶高音
灵 敏 度	88dB	90dB
频率响应	60-23KHz	50-23KHz
最大功率	120W	150W
额定功率	40W	50W
额定阻抗	4 Ω	4 Ω
安装尺寸	Φ 138	Φ 156.5
开孔尺寸	Φ 116	Φ 144
安装深度	>62	>65
网罩尺寸	Φ 158x22	Φ 172.5x22
分 频 点	2.8KHz	2.7KHz
高通衰减斜率	-12dB/Octave	-12dB/Octave
低通衰减斜率	-6dB/Octave	-6dB/Octave

HI-END CAR LOUDSPEAKER SYSTEM



TC150



TC160



TC169



T1500



T1600

Thank you for your purchase of HiVi Car-Audio Speaker Systems. Please read the following installation and operation guidelines carefully to ensure many years enjoyment of car audio speaker system. All HiVi Speaker Systems products should be set-up and installed by authorized and licensed technicians.

Though this manual narrates the installation, it didn't show the remove of car. If you got no experience of this, please don't set up by yourself, you can inquire at the experienced car service office.

Please note your car is on flameout situation!

Acoustic is a very special subject, it includes many wide fields and in different field it has the special requirement, as the particularity of different environment so that there is different explanation to the design of acoustic, but the final wish is the same- the pursuit of perfect! Car Audio Speaker System is a special acoustic environment. HiVi is a professional manufacturer with leading techniques; we pay our attention in different acoustic fields, and try to offer the best enjoyment for our customers.

Car is more and more popular, car life and car culture are intermingling in our daily life step by step. Besides weary, how to completely enjoy the life becomes the topic that men think about and pursue.

So we strive and design out a popular car audio system-T Series, this is a fresh design, we did many research work in acoustic environment and made many progress. The limit of car space may easily cause high frequency noises, lack of human sound in middle frequency, bored, big resonance in low frequency etc. Additionally using in the hot summer and cold winter, so how to choose the material becomes very important.

In our C Series, we use ceramic intermingling polypropylene so as to change inside hinder and flexibility, according with sparkle NBR rubber margin which we made great success. Based on this, T Series use carbon fiber intermingling polypropylene and accord with Sanoprene rubber margin which the specific gravity is smaller than water, can balance the connection between inside hinder, weights, Yang mode, and can solve the problem of human sound too thick, and improve the definition of sound. Increase the quality of middle frequency. New design of high gathering magnetic system, great power, and reduce no-line distortion and enhance efficiency.

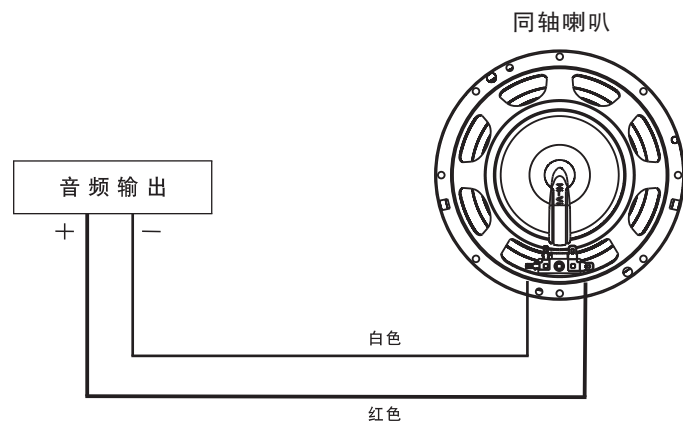
Tweeter unit uses high capability Neodymium Iron Boron sandwich magnet, high magnetic density. Nature fiber high damp dome flap, frequency resonance wide and straight, high definition, nice instant resonance, great power CCAW voice coil with Ferrosound fluid magnet refrigeration, enhance the power handling.

T1500、T1600 use separate disport sound ware.. According the particularity of car environment and the different installation place of high and low sound then adjust the components carefully, link up the high and low sound smoothly and nature, the whole sound feels great and nature. Three different input installations, can adjust it freely. That's complying with different car style and different choice of music. Tweeters also use three different installations and can extend the convenience of installation, also can change the outlook of tweeter as you like. T Series has the compact coaxial system, and is convenient for installation.

规格：

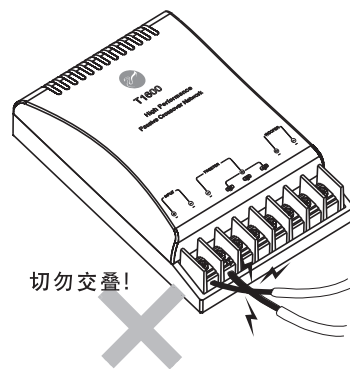
型 号	TC150	TC160	TC169
口 径	5 1/4 " 同轴	6 1/2 " 同轴	6 " X9 " 同轴
中 低 音	5 1/4 " 中、低音	6 1/2 " 中、低音	6 " X9 " 中、低音
高 音	3/4 " 软球顶高音	3/4 " 软球顶高音	3/4 " X2 软球顶高音
灵 敏 度	88dB	90dB	90dB
频率响应	60-23KHz	45-23KHz	45-23KHz
最大功率	120W	150W	180W
额定功率	40W	50W	60W
额定阻抗	4 Ω	4 Ω	4 Ω
安装尺寸	Φ138	Φ156.5	166.5x119.5
开孔尺寸	Φ116	Φ144	153x214
安装深度	>62	>65	>81
网罩尺寸	Φ158x22	Φ172.5x22	252x179x29

2、同轴喇叭接线示意图



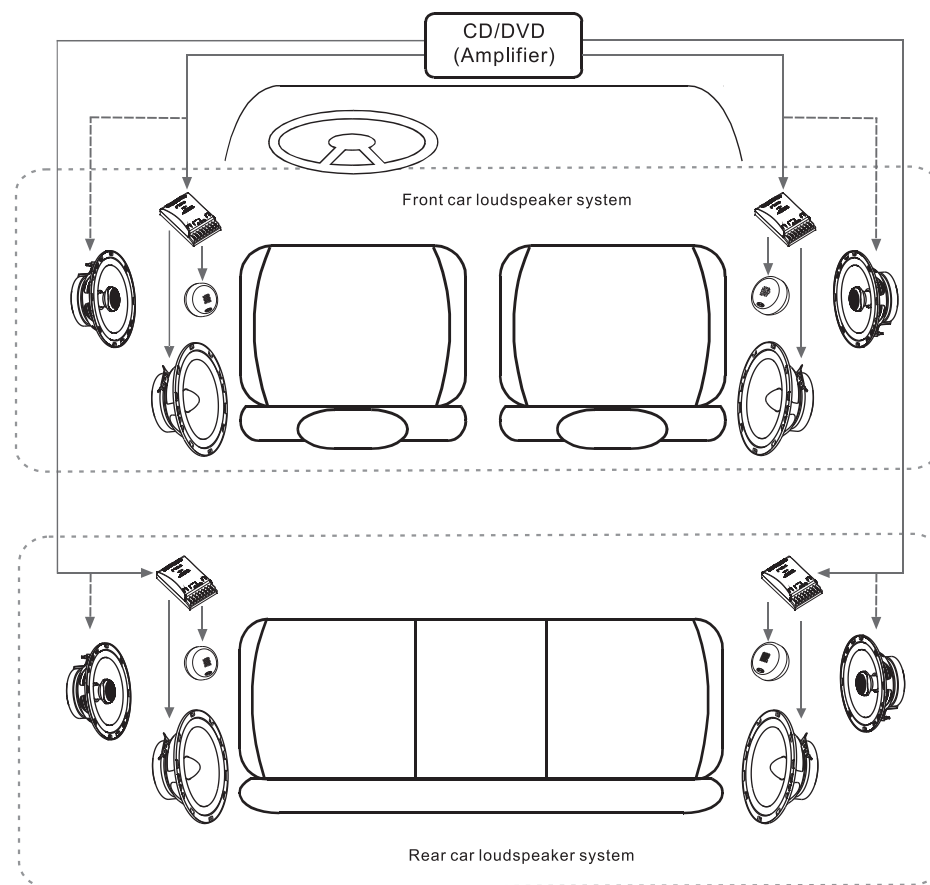
安装注意事项:

1. 剥除约5mm的电线绝缘体。
2. 将电线线芯紧紧扭绞一起。
3. 为防止损坏电路，切勿让正极(+)和负极(-)扬声器缆线发生短路。



Circuit diagram

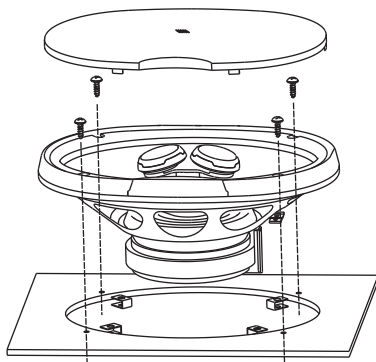
Please connect according to the following circuit diagram



Installation of woofer

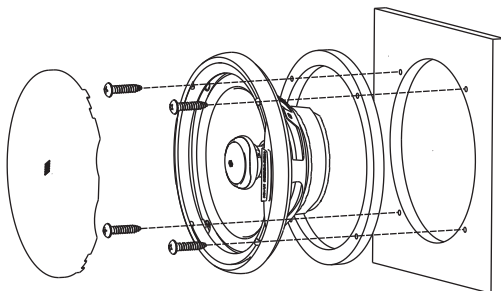
Option One (TC169) :

- 1、According the demand then stick the airproof mat on the place of Installation.
- 2、According the opening hole template then open the speaker hole and the snail installation hole in suitable place.
- 3、Install the metal clips in the position of hole.
- 4、Dispatch the decorating net. Use the snail threading the plastic of decorating net and speaker to lock up the speaker.
- 5、Install the net on the speaker as drawing.

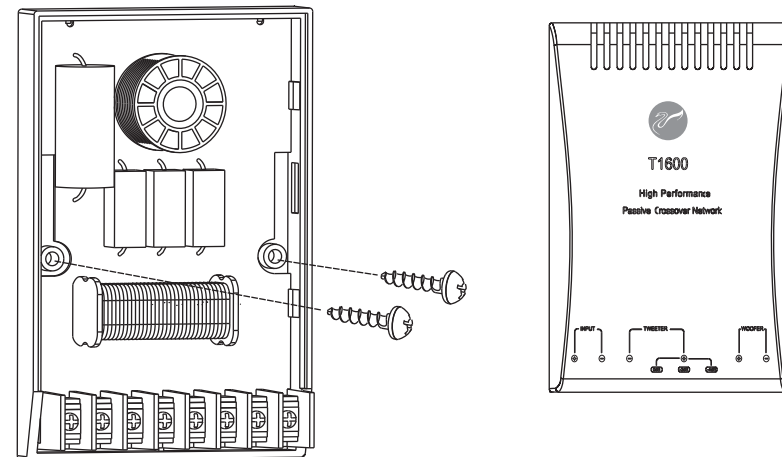


Option Two (TC160、TC150、T5W、T6W) :

- 1、According the demand then stick the airproof mat on the place of Installation.
- 2、According the opening hole template then open the speaker hole and the snail installation hole in suitable place.
- 3、If the depth is not enough, can use some mats on the place of installation then can add some depth.
- 4、Install the net on the speaker as drawing.

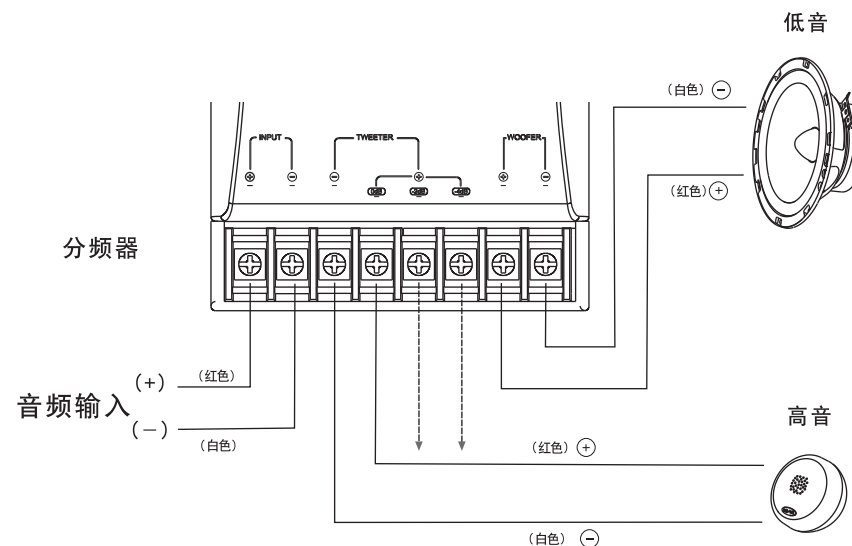


2、将分频器安装在车门内或其它位置



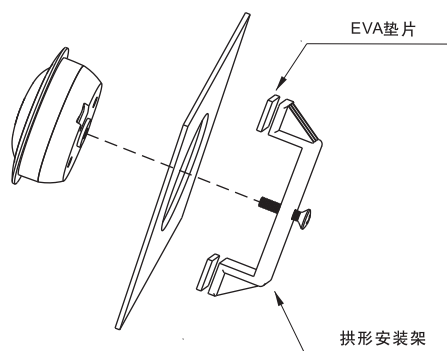
接线：

1、分频器与高音、低音连接示意图



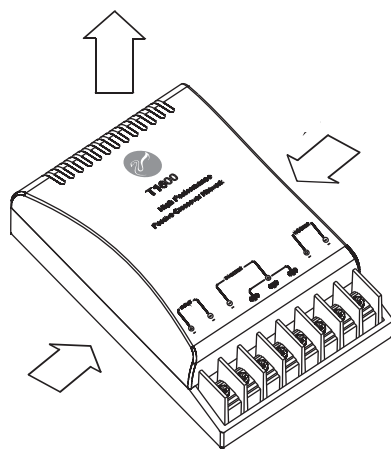
安装方式三：如果需将高音喇叭安装在车门或其它隐蔽的位置，可以采用此种方式。

- 1、在选定的位置开一约为50mm的圆形孔。
 - 2、将高音喇叭的窄边前盖换成宽边前盖后沉于圆形孔内。
 - 3、在安装板的背面,将螺丝穿过拱形高音安装架锁紧喇叭。
 - 4、依实际情况，如果安装板比较薄，则可以先将3mm单面自粘性EVA粘于安装架的脚位。
- 注:此种安装方式也需要在车上打孔,故在安装前须确定高音喇叭的安装位置。



分音器安装：

- 1、将分音器外罩打开：用力从两侧面向盒内按压,然后向上提起。

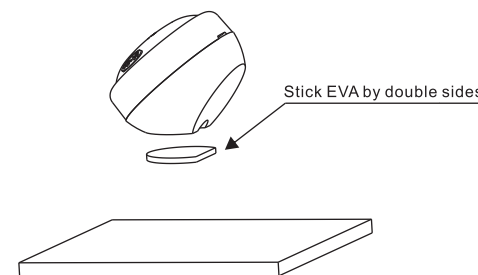


Installation of Tweeter(CST225C)

Option one: If you don't want to change the structure of car, and install the tweeter before steering wheel or beside the door of car, then you can use this mode.

- 1、Take semicircle double sides stick EVA, get rid of one side protecting paper and stick this on the place of installation of tweeter (as drawing).
- 2、Get rid of another protecting paper of EVA, then stick speaker at the fixed place.
- 3、Adjust the orientation of speaker so as to reach the best sound quality.

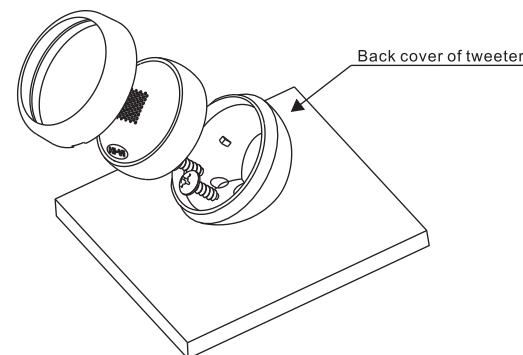
Note: The merit of this kind of installation is that don't need to change the car, the demerit is that can't fix the tweeter well enough.



Option Two: If you want to fix the tweeter before the steering wheel or beside the door of car, then you can use this mode.

- 1、Use the “—” snail knife open the front cover of tweeter.
- 2、Use the snail threading the back cover, installation plate, then fix the back cover of speaker on the selected place as drawing.
- 3、Put the speaker into the back cover, press the front cover.
- 4、Adjust the orientation of speaker so as to reach the best sound quality.

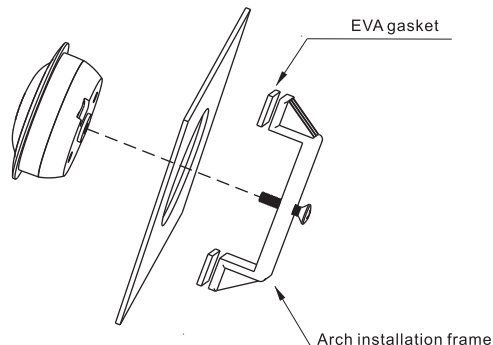
Note: This kind of installation needs to lock the snails on the car, so you have to fix the place of tweeter before installation.



Option Three: if you want to fix the tweeter on the door of car or some other shady place, you can use this kind of installation:

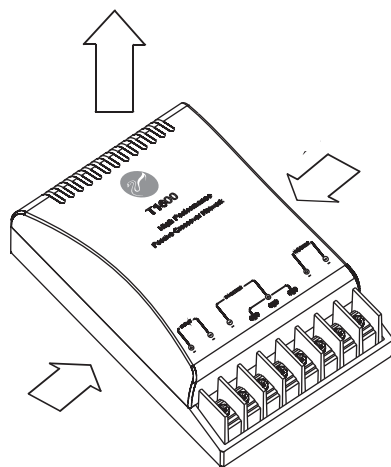
- 1、Open a round hole about 50mm on the selected place.
- 2、Change the narrow front cover of tweeter into wide front cover then fell into the round Hole.
- 3、On the back of installation plate, use the snail threading arch tweeter
- 4、Actually if the installation plate is very thin, you can use a 3mm one-side sticking EVA stick at the foot of installation frame.

Note: This kind of installation needs to open holes on the car, so you have to fix the place of tweeter before installation.



Installation of crossover

1. Open the cover of crossover, press from two franks to center and then take up.

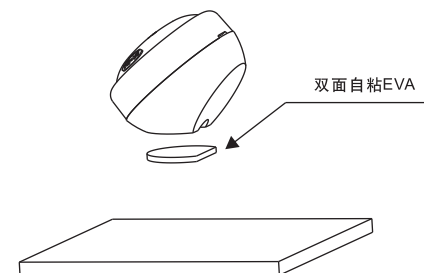


高音喇叭的安装(CST225C):

安装方式一：如不想改变车的结构，将高音安装在仪表盘前方或车门边，可以采用此种方式。

- 1、取半圆形双面自粘EVA，去除一面保护纸后将它粘在高音喇叭的安装位（如图）。
- 2、将自粘EVA的另一面保护纸去除，然后将喇叭粘在选定的位置。
- 3、调整喇叭方向，以便达到理想的听音效果。

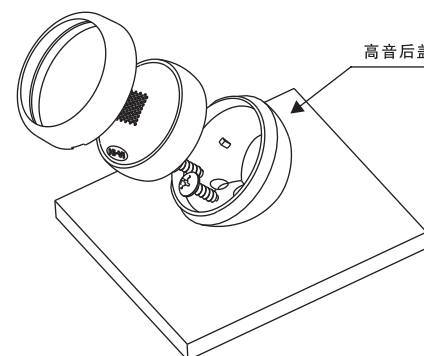
注：此种方式好处在于可以完全不对车进行改变；缺点是不能很牢固地固定高音。



安装方式二：要想牢固地将高音安装在仪表盘前方或车门边，可以采用此种安装方式：

- 1、先用“一字”螺丝刀将高音喇叭的前盖打开。
- 2、按图示将安装螺丝穿过后盖、安装板，将高音喇叭的后盖锁紧在选取的位置
- 3、将喇叭装入后盖内、压紧前盖。
- 4、调整喇叭的方向，以便达到理想的听音效果。

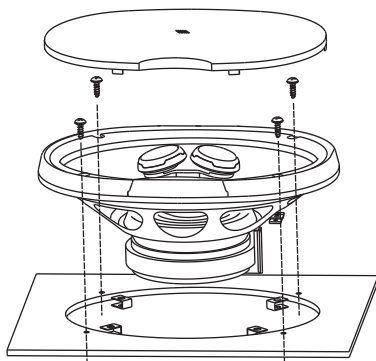
注：此种方式需在车上锁螺钉，故在安装前须确定高音喇叭的安装位置。



低音喇叭安装：

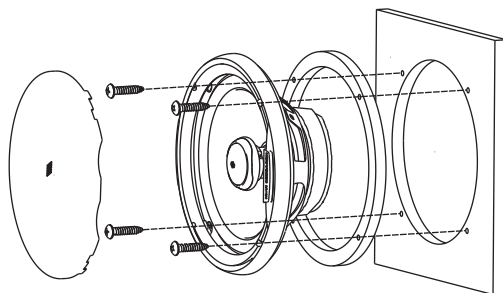
安装一（TC169）：

- 1、依实际需要将密封垫片粘于喇叭的安装位。
- 2、依开孔模板在选定的位置开喇叭孔及螺丝安装孔。
- 3、在安装孔位置安装铁夹。
- 4、将装饰网的网拆除，螺丝穿过装饰网塑料件及喇叭安装孔将喇叭锁紧。
- 5、将网按图示装于喇叭上。

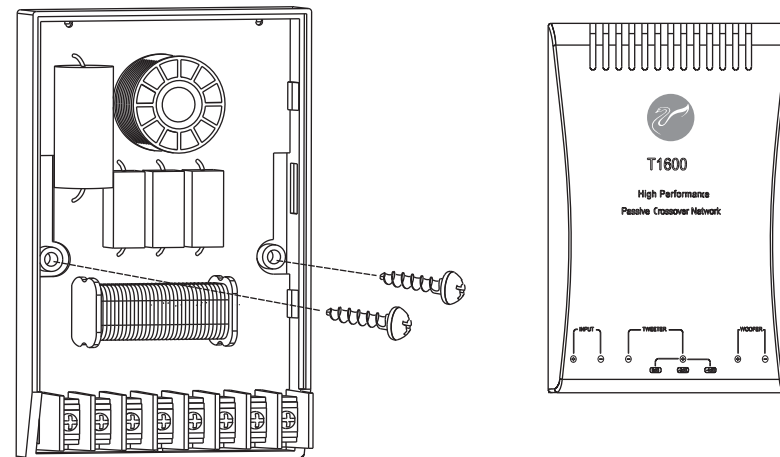


安装二（TC160、TC150、T5W、T6W）：

- 1、依实际需要将密封垫片粘于喇叭的安装位。
- 2、将装饰网的网拆除。螺丝穿过装饰网塑料件及喇叭安装孔将喇叭锁紧。
- 3、当安装深度不够时，可以在喇叭的安装位加一垫圈以增加安装深度。
- 4、将网按图示装于喇叭上。

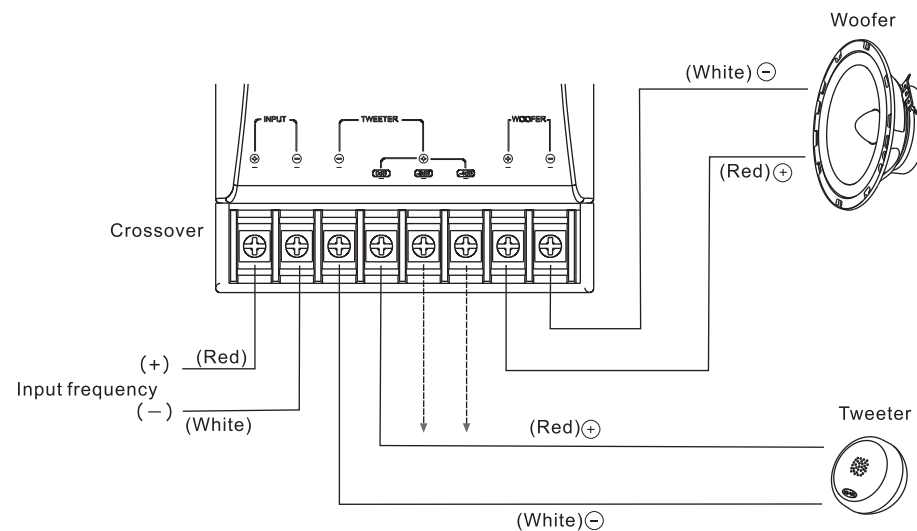


2. Install the crossover in the door of car or some other places.

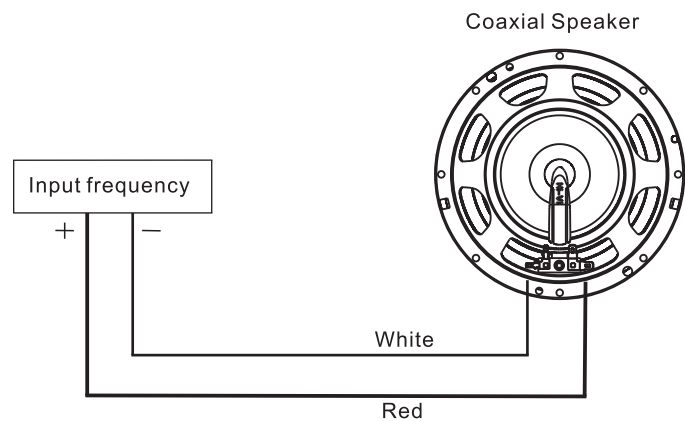


Connection

- 1、The drawing of crossover and tweeter, woofer

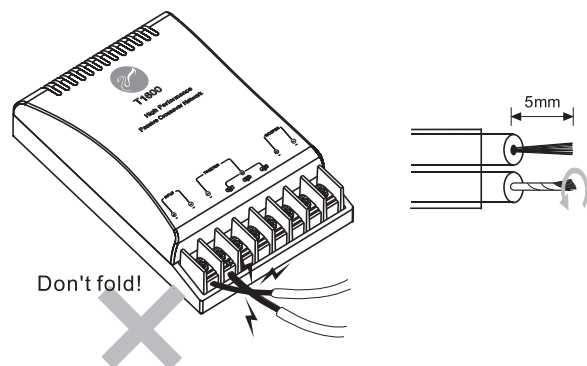


2. The drawing of coaxial speaker:



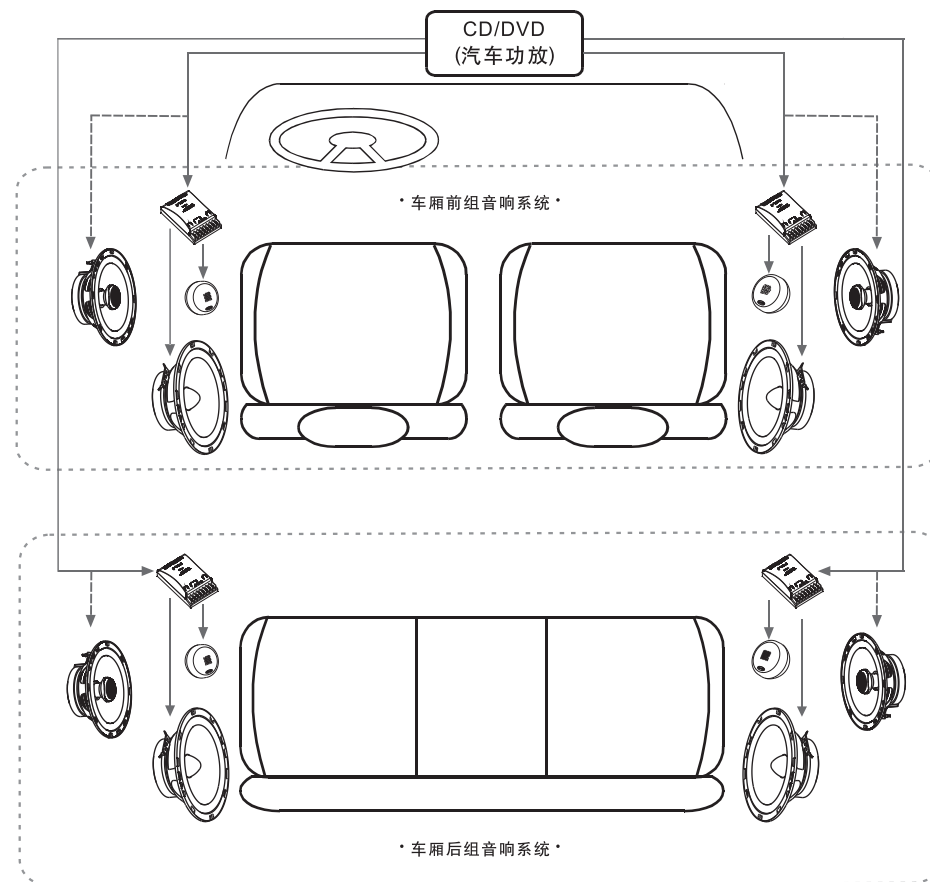
Notice of installation

1. Divest about 5mm wire insulator
2. Wring the wire core together tightly
3. As to protect circuit, don't let anode(+) and cathode(-) happen short circuit



线路图:

请按照以下线路图连接



声学是一门非常独特的学科，它涵盖的领域非常的广泛，在不同的领域里又有着非常独特的要求，因不同环境的特殊性对声学的设计有着不同的诠释，但最终的愿望都是一样--对美的追求！汽车影音系统就是一种非常特别的声学环境。惠威是一家以技术为当先的企业，我们专心的在不同的声学领域认真地研究，以期为顾客提供高品质的享受。

“旧时王谢堂前燕，飞入寻常百姓家”，汽车在逐步普及，汽车生活、汽车文化也在慢慢渗入我们的日常生活，劳累之余，如何更好的享受生活？成为许多人思考并追求的话题！

为此，我们精心设计并推出面向大众的全新汽车扬声器系统-----T系列，这是一个全新的设计，针对汽车声学环境我们做了大量的研究，并作了大量的改进。汽车空间的局限性很容易造成高频嘈杂，中频人声缺少、沉闷，低频共鸣声大，声场定位、结像力变差。加之严寒酷暑潮湿的使用条件，如何选材设计变得非常重要。

在C系列里，我们采用陶瓷渗入聚丙烯改变内阻及比弹性率；配以发泡NBR橡胶边的设计取得了重要的突破，在此基础上，T系列我们采用碳纤维渗入聚丙烯的设计，配以比重比水还小的Sanoprene橡胶边，有效平衡内阻、重量、杨氏模量之间的关系，解决人声过厚的问题，提高语言清晰度。增加中频质感。全新设计高聚磁驱动系统，动力强劲，极大的降低非线性失真且效率大大提高。

高音单元均采用高性能钕铁硼三文治磁路，磁通密度高。天然纤维高阻尼球顶振膜，频率响应宽广平直，清晰度高、瞬态响应好、音色细腻自然，大功率低质量CCA W音圈配以Ferro sound液磁冷却，极大提高了功率承受能力。

T1500、T1600均采用独立分音器设计。依据车内环境的特殊性的高低音安装位置的不确定性对各元器件进行精确校准，高、低音衔接平滑自然，声像聚焦准确，整体听感圆润丰满，清晰自然。高通设计为三种不同灵敏度输出，可以自由调整。方便不同车型、不同类型音乐取向用户的选择。高音部分采用三种不同的安装方式，最大程度地扩展了安装的便利性，并且可以根据用户的喜好更换高音前后外饰。T系列同轴系统结构紧凑，极大地方便了用户的安装。

Specification

Model	TC150	TC160	TC169
Diameter	5 1/4 " coaxial	6 1/2 " coaxial	6 " X9 " coaxial
Woofers	5 1/4 " middle, low sound	6 1/2 " middle, low sound	6 " X9 " middle, low sound
Tweeter	3/4 " soft dome tweeter	3/4 " soft dome tweeter	3/4 " X2 soft dome tweeter
Sensitivity	88dB	90dB	90dB
Frequency Response	60-23KHz	45-23KHz	45-23KHz
Max Power	120W	150W	180W
Power Handling	40W	50W	60W
Rating Impedance	4 Ω	4 Ω	4 Ω
Installation Size	Φ138	Φ156.5	166.5x119.5
Hole Size	Φ116	Φ144	153x214
Installation Depth	>62	>65	>81
Net size	Φ158x22	Φ172.5x22	252x179x29

Model	T1500	T1600
System	5 1/4 " + 1 " Fissiom	6 1/2 " + 1 " Fissiom
Woofer	5 1/4 " middle, low sound	6 1/2 " middle, low sound
Tweeter	1 " soft dome tweeter	1 " soft dome tweeter
Sensitivity	88dB	90dB
Frequency Response	60-23KHz	50-23KHz
Max Power	120W	150W
Power Handling	40W	50W
Rating Impedance	4 Ω	4 Ω
Installation Size	Φ 138	Φ 156.5
Hole Size	Φ 116	Φ 144
Installation Depth	>62	>65
Net size	Φ 158x22	Φ 172.5x22
Frequency point	2.8KHz	2.7KHz
High pass decay rate	-12dB/Octave	-12dB/Octave
Low pass decay rate	-6dB/Octave	-6dB/Octave

惠威车用扬声器系统

HI-END CAR LOUDSPEAKER SYSTEM



TC150



TC160



TC169



T1500



T1600

欢迎您选购惠威车用扬声器系统。为了便于您的安装及使用，我们编写本手册。请务必在安装之前，仔细阅读并清楚了解安装程序及注意事项。依据不同型号的扬声器系统，采用不同的安装方式。

虽然这本手册说明了安装的方式，但是对于汽车拆装并没有作说明。假如您没有此方面的经验，请不要自行安装，您可以去有经验的汽车服务处进行咨询。

请特别注意您的汽车处于熄火状态！