

# Installation Manual for Experience Line

<b>EL-C6.2A</b>	2-Way Component System	Part Nr. 280236
<b>EL-X6A</b>	2-Way Coaxial Set	Part Nr. 280237

**Please read installation manual carefully before beginning  
installation!**



# rainbow

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## Dear Music Lover

Congratulations on your purchase of our superior product! We sincerely thank you for placing your trust in Rainbow Audio. With over 30 years of engineering expertise in car audio speakers and a commitment to the principles of the **golden ratio** for product design, Rainbow has developed a wide range of products that deliver life-like sound, capturing every detail and emotion.

Rainbow guarantees exceptional quality, and we wish you countless hours of enjoyment with your favorite music, brought to life by our high-performance products. This installation manual has been carefully prepared, considering various mechanical and acoustical factors, to help you better understand and operate Rainbow products.

We welcome your questions, feedback, and suggestions. Please feel free to send them to **info@rainbow-audio.de**.

Best regards,

**The Rainbow Team**

## Safety Instructions

### Attention

Please read all warnings in this manual carefully. These instructions are included to inform you about potential risks of personal injury or property damage. Rainbow products are designed for car audio enthusiasts seeking unparalleled sound performance in vehicles. Always comply with the relevant safety regulations for vehicle components, internal safety standards, and those specified by authorized vehicle manufacturers.

### Hearing Protection

Continuous exposure to sound pressure levels above **85 dB** can result in permanent hearing loss. High-powered audio systems may exceed **130 dB**, posing a serious risk to your hearing. Use common sense and avoid prolonged exposure to high volume levels.

### Volume and Driver Awareness

Using audio systems while driving can impair your ability to hear essential traffic sounds, posing a potential safety hazard. Rainbow Audio accepts no liability for hearing loss, injury, or property damage caused by the use or misuse of this product.

# Installation Notice

## 1. Secure Installation

Ensure all components of the speaker system are firmly secured to prevent them from becoming hazardous projectiles in the event of sudden stops or accidents.

## 2. Inspect Before Drilling

Avoid damaging fuel lines, brake lines, electrical cables, or oil lines when drilling or driving screws into the vehicle. Inspect the area thoroughly before proceeding.

## 3. Disconnect the Battery

Disconnect the car battery before starting installation. Check with your car dealer to confirm whether this is feasible without triggering system issues.

## 4. Trim Panel Removal

Exercise care when removing interior trim panels to prevent damage to fastening devices used by the manufacturer.

## 5. Sheet Metal Alterations

If cutting or removing sheet metal is necessary, consult your authorized dealer to ensure vehicle safety certification remains valid.

## Shock Hazard

Avoid touching connectors while the system is operational.

# Mechanical Installation

## Choosing a Location

For optimal performance and a clean installation, start by identifying the best mounting locations for your speakers. In most vehicles, rear doors are the standard location for coaxial speakers. We recommend using factory-installed speaker slots whenever possible, as this eliminates the need for custom drilling, saves time, and ensures a seamless fit. Whether installing a coaxial speaker set or a 2-way component system, using factory locations simplifies the process and ensures a smooth, integrated look.

## System Testing

Gradually increase the volume to test for distortion. Adjust the balance control to verify sound uniformity across both speakers. Recheck all connections if any abnormalities occur.

## Warranty Policy

**Warranty Period:** One year from the date of purchase by the original buyer.

### Exclusions:

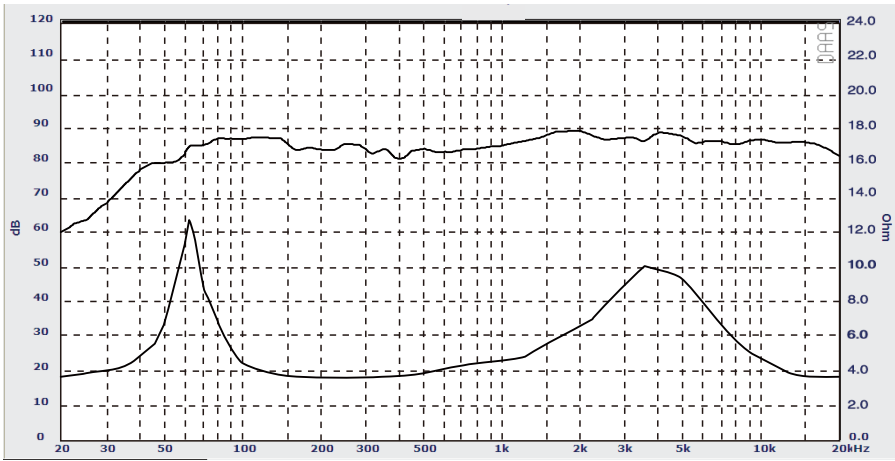
- Mechanical damage during installation or use of incompatible components.
- Electrical defects due to overload or distortion.
- Wear and tear, improper enclosures, or extreme volume levels.

**Note:** Warranty becomes void if the product is transferred or modified by unauthorized personnel.

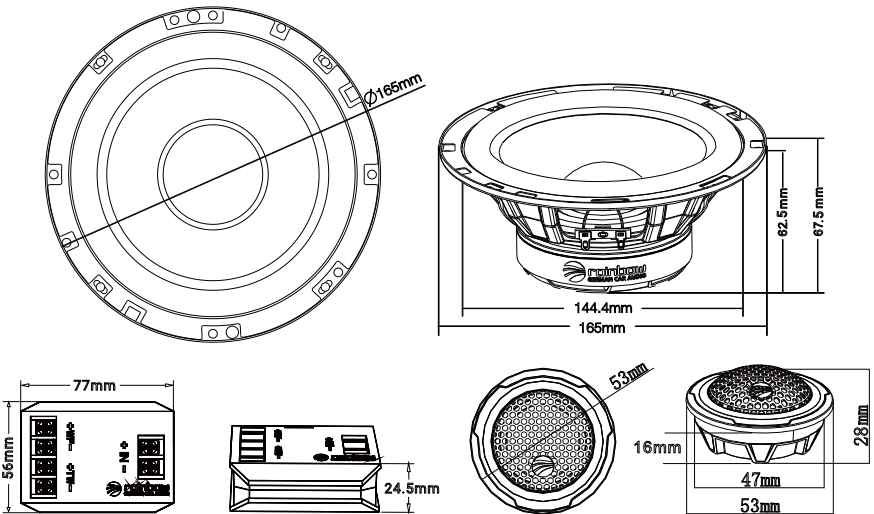
# TECHNICAL DATA

## EL-C6.2A

Impedance vs Frequency Response

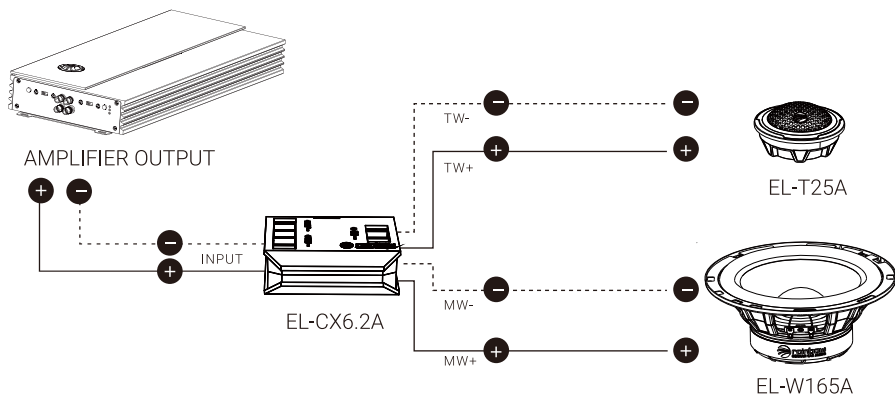


## Dimension Illustration



<b>T/S Parameters</b>	
Cone	silk/PP
Sensitivity	86 dB/W/m
Nominal Power	90 W
Peak Power	180 W
Nominal Impedance	4 Ohm
Re	3.4 Ohm
Fs	63 Hz
Fr	63 Hz - 20 kHz
Qms	4.53
Qes	1.25
Qts	0.98
Mms	12.6 g
Cms	498 u M/N
Sd	12.87 cm <sup>2</sup>
Vas	12 L
BL	3.7 Tm
Magnet Dimension	85 * 45 * 15 mm
Voice Coil Diameter	25.5 mm
Voice Coil Height	7.41 mm
Mounting Depth	62.5 mm
Mounting Diameter	144.5 mm
Weight	798 g

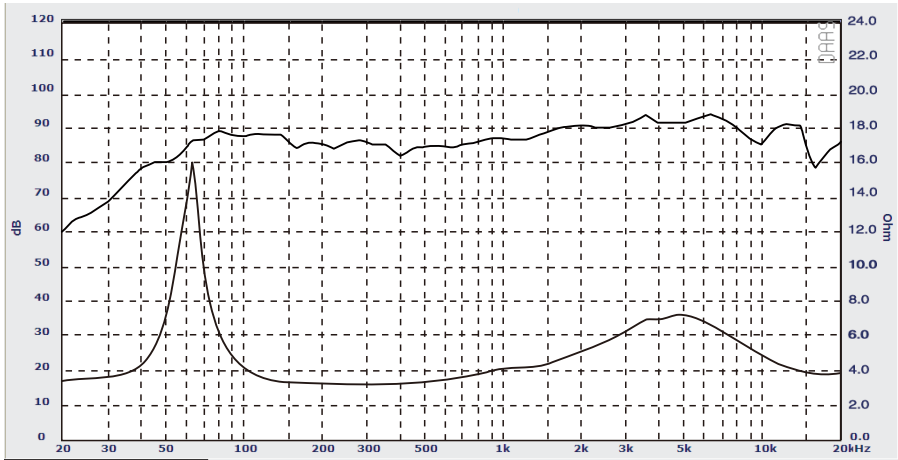
## EL-C6.2A Wiring Diagram



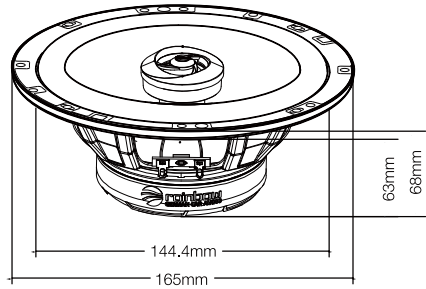
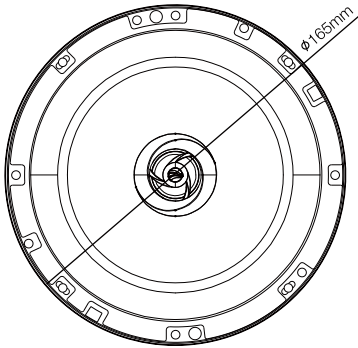
# TECHNICAL DATA

## EL-X6A

Impedance vs Frequency Response



## Dimension Illustration



<b>T/S Parameters</b>	
Cone	PP
Sensitivity	86 dB/W/m
Nominal Power	90 W
Peak Power	180 W
Nominal Impedance	4 Ohm
Re	3.4 Ohm
Fs	62 Hz
Fr	62 Hz - 20 kHz
Qms	6.6
Qes	1.4
Qts	1.1
Mms	11.5 g
Cms	583.0 u M/N
Sd	13 cm <sup>2</sup>
Vas	13.7 L
BL	3.4 Tm
Magnet Dimension	85 * 45 * 15 mm
Voice Coil Diameter	25.5 mm
Voice Coil Height	7.37 mm
Mounting Diameter	144.5 mm
Mounting Depth	63 mm
Weight	836 g

亲爱的音乐爱好者：

祝贺您购买了我们的优质产品，感谢您对彩虹的信任。彩虹拥有超过30年的汽车音响产品开发技术和生产经验，并遵循拥有两千多年历史的黄金分割率，制造出富有音乐感、声音自然动听的音响器材。彩虹汽车音响音质卓越，性能优良，让您尽情享受音乐之美。我们结合了不同的机械和汽车声学特点编写了这本安装手册，帮助您更好地了解和使用彩虹产品。如您有任何疑问、反馈和改善建议，请发邮件至info@rainbow-audio.de，我们将不胜感激。

最美好的祝愿

彩虹团队

## 安全指南

### 注意

请仔细阅读用户手册中的警示，我们在此注明并强调这些信息是为提醒您免受潜在的人身伤害或设备损坏。

如您想要升级汽车音响系统、乐享旅程，彩虹产品一定是您的不二之选。汽车零部件相关安全守则，车内安全守则和授权汽车生产商相关守则都须严格遵守。

### 听力保护

长时间聆听高于85分贝音量的声音可能会造成永久性听觉损失。而大功率音响系统产生的声音高于130分贝，可能会损伤听力。请合理调节系统音量及聆听时间，避免以上风险。

### 音量和安全驾驶

驾驶时，使用音响系统可能会让你听不清周围的交通声，进而引发交通事故。

彩虹对因产品使用不当引起的听力损伤、人身伤害或财产损失概不负责。

### 安装须知

#### 1、安全安装

确保音响系统的所有组件均牢固固定，以防在车辆急刹或发生事故时成为危险的抛射物。

#### 2、钻孔前检查

在车辆上钻孔或拧入螺丝前，务必仔细检查，避免损坏燃油管路、制动管路、电缆或机油管路。

### 3、断开电池

在安装前，请先断开汽车电池。建议咨询您的汽车经销商，确认此操作是否可行，确保不会引发系统问题。

### 4、拆卸内饰板

拆卸车内饰面板时，请小心操作，以免损坏制造商使用的固定装置。

### 5、钣金改动

如需切割或移除车身钣金，请咨询授权经销商，以确保车辆安全认证仍然有效。

### 触电危险！

音响系统运行时，不要触摸接线端口。

## 机械安装

### 选择安装位置

为实现最佳音效和简洁的安装效果，请先确定扬声器的最佳安装位置。在大多数车辆中，后车门是同轴扬声器的标准安装位。我们建议尽可能使用原厂预装的扬声器槽位，这样无需额外打孔，既能节省时间，又能确保完美贴合。无论是安装同轴扬声器套装还是二分频音响系统，使用原厂安装位都能简化流程，并实现流畅、一体化的视觉效果。

### 系统测试

逐步增加音量以测试是否存在失真。调整平衡控制，确保两侧扬声器的声音均匀。如果出现任何异常情况，请重新检查所有连接。

### 保修政策

**保修期限：**自原始购买者购买之日起一年。

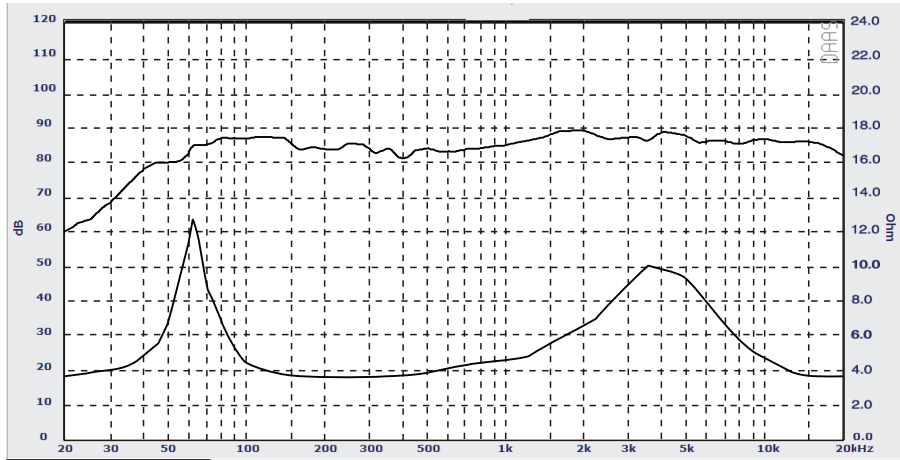
保修范围不包括以下情况：

- 安装过程中造成的机械损坏或使用了不兼容的组件。
- 由于过载或失真导致的电气故障。
- 正常磨损、不当安装或极端音量使用。

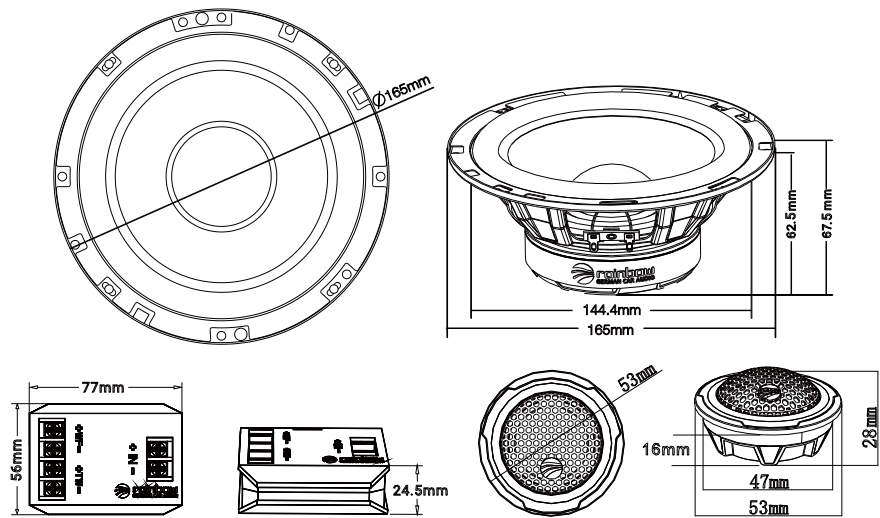
注意：若产品被转让或未经授权人员改动，保修将失效。

EL-C6.2A

阻抗/频率响应

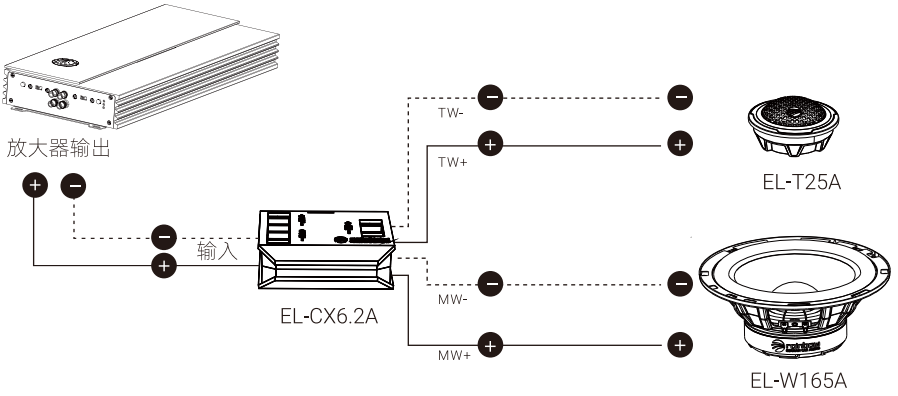


尺寸图示



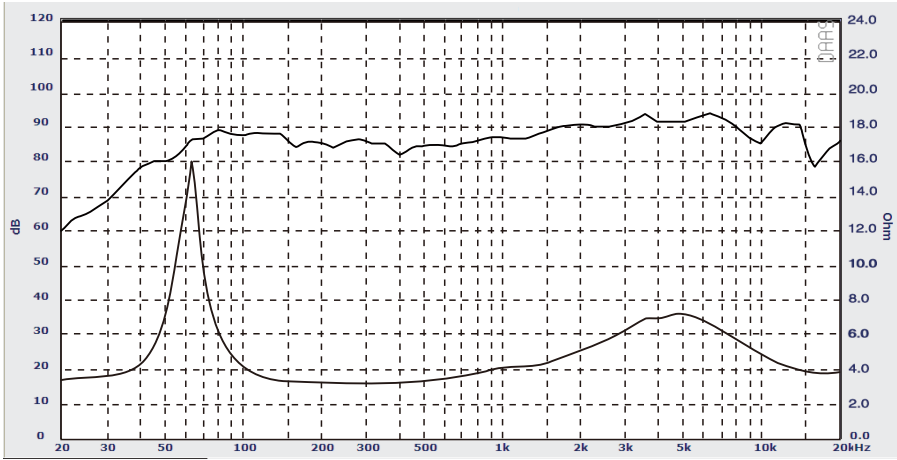
<b>T/S参数</b>	
振膜	丝膜/PP
灵敏度	86 dB/W/m
额定功率	90 W
峰值功率	180 W
额定阻抗	4 Ohm
直流阻抗	3.4 Ohm
谐振频率	63 Hz
频率响应	63 Hz - 20 kHz
机械品质因数	4.53
电声品质因数	1.25
总品质因数	0.98
振动质量	12.6 g
力顺	498 u M/N
振动面积	12.87 cm <sup>2</sup>
等效容积	12 L
力系数	3.7 Tm
磁铁尺寸	85*45*15 mm
音圈直径	25.5 mm
音圈高度	7.41 mm
安装深度	62.5 mm
安装直径	144.5 mm
重量	798 g

### EL-C6.2A 连接图示

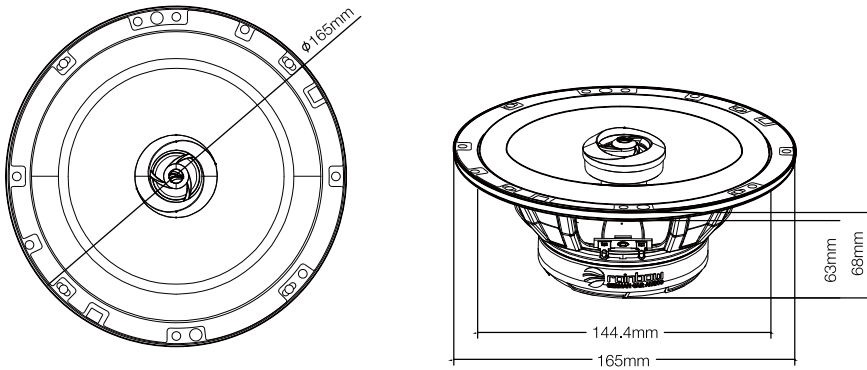


EL-X6A

阻抗 vs 频率响应



尺寸图示



<b>T/S参数</b>	
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