

Installation Manual for Sound Line Pro

SL PRO-W12ST

12" SPARE TYRE ALUMINUM ACTIVE SUBWOOFER

Part Nr. 280245

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



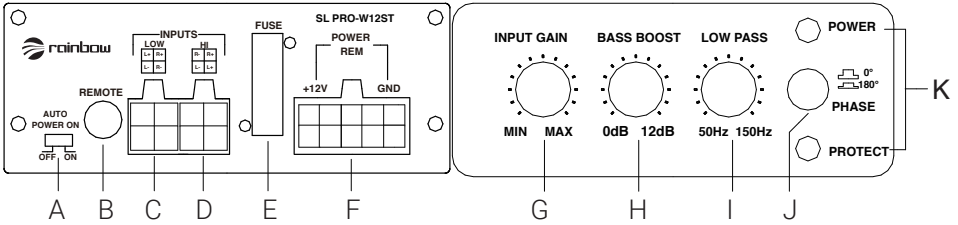
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PANEL FEATURES



A. AUTO POWER ON

The AUTO POWER ON switch is for high level input. When the switch is "ON", the subwoofer will turn on/off automatically as the head unit is turned on/off. If you prefer to use REMOTE terminal of the head unit to turn on/off the subwoofer, the AUTO POWER ON switch must be set "OFF".

Note: If there is POP noise when turning on the head unit, it's recommended to set the AUTO POWER ON switch "OFF" and use REMOTE terminal to turn on/off the subwoofer.

B. REMOTE

Connect the included remote control to control the volume level of the subwoofer independently.

C. LOW LEVEL RCA INPUTS

Low level inputs are the recommended way to introduce the audio signal to the subwoofer if RCA outputs are present on your head unit or other signal source (such as a sound processor).

D. HIGH LEVEL (speaker level) INPUTS

If your head unit does not have RCA outputs you can use the speaker outputs for the audio source for the subwoofer. Use the supplied cable and wire harness and connect the outputs properly as shown in the connection diagram in this manual.

E. FUSE

Do not use a fuse with a different value and NEVER replace the fuse with a wire or a coin.

F. CONNECTOR

Power input terminals.

G. INPUT GAIN CONTROL

After you have installed your system, turn this control to minimum.

Turn the head unit on (and the subwoofer will turn on via the remote connection). Turn the head unit volume to about 2/3 full level.

Slowly turn up the subwoofer input gain control until you hear a small amount of distortion. Then reduce the level until the distortion is completely gone. Level the control at this setting.

H. BASS BOOST

The BASS BOOST feature will increase the sound level in the bass frequency.

I. LOW PASS FILTER

This control permits you to define the frequency range you want the subwoofer amplifier to receive. The subwoofer will reproduce all sound BELOW the frequency you set.

Note: The low pass filter frequency can be higher or lower than the standard. There is +/-20% tolerance.

J. PHASE SHIFT

Use this switch to help compensate for time alignment problems in the system. Such problems usually result from having the subwoofer at a different distance from the listener than the other speakers in the system.

K. POWER STATUS LED

This bi-color LED glows green when power is on and no problems are present. If one of the protection circuits comes on, it will change to red.

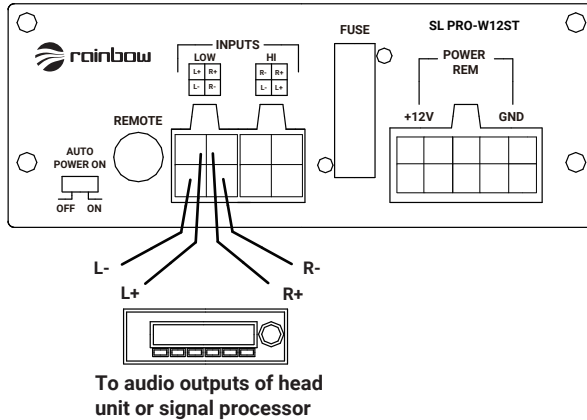
WIRING

LOW LEVEL INPUT WIRING

Low-level (RCA) input wiring is preferred for best audio performance. Most trunk installations will require a 6-12 feet RCA cable. Always use a high quality cable.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

Fig.1

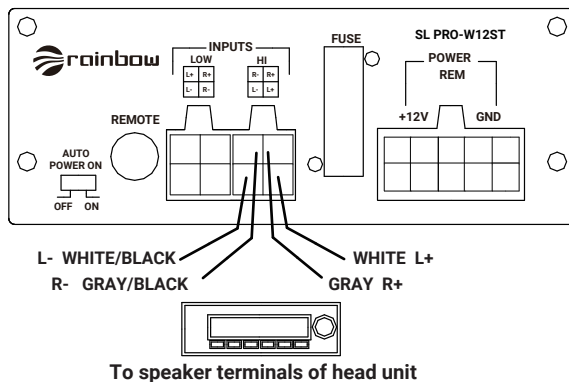


HIGH LEVEL INPUT WIRING

The high level input(s) should only be used when your receiver lacks RCA outputs. If the RCA outputs are not present, connect the speaker outputs from the receiver to the high level input connector of the amplifier. Be sure to observe polarity to avoid audio phase problems.

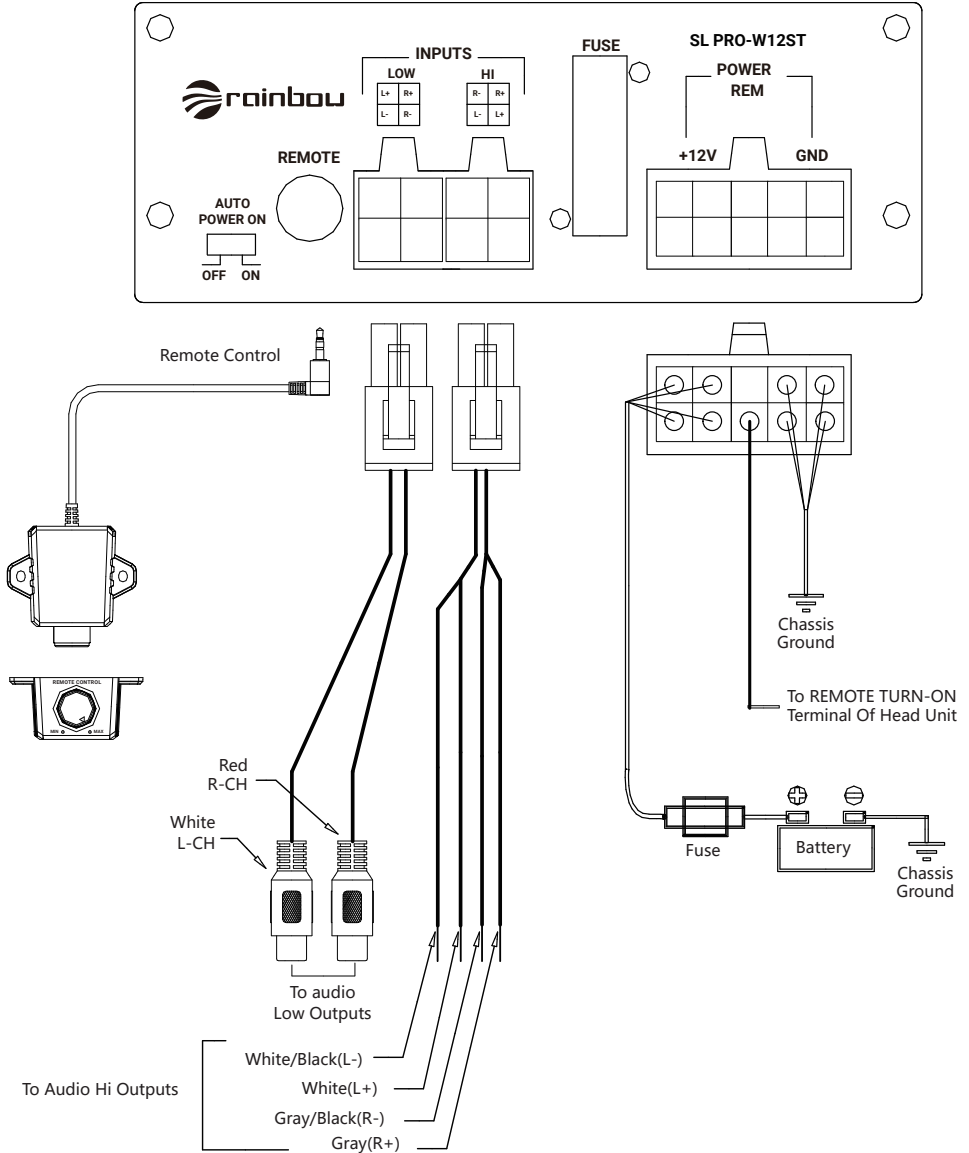
NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

Fig.2



SIGNAL INPUT & POWER CONNECTION

Fig.3



SPECIFICATIONS

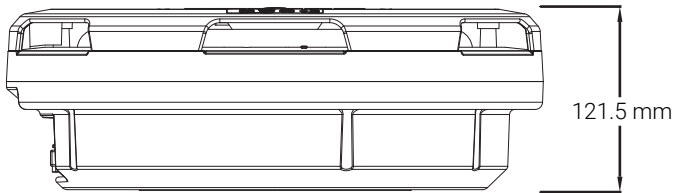
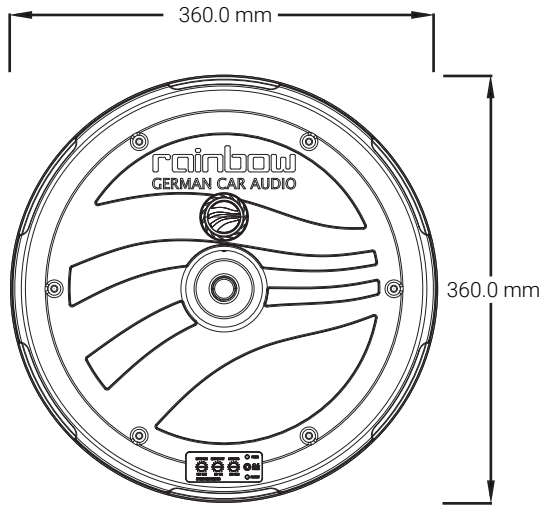
RMS Power	150W
THD	<0.5%
SNR	>90dB
Frequency Response	20Hz - 150Hz
Input Sensitivity, High Level	0.6 - 1V
Input Sensitivity, Low Level	200mV
Low Pass Filter	50Hz - 150Hz
Bass Boost	0 - +12dB
Subsonic Filter	20Hz
Fuse Rating	25A
Subwoofer	12 inch, 2 Ohm

All specifications are subject to change without notice

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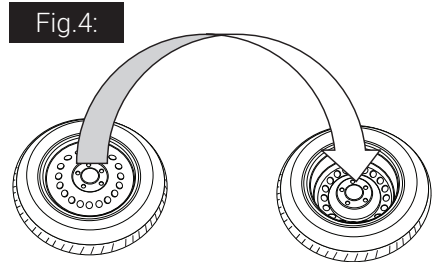
PRODUCT DIMENSIONS



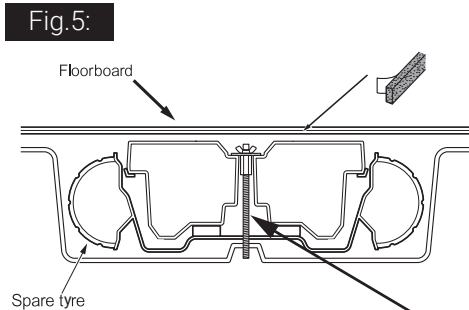
INSTALLATION

FLIP OVER THE SPARE TYRE - IF NEEDED

1. If your spare tyre is Deep Side UP then you need to unbolt it and flip it over so the SL PRO-W12ST can fit in.
(See Fig.4)

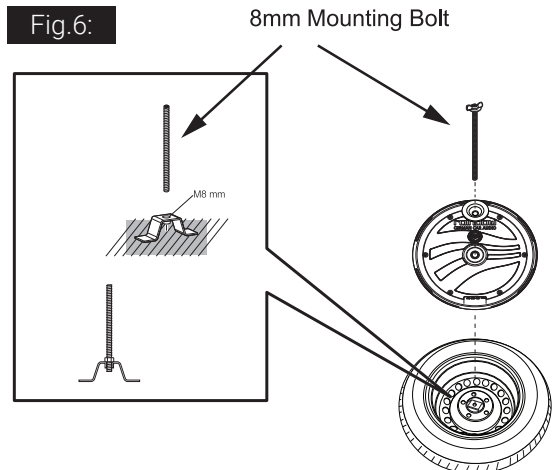


NO NEED TO FLIP OVER THE SPARE TYRE



2. If your spare tyre is Deep Side DOWN, then you simply need to unbolt it and drop the SL PRO-W12ST in.
(See Fig.6)

3. Make sure to check what size the mounting bolt is as the SL PRO-W12ST comes with an 8mm mounting bolt that should fit 90% of all vehicles today.

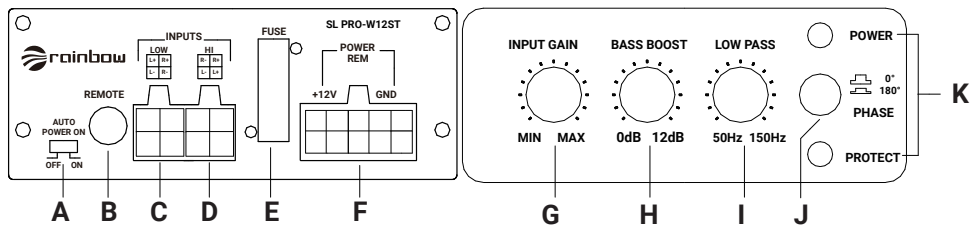


TROUBLESHOOTING

If you experience operation or performance problems with this product, compare your installation with the electrical wiring diagram on the previous pages. If problems persist, read the following troubleshooting tips which may help eliminate the problems.

SYMPTOM	POSSIBLE REMEDY
Amplifier will not power up	<p>Check to make sure you have a good ground connection.</p> <p>Check that the Remote Input (Turn-on) has at least 5VDC. check that there is battery power on the (+) terminal.</p> <p>Check that there is at least 12V.</p> <p>Check all fuses, replace if necessary.</p> <p>Make sure that the protection LED is not illuminated. If it is lit, shut off the amplifier briefly, and then repower it.</p>
protection LED comes on when amplifier is powered up	<p>Check for short circuits on speaker leads.</p> <p>Turn down the volume on the head unit to prevent overdriving.</p> <p>Remove speaker leads, and reset the amplifier. If the protection LED Still comes on, then the amplifier is faulty and needs servicing.</p>
No output	<p>Check that all fuses are Ok.</p> <p>Check that unit is properly grounded.</p> <p>Check that the Remote Input (Turn-on) has at least 5VDC.</p> <p>Check that the RCA audio cables are plugged into the proper inputs.</p> <p>Check all speaker wiring.</p>
Low output	<p>Reset the Level control.</p> <p>Check the crossover control settings.</p>
High hiss in the sound	<p>Disconnect all RCA inputs to the powered sub's control panel. If the hiss disappears, then plug in the component driving the amplifier and unplug its inputs. If the hiss disappears at this point, go on until the faulty/noisy component is found.</p> <p>It is best to set the amplifier's input level control as low as possible. The best subjective signal-to-noise ratio is achieved in this manner. Try to set the head unit as high as possible (without distortion) and the amp input level as low as possible.</p>
squealing noise is present	<p>Check for improperly grounded RCA interconnects.</p>
Distorted sound	<p>Check that the Input Level control is set to match the signal level of the head unit. ALWAYS try to set the Input Level as low as possible.</p> <p>check that crossover frequency is properly set.</p> <p>check for short circuits on the speaker leads.</p>
Amplifier gets very hot	<p>Check that the minimum speaker impedance for the amp model is correct. check that there is good air circulation around the amp. In some applications, it maybe necessary to add an external cooling fan.</p>
Engine noise (static type)	<p>This is usually caused by poor quality RCA Cables, which can pick Up radiated noise. Use only the best quality cables, and route them away from power cables.</p>
Engine noise (alternator whines)	<p>Check that the RCA grounds are not shorted to the vehicle chassis. Check that the head unit is properly grounded.</p>

面板功能



A. 自动开关机控制开关

电源自动开关(ON/OFF)仅应用于高电平输入连接。当开关处于"ON"位置时,在主机开机时,有源音箱将会自动开启;在主机关闭时,有源音箱将会自动关闭。如果使用主机REMOTE线来控制有源音箱开关时,此开关必须处于"OFF"位置。

注意: 开关主机时, 如果听到有开关机冲击声, 此时自动开关机开关要设定在“OFF”位置。改用主机的REMOTE线来控制开关机。

B. 远程低音音量控制端口

连接自带的遥控器可以控制有源低音音箱。

C. 低电平输入端口

主机的低电平信号可以通过RCA音频线输入到有源音箱的RCA端口,低电平输入线的连接方法参考Fig.1。

D. 高电平输入端口

附件配有高电平输入线,如果主机没有RCA输出端口,这时主机的功放信号可以通过高端输入线,输入到高电平输入端口。高电平输入线的连接方法参考Fig.2。

E. 保险丝插座

保险丝的规格要用标称值,不要用铜导线类代替保险丝。

F. 连接器

电源端子。

G. 音量电位器

开机前要把音量电位器调到最小位置。主机调到合适音量后,慢慢调大有源音箱的音量电位器,直到出现较小失真时,这时再调小音量即可。

H. 低音提升电位器

此电位器用来提升低音的声压。

I. 低音滤波器电位器

此电位器用来调节低滤波器的频率范围,有源音箱将播放所设定频率范围内的低音。

注意: 低滤波器的实际频率有可能高于或低于设定值,误差在 $\pm 20\%$ 左右。

J. 相位转换开关

在不同的位置,通过转换0或180度相位可以得到最大的低音效果。

K. 电源和保护指示灯

当电源开启时,电源指示灯显示绿色,则运作正常;保护指示灯显示红色,则保护电路开启。

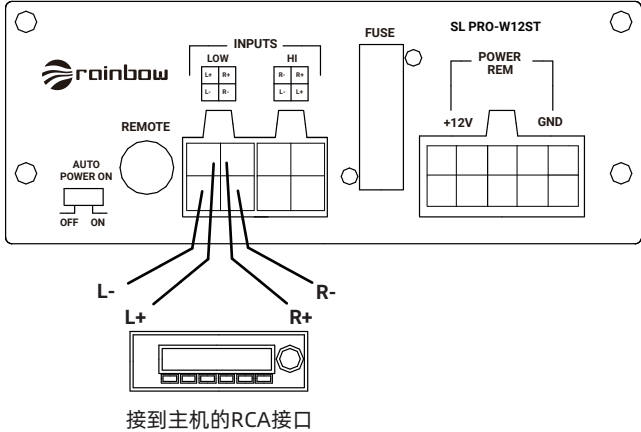
连接方式

低电平输入连接方式

低电平输入连接可以得到最好的低音效果。为了减小失真和干扰,建议使用高品质的RCA连接线(附件不提供)。大多备胎安装都需要6-12英尺的RCA连接线。

注意：高电平和低电平不要同时输入！

Fig.1

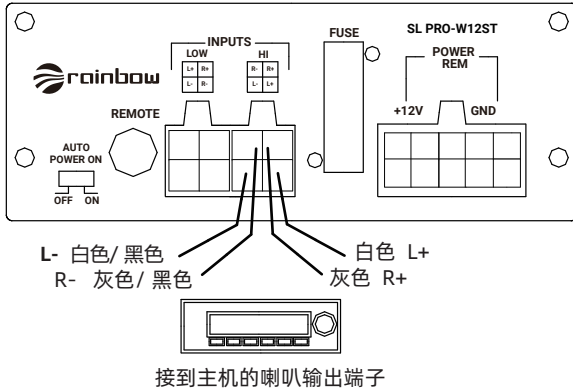


高电平输入连接方式

如果主机没有RCA输出端口,这时主机的功放信号可以通过高端输入线,输入到高电平输入端口。

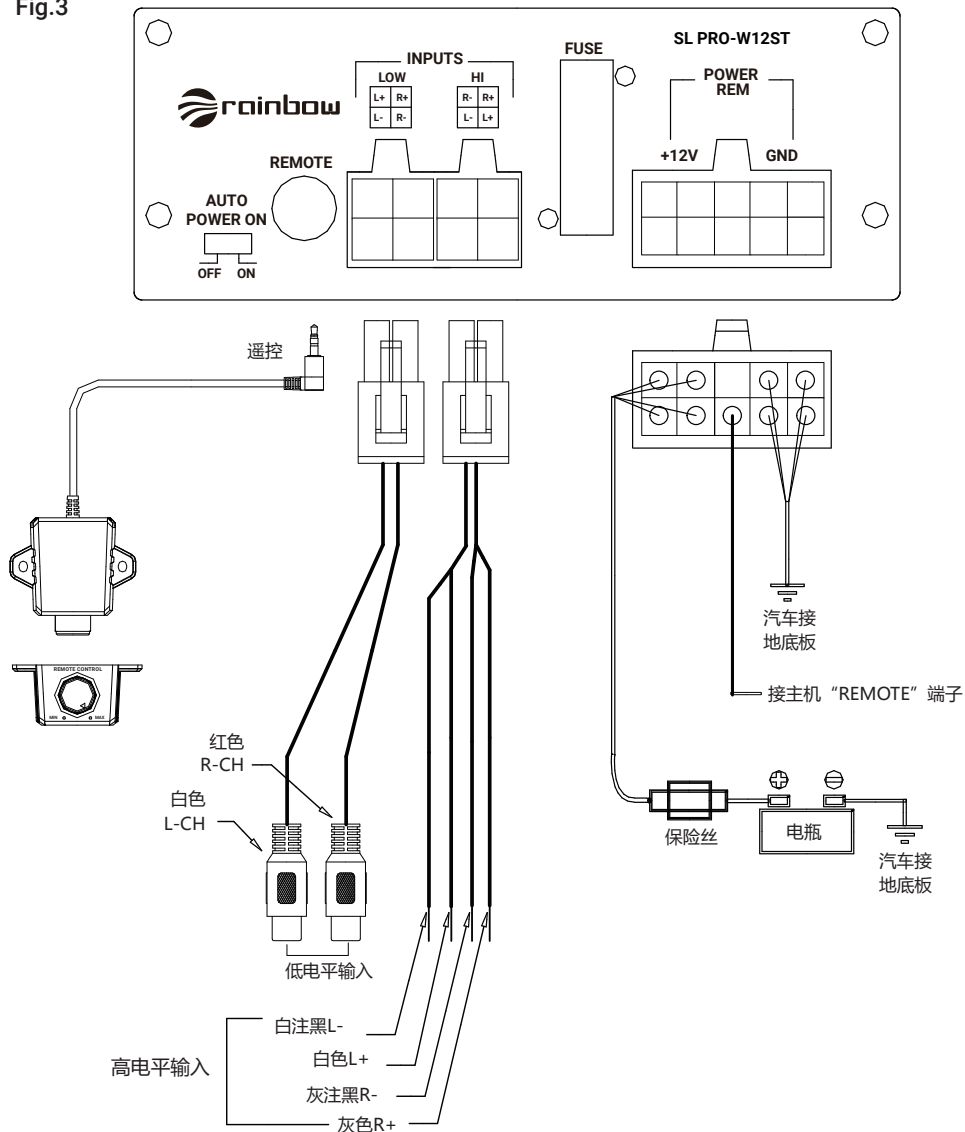
注意：高电平和低电平不要同时输入！

Fig.2



信号输入和电源连接

Fig.3



技术规格

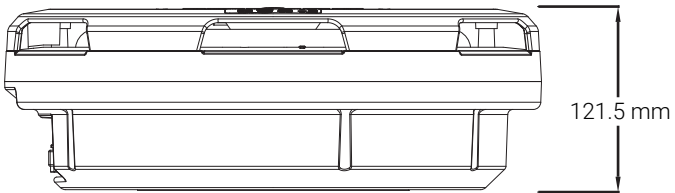
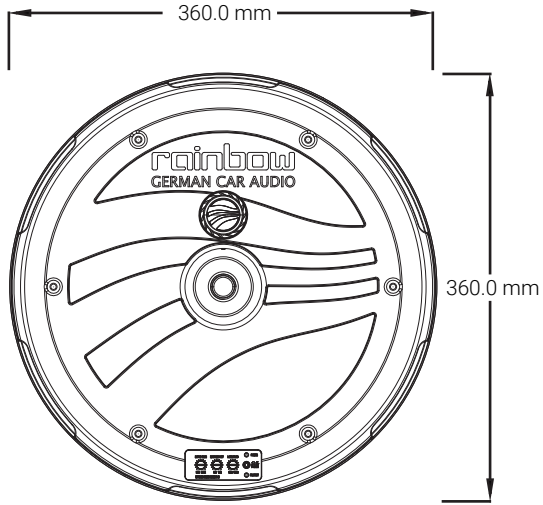
额定功率	150W
总谐波失真	<0.5%
信噪比	>90dB
频率响应	20Hz - 150Hz
高电平输入灵敏度	0.6 - 1V
低电平输入灵敏度	200mV
低通滤波器	50Hz - 150Hz
低音提升	0 - +12dB
高通滤波器	20Hz
保险丝额定值	25A
主动低音喇叭	12 inch, 2 Ohm

所有规格如有更改，恕不另行通知。

附件

1. 铝合金有源备胎低音炮	1台
2. 说明书	1本
3. 螺栓 (M8x205mm)	1个
4. 电源插头	1个
5. 高端输入线	1个
6. 低端输入线	1个
7. 遥控器 & 连接线	1套

产品尺寸

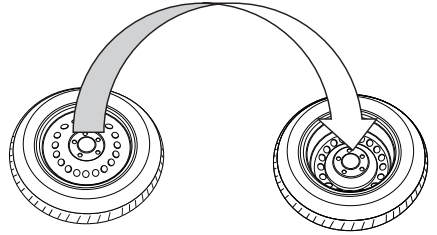


安装

有必要翻转备胎

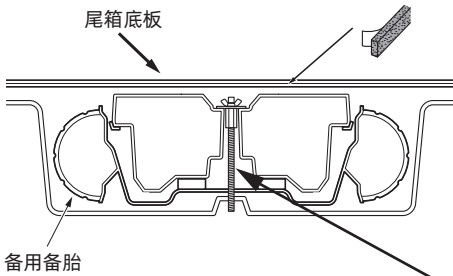
1. 如果你的备胎是深面朝上，那么你需要翻转备胎，这样SL PRO-W12ST就可以安装在里面。
(见图4)

Fig.4:



不必要翻转备胎

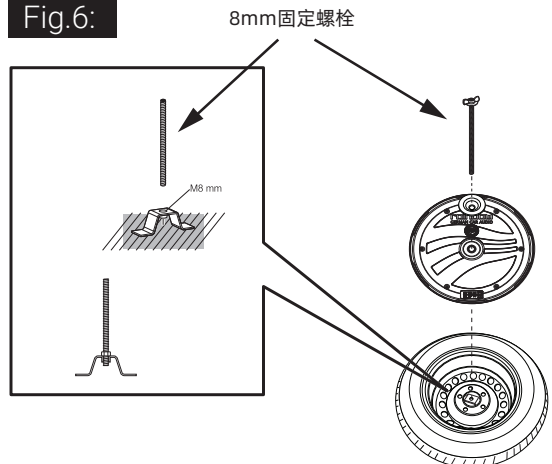
Fig.5:



2. 如果你的备胎是深面朝下，那么你只需要打开备胎，把SL PRO-W12ST放进去，这样它就可以安装在里面了。
(见图6)

3. 确保检查8mm安装螺栓适用SL PRO-W12ST (现在90%的车辆都可以适用)。

Fig.6:



故障排除

故障现象	故障原因
产品不能启动	<ol style="list-style-type: none">1.检查功放电源线地线是否连接良好。2.检查电瓶正极电压是否加在功放的电源端子正极。3.检查REMOTE电压不要低于5V DC。4.检查电源端子正极电压不要低于+12V。5.检查保险丝是否损坏（开路）。6.确认保护指示灯是否亮起，如指示灯亮起则重新启动功放。
产品启动后保护指示灯亮起或过热保护	<ol style="list-style-type: none">1.检查喇叭接线端子是否短路。2.调低音量电位器以防止过载保护。3.卸掉喇叭连接线，重新启动功放，如保护指示灯亮则功放已损坏，需要维修。
产品无输出	<ol style="list-style-type: none">1.检查保险丝是否损坏（开路）。2.功放是否正确接地。3.功放启动电压不要低于5V DC。4.检查RCA音频线或高电平输入线是否正确连接到功放。5.检查喇叭线是否连接良好。
产品输出低	<ol style="list-style-type: none">1.重新设定音量电位器。2.检查滤波器电位器是否在正确的位置。
播放音乐时有嘶嘶声	<ol style="list-style-type: none">1.断开功放的信号输入线，如果嘶嘶声消失就是信号源有问题，此时要确认信号线是否连接良好或信号线质量是否有问题，否则主机可能有问题。2.尽可能把功放音量电位器开小，同时尽可能把主机音量开大（不要失真）。
有啸叫声	<ol style="list-style-type: none">1.检查RCA的地线是否连接好。
失真	<ol style="list-style-type: none">1.检查功放音量电位器是否太大了，功放音量电位器要配合好主机音量。2.检查滤波器电位器大小是否合适。
产品发烫	<ol style="list-style-type: none">1.检查喇叭阻抗是否低于功放的标示阻抗。2.检查功放的安装位置是否通风良好。
引擎声(静态)	<ol style="list-style-type: none">1.主要是RCA信号线质量太差的原因，要换用质量好的RCA信号线，并要远离电源线。
引擎声(发电机火花声)	<ol style="list-style-type: none">1.检查RCA信号线地线不能连接到汽车底盘。2.检查主机是否正确接地。

