

FREUDE

User Manual



FED-25S Spare Tie Subwoofer

***PLEASE READ CAREFULLY BEFORE INSTALLING
OR OPERATING THIS UNIT***

Thank you for buying Freude FED-25S spare tire subwoofer. It makes use of your spare tire and saving space in your car. Easy assembly with provided plug and cable is one of its advantages. If you play it with your own amplifier, please read this manual carefully. This manual will help you learn about and assemble well the Freude spare tire subwoofer.

Features

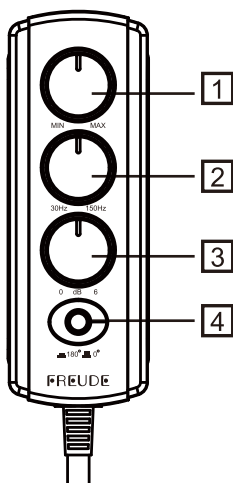
Sealed aluminum enclosure
Easy plug and play connection system, easy to assemble and knock down.
Built in class D amplifier, total hidden installation;
Remote controlled volume; bass boosting, low pass filter and phase.
Automatic power on and off.

Attention

This spare tire subwoofer designed only for assembly into 15inch spare tire or above.

Attachement

1.Active subwoofer	1pcs
2.User manual	1pcs
3.Screw bolt (M8x200mm)	1 set
4.Sponge stickers	8pcs
5.Rubber gasket	1pcs
6.Cable	1set
7.Fuse	1set
8.Remote control	1set
9.Subwoofer mounting base	1pcs
10.Warranty card	1pcs



1. Volume

Adjust the knob to minimum volume before turning on the subwoofer. While the headunit is at proper volume, increase the volume of active subwoofer until there is minimum distortion.

Then turn lower the volume of subwoofer.

2. Low Pass Filter

This knob is used for adjusting the frequency range of low pass filter, among which the active subwoofer will play.

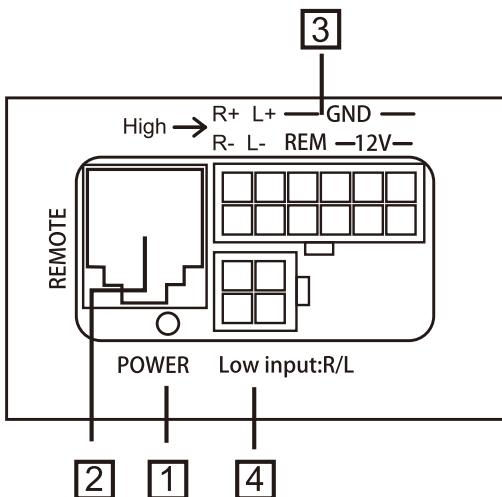
Attention: actual frequency of low pass filter may higher or lower than standard, with deviation between +/-20% or so.

3. Bass

This knob is used for bass boosting.

4. Phase

On different position, switch the phase from 0 or 180 degree to get the maximum bass effect.



1. Indicator light

When power supply working normally, green light on, if circuit protection activated, red light on.

2. Remote control

After connected, it can control the active subwoofer

3. Connector

Power and high level input terminal

4. Connector (2)

Low level input terminal

Model:	FED-25S
Rms power:	400W
Max power:	600W
Total harmonic distortion:	<1.0%
Signal to noise ratio:	>90dB
Frequency response:	20Hz-150Hz
High level input sensitivity	1V
Low level input sensitivity	0.4V
Low pass filter	50Hz-150Hz
Bass boost:	0 to + 12dB
High pass filter:	20Hz
Fuse rating:	40A
Subwoofer diameter	11inch
Impedance	2ohm

The contents of this manual and the specifications of this product are subject to change without notice.

SICHERHEIT reserves the right to make changes to the specifications and materials contained therein without notice.

Installation manual

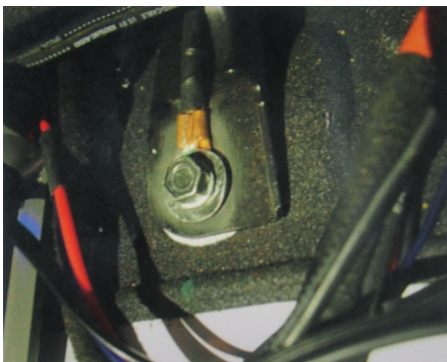
We strongly recommend you to installed the active subwoofer with professional help. But if you have to operate by yourself, this section lists the steps of how to install an active subwoofer in your vehicle.

Warning

Continuous listening to high volume(>110dB) voice may jeopardize hearing ability. listening to voice over 130dB may causes permanent damage to hearing.

- A: Connect ground terminal to the position nearest the amp on car chassis, by minimum 8AWG ground cable with at least 39inch (100cm) long (not supplied).
- B: Connet controlling terminal by minimum 16AWG cable (not supplied) to the RMOTE output terminal of headunit.
- C: Connect the fuse box, without fuse, by 40cm length, and minimum 8AWG cable. Connect one side of fuse box to positive post of car battery and the other side of the fuse to +12V active subwoofer terminal with 8AWG cable. Double check to make sure correct connection before putting the fuse into the fuse box.

Picture 1:



- A. Connect the ground terminal / negative cable in black to the car chassis on the position nearest to the active suwoofer.

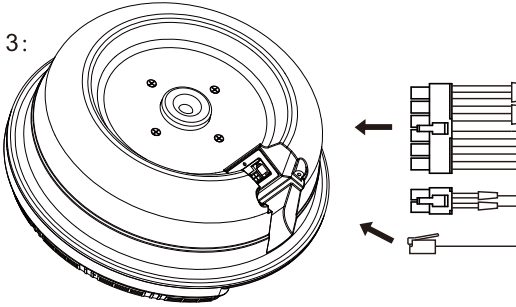
Picture 2:



- C. Power/possitive cable in red, get power from the car battery.(connect the power cable to possitive post of car battery)

Low power input connected method

Picture 3:

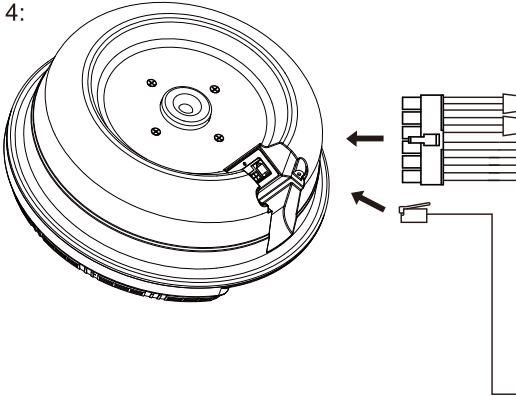


Low level input connection can attain the best bass effect. In order to decrease the distortion and interference,

Attention: Don't connect at the same time by high level

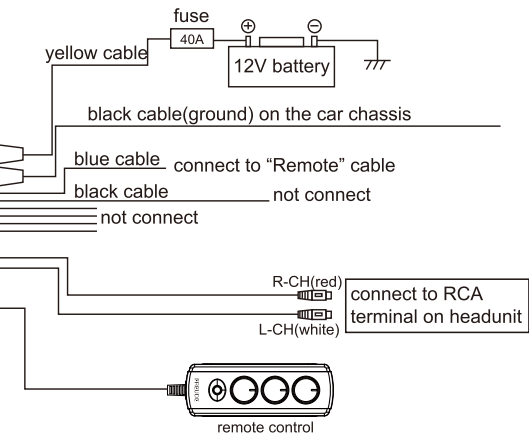
High level input connect method.

Picture 4:



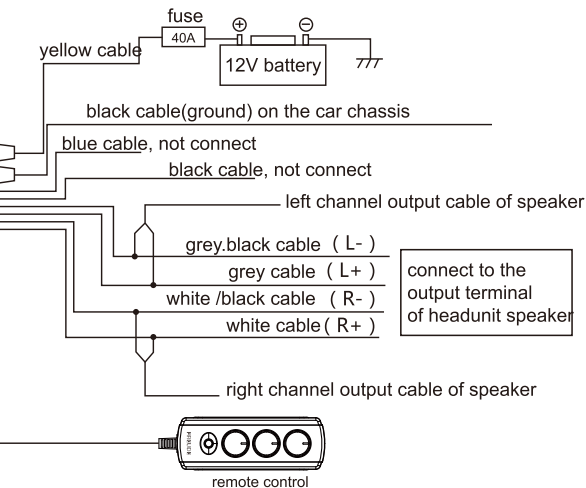
If headunit without RCA output terminal, amp signal input cable.

Attention: Don't connect at the same time by high level



effect, connect RCA terminal by RCA cable (not supplied).
 we recommend you to choose RCA cable with high quality.

level input and low level input!



of headunit can input to high level input terminal by high

level input and low level input!

Attention: This spare tire subwoofer is only designed for assembly into over 15inch spare tire or above.

Picture 5:



- A. At first, make sure your spare tire size suitable for the spare tire subwoofer
- B. clean up your car suitcase
- C. Take off the board and gasket of your car suitcase.

Picture 6:



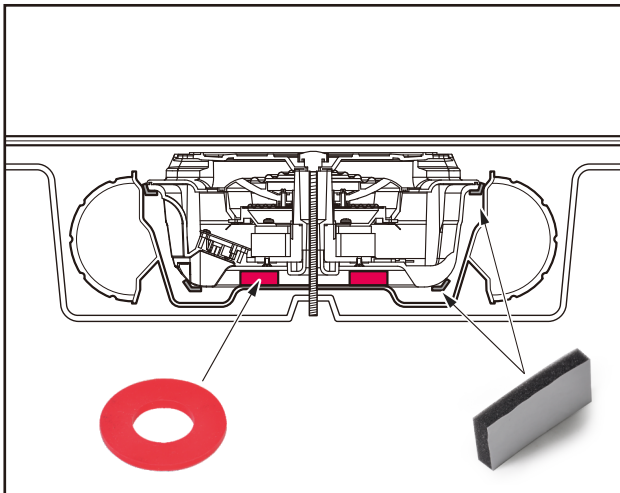
- Use screw bolt (provided)
- A. Clean up your spare tire thoroughly.
 - B. Take out your original spare tire screw bolt.

Picture 7:



- Using screw bolt and screw nut mounting base (provided)
- A. clean up the spare tire
 - B. Take out your original spare tire screw bolt.
 - C. Assemble the provided basis of screw nut.

Picture 8:

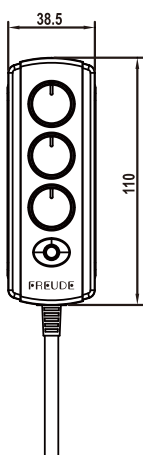
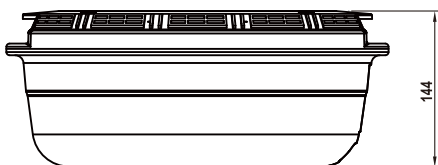
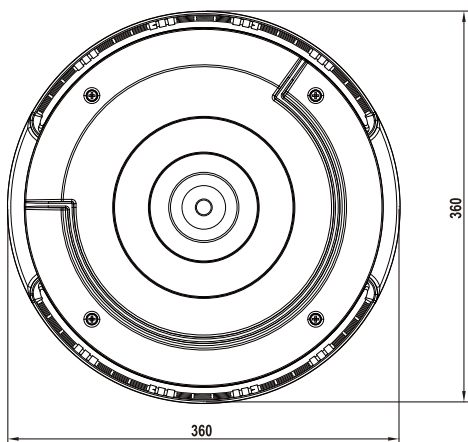


A. put the foam gasket and rubber gasket into correct position.

Picture 9:



A. Active subwoofer connect to power cable
 B. Active subwoofer connect to remote control
 C. Fix to original position with spanner of L shape
 D. Fix the active subwoofer into spare tire with provided screw



Trouble	Cause
can not start up	<ol style="list-style-type: none"> 1.Power cable ,ground cable whether connected well 2. Battery possitive whether added on the possitive power terminal of amp. 3.Check voltage of remote not lower than 5VDC 4.Possitive terminal of power not lower than +12V 5.Fuse whether damaged. 6.Make sure that indicator light is off, if on, please restart the amplifie
Protection indicated light on or overheated protection	<ol style="list-style-type: none"> 1.Check the speaker whether in short-circuited. 2.Adjusting the volume to avoid overloading 3.Remove the speaker connection, restart amplifier, if protection indicator light on, the amplifier had already been damage, which needs to be repaired.
No output	<ol style="list-style-type: none"> 1.Fuse whether damaged. 2.Amplifier whether connected to ground 3.Start voltage of amplifier cannot lower than 5V DC 4.RCA or power input cable whether connected to amplifier well. 5.Check the speaker cable whether connected well.
Low output	<ol style="list-style-type: none"> 1.Reset the volume. 2.Check the fliter whether in correct position.
Hissing when playing music	<ol style="list-style-type: none"> 1.Disconnect the amplifier signal input cable, if hissing disappears, it indicates signal problem. please make sure the signal cable whether connected well, or whether any quality problems exist in the cable. If not, please test wheteher there's problem with headunit. 2.Turn the amplifier at lowest volume, and turn louder the headunit in the same time, to avoid distortion.
Howling sound	<ol style="list-style-type: none"> 1.Check RCA whether connected well
Distortion	<ol style="list-style-type: none"> 1.Amplifier volume whether too large, it need to match with the headunit. 2.Check whether filter is at appropriate level.
Heating	<ol style="list-style-type: none"> 1.Speaker impendance whether lower than standard amplifier impendance. 2.Amplifier assembly system whether in good ventilation
Warning sound	<ol style="list-style-type: none"> 1.Main cause is the bad quality of RCA signal cable, please change good quality ones which should stay far away from power cable.
Warning sound (Generator sparks sound)	<ol style="list-style-type: none"> 1.Check whether the RCA signal cable is connected to car chassis. 2.Check whether the headunit is connected to ground.