

FREUDE

OWNER'S MANUAL

CAR AUDIO SYSTEM

*PLEASE READ CAREFULLY BEFORE INSTALLING
OR OPERATING THIS UNIT*

FED-1000

WARNING

Make sure you choose a suitable place to mount the unit. The position should be completely dry with a good circulation of air, and from a mechanical point of view very stable.

OWNER'S MANUAL

Thank you for purchasing our company car speakers
Please read this instructions carefully before using and make sure you know speaker connections very well.

Precautions

- Before making holes. check the mounting space with supplied template.
- To prevent noise pick-up. keep the wiring away from motors. high-voltage leads and other potential noise sources.
- To prevent a short-circuit. keep all wiring away from moving parts and sharp edges.
- Make sure you carefully read and understand the installation instructions before installing the system in your vehicle.

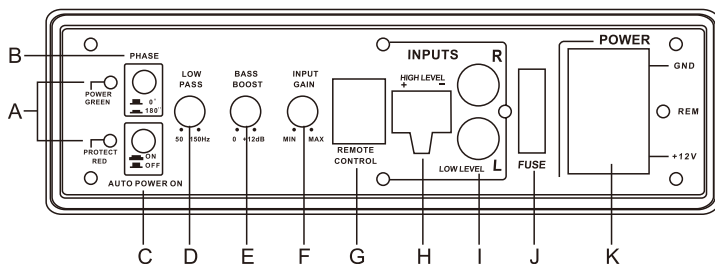
Technical Parameters

Model:	FED-1000
RMS power	180W
THD	<0.4%
Signal-to-noise ratio	>90db
Frequency response	20Hz - 150Hz
High level input sensitivity	0.9V
Low level input sensitivity	300mV
Low pass Filter	50Hz -150Hz
Bass bost	0 to +12dB
High Pass Filter	20Hz
Resistance	4ohm
Fuse rating	25A
Active Subwoofer	10"inch
Dimensions(LxWxH)mm	345x245x65

Trouble Shooting

Amplifier will not power up.	Check to make sure you have a good ground connection. Check that the Remote Input (Turn-On) has at least 5VDC. Check that there is battery power on the (+) terminal. Check that there is at least 12V. Check all fuse, replace if necessary. Make sure that the Protection LED is not illuminated. If it is lit, shut off the amplifier briefly, and then repower it.
Protection LED comes on when amplifier powers up	Check for shod circuits on speaker leads. Turn down the volume control on the head unit to prevent overdriving Remote speaker leads, and reset the amplifier. If the Protection LED still comes on, then the amplifier is faulty and needs servicing.
No output.	Check that all fuses are OK. Check that unit is properly grounded. Check that the Remote Input (Turn-On) has at least 5VDC. Check that the RCA audio cables are plugged into the proper inputs. Check all speaker wiring.
Low output.	Reset the Level Control. Check the Crossover Control settings.
High hiss in the sound.	Disconnect all RCA inputs to the power 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. 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 amplifier input level as low as possible
Squealing noise is present.	Check for improperly grounded RCA inter connects.
Distorted sound.	Check that the Input Level Control is setting to match the signal level of the head unit. Always try to set the Input level as low possible. Check that all crossover frequencies are properly setting. Check for short circuits on the speaker lead
Amplifier gets Over heated.	Check that the minimum speaker impedance for the amp model is correct. Check that there, is good all ready circulation around the amplifier. In some applications, it may be necessary to add an extra cooling fan
Engine noise (static type)	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.
Engine noise (alternator whine)	Check that the RCA grounds are not shorted to the vehicle chassis Check that the head unit is properly grounded.

Panel controls and features



A. POWER STATUS LED

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

B. 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.

C. AUTO POWER ON

The AUTO POWER ON (ON/OFF) is for high level (speaker-level) connections. When the switch is in the "ON" position, the subwoofer AUTO POWER ON when there is signal input. If the amplifier detected no signal input, the amplifier will auto turn off. If you prefer to use the remote turn on/off connection, the switch is in the OFF position.

Note: Please connect the remote terminal to the remote output of head unit as Fig.4. When you hear the unit turn ON/OFF POP noise from the subwoofer.

D. LOW PASS FILTER

This control permits you adjust 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 have +/-20% tolerance.

E. BASS BOOST

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

F. 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.

G. REMOTE LEVEL CONTROL

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

H. HIGH LEVEL (speaker low) 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.

I. 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).

J. FUSE

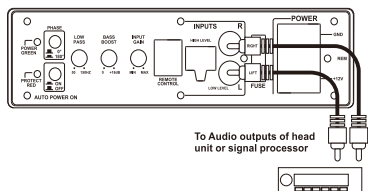
Do not use a fuse with a different value and NEVER replace the fuse with a wire or coin.

K. POWER INPUT TERMINAL

Connection Method

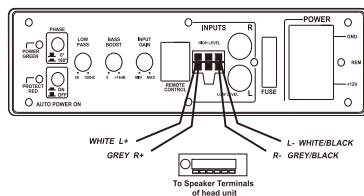
Low Level Input Wiring

Fig.1



High Level Input Wiring

Fig.2

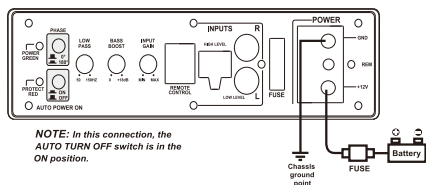


NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time

Power Connections

Solution 1:

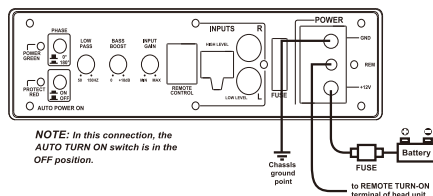
Fig.3



NOTE: In this connection, the AUTO TURN OFF switch is in the ON position.

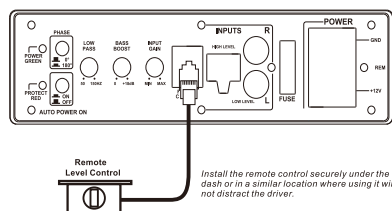
Solution 2:

Fig.4



NOTE: In this connection, the AUTO TURN ON switch is in the OFF position.

Remote Level Control Connection



Install the remote control securely under the dash or in a similar location where using it will not distract the driver.



SICHERHEIT (ASIA) CO., LIMITED
Address: Flat/rm 815 8/f Star House 3 Salisbury Road
Tsim Sha Tsui, Kowloon, Hong Kong

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