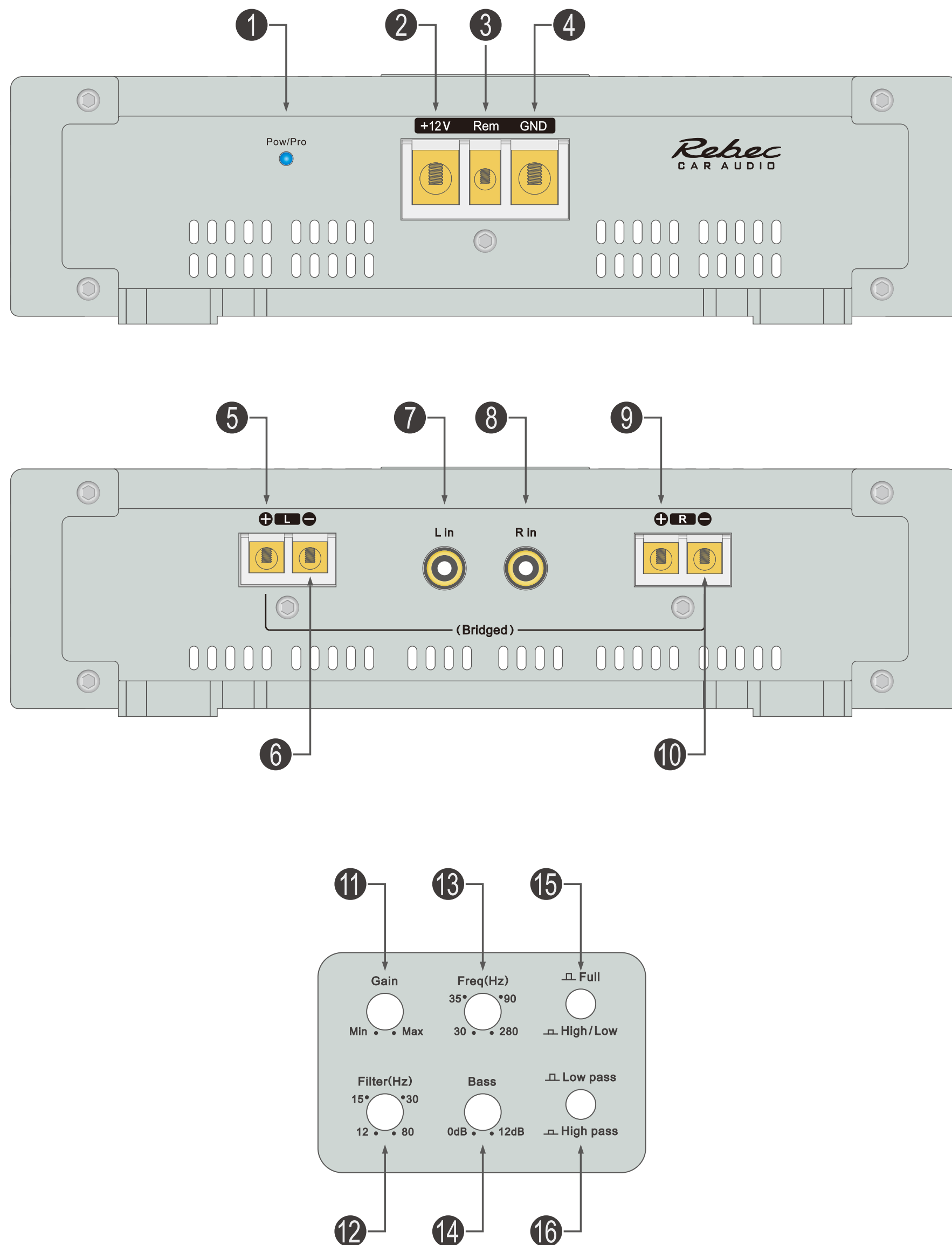


## ES2 Technical Parameters

| Specifications                          |                         |
|---|-------------------------|
| Number of Channels                      | 2CH                     |
| Working Mode                            | AB                      |
|   |                         |
| Power at 13.8 Volt (@1KHz)              | Power                   |
| Power Out 4ohm                          | 2 x 200 watts           |
| Rear / Power Out,4ohm                   | No                      |
| Mono.Power Out, 4ohm                    | 1 x 700 watts (Bridged) |
| Signal to Noise Ratio,A-Weighted        | > 98dB (Bass Boost:0dB) |
| THD+N@ 1W                               | <0.08%                  |
| Damping Factor                          | >170                    |
| Separation                              | >95dB                   |
| Frequency Response                      | 10Hz-35KHz,±0.5dB       |
| Input Impedance,Low level-Front         | >10Kohm                 |
| Input Impedance,Low level-Rear          | No                      |
|   |                         |
| Input Sensitivity                       |                         |
| Front Channel (RCA)                     | 300mv-∞                 |
| Rear Channel (RCA)                      | No                      |
| Pre amp Configuration on Front Channel: |                         |
| Filter Lowpass                          | 12Hz-80Hz               |
| Filter Highpass                         | 30Hz-280Hz              |
| Grand bass adjustable gain@ 55Hz        | 0dB — +12dB             |
| Grand bass adjustable gain@ 40Hz        | No                      |
| Pre amp Configuration on Rear Channel:  |                         |
| Filter Lowpass                          | No                      |
| Filter Bandpass                         | No                      |
| Filter Highpass                         | No                      |
| Filter Highpass (SUB)                   | No                      |
| Grand bass adjustable gain@ 45Hz        | No                      |
| Phase shift 0-180 degrees contiously    | No                      |
|   |                         |
| Power Consumption                       |                         |
| Idle Current                            | 1.5A                    |
| Maximum Current                         | 85A                     |
| Fuse                                    | 25A x 4                 |
| Weight                                  | 7.3Kg                   |
| Dimensions(mm)                          | 438 L X 240 W X 63 H    |

**Description:** The parameters of the outer packing box are the lower reference values. It is suggested that the parameters of the manual be used as reference values.

## ES2 Front & Rear Panel Layout

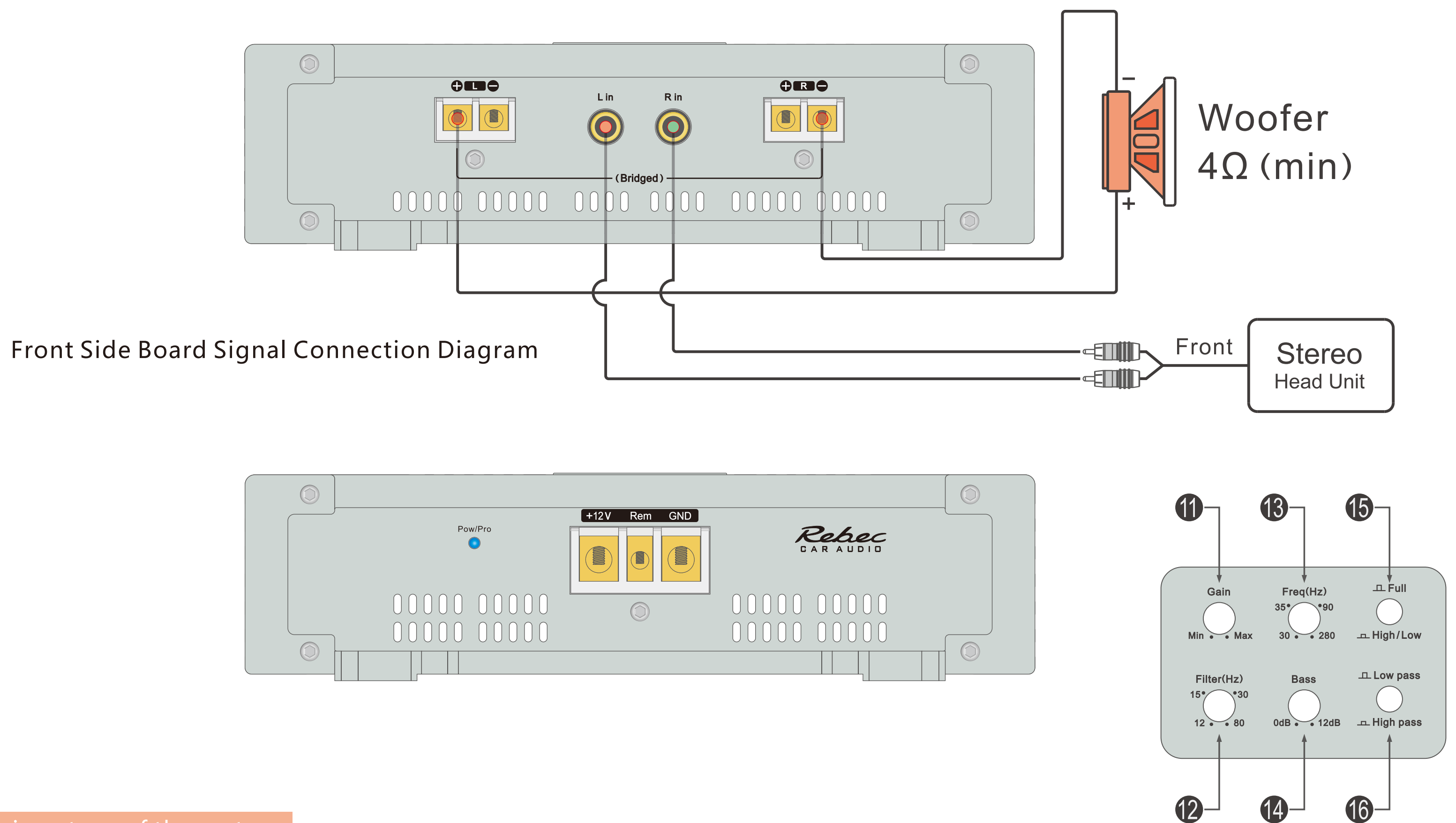


### Function description

- |   |  |
|---|--|
| ① — Power supply working indicator              | ⑤ — Left channel positive terminal                   |
| ② — Operating voltage terminal                  | ⑥ — Negative terminal of left vocal tract            |
| ③ — Control voltage terminal                    | ⑦ — Left channel signal input jack                   |
| ④ — Ground wiring terminal                      | ⑧ — Right channel signal input jack                  |
| ⑨ — Right-field cathode terminal                | ⑬ — High and low pass frequency adjusting knob       |
| ⑩ — Negative terminal of right sound field      | ⑭ — Bass Compensation Adjustment Knob                |
| ⑪ — Gain adjustment knob                        | ⑮ — Full-frequency and high-low-pass setting buttons |
| ⑫ — Infrasound filter frequency adjustment knob | ⑯ — High-pass and Low-pass Settings Button           |

## ES2 Conjunction demonstration

### 1 Channel Mode



### Basic debugging steps of the system

First, check whether the polarity of the power supply line is correct. After confirming the correctness, then connect the horn line and the RCA signal line respectively according to the "Front Side Board Signal Connection Diagram" above, adjust the driving position and sit in the driving position correctly. Before debugging, first confirm whether the whole system is active frequency division or passive frequency division. If it is active frequency division, please pop up the function button 15, in full frequency state. All functional debugging is done by the host. In this case, the power amplifier is in the best mode. If it is passive frequency division, press the function button 15, in high-pass or low-pass mode.

Step 1: The first step is to manually adjust the main sound channel without turning on the power amplifier control switch (REM), if the system is a three-channel structure. Refer to the main sound field adjustment section of the three-channel mode application example; if the system is a five-channel structure, refer to the five-channel mode application example. The main sound field is adjusted to the next step.

Step 2: Similarly, without booting, first press the function switch 15 in the high/low state, and then pop up the function switch 16 in the low state. Pass state, and then "Freq (Hz)" frequency point to about 85Hz; bass compensation (Bass) to the minimum. Infrasound Filter Rotates to the Maximum At last, the Gain of the amplifier is set to the minimum state, i. e. to turn counterclockwise to the bottom.

Step 3: Turn on the mainframe power supply and put in the tuned CD record. Reduce the volume to just the right volume for listening. Then turn on the Ultrasound Power Amplifier. Gain until you feel that the volume of the rear Subwoofer matches the volume of the front sound field (F/CH). Specific subjective auditory judgment is sensible. Mixed bass is transmitted from the front of the dashboard to the best. So far, the sound system debugging work has been basically adjusted.

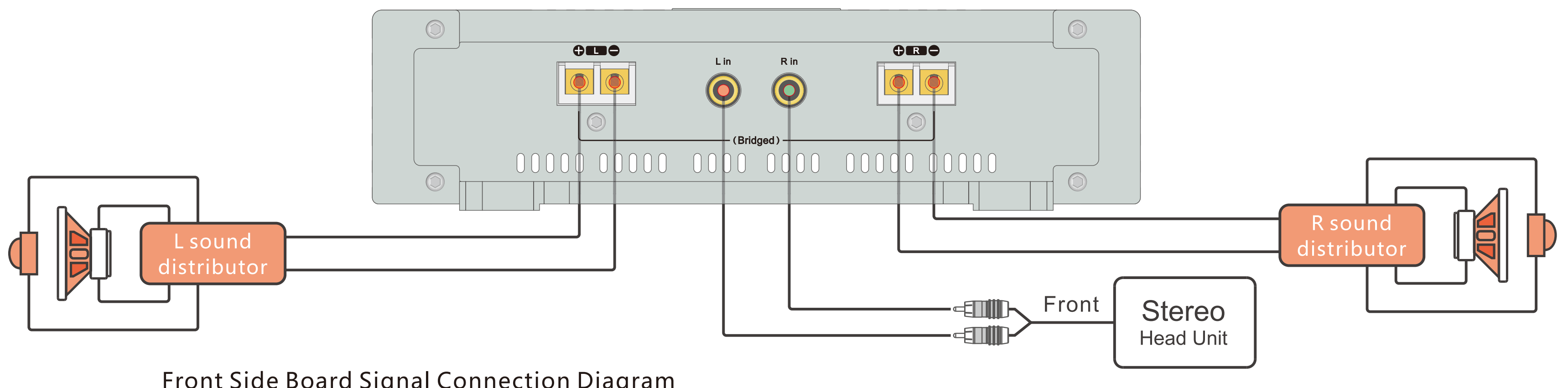
### Modification of sound and effect

According to the above guidelines, after the preliminary adjustment of the system is completed, the sound effect at this time is seldom in the best state. Therefore, later modification Adjustment is important. It should be pointed out that in order to accomplish the task of decoration and adjustment well, the operator must have certain listening experience to do so. example For example, when adjusted according to the above steps, feel that the bass dive or energy is slightly less, this may be due to the high frequency point of Qualcomm, which can be adjusted before. Improve the high-pass frequency point of the sound field (F/CH): "Remember: when the high-pass frequency point is lowered, its gain should also be lowered accordingly, because the lower the high-pass frequency point is, Ra." The lower the "power endurance" of the speaker is, that is to say, the more likely the speaker is to suffer from overload distortion (beat-edge distortion). It is also possible to adjust the Ultra-bass power amplifier. Bass is improved by adjusting its lift to make the bass thicker. But everything has its good and bad sides, bass compensation. Functions are no exception. If the bass compensation is too large, it will destroy the overall balance of the bass and compress the dynamic range of the bass. More importantly, this will do to the bass. Ultra-bass speaker unit puts forward higher requirements. Therefore, the bass compensation should be moderate. As for how to adjust, it depends on the operator's listening experience. If There is a trailing phenomenon in bass, which can be improved by adjusting infrasound filter, but the frequency of infrasound filter should not be too high. (Usually the frequency of infrasound filter is set at about 30 Hz-35 Hz), too high frequency point will cause low volume sense insufficient, serious will cause no bass.

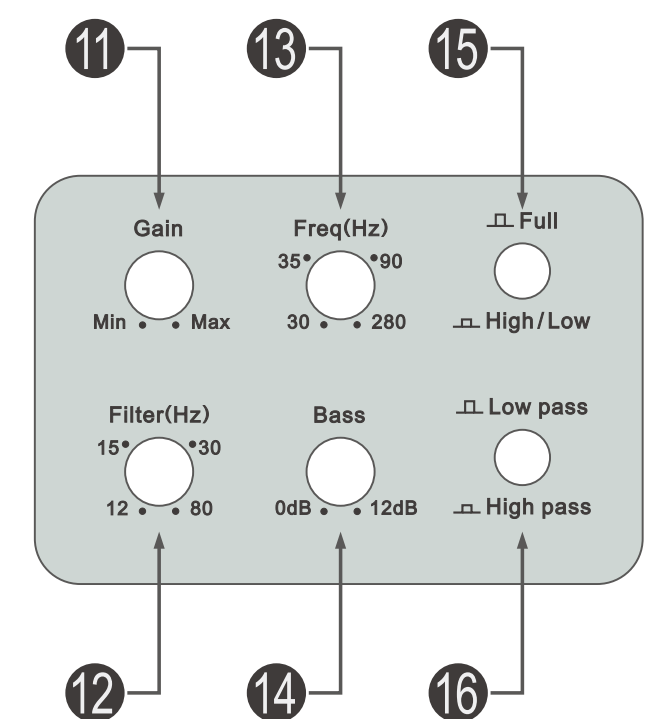
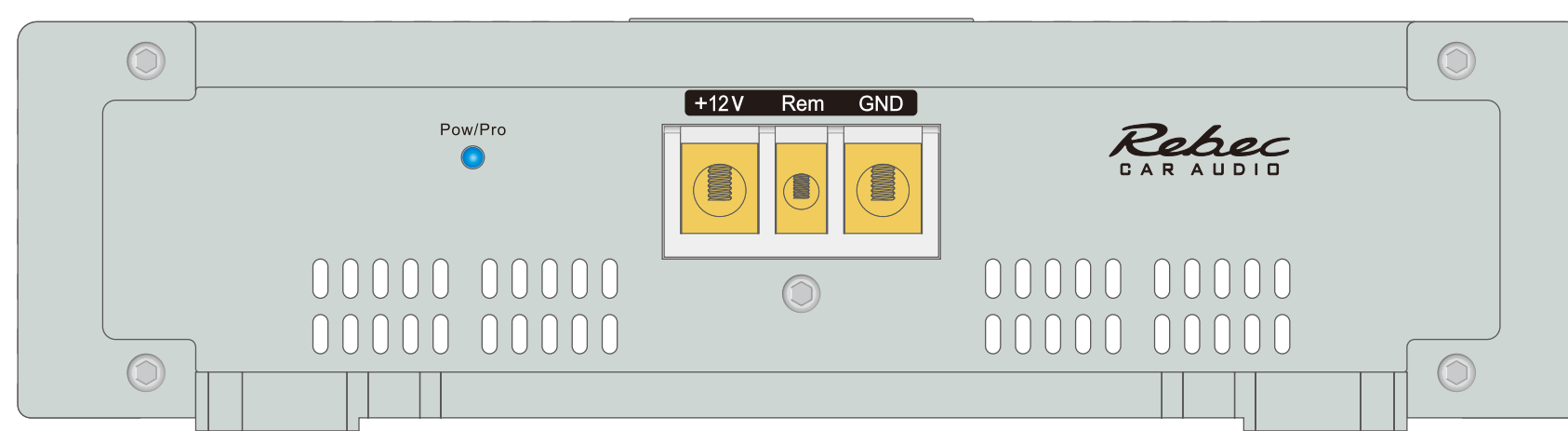


## ES2 Conjunction demonstration

### 2 Channel Mode



Front Side Board Signal Connection Diagram



### Basic debugging steps of the system

First, check whether the polarity of the power supply line is correct. After confirming the correctness, then connect the horn line and the RCA signal line respectively according to the "Front Side Board Signal Connection Diagram" above, adjust the driving position and sit in the driving position correctly. Before debugging, first confirm whether the whole system is active frequency division or passive frequency division. If it is active frequency division, please pop up the function button 15, in full frequency state. All function debugging is done by the host. At this time, the power amplifier is in the best mode. If it is passive frequency division, it will press the function button for 15 minutes, in high-pass or low-pass mode.

Step 1: The first step: without turning on the power supply control switch (REM), first press the function switch 15 in the high/low state, then press the function switch 16 in the high pass state, then adjust the frequency point of "Freq (Hz)" to about 85Hz, and the bass compensation (Bass) to the minimum. The infrasound filter rotates to a minimum of 12 Hz, and the Gain of the power amplifier is set to a minimum state, i.e. to turn counterclockwise to the bottom.

Step 2: Turn on the CD mainframe power supply and put it on the tuned CD record. Set the volume value to about 90% to 95% of the total volume value. Then gradually increase the gain of the amplifier until the mid-bass speaker of the front sound field (F/CH) just stops overload distortion (beat edge distortion), and then slightly adjust back (to the direction of smaller volume) to just miss overload. True stop; at this time, the front sound field of the amplifier and the level of the host are basically adjusted.

### Modification of sound and effect

According to the above guidelines, after the preliminary adjustment of the system is completed, the sound effect at this time is seldom in the best state. Therefore, the later modification adjustment (fine adjustment) is very important. It should be pointed out that in order to accomplish the task of decoration and adjustment well, the operator must have certain listening experience to do so. For example, if you feel that the bass is not dived or the volume sense is not enough after following the above steps, this may be due to the high frequency point of Qualcomm, which can be improved by adjusting (lowering) the frequency point of Qualcomm. If the low-frequency power endurance of the front sound field horn is large enough, the power amplifier can also work in the "FULL" mode, which is the best mode of operation. However, you should remember that whether you turn down the frequency of HPF or let the amplifier work in the "FULL" state, special attention should be paid to the level matching between the CD host and the amplifier, otherwise the front sound field horn will be easily damaged. If the bass compensation is too large, it will destroy the overall balance of the bass and compress the dynamic range of the bass. Therefore, the bass compensation should be moderate. Note: Bass compensation and infrasound only work at low pass.