

# INSTRUCTION MANUAL

## KONANlabs KSP-MA2200/2100



Thanks for purchasing our products. Please read the Instruction Manual carefully before you use the Frequency Shifter equipments

## Instruction

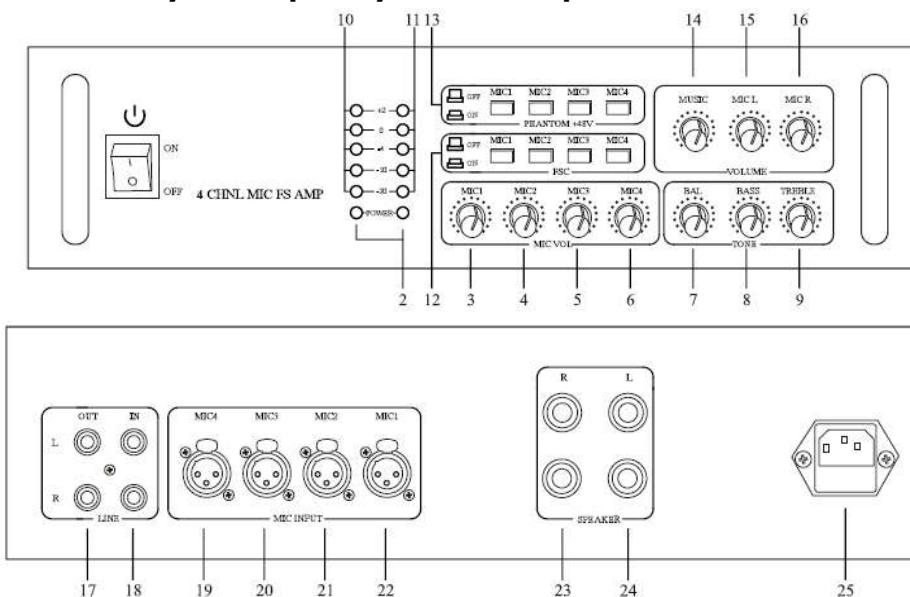
This is a frequency shifter originally designed to eliminate feedback. It uses the latest DSP technology to very efficiently frequency shift the audio signal. This system is widely used in commercial buildings, plazas, schools, Karaoke, meeting room and other places. Each microphone channel has phantom power switch independently. It can protect the speaker and other audio equipments effectively.

## Instruction of frequency shifter amplifier

### A. Specification

1. Power supply: AC220~230V,50/60Hz
2. Four-channels phantom power microphone input
3. Microphone adjust independently
4. Microphone gain: 5~14dB
5. Equipped with 4-16Ω speaker.
6. Alt/Bass adjusting
7. Phantom power 48V switch of each channel
8. Frequency shift switch of each channel
9. Frequency shift: 5Hz±1Hz
10. Input impedance:  $\geq 5K\Omega$
11. Output impedance:  $\leq 600\Omega$
12. Output consumption: 100W+100W
13. Frequency response:  
20Hz-20 KHz in frequency non-shift state  
150Hz-15 KHz in frequency shift state

### B. Function key of frequency shifter amplifier



1. Power switch
2. Power indicator

3. MIC volume knob for channel 1
4. MIC volume knob for channel 2
5. MIC volume knob for channel 3
6. MIC volume knob for channel 4
7. Balance knob for external audio input
8. MIC Bass knob
9. MIC Treble knob
10. L channel Indicator
11. R channel Indicator
12. Frequency shift switch of each channel
13. phantom power switch of each channel
14. Master volume knob of external audio input
15. Microphone L channel volume knob
16. Microphone R channel volume knob
17. Line /REC out
18. Audio/AUX input
19. MIC input for channel 4
20. MIC input for channel 3
21. MIC input for channel 2
22. MIC input for channel 1
23. Speaker R channel
24. Speaker L channel
25. AC Power input

### C. Operation

1. Please turn off the power switch first, and then connect the AC power, adjust all the volume to the minimum and connect the speaker and MIC, then turn on the power switch. Please choose the 48V power supply according to the circumstances. Adjust each microphone to the balanced level, and adjust the master volume to the suitable position, then adjust the treble and bass to ensure the high quality tone.
2. Please connect the original signal to the audio/AUX input, adjust the volume to the desired level.
3. Caution: please turn off 48V switch if the microphones without phantom power function.

### C. Schematic diagram

