



FI-P4X6K

Four microphone input and six output KTV audio processor



FI-P4X6K is a four microphone input and six output KTV audio processor, it is a specialized device designed to enhance and manage the audio signals in a KTV environment. It takes in four audio input signals, which can be from sources like microphones, music players, or other audio - generating devices, and processes them to output six channels of audio signals with various effects and adjustments. It is crucial for creating high - quality sound in KTV rooms, ensuring that the voices of singers and the background music are mixed and balanced properly.

Product Features

● Input Signal Processing:

It has functions such as gain control, mute, polarity adjustment, delay, noise gate, and parametric equalizer (PEQ) for each input channel. This allows for precise adjustment of the input audio signals, ensuring that they are at the right level and have the desired tonal characteristics before further processing. For example, the gain control can increase or decrease the volume of the input signals, while the PEQ can be used to boost or cut specific frequencies to enhance the clarity of the vocals or the fullness of the music.

● Output Signal Processing:

Each output channel typically has gain, mute, polarity, delay, frequency division, PEQ, and compression - limiting functions. There are up to 13 types of filters to choose from for the output frequency - dividing filters. The hard limiter can protect the speakers by limiting the output signal level to a certain threshold. The frequency division function can separate the audio signals into different frequency bands and send them to different speakers, such as sending low - frequency signals to subwoofers and full - frequency signals to the full range speaker.

● Effect Processing:

It often comes with various built - in effects, such as reverb, echo, and chorus. These effects can add a sense of space and depth to the vocals, making the singing sound more professional and enjoyable. The parameters of these effects, such as the decay time of the reverb and the delay time of the echo, are usually adjustable to meet different singing styles and room acoustics.

● User - Friendly Interface:

It is equipped with an intuitive graphical user interface, which allows users to easily view and adjust all signal channels in a single window. It can be connected to a computer via USB or other interfaces and be debugged and monitored through dedicated software. This provides users with a wide range of operating space and makes it convenient to configure and optimize the audio system.

Technical Parameters

- Sampling Rate:

Usually, it adopts a high - sampling - rate ADC and DAC, such as 96KHz or 48KHz, to ensure high - fidelity audio signal conversion and processing. A higher sampling rate can better capture the details of the audio signal and reproduce the original sound more accurately.

- Bit Depth:

Commonly uses 24 - bit or 32 - bit processing to increase the dynamic range and resolution of the audio signal. This means that the processor can handle a wider range of signal amplitudes, resulting in less distortion and a more detailed sound.

- Frequency Response:

Has a wide frequency response range, typically from 20Hz to 20KHz, which is the audible frequency range of the human ear. This ensures that the processor can handle all frequencies of the audio signal without distortion or attenuation.

- Total Harmonic Distortion:

The total harmonic distortion is very low, usually less than 0.01% at a specific output level and frequency. This indicates that the processor can reproduce the audio signal with high fidelity and minimal introduction of additional harmonic components.

Product Specification

Music	
S/N R	≥80db
THD	≤0.6% output XLR 1Vrms 1 KHz
Frequency response	10Hz-20KHz ≤ +3.0 dB
Input sensitivity / Impedance	350 ± 10%mv / 20KOhm
Max output	≥2.5Vrms XLR Out / ≥6.0Vpp XLR Out
Gain	10dB ± 1.0dB
Mic	
S/N R	≥80db
THD	≤0.8% output XLR 1Vrms 1 KHz
Frequency response	100Hz-20KHz ≤ +3.0 dB
Input sensitivity / Impedance	50 ± 10%mv / 20KOhm
Max output	≥2.5Vrms XLR Out / ≥6.0Vpp XLR Out
Gain	26dB ± 1.5dB
Other	
Mic input	6.35TRS x 4
Computer Control Interface	USB RS232
Power connector	AC 220V / 50Hz
Fuse	2A / 250V AC
Standard Power Supply	AC 220V / 50Hz ± 10
weight	4.5 kg
Size (L x W x H)	485 x 230 x 44.5 mm

