



## Description

FIR speaker processor software uses AEQ automatic equalization, IIR/FIR frequency divider, equalizer, delay, limiter, compressor and other technologies . It automatically corrects the audio by identifying the sound fields of different scenes such as lecture halls, concert halls, and high-end conference rooms , thereby improving the fidelity and naturalness of the sound, making the sound emitted by the speaker consistent with the sound source , and has the characteristics of high- precision processing, real-time response, and versatility . At the same time, it simplifies the operation process and enhances the user experience of the speaker processor .

## Features

- \*[Device List] Supports searching for devices and manually adding devices; supports displaying device online/offline status, device name, IP address, etc.; supports device editing, including editing device name, device network information, etc.; supports adding demonstration devices.
- \*[Scene List] Supports application, preview, renaming, and restoring factory settings; supports importing and exporting scene data; supports up to 32 scenes.
- \*[Input/Output Matrix] supports resetting parameters; supports input and output matrix, which can send one or more input channels to a CH channel, and then superimpose and mix one or more CH channels to a physical output; supports adjusting matrix gain; supports quick setting of function switches on the home page; supports right-clicking to quickly enter the corresponding function interface (except mute and invert).
- \*Support input , CH channel single channel control or one-key control of channel mute, inversion and other function switches , adjust channel gain, gain range -72~12 ; support modifying channel name.
- \*Support input linkage, support a group of input channel linkage, select one or more input channels for linkage, the adjusted parameters can be modified synchronously after linkage, similarly support CH linkage; support applying channel function parameters to other channels.
- \*[Delay] Supports control of switch and reset parameters ; supports adjustment of channel delay time and delay distance. Each input and CH channel supports delay .
- \*[RMS compressor] Supports control switch, reset parameters ; supports display of compression amount ; supports adjustment of compression threshold , soft and hard knee points , attack time , soft and hard knee points , release time, soft knee point, gain compensation . Each input and CH channel supports RMS compressor.
- \*[Noise Gate] Supports control of switch and reset parameters ; supports adjustment of noise gate threshold , build-up time, and release time . Each input channel supports noise gate .
- \*[Dynamic Loudness Filter] supports control of switches and reset parameters ; supports adjustment of dynamic loudness filter speed (fast, medium , slow), low frequency gain, and high frequency gain. Each input channel supports dynamic loudness enhancer .
- \*[Peak Limiter] Supports control of switch and reset parameters ; supports display of compression amount ; supports adjustment of peak limiter threshold, attack time, and release time. Each CH channel supports peak limiter.
- \*[Hard Limiter] supports reset parameters; supports adjustment of hard limiter start time and threshold. Each CH channel supports hard limiter.
- \*[Input Equalizer] Supports control switch, supports control point display or hiding, and reset parameters; supports two curve views of amplitude and phase, and the amplitude view supports full display; the input equalizer supports 4 equalizer modes: 31-band PEQ, FIR+17-band PEQ, 7-band PEQ TARGET + 24-band PEQ, 7-band PEQ TARGET + 10-band PEQ + FIR; supports quick comparison function.



- \*[Output Equalizer] Supports control switches, supports displaying or hiding control points, and resetting parameters; supports two curve views, amplitude and phase, and the amplitude view supports full display; the output equalizer supports switching between four types of divider types: frequency division-IIR+8-band PEQ, frequency division-MIR+8-band PEQ, frequency division-FIR+8-band PEQ, and frequency division-IIR+FIR+4-band PEQ; supports quick comparison function.
- \*[FIR import and export] Supports FIR import and export functions , compatible with 3 file formats including .txt, .cvs, and .Saf .
- \*[FIR Editing] Output equalizer frequency division - FIR+8PEQ mode supports FIR editing, supports selection of 3 types of high-pass, band-pass and low-pass filters, adjustment of high/low frequency, tap coefficient, attenuation and windowing type; supports amplitude, phase (folded, non-folded, logarithmic, linear), group delay and other display effect curves.
- \*[Microphone test function] Supports microphone test function, supports saving and exporting curve frequency characteristic data.
- \*[Automatic Equalization] supports importing smart curve data; supports adjusting IR window, smoothing, and target PEQ parameters; supports three types of automatic equalization: IIR, FIR, and FIR+IIR, adjusting amplitude, phase, and FIR parameters, setting the number of filters, and applying the calculation results to the input and output equalizers; supports switching, adding, and deleting projects, and supports channel synchronization of project data; supports setting the color of the automatic equalization curve.
- \*Supports single or batch online upgrade of DSP and MCU firmware; supports viewing help documents.
- \*[Signal Generator] Supports signal generator switch; supports switching between white noise and pink noise and adjusting the level; supports assigning signals to different input channels.
- \*[Restore factory settings] supports restoring the device to factory settings and restoring all scene parameters to the factory preset parameters.