

*HPA-0202DP Feedback Suppressor*

*Excellent conferencing solutions*

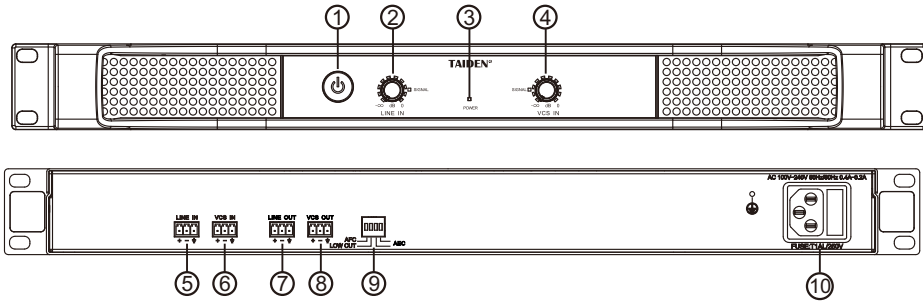


反馈抑制器

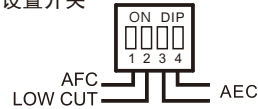
User's Manual  
用户手册  
V 1.1

注：开机时，建议先开启HPA-0202DP，再开启功放；关机时，建议先关闭功放再关闭HPA-0202DP。  
Note: when starting up, it is recommended to turn on the HPA-0202DP first, and then turn on the power amplifier; when shutting down, it is recommended to turn off the power amplifier first and then turn off the HPA-0202DP.

## 功能及指示 / Functions and instructions



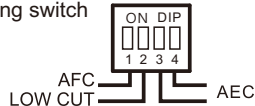
1. Power电源开关
2. Line in增益调节旋钮，带指示灯  
当输入信号超过“-23dBV”时，指示灯亮绿色  
当输入信号超过“-4dBV”时，指示灯亮橙色
3. Power电源指示灯  
电源开关接通，指示灯亮绿色
4. VCS in增益调节旋钮，带指示灯  
当输入信号超过“-23dBV”时，指示灯亮绿色  
当输入信号超过“-4dBV”时，指示灯亮橙色
5. Line in输入接口
6. VCS in输入接口
7. Line out输出接口
8. VCS out输出接口
9. 设置开关



AFC(拨码1): 关/开  
LOW CUT(拨码2): 关/开(300Hz, -3dB)  
AEC(拨码3和4): 关(00), 低(01),  
中(10), 高(11)

10. 电源接口  
AC 100-240 V, 50/60Hz

1. Power switch
2. Line in gain control with indicator  
When the input signal exceeds “-23dBV”, the indicator will turn to green;  
When the input signal exceeds “-4dBV”, the indicator will turn to orange;
3. Power indicator  
The “Power” indicator turns to green when power on
4. VCS in gain control with indicator  
When the input signal exceeds “-23dBV”, the indicator will turn to green;  
When the input signal exceeds “-4dBV”, the indicator will turn to orange;
5. Line in interface
6. VCS in interface
7. Line out interface
8. VCS out interface
9. Setting switch



AFC (switch 1): OFF/ON  
LOW CUT (switch 2): OFF/ON (300Hz, -3dB)  
AEC (switch 3&4): OFF (00) Low (01)  
Medium (10) High (11)

10. Power connector  
AC 100-240 V, 50/60Hz

## 产品概述

- 适用于本地和远程会议系统的专用音频处理器
- 使用高性能DSP处理器和业界前沿的自适应反馈抑制和回声消除算法，有效抑制声学反馈的发生，处理速度更快，音质更佳
- 采用AI算法，极强的自学习能力，有效滤除房间混响，实现消除声学反馈的目的，同时大幅度改善了直通和反馈处理后的音色差异
- Line In/Out: 适用于现场音频信号输入/输出
- VCS In/Out: 适用于远程会议音频信号输入/输出
- 内置自适应反馈抑制（AFC）和自动回声消除（AEC）开关
- 自适应滤波器根据环境自动收敛，无需调试，即接即用，在声学反馈发生之前可以额外获得多达12dB的增益
- 采用自适应全双工全频段回声消除算法，提高通讯音频频率响应，改善通信质量
- 自适应噪音消除算法，可滤除背景噪音，但不影响发言人的声音，降噪能力可达15 dB，有效提高信噪比，改善音质
- 广泛适用于现场会议、远程会议、教育教学等需要提升环境声压并防止系统啸叫的场所

## 技术参数

频率响应.....	80 ~ 20000 Hz
采样频率.....	48 kHz
信噪比.....	≥90 dBA
总谐波失真.....	≤0.1%
输入阻抗.....	10 kΩ
输出阻抗.....	1 kΩ
反馈抑制时间.....	≤400 ms
信号延时.....	≤11 ms
噪音消除量.....	≤15 dB
回声消除能力.....	≥65 dB
电源.....	AC 100 V - 240 V, 50 Hz/60 Hz
最大功耗.....	5 W
颜色.....	银灰色面板+黑色机身
尺寸 宽×深×高(mm)	
桌面放置，含胶脚.....	480 × 295 × 48 mm
19"机柜安装，不含胶脚.....	480 × 295 × 45 mm
重量.....	3.9 kg

## Overview

- Apply to local and teleconferencing congress system
- High-performance DSP processor, cutting edge feedback suppression and echo cancellation algorithms suppress acoustic feedback effectively, for making fast processor speed and better sound quality
- AI algorithm with strong self-learning ability, effectively filter out room reverberation to achieve the purpose of eliminating acoustic feedback, and greatly improve the timbre difference between through and feedback processing
- Line In/Out: for Live audio signal input/output
- VCS In/Out: for Teleconferencing audio signal input/output
- Build-in Adaptive Feedback Cancellation(AFC) and Automatic Echo Cancellation(AEC) switch
- According with the environment, the automatic adaptive filter adjust amount of computation to achieve best performance, get extra 12dB gain before acoustic feedback happens
- Adpot self adaptive full duplex and all frequency bands echo elimination algorithm
- Adaptive noise cancellation algorithm, which can filter out background noise without affecting the speaker's voice, the 15 dB noise reduction effectively improve the signal-to-noise ratio to improve the sound quality
- Widely used in on-site conferences, remote conferences, teaching and other application scenarios that need to increase the ambient sound pressure and prevent the system from whistling

## Specifications

Frequency response.....	80 ~ 20000 Hz
Sampling Rate.....	48 kHz
SNR.....	≥90 dBA
THD.....	≤0.1%
Input impedance (balanced).....	10 kΩ
Output impedance (balanced).....	1 kΩ
Feedback suppression time.....	≤400 ms
Signal delay.....	≤11 ms
Noise cancellation.....	≤15 dB
Echo cancellation capability.....	≥65 dB
Power supply.....	AC 100 V - 240 V, 50 Hz/60 Hz
Max. consumption.....	5 W
Color.....	Black box with silver gray panel
Dimensions (h × w × d)	
For table use, with feet.....	480 × 295 × 48 mm
For 19" rack use.....	480 × 295 × 45 mm
Weight.....	3.9 kg