# TAKSTAR®得胜



使用手册 User Manual

ESC-80A 有源可控指向音柱 Active Column Speaker

目录
Content01
前言
Preface
产品特性
Features09
技术参数
Specifications
产品尺寸图
Dimensions10
功能板
Panel Description 10
产品配置
Product Content 11
安装方法
Installation Method ······11
PC 软件05
PC Software·····12
PC 软件说明······06-07
PC Software Description 13-15
安全警示
Safety Instructions
产品服务保证卡

#### ■ 前言

尊敬的用户:

若存在有疑问或者您有宝贵的建议,可通过拨打得胜官方服务热 线400 6828 333或微信扫描二维码关注得胜官方公众号与我们联系。

### ■ 产品特性

- 8个4英寸高品质全频率驱动单元和全铝外壳组成
- 配有特殊安装支架,安装方便,用户还可以调节扬声器的覆盖角度。
- 32位DSP芯片处理,48kHz采样率,24bit AD/DA转换。
- 2X8的核心矩阵,2路模拟转换(线路平衡输入和高压信号输入),2个Dante转换输入,8个模 拟输出把功放连接到扬声器。
- Dante以先进的网络同步技术,能提供低延迟、低抖晃率和高采样精度的高性能数字媒体网络影音设施、广播和录音系统。它继承了CobraNet与EtherSound的所有优点,如无压缩的数字音频信号,保证了良好的灵敏度可调。
- 输入通道处理部分包括噪声门、增益、静音、相位、压缩/限幅器、连动调节等功能。
- 输出通道处理部分包括分频、6段参量均衡、增益、静音、相位、延迟、连动调节等功能。
- ●所有通道的PEQ增益、带宽、频率连续可调。类型可选择:参量均衡、高架滤波、低架滤 波、低切、高切、1阶移向,2阶移向。
- 所有高切、低切滤波器的类型可选择:巴特沃斯、林奎瑞利、贝塞尔,斜率在-6db----24dB可选。
- 输入通道噪声门的门限值,时间连续可调。输出通道的压缩/限幅器的阀值,比率,时间, 拐点值可调。
- ●所有输出通道的延时模块具有高达625ms的延时时间。
- 可通过Dante双网口控制,连接PC软件时自动搜寻同网段的所有IP地址,然后进行一键式连 机使得用户的操作更简易、快捷。
- 30个用户预设,整机状态和每个预设都可以单独储存和调用,还具有密码锁保护功能,使设备更安全。

02

## ■ 技术参数

频率响应: 110Hz-16kHz(-3dB)
声压级: 98dB (1M/1W)
额定功率: 320W (AES)
峰值功率: 640W (AES)
输入灵敏度: 0dB
定压输入: 100V
数字处理: 24bit sigma-delta A/D、D/A转换, 32bit DSP, 48kHz采样率
净重: 13.7KG
注: 以上数据由得胜实验室测试得到,并拥有最终解释权!





l	■ 产品配置			
ì	音箱	1只	M6 弹垫	1件
1	说明书	1份	M6 平垫	1件
	电源线	1条	M4X12 螺丝	1件
	支架 A	1件	M5X60 螺丝	1件
I	支架 B	1件	M6X12 螺丝	1件

# ■ 安装方法

1. 将支架A安装在牢固的墙壁上。



## 2.将支架B安装在音柱上。



04

M6弹垫4个

## ■ PC软件

提示:所需PC控制软件和产品说明书都保存在附件的光盘。

#### Dante接口步骤:



网线连接步骤

1.点击安装光盘上随机附送的PC控制软件,根据默 认提示按"下一步"进行操作,直到软件安装成功 后按"完成"退出,出现以下窗口后关闭此控制软 件窗口:

2.将处理器和电脑用网线连接起来,打开处理器电源,打开Dante控制软件,检查机器IP(注意:电脑 IP应该设置为自动获取)。









### 1. 菜单栏

- File------打开和保存预设参数,以及整机数据上传到电脑和整机数据下载到机器
- Link------输入输出通道可以任意组合,来连动调节所有参数
- Copy------输入和输出通道的所有参数可以任意进行复制
- Lock------用来设置面板锁密码,以确保机器的安全使用
- Working status------工作状态应设置为:断电记忆,断电不记忆(U01-21用户模式)和断电不记忆 且每次开机默认U01参数。
- Setting ID/IP------可设置不同的ID来进行多大254台机器的级联控制,以及通过设置ID和IP地址来 进行远距离网络控制和无线WIFI控制
- Teat tone------自带信号发生器,可输出分红噪声,白噪声以及正弦波信号
- Priority select------输入信号优先选择: DANTE优先/ ose优先/关闭
- 2. 频谱区:可以任意勾选显示输入输出通道的PEQ曲线和相位曲线图。
- 3. 模拟和Dante通道切换,可实现通道资源共享,Dante 输入和输出可通过模拟通道进行处理。
- 4. 音量控制区:可以调整所有输入输出通道的增益参数,以及每个通道的相位和静音参数。
- 5. 预设操作区: 用来保存和调用预设参数,以及显示当前预设参数的状态。

|(2). 噪声门界面

1. 显示当前的噪声门状态曲线,以及输入通道的电平指示灯。

2. 可设置所有输入通道的噪声门参数: 门限值-90dB--0dB,启动时间1-999ms,恢复时间1-3000ms,保持时间10-999ms连续可调。



(06)

## (3). 压缩器界面

- 1. 显示压缩状态曲线图,以及所有通道的电平指示灯和压缩状态灯。
- 2.可设置所有输出通道的压缩器参数:压缩值-60dB到+20dB,压缩比率1:1、1:10、LIMIT, | 启动时间0-999ms,恢复时间10-3000ms可调,软拐点0到+12dB。



## (4).延时界面

1. 直观的显示所有通道的延时参数状况图。

2. 可以调整所有通道的延时参数,调整范围是0-625ms,分别有毫秒、米、英寸单位切换显示。



1.选择"Mag"界面可以调整输出通道的参量均衡和高低切曲线,选择Phase界面可以调整当前通道的相位曲线。而且可以勾选同步显示非当前通道的参量均衡曲线和相位曲线。

所有参量均衡的增益、Q值、频率、类型可以调整,以及旁路按键选择。PEQ类型选择有:
 均衡;低架;高架;低切;高切;相位180度,相位360度调整。

- |3. 参量均衡的增益、Q值、频率可以用推杆来进行调整,也可以用键盘的上下左右箭头来控制。
- 4.低切的频率20HZ-20KHZ可调整,斜率可以选择"Butterworth"巴特沃斯,"Bessel"贝 塞尔,"Linkwitz-Riley"宁可锐,范围是-6dB到-24dB可调。
- 5. 高切的频率20HZ-20KHZ可调整,斜率可以选择"Butterworth"巴特沃斯,"Bessel"贝 塞尔,"Linkwitz-Riley"宁可锐,范围是-6dB到-24dB可调。
- 6. 输出通道增益、静音、相位可以独立控制,以及通道的电平显示灯。

#### ■ 安全警示

为避免电击、高温、着火、辐射、爆炸、机械危险以及使用不当等可能造成的人身伤害或财产损 失,使用本产品,请仔细阅读并遵守以下事项:

- 使用产品时请确认所连接设备与本产品功率是否匹配以及合理调整音量大小,不要在超过产品 功率及大音量下长时间使用,以免造成产品异常和听力损伤;
- 2.使用中若发现有异常(如冒烟、异味等),请立即关闭电源开关并拔掉电源插头,然后将产品送
   经销商检修;
- 本产品及附件都应放置在室内干燥通风处,勿长期存放在潮湿、灰尘多的环境,使用中避免靠近 火源、雨淋、进水、过度碰撞、抛掷、振动本机及覆盖通风孔,以免损坏其功能;
- 4. 若产品需要固定于墙壁或天花板上时,请确保固定到位,防止因固定强度不足导致产品发生跌落 | 危险;
- 5. 使用该产品时需遵守相关安全规定,法律法规明确禁止使用场合请勿使用本机,以免导致意外事故;
- 6. 请不要自行拆机改装或维修,以防止出现人身伤害,如有问题或服务需求请联系当地经销商跟进 | 处理。

08

# Preface

## Dear Customer,

Thank you for purchasing TAKSTAR ESC-80A Active Column Speaker. Please read the user manual carefully before use and keep it for reference in future.

If you have any questions or suggestions, please contact our local dealer.

# Features

- It is composed of eight 4-inch high-quality full-range driver units and all-aluminum housing.
  - It is equipped with a special mounting bracket that is easy to install. The user can also adjust the coverage angle of the loudspeaker.
- It features 32-bit DSP chip, 48 kHz sampling rate, and 24-bit AD/DA converter.
- 2X8 core matrix, 2 analog conversions (balanced line input and high voltage signal input),
   2 Dante conversion inputs, and 8 analog outputs connect power amplifiers to speakers.
- With advanced network synchronization technology, Dante makes it possible to achieve high-performance digital media networks with low latency, low jitter rate and high
- sampling accuracy that meet the demands for sound quality and performance needed in audio/visual equipment, broadcasting, and recording systems. It inherits all the advantages of CobraNet and EtherSound, such as uncompressed digital audio signals, ensuring good sensitivity adjustment.
- Input processing includes Noise gate, Gain, Mute, Phase, Compressor/Limiter, Link.
- Output processing includes Crossover, 6PEQ, Gain, Mute, Phase, Delay, Link.
- The PEQ frequency, gain and bandwidth of all channels are adjustable with types of Peak, High-shelf, Low-shelf, Low cut, High cut, Allpass1, and Allpass2
- The types of high-cut and low-cut filters available are Butterworth, Linkwitz- Riley, and Bessel with the slope of -6dB to 24dB.
- The threshold and time of input channels' noise gate are adjustable; the threshold, ratio, time and soft knee of output channels' compressor/limiter are adjustable.
- The maximal delay time for all delay modules of the output channel is 625ms.
- It can be controlled by Dante's dual network interfaces. When connecting to the PC software, it will automatically search for all IP addresses in the same network segment, and then perform one-button connection to make the user's operation easier and faster.
- There are totally 30 user presets. The state of the complete machine and each preset can be stored and called separately. It also has password protection function to make the device securer.

09

# Specifications

Frequency Response: 110Hz-16kHz (-3dB) SPL: 98dB (1M/1W) Rated Power: 320W (AES) Peak Power: 640W (AES) Input Sensitivity: 0dB Constant Voltage Input: 100V Digital Processing: 24-bit sigma-delta A/D, D/A converter, 32-bit DSP, 48 kHz sampling rate Net Weight: 13.7KG

Note: The data is tested by Takstar Laboratory, and Takstar has the final interpretation right!

# Dimensions (unit: mm) .335mm 130mm 130mm **Panel Description** 1 Dante Input 1 2 Power Indicator ③ Signal Indicator 8 3 ④ Peak Indicator 2 (5) Signal Input/Output Socket (4) 6 Volume Control 6) (5) ⑦ Constant Voltage Input (7) 8 Power Input (9) Power Switch



# PC Software

Tips: The required PC control software and product manual are saved in the attached CD.

Steps to connect the Dante interface:



equipment

### Steps to connect the network cable

1. Click on and install the PC control software that comes with the CD, and press "Next" according to the default prompts until the software is successfully installed and then click "Finish" to exit. When the following window appears, close the control software window.

2. Connect the processor to the computer with a network cable, turn on the processor power, open the Dante control software, and check the machine IP (note: the computer IP should be set to obtain automatically).

3. Open the PC control software, click the menu of setting an IP address, enter the IP address checked at the last step, and then click the connect button on the upper right corner. After connecting, the connect button on the upper right corner will turn green and display "Online", indicating that the software and the machine have been connected successfully. At this time, the processor can be operated through the control software. When exiting, click the "Online" button first, and then close the software interface window.





# PC Software Description

(1). Volume Control Interface



1. Menu Bar

File-----Open and save the preset parameters, upload the debug data to the computer and download the debug data to the machine.

Link-----Input and output channels can be combined arbitrarily to adjust all parameters.

Copy-----All parameters of input and output channels can be copied arbitrarily. Lock------Used to set the panel lock password to ensure the safe use of the machine.

Working status-----The working status should be set as power off with memory, power off without memory (U01-21 user mode), and power off without memory but with default U01 parameters each time the device is turned on.

Setting ID/IP-----Different IDs can be set for cascade control of up to 254 machines, and remote network control and wireless WIFI control can be performed by setting ID and IP address.

Teat tone------With built-in signal generator, it can output pink noise, white noise and sine wave signal.

Priority select-----Input signal can be prioritized: DANTE priority/ose priority/off.

2. Spectrum Area: You can arbitrarily check the PEQ curve and phase curve that show the input and output channels.

3. Analog and Dante channel switching enables channel resource sharing, and the input and output of Dante can be processed through analog channels.

4. Volume Control Area: You can adjust the gain parameters of all input and output channels, as well as the phase and mute parameters of each channel.

5. Preset Operation Area: Used to save and call preset parameters and display the status of current preset parameters.

(2). Noise Gate Interface

1. Display the curve of the current noise gate status and the level indicator of the input channels.

2. The noise gate parameters of all input channels can be set as threshold value of -90dB--0dB, starting time of 1-999ms, recovery time of 1-3000ms, and continuously adjustable retention time of 10-999ms.



(3). Compressor Interface

1. Display the curve of the compression status, as well as the level indicators and compression status lights of all channels.

2. The compressor parameters of all output channels can be set as compression value of -60dB to +20dB, compression ratio of 1:1, 1:10 and LIMIT, starting time of 0-999ms, adjustable recovery time of 10-3000ms, and soft knee of 0 to +12dB.



## (4). Delay Interface

1. Visually display the delay parameter status of all channels.

2. The delay parameters of all channels can be adjusted to a range of 0-625ms, and there are switching displays in milliseconds, meters, and inches.



- 1. Select the "Mag" interface to adjust the PEQ, high-cut, and low-cut curves of the output channel, and select the Phase interface to adjust the phase curve of the current channel. And you can check the synchronous display to display the PEQ and phase curves of the non-current channel synchronously.
- 2. The gain, Q value, frequency and type of all PEQ can be adjusted, and the bypass button can be selected. PEQ types include Balanced, Low-shelf, High-shelf, Low-cut, High-cut, 180°Phase and 360°Phase.
- 3. The gain, Q value, and frequency of the PEQ can be adjusted with the push rod, and can also be controlled with the up, down, left, and right arrows on the keyboard.
- 4. The low-cut frequency of 20HZ-20KHZ can be adjusted, and the slope can be selected from "Butterworth", "Bessel", "Linkwitz-Riley" in the adjustable range of -6dB to -24dB.
- 5. The high-cut frequency of 20HZ-20KHZ can be adjusted, and the slope can be selected from "Butterworth", "Bessel", "Linkwitz-Riley" in the adjustable range of -6dB to -24dB.
- 6. The gain, mute and phase of the output channels can be controlled independently, so as the level indicator of the channels.

## Safety Instructions

To avoid possible personal injury or property damage caused by electric shock, high temperature, fire, radiation, explosion, mechanical hazards, and improper use, please read and observe the following items before using the product.

- When using the product, please confirm whether the power of the connected device matches the product power and adjust the device volume. Please do not use it for a long time when the product power is exceeded or at a high volume to avoid product failure and hearing damage.
- If there is any abnormality (such as smoke, odor, etc.) during use, please turn off the power switch and unplug the power plug immediately, and then send the product to the dealer for maintenance.
- 3. The product and accessories should be placed indoors in a dry and ventilated place. Do not store them in a humid and dusty environment for a long time. Avoid getting close to the fire, rain, water, excessive collision, throwing, vibrating the machine, and covering the ventilation holes during use, so as not to damage its function.
- If the product needs to be fixed on the wall or ceiling, please make sure to fix it in place to prevent it from falling.
- 5. When using the product, you must abide by the relevant safety regulations and do not use it on occasions that are prohibited by laws and regulations to avoid accidents.
- 6. Please do not disassemble, refit, or repair the product by yourself to prevent personal injury. If you have any questions or service needs, please contact the local dealer for follow-up.

## ■产品服务保证卡



17



扫一扫,了解更多产品 Scan for more product information

# 广东省电声工程技术研究开发中心 广东得胜电子有限公司制造

Guangdong Takstar Electronic Co., Ltd. Address: No. 2 Fu Kang YiRd., Longxi Boluo Huizhou, Guangdong 516121 China Tel: 86 752 6383644 Fax: 86 752 6383952 Email: sales@takstar.com Website: www.takstar.com