

Sinfoni



BO32

使用手册
Manual

注意事项

为了您的安全，请不要在驾驶过程中操作机器或查看本手册；驾驶车辆时，请将音量调至能清楚听到外界声音水平。开始操作前，请详细阅读和了解本使用手册和机器上的相关安全提示和警告标识，阅读完之后妥善保管，防止丢失。

首先请注意交通安全：

- 1.如您在操作本机器遇到困难时，请将车辆停靠在安全的地方后操作，勿让儿童操作本机器，以免造成人身伤害或者机器损坏。
- 2.在接通电源的情况下请勿安装或维修本机。机内没有用户能维修的地方，请勿自行保养，维护，安装本机器，如有需要，请找专业人员打开和维修。
- 3.为了保证机器正常运行，请不要将机器暴露在潮湿的空气中，更不能将液体洒落在机器上。



包装清单

根据您购买的型号包装箱内应放置如下物件，如有缺少，请尽快通知销售商或厂家：

配件	数量
BO32 主机	1 台
用户手册	1 本
1.5 米 USB 2.0 线	1 条
150mm 高电平输入线（2*17P）	1 条
150mm 喇叭线（2*8P）	2 条
安装支架配件包	1 包

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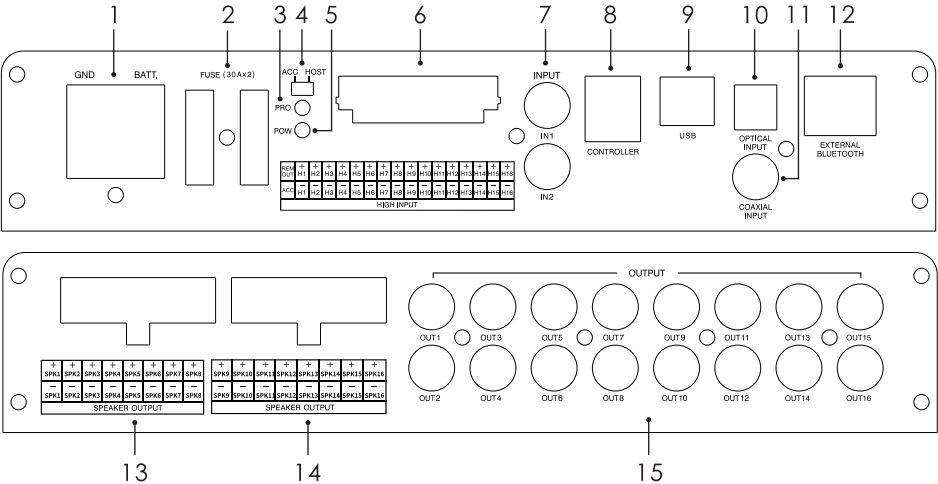
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第一部分：机器接口简介



- 1、电源接口
- 2、2×30A保险丝
- 3、保护指示灯
- 4、机器启动方式开关
- 5、电源指示灯
- 6、高电平输入接口
- 7、低电平输入接口
- 8、线控器接口
- 9、USB2.0 接口
- 10、光纤输入接口
- 11、同轴输入接口
- 12、外置蓝牙接口

13、高电平输出接口，1~8高电平输出

+	+	+	+	+	+	+	+
SPK1	SPK2	SPK3	SPK4	SPK5	SPK6	SPK7	SPK8
-	-	-	-	-	-	-	-
SPK1	SPK2	SPK3	SPK4	SPK5	SPK6	SPK7	SPK8

SPEAKER OUTPUT

14、高电平输出接口，9~16高电平输出

+	+	+	+	+	+	+	+
SPK9	SPK10	SPK11	SPK12	SPK13	SPK14	SPK15	SPK16
-	-	-	-	-	-	-	-
SPK9	SPK10	SPK11	SPK12	SPK13	SPK14	SPK15	SPK16

SPEAKER OUTPUT

15、低电平输出接口

注：13~16路可桥接，桥接正负极如下图：

+	-	+	-
SPK13	SPK14	SPK15	SPK16
⊖	BTL1 ⊖	⊖	BTL2 ⊖

第二部分：控制软件简介

一、PC 软件使用简介



1、主菜单编辑区

主要功能：加载或保存整机场景文件；混音混频设置、输入联调设置、输出联调设置、高级（功放开关、关机延时、统一Q值）、固件更新、恢复出厂设置、中文和英文切换和关于（查看版本号）；数据加密；延时调节；设备温度显示；预置音效调用或存储等。

2、输入通道编辑区

输入通道的均衡设置，频率、Q值（响应带宽）、增益（增加或减少该频率点附近的频响幅度）；可直通、恢复和重置均衡，参量均衡和图示均衡切换；通道的高低通分频设计，可设置专业滤波类型、频率和Q值（坡度或斜率）。可设置输出通道类型、相位、音量、静音及联调。

3、输出通道编辑区

输出通道的均衡设置，频率、Q值（响应带宽）、增益（增加或减少该频率点附近的频响幅度）；可直通、恢复和重置均衡，参量均衡和图示均衡切换；通道的高低通分频设计，可设置专业滤波类型、频率和Q值（坡度或斜率）。可设置输出通道类型、延时、相位、音量、静音及联调。

4、功能编辑区

主音量大小的调整，可调范围：-60dB~0dB，或点击静音按钮直接静音；主音源选择和混音音源选择；输出通道的频谱动态选择。

二、手机软件使用简介



- 1、**主页界面：**BO32 手机软件打开后默认进入主页界面。可进行EQ增益步径、信号发生器、输入联调设置、输出联调设置、关机延时、加密、分享音效、保存音效、本地音效、查看设备和软件的型号和版本号、退出软件等操作；对主音量大小进行调节或静音；主音源和混音音源选择；6组预置场景文件的存储和调用等。
- 2、**输入界面：**可设置输入通道类型选择和静音、音量、相位、EQ和联调。
- 3、**输入EQ界面：**输入通道EQ曲线调节，可重置、恢复和直通均衡，参量均衡与图示均衡切换；高低通滤波器设置，可调节滤波类型、频率和斜率。
- 4、**输出界面：**可设置输出通道类型选择和静音、音量、相位、延时、EQ和联调。
- 5、**输出EQ界面：**输出通道EQ曲线调节，可重置、恢复和直通均衡，参量均衡与图示均衡切换；高低通滤波器设置，可调节滤波类型、频率和斜率。
- 6、**延时界面：**声场定位输出通道延时调节，可点击对应通道喇叭进入相应通道延时窗口进行延时设置，切换延时单位。

第三部分：产品参数指标

技术规格

动态范围	≥ 100dB
信噪比（RCA）	≥ 98dB
总谐波失真	≤ 0.05%
频率响应	20Hz~20KHz
输入阻抗	低电平：10KΩ；高电平：240Ω
低电平输出阻抗	100Ω
信号输入范围（最大）	低电平：6.5Vpp；高电平：28Vpp（可切换50Vpp）
信号输出范围（最大）	低电平：6.5Vpp；高电平：1~8路28Vpp，9~12路40Vpp，13~16路50Vpp
使用环境温度	-20~70℃
电源	DC 9V~16V
启动REM输入	高电平启动（H1+/H1-）、ACC启动可选
启动REM输出	+12V 启动电压输出（0.2A）
待机功耗	≤ 0.1W
产品尺寸	286（长）× 246（宽）× 48（高）mm

功能参数

输入信号类型	16路高电平、2路RCA低电平、外置蓝牙、光纤/同轴
输出信号类型	8×25W+4×50W+4×80W功放、16路低电平
输出信号增益	增益范围：静音，-60dB至0dB
输出信号均衡器	每输出通道均衡器引擎： 1、频率范围：20Hz~20KHz，分辨率 1Hz 2、Q 值（斜率或坡度）：0.404~28.852 3、增益：-12.0dB~+12.0dB，分辨率 0.1dB
输出信号分频器	每路通道配有多阶的高低通独立滤波器 1、专业滤波类型：巴特沃斯（Butter-W）、宁克（Link-Ril）、贝塞尔（Bessel） 2、滤波分频点：20Hz~20KHz，分辨率 1Hz 3、滤波斜率（坡度）设置：关闭，6dB/Oct~48dB/Oct
输出相位和延时	每路通道可进行相位和延时调整，参数范围： 相位：正相或反相（0°/180°） 延时：0.000 至 20.000 毫秒、0 至 692厘米、0 至 273英寸
场景操作	机器可保存 6 种预置音效

保修卡

尊敬的用户：

您好！感谢您购买 诗芬尼汽车音响有限公司的产品，为了更好的为您服务，在购买产品后，请认真阅读，填写请妥善保管好此保修卡。

用户名		联系人	
购买日期		联系电话	
产品名称		产品型号	
用户地址			
订单编号			
维 修 记 录	日期	故障原因及处理方法	

保修说明：

产品若出现质量问题需要维修时，请把此保修卡与所购买产品一起妥善寄回本公司提供的维修处。

注意事项！

- 1、自您选购本产品首日起，凡按照使用说明安装使用，一年内出现非人为质量问题，本公司提供免费维修，一年后维修需收取维修工本费用。
- 2、非本公司产品质量原因引起的质量问题，如使用不当，保管不妥，私自拆机等原因造成的损坏，本公司将收取维修工本费。

Precautions

For your safety, please do not operate the machine or check this manual while driving; when driving a vehicle, please adjust the volume to a level where the outside sound can be clearly heard. Before starting operation, please read this statement in detail, understand this manual and the relevant safety tips and warning signs on the machine, and keep it properly after reading to prevent loss.

Please pay attention to traffic safety first:

1. If you encounter difficulties in operating the machine, please park the vehicle in a safe place before operating. Do not allow children to operate the machine to avoid personal injury or damage to the machine.
2. Do not install or repair this machine when the power is on. There is no place in the machine that can be repaired by the user. Please do not maintain, maintain or install the machine by yourself. If necessary, please ask a professional to open and repair it.
3. In order to ensure the normal operation of the machine, please do not expose the machine to humid air, let alone spill liquid on the machine.



Packing list

According to the model you purchased, the following items should be placed in the box. If there are any missing items, please notify the seller or manufacturer as soon as possible:

Accessories	Quantity
BO32	1Pc
User manual	1Pc
1.5m USB 2.0 cable	1Pc
150mm high level input cable (2*17P)	1Pc
150mm speaker cable (2*8P)	2Pcs
Mounting bracket accessory kit	1Pc

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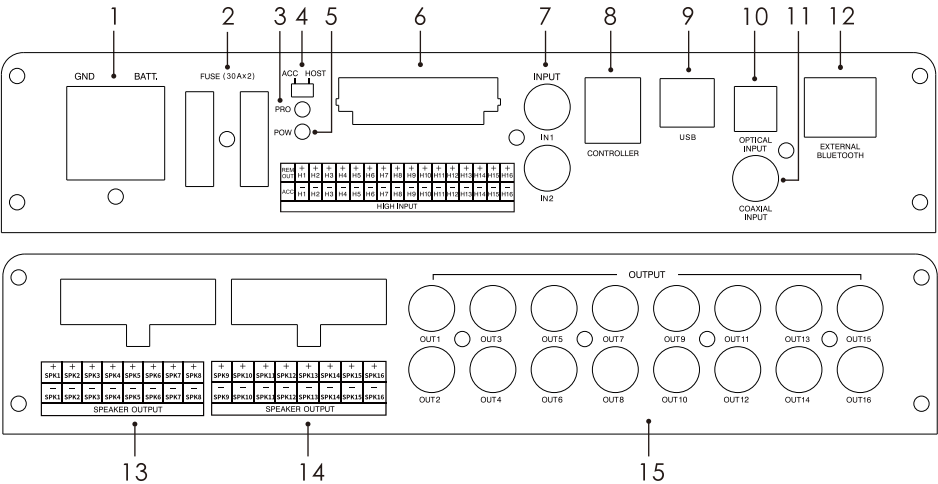
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Part 1: Introduction to Machine Interface



- 1. Power interface
- 2. 2 x 30A fuse
- 3. Protection indicator
- 4. Machine start mode switch
- 5. Power indicator
- 6. High level input interface
- 7. Low level input interface
- 8. Wired controller interface
- 9. USB2.0 interface
- 10. Optical input interface
- 11. Coaxial input interface
- 12. External bluetooth interface

REM	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
OUT	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16
ACC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16
HIGH INPUT																

- 13. Power output interface, 1~8 channels of power output

+	+	+	+	+	+	+	+
SPK1	SPK2	SPK3	SPK4	SPK5	SPK6	SPK7	SPK8
-	-	-	-	-	-	-	-
SPK1	SPK2	SPK3	SPK4	SPK5	SPK6	SPK7	SPK8

SPEAKER OUTPUT

- 14. Power output interface, 9~16 channels of power output

+	+	+	+	+	+	+	+
SPK9	SPK10	SPK11	SPK12	SPK13	SPK14	SPK15	SPK16
-	-	-	-	-	-	-	-
SPK9	SPK10	SPK11	SPK12	SPK13	SPK14	SPK15	SPK16

SPEAKER OUTPUT

- 15. Low level output interface

Note: 13~16 channels can be bridged, bridging the positive and negative as shown below:

+	-	+	-
SPK13	SPK14	SPK15	SPK16
⊖ BTL1 ⊖		⊖ BTL2 ⊖	

Part 2: Introduction to the control software

1. Introduction to the use of PC software



1. Main menu editing area

Main functions: Load and save the whole machine scene file; mixer settings, input link settings, output link settings, advanced (amplifier switch, shutdown delay, unified Q-value), firmware update, restore factory setting, Chinese and English switching, about (check version number); data encryption; delay adjustment; equipment temperature display; preset sound effect call or storage.

2. Input channel editing area

The equalization settings for the input channel, including frequency, Q value (response bandwidth) and gain (increase or decrease the frequency response amplitude near the frequency point); it can pass through, restore and reset the equalization, and switch between parameter and graphic equalization. Types of high-pass and low-pass filters, filter type, frequency, and slope can be adjusted. Output channel type, phase, volume, mute, and tuning can be set.

3. Output channel editing area

The equalization settings for the output channel, including frequency, Q value (response bandwidth) and gain (increase or decrease the frequency response amplitude near the frequency point); it can pass through, restore and reset the equalization, and switch between parameter and graphic equalization. Types of high-pass and low-pass filters, filter type, frequency, and slope can be adjusted. Output channel type, delay, phase, volume, mute, and joint tuning can be set.

4. Function editing area

Volume adjustable range: -60dB~0dB, or click the mute button to directly mute the total volume. Main sound source and mixer sound source selection; spectrum dynamic selection of the output channel.

2. Introduction to the use of mobile phone software



- 1. Homepage interface:** After opening the BO32 mobile phone software, it will enter the homepage interface. Can perform operations such as EQ gain step, signal generator, input link settings, output link settings, shutdown delay, encryption, share or save sound effects, local sound effects, viewing device and software models and version numbers, and exiting software; adjust or mute the main volume; select the main and mixed audio sources; store and recall 6 sets of preset scene files, etc.
- 2. Input interface:** Input channel type selection and mute, volume, phase, EQ, and joint tuning can be set.
- 3. Input EQ interface:** Input channel EQ curve adjustment, reset, restore and pass-through equalization, parameter and graphic equalization switch; high and low pass filter settings, adjustable filter type, frequency, and slope.
- 4. Output interface:** Output channel type selection and mute, volume, phase, delay, EQ, and joint tuning can be set.
- 5. Output EQ interface:** Output channel EQ curve adjustment, reset, restore and pass-through equalization, parameter and graphic equalization switch; high and low pass filter settings, adjustable filter type, frequency, and slope.
- 6. Delay interface:** Adjust the delay of the sound field positioning output channel. You can click the corresponding channel speaker to enter the corresponding channel delay window to set the delay and switch the delay unit.

Part 3: Product Parameters

Technical Specifications

Dynamic Range	≥ 100dB
S/N Ratio (RCA)	≥ 98dB
THD	≤ 0.05%
Freq. Response	20Hz~20KHz
Input Impedance	RCA: 10KΩ; High level: 240Ω
Low Level Output	100Ω
Input Range (max)	RCA: 6.5Vpp; High level: 28Vpp (Switchable 50Vpp)
Output Range (max)	RCA: 6.5Vpp; High level: CH1~8: 28Vpp, CH9~12: 40Vpp, CH13~16: 50Vpp
Operating	-20~70℃
Supply Voltage	DC 9V~16V
REM Input	High level input/H1+/H1- or ACC on function (optional)
REM Output	+12V starting voltage (0.2A)
Standby Power	≤ 0.1W
Dimension	286(L) × 246(W) × 48(H) mm

Function Parameters

Input Signal	16-channel high level, 2-channel low level, External Bluetooth, optical/coaxial
Output Signal	8 × 25W+4 × 80W+4 × 50W power, 16-channel low level
Output Signal	Gain range: OFF, -60dB~0dB
Output Signal Equalizer	Equalizer engine per output channel: 1. Frequency range: 20Hz-20kHz 2. Q value (slope): 0.404-28.852 3. Gain: -12.0dB~+12.0dB, resolution: 0.1dB
Output Signal Crossover	Each channel has an independent multi-stage filter 1. Types: Linkwitz-Riley, Butterworth and Bessel 2. Crossover point: 20Hz-20kHz, resolution: 1Hz 3. Slope setting: OFF, 6dB/Oct-48dB/Oct
Phase Shift and Delay Setting	Phase shift and delay setting are available for each output channel Phase: positive & negative phase (0°/180°) Time: 0.000-20.000 ms, 0-692cm, 0-273 inch
Preset Operation	The machine can save 6 preset sound effects

Warranty Card

Respected user:

Hello! Thank you for purchasing the products of Shifenni Car Audio Co., Ltd. In order to better serve you, please read carefully after purchasing the products, fill in and keep this warranty card properly.

Username		Contact person	
Purchase date		Contact number	
Product name		Product number	
User address			
Order number			
Maintenance records	Date	The cause of the failure and its treatment	

Warranty description:

If the product has quality problems and needs to be repaired, please send this warranty card together with the purchased product to the repair shop provided by our company.

Precautions!

1. Starting from the first day when you purchase this product, if you install and use it according to the instructions for use, the company will provide free maintenance for any non-artificial quality problems within one year, and maintenance costs will be charged for maintenance after one year.
2. For quality problems that are not caused by the quality of our company's products, such as improper use, improper storage, and damage caused by unauthorized disassembly, our company will charge maintenance costs.

