

# BSK-60

## ACOUSTIC GUITAR

## AMPLIFIER | User Manual

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# JOYO

# Thank you for purchasing this product!

## Product introduction:

Thanks for purchasing JOYO BSK-60 acoustic guitar amplifier. BSK-60 amp is specially designed for acoustic guitar, its EQ curve is tailor-made for acoustic guitar, offering a nice and bright treble with rich mid-low frequencies; its 60W(RMS) power can meet your needs for small live show or home practice. Compared with rivals' similar products, its tone is stunning, with a built-in high-performance DSP chip, featuring several DSP digital effects(CHORUS, DELAY, REVERB, ANTI-FEEDBACK). Those DSP digital effects can be used simultaneously, which is rare from rivals' similar products. Moreover, BSK-60 has a mic input channel, we've optimized mic amplification circuit, say, the special frequency response for vocal, so the human voice signal becomes much clearer and stronger. Besides, the mic channel features an independent reverb effect, beautifying your singing. Like most guitar amps, BSK-60 has AUX IN jack, connecting CD player, MP3 to jam along or practice. Plus, it has LOOPER recording and playback functions, Bluetooth accompaniment function, LINK function, host function, LINE IN function, LINE OUT function, BALANCED OUT function, DC OUT function(supplies power to pedals) (DC 9V/ 500mA). Besides, a footswitch pedal in synch with the main unit is attached in the packing list.

SPECIAL NOTE: Should your BSK-60 Acoustic Guitar Amplifier ever require servicing, a Return Authorization (RA) number is necessary. Without this number, the unit will not be accepted. Please retain the original packing materials and call JOYO 0755-29765393 before you sending out, return the unit in its original carton and packing materials.

## Features:

- Rated speaker power: 60Wrms
- Built-in lithium battery, can be charged up for outdoor performance
- Built-in 9V/500mA DC output, for powering your gears such as effect pedals during outdoor performance
- Dual channel for guitar and mic
- Independent mic Reverb and guitar Reverb effects
- 3 effects can be used simultaneously(CHORUS, DELAY with TAP TEMPO and REVERB)
- Built-in anti-feedback function for guitar
- Built-in guitar signal phase inverter
- Quick mute function for you to better control the live performance
- Built-in LOOPER
- Bluetooth 4.0 for music playing
- Built-in audio interface for connecting to cell phone, you can use cell phone's (iOS or some Android devices)audio effects app to beautify guitar tone
- Live recording output jack for cell phone live broadcasting
- LINE IN/LINE OUT for connecting to other amps
- XLR jack for connecting to the mixer
- JOYO external footswitch pedal is included in the packing list, it can synchronize host's status



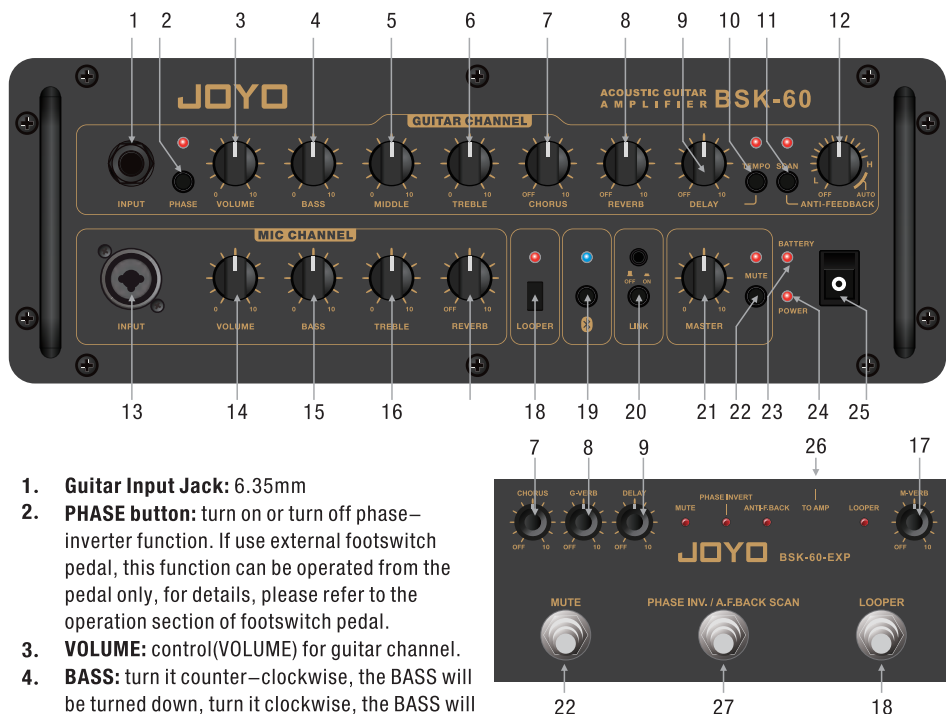
## Detailed safety instructions:

- Use the attached power adapter only. It has passed strict tests and has safety certificates. If use other power adapters, it will increase noise, damage the internal circuits or the built-in battery.
- Do not expose it to any damp areas such as bathtub, toilet, washing-tub, sink, swimming pool. Avoid spill liquid substance into the product, otherwise it will lead to malfunction or electric shock.
- Don't use this product in places where is full of flammable and explosive gas, such as gas station or dusty areas.
- Use BSK-60's attached AC power adapter only! If you choose other adapters, they might not compatible for BSK-60's input voltage damage the unit or worse.
- BSK-60's attached adapter has passed the related electromagnetic compatibility tests and has safety certificates. If you use other power adapters, we're not sure whether they meet your country or region's compulsory safety certification standards.
- If the attached power adapter is broken, and you need to buy a new one, please make sure its polarity of power source and maximum power are the same as the attached power adapter.
- In order to save energy, please unplug the power switch after use.
- Do not use alcohol or other cleaning fluids to clean this product, otherwise it will damage the surface, use a clean dry cloth when necessary.
- Do not open the case for any reason, please contact professional maintenance men if it malfunctions, or contact your local retailer for maintenance.
- Do not pull the power cord or other parts of this product, so as not to damage the power cord and plugs.
- Please turn off this product and unplug it during a thunderstorm, lightning or not in use for a long time.
- Do not collide, throw or vibrate this equipment.
- To protect the built-in battery, please have a full charge if it is not in use for a long time and ensure charge it for every 2 months.
- If it indicates low battery, please charge it in time, as over discharge and low battery will cause irreversible loss to the battery capacity, and damage the battery.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



## Panel

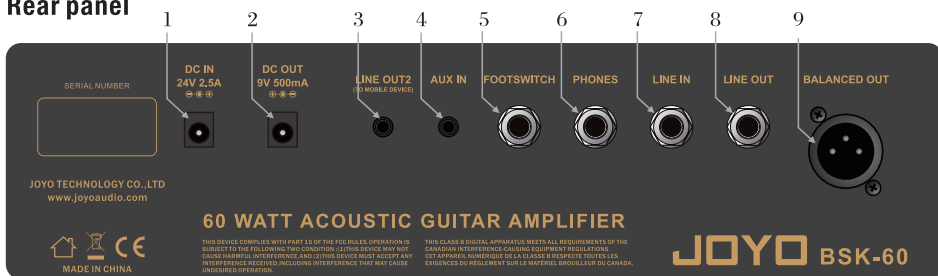
### Front panel/Footswitch pedal panel



1. **Guitar Input Jack:** 6.35mm
2. **PHASE button:** turn on or turn off phase-inverter function. If use external footswitch pedal, this function can be operated from the pedal only, for details, please refer to the operation section of footswitch pedal.
3. **VOLUME:** control(VOLUME) for guitar channel.
4. **BASS:** turn it counter-clockwise, the BASS will be turned down, turn it clockwise, the BASS will be turned up.
5. **MIDDLE:** turn it counter-clockwise, the MIDDLE will be turned down, turn it clockwise, the MIDDLE will be turned up.
6. **TREBLE:** turn it counter-clockwise, the TREBLE will be turned down, turn it clockwise, the TREBLE will be turned up.
7. **CHORUS:** adjust the depth of CHORUS. If connects to external footswitch pedal, this knob fails temporarily, you can only adjust CHORUS effect parameter through the footswitch pedal.
8. **REVERB:** adjust the ratio of dry and wet signal. If connects to external footswitch pedal, this knob fails temporarily, you can only adjust REVERB effect parameter through the footswitch pedal.
9. **Delay time control:** If connects to external footswitch pedal, this knob fails temporarily, you can only adjust delay parameter through the footswitch pedal, you can also set delay time through the TAP TEMP button.
10. **TAP TEMPO button:** you can set delay time by double clicking this button twice in a row.
11. **SCAN button:** auto feedback frequency searching button. For details, please refer to the operation section of feedback suppressor.
12. **ANTI-FEEDBACK knob:** ANTI-FEEDBACK CONTROL knob.  
For details, please refer to the feedback suppressor operation section.
13. **Mic Input Jack(INPUT):** It's a balanced signal input jack(XLR) for mic input
14. **Mic's volume control(MIC/VOLUME):** adjust mic channel's volume.
15. **Mic's BASS:** turn it counter-clockwise, the BASS will be suppressed, turn it clockwise, the BASS will be boosted.

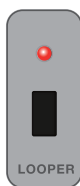
16. **Mic's TREBLE:** turn it counter-clockwise, the TREBLE will be suppressed, turn it clockwise, the TREBLE will be boosted.
17. **REVERB:** adjust mic's reverb effect.
18. **LOOPER Button:** for record and playback. **For details, please refer to the operation section of built-in LOOPER.**
19. **Turn on and turn off Bluetooth function:** long press the Bluetooth switch and turn on Bluetooth, then the Bluetooth indicator is on and flickering, you can connect to Bluetooth, the indicator is on and can play music after the Bluetooth connection. Tap and hold the Bluetooth switch to turn off Bluetooth connection, the Bluetooth indicator flickers, you can connect to Bluetooth. You can turn off the Bluetooth connection by long press the Bluetooth switch again.
20. **LINK button and Jack(3.5mm TRRS):** it can be used as portable devices' audio jack, please connect the attached audio connecting cable to cell phone, and make sure your cell phone has already downloaded audio processing app such as JamUp, AmpliTube and more. **Please note that the internal signal is transmitted to cell phone after this switch is turned on, BSK-60 has no sound or noise if you press this switch when it doesn't connect to external devices.**
21. **MASTER Volume Control:** adjusting the unit's volume.
22. **MUTE button:** turn on or turn off MUTE mode, this button fails temporarily if external footswitch pedal is used, you can only control the MUTE button from the footswitch pedal.
23. **Charging indicator, please refer to battery maintenance section for details.**
24. **Power:** connects to AC100-240V adapter
25. **Power switch(POWER ) :** turn on or turn off the unit.
26. **TO AMP Jack:** connects to amp's FOOTSWITCH jack.
27. **PHASE INV/A.F. BACK SCAN switch:** for details, please refer to connecting BSK-60 to external footswitch pedal section.

## Rear panel



1. **DC IN Mains Input:** connects to DC24V/2.5A adapter(center positive).
2. **DC OUT Mains Output:** DC9V/500mA mains output, supply power to pedal.
3. **LINE OUT 2 Jack:** tape recording signal output jack specially designed for cell phone live stream users, connects to cell phone, supplying BSK-60's internal audio signal to cell phone.
4. **Connects to accompaniment input jack(AUX/INPUT):** stereo headphone input jack(3.5mm ), for connecting to external sound source, such as CD, MP3.
5. **FOOTSWITCH Jack:** connects to 6.35mm stereo jack footswitch.
6. **PHONES Jack:** for connecting Headphones with 6.35mm Jack. (supports headphones impedance above 32 Ω )
7. **LINE IN(6.35mm Jack):** Line input jack, used for connecting to other device's LINE OUT, or connecting to another BSK-60's LINE OUT jack for expanding cascade.
8. **LINE OUT(6.35mm Jack):** Line output jack, used for connecting to other device's LINE IN, or connecting to another BSK-60's LINE IN jack for expanding cascade.
9. **BALANCED OUT standard balanced output jack:** supports balanced signal output, ensuring longer transmission distance and stronger anti-interference ability.

## Built-in LOOPER's instructions



### 1.Record

Press LOOPER button when there is no recording data, LOOPER indicator becomes red and starts to record, press this button again if you want to stop recording, the built-in LOOPER stops recording and switch to play status and the indicator becomes blue.

### 2.Play

You can press LOOPER button while playing or dubbing, now the built-in LOOPER switches to play status, and the indicator becomes blue.

### 3.Dub

You can press LOOPER button while playing, the built-in LOOPER switches to dub status, and now the indicator becomes red, you can press this button again when you finish dubbing, exit from dubbing and back to play mode.

### 4.Stop

You can tap the LOOPER button twice in a row while recording or dubbing, the built-in LOOPER switches to stop mode and now the LOOPER goes out. Tap the LOOPER button again when it stops and back to play mode.

### 5.Revoke dubbing/Recover the dubbing

If you're not content with the quality of the parts just dubbed, you can press LOOPER button for over 1 second while playing until LOOPER indicator starts to flicker, the parts dubbed just now will be revoked, the recording will be back to the last status, and back to play mode. If you want to cancel this revoke, press LOOPER and keep until the indicator flickers, then the recording been revoked will be recovered. Please note that only the most recent recording can be revoked or recovered.

### 6.Delete recording completely

Double click LOOPER button and keep until the red indicator begins to flicker quickly, then release the button, you can delete all the recording completely.

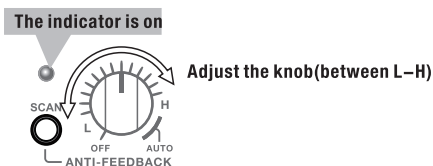
### 7.Use external footswitch pedal to control LOOPER function

Please refer to the instructions for connecting BSK-60 to external footswitch pedal section.

## Instructions for feedback suppressor

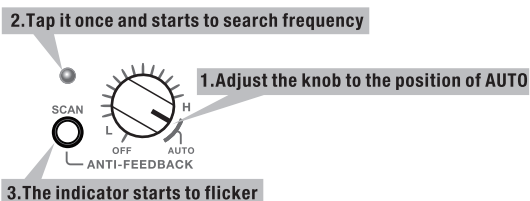
BSK-60 features anti-feedback function, it reduces feedback to the maximum when guitar produces feedback. You can turn on or adjust feedback suppressor by the following methods:

### 1. Search for feedback frequency manually



You can rotate ANTI-FEEDBACK knob to turn on and search for suitable feedback frequency point manually, the feedback diminishes or disappears immediately once it reaches to the suitable frequency point.

### 2. Auto-search feedback frequency



You can activate BSK-60's auto-search feedback frequency function by rotating ANTI-FEEDBACK knob to the position of AUTO. Then ANTI-FEEDBACK indicator starts to flicker and enter to preparation status, you can tap SCAN switch gently once and begin to search for frequency if there is feedback, ANTI-FEEDBACK indicator flickers at high speed, the indicator backs to flickering status if frequency was successfully searched, the indicator flickers every second in low speed if it fails to search, now you can press SCAN button again and search for feedback frequency all over again, you can switch to manual mode to search for feedback frequency manually if it fails to search several times in a row.

**Note: BSK-60's auto-searching speed for frequency is quite high, you might notice the indicator flashing quickly during search, don't worry, it's normal.**

### 3. Use external footswitch pedal to operate the feedback suppressor

You can use external footswitch pedal to activate BSK-60's feedback suppressor, please refer to BSK-60's connection to external footswitch pedal instruction section if activates through external footswitch pedal anti-feedback function.

**Note: BSK-60's anti-feedback automatically works to a certain degree, if you notice it doesn't work whether you try to suppress the feedback manually or automatically, you can try the following methods to enhance the success ratio of anti-feedback:**

**1) Check up your channel's gain or guitar output signal, make sure gain or volume are at a reasonable range.**

**2) With guitar's built-in PHASE INVERTER (in case your guitar has such function) or BSK-60's PHASE INVERTER function, you can switch signal's phase so as to break oscillating loop.**

**3) Adjust the distance or direction of your guitar and amp.**

## The instructions for connecting BSK-60 to external footswitch pedal

**Note:** when connects BSK-60 to external footswitch pedal, it doesn't support hot plug and play, if you need to use external footswitch pedal, please use the attached connecting cable to connect the main unit and footswitch pedal when BSK-60 is turned off.

Turn off the main unit first, then connects the footswitch pedal to the main unit



Turn on the main unit first, then connects the footswitch pedal to the main unit



**Note:** The related panel knobs or switches fail temporarily when external footswitch pedal is connected, you can adjust some of BSK-60's parameters through the footswitch pedal only.

### 1.Check up the connection of footswitch pedal and main unit

Firstly you've got to turn off the main unit, and then use the attached connecting cable to connect the main unit and footswitch pedal, turn on the main unit. Once the power is on, there is a brief communication between the main unit and the footswitch pedal, to confirm each other has been connected, if successfully connected, all the indicators will flicker quickly 3 times, indicating the communication is established, now you can operate BSK-60 through footswitch pedal's knobs and footswitch. If footswitch pedal fails to connect to the main unit, all the indicators on the footswitch pedal flicker every second, indicating the communication fails to establish. Please check up whether the cable is broken or the plug has been plug into the socket completely or not.

### 2.The attached connecting cable for the footswitch pedal

2 meters connecting cable is attached in the packing list for BSK-60, suitable for most venues. If the cable is not long enough, you can use the standard stereo audio cable of the same standard to replace the original one. Please note that the length for the cable shall not exceed 5 meters, and make sure it is of high quality and communication signals transfer smoothly. If the footswitch pedal cannot recognize the signal, you'd better shorten cable's length or replace a high quality cable.

### 3.Instructions

#### LOOPER switch:

Tap the LOOPER footswitch to control the built-in LOOPER function, the operation is the same as the main unit panel's operation, footswitch pedal's indicator flickers according to the main unit( due to communication delay, it takes a little bit longer when you turn on the footswitch pedal's indicator compared with that of main unit's indicator ).

#### MUTE switch:

The indicators on the panel and footswitch illumine or go out simultaneously when you tap it to turn on or turn off mute function.

#### PHASE INV / A.F.BACK SCAN switch:

PHASE INV / A.F.BACK SCAN switch is a multifunction control switch, for controlling the SIGNAL PHASE INVERTER and FEEDBACK suppressor, you can turn on the SIGNAL PHASE INVERTER by tapping this switch twice when the FEEDBACK suppressor is not turned on, PHASE INV indicator and main unit's PHASE indicator will be on, indicating the signal has been inverted.

**Note:** if the footswitch pedal's FEEDBACK suppressor is turned on, PHASE INVERTER cannot be used temporarily, you can turn off and exit from FEEDBACK suppressor first, and then operate it.



Whether PHASE INVERTER is turned on or not, press and keep PHASE INV / A.F.BACK SCAN switch, the main unit turns on FEEDBACK suppressing function and enter to auto-search mode, and won't be controlled by main unit's ANTI-FEEDBACK knob. When ANTI-FEEDBACK is turned on, footswitch pedal's ANTI-F.BACK indicator flickers according to the main unit's indicator, and enter to auto-search preparation status, tap PHASE INV / A.F.BACK SCAN switch to turn on feedback frequency search, ANTI-F.BACK indicator flickers quickly during search, ANTI-F.BACK indicator back to slow-flicker status if searches successfully; ANTI-F.BACK indicator flickers every second if fails in search, now you can tap PHASE INV / A.F.BACK SCAN switch again to start searching for feedback frequency all over again . If you want to exit from and turn off FEEDBACK suppressor, you need to tap and keep PHASE INV / A.F.BACK SCAN switch, and wait for ANTI-F.BACK indicator goes out and then turn off and exit from FEEDBACK suppressor.

**Note: the panel's ANTI-FEEDBACK knob will be shielded when the footswitch pedal is connected, you can not operate it manually, but realize FEEDBACK suppressing function by auto-search through the footswitch pedal.**  
**CHORUS/G-VERB/DELAY knobs**

Those 3 knobs control the main unit guitar effects module's CHORUS, REVERB and DELAY effects, the operation is the same as that of the main unit panel.

**M-VERB knob**

This knob control mic channel's reverb effect, the operation is the same as that of the main unit panel.

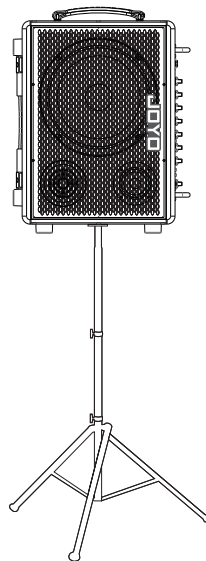
**Bluetooth connection**

BSK-60 has a built-in Bluetooth communication unit, so you can connect it to devices with a Bluetooth function for playing music. For detailed information, please refer to the instructions as below.



- 1.Long press the Bluetooth switch and turn on Bluetooth, the Bluetooth indicator is blue and flickers continuously.
- 2.Turn on the Bluetooth of the mobile device, find “BSK-60” from the device list and match. When Bluetooth connects to BSK-60, then the Bluetooth indicator is on.

**PUT THE SUPPORT BRACKET IN BSK-60'S SUPPORT HOLE, SO YOU CAN PROP UP THE AMP WITH EASE.**



## Battery maintenance:

When the power indicator(POWER) changes from red to blue, it indicates that the battery needs to be charged. Please turn off the power switch (NO/OFF) , then the power indicator goes out. Connect the attached power cable with adapter and plug into DC 24V/2.5A port.

The battery indicator(BATTERY) is in yellow, indicating charging. It turns off automatically once fully charged. Note: Please do not disconnect the power when it is charging, otherwise it will damage the battery. Please turn on the power switch and operate the unit if you need to use it during charging.

1. If your amp is not in use for a long time, make sure to charge the battery above 80%, the battery should be charged every two months to avoid battery aging.
2. When the power indicator (POWER) changes from red to blue, please charge it in time to protect the battery.
3. If the amp can only work for less than 1 hour after fully charged (with normal use and maintenance), it's time to replace the battery.

## Parameters:

AC adapter input voltage: AC100–240V 50–60Hz

AC adapter output voltage: DC24V/2.5A

Battery's specification: 18.5V/6.6Ah(lithium battery)

Guitar input sensitivity: –11.5dBV 1M $\Omega$

Microphone input sensitivity: –41dBV 100K $\Omega$

AUX IN sensitivity: –11.5dBV 2.2K $\Omega$

LINE OUT 2 Jack output impedance: 4.7K $\Omega$

Headphone output impedance: 32 $\Omega$

LINE IN Jack input impedance: 10K $\Omega$

LINE OUT Jack output impedance: 10K $\Omega$

BALANCED OUT Jack output impedance: 1K $\Omega$

RMS: 60W

Bass unit: 10 inches , 4 $\Omega$ , 70W

Treble unit: 3 inches , 4 $\Omega$ , 30W

Pedal–Guitar channel: CHORUS, DELAY(The maximum is 500ms), REVERB

Pedal–MIC channel: REVERB

Dimensions:50x29x37.5cm

Weight:14.2kg

## Package content:

BSK–60 x 1

Power adapter x 1

Power cord x 1

Footswitch pedal x 1

6.35mm footswitch pedal connecting cable x 1

3.55mm TRRS audio cable x 1

User manual x 1

# JOYO

## JOYO TECHNOLOGY CO., LTD

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# BSK-60

# 原声吉他放大器

## 用户使用说明



# JOYO

# 感谢您购买我们的产品!

## 产品概述

非常感谢您选择和购买JOYO BSK-60原声吉他放大器。BSK-60是一款专门为原声吉他设计的乐器放大器产品，其放大特性曲线专门针对原声吉他而设计，高音亮丽饱满，中低频浑厚有力；其60W的RMS输出功率完全可满足您小型演出或家用练习的需求；与同类产品相比，除了在音色上可圈可点外，BSK-60还内置了一颗高性能的数字效果处理芯片，为您提供多种高品质DSP数字效果（CHORUS、DELAY、REVERB、ANTI-FEEDBACK），而这多种数字效果，您可以同时使用，这在同类产品中是并不多见的；BSK-60还为您准备了一个麦克风输入通道，设计时，我们也特别对麦克风放大电路做了针对人声特点的特殊频响优化，通过电路处理，人声将变得更清晰有力，却不会浑浊不堪，另外，我们还为麦克风通道配备了独立的混响效果，为您的歌声增添几分华丽色彩；BSK-60也如多数吉 he 音箱一样，配备了AUX IN接口，您可通过此接口来输入CD或MP3音乐伴奏信号，来跟着伴奏即兴演奏或练习，BSK-60还新增了LOOPER内录和回放功能、蓝牙播放功能、LINK功能、主插功能、LINE IN输入功能、LINE OUT输出功能、BALANCED OUT输出功能、可向效果器电源供电的DC OUT功能（DC 9V/500mA），并随机附送外接控制踏板，让您能更方便的操作BSK-60。

**特别提示：**如果您的BSK-60机器需要维修时，则需要归还授权(RA)号码，若没有这一号码，这个设备将不接受维修。请保持原包装材料一起寄出，在寄出维修之前，请拨打JOYO电话0755-29765393取得联系。

## 产品特点

- 额定输出功率60W rms。
- 内置锂电池，可充电，满足户外使用需求。
- 内置最大500mA的直流9V输出接口，可用于给小型效果器设备供电。
- 吉 he 与麦克风双通道设计。
- 完全独立的麦克风混响与吉 he 混响效果。
- 三种可同时使用的吉 he 效果器（合唱、带有TAP TEMPO功能的延时，以及混响效果）。
- 内置吉 he 啸叫抑制功能。
- 内置吉 he 信号相位反相功能。
- 一键静音功能。
- 内置30秒可无限叠加的LOOPER功能。
- 蓝牙4.0音乐播放功能。
- 内置移动设备音频接口，允许连接到手机，并使用手机(iOS或部分Android设备)内的音频效果软件来润色吉 he 音色。
- 用于手机直播的直录输出接口。
- 用于级联其他音箱设备的LINE IN和LINE OUT接口。
- 用于连接调音台设备的XLR(卡侬)接口。
- 随机附送JOYO独有的可同步主机状态的外接控制踏板。

## 详细的安全说明

- 为了您的安全和能更快地熟练使用本产品, 使用前请先仔细阅读并理解本说明书中所有的安全与使用说明。
- 为了您以后能更加方便地使用和保养本产品, 请妥善保管好本使用说明书以供必要时查阅。
- 为了您能更加安全地使用本产品, 请遵守在设备上和说明书中所有的警告与注意事项。
- 请使用BSK-60随机附带的AC电源适配器! 使用其他适配器可能造成适配器电压与BSK-60输入电压不兼容, 导致损坏或其他意外情况发生。
- BSK-60随机附带之适配器已通过相关电磁兼容及安规测试, 使用其他适配器我司将不保证其安规性能可以达到或符合您所在国家或地区的强制安全认证标准。
- 如果发生电源适配器损坏, 在无法获得原厂附配的电源适配器必须另外购买时, 请首先保证您要购买的电源适配器之电源极性与最大功率要与本产品所附配的原厂电源保持一致。
- 请在使用完毕后拔下电源插头, 以节约能源。
- 请勿将本机放在靠近水或潮湿的地方使用, 如浴缸、厕所、洗衣桶、厨房洗菜盆、游泳池旁, 防止液体渗进机内, 导致机器发生故障无法正常工作或者发生用电危险。
- 避免在周围充满易燃易爆气体的地方使用, 如加油站或粉尘场所。
- 如遇本机内置锂电池损坏, 请勿擅自采购并更换;  
本机内置电池已通过严格的安规测试, 擅自更换其他途径获得的电池可能会因其自身质量问题导致本产品无法正常工作, 或发生爆炸引起火灾。请联系您的零售商更换电池。
- 请勿用酒精等化学溶剂物品清洁本机器, 避免造成机器表面的损伤, 有清洁必要时可用干抹布擦拭。
- 无论出于哪种原因, 请勿自行拆开机壳, 如遇产品故障请联系专业维修人员, 或联系您的零售商进行维修。
- 请不要强行拉扯电源线以及其他机器组件, 避免电源线以及插头损坏。
- 若是在打雷或闪电时, 较长时间不使用本机器, 务必关闭本机电源开关并拔出电源插头。
- 请勿碰撞、抛掷、振动本机, 以免损坏本机。
- 如果设备长期闲置不用, 应确保电池处于充满状态, 每隔两个月复充一次电, 否则电池将老化。
- 如本机提示电量低, 请及时为本机充电, 过度放电以及内部电池长期低电会导致不可逆转的电池容量损失, 导致电池损坏。
- 禁止推移在最顶端安放有机器而又无保护措施的可移动机架, 谨防最顶端的机器跌落给您带来不必要的人身伤害。为保护您的利益, 请使用由该制造厂商所生产或推荐的可移动机架、三角架、脚架, 固定架、控制台等配件。



## 面板说明

### 前面板/脚踏面板

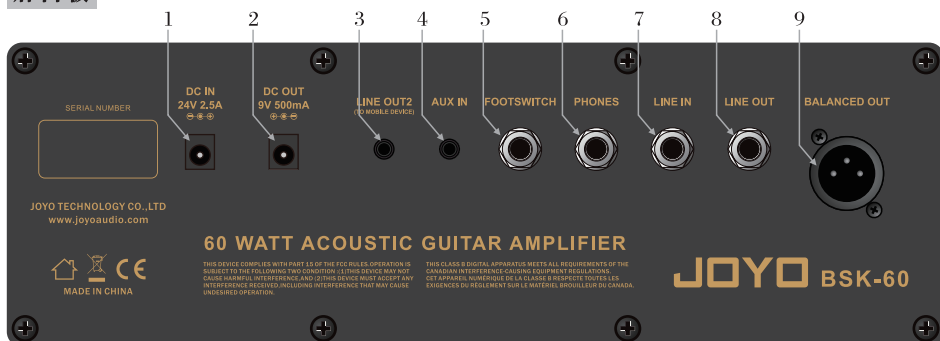


1. 吉他输入接口6.35mm (INPUT)；
2. **PHASE**按键：用于开启或关闭信号反相器功能。如使用外接踏板，该功能将只能从踏板上操作，详见踏板操作指南章节。
3. 吉他音量控制 (VOLUME)；
4. 低频 (BASS)；
5. 中频 (MIDDLE)；
6. 高频 (TREBLE)；
7. **合唱 (CHORUS)**：调节合唱效果深度。如使用了外接踏板，此旋钮将暂时失效，您只能从踏板端调整合唱效果参数。
8. **混响 (REVERB)**：调节吉他混响效果干湿比。如使用了外接踏板，此旋钮将暂时失效，您只能从踏板端调整混响效果参数。
9. **延时 (DELAY)**：调节延时时间长短。如使用了外接踏板，此旋钮将暂时失效，您只能从踏板端调整延迟效果参数，但是您仍然可以通过操作TAP TEMPO按键来设定延迟时间。
10. **TAP TEMPO**按键：连续两次以上双击此按键，即可设置延迟时间。
11. **SCAN**按键：自动啸叫频率搜索按键。具体操作方式请阅读反馈抑制器使用说明章节
12. **ANTI-FEEDBACK**旋钮：手动反馈抑制控制旋钮，具体操作方式请阅读反馈抑制器使用说明章节。
13. 话筒输入接口 (INPUT)；
14. 话筒音量控制(MIC/VOLUME)：调节话筒通道的音量大小。
15. 话筒低频(BASS)；
16. 话筒高频(TREBLE)；
17. **混响 (REVERB)**：调节话筒混响效果。
18. **LOOPER**按键：此按键用来内录和回放功能。详情请参考内建LOOPER操作指南章节。



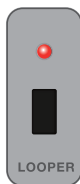
19. **蓝牙功能的开启与关闭按键**：长按蓝牙开关，启动蓝牙，蓝牙指示灯点亮并闪烁，此时可以连接蓝牙，连接完蓝牙后指示灯长亮并可以播放音乐。轻按蓝牙开关，断开蓝牙连接，蓝牙指示灯闪烁，可以继续连接蓝牙。长按蓝牙开关，关闭蓝牙。
20. **LINK按键与接口（3.5mm接口 4级）**：本接口可作为移动设备的音频接口使用，请使用本机附送的音频连接线连接手机，并确保您的手机预先安装有音频处理软件，如JamUp、AmpliTube等。注意本开关开启后，内部信号将被发送至手机端，没有连接外部设备的情况下按下本开关将导致BSK-60没有声音或出现噪音。
21. **MASTER总音量控制**：调整整机的音量大小。
22. **MUTE静音按键**：此键用于打开或关闭静音模式，如使用了外接踏板，此按键将暂时失效，您只能从踏板端控制静音功能。
23. **充电指示灯**：详见电池充放电的使用与保养章节。
24. **电源指示灯**；
25. **电源开关（POWER）**；
26. **TO AMP接口**：与音箱FOOTSWITCH接口连接。
27. **PHASE INV / A.F.BACK SCAN开关**：详见BSK-60外接踏板操作指导章节。

## 后面板



1. **DC IN电源输入接口**：与DC24V/2.5A内正外负的适配器连接。
2. **DC OUT电源输出接口**：DC9V/500mA的电源输出，给效果器提供电源。
3. **LINE OUT 2接口**：方便手机直播用户使用的内录信号输出接口，直连手机，向手机提供BSK-60的内部音频信号。
4. **AUX IN外接伴奏输入接口**：此为立体声输入接口（3.5mm），用于接入外部音源，如CD，MP3。
5. **FOOTSWITCH接口**：与6.35mm立体声接口脚踏控制器连接。
6. **PHONES接口**：与6.35mm立体声耳机监听接口连接。（支持32Ω阻抗以上的耳机）
7. **LINE IN(6.35mm接口)**：线路输入接口，用于连接其他设备的LINE OUT，也可以连接另外一台BSK-60的LINE OUT接口，进行音箱级联扩展。
8. **LINE OUT(6.35mm接口)**：线路输出接口，用于连接其他设备的LINE IN，也可以连接另外一台BSK-60的LINE In接口，进行音箱级联扩展。
9. **BALANCED OUT标准平衡输出接口**：支持平衡信号输出，传输信号更远，抗干扰能力强。

## 内建 LOOPER 操作指南



### 1. 录音

在没有录音数据的情况下，按下LOOPER按键，LOOPER状态指示灯变成红色，录音开始，当您想要终止录音时，请再次按下本按键，内建LOOPER将结束录音并切换到播放状态，指示灯变成蓝色。

### 2. 播放

您可以在录音或叠录状态下按下LOOPER按键，此时内建LOOPER将切换到播放状态，指示灯变成蓝色。

### 3. 叠录

在播放状态下按下LOOPER按键，内建LOOPER将切换到叠录状态，指示灯变成红色，叠录完成后您可以再次按下此按键，退出叠录返回播放模式。

### 4. 停止

您可以在播放或者叠录状态下快速连按两次LOOPER按键，此时内建的LOOPER将切换到停止模式LOOPER指示灯熄灭。停止后再次按下LOOPER按键，将返回到播放模式。

### 5. 撤销叠录内容/找回撤销叠录内容

如您对刚刚叠录的段落不满意，您可以在播放状态下按下LOOPER按键不放并保持1秒钟以上，直到LOOPER指示灯开始闪烁，此时刚刚的叠录将被撤销，录音内容将返回到上一次的状态，并回到播放模式。如果您想取消本次撤销，您可以再按下LOOPER按键不放直到指示灯闪烁，刚刚被撤销的录音将被找回并恢复。注意，撤销或找回只能找回最近的一次录音或撤销。

### 6. 完全清除录音内容

连续按下两次LOOPER按键并保持不放，等到红色指示灯开始快速闪烁时松开按键，即可全部清除录音内容。

### 7. 使用外接踏板控制LOOPER功能

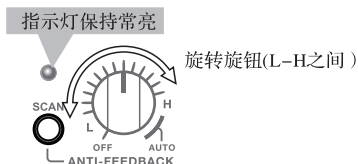
请参考BSK-60外接踏板操作指导章节。

## 反馈抑制器使用说明

BSK-60内置有反馈抑制功能，用于在吉他发生反馈啸叫时最大程度的降低反馈啸叫声。

您可以通过下面几种方式来启动或调整反馈抑制器。

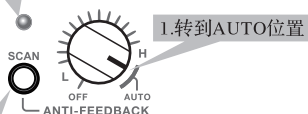
### 1. 手动打开并搜索啸叫频率



您可以通过操作面板上的ANTI-FEEDBACK旋钮来打开啸叫抑制功能，打开后，ANTI-FEEDBACK指示灯保持常亮，当啸叫出现时，您可以通过旋转ANTI-FEEDBACK旋钮来手动搜索啸叫频点，当处于合适的频点时，啸叫声将立刻降低或消失。

### 2. 自动搜索啸叫频率

2. 指示灯开始闪烁



3. 轻按一下开始频率搜索

您可以通过将ANTI-FEEDBACK旋钮旋转到AUTO位置，激活BSK-60的自动啸叫频率搜索功能。功能被激活后，ANTI-FEEDBACK指示灯开始闪烁，进入准备状态，当啸叫出现时，您可以轻按一下SCAN开关，开始频率搜索，频率搜索后，ANTI-FEEDBACK指示灯高速闪烁，如果啸叫频率搜索成功，指示灯将回到闪烁状态，如果搜索失败，指示灯将会慢闪约1秒一次，此时您可以重新按下SCAN按键重新搜索啸叫频率，如果出现多次搜索失败，您可以切换回手动模式进行手动啸叫频率搜索。

**注意：**BSK-60的自动啸叫频率搜索速度非常快，您有可能察觉不到搜索过程中指示灯的高速闪烁，这属于正常现象，请不必担心。

### 3. 使用外接踏板来操作反馈抑制器

您还可以通过使用外接踏板来启动BSK-60的反馈抑制器，如果启动通过外接踏板操作反馈抑制功能，请参考BSK-60外接踏板操作指导章节。

**注意：**BSK-60的自动啸叫抑制只能在一定程度上抑制啸叫，如果发现无论手动或自动方式都无法对啸叫进行有效抑制，您可以通过以下几个方法来改善来提高啸叫抑制器的抑制成功率：

1) 留意您的通道增益或者吉他输出信号，确保增益或音量在一个合理范围。

2) 配合吉他自带PHASE切换（如果您的吉他有此功能的话）或者BSK-60的PHASE INVERTER功能，切换信号相位，来破坏震荡环路。

3) 调整您吉他与音箱的距离或方向。

## BSK-60 外接踏板操作指导

注意：BSK-60外接踏板不支持热插拔，如您需要使用外接踏板，请在BSK-60主机完全关机的情况下用附送的连接线连接好主机与踏板。

### 主机关机后,踏板连接主机



### 主机开机后,踏板连接主机



注意：外接踏板接入后，与踏板对应的面板旋钮或开关将暂时失效，您将只能通过踏板操作BSK-60的一些参数。

### 1.踏板与主机连接状态检查

您需要将主机电源完全关闭，然后用附送的光缆连接好主机与踏板，然后打开主机电源。电源接通后，主机与踏板之间将进行简短的通信过程，确认彼此已可靠连接，如连接成功，踏板全部指示灯将快闪3次，表示通信已建立，此时您已经可以通过操作踏板上的旋钮与脚踏开关来控制BSK-60的对应功能。

如果踏板与主机连接失败，踏板上的全部指示灯将每隔1秒闪烁一次，表示通信连接不成功。如此种情况出现，请检查您的光缆是否有损坏或插头有没有完全插入插座内。

### 2.关于附送的踏板主机连接线

BSK-60附送了一条2米长的连接线，可满足大部分使用场合需求。如线缆长度不能满足您的使用需求，您可以使用同类型的标准立体声音频线来代替原装线缆。请注意，替代的音频线长度最好不要超过5米，并确认替代线有着良好的品质，已确保通信信号正常传输。如出现踏板无法识别，您可以尝试缩短连线长度，或更换高品质连接线。

### 3.操作指南

#### LOOPER开关：

通过踩踏LOOPER脚踏开关来操作内建LOOPER功能，操作方式与主机面板操作方式相同，踏板指示灯闪烁与主机同步（由于通信延迟，踏板端指示灯开启速度会比主机指示灯稍微慢一点点）。

#### MUTE开关：

踩下打开或关闭静音功能，静音开启或关闭后，面板和脚踏板上的指示灯同时亮起或熄灭。

#### PHASE INV / A.F.BACK SCAN开关：

PHASE INV / A.F.BACK SCAN开关为多功能复用控制开关，用来操作信号反相器和反馈抑制器，在反馈抑制器没开启的状态下，您可以通过双踩本开关来开启信号反相器，开启后踏板的PHASE INV指示灯和主机的PHASE指示灯会亮起，提示信号已经被反相。注意：如果踏板端打开了反馈抑制器，那么信号反相器将暂时不能操作，如需操作，请先关闭并退出反馈抑制器。

不管信号反相器是否打开，只要长踩PHASE INV / A.F.BACK SCAN开关，主机就会直接打开反馈抑制功能，并直接进入自动搜索模式，并且不受主机ANTI-FEEDBACK旋钮旋转位置影响。开启后，踏板端ANTI-F.BACK指示灯与主机端指示灯同步闪烁，进入自动搜索准备状态，您可以通过轻踩PHASE INV / A.F.BACK SCAN开关来开启啸叫频率搜索，在搜索过程中ANTI-F.BACK指示灯会快速闪烁，如果搜索成功，ANTI-F.BACK指示灯返回慢闪状态；如果搜索失败，ANTI-F.BACK指示灯将每秒钟闪烁一次，此时您可以通过再次踩下PHASE INV / A.F.BACK SCAN开关重新搜索啸叫频率。如果需要退出并关闭反馈抑制器，您需要踩住PHASE INV / A.F.BACK SCAN开关不放，并等待ANTI-F.BACK指示灯熄灭后完成反馈抑制器的关闭退出。  
**注意：**踏板插入后，面板上的ANTI-FBACK旋钮将被屏蔽，手动方式无法操作，只能通过踏板利用自动搜索的方式来实现反馈抑制。

**CHORUS/G-VERB/DELAY旋钮**

这三个旋钮分别用于控制主机吉他效果模块的合唱、混响和延迟效果，操作方式与主机面板相同。

**M-VERB旋钮**

这个旋钮用来控制话筒通道的混响效果，操作方式与主机面板相同。

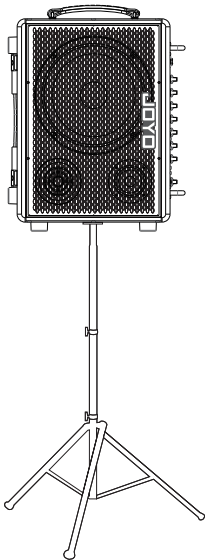
**蓝牙连接**

BSK-60内建有蓝牙通信单元，你可以使用带有蓝牙功能的设备与BSK-60进行连接并播放音乐。要使用本功能，您可以按照下面的方式来操作您的BSK-60。



- ①长按蓝牙开关，启动蓝牙，蓝牙指示灯点亮并闪烁;
- ②打开移动设备的蓝牙功能，在设备列表中找到“BSK-60”，并进行配对。成功配对后，蓝牙指示灯将保持常亮状态。

**将支撑支架对准BSK-60支撑孔，轻松将音箱支起来。**



## 电池充放电的使用与保养

本机开机状态下，当电源指示灯（POWER）由红色变成蓝色灯时，就需要对电池进行充电了，这时请您关闭电源开关（ON/OFF），电源指示灯熄灭后将配套电源线插入适配器，输出插口连接到（DC 24V/2.5A）位置上，把电源插头插入交流插座上，这时充电指示灯点亮（BATTERY）黄色，表示正在充电中，充满电后充电指示灯熄灭。充电期间请不要断开电源，否则会影响电池的使用寿命。在充电期间使用设备时，请打开电源开关后设备可以正常使用，在使用设备时不影响您充电。

- 1.如果设备长期闲置不用，应确保电池电量充至80%以上，每隔两个月复充一次电，否则电池将老化。
- 2.请勿将设备倒置，否则电池液容易流出，损坏电池。
- 3.电池电量不足时，电源指示灯（POWER）由红色变成了蓝色灯，请您及时充电，否则电池将会老化。
- 4.如果电池已经充满，但电池使用时间不足1小时，说明电池已经老化，需要更换新电池。

## 电器参数

- AC适配器输入电压：AC100-240V 50-60Hz
- AC适配器输出电压：DC24V/2.5A
- 电池规格：18.5V/6.6Ah(锂电池)
- 吉他通道输入灵敏度：-11.5dBV 1M $\Omega$
- 麦克风通道输入灵敏度：-41dBV 100K $\Omega$
- AUX IN输入灵敏度：-11.5dBV 2.2K $\Omega$
- LINE OUT 2接口输出阻抗：4.7K $\Omega$
- 耳机输出阻抗：32 $\Omega$
- LINE IN接口输入阻抗：10K $\Omega$
- LINE OUT接口输出阻抗：10K $\Omega$
- BALANCED OUT接口输出阻抗：1K $\Omega$
- RMS功率：60W
- 低音单元：10寸，4 $\Omega$ ，70W
- 高音单元：3寸，4 $\Omega$ ，30W
- 效果器-吉他通道：CHORUS、DELAY(最大500ms)、REVERB
- 效果器-麦克风通道：REVERB
- 体积：50x29x37.5cm
- 重量：14.2kg

## 包装清单

- 主机x1
- 电源适配器x1
- 电源线x1
- 脚踏控制器x1
- 6.35mm脚踏控制器连接线x1
- 3.5mm 4级连接线x1
- 说明书x1

### 卓乐产品服务政策

一、在正常使用产品过程中，如果产品出现非人为损坏的性能故障，自购买之日起，消费者享有保修服务，保修期为12个月。

二、有下列情况之一者，消费者不能享受保修权益。

1、人为损坏；2、超过保修期；3、无保修卡及有效发票，但能够证明产品在保修期内的除外；4、保修卡与产品型号不符，或保修卡被涂改；5、未按说明书要求使用、维护、保养而造成产品损坏；6、未经卓乐公司授权，擅自拆卸、维修产品、或浸水、摔坏产品；7、其他不可抗力造成的损坏。

三、卓乐服务信息

消费者服务热线：0755-29765390

更多信息请访问：[www.joyochina.cn](http://www.joyochina.cn)



### 卓乐产品保修卡

产品型号	SN号码	
	姓名	购机日期
用户信息	电话	
	地址	
	发票号码	
	名称（加盖公章）	
销售单位信息	地址	
	电话	

品牌:JOYO

名称:木吉他音箱

执行标准:QB/T 4325-2012

制造商:深圳市卓乐科技有限公司

地址:广东省深圳市宝安区新安三路陆氏工业大厦2楼 邮编:518133

售后服务热线:0755-29765390

### 产品合格证

检验结论 合格  
检验员号 QC 01  
日期