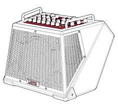
BSK-150
MULTIFUNCTIONAL LIVE STREAMING AMP



Owner's Manual

JOYO

Ⅰ.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-150's attached AC power adapter only! If you choose other adapters, they might not compatible with BSK-150's input voltage damage the unit or worse.
- BSK-150'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 turn off 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.
- Use the knobs, buttons, plugs and ports carefully. Do not apply excessive force to use this unit, as this may result in damage of it.
- 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.
- Please use the original packaging or shock-proof materials as you possibly can for transportation. Improper packaging could result in scratch or damage, or even malfunction.
- 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.

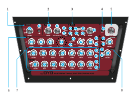
Ⅱ.Features

- 150W Multifunctional outdoor live streaming PA amplifier
- Mic Channel features PITCH CORRECTION and multiple 3 HARMONY Effects, beautifying your tone while singing
- Built-in audio interface, 3 smart phones can be used simultaneously during live streaming, for wireless recording and OTG digital recording
- LOOPER function can record your performance unlimitedly
- You can enjoy backing tracks via the Bluetooth and USB flash drive
- 20 built-in drum patterns for playing backing tracks
- Professional digital effects such as REVERB/CHORUS/DELAY
- Controlled by a Wireless Footswitch, facilitating outdoor use
- 6-Channel Instrument/Mic Input
- 5×speakers: 1×full-range speaker+4×treble speakers
- With USB interface for charging smart phones
- 12×21700 lithium batteries ensure long battery life
- You can run 2 amps in stereo
- With precise battery indicator, the LCD screen displays how much battery power is left
- Professional algorithm and PA amplifier tech, compatible with multiple instruments
- With elevation design and support hole, suitable for different venues

Ⅲ.Package contents

BSK-150×1
Power adapter×1
Power cable×1
Wireless Footswitch×1
2.4G wireless audio interface for smart phone live streaming(JW-05R)×1
Type-C to Lightning Adapter ×1
Type-C to Type-C USB cable ×1
Amp gig bag×1
Owner's manual×1

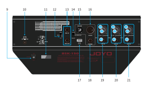
Ⅳ.Panel



1.LOOPER recording function module
①VOLUME: LOOPER's Volume Control Knob
②LOOPER Button: it's a bi-color LED(Green and red), press it once means record(in red)/play(in green)/overdub(in red). Long press it once for 1 second to clear all the recordings(The LED is in red and flashing twice), tap it twice to pause playing(The LED is in green and flashing).
2.DRUM: Drum machine's function module
①VOLUME: Drum machine's Volume Control Knob
②BEATS: Adjust it to choose among the 20 drum patterns, while press it to turn on or turn off the drum machine.
③TAP TEMPO button: it's a red/green bi-color LED, you can set the tempo quickly by pressing it evenly for multiple times(it indicates the current tempo when the LED is flashing in red, the TAP TEMPO mode has been activated when the LED is flashing in green.)
④REC: LOOPER/drum machine Channel Recording Signal Switch. If you need this Channel to be recorded by the smart phone, please turn on this function and the red LED will be lit.
3.MUSIC function module
①AUX IN
②"MP3": for playing music via USB flash drive
③Bluetooth switch: Long press it to turn on/off the Bluetooth function, tap it once to sever the current connection (If the LED is flashing, it means pending, to be connected.It means they're connected if the LED is on.)
④" ⏮ ": Previous/Fast rewind
⑤" ⏯ ": Play/Pause
⑥" ⏭ ": Next/Fast forward

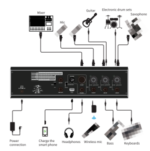
⑦VOLUME: Volume Control Knob for music playing

4.RECORDING: RECORDING, LIVE STREAMING Function Modules
①VOLUME: Live streaming/recording Output Volume Control Knob
②OTG: USB digital live streaming/recording port
③PORT 1: Smart phone live streaming/recording port
④PORT 2: Smart phone live streaming/recording port
5.MASTER: Master Volume Control Knob
6.CH1: Special Channel for Mic
①VOLUME: Mic Channel Volume Control Knob
②BASS: Mic Channel BASS Control Knob
③TREBLE: Mic Channel TREBLE Control Knob
④KEY SELECT: for selecting the key, press it to choose between Major/Minor, red means Major(this is the default value when you turn on the unit), green means Minor.
⑤PITCH CORRECTION: Pitch correction switch, press it to turn it on/off, it's in red when it's turned on, long press it to switch between scale modes, quick flash for 4 times activates the diatonic scale mode, slow flash twice activates chromatic scale mode (The chromatic scale is the default setting).
⑥HARMONY Switch: HARMONY Effects Switch, tap it once to turn on/off the HARMONY Effects, the LED is in red when it's been turned on, while the LED extinguishes when it's been turned off, long press it for 1 second to turn on the instant activation mode (the LED flashes quickly for 4 times). Press it for 1 second again to turn off the instant activation mode, the LED flashes slowly twice. You should use this function together with the Wireless Footswitch. For detailed info, please refer to Chapter 6, No.3.
⑦HARMONY: HARMONY Effects Selector, for selecting HARMONY and adjusting the effects.
⑧REVERB: Mic Channel Reverb Control Knob.
⑨48V Phantom power switch, please press this button when you use the condenser mic, and now the red LED is lit.
***Please turn off this switch when you use the moving coil mic, so as not to damage it.**
⑩Mic Channel Recording Signal Switch: If this Channel needs to be recorded by the smart phone, please turn on this function and the red LED will be lit.
7.CH2/CH3: Versatile Instrument Channel
①VOLUME: Instrument Channel's Volume Control Knob
②BASS: Instrument Channel's Bass Control Knob
③MIDDLE: Instrument Channel's Middle Control Knob
④TREBLE: Instrument Channel's Treble Control Knob
⑤CHORUS: Instrument Channel's Chorus Control Knob
⑥DELAY: Instrument Channel's Delay Control Knob(The maximum Delay Time is 1000ms)
⑦REVERB: Instrument Channel's Reverb Control Knob
⑧BRIGHT: Instrument Channel's Tone Bright Switch, Bright is in use when the green LED is lit.
⑨Versatile Instrument Channel Recording Signal Switch: If you need this Channel to be recorded by the smart phone, please turn on this function and the red LED will be lit.
8.Headphone Function Module
①VOLUME: Headphone's Volume Control Knob
②MUTE AMP: The amp's Mute button
③" 🎧 ": Headphone Jack



9. Power: Power Switch
10.Power adapter charging port
11.Battery Indicator
12.When connected in series, it's used for selecting this amp's stereo or mono working mode
13. AMP IN: 6.35mm amp series connection Input Jack
AMP OUT: 6.35mm amp series connection Output Jack
14. When connected in series, it's used for selecting this amp's Master/Slave mode.
15. DI OUT Volume Control Knob
16. DI OUT XLR Jack
17. 5V/1A USB smart phone charging port
18. 6.35mm Headphone Out Jack
19. CH1 Microphone Channel Input
①XLR+6.35mm Combo Jack : special for mic
②XLR+6.35mm Combo Jack : special for mic
③6.35mm Jack: special for the mic
20. CH2 Instrument Channel Input
①XLR+6.35mm Combo Jack : special for mic
②XLR+6.35mm Combo Jack : special for instruments (can also connect to mic, needs to be used with Mic preamp)
③6.35mm Jack: special for instruments(can also connect to mic, needs to be used with Mic preamp)
21. CH3 Instrument Channel Input
①XLR+6.35mm Combo Jack : special for mic
②XLR+6.35mm Combo Jack : special for instruments (can also connect to mic, needs to be used with Mic preamp)
③6.35mm Jack: special for instruments(can also connect to mic, needs to be used with Mic preamp)

Ⅴ.Connection diagrams



Ⅵ.Instructions for voice effects

1.PITCH CORRECTION: It's used for assisting vocalists while singing, to fix wrong intonation (tuning) of notes sung by them in real time when they are inaccurate on the pitch (error <1 semitone). there are 2 scale modes: Chromatic scale mode and diatonic scale mode.

Chromatic scale mode: Press "PITCH CORRECTION" Button(the LED is lit) or tap the Wireless Footswitch's "PITCH CORRECTION" to turn on "PITCH CORRECTION" effects, now it works in chromatic scale mode, it fits for most people's requirements, press "PITCH CORRECTION" button again(the LED extinguishes) to turn off "PITCH CORRECTION" effects.

Diatonic scale mode: Long press "PITCH CORRECTION" button for 1 second(the LED will be flashing quickly for 4 times) or tap the Wireless Footswitch's "PITCH CORRECTION" and hold for 1 second, and it changes into diatonic scale mode, you need to adjust your song's Key and Mode for the song that you're going to sing in advance, the instructions are as below: choose the matching Key via the "KEY SELECT" Encoder, press it to choose the Mode: Major(the red LED), minor(the green LED), it's suitable for those who are familiar with certain music theory, if you have no idea about "the scale", we suggest that you use chromatic scale mode.
Long press "PITCH CORRECTION" button for 1 second(the LED will be flashing quickly twice) again or tap the Wireless Footswitch's "PITCH CORRECTION" and hold for 1 second and it changes into chromatic scale mode.

2.HARMONY Effects: Press " ON/OFF" button(the LED is lit) to turn on the HARMONY Effects, there are 4 types in all, including ① HIGH: Augmented 3rd, ② LOWER: Diminished 5th, ③ HIGHER: Augmented 5th, ④ OCTAVE: Augmented Octave. You need to set the correct Key and Mode for the song that you're going to sing before using the HARMONY Effects. The instructions are as below: choose the matching Key via the KEY SELECT Encoder, press it to choose the Key: Major(the red LED), minor(the green LED), after you set the Key and Mode, choose the HARMONY Effects types via the "HARMONY" Selector, you can get the desired one by singing tryouts and adjusting the HARMONY Effects.

***You need to set the correct Key and Mode for the song that you're going to sing before using the HARMONY Effects, wrong Key and Mode will make the HARMONY Effects fail to pair up with the correct pitch.**

3. HARMONY Effects activation mode: It includes Routine mode and Instant activation mode, you can switch between them based on different needs.

Routine mode: Press amp's "ON/OFF" button or tap the Wireless Footswitch's "HARMONY", the HARMONY Effects is turned on as the routine mode, press "ON/OFF" button again to turn it off, this activation mode is commonly used for a complete song or a long verse that require HARMONY Effects.

Instant activation mode: Long press "ON/OFF" button or tap both the Wireless Footswitch's "PITCH CORRECTION", "HARMONY" simultaneously, now the "ON/OFF" LED and "HARMONY" indicator will be flashing for 4 times and then turn on the instant activation mode, if you need to turn on the "HARMONY" effects in this mode, it must be done via the Wireless Footswitch, when you tap and hold the "HARMONY", the Harmony effects is turned on, release the "HARMONY", the Harmony effects is turned off, this activation mode is suitable for a short verse or any sustain that require HARMONY Effects.

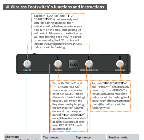
Ⅶ.Instructions for LOOPER/drum machine

LOOPER and drum machine feature auto-align function, when LOOPER is recording, the drum machine works automatically, so please adjust the Tempo and drum patterns accordingly first, then you can start to record, if you don't need drum machine function, please turn off the drum machine's Volume.

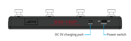
Instructions for LOOPER: Press LOOPER button to enter Pre-beat preparation phase, now the LED is flashing in red, when the Pre-beat is over, it enters record phase, now the LED is in red, press the LOOPER button again to enter play mode, now the LED is in green, you can adjust the Volume by the "VOLUME" knob during playing.

Instructions for Drum machine: When you record via the LOOPER or use the drum machine independently, you need to choose the drum patterns and Tempo first, and adjust the Volume accordingly as well, the procedures are as below:

Ⅷ.Wireless Footswitch's functions and instructions



Short tap:	Tap it once:	Tap it once:	Routine mode:
Recording(the indicator is flashing slowly)→Playing (the indicator is on)→ Overdubbing(the indicator is flashing slowly)	Turn on/off the drum machine(the indicator is flashing according to the current tempo of it.)	Turn on PITCH CORRECTION(the indicator is lit)→Turn off PITCH CORRECTION (the indicator extinguishes)	Tap it once to turn on the HARMONY EFFECTS (the indicator is lit)→ Turn off the HARMONY EFFECTS(the indicator extinguishes)
Double short tap: Pause playing(the indicator is flashing quickly)	**Press it and hold:** Enter TAP TEMPO mode (the indicator is flashing quickly), tap it evenly for 2-4 times and then set the tempo of it.	**Press it and hold:** Turn on diatonic scale mode(the indicator is flashing for 4 times)→ Turn off the diatonic scale mode(the indicator is flashing twice)	**Instant activation mode:** Press it and hold to turn on the HARMONY Effects (the indicator is lit)→ Release it to turn off the HARMONY Effects(the indicator extinguishes)
Press it and hold: Clear all the recordings (the indicator flashes twice and then extinguishes)			



*** When the Wireless Footswitch pairs up with the amp, pls turn on the Wireless Footswitch and activates pairing up mode first, then turn on the amp and begin to pair them up. If the sequence is wrong, then they won't be paired up successfully.**

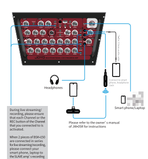
Ⅸ.The instructions for live streaming/ recording

With 2×3.5mm Jack and 1×Type-C Jack(for recording) , easy to connect to smart phone, headphone Jack or smart phones compatible with OTG function, 2×3.5mm Jack and 1×Type-C Jack(for recording) support live streaming and recording up to 3 smart phones and more simultaneously.

Multitrack live streaming/recording:
During band performance, if you want to live stream/record via smart phone with one Channel's signals, just activate this Channel's REC button, turn off this REC button if you don't need to live stream/record with other Channels.

Connect amps in series for live streaming/recording:
When 2 pieces of BSK-150 are connected in series, if you want to use the 2 amps' signals for live streaming/recording simultaneously, you need to set amp A as the SLAVE mode, and amp B as as the MASTER mode, connect the smart phone to amp A's live streaming/recording Jack, activate all the REC buttons on amp A, now all the Channels' signals of the 2 amps output to amp A's live streaming/recording Jack.

***Please refer to Chapter 10 for detailed info of connecting amps in series**
***Make sure to turn on OTG function on the smart phone before connect to Type-C recording Jack.**
***During live streaming and recording, make sure to press the REC buttons of the related Channels, and adjust the recording Out Volume to 12 o'clock-3 o'clock.**



During live streaming/ recording, please ensure that each Channel or the REC button of the Channel that you connected to is activated.

When 2 pieces of BSK-150 are connected in series for live streaming/recording, please connect your smart phone, laptop to the SLAVE amp's recording Jack.

Ⅹ.Instructions for connecting amps in series

There are 2 toggle switches for connecting amps in series, they're used for controlling the working mode during connection in series, the details are as below:

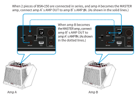
LEFT
This amp becomes Left channel when they're stereo and in series
RIGHT
This amp becomes Right channel when they're stereo and in series
MONO
A/B amp becomes Mono when in series
MASTER
This amp becomes MASTER amp when in series
SLAVE
This amp becomes SLAVE amp when in series
NO CONNECTION
Turn off the series connection

***Use 6.35mm stereo audio cable to connect amps, as connection in series function fails if you use mono cable.**

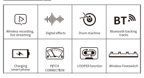
***We suggest that you switch the connection in series mode to stereo when playing music.**

***We suggest that you switch the connection in series mode to MONO mode during band performance and live streaming/recording (For detailed info about live streaming/ recording during connection in series, please refer to Chapter 9).**

When 2 pieces of BSK-150 are connected in series, and amp A becomes the MASTER amp, connect amp A's AMP OUT to amp B's AMP IN. (As shown in the solid lines.)



Ⅺ.Product advantages

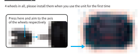


Ⅻ.Specifications

Specifications	Parameters
AC adapter input voltage:	AC100-240V 50-60Hz
AC adapter output voltage:	DC 28V/5.5A
Lithium battery's specifications:	9000mAh, 21700 Lithium battery×12
USB charging port:	DC 5V/1A
Guitar Channel Input Sensitivity:	-12dBV 1mΩ
Mic Channel Input Sensitivity:	-46dBV 100kΩ
AUX IN Sensitivity:	0dBV 3.9kΩ
PORT 1, POR 2 Input Impedance:	100kΩ
Headphone Out Impedance:	32Ω
AMP IN Impedance:	100kΩ
AMP OUT Impedance:	1kΩ
DI OUT Impedance:	1kΩ
RMS:	150W
Bass unit:	8 inches, 4Ω, 90W
Treble unit:	2.75 inches, 4Ω, 15W*4
Dimensions:	39.2x32x30cm
Net weight:	9.6kg

XⅢ.Accessory

4 wheels in all, please install them when you use the unit for the first time



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FCC warning statements:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.