

User Manual

Boston Acoustics BA 180



Karaoke Amplifier

User Manual

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Thank you for trusting a high quality audio product developed and produced by Boston Acoustics.

Please refer to and implement the instructions on this User Guide so that the product is set up to correct technical requirements, helping to bring the optimum experience, while ensuring durability for many years of use.

INTRODUCTION

Boston Acoustics BA180 series is a powerful karaoke amplifier with integrated 24bit / 192kHz DAC, Bluetooth connection, USB, Optical and HDMI (ARC) ports. Enabling convenient music playback from smart-phones, USBs and TVs without having to buy a Karaoke player. Products are equipped with world-leading quality components for fast and accurate signal processing. The BA 100 series amplifier features a wide range of audio-input connections and an intuitive, easy-to-use button design.

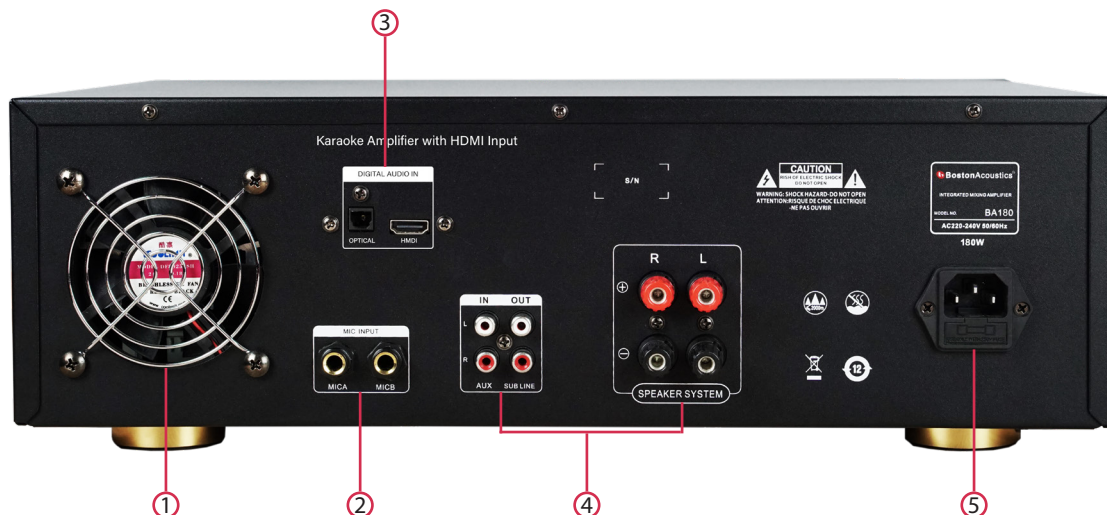
FOR YOUR OWN SAFETY, PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE USE.

1. Please keep this document for future reference.
2. Please keep all packaging and documentation for easy transport to warranty repair center when needed.
3. The power source used must conform to the description in the instruction document or the symbol on the amplifier.
4. Do not place device near water sources, humid places to avoid the risk of fire, explosion, and electric shock.
5. Do not place device near sources of heat such as stoves, heat vents, or other heat generating appliances.
6. Do not place objects containing liquid such as vases, water cups, etc. on the device.



1. **The area on the left of the amplifier** features ports for receiving music files in MP3 / WAV formats from USBs and SD Cards, with a display screen and buttons control music playback.
2. **Input source selection buttons**
 - **USB / CARD / BT:** choose to play audio from USB / Memory card / Bluetooth connection
 - **AUX:** The AUX port can accept and play Left / Right Analogue audio channels from Karaoke players, DVD players, and CD players.
 - **OPTICAL & HDMI:** ports for receiving digital audio from TV and from TV boxes, and link Karaoke players to built-in DACs
3. **EFF VOL:** Adjust the volume of echo effects when singing Karaoke
4. **MIC VOL:** Adjust microphone volume for both MIC ports.
5. **MUSIC VOL:** Adjust the volume of Karaoke background music.
6. **POWER ON / OFF:** Turns amplifier on / off
7. **MIC** the mic effects control area includes:
 - **DELAY BALANCE:** Adjust the delay effect balance between the left and right speakers, for situations where one speaker must be placed near a wall/corner and might produce more sound reflection. In addition, this button is also to adjust the Pingpong Delay effect in one repeat cycle will be adjusted for the left and right speaker channels with different levels of Delay, creating the feeling of the sound running from right to left and vice versa, suitable for large spaces to create more resonance for microphones.
 - **DELAY:** Adjust the repetition rate, the amount of time between repeated sounds of the microphone with reverberation effects, increase (fast) or decrease (slow).
 - **REPEAT:** Adjusts the repetition of the Microphone sound, to create a more or echo effect.
 - **BASS:** Adjusts the low frequencies of the microphone.
 - **TREBLE:** Adjusts the high frequencies of the microphone
8. **Microphone ports** and input volume control button for each Microphone
9. **MUSIC:** knobs to adjust the tone for background music, including:
 - **BASS:** Adjusts low frequencies for background music.
 - **TREBLE:** Adjusts the high frequencies for background music.

AMPLIFIER BACK PANEL



1. **Amplifier heat fan:** activates automatically when the amplifier is too hot and automatically stops spinning when temperature is stable.
2. **MICA / MICB:** Microphone pin port.
3. **DIGITAL AUDIO IN:**
 - **OPTICAL:** Digital signal input port, for connecting optical cable to OPTICAL OUT port on TV or Karaoke player, HD box....
 - **HDMI IN:** Digital input, only receives HDMI signal from TV via HDMI cable connection to HDMI (ARC) on TVs, does not receive HDMI signal from Karaoke players, HD players or TV Boxes.
4. **AUDIO:**
 - **AUX IN:** Analog audio input for L / R channels (for connecting Karaoke, DVD, CD players)
 - **SUB OUT:** Subwoofer connection output port
 - **SPEAKER SYSTEM:** port for connecting L / R speaker channels
5. **AC IN:** Power cord terminal

CONNECTION INSTRUCTIONS

NOTE:

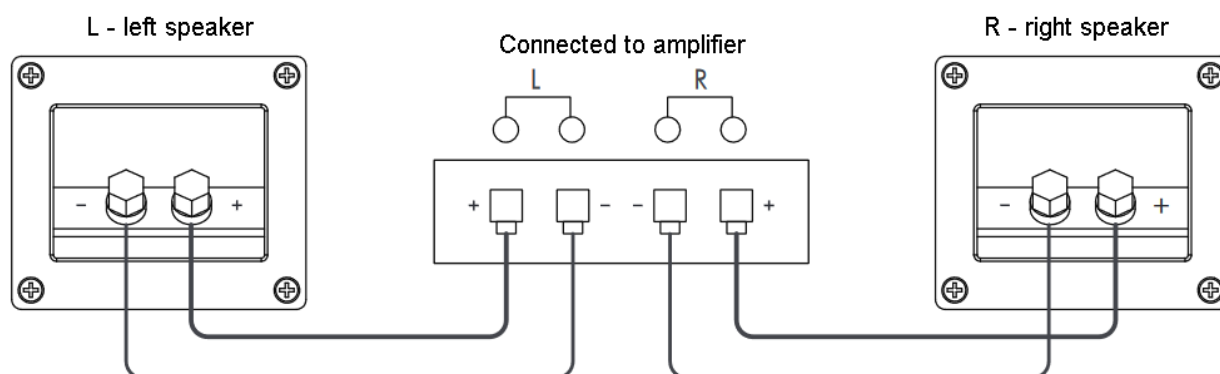
- If you are using this unit to connect with external devices, please only turn on the power switch when you are sure all connections are technically accurate.
- Check and make sure the wire is correctly connected to the left and right speakers.
- Note that the wires must be attached properly and securely.

CONNECTING AMPLIFIER TO A SPEAKER

Selecting cables: select a cable with a good conductor to achieve the best sound, usually a double wire cable with an insulated core, and a wire core diameter of 1.5mm or more is best.

Connection: Before connecting the speaker cable, do not plug in the power to turn on the amplifier. Peel/shave off the cable cover at the end of the speaker cable to expose the 8mm long core, connect the red (+) speaker port on the amplifier to the red (+) port on the speaker, repeat for the black (-) port.

Note: Make sure to correctly connect the L and R audio channels as noted on the speaker ports on the amplifier.



After placing the speaker and connecting the necessary audio signal cables (HDMI or Optical cable connected to a TV, Left / Right RCA line connecting Karaoke, DVD, or CD players and SUB OUT line to a subwoofer), Proceed to plug the microphone cable to the rear or front **MIC** port, then the power cord (AC IN port) and turn on the amplifier (using the **POWER** switch on the front panel).

CONNECTING AN AUDIO SOURCE

Using a TV as an audio source (YouTube, USB through USB port on TV ...)

1. **Using an HDMI cable** to lead the transmitted signal from the HDMI (ARC) port on the TV to the HDMI port on the amplifier. To use this HDMI connection source, please press the **HDMI** button on the front of the amplifier.
2. **Using an Optical cable** to lead the signal transmitted from the Optical port on the TV to the Optical port on the amplifier. To use this Optical connection source, please press the **OPT** button on the front of the amplifier.

In addition, Boston Acoustics amplifiers can receive audio from Karaoke, DVD, CD players via the RCA L / R port - **AUX IN** port. To use this Analog connection source, please press the **AUX** button on the front of the amplifier.

However, the most convenient and simplest audio source is your Smartphone, Tablet or Laptop, connecting via Bluetooth. To use Bluetooth connection, click the **USB / CARD / BT** button on the front of the amplifier, open the Bluetooth device menu on your Smartphone, Tablet or Laptop and select the name "*Boston Acoustics*".



HOW TO ADJUST SOUND

First, turn the entire row of knobs for the **MIC** and **MUSIC** sections at the bottom part of the front of the amplifier to the 12 o'clock position, then turn the 3 largest buttons, EFF VOL, MIC VOL and MUSIC VOL to the 7 o'clock position.

Next, plug the microphone cable into the **MIC** port on the amplifier, then connect the power cable and turn the **POWER** button to **ON**.

You can choose to play karaoke background music from a TV (press OPT or HDMI button with connected cable is Optical or HDMI), Smartphone, or Tablet via Bluetooth connection, press USB / CARD / BT button and turn on the phone Bluetooth settings connected to the Boston Acoustics amplifier name displayed on the device detection screen.

Turn the **MUSIC VOL** button clockwise until you reach the desired volume level.

Turn the **MIC VOL** button clockwise and sing along to the music until the singing is loud enough to blend with the music. However, to make easier to sing, we recommend adjusting the microphone to be a bit louder than the MUSIC. This helps singers hear themselves clearly and sing more effortlessly.

- Turn the **EFF VOL** knob up or down depending on you preference, but typically this knob should be left at the 10 or 12 o'clock position, adjusting the **EFF VOL** too high may lead to a hissing sound in the microphone. If you have a good and powerful voice, setting the knob at the 8 or 9 o'clock position should be enough.



ADJUSTING CONNECTED MICROPHONES & SINGING VOICE

DELAY: for slow tempo music like Bolero, turn up the Delay level so that the EQ banding is in matches the rhythm and accompaniment. In contrast, with fast-paced music such as Dance and Remix, you should reduce the level of Delay.

REPEAT: To make Karaoke easy to sing and vocals more soft and sweet, in addition to increasing the level of **DELAY** to create a wide resonance, you can also adjust the **REPEAT** setting to increase the level of vibration. Read the word "One" slowly and adjust so that the word is repeated about 6 times so that when singing with background music, there will be enough natural vibration.

BASS: For those with a thin, slightly soft voice when singing, you can turn the BASS up to make the sound warmer, and more powerful, moderately adjust to your preference with causing distortion.

TREBLE: For those with a deep voice, to make the singing sound more clear and bright, you can turn up **TREBLE**, increase just enough to not cause any distortion or howling.

To optimize your singing, follow the instructions below for MIC adjustment:

- Speak in to the Microphone and adjust the MIC VOL moderately to your liking
- Adjust the BASS sound by reading the numbers "1", "4", "7" into the microphone while turning the BASS knob slowly clockwise until you can hear yourself clearly. Turning up the bass quickly suddenly may lead to a buzzing and humming sound that can easily cause a howling sound, in this case turn the knob down slowly to eliminate the phenomenon. Usually the BASS knob should be left at the 11 o'clock or 12 o'clock position, but depending on the frequency response of the speaker and microphone, you may need to compensate accordingly.
- Adjust TREBLE tone by reading numbers "6", "9" into Micro while turning the TREBLE knob slowly down clockwise until your voice sounds clear. If you turn up the treble quickly and suddenly, it may lead to a shrill sound that can easily cause a squeaking and a hissing sound, turning the treble down slowly will eliminate the phenomenon. Typically, the TREBLE knob should be left at the 11 o'clock or 12 o'clock position, but depending on the frequency response of the speaker and microphone, you may need to compensate accordingly.

ADJUSTING BACKGROUND MUSIC

Depending on the real world feel when listening, you may hear the excess or lack of sound range that needs to be compensated, depending on personal preference. You adjust **BASS** and **TREBLE** for background music, but make sure that the sound blends well with the singing, without causing buzzing or howling or hissing in the speaker.

Final notes when adjusting the Boston Acoustics karaoke amplifier

- If you feel a lack of power when singing, turn up the **BASS** and **TREBLE** knobs in the **MIC** tuning section slowly, if you increase a lot or suddenly, it will cause howling and hissing.
- For bright vocals, turn up **TREBLE** knob in the **MIC** and **EFF VOL** sections.
- There is howling and hissing, please turn the **EFF VOL** and **MIC VOL** knobs down slowly.

SPECIFICATIONS

Model	BA 180
Wattage RMS (8 Ohms)	200W/channel
Wireless connection	Bluetooth
HDMI input	1
Optical input	1
USB type A port for music	1
SD card input	1
Analog input	Micro x 4, AUX x 1 RCA Left/Right
Output	Sub Out RCA Left/Right x 1
Dimensions (Height x Width x Depth)	140 x 430 x 330mm
Net weight	12kg