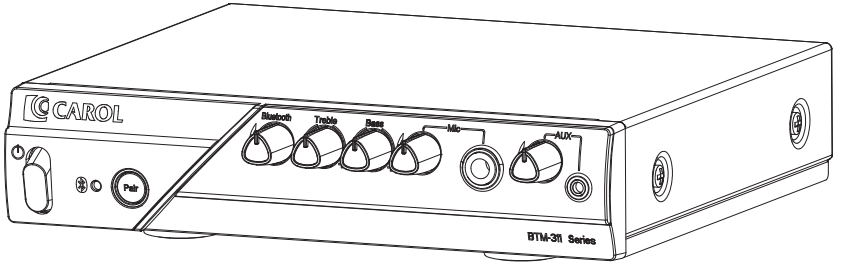
CAROL
Sound of Excellence

User's Manual

使用說明書



BTM-311RH

CE FC

CAROL
Sound of Excellence

TAIWAN CAROL ELECTRONICS CO., LTD.
http://www.taiwancarol.com

2018.11

Precautions For Use

- **Read this section carefully and thoroughly.**
- **To obtain the best performance, read this manual before installing or using the product.**
- **Be sure to follow the precautionary instructions listed in this manual.**
- **“Warning” and “Caution” are used to indicate the degree of danger and damage when the product is not used correctly.**

Warning Warning:Indicates incorrect operation may result in severe personal injury or property damage if the instruction is ignored.

Caution Caution:Indicates incorrect operation may cause common personal injury or property damage if the instruction is ignored.

WARNING

- **Do not let any form of liquid (water etc.) or foreign matter enter the equipment. Failure to follow this warning may cause fire or electric shock.**
- **Do not attempt to modify the product. Doing so may result in personal injury and/or product failure.**
- **Keep this product, packaging and small parts away from children and pets to avoid choking hazard.**
- **Do not use a power adapter that has different specification. It may cause fire or electric shock.**
- **To avoid shock hazard when accidently step on the wire, the power cord of the Receiver must be secured at a proper place.**

CAUTION

- **Do not attempt to disassemble or modify the equipment. Doing so may result in product failure.**
- **Keep dry. Do not expose the product to direct sunlight or place the product at the environment with high level of heat, moisture or dust. Avoid contact with acid, alkali or organic solvent; it may cause product corrosion or deformation.**
- **Do not use this product when there is any obvious damage.**
- **If not in use for a long period of time, unplug the output plug of power adapter from the Receiver, and remove the batteries from the microphones, store the batteries separately.**
- **To avoid interfering with the display of a monitor, do not place this product near electronic appliances that have CRT, such as TV or computer monitor.**
- **Avoid falling, or hitting by external force.**

Limited Warranty

- TAIWAN CAROL ELECTRONICS CO.,LTD. Warrants that this product shall be free from defects in material and workmanship for a period of one year (12 months) from the date of purchase by the distributor ("Warranty Period").
- When a defect is found during the Warranty Period, CAROL could repair the product free of charge with new or renewed parts
- The Warranty Period for such repaired product is the remaining Warranty Period of the original product, or sixty (60) days after the repair date, whichever is longer.
- Liability of CAROL is limited maximum to the initial net purchase price paid for the product.

This Limited Warranty does not cover

❶ The defect is not notified within Warranty Period.

❷ Any damage caused as a result of improper storage or use, accident, modification of the product, non-material or non-workmanship defect, or any unreasonable usage.

❸ Normal wear out (including consumption parts) and damage to the product, broken cable, scratch, lost, stolen, bended plug ...etc.

❹ Appearance items and decorative parts.

❺ Warranty is void if the product has been modified by the user.

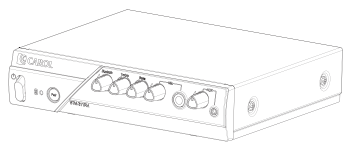
※ Without authorization, this Limited Warranty cannot be modified.

Thank you

Thank you for purchasing this BTM-311RH Bluetooth Amplifier. Please read this manual carefully to understand the correct method of operation and make the most of your amplifier.

Based on the basic design concept for fulfilling the modern living requirements, the BTM-311RH Bluetooth Amplifier is developed suitable for use by individuals, schools, companies, institutions or others that need to use a Bluetooth Amplifier system with integrated amplifier equipment. With its novel design, beautiful styling and exquisite texture, it can provide users with convenient, simple and highly efficient applications.

BTM-311RH can be connected with HDMI, microphones, external sound sources, and Bluetooth wireless receiver inputs, and then integrate the sounds to class-D adjustment of Treble and Bass according to their requirements. It can also convert HDMI video to CVBS format output. Moreover, BTM-311RH can be used with our BTM Bluetooth Module Series.

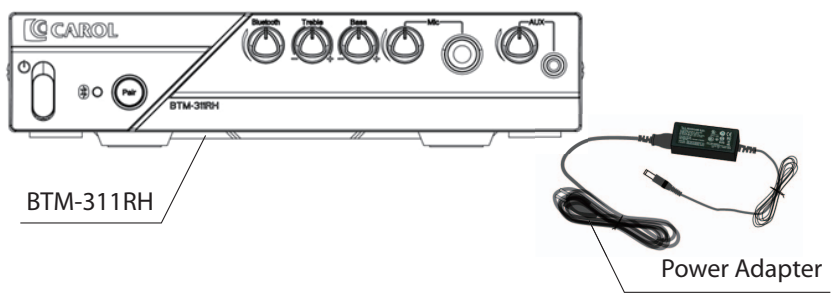


1. BTM-311RH Product Contents

1.1 BTM-311RH X1

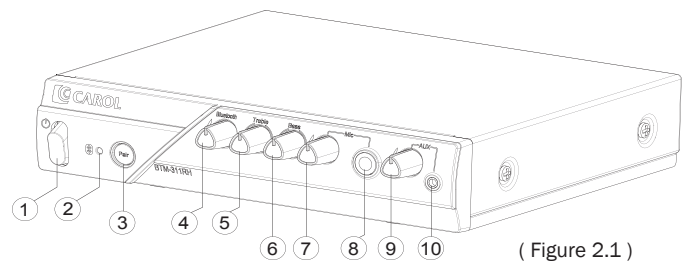
1.2 International Voltage DC 20V Power Adapter X1

1.3 User's Manual X1

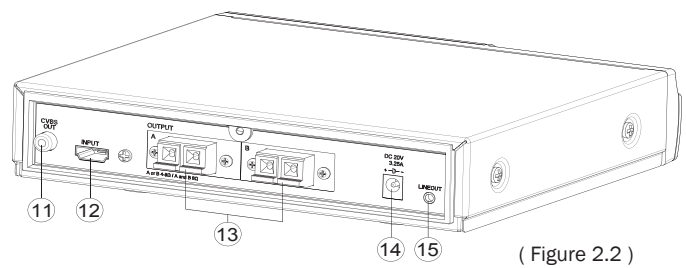


2. Parts Identification: (as shown in Figure 2.1, 2.2)

1. Power Button: Switches the amplifier on/off, with status LED.
2. Bluetooth Connecting LED: Lights up when the Bluetooth signal is received.
3. Bluetooth Pair Button: Turns the Bluetooth function and pairing on/off.
4. Bluetooth Volume Controller: Controls the output volume of the Bluetooth sound source.
5. Treble Controller: Adjusts the Treble to boost or attenuation.
6. Bass Controller: Adjusts the Bass to boost or attenuation.
7. Microphone Volume Controller: Controls the microphone output volume.
8. ø 6.3mm Female Jack: For connecting the microphone (Dynamic microphone only).
9. AUX Volume Controller: Controls the output volume (Line in / HDMI in) of the external sound source.
10. ø 3.5mm Female Jack: For connecting the external sound source.
11. RCA Jack: Video Output (CVBS format).
12. HDMI Jack: Video Input (with sound and image).
13. Speaker Connector: For connecting the external speaker (4Ω~8Ω).
14. DC Power Receptacle: Connects DC adapter, and the polarity of the central pole is positive.
15. ø 3.5mm Female Jack: For connecting the sound source.



(Figure 2.1)



(Figure 2.2)

3. Operating Instruction

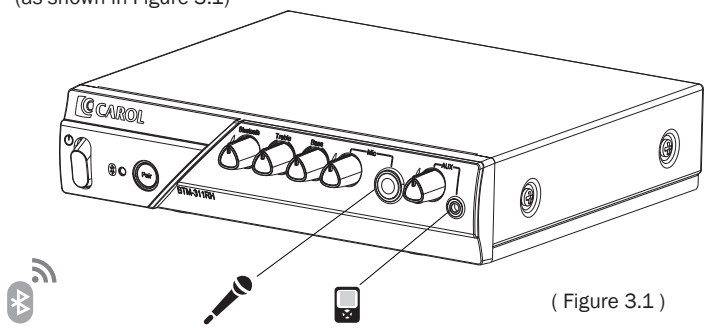
3.1 Setting up

3.1.1 Plug the input end of the DC Power Adapter to a wall outlet, and connect the output end to the DC Power Receptacle on the BTM-311RH.

3.1.2 Connect the speaker to the Speaker Connector. Red indicates positive, Black indicates negative.

3.1.3 Press the BTM-311RH's Power Button to turn the power on. The status LED will continuously light up green, it indicates the power is on.

3.1.4 Now, BTM-311RH is ready to be used with a microphone, sound source, and Bluetooth. (as shown in Figure 3.1)

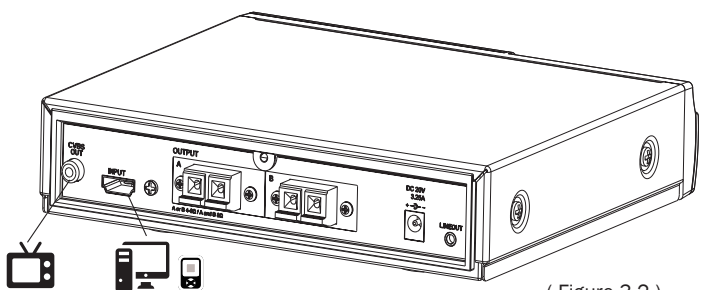


(Figure 3.1)

3.2 Audio & video conversion device (see Figure 3.2)

3.2.1 The signal source can be connected to the HDMI jack for image and sound inputs

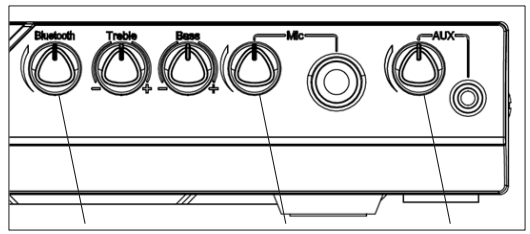
3.2.2 Then, connect with RCA to convert into the CVBS format for image output.



(Figure 3.2)

3.3 Bluetooth Receiver:

3.3.1 The microphone and Bluetooth all have their own independent volume controller, so the volumes can be adjusted individually, and you can adjust the ø 3.5mm and HDMI source volume of the external sound source at the same time (as shown in Figure 3.3).

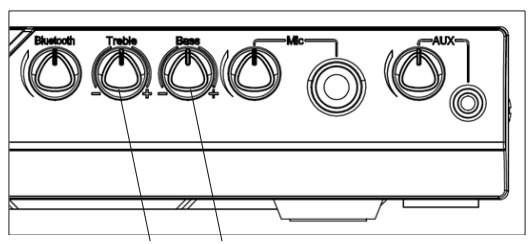


Bluetooth Microphone External Sound Source

(Figure 3.3)

3.3.2 Adjusting the volume too loud or moving the microphone too close to the loudspeaker might cause annoying feedback. When this happens, turn down the volume to avoid feedback.

3.3.3 BTM-311RH has independent Treble and Bass Volume Controllers, so the users are able to adjust the Treble or Bass individually (as shown in Figure 3.4).



Treble Bass

(Figure 3.4)

3.4 Bluetooth Receiver Operating Instruction:

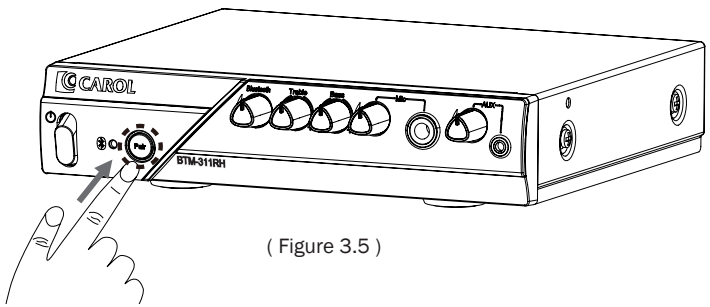
3.4.1 BTM-311RH built a Bluetooth Receiver (RX) in for receiving signals from computers, cell phones, and our BTM-210C/D Bluetooth Series.

3.4.2 Devices used to connect with BTM-311RH, such as a computer or cell phone, must be equipped with a Bluetooth transmission function. Please refer to your device's document.

3.4.3 This Bluetooth Receiver can only work with ONE Bluetooth device at a time.

3.5 Bluetooth Receiver Operating Instruction

3.5.1 When the Bluetooth Receiver function is needed, press the Bluetooth "Pair" Button (for about 3 seconds) when the BTM-311RH is on until the Bluetooth Connecting LED lights up (as shown in Figure 3.5).



(Figure 3.5)

3.5.2 Bluetooth Connecting LED signals

Module	LED signal
Bluetooth Receiver On	Green blinks twice every second
Bluetooth Device Scanning	Green and Red blink in turn every second
Sound Transmission	Green blinks once every 2 seconds
Bluetooth Receiver Off	Red blinks 4 times in 4 seconds

3.5.3 When the Bluetooth function is on, it goes into scanning mode, and the Bluetooth Connecting LED will blink Green and Red in turn every second. At this time, a Bluetooth transmission device (such as a cell phone or computer) can be used to pair with the BTM-311RH.

3.5.4 To turn off the Bluetooth Receiver, press the Bluetooth "Pair" Button for about 3 seconds. The Bluetooth Connecting LED will blink Red 4 times and then goes off. This indicates the Bluetooth Receiver is now off.

3.5.5 If the pairing process does not work, press the Bluetooth "Pair" Button 5 times to reset the Bluetooth Receiver. When the Bluetooth Connecting LED flashes Red quickly, it indicates the memory has been cleared, and the Bluetooth Receiver will go into the scanning mode (LED blinks Green and Red in turn every second), please repeat the pairing process.

3.5.6 When connecting a computer or cell phone with the BTM-311RH, the device name will appear as "CAROL BTM-311RH", and the password is "0000" when needed.

4. Troubleshooting:

4.1 Cannot power on: Check if the DC adaptor is well connected.

4.2 No sound: Check if the speaker, AUX, and microphone cables are well connected.

4.3 Volume too low or too loud: Adjust the Volume Controllers to a suitable level, or adjust the volume on the external sound source device (such as MP3 Player, CD player) / Bluetooth sound source (such as cell phone, computer).

4.4 Bluetooth connect failed: It is suggested to delete the existing pairing from cell phone/computer first, and then start a fresh device scan. The existing pairing in BTM-311RH also needs to be cleared.

5. Specification:

5.1 BTM-311RH :

Model: BTM-311RH
Quiescent Current: 150mA
Power Consumption: 50W (MAX)
Bluetooth Version: Bluetooth V2.1 EDR
Support: Advanced Audio Distribution Profile (A2DP)
HDMI Specification: HDMI Ver.1.4
Video Input: HDMI A-Type Female Jack
Microphone Input: ø 6.3mm Female Jack
External Sound Source Input: ø 3.5mm Female Jack
Sound Source Output: ø 3.5mm Female Jack
Video Output: RCA Jack, CVBS format
Output Connector: 2 Pin Speaker Connector, suitable for single driver speaker (4~8Ω)
Dimension: 210 mm (L) × 206mm (W) × 49.7 mm (H)
Weight: 690g± 50g

5.2 Power Adapter:

Input: AC 100/240V
Output: DC 20V/3.25

6. FCC Compliance Statement

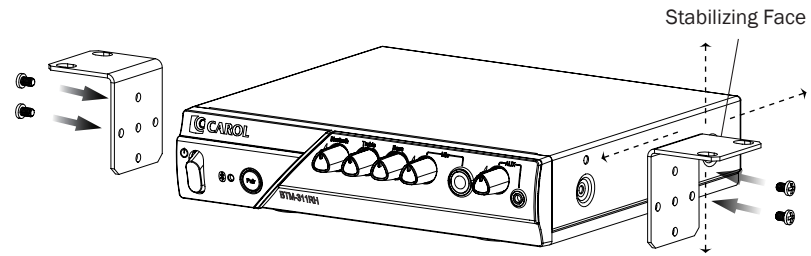
6.1 Without manufacturer's permission, modify or alter this equipment will void the user's right to operate this equipment.

6.2 In order to comply with FCC Radiation Exposure Limits, do not use or place together the Receiver and its antennas with any other antenna or receiver.

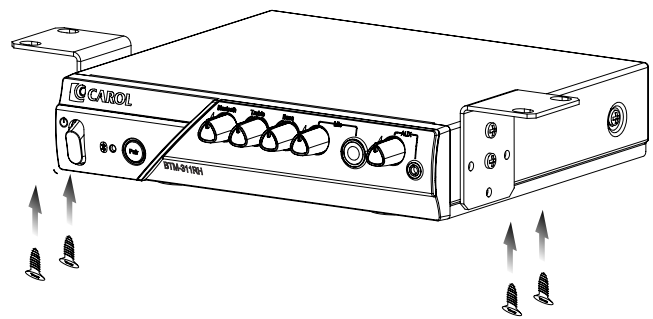
6.3 This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference; (2) This device must accept any interference received, including interference that may cause undesired operation.

✱ Mounting Brackets

(1) Screw the brackets on left and right sides. The stabilizing face can be adjusted in 4 different directions.



(2) When the brackets are secured on BTM-311RH, mount the brackets with BTM-311RH at the intended location.



FCC INFORMATION

The Federal Communication Commission Radio Frequency Intererence Statement includes the following paragraph:

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.

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.