



BOSS MC420B Weatherproof Speaker and Amplifier System User Manual

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AUDIO SYSTEMS

MC420B

MCBK420B

BLUETOOTH1 3" (76 mm) WEATHERPROOF
SPEAKER AND AMPLIFIER SYSTEM
User Manual



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MC420B Weatherproof Speaker and Amplifier System

Thank you for choosing our product!

Please read the instructions carefully so you will know how to operate your product properly.

If there are any technical questions, please contact:

Customer care: (805) 751-4853 & Live chat

Online support: www.bossaudio.com/support

IMPORTANT

Please enter below the Serial No. which is located on the exterior of the product. Retain this information for future reference.

Model No.....

Serial No.....

Date of Purchase.....

Introduction

This product has two speaker pods and an external amplifier. The speaker pods are designed to be installed on the handlebar of a motorcycle or cage bar of a UTV vehicle. The applicable mounting bar ranges 0.75" to 1.25" in diameter.

You can stream audio from a mobile phone to this product via Bluetooth. You can also play music from an external device (e.g. a mobile phone or MP3 player) via 3.5mm audio input. The product has inline power switch and volume control.

This product is water resistant. However, never submerge the product in water. Connect this product to only 12VDC power source. Do not connect to other voltage for power supply.

Package Contents

When first unpacking this product, please check that the package contains each of the items listed below. If something is missing, contact the store where you purchased the product.

- 2 x Speaker pods
- 1 x Bluetooth amplifier (with power-volume knob/speaker/power/AUX cables)
- 1 x Power cable harness (with a 7.5A inline fuse)
- 2 x Clamp mounting kits (pre-attached to the speakers)
- 1 x Amplifier mounting kit (four screws/plain washers/spring washers)
- 4 x Rubber mounting shims
- 1 x Cable zip tie

- 1 x Spare 7.5A fuse
- User Manual / Warranty card

Important

Read and understand all instructions before you use your product. If you do not follow the instructions in this manual, we are not responsible for any resulting personal injury or damage to property. This will also void the warranty.

Important Safety Precautions

- Be sure to observe the following guidelines:
 - Do not increase speaker volume so high that you cannot hear what is around you.
 - Use caution or temporarily discontinue use in potentially hazardous situations.
- Do not make any adjustment on the product when driving or in other situations where distractions can be hazardous. Responsible and safe driving is your primary responsibility when operating a vehicle.
- Start volume at a low setting then gradually increase the volume until you can hear it comfortably, without sound distortion or ear discomfort.
- In the event of smoke, strange noise or odor emitted from the product or any other abnormal operational signs appearing on the product, disconnect the product from the power supply.
Discontinue use and contact your dealer or our technical support. Using the product in this condition may result in permanent damage to the product.
- Servicing must only be carried out by a technician. Contact our technical support for any service questions.

Installation Precautions

- **WARNING:** Always consult a professional installer.
- Installation must be performed by a professional. Contact our technical support for any installation questions.
- Before installation, disconnect the negative terminal of the vehicle battery to prevent damage to the product, fire, and/or possible injury.
- Use only installation parts provided with the product. Using other mounting methods may void the warranty.
- Observe the safety and operating instructions of the devices which are connected to the product.
- Important! Replace the faulty fuse with the same type and rating. Using a different type or rating of use may result in damage to the product or vehicle, or cause a fire.
- Do not use any aggressive cleaning agents. Clean the product with a dry, fiber-free cloth.
- This product is water resistant against splashing water. Do not submerge the product in water under any circumstances.

Environmental Care

Do not throw away the product with normal household waste at the end of its life. Follow your local laws if/when disposing of electronic products. By doing this, you help preserve the environment.

Mounting



See the section "Installation Precautions" on page 2.

Keep connection cables away from any pinch points, moving parts, or any hot exhausts.

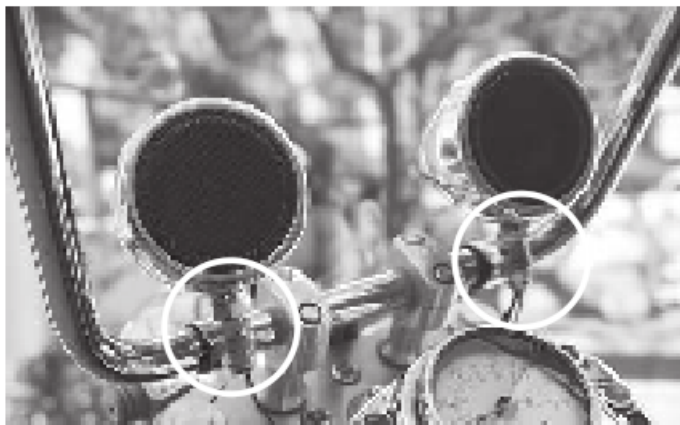
Do not install the speakers where they may obstruct the rider's view or inhibit any safety features on the vehicle (e.g. lights, horns, brake levers, etc.).

Before you drill any holes, investigate your vehicle's layout very carefully. Take special care when you work near the fuel tank, fuel lines, hydraulic lines and electrical wiring.

To ensure security of the mounted speakers, always check the mounting conditions (e.g. clamp fastening) of the speakers before each vehicle ride.

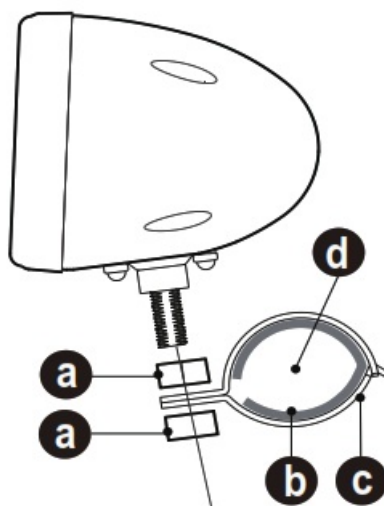
Mounting the speaker pods

1. Find a safe and ideal mounting location on the handlebar. Make sure the speakers will not obstruct the rider's view or any safety features.



The supplied clamp is pre-attached to the bottom of the speaker. Unfasten the clamp through the mounting nuts.

2. Fit the clamp around the handlebar of your vehicle. Remember to attach the supplied rubber shims over the mounting bar to secure clamping and prevent abrasion.
3. Re-fasten the mounting nuts to tighten the clamp. Before fully tightening, adjust the speaker so it points directly at the rider.

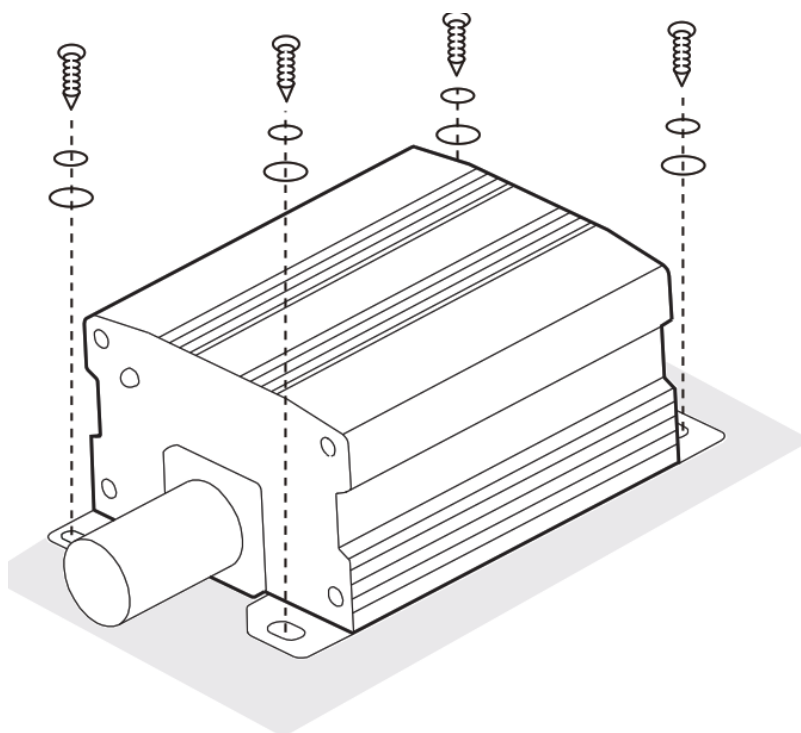


Mounting the amplifier

You can secure the power amplifier in your vehicle using the supplied screws.

1. Find a suitable location in the vehicle to mount the amplifier. Make sure there is sufficient air circulation around the intended mounting location.
2. Secure the amplifier as follows:
 - a. Use the four screw holes on the amplifier to mark the mounting holes on the mounting surface.

- b. Drill the mounting holes in the mounting surface.
- c. Place the amplifier in position, and attach the amplifier to the mounting surface using four supplied screws, spring washers and plain washers.



Mounting the power/volume knob

Mount the power/volume knob in a safe, easy-to-access location where it will not impede the rider's ability to drive safely. Secure the power/volume knob using the supplied zip tie.

Wiring

See the section "Installation Precautions" on page 2.



For safety, disconnect the negative terminal of the vehicle battery prior to wiring. Keep connection cables away from any pinch points, moving parts, or any hot exhausts. Secure the connected cables.

Reconnect the negative terminal of the vehicle only when all wire connections are correctly and securely made.

Power Source Connection

Option 1: Direct connection to vehicle battery

Note: Direct connection to vehicle battery consumes power. Always use the inline power/volume knob to cut the battery power when the speakers are not used.

1. Using the supplied power cable harness, connect the black cable (labeled "GROUND") to the vehicle's metal frame or to the negative battery terminal and the red cable (labeled "+12V") to the positive battery terminal.
2. Connect the power cable harness to the connector of the power cable (labeled "POWER") which is attached to the amplifier.

Option 2: Connection to ignition switch

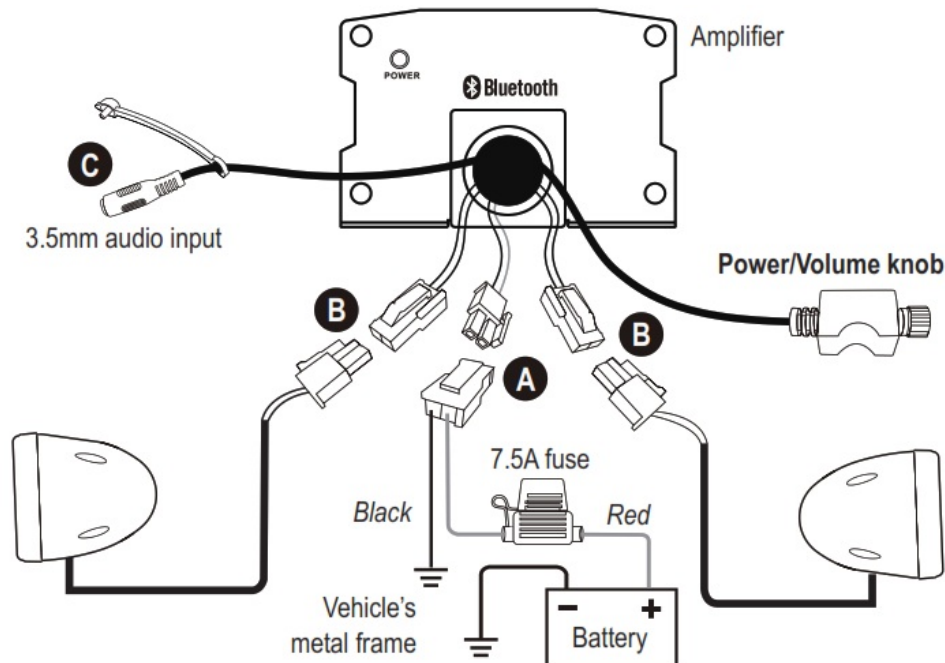
When connecting the speakers to the vehicle's ignition switch, the speakers can be automatically powered on or off with the operation of the ignition switch.

1. Locate and identify two power wires in the ignition switch, one for switched +12V and the other for

negative/ground.

- Using the supplied power cable harness, connect the black cable (labeled "GROUND") to the negative/ground wire of the accessory power and the red cable (labeled "+12V") to the switched +12V wire of the accessory power. Insulate the cable connection with electrical tape.
- Connect the power cable harness to the connector of the power cable (labeled "POWER") which is attached to the amplifier.

Wiring Overview



A : Connect the power cable harness. See the section "Power Source Connection" for complete power connection instructions.

B : Connect the speaker cable harnesses.

C : Connect your mobile phone or MP3 player for audio input to the speakers, using an audio cable (e.g. 3.5mm audio cable or 3.5mm audio input adapter).

Bluetooth Streaming

Before you can stream music from your mobile device (iOS device or Android device) to this product through Bluetooth, pair this product with your mobile device.

- Power on the product (rotate the inline power/volume knob).
- On your mobile device, enable Bluetooth function and select the device name ("Boss Audio MC420B" or "Boss Audio MCBK420B") to pair this product with the mobile phone.

If prompted for password input on your mobile device, input "0000".

Note: Only one device can be paired at a time.

- When successfully paired/connected, confirmation tone can be heard. Play audio on your mobile device, and audio will be streamed to this product. Rotate the inline power/volume knob to adjust volume.

After pairing, the product will be automatically connected to your mobile device each time the two are turned on. To change Bluetooth source, disconnect the Bluetooth connection on the current mobile device. Then repeat Step 2 above to pair/connect with another mobile device.



Operating this product consumes the vehicle battery. To avoid battery exhaustion, be sure to run the vehicle engine when operating the product.

Operational range can be reduced by any obstacle between this product and the device.

If the connected device is out of the effective range from this product, the device will be automatically disconnected. The device will be automatically re-connected if it is within the effective range again.

AUX Input

You can listen to an external audio device (e.g. a mobile phone or MP3 player) through this product.

1. Power on the product (rotate the inline power/volume knob), and make sure the product is not connected to Bluetooth.
2. Connect the 3.5mm audio input jack of the speaker to the audio output connector on your mobile phone, using the following audio cable.
 - For a mobile phone with 3.5mm headphone jack, use a 3.5mm audio cable (not included).
 - For a mobile phone with a USB-C port, use a USB-C to 3.5 audio cable (not included).
 - For an iPhone, use a lightning to 3.5 audio cable (not included).
3. Play audio files on your audio device. Audio from the mobile phone will be played on this product.
Rotate the inline power/volume knob to adjust volume.



For best audio performance, set the volume of the mobile device to maximum. If there is distortion heard, turn down the connected device's volume a little.

Operating this product consumes the vehicle battery. To avoid battery exhaustion, be sure to run the vehicle engine when operating the product.

Troubleshooting

If you have problems using this product, check the following points before you request service. If you still have a problem, contact our technical support.

Problem	Solution
No power/ POWER LED not lit up.	The product is turned off. Rotate the inline power/volume knob to turn on the product.
	Check that power source connection is correctly or securely made. See the section "Power Source Connection" for details.
	Turn on the vehicle's ignition switch if power is connected to the ignition switch.
	The inline fuse is blown. Replace the fuse with the same type and rating.
No sound/ no AUX input	Check the connected device for volume level or playback status (e.g. pause or stop).
	For 3.5mm audio input, make sure Bluetooth connection is disabled.
Bluetooth not connected	Check that Bluetooth on your mobile device is enabled.
	Ensure your mobile device is within Bluetooth's range.
	This product is connected with another Bluetooth device. Disconnect the current Bluetooth connection.
Poor audio quality from Bluetooth connection	Move your mobile device closer to the product, or remove obstacles or sources of interference that are affecting Bluetooth reception.

Specifications

Bluetooth

Bluetooth version 5.0 / EDR
 Bluetooth profiles A2DP
 Bluetooth frequency 2402 – 2480 MHz
 Transmission power..... <4 dBm
 Transmission distance up to 33 ft /10 m (line of sight)

Audio

Speaker driver 3" (76 mm)
 Speaker impedance 4Ω
 Frequency response 50 Hz – 15 KHz
 Total harmonic distortion (THD) <0.1%
 Signal-to-noise ratio >75 dB
 Channel separation >50 dB
 Input sensitivity 500 mV

Amplifier

Amplifier class Class D, full range
 Input impedance 10 kΩ
 Dimensions 3.6" x 2.3" x 1.5" (91 x 58 x 38 mm)

General

Power supply 12VDC (allowable 10 – 16VDC)
 Current consumption max. 5A
 Fuse ATO type, 7.5A
 Clamp range (Ø) 0.75" – 1.25"
 Cable length 3.6'/1.1 m (speaker cable); 6.2'/1.9 m (power cable); 6.2'/1.9 m (power/volume knob cable); 1.9'/0.6 m (Aux input cable)
 Speaker Dimensions 4.7" x 6.3"x 4.7" (120 x 160 x 120 mm)

Specifications are subject to change without notice.



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www.bossaudio.com

805-751-4853 Customer Service

Tech Support: www.bossaudio.com/support



Documents / Resources



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