A

B

3) Mirror side:
1. Select mounting bracket I and J from the package and disassemble the side mirror.
2. Select the appropriate mounting style of the bracket. To position the speakers at a higher level see diagram A; to position the speakers at a lower level see diagram B.
3. Hold the speaker in position and secure the mounting to the holder with a screw (4×15 mm) and a nut.
4. Screw the holder to the stainless steel bracket with a 4×6 mm screw and adjust the angle.
5. Reassemble the side mirror on the stainless steel bracket as shown.
6. Secure a tight mount to prevent detachment of the bracket or the mirror.
7. Adjust the final projecting angle of the speaker.
8. Check for any loose screws and nuts.

9. Amplifier Functional Test

We suggest the following product testing procedures to test the amplifier for the first time. The automatic on/off system could help to save electricity in various situations. The LED light indicates the status of the amplifier. It is only switched on if the amplifier is turned on.

The amplifier would be turned on automatically in the following situations:
1) Connect the audio device (e.g. MP3 player) to the amplifier with the 3.5 mm Stereo Male to Male cord. Turn the volume control towards 10 o'clock position and play any music. The LED light should be switched on and the amplifier should come to life immediately.
2) If the music device is already playing, connecting it to the amplifier should also turn on the amplifier automatically.

The amplifier would be turned off automatically in the following situations:
1) While the music is still playing and the volume is adjusted to the minimal for more than 40 seconds, the amplifier should turn off spontaneously.
2) If the music stops playing while the audio device is still connected to the amplifier, the amplifier would also turn off automatically after 40 seconds.
3) Disconnecting the audio device from the amplifier would turn off the amplifier after 40 seconds.

Model 13-250A, 13-250BK, etc.

Item	Qty	Description	Item	Qty	Description
A	1	Amplifier	O	2	Truss head, Phillips, type C, M4x8 mm
B	1	Amplifier bracket	P	2	**Hex nuts 4.85x3.8 mm**
C	1	Volume control	Q	2	Lock washers 6.3x10 mm
D	1	Volume control clamp	R	2	Lock washers 5.8x10 mm
E	2	High fidelity speakers	S	4	Flat washers 6.3x10 mm
F	2	Brackets (surface mount)	T	2	Square head bolts, 4.85x10 mm
G	2	Clamps (handle bar mount) 1" and 7/8"	U	2	Hex point, type A, 6.3x19 mm
H	4	Twin adhesive sticker	V	2	Truss head, Phillips, type B, 4x13 mm, spare for plastic mount.
I	2	Speaker holders	W	3	C-ring EPDM gasket, 50Lx15Wx1.5H mm
J	2	Stainless steel brackets	X	3	C-ring EPDM gasket, 82Lx15Wx1.5H mm
K	2	Pan head, Phillips, type C, 4x15 mm	Y	1	Volume control, Pan head, Phillips, type C, 4x25 mm
L	2	Pan head, Phillips, type C, 4x25 mm	Z	2	Washer 4 x 9.5 x 0.8 mm
M	4	Speaker nuts, 4x7mm	ZZ	2	Hook and Loop
N	6	Pan head, Phillips, type A, 4x12 mm	ZA	2	Nylon spacer

scan code with your smartphone to view demo video

Installation Manual
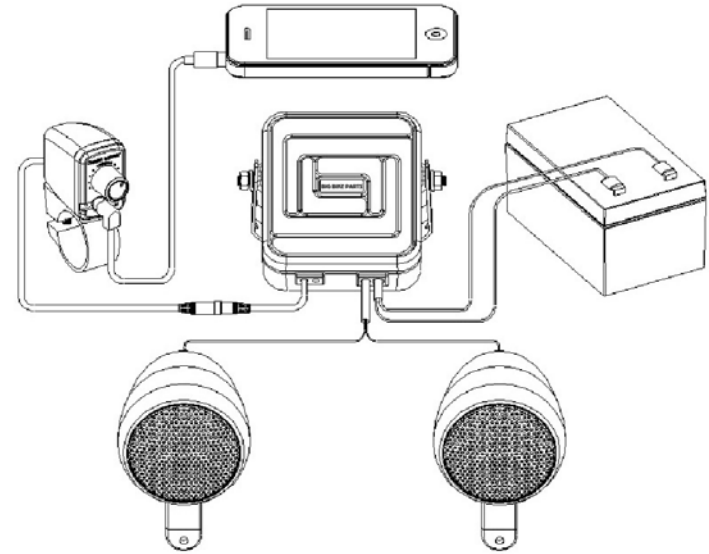
Waterproof Audio System

Motorcycle / ATV Specialized Outdoor Audio System

CONTENTS

1. Introduction
Our Waterproof Audio System provides everything required to setup a complete audio system. It is specially designed to provide the maximum outdoor music entertaining experience to the users. It offers high quality music experiences and 3 different user-friendly means of installation. The audio system can be installed on a variety of vehicles, including motorcycles, ATV, UTV, most watercraft and scooters. The amplifier has an auto on/off system to help power save and has a protective thermal fuse device to protect both amplifier and speakers from short circuiting. It is compatible with audio devices that have an AUX-IN 3.5mm jack and the system is highly adapted to condition changes in the environment, including humidity and temperature. Complete with waterproof accessories, the amplifier and speakers carry IP 68 rating and IP 65 rating respectively.

2. Applications
Our Waterproof Audio System is built to withstand tough challenges in different outdoor / marine environments. They can be installed at locations with high humidity and high chance of water splashes. Vehicles suitable for installation include:

- Motorcycle
- Snowmobile
- Utility Task Vehicle (UTV)
- All Terrain Vehicle (ATV)
- Recreational Vehicle (RV)
- Personal Watercraft (PWC)
- Golf Cart
- Boats / Yachts

3. Safety Precautions
- Read the manual before installation. It contains important information for all users.
- Turn off the main electricity supply before beginning the installation.
- For electric drill, ensure it is connected to the ground properly and the area is free of any liquid.
- If any problem occurs during the installation, please contact your local dealer for advice before proceeding.

4. Specifications
13-250A, 13-250BK, etc.
- 2 Channel 40 watts waterproof outdoor Class D Amplifier for iPod / MP3 / portable CD players or most satellite radio systems
- Two high fidelity speakers including 3 different mounting styles
- Waterproof and corrosion-proof amplifier case with mounting bracket
- Waterproof volume control with 6 ft cable and 3.5mm mini plug
- Protection :Thermal and short circuit protection and auto recovery feature
- Automatically turns on power and automatically turns off power (30 - 50 seconds)
- Amplifier : IP68 rating / CE certificate / E-Mark / RoHS conformed
- Speaker : IP65 rating / IEC-268-5 (100 hrs tested) / RoHS conformed
- AUX-IN 3.5 mm jack with rubber cover
- Frequency response : 20 Hz – 20000 Hz
- Impedance : 4 ohms
- Output power : 20W/Channel 4 ohm load from 12V DC;   30W/Channel 4 ohm load from 24V DC
- Power supply : From 10V - 26V DC
- SNR : 98 dB / 12V;   102 dB / 24V

5. Parts List
Please check the parts and their quantity before installing your audio system. Contact your local dealer if anything is missing as soon as possible.
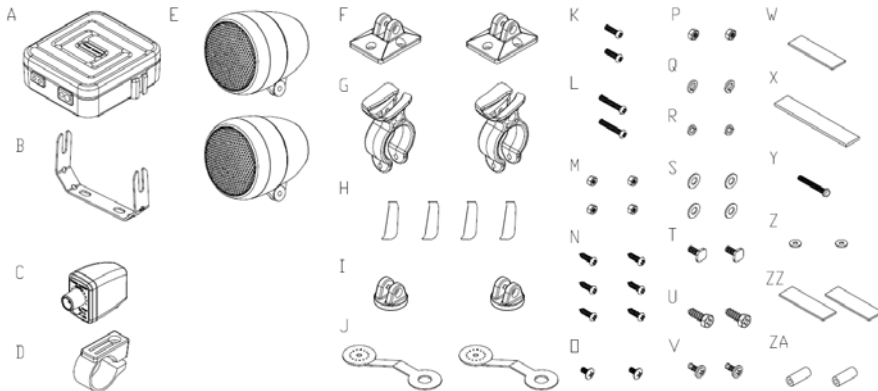
## 6. Select the best location for mounting
Be aware that our Waterproof Audio System can adapt different mounting styles and each follows a separate set of installation instructions. The high fidelity speakers are designed to stand on top of a strong surface. All speakers are intended to be installed into a sturdy surface/panel. The surface/panel you select should have the appropriate strength to hold the unit firmly in place after installation. Apart from the strength, consider the effects of shock, vibration, shear pressure and movement in different directions have on the mounting surface/panel. If the surface is not sturdy enough, the housing may be dislocated from its original position and it may be damaged. If you are uncertain about the location of your choice, contact the local dealer for advice.

7. Amplifier Installation
Read the following instructions carefully before proceeding. If you are unfamiliar with wiring electronic devices, consult your local dealer or contract professionals. False wiring could damage the amplifier and the rest of audio system. Hook and Loop has been included for tight fitments when the 'U' mount bracket will not fit.

Figure 3. Amplifier and volume control installation quick guide.
Select a stable and sturdy surface before beginning the process. Mount the amplifier unit as illustrated in the diagram (left). For reference to volume control installation, please see right diagram. Ensure the right parts are used during installation. For the parts list, please see *Parts List*. Test the audio system by playing music from your audio device. If the green light comes on then rotate the volume control knob to adjust the volume. Contact your local dealer if the system fails to function.
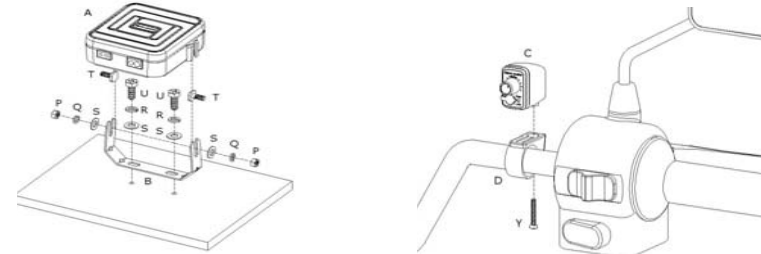

Figure 4. Wiring diagram of 13-250A, 13-250BK, etc.
1. Red wire - Audio amplifier power (+). Connect the red wire directly to a positive (+) power source.
2. Black wire - Audio amplifier ground (-). Connect black wire to a negative (-) source.
3. Grey wire - Connect the grey wire to the positive (+) terminal of the right speaker.
4. Grey/White wire - Connect the grey/white wire to the negative (-) terminal of the right speaker.
5. White wire - Connect the white wire to the positive (+) terminal of the left speaker.
6. White/Black wire - Connect the white/black wire to the negative (-) terminal of the left speaker.
7. Black cord - Connect amplifier and volume control through a black 3.5mm mini plug waterproof cord and then you will need to connect an audio cord(not supplied) from the volume control to an iPod/MP3/CD player/Phone/ Satellite Radio System.

8. Speaker Installation
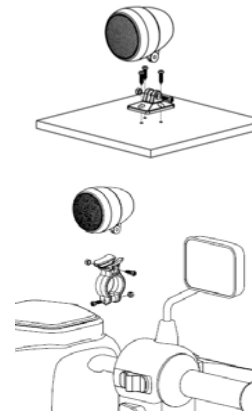
1) Standard Flat Surface:
1. Mount plastic bracket F on the chosen flat surface with the screws (4×12 mm) provided in the package.
2. Hold the speaker in position and secure the mount with a screw (4×15 mm) and a nut.
3. Adjust the projecting angle of the speaker and tighten any loose screws.

2) Handle bar:
1. Select mounting clamp G from the package.
2. Peel one side of twin adhesive stickers H and adhere it to the surface of the speaker mount.
3. Place the speaker in the correct position so the screw hole of the speaker in line with the mounting hole of the clamp and secure the installation with a screw (4×15 mm) and a nut.
4. Clamp the speaker mount around the handle bar.
5. For one-inch handlebar, fold the C-ring gasket X (see parts list) around the handlebar; for 7/8 inch handlebar, place an additional C-ring gasket W inside C-ring X to achieve a tight mounting.
6. Slide the C-ring into the speaker mount. This will absorb shockwaves from motorcycle.
7. Tighten the clamp around the handlebar with a screw (4×25 mm), a nut and a nylon spacer in between. The nylon spacer is designed to absorb vibration and shockwaves. It reduces the chance of the clamp breaking.
8. Adjust the projecting angle of the speaker and tighten any loose screws.