

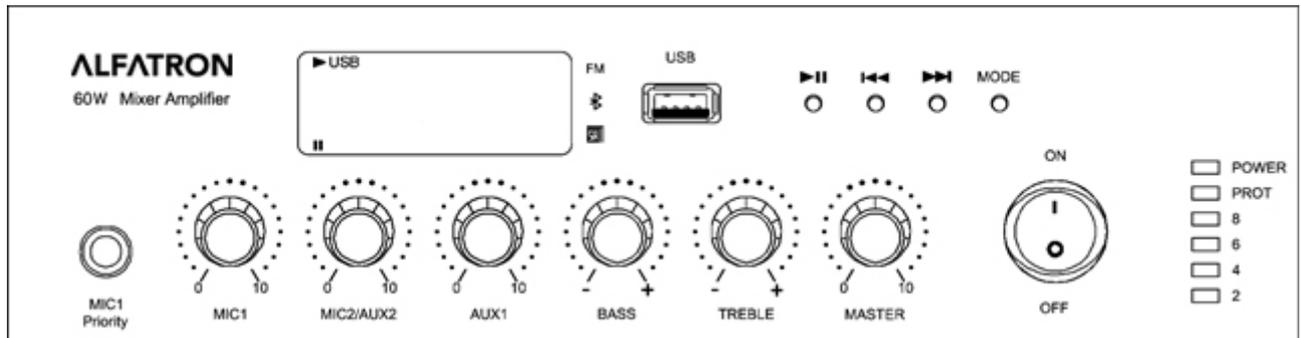


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ALFATRON ELECTRONICS GmbH GERMANY

### Alfatron ALF-60W-UB

### Mixer Amplifier with USB, Bluetooth and FM Radio



## Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated October 2018. In the constant effort to improve the product, we reserve the right to make function or parameter changes without notice or obligation. Please refer to the dealers for the latest details.

## FCC Statement

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. It 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 commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



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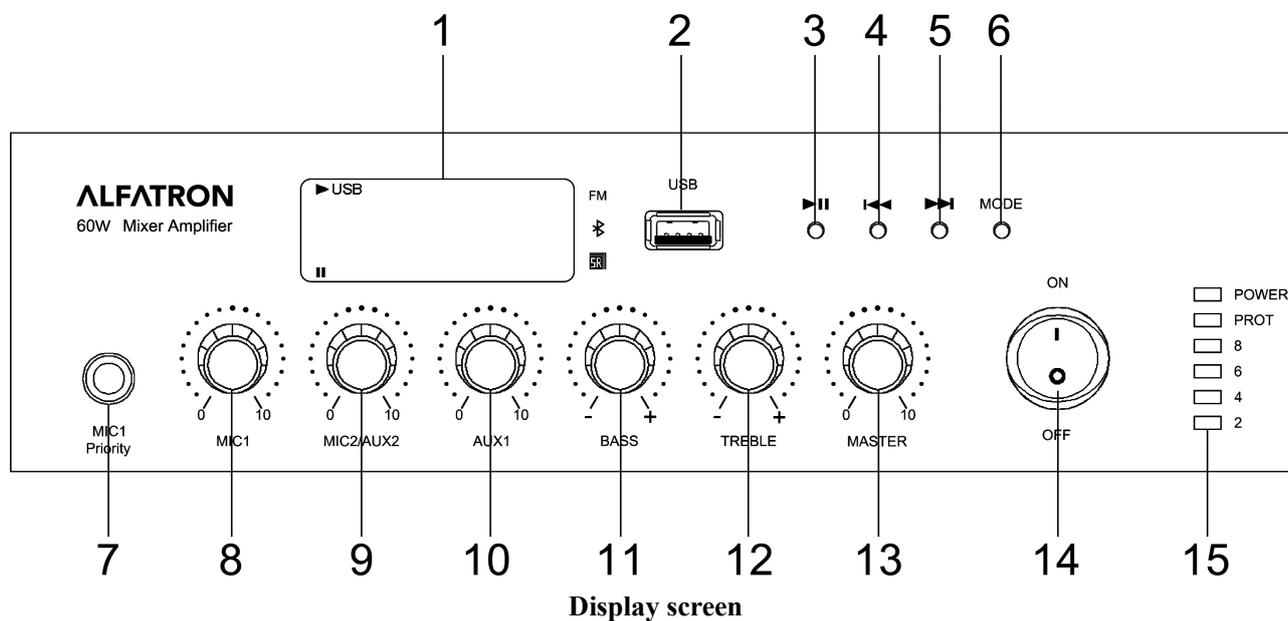
# 1. Product Description

## 1.1 Features

- Compact public-address amplifier.
- Speaker output of 100V or 70V & 4 -16 ohms, rated power output of 60W.
- Built in Mp3 player, FM radio & Bluetooth with remote controller.
- 2 MIC inputs, 1 EMC input, 2 line inputs, 1 line output.
- Built in Class-D amplifier module and switching power, with 100V/70V transformer technology.
- Individual volume control for Mic 1-2, line 1-2, Mp3/FM, bass/treble and master volume control.
- Support both AC100-240V & DC 24V power supply.
- Priority: EMC > MIC1 > others.
- LED indicators for power, clip, protect and signal.
- With short-circuit, clip, overload and high temp protection.
- Ideal for small venues such as classrooms, retail stores, coffee shops, restaurants etc.

## 2. Appearance Description

### 2.1 Front panel



#### 1. Display screen

#### 2. USB interface

For use with .MP3 files

#### 3. Play / Pause

In USB and Bluetooth mode, pause & play

In FM mode, this button is to search the radio frequency automatically

#### 4. Previous song/ (Previous radio channel when in FM mode)

In USB and Bluetooth mode, press this button to switch to the “previous song”,

In FM mode, press this button to switch to the “previous radio”

In FM/Bluetooth/USB mode, long press this button to turn down the volume

#### 5. Next song/ (Next radio channel when in FM mode)

In U-disk and Bluetooth mode, press this button to switch to the “next song”

In FM mode, press this button to switch to the “next radio”

In FM/Bluetooth/USB mode, long press this button to turn up the volume

#### 6. Mode main function key

Bluetooth mode, USB mode, AUX input mode and FM mode

#### 7. MIC1 Input

This button has priority function. (MIC1-MIC2-Music)

#### 8. MIC1 volume adjustment

Adjust the volume of **MIC1**, turn clockwise to increase volume, counter clockwise to decrease volume.

**9. MIC2/AUX2 volume adjustment**

Adjust the volume of MIC2/AUX2, turn clockwise to increase volume, counter clockwise to decrease volume.

**10. AUX1 volume adjustment**

Adjust the volume of AUX1, turn clockwise to increase volume, turn counter clockwise to decrease volume.

**11. Bass volume adjustment**

The central position as the benchmark, turn clockwise to increase the bass, turn counter clockwise to decrease the bass.

**12. Treble volume adjustment**

The central position as the benchmark, turn clockwise to increase the treble, turn counter clockwise to decrease the treble.

**13. Master volume adjustment**

Adjust the level of all signals (except EMC), turn clockwise to increase the volume, turn counter clockwise to decrease the volume.

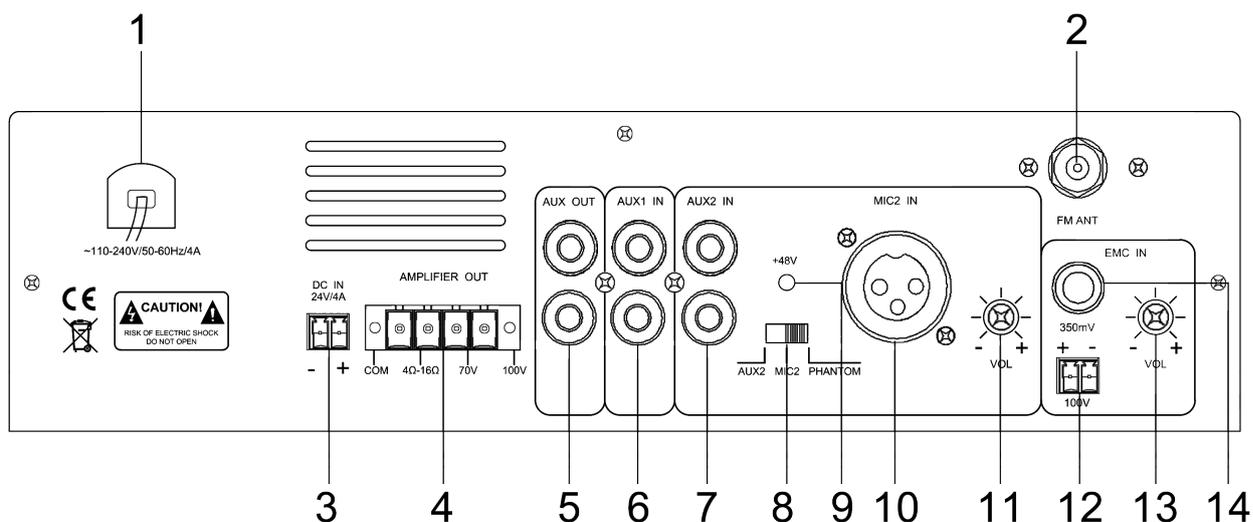
**14. power switch**

Press "ON" to switch on the power, press "OFF" to switch off the power

**15. Level indicator**

Audio output level display

## 2.2 Rear panel



### 1. AC~110-240V 50/60Hz Power input

Insert the plug into the machine, and then connect the power inlet socket.

### 2. Radio antenna interface

Radio antenna connect to this socket.

### 3. DC 24V power input

DC 24V stand-by power phoenix contact interface.

### 4. Audio power output

Note: No terminal is connectable to “Earth wire”

### 5. AUX output

### 6. AUX1 input port

### 7. AUX2 input port

### 8. Audio source selection switch (AUX2-MIC2-PHANTOM)

AUX2, MIC2 audio source selection, left – middle - right slide selection to choose AUX2, MIC2 or PHANTOM respectively.

### 9. Indicator of 48V phantom power

### 10. MIC2 balanced input interface

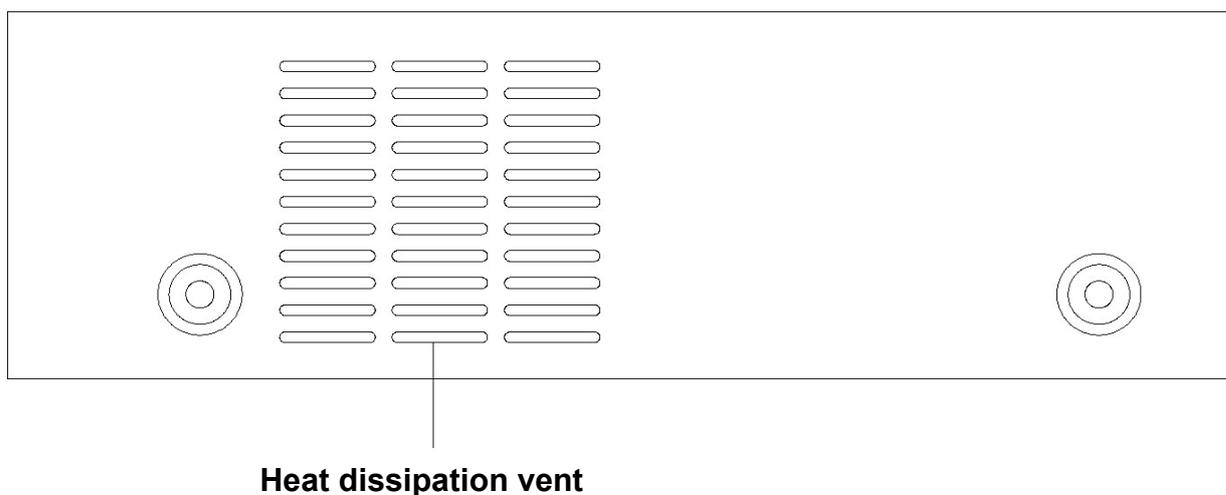
### 11. AUX2/MIC2 volume control

### 12. 100V emergency signal input

### 13. Volume control of emergency input

### 14. Volume control of secondary emergency input

## 2.3 Side Panel



## 3. Working mode

### 3.1 MIC mode

When the Microphone is broadcasting in any mode, the system will detect the MIC and mute the other sources. It will return to the original play status when the MIC has no signal.

### 3.2 Bluetooth mode

Press MODE to display “BLUE” on the digital screen, the “BLUE” will flash until device or mobile phone pairing is successful, the name is “Bluetooth”. After successful pairing, the user can play music from the mobile phone. Bluetooth range is maximum 10 metres.

### 3.3 USB mode

When the USB port is used, it will be in USB mode automatically (plug and play)

### 3.4 Line mode

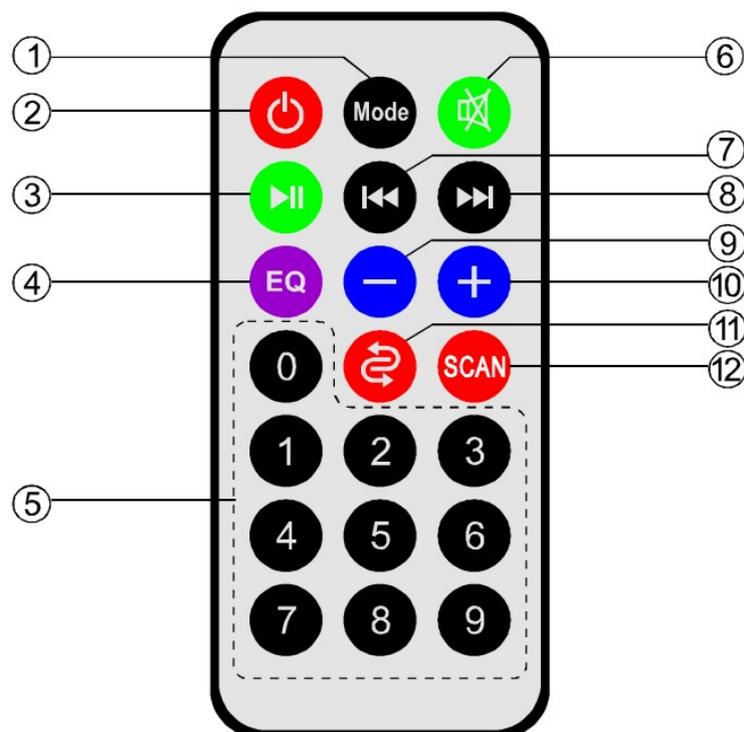
In line mode, press MODE, digital screen will display “AUX”

### 3.5 FM mode

Operation details please view the part 3, 4, 5 of “2.1 front panel”

## 4. Remote control instructions

As shown in the following figure:



### Function key description:

- ① Mode button – switches between inputs.
- ② Power switch (only controls Bluetooth/USB/FM)
- ③ Play & Pause/ ( Searches automatically when in FM)
- ④ EQ sound effect
- ⑤ 0-9 song selection key, can be composed of digital channel selection when in FM
- ⑥ Mute key
- ⑦ Previous song ( Previous radio channel when in FM)
- ⑧ Next song (Next audio when in FM)
- ⑨ Volume down
- ⑩ Volume up
- ⑪ Cycle / Refresh
- ⑫ Non-Functional

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## Safety Precaution

- DO NOT connect this device to the power source, before the system is correctly wired.
- Ensure that input voltage to the device is the same as required voltage of the device; if not the device may be damaged.
- There are dangerous voltages within the device, which may cause personal electric shock. Housing should not be opened thus avoiding the potential risk of electric shock.
- The device is not completely disconnected from power source when it is switched "OFF". For safety reasons, please disconnect the device from the socket if not in use.
- DO NOT place the device in extreme temperature conditions.
- Effective ventilation must be provided in the working environment of the device to avoid excessive temperature fluctuations during operation or the device may be damaged.
- Unplug device from the power socket during weather storms or if the device is not in use for an extended period of time.
- Disconnect the power plug from sockets to ensure the device has been completely disconnected from power source, before any component is removed from or re-installed to the device or before any electric connector of the device is disconnected or reconnected.
- In the event of device failure, DO NOT open the housing and repair. Device may only be disassembled by authorized personnel.
- DO NOT place any corrosive chemicals or liquids near or on the device.

## 1. Limited warranty in respect of ALFAtron Products Only

1.1 This limited warranty covers defects in materials and workmanship in this product.

1.2 Should warranty service be required, proof of purchase must be presented to the Company. The serial number on the product must be clearly visible and not have been tampered with in any way whatsoever.

1.3 This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by the Company to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover equipment enclosures, cables or accessories used in conjunction with this product.

This limited warranty does not cover the cost of normal maintenance. Failure of the product due to insufficient or improper maintenance is not covered.

1.4 The Company does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

1.5 Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

1.6 Unless otherwise specified, the goods are warranted in accordance with the manufacturer's product specific warranties against any defect attributable to faulty workmanship or materials, fair wear and tear being excluded.

1.7 This limited warranty only covers the cost of faulty goods and does not include the cost of labour and travel to return the goods to the Company's premises.

1.8 In the event of any improper maintenance, repair or service being carried out by any third persons during the warranty period without the Company's written authorization, the limited warranty shall be void.

1.9 A 7 (seven) year limited warranty is given on the aforesaid product where used correctly according to the Company's instructions, and only with the use of the Company's components.

1.10 The Company will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty:

1.10.1 Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labour to complete the repair and restore this product to its proper operating condition.; or

1.10.2 Replace this product with a direct replacement or with a similar product deemed by the Company to perform substantially the same function as the original product; or

1.10.3 Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

1.11 The Company is not obligated to provide the Customer with a substitute unit during the limited warranty period or at any time thereafter.

1.12 If this product is returned to the Company this product must be insured during shipment, with the insurance and shipping charges prepaid by the Customer. If this product is returned uninsured, the Customer assumes all risks of loss or damage during shipment. The Company will not be responsible for any costs related to the removal or reinstallation of this product from or to any installation. The Company will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

1.13 Please be aware that the Company's products and components have not been tested with competitor's products and therefore the Company cannot warrant products and/or components used in conjunction with competitor's products.

1.14 The appropriateness of the goods for the purpose intended is only warranted to the extent that the goods are used in accordance with the Company's installation, classification and usage instructions.

1.15 Any claim by the Customer which is based on any defect in the quality or condition of the goods or their failure to correspond with specification shall be notified in writing to the Company within 7 days of delivery or, where the defect or failure was not apparent on reasonable inspection by the Customer, within a reasonable time after discovery of the defect or failure, but, in any event, within 6 months of delivery.

1.16 If delivery is not refused, and the Customer does not notify the Company accordingly, the Customer may not reject the goods and the Company shall have no liability and the Customer shall pay the price as if the goods had been delivered in accordance with the Agreement.

1.17 THE MAXIMUM LIABILITY OF THE COMPANY UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT.

## Packing list

No.	List	Quantity
1	60W mixer amplifier	1
2	Manual	1
3	Power line	1
4	Remote control	1
5	FM antenna	1
6	4P 5.08 wiring terminal	1
7	2P 3.81 wiring terminal	2

## Performance

Description	PA Amplifier with USB/SD & FM & Bluetooth
Rated power	60W
Speaker Outputs	100V or 70V & 4Ohms-8 Ohms-16 Ohms
Connector	Mic1 input by unbalance jack MIC 2 balance XLR socket Line1-2 inputs by RCA; Line output by RCA
Attenuation	Microphone1-2, line1-2 and Mp3/FM, bass/treble and master
MIC1 input sensitivity	5mV
MIC2 input sensitivity	5mV
MIC3 input sensitivity	5mV
AUX1 input sensitivity	350mV
AUX2 input sensitivity	350mV
EMC input sensitivity	350mV
MIC frequency response	180Hz~10kHz (±3dB)
AUX frequency response	70Hz~16kHz (±3dB)
Noise	<5mV (4 ohm load output terminal)
THD	<1% 1KHz
Protection	Short-circuit, clip, overload and high temp protection
Treble adjustment	10dB (±2)
Bass adjustment	10dB (±2)
Rated power Supply	AC~110-220V
Rated output voltage	60W/4Ω, AC220V
Priority	EMC > MIC1 > others
Machine size(L×W×H)	247*198*66mm
Packing size	343*302*121mm (1PS)
Maximum packing size	630*355*283mm (4PS)
Net Weight	2.6kg
Gross Weight	3.25Kg

Technical specifications are subject to change without prior notice.