

**NVS-90220121MA**  
**120w Mini Digital Mixer Amplifier with USB**  
**and Bluetooth**  
**User Manual**

Thank you for using our public address system. Please read this User Manual carefully to make better use of this equipment



## Product Overview

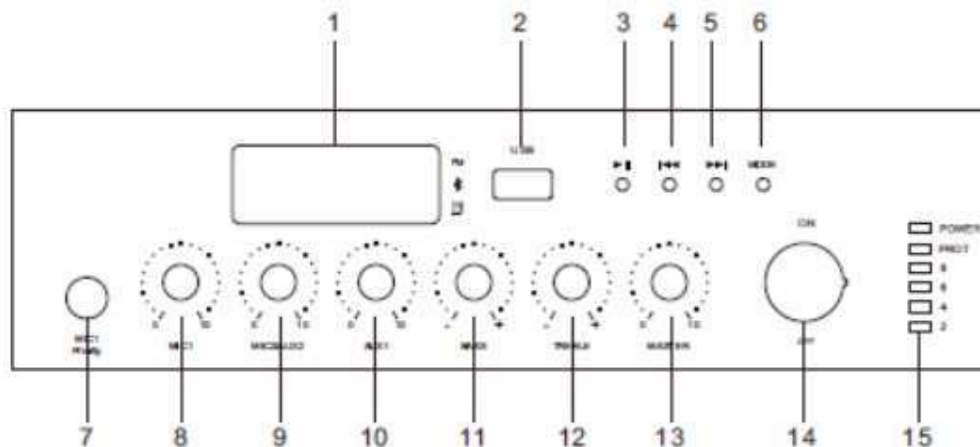
The NVS-90220121MA is a Mini Digital Mixer Amplifier with USB and Bluetooth. It is widely used in such places as schools, gymnasiums, square halls, parks, parking lots, railway stations, airports, villa communities, mall supermarkets and so on.

## Product Features

- Built-in Bluetooth, FM, and USB function.
- 2 MIC inputs, 2 EMC inputs, 2-line inputs, 1 line output.
- Support 100V/70V constant voltage output, and 4 -16 $\Omega$  constant resistance output.
- Can be controlled by the infrared remote controller.
- With priority function, the priority is EMC/MIC1>AUX1/AUX2/MIC2.
- With master volume control, individual volume control for MIC & LINE, treble and bass volume control.

# Hardware Interface Description

## Front Panel



- 1. Display screen**
- 2. USB interface**  
Insert the USB to provide program to the built-in MP3.
- 3. Play / Pause**  
In USB and Bluetooth mode, this key is Pause & Play.  
In FM mode, this key is auto search.
- 4. Previous song/ (Previous FM when in FM mode)**  
In USB and Bluetooth mode, press this key to switch to the “previous song”.  
In FM mode, press this key to switch to the “previous FM”.  
In FM/Bluetooth/USB mode, long press this key to turn down the volume.
- 5. Next song/ (Next FM when in FM mode)**  
In USB and Bluetooth mode, press this key to switch to the “next song”.  
In FM mode, press this key to switch to the “next FM”.  
In FM/Bluetooth/USB mode, long press this key to turn up the volume.
- 6. Mode main function key**  
Bluetooth mode, USB mode, AUX input mode, FM mode can be switched.
- 7. MIC1 Input**  
This button has priority function. (Same level with EMC input signal on the real panel).

**8. MIC1 volume adjustment**

Adjust the volume of MIC1, clockwise to turn up the volume, counter clockwise to turn down the volume.

**9. MIC2/AUX2 volume adjustment**

Adjust the volume of MIC2/AUX2, clockwise to turn up the volume, counter clockwise to turn down the volume.

**10. AUX1 volume adjustment**

Adjust the volume of AUX1, clockwise to turn up the volume, counter clockwise to turn down the volume.

**11. Bass volume adjustment**

Take the central position as the benchmark, counter clockwise to turn down the bass, clockwise to turn up the bass.

**12. Treble volume adjustment**

Take the central position as the benchmark, counter clockwise to turn down the treble, clockwise to turn up the treble.

**13. Master volume adjustment**

Adjust the level of all signals (except EMC signal on the rear panel), clockwise to turn up the volume, counter clockwise to turn down the volume.

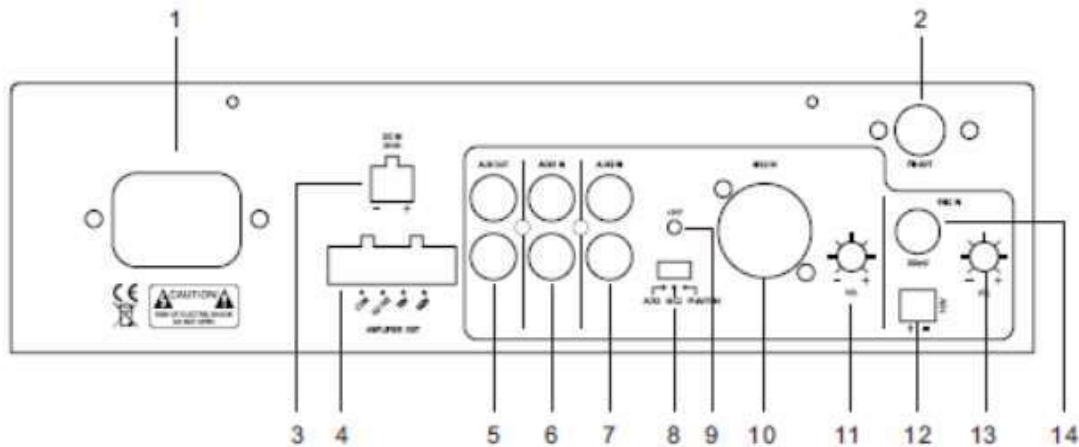
**14. Power switch**

Press "ON" to turn on the power, press "OFF" to turn off the power.

**15. Level indicator**

Audio output level display.

## Rear Panel



### 1. Power input

Connect the power plug from this interface. Insert the plug into the machine, and then connect the power grid.

### 2. FM antenna interface

Connect the FM antenna to this interface.

### 3. DC power input

DC24V backup power input interface. (DC24V IN, only half power output for MP120UB)

### 4. Audio power output

Note: Any terminal of the power output cannot be connected to “Ground wire” directly or through other devices.

### 5. AUX output

### 6. AUX1 input port

### 7. AUX2 input port

### 8. Audio source selection switch

(AUX2-MIC2 Note: When you operate this switch, you need to turn the volume down or turn off the device). AUX2, MIC2/24V (MP35UB/60UB is 48V) phantom power switch, toggle the switch left and right to choose.

### 9. Indicator of phantom power (MP35UB/60UB is 48V, MP120UB is 24V)

### 10. MIC2 balanced input interface

### 11. AUX2/MIC2 volume control

### 12. 100V emergency signal input

(When using external 100V emergency signal input, the ground wires of the two devices cannot be connected together.)

### 13. Emergency input volume control

### 14. General emergency signal input port

## Instructions

### 1. MIC mode

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

### 2. Bluetooth mode

Press MODE to display “BLUE” on the digital screen, the “BLUE” will always flash until device and mobile phone pairing success, take the name is “MIXER AMP BLUETOOTH”. After finishing the pairing, the user can play music on the mobile phone. With excellent wireless transmission function, and the wireless transmission distance is  $\approx 10\text{m}$ .

### 3. USB mode

When the USB access, it will be USB mode automatically (plug and play).

### 4. Line mode

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

### 5. FM mode

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

## Remote control instructions

**1. Power switch (MP3/FM/BT)**

**2. Mode**

AUX, FM, BT and MP3 mode switch

**3. Mute**

MP3, FM and BT Mute key.

Pressing this key, the currently playing program is muted, and the LED display screen will flash.

**4. Play/ Pause key (MP3/BT), Radio channel selection:** repeatedly to recall the stored station

**5. Previous song (MP3/BT), Previous channel (FM)**

**6. Next (MP3/BT), Next channel (FM)**

**7. EQ**

Press this key you could choose different sound effects when in MP3 mode. You could choose Classical, Jazz, Rock, DBB, and Pop mode.

**8. Vol-**

MP3/FM/BT volume decrease

**9. Vol+**

MP3/FM/BT volume increase

**10. 0-9 number key**

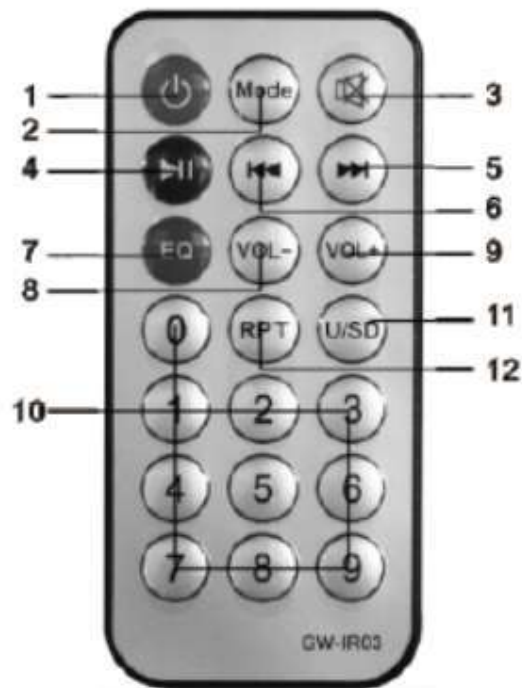
Select MP3 player's song by serial number or stored the searched radio program by serial number

**11. U/SD**

When in MP3 mode, switch USB disk or SD card to play

**12. RPT**

When in MP3 mode, repeat one or repeat all





## Specifications

Speaker Output	120W
MIC Frequency Response	100Hz~8kHz ( $\pm 3$ dB)
AUX Frequency Response	80Hz~15kHz ( $\pm 3$ dB)
Input Sensitivity	MIC: 7mV $\pm$ 1mV
	Line: 300mV $\pm$ 10%
	EMC: 350mV $\pm$ 10%
Noise	$\leq$ 6mV (4 $\Omega$ load out)
Total Harmonic Distortion	<1% 1KHz
Tone Adjustment	Treble: 10dB ( $\pm$ 2)
	Bass: 10dB ( $\pm$ 2)
Interface Output Voltage	70V,100V (Constant voltage output), 4-16 $\Omega$
Power Supply	$\sim$ 110-240V 50/60Hz
Dimension (D x W x H)	198 $\times$ 247 $\times$ 66mm
Weight	3 Kg



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