Please read this instruction manual

before installation and use

# KT9213/MP3 Preamplifier

# Instruction manual

2014/1.0

## 1 Overview

1) The KT9213/MP3 preamplifier is a new generation of high reliability, high quality fire or accident emergency broadcasting equipment.It integrates with MP3 audio source. It can also cooperate with broadcast power player to realize background

music broadcast function.

2） KT9213/MP3 preamplifier internal integrated fire broadcasting emergency voice function.It can be forced to switch to emergency broadcast state through external trigger port.It can broadcast through microphone and record automatically.

3）KT9213/MP3 preamplifier LCD display is used to indicate various working conditions。The buttons are light touch buttons.The LCD can indicates current state.

## 2 Main Specifications

| | |
|---|---|
| 1）Power supply: | DC24V±10%, <0.5A |
| 2）Line input sensitivity: | 300mV ～775mV |
| 3）Line output level: | 500mV ± 100mV |
| 4）Line frequency response: | 20Hz ～ 20kHz ±0.5dB |
| 5）THD: | < 0.5% |
| 6）SNR: | > 70dB |
| 7）Emergency trigger mode: | Level trigger (DC24V) |
| 8）Working environment: | a）temperature 0℃-40℃ |
| | b）Humidity relative humidity 92% |
| 9) Insulation resistance: | between power supply and chassis ＞20MΩ (DC500V) |

## 3 Function buttons and Indicator LEDs

1) Front panel (figure 4-1)：

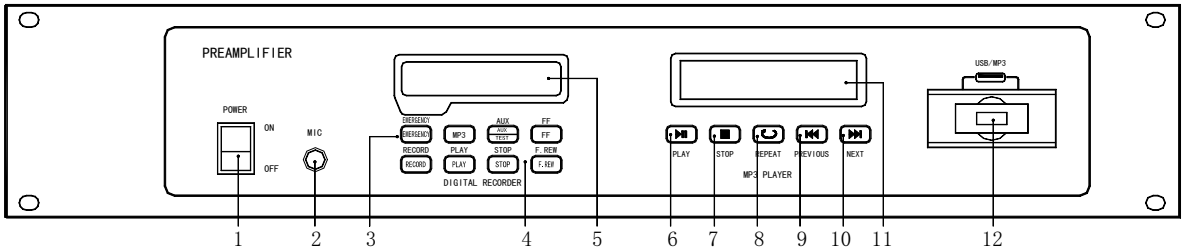



Figure4-1 front panel schematic diagram

1.power switch 2.microphone jack 3.Source selection button 4.digital record

5.pre-state indication 6.【Play/Pause】 7.【Stop】 8.【Repeat】

9.【Last song/Fast backward】 10.【Next song/Fast forward】 11.Play status display 12.USB jack

2) back panel(figure 4-2)：

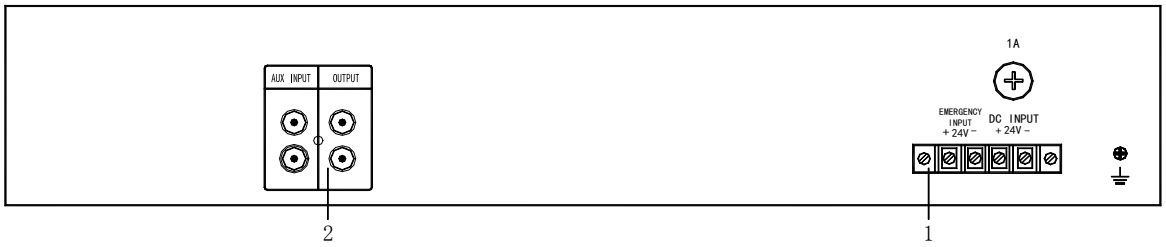



Figure 4-2 Back panel schematic diagram

1.Power supply input/Fire alarm trigger 2.Audio source input/output

## 4 Appearance Mounting dimensions&Weight

1) Appearance and mounting dimensions (figure5-1)：482.6mm * 225mm * 88mm (length*width*height)

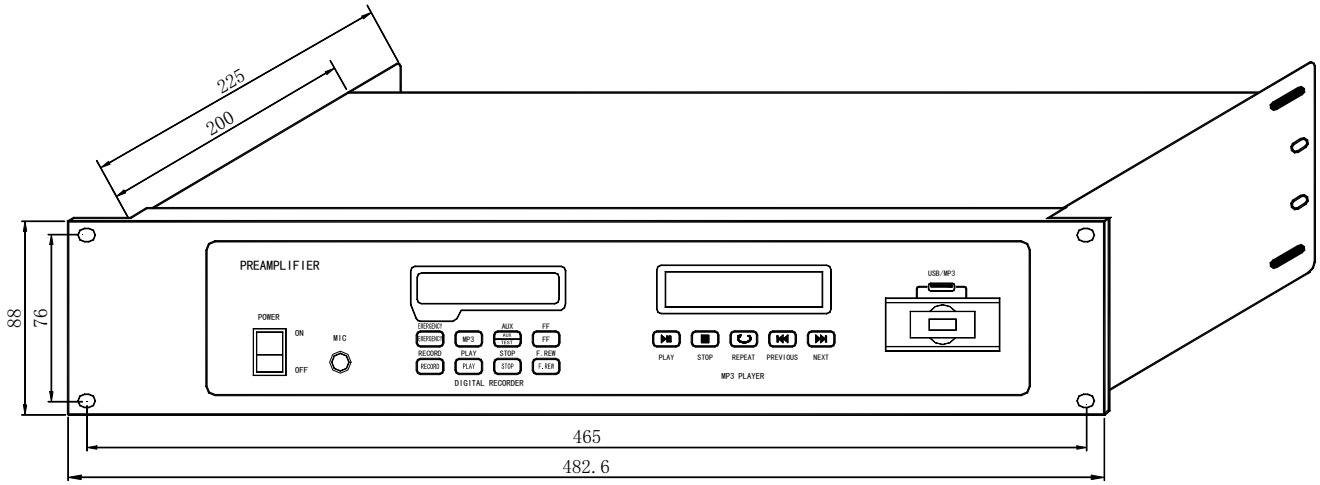



Figure 5-1 Appearance and mounting dimensions

2) weight： <6kg

## 5 Wiring instructions

1) power cable connection:

Please make sure the power switch is in the "off".Connect the 24V DC output voltage of the DC regulated power supply to the "24V" terminal.Pay attention to the polarity.Please use twisted pair to connect.

2) input line connection:

a) Connect an external source signal to the rear panel “Line in”port.Please use high quality shielded wire.

b) Fire alarm trigger signal connection: Connect the 24V level signal given by the control device to the "fire alarm" terminal.Pay attention to the polarity.This signal should be exported directly by the alarm controller or

provided using the export module.

3) output line connection:

Connect the “Audio Output” port signal to a power amplifier or other device as needed.Please use high quality shielded wire.

## 6 Installation and Debug

1) Correct connection shall be made according to the wiring instructions before debugging.

2) The display LCD should be in standby mode when power on.The LED “MP3” (green) should be lighted。

3)Insert USB device or trigger emergency broadcast,observe whether the equipment is in normal condition.If abnormal,please shut down and contact us.

## 7 Instructions for use

1) Make sure the line connection is correct before use

2) MP3 control:

Turn on the power switch, the machine will automatically start to retrieve the U disk.If the USB flash drive is inserted, it will start playing automatically.

Button functions:

| | |
|---|---|
| ⏯ | Play/Stop |
| ■ | 1 Short press to stop all playback, return to the initial state<br>2 Long press 2s to detect LED display |
| ↻ | When playing,this button will switch between "single repeat", "all repeat", "not repeat" |
| ⏮ | 1 Short press to return to the previous song<br>2 Long press to fast backward |
| ⏭ | 1 Short press to forward to the next song<br>2 Long press to fast forward |

In order to avoid unnecessary losses, please press STOP firstly, then pull out the U disk.

3) Audio source and audio source switch(figure 8-1)




Figure 8-1 audio source switch

This unit has a built-in emergency radio source (solidified voice).One MP3 source

can connect one auxiliary input source.Audio source can be switched by the buttons of "emergency" "MP3" and "line".The default state is "MP3" broadcast.

【Emergency】The audio source corresponds to the internal digital recording chip curing recording area.You can record what you want to play through the line or microphone.Recording a solidified voice will automatically delete all live recordings, so the operation should be cautious.The curing recording is generally recorded at the factory. If you need to replace it, please contact FAE.

**The method to delete recording:**

Press the button "record" for at least 2s, The two-digit digital tube starts to flash.Please release the button.The recording module starts to delete the live recording.Resume standby after deletion is complete, The digital tube displays "00", This process takes about 2 seconds.

**Note:** Curing voice duration should be controlled within 30 seconds, otherwise, too much recording memory will be occupied, resulting in insufficient space for field recording.

【MP3】Corresponds to the output of the MP3 player on the right side of the panel.

【Line】corresponds to the external RCA socket "line input" port for the rear panel。

The audio source selection status indicator is located on the LED display.The character corresponding to the currently selected audio channel will automatically light up with the key selection.

**4) Trigger emergency broadcast:**

Triggering emergency broadcast refers to turning the device into emergency broadcast state when a fire or accident occurs.The machine can automatically start playing the broadcast content of the internal digital recording chip.The fire broadcast host volume is automatically set to the preset state and manual change is not allowed. Enter the emergency broadcast as follows:

a) Manual mode: Press the [Emergency] button in any broadcast state to enter the emergency broadcast state.

b) Automatic mod: When the external "fire alarm trigger" terminal detected 24V level input, the emergency broadcast will start.When the 24V level signal be cancelled, the system will automatically returns to the state before.<u>After the fire alarm trigger signal is cancelled, the sound source channel will automatically go to the neutral position outside the emergency/line. In this case, if you want to resume other broadcasts, you should manually press the button to re-select.</u>

**5) Digital record and play(figure 8-2)**

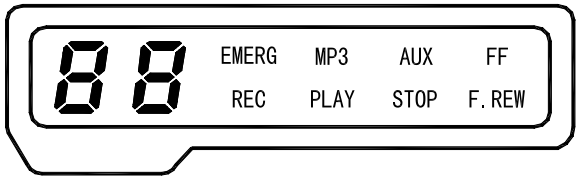


Figure 8-2 digital record and play

Record and Play are displayed by section, The maximum number of the recording is 99.When the recording section is full(>99), the first section will be deleted automatically.The unrepeated playback time is more than 30 minutes.

Set the digital recording section.There’re 5 buttons:【Record】【FF】【FB】【Play】【Stop】.

The button【Record】is used to record fixed voice.It means all the emergency broadcast audio source or deleting field recording content;

The button【Fast Forward】and【Fast Backward】is used to searching record content;

The button【Play】is used to play back the recorded content, Start playing from the selected segment(For example: press the button【Fast Forward】or【Fast Backward】.Please play it sequentially from the recording section of paragraph 10.The LCD displays the change of the segment number.If there is no other operation when playing, all the recordings will be played.

The button【Stop】is used to stop everything about digital recording and return to standby.

**Automatic recording: The digital recording of this device can only be started automatically when the emergency broadcast is triggered and the microphone is spoken, and manual recording cannot be realized.**

When in emergency broadcast, Use the microphone broadcast can automatically trigger recording.Recording stops automatically after stopping the microphone for 2s.When the number of recording segments is greater than 99, the first recording will be deleted automatically and other recording segment numbers will be automatically reduced by one。Note: When in **“recording automatically” status, manual stop is not allowed.**

**6) Use of the microphone:**

**The microphone is a customized using for broadcast input unit with our company (GB9247 handheld microphone).It Can’t be used with other microphones.**

a) Microphone has strong insertion and silent function in non-emergency broadcast mode.The priority is higher than the sound source broadcast.Using the microphone will not trigger recording.

b) In the emergency broadcast state, using the microphone broadcast, the voice broadcast and other alarm sound signals will be automatically stop. The system will enter recording status.The LED “record” will be lighted.The display automatically returns to the segment number display of the live recording, and plus “1” automatically.After stopping the microphone broadcast, the system will return to the state before the microphone broadcast within 3 seconds.

**7)** Self-test:Press the [Self-test] button to start checking the indicator device and the alarm device. After the check complete, it will automatically exit

## 8 Common trouble shooting

| fault | reason | solution |
|---|---|---|
| No response when power on | ① Main&backup power connected OK? | ① Check main power supply voltage and standby power supply polarity |
| | ② AC fuse OK? | ② Replace the same fuse |
| The curing recording can't played In emergency state | ③ The cable is not connected | ③ Check if the audio output cable is connected |
| | ④ Recording files are deleted by mistake | ④ Contact the manufacturer |
| Insert U disk does not play files | ① No file or format is not supported | ① Check whether the file in the U disk is in MP3 format. |
| | ② Poor contact in the socket | ② change another U disk and test |
| USB booting time is too long | The number of files or folder levels in the U disk is too large | Rearrange files in the U disk and delete other non-audio files |

## 九 Precautions

1) When in use, the casing of the machine should be grounded reliably and away from strong interference sources, otherwise interference noise may be introduced.

2) Audio cable should be high quality shielded cable, The connection distance should be as short as possible, otherwise it's easy to cause interface noise.

3) The number of files and file fragments stored in the U disk directly affect the file reading speed.Please format your U disk regularly and copy the file after use.

4) The continuous on/off time interval should be greater than 10 seconds.

5) Please use the same specification fuse when replacing.Please tighten the seat to prevent bad contact.

## 10 Attached parts and components

1) Attached parts:

| No. | Project | | Notes |
|---|---|---|---|
| 1 | Instruction manual | 1 | |
| 2 | 1A fuse | 2 | specification: Φ5*20mm |
| 3 | Microphone | 1 | GB9247 handheld microphone |
| 4 | Certificate | 1 | Stick to the chassis |