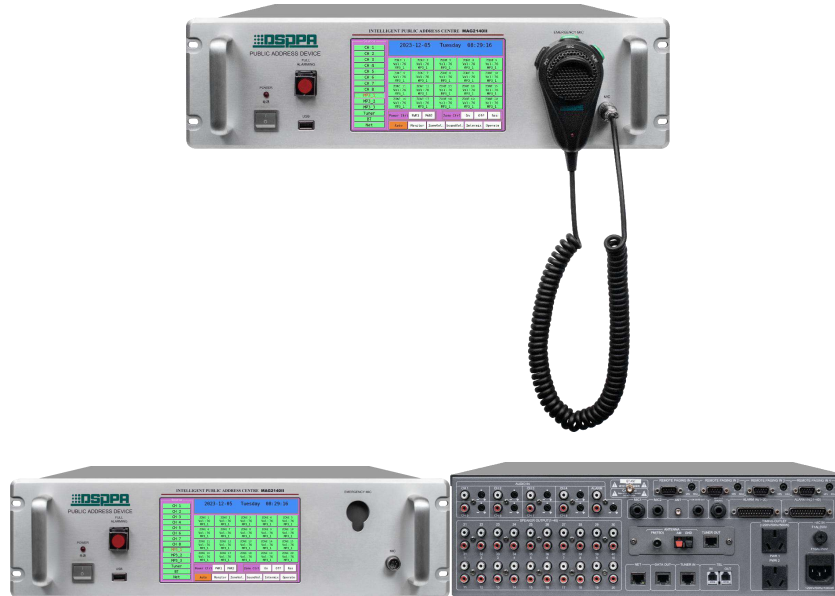# MAG2120II MAG2140II

Intelligent Public Address Center

Note: The picture is MAG2140II as an example.

Description

The mini intelligent broadcast media matrix system is an intelligent public address system, which integrates such functions as playing, intelligent timing control, audio matrix, zone control, intelligent fire linkage, remote computer control and telephone paging as well as remote paging, which contains a number of players, Bluetooth, network terminal decoding, support for Android software online paging.

Leveraging on its integral public address functions and individualized intelligent control functions, the system can better satisfy demands of users for small and medium address systems, like the sound amplification at such public places as primary and high schools, small and medium plants, parks and squares.

The public address system is divided into two types, MAG2120II and MAG2140II, according to the number of control zones. MAG2120II and MAG2140II can control 20 and 40 zones respectively, providing more options for users.

Features

- The public address controller integrates such functions as playing, intelligent timing control, audio matrix and zone control.
- There are 5 timing schemes and 200 timing points for each timing scheme, for cycle on a 7-day basis. Each timing point is available for control of audio source selection,including chime, 3-channel built-in MP3, built-in AM/FM, 2-channel power supplies, 2 external peripheral audio sources (CD, tuner, socket and MP3 program player). The 5 timing schemes can be switched easily.
- It is a large audio matrix with 8-channel common audio source inputs, three built-in MP3s, Bluetooth,

radio and network terminal decoding and playing; 1-channel local aviation microphone input (with first priority), 1-channel alarm signal input (with second priority, the alarm sound source can be internal or external.), 1-channel remote paging microphone signal input (with third priority), 1-channel phone paging signal input (with fourth priority) and 40-channel outputs.
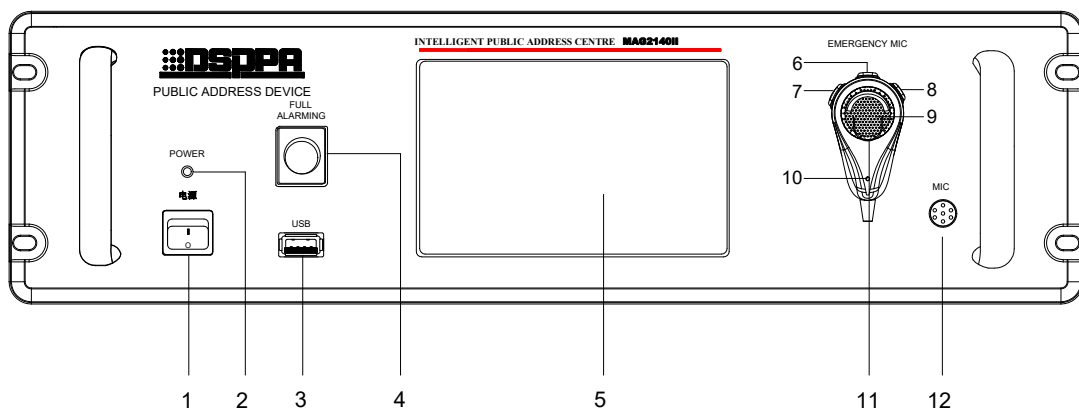
- 40-channel (MAG2140II) and 20-channel (MAG2120II) fire emergency inputs (short-circuit signal), and 1-channel fire linkage output (short-circuit signal, used for extension, which can be connected to MP9915E/8815E, MP9923S/8823S and others). (Each emergency input can trigger any programmable zone.)
- Can be connected to an external computer through LAN for control of the host via a software (It can realize remote timing settings, timing point settings and auto play of specified programs through the computer.) (Such functions can be realized by a remote control software available at an additional purchase.).
- The remote paging microphone can be extended through 9 pin ports.
- Support network paging and online paging with Android software.
- All timing programs are available for instantaneous and easy manual intervention.
- Can monitor each zone in real time with volume control (digital volume control).
- With DSP processor of high performance, digital matrix, digital volume control, digital equalizer, 7-inch color screen and touch pad.
- With USB interface, which can be used to copy songs in the USB directly to the host for playing. With built-in 6G storage capacity in the host.
- It can realize 100m wireless remote control with 12 programmable buttons. It can realize customized on/off of zone and selection of audio sources and songs with one button.
- With 3 types of chime signal output function (digital volume control).
- With alarm signal output function (digital volume control).
- With telephone zone paging function (digital volume control, with password alteration, all paging, optional paging and programmed paging).
- With timing control of playing status of external audio source.
- With calibration of touch points on the touch screen.
- Can realize remote control of digital volume control of 20 channel / 40-channel zone outputs
- The system automatically calibrates the local time to be consistent with the set server time by enabling the network time adjustment function.
- The central control host can control the device's zones (including partition switch, full zone switch and recovery), sound source selection and analog remote control 12 button trigger functions.

Specifications

Model		MAG2120II	MAG2140II
Number of control zone		20 zones	40 zones
Display		7-inch color screen	
Control mode		Touch screen / Remote control / Wireless remote control	
Host Built-in Storage Capacity		6G	
Input sensitivity		250mV(±25mV)	
Output		1V(0dBV)	
Built-in audio source		Radio, MP3	
MP3	Frequency response	20Hz-20kHz	
	SNR	85dB	

Radio		Dynamic range	80dB	
		Harmonic distortion	0.05%	
	AM	Sensitivity	52dBu	
		Receiving range	522kHz-1620kHz	
		Pass-band	6kHz	
		SNR	35dB	
	FM	Sensitivity	26dBu	
		Receiving range	87.0MHz-108.0MHz	
		Pass-band	15kHz	
		SNR	75dB	
Wireless control			12 groups, with control distance within 100-1000m	
Frequency response			20Hz-20kHz(±3dB) (Single zone)	
SNR			85dB	
Crosstalk			70dB	
Alarm trigger mode			Low level of 0V, and high level of 5V～24V	
Timing power output		PWR1	AC220V/50Hz/500W	
		PWR2	AC220V/50Hz/500W	
Fuse		Machine protection	F1AL	
		Power protection	F10AL	
Power supply			AC220V (±10%) / 50Hz	
Overall power consumption			22W	
Package dimension (mm)			（L×W×H）555×460×235	
Machine dimension (mm)			（L×W×H）484×360×132	
Gross weight			11.8kg	12.3kg
Net weight			9.2kg	9.6kg

Front / Rear Panel

1. **Power Switch**

Press I to turn on the power, and press O to turn off the power.

2. **Power LED**

   The LED turns on when the power is switched on, while off when the power is switched off.

3. **USB Interface**

Used to be connected to memory devices such as USB and mobile hard disk with MP3 programs for playing musics in the USB and copying programs to built-in MP3 player, which is also available for plug-in of the mouse with USB interface.

4. All-Zone Alarm Button

Press all-zone alarm button of the system to send alarm signals to all zones. The button LED will turn on when the alarm signal is being sent. Press the button again to switch off the alarm and the LED will turn off.

5. Display Screen / Touch Pad

The display screen is used for dynamic display of system information, which is also a touch screen.

6. Green Recording Button

Press the green recording button to record the voice; stop recording through software operation on the host screen.

7. Black Paging Button

Press the paging button to make paging to selected zones; stop recording through software operation on the host screen and release the button to stop paging

8. Green Play Button

After recording the voice, press this button again to play the recording, and operate the software on the host screen to stop playback.

9. MIC Pickup Window
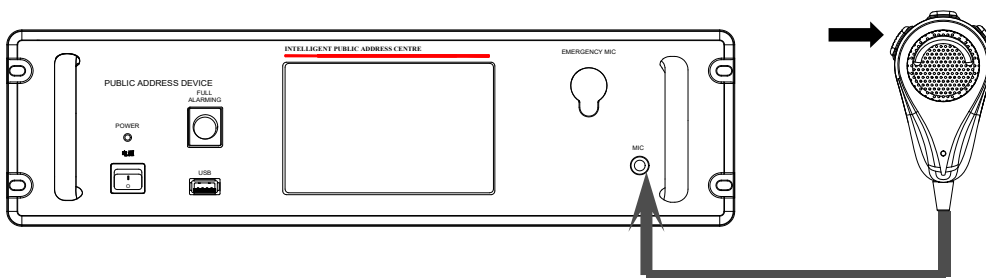
10. Recording Indicator Light

When the recording button is pressed and held, the red indicator light is always on, and when the recording button is released, the indicator light goes out.
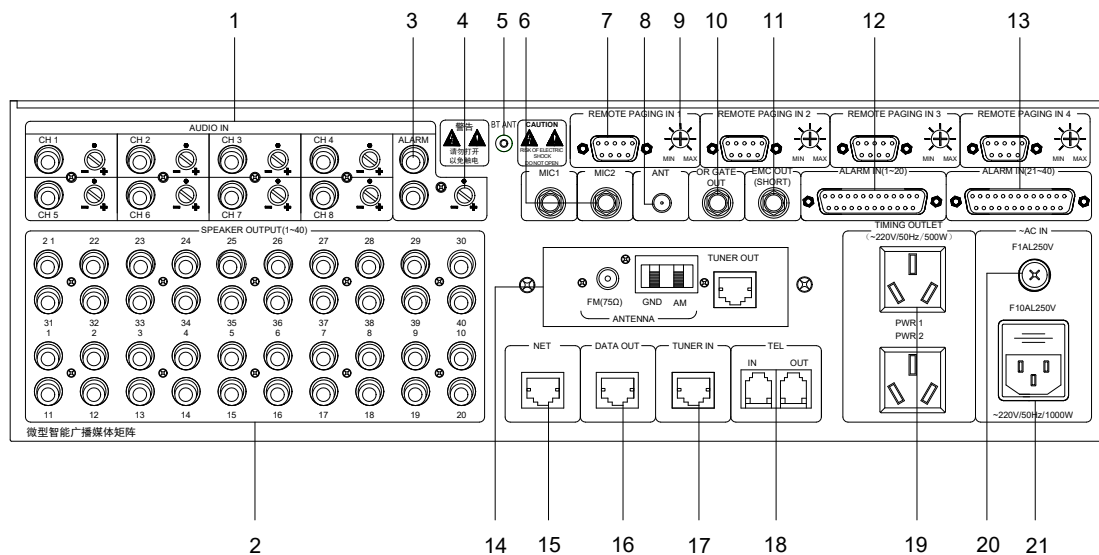
11. Handheld Emergency Paging Microphone Stand

Be sure to insert the buckle on the back of microphone into this hole when the microphone is not in use.

12. Handheld Emergency Paging Microphone Jack

The microphone signal connected to the interface has the ultimate priority, which can cover all output signals. The plug connection method is as shown below.

1. **8-channel Audio Input Interface and Volume Control Knob**

   8 independent audio input channels for connection to 8 external audio sources, with one independent volume control knob for each channel.

2. **40-channel Audio Matrix Output Interfaces**

   Each audio output interface corresponds to a zone for connection to the audio input interface of the amplifier in the zone.

3. **External Alarm Signal Input interface**

   Can be connected to MP99/8815E (Alarm generator) to input the alarm signal to the machine and give alarm to the corresponding zone automatically. The signal of the interface has a second priority, after the aviation microphone on the front panel.

4. **Alarm Volume Adjustment Knob**

   Used to adjust the volume of the alarm signal input by MP99/8815E alarm matrix.

5. **Bluetooth Antenna Interface**

   Used to play Bluetooth audio through wireless Bluetooth connection

6. **2-channel MIC Interfaces**

   The 2-channel microphone interfaces are connected in parallel to CH1 and CH2 line input interfaces.

7. **Remote Pager Connection Interface**

   4 remote pager connectors with 9 pin D-type data serial ports, can be connected to remote paging device.

8. **Wireless Remote Control Receiving Antenna Interface**

   Can connect wireless remote control antenna. Please refer to the part of "Description of Wireless Remote Control" for details.

9. **Volume Control Knob of Remote Pager**

   Can adjust the volume of the remote pager mechanically.

10. **Short-circuit Signal Output Interface**

    When any zone is open, there is a short-circuit signal output.

11. **Short-circuit Signal Output Interface**

    When the alarm button on the front panel of the machine is pressed or an alarm signal from a fire center is received by the rear panel, there is a short-circuit output.

12. **Zone 1-20 Alarm Signal Input Interface**

    Input signals from a fire center.

13. **Zone 21-40 Alarm Signal Input Interface**

Input signals from a fire center.

14. **Built-in Radio Module**

Please refer to the part of "Connection of Radio Module" for details of the radio module.

15. **Network Interface**

- Can connect LAN to realize remote control of the system via LAN.
- Connect to the Network PA System to play network audio.
- Connect and control the external sound source (PC1061 CD&MP3 player /PC1062 AM&FM tuner) regularly.

16. **Data Interface**

This interface is connected to the serial communication control card/serial communication expansion card of the company's central control system. The equipment partition (including partition switch, full zone switch and recovery), sound source selection and analog remote control 12 button trigger functions can be controlled through the central control host.

17. **Radio Signal Input Interface**

Can be connected to TUNER OUT of the radio module to input the radio signals to the machine for audio source playing.

18. **Telephone Interface**

Can connect the telecommunication signals to the machine from the IN interface, and connect other telephones from the OUT interface.

19. **Timing Power Linkage Short-circuit Output Interface**

Provide AC220V working power to external devices, which can control the output status via timing points.

20. **AC Fuse Holder**

Please replace the fuse with one of the same specification when it is damaged. There might be line faults in the machine in case of continuous blowout of the fuse. Please check the line and remove the fault before replacing it with a fuse of the same specification.

21. **AC220V Power Input Jack**

Connect the working power of the machine from this interface. Please insert the plug to the machine before connecting the power grid.