

PS1206/2406 6 ZONES PA AMPLIFIER-120W/240W

1. INTRODUCTION:

THE PS SERIES AMPLIFIER IS 6 ZONES MULTI-FUNCTIONAL PUBLIC ADDRESS SYSTEM, WITH OUTPUT POWER 120W(6X20W) OR 240W (6X40W). EACH ZONE HAS SEPARATE VOLUME CONTROL. THERE ARE 6 ZONE SELECTOR SWITCHES AND ONE ALL SELECTOR SWITCH. WHEN PRESS ALL, ALL ZONES ARE SELECTED AND THE OUTPUT IS AT MAXIMUM LEVEL. IT CAN PLAY MP3+FM AND CAN SET VARIOUS PRIORITY GRADES ON MP3 SCREEN. THIS SYSTEM HAS BUILT-IN CHIME AND SIREN WHICH ALSO CAN BE PROVIDED BY EXTERNAL MEMORY. IT CAN BE CONNECTED TO SEVERAL PM-01 MIC AND PM-06 MIC. CH1 TO CH4 ARE MIC INPUT, AND EACH INPUT HAS SEPARATE PHANTOM POWER SWITCH/GAIN CONTROL/VOLUME CONTROL/TONE CONTROL. CH5-CH6 ARE LINE INPUT, EACH INPUT HAS SEPARATE VOLUME CONTROL/TONE CONTROL. THAS EXTERNAL CONTROL CONNECTION FOR SIGNAL INPUT. IT HAS REC OUT/PRE OUT/AMP IN FUNCTION AND OVERHEAT AND OVERLOAD PROTECTION. IT HAS A 24VDC EMERGENCY POWER SUPPLYAND HAS POWER REMOTE CONTROL FUNCTION.



2. FRONT PANEL:

- 1. 4 MIC INPUT VOLUME /TREBLE/BASS CONTROLS:
- 2, 2 LINE INPUT VOLUME /TREBLE/BASS CONTROLS;
- 3、1 CHIME VOLUME CONTROL, 1 CHIME SWITCH;
- 4、1 TELEPHONE RINGER, 1 TELEPHONE VOLUME CONTROL,1 TELEPHONE SWITCH;
- 5. 1 SIREN VOLUME CONTROL, 2 SIREN SELECTOR SWITCHES;
- 6, 1 MASTER CONTROL;
- 7、6 ZONE VOLUME CONTROLS, 6 ZONE SELECTOR SWITCHES, 1 ALL SELECTOR SWITCH;
- 8 MP3+FM PLAYER WITH RECORDING PRIORITY SETTING;

3. REAR PANEL:

- 1、4 MIC INPUTS, 4 GAIN CONTROLS, 4 PHANTOM POWER SWITCHES:
- 2, 2 LINE INPUTS;
- 3, 1 REC OUTPUT, 1 PRE OUTPUT, 1 AMP INPUT;
- 4、1 PM-01 INPUT AND 1 24VDC OUTPUT;
- 5、1 PM-06 INPUT;
- 6 FM ANTENNA TERMINAL;
- 7. USB PORT AND SWITCH, EXTERNAL CONTROL CONNECTION FOR SIGNAL INPUT;
- 8, 6 ZONE OUTPUTS, 1 40HM OUTPUT;
- 9 RINGER AND TELEPHONE INPUT;
- 10、100V INPUT;
- 11, 24VDC INPUT, POWER REMOTE CONTROL;
- 12、AC INPUT;





1. PS-1206/2406 OPERATING INSTRUCTIONS

- ① The display of MP3+FM player: which is indicated the playing status.
- ② USB+SD/MMC: the play medium of MP3 player which can support SD card and USD play.
- The operation control key of MP3+FM player: the MP3 including operation of choose, play, stop, up, next, audio adjustment, switch recording and so on. And the FM player including operation of choosing frequency, volume adjustment and so on.
- ④ LEVEL potentiometer: which is used to adjust the level during recording.PEAK indicator light: it will be lighted when the signal level is too high. At this time please adjust the LEVEL potentiometer.
- Sone selector switch and indicator6 switches separately control 6 zones output. The indicator will showed on condition if need output. Pressing ALL CALL in dicated that 6 zones will output with maximum volume at the same time.
- 6 section volume switch control 6 zone volume. 1 section is the minimum, 6 section is the maximum.
- Output level indicator
- Signal input tone control

BASS: 100Hz +/-10dBv

TREBLE: 10KHz +/-10dBv

- 9 Signal input volume control
- (10) CHIME switch and volume control
- (f) Ring switch and volume control, call volume control.
- 2 kinds of alarm switch, alarm volume control.
- Overload protection indicator.
- (4) Master volume control.
- (b) POWER switch and indicator

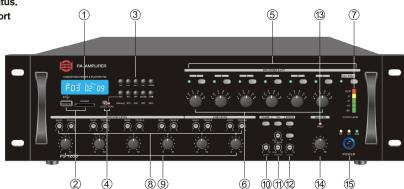
DC: DC supply indicator

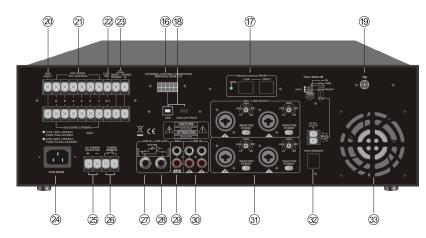
AC: AC supply indicator

S/B: Standby mode

- **® EXTERNAL CONTROL CONNECTION MESSAGE**
 - BANK 1-6 terminalThe external connection terminal which can connect external signal, and the key of REPEAT · START · STOP, to achieve the external key to control the DIGITAL MESSAGE play.
- Remote receiver PM-06 INPUT: Used to connect the output terminal of PM-06. LINK: Used to connect another PS-1206 for expanding.
- ® USB+3dialing: Used to update the digital message, CHIME, firm-mode of the leader. Please dial USB+3 to select the updating contents:CHI: CHIME sound of the leader MSG: DIGITAL MESSAGE of the leader PROG: Firm-mode and audio priority setting.
- (9) FM antenna terminal
- External 100V input terminal, has 2 kinds of operation mode
 - Expanding operation mode: BGM SIREN/CHIME/PAGING can process with different amplifier,
 - and when SIREN/CHIME/PAGING occurred in some zones, another zones can keep effective to play background music.
 - Single host mode: BGM SIREN/CHIME/PAGING share a amplifier for operation, and when SIREN/CHIME/PAGING occurred, another zones stay in a quiet state.
- 2) 6 zone output terminal
- 4ohm output terminal
- 23 Telephone broadcast and ring input terminal.
- AC power input terminal
- 25 DC power input terminal
- ② External supply switch terminal.
- $\ensuremath{\mbox{\sc down}}$ AMP IN, all input signal will be cut down when 6.3 Φ plug inserted.
- PRE OUT, using for connecting external expand amplifier, with only the background music output from native machine.
- 29 REC output, using for external recording.
- 30 LINE IN, using for external circuit input.
- MIC/LINE INPUTS, can be connected with MIC or circuit input.

 CAIN and adjust input conditions.
 - GAIN can adjust input sensitivity.
 - PHANTOM POWER is phantom power switch.
- PM-01 port can most extent connect with 3 PM-01 DC24V OUTPUT, if a emergency need broadcast through the zone broadcast terminal, it can control terminal with maximum volume output.
- 33 Heat sink fan.







SPECIFICATIONS

	PS-1206 / PS2406	Test Conditions	Standard reference	Remark
1	AC power	110-120V~,220-240V~ 50Hz/60Hz	230V~ 50Hz	±10%
2	DC power	24V DC	PS-1206: 10A PS-2406: 20A	
3	Input sensitivity	MIC (balanced)	-50dBV	±1.5dBV
		LINE (balanced)	- 10dBV	±1.5dBV
		Telephone emergency (balanced)	-12dBV	±1.5dBV
4	S/N ratio	MIC (20-20000Hz)	>65dB	±1.5dBV
		LINE (20-20000Hz)	>80dB	±1.5dBV
5	Bandwidth		80-16000Hz	3dBV
6	THD+N		<1%	
7	Tone control	BASS @ 100 Hz	±10dB	±1.5dBV
		TREBLE @ 10kHz	±10dB	±1.5dBV
8	Phantom supply	MIC (balanced)	24V	± 2.5V
9	REC OUT	50-16kHz @ THD<1%	1V Rating	±0.2V
10	PRE OUT	50-16kHz @ THD<1%	1V Rating	±0.2V
11	AMP IN	50-16kHz @ THD<1%	1V Rating	±0.2V
12	Power output	4Ω	PS-1206: 120W PS-2406: 240W	±5%
13	Zone power output	70 V or 100V	PS-1206: 6*20W PS-2406: 6*40W	±5%
14	Power consumption		PS-1206: 340W PS-2406: 680W	
15	MP3 Decoder(USB/SD)	USB/SD Device	Builds in the USB Full speed (12Mbps)Host control function Supports the USB mass storage class Supports SDHC memory cards Supports MMC,mini-SD and micro-SD cards Supports FAT32,FAT16 and FAT 12 file system Support MP3/wma/wav/aac format Supports the file size up to (2G-1) byte. Supports the device size up to FAT specification (2T byte).	
16	MP3 Encoder	USB/SD Device	Supports MP3 format encode (MPEG1 Layer3). Supports sample rate of 48 kHz. Encoding bit rate 320 kbps. Supports the writing of the encoded file to USB or SD card.	
17	FM		Frequence range :87.5 - 108.0 MHz STEP :100KHz MONO= 1, and L = R; Δ f = 75 kHz.VEMF = 1 mV. FMOD = 1 kHz, 75 μ de-emphasis	



PM SERIES P.A PAGING SYSTEM MIC

PM-01 PUSH TO TALK MICROPHONE

1. FUNCTION DESCRIPTION:

PM-01 IS DESKTOP MICROPHONE, WHICH SPECIALLY DESIGNED TO BE WORKED WITH PS-1206/2406 PAGING SYSTEM. IT HAS GENERAL MICROPHONE S FUNCTION; IT CAN SET MASTER OR SLAVE MODE, MASTER UNIT IS PRIORITY OVER SLAVE;

IT CAN SET CHIME AND PRIORITY BY DIP SWITCH; PS-1206/PS2406 CAN CONNECT UP TO 3 PM-01; WITH LED INDICATORS ON PANEL; POWER IS SUPPLIED BY PS-1206/PS2406, NO NEED EXTERNAL POWER SUPPLY;

2. CONTROL ELEMENTS ON FRONT AND REAR PANEL

- 1, 1-PUSH-TO-TALK SWITCH;
- 2 2 BUS CONNECTIONS, 1 LINK, 1 OUTPUT;
- 1 2P DIP SWITCH, CAN SET TALK PRIORITY AND SWITCH ON/OFF CHIME.
- 4 1 MASTER/SLAVE SELECTION SWITCH.





PM-06 REMOTE MICROPHONE FOR 6 ZONES

1. FUNCTION DESCRIPTION:

PM-06 IS DESKTOP PAGING MICROPHONE, WHICH SPECIALLY DESIGNED TO BE WORKED WITH PS-1206/2406 PAGING SYSTEM. IT CAN CHOOSE ANY ZONE OF 6 TO BROADCAST; BESIDES IT HAS ALL CALL FUNCTION. IT CAN SET MASTER AND SLAVE MODE, MASTER UNIT IS PRIORITY OVER SLAVE. THE SENSITIVITY OF MICROPHONE CAN BE ADJUSTED.EXCEPT INPUT FROM MICROPHONE, THERE IS ANOTHER RCA AUDIO INPUT. CONNECTED TO PS-1206/PS 2406 TO WORK BY CAT-5E;RS485 COMMUNI CATION CONTROL; AES DIGITAL AUDIO TRANSMISSION, UP TO 300M DISTANCE;BUILT-IN CHIME, WHICH CAN BE MODIFIED AND SET BY USB PORT; SUPPORT WIN XP/WIN 7/8.IT CAN CONTROL PS-1206/PS-2406 TO PLAY 6 MESSAGES, INCLUDING OPERATION OF PLAY, REPEAT, STOP; WITH LED INDICATORS ON PANEL;POWER IS SUPPLIED BY PS-1206/PS-2406, NO NEED EXTERNAL POWER SUPPLY;

2. CONTROL ELEMENTS ON FRONT AND REAR PANEL

- 1、SPEAK ZONES SELECTOR→INCLUDE 7 ZONE BUTTONS, ONE IS ALL CALL; AND 1-PUSH-TO-TALK SWITCH;
- 2. DIGITAL MESSAGE > INCLUDE 6 MESSAGE BUTTONS; 1 START/STOP BUTTON; 1 REPEAT/STOP BUTTON, USED TO CONTROL MESSAGE PLAY;
- 3、1 VR TO ADJUST MIC SENSITIVITY;
- 4、1 RCA JACK FOR AUX IN, CAN CONNECT EXTERNAL AUDIO, MIX WITH MIC SIGNAL;
- 5、2 BUS CONNECTION, 1 LINK, 1 OUTPUT, DAISY-CHAIN CONNECTION;
- 6, 12P DIP SWITCH, CAN SET TALK PRIORITY AND SWITCH ON/OFF DIGITAL MESSAGE;
- 7、1 DIAL SWITCH TO CHANGE FUNCTION FOR USB PORT: UPDATE CHIME OR UPDATE PM-06 FIRMWARE;



PM SERIES P.A PAGING SYSTEM MIC

1. PM-01 OPERATING INSTRUCTIONS

- GOOSE NECK microphone base: can use for the goose neck microphones of different lengths
- ② Talk button and indicator. The TALK indicator showed on when pressing the TALK BUTTON. BUSY OFF condition showed it is available to speak.

BUSY ON condition showed it is unavailable to speak.

3 2PIN DIP switch,

CHIME ON, has the prelude sound when pressing TALK button. CHIME OFF, has no prelude sound when pressing TALK button. PRIORITY ON, has the priority function when pressing TALK button. PRIORITY OFF, has no priority function when pressing TALK button.

- Master and Slave mode to select switch
 Master mode, has the speak priority function when numbers
 of PM-01 connected. Slave mode, only available after BUSE
 light showed off when numbers of PM-01 connected.
- ⑤ LINK---OUTPUT:

LINK: Used to connect the output terminal of another PM-01.

OUTPUT: Used to connect the LINK terminal of another

PM-01 or INPUT terminal of PS-1206/2406



2. PM-06 OPERATING INSTRUCTIONS



- ① GOOSE NECK microphone base: can use for the goose neck microphones of different lengths
- ② Indicator

POWER: power indicator

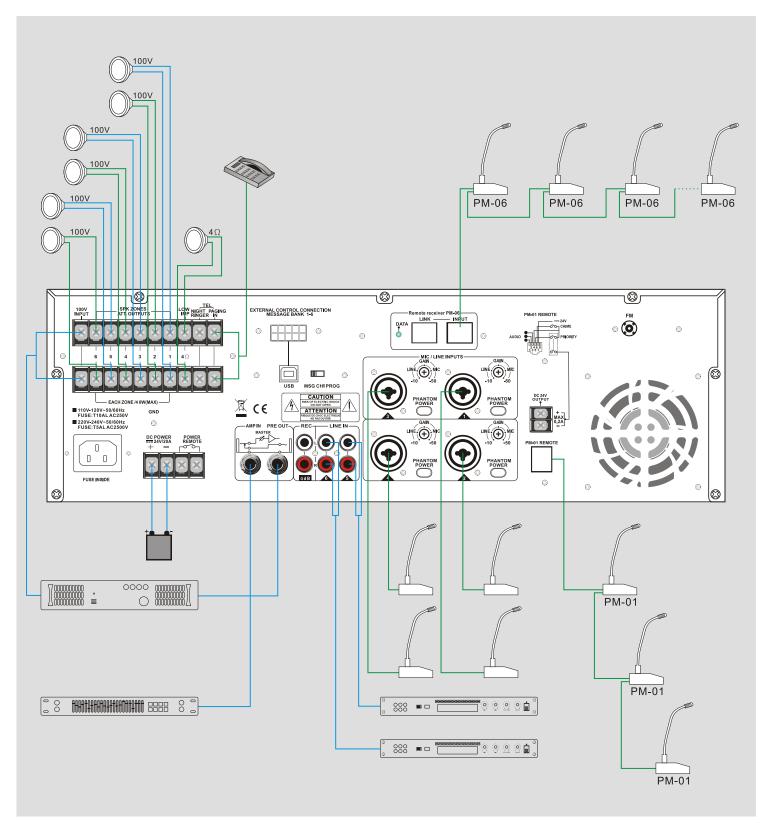
SEND: communication indicator, which will be flash when getting an effective call BUSY: busy condition indicator, which will be showed on when TALK, MESSAGE button is unavailable.

- ③ MESSAGE BANK: button for message selection which can use for choosing audio message in PS-1206 to play. The button light will be on when the message is selected.
- ④ DIGITAL MESSAGE: digital message control button, which can use for controlling message play, repeat, stop operation. It is available only under the condition that the busy indicator showed off.
- (5) 5 SPEAKER ZONES SELECTOR:
 - 1.2.3.4.5.6 buttons are used for selecting the zone which is needed to speak. The button light will on when the zone is selected.
 - ALL CALL used to select all zones and adjust the volume to maximum condition to play. TALK button: Apply for playing. Only is available when the busy indicator showed off
- **© USB+ SWITH:**
 - USH: Connecting computer to update CHIME or firm-mode.
 - SWITH: Used to switch the contents of USB updating.
- 7 1 2P DIP switch:
 - MSG---ON/OFF: For DIGITAL MESSAGE function; ON→available; OFF→unavailable TALK—SLAVE/PRIORITY: It can separate the master and slave when numbers of PM-06 are connected together, and the master is priority over than the slave.
- **® LINK---OUTPUT:**
 - LINK: Used to connect the output terminal of another PM-06.
 OUTPUT: Used to connect the LINK terminal of another PM-06 or INPUT terminal
- of PS-1206/2406

 ② AUX IN -10dB: External audio input. Transmit the speak audio and MIC signal mix audio to the host.
- 10 AUDIO OUT: Adjust MIC sensitivity.



CONFIGURATION EXAMPLE





PS1206/2406 BLOCK DIAGRAM

