



PROFESSIONAL MIXER POWER AMPLIFIER

PA-41000/40600



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NF02571-1.0

www.show-pa.com

IMPORTANT!

**Please read this manual carefully before operating
this unit for the first time.**

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4. TECHNICAL SPECIFICATION

MODEL	PA-41000/40600
RMS /MAX POWER	PA-41000:250W RMS per channel PA-40600:150RMS,per channel
POWER INPUT	AC: 110-120V 50/60Hz AC: 220-240V 50/60Hz
FREQUENCY RESPONSE	50Hz~17kHz (±3dB)
INPUT IMPEDANCE/SENSITIVITY	MIC1: BAL: -51dBv/UNBAL : -45dBv LINE: BAL: -10dBv/UNBAL: -6dBv AUX: UNBAL -10dBv
TONE CONTROL	BASS: ±10dBv (100Hz) TREBLE: ±10dBv (10Hz)
DISTORTION(THD)	<0.1%
S/N RATIO	AUX ≥90dB MIC ≥80dB LINE ≥90dB MAIN IN ≥90dB
CONTROLLING KEY	INPUT 1 LEVEL CONTROL INPUT 2 LEVEL CONTROL INPUT 3 LEVEL CONTROL LINPUT4 LEVEL CONTROL TINE CONTROL (BASS, TREBLE) MASTER CONTROL SIREN SWITCH CHIME SWITCH AC SWITCH
OUTPUT IMPECANCE	4Ω,8Ω
LINE OUTPUT	25V,70V,100V
SIREN FUNCTION	YES
TELEPHONE PAGING LELECT FUNCTION	YES
INPUT1 PRIORITY	YES
4-TONE CHIME	YES
WEIGHT	PA-41000: 25.28kg PA-40600:22.27kg
DIMENSION	483mmx410mmx133mm
COLOR	BLACK

SAFETY RELATED SYMBOLS



This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.



This symbol, wherever used, alerts you to important operating and maintenance instructions. Please read.



Protective Ground Terminal



AC mains (Alternating Current)



Hazardous Live Terminal



ON: Denotes the product is turned on.



OFF: Denotes the product is turned off.

WARNING

Describes precautions that should be observed to prevent the possibility of death or injury to the user.

CAUTION

Describes precautions that should be observed to prevent damage to the product.



Disposing of this product should not be placed in municipal waste and should be separated for separate collection.

WARNING

• Power Supply

Ensure that the mains source voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user.

Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

• External Connection

Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice from a registered electrician.

• Do Not Remove Any Covers

Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed.

Covers should be removed by qualified service personnel only.

No user serviceable parts inside.

• Fuse

To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

• Protective Ground

Before turning the product ON, make sure that it is connected to Ground. This is to prevent the risk of electric shock.

Never cut internal or external Ground wires. Likewise, never remove Ground wiring from the Protective Ground Terminal.

• Always install in accordance with the manufacturer's instructions.

To avoid the risk of electric shock and damage, do not subject this product to any liquid/rain or moisture. Do not use this product when in close proximity to water.

Do not install this product near any direct heat source.

Do not block areas of ventilation. Failure to do so could result in fire.

Keep product away from naked flames.

IMPORTANT SAFETY INSTRUCTIONS

Read these instructions

Follow all instructions

Keep these instructions. Do not discard.

Heed all warnings.

Only use attachments/accessories specified by the manufacturer.

• Power Cord and Plug

Do not tamper with the power cord or plug. These are designed for your safety.

Do not remove Ground connections!

If the plug does not fit your AC outlet seek advice from a qualified electrician.

Protect the power cord and plug from any physical stress to avoid risk of electric shock.

Do not place heavy objects on the power cord. This could cause electric shock or fire.

• Cleaning

When required, either blow off dust from the product or use a dry cloth.

Do not use any solvents such as Benzol or Alcohol. For safety, keep product clean and free from dust.

• Servicing

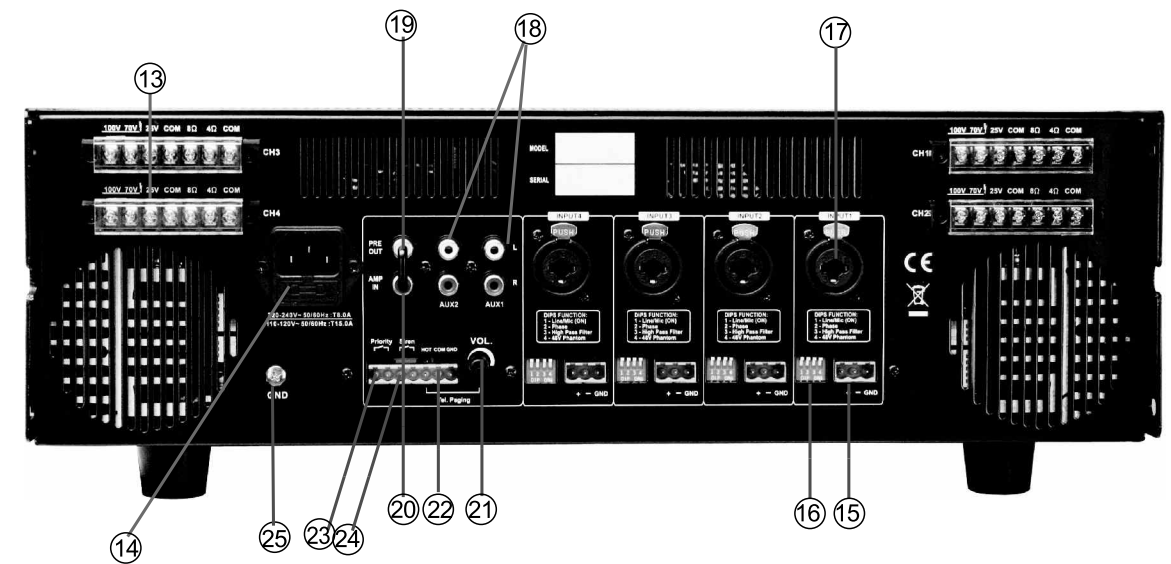
Refer all servicing to qualified service personnel only.

Do not perform any servicing other than those instructions contained within the User's Manual.

TABLE OF CONTENTS

1. Features.....	3
2. Description.....	4
3. Front Panel and Rear Panel.....	6
4. Technical Specification	8

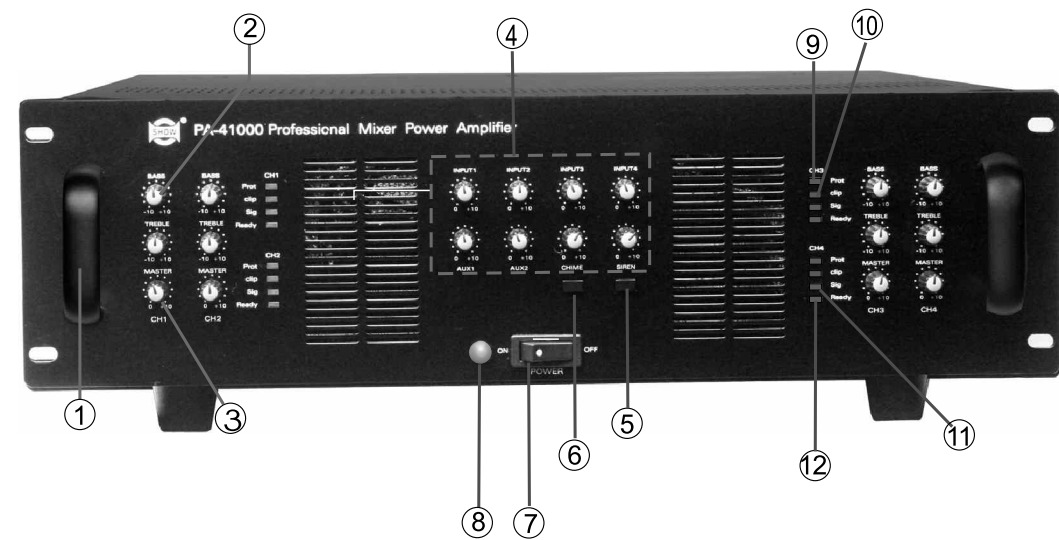
3.2 The Rear Panel



- ⑬ **Output terminal**
This terminal provides five groups of outputs: 4Ω, 8Ω, 25V, 70V and 100V.
- ⑭ **AC out let**
Ac power input
- ⑮ **Phonex jack**
This jack inputs balanced signals.
- ⑯ **Dip switch**
- Set the switch in the position ON and it inputs the signals from MIC. Set it in the position OFF and it inputs the signals from LINE.
 - Set the switch in the position OFF and the signal keeps the same. Set the switch in the position ON and signals reverse 180°.
 - Set the switch in the position OFF, then signals will not go through the high pass filter. Set the switch in the position ON, then signals will go through the high pass filter.
 - Set the switch in the position OFF, then the phantom power is turned off. Set the switch in the position ON, then the phantom power is turned on.
- ⑰ **Combo jack**
This jack inputs balanced and unbalanced signals.
- ⑱ **AUX input jack**
This jack inputs AUX signals.
- ⑲ **PRE OUT jack**
This jack outputs pre-signals to other amplifiers.
- ⑳ **AMP IN jack**
This jack inputs the outer audio signals to the unit.
- ㉑ **Call volume knob**
The knob can be used to set the input level of call and siren signals.
- ㉒ **Urgent call jack**
It can be used to input urgent signals and call broadcast signals.
- ㉓ **Priority remote control switch**
This switch can be used to set the priority function in a long distance.
- ㉔ **Siren remote control switch**
This switch can be used to set the siren in a long distance.
- ㉕ **GND**
It connects the unit to ground

3. Front Panel and Rear Panel

3.1 The Front Panel



① **Handle**

It is used to carry the unit.

② **BASS and TREBLE knobs**

It is for the convenience of setting optimum sound.

③ **Master volume knob**

It sets the input level of all channels.

④ **Volume input knob**

It sets the input level of each channel.

⑤ **Siren switch**

If emergency happens, the button can be pushed for siren.

⑥ **Chime switch**

This switch turns on or off chime of the unit.

⑦ **Power switch**

This switch turns ON/OFF power for the unit.

⑧ **Power LED**

When power is on the led lights up

⑨ **Prot LED**

If the unit has problem the led lights up

⑩ **Clip LED**

If the unit output the led lights up

⑪ **Signal LED**

when signals come the led lights up

⑫ **Ready LED**

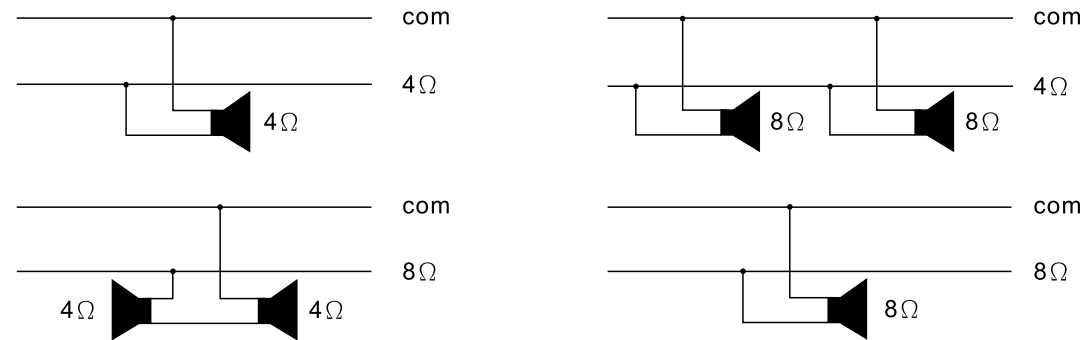
when the units has no problem
the led lights up

1. Features

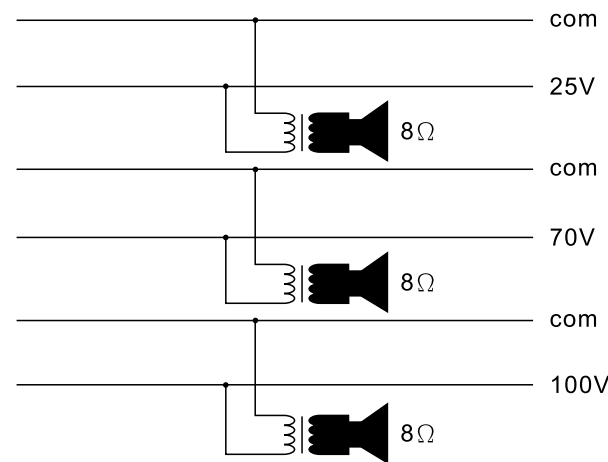
- Low resistance (4Ω , 8Ω) output
- Fixed voltage (25V, 70V and 100V) output
- Automatic broadcast function for emergency
- Call broadcast function
- Four chimes
- Four sirens
- Four groups of COMBO inputs with balanced PHONEX input
- RCA jack and PHONEX jack for input
- Pre-output
- Rear input
- Input 1 with mute function
- Bass and Treble control
- Master volume control for the unit, and individual volume control for each input
- 3H widened cabinet design
- Fan for heat dissipation
- Perfect circuit protection: over-load protection, over current protection, over voltage protection and short-circuit protection
- LED states indication
- Four channel output

2. Descriptions

2.1 Low resistance (4Ω , 8Ω) output is for the convenience of connecting low impedance speaker.



2.2 Fixed voltage (25V, 70V and 100V) output is for the convenience of connecting speaker in a long distance.



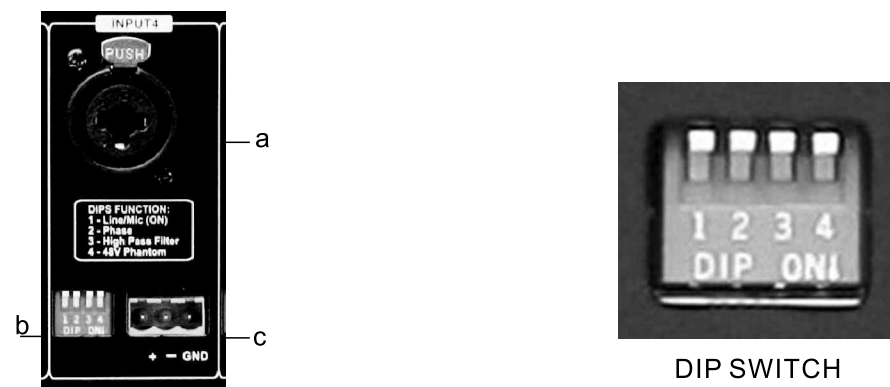
2.3 Automatic broadcast function for emergency: when the urgent signal is input or siren starts, each paging will broadcast the signal automatically.

2.4 Call broadcast: the call broadcast jack provides balanced signal input and the balanced signal input can decrease HUM noise. It can mute signals from INPUT2, INPUT3, INPUT4, AUX1, AUX2.

2.5 Chime: when the chime starts, it can mute the background music. At this time, microphone can be used for speech and can mute signals from the following input of the microphone: INPUT2, INPUT 3, INPUT4 and INPUT5.

2.6 Sirens: when emergency happens, siren can be started.

2.7 The unit has four groups of COMBO inputs, balanced PHONEX input. Dip switch can be selected as requirement for the following purposes: LINE input, MIC input, reverse phase, hi-pass filter, 48V phantom power.



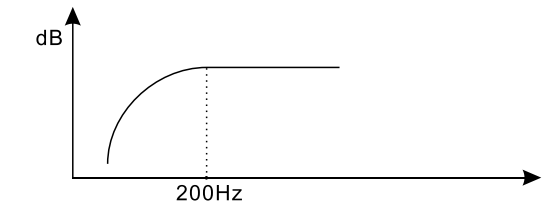
2.7.1 Combo jack input

2.7.2 Dip switch

a. When the switch is set in the position ON, it inputs the high sensitive signal and the signal from microphone. When the switch is set in the position OFF, it is the LINE input, e.g. CD, tuner, MP3, etc.

b. When the switch is set in the position ON, its output reverses 180° .

c. When the switch is set in the position ON, signals output will be processed by high pass filter. All frequencies under 200Hz will be deleted.



d. When the switch is set in the position ON, it provides 48V phantom voltage to condenser microphone.

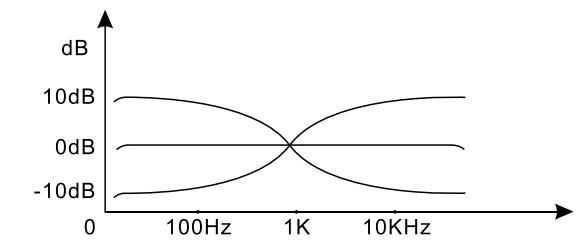
2.7.3 PHONEX inputs balanced signals.

2.8 PRE OUT function: the signal of pre-amplifier can be amplified by sending it to the power amplifier.

2.9 Amp input: the power amplifier can accept the signals of the pre-amplifiers.

2.10 INPUT1 can mute INPUT2, INPUT3, INPUT4 and AUX1, AUX2

2.11 BASS and TREBLE control: BASS 100Hz, ± 10 dB, TREBLE 10kHz, ± 10 dB.



2.12 Each input has volume control and the master volume control sets at each channel

2.13 H widened cabinet design.

2.14 Fan is for heat dissipation. The fan speed changes with the variation of temperature. When temperature is above 50°C , the fan works more quickly.

2.15 Perfect protection circuit: The circuit has the protective functions of over load, over current, over voltage and short-circuit.