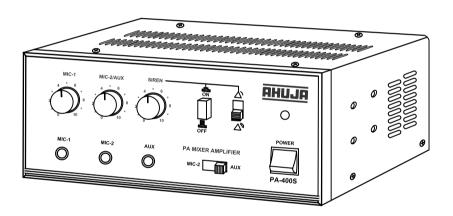


# **PA Mixer Amplifier**

40W RMS / 50W Max.

# **PA-400S**



Operates on 12V Car Battery

### **Powerful Sound System for:**

- Crowd Control
- Police Patrol Vehicles
- Ambulances
- Emergencies
- Announcements / Publicity
- Electioneering

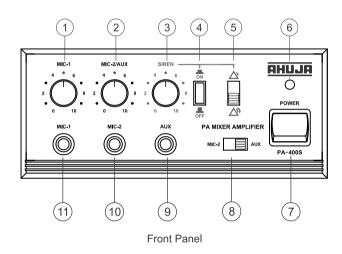


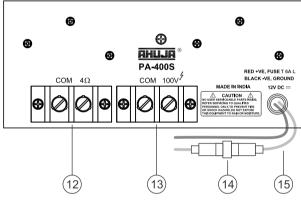
- Thank you for purchasing the AHUJA PA Mixer Amplifier.
- Please read this manual thoroughly before making connections and turning on the power. Following the instructions
  in this manual will enable you to obtain optimum performance from your new AHUJA PA Mixer Amplifier.
- Please retain this manual for future reference.

# **FEATURES**

- Easy to install in any vehicle.
- Compact Rugged Construction with Front Panel Controls.
- Two-Mic Inputs, matchable to all low impedance microphones. AUX Input for connecting to any MP3/CD Player.
- Two-Tone siren selectable through a switch.
- Output impedance of strip (COM  $4\Omega$ ) is Auto-Matching to speakers with  $4\Omega$  to  $16\Omega$  impedance.
- 100V Output on two pin red terminal strip for use with LMT.

## FRONT & REAR PANEL CONTROLS & FEATURES





Rear Panel

- 1. MIC-1 Volume Control
- 2. MIC-2/AUX Volume Control
- 3. SIREN Volume Control
- 4. SIREN ON/OFF Push Switch
- 5. TONE Selector Switch
- 6. POWER LED

This LED glows when the amplifier is switched 'ON'.

#### 7. POWER ON/OFF Switch

Push the top part of the knob to switch the amplifier ON. Push the bottom part of the knob to switch the amplifier OFF.

8. MIC-2/AUX Selector Switch

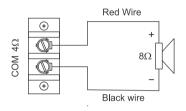
- 9. AUX Input Jack Socket
- 10. MIC-2 Input Jack Socket
- 11. MIC-1 Input Jack Socket
- 12. Speaker Terminal Strip ( $4\Omega$ -16 $\Omega$ ) For connecting low impedance speakers.
- **13. Speaker Terminal Strip (100V)**For connecting speaker with line matching transformers.
- 14. Fuse Rating 6 Amp. 250V (T 6A L)
- 15. Battery Connection Wires

Red Wire fitted with In-line fuse for connection to positive (+) terminal. Black wire connection to negative (-) terminal.

#### **OPERATING INSTRUCTIONS**

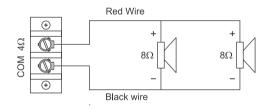
# When one horn speaker with $8\Omega$ impedance is to be installed:

When a horn speaker like SUH-25 / UHC-25 with  $8\Omega$  impedance is connected to COM- $4\Omega$  tap (this is an under loading condition), the power output delivered to the horn speaker will not exceed 20-25 watts, which is well within the safe handling capacity of the unit horn. See sketch below:



# Installing two horn speakers (each having $8\Omega$ impedance:

These must be connected in parallel as shown in the sketch below. The result impedance will be  $4\Omega$ . When connected to COM-4 $\Omega$  terminal PA-400S will deliver full 40 watts power, feeding each horn speaker with 20 watts, which is well within their handling capacity.



Resultant impedance =  $8\Omega$  / 2 =  $4\Omega$ 

# Connecting any other types of loudspeaker:

Other types of loudspeakers can be operated with PA-400S. For instance one AU-40 (16 $\Omega$  impedance) fitted with WFA / WFB horn will work satisfactorily when connected to COM and  $4\Omega$  terminal. Similarly two or even up to four of AU-40 connected in parallel to COM and  $4\Omega$  will also work satisfactorily.

# **Output Amplification:**

Output from a MP3/CD Player can be fed to PA-400S, through AUX Jack provided at the front. For this operation, MIC-2 / AUX selector switch be kept at AUX position.

## **Microphone Operation:**

All Ahuja microphones can be used with PA-400S. For crowd control and operation in noisy surroundings Ahuja MM-60M is the most suitable and is recommended. It has following special features:

- 1. It gives distinctive clean sound even when used in close-to-lip position, which is an important requirement in noisy surroundings.
- 2. The howling and feedback is suppressed.
- 3. It is provided with press-to-talk switch.

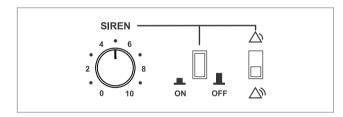


#### **Siren Section:**

Two tone siren has been provided. The two tones are whaling for police jeeps and yelping for ambulances. A selector switch has been provided to select the tone of the siren.

### **Siren Operation:**

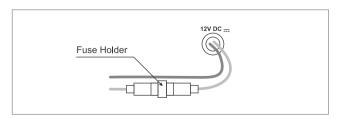
To activate the siren:



- 1. Put the power switch to ON position.
- 2. Put the siren switch to ON position.
- 3. Select the siren tone using the tone selector switch.
- 4. Adjust the volume level.

### **Fuse Replacement:**

A 6 Amp fuse has been provided with in-line fuse



holder to protect the amplifier against short circuit. In case fuse blows replace one with the same rating.

#### Safety Instructions

**Read the Instructions:** Please read all the instructions in this section carefully before installation or use of the product. All the safety instructions must be followed.

**Retain the Instructions:** Please retain this Instruction Manual for future reference.



This symbol, wherever it appears, alerts you to the presence of uninsulated hazardous voltage that may be sufficient to constitute a risk of electric shock. External wiring to any terminal marked with this symbol must be done by a trained and instructed person only.



This symbol, wherever it appears adjacent to a component, alerts you that the concerned component can only be replaced by another of the exact same specifications.

#### **WARNING**

To reduce the risk of electric shock, do not remove the top cover.
 No user serviceable parts inside. Refer all servicing to qualified personnel only.

 Before replacing any fuse, make sure the set is switched off and disconnected from the power source. Replace a fuse only with another of exactly same specification.

#### **CAUTIONS**

**Water & Moisture:** To reduce the risk of fire or electrical shock, do not expose this set to rain or moisture. Do not use this set near water or in a wet location. Do not keep any object filled with liquid, such as a vase, on top of this set.

**Power Source:** Use only with 12V DC battery. This set uses negative ground system. Connect battery positive to the red wire shown on page 2, and battery negative to the black wire.

Stability: Fix and clamp the set securely before use.

#### **SPECIFICATIONS**

Power Output	50 Watts RMS Max., 40 Watts RMS at 10% THD, 35 Watts RMS at 5% THD (Rated)
Input / Sensitivities	$2 \times \text{Mic } 1\text{mV}/4.7\text{k}\Omega$ , $1 \times \text{Aux } 100\text{mV}/330\text{k}\Omega$ Impedance
Frequency Response	100Hz-10,000Hz ±3dB
Signal to Noise Ratio	60dB
Output Impedance	$4\Omega$ (Auto matching 4 to 16 $\!\Omega$ ), $$ 100 V Line (for use with LMT)
Sirens	Built-in operation through a push button switch. Two Tones available: Whaling & Yelping, selectable through a selector switch.
Power Supply	12V DC (Car Battery), Standard Voltage 13.2V
Protection	DC: Fuse 6Amp. ( T 6A L)
Average Battery Consumption	2.5 Amps
Dimensions	W180 × H80 × D240 mm
Weight	2.10 kg approx. (with clamps)

### RECOMMENDED OPTIONAL ACCESSORIES





Design and Specifications are subject to change without notice owing to continuous product up-gradation. Technical specifications are subject to production tolerances.

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