

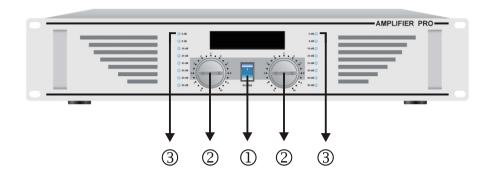
# INSTRUCTION

# **AMPLIFIER**

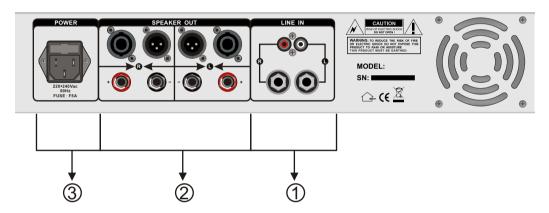
- PRO-480
- PRO-600
- PRO-1000

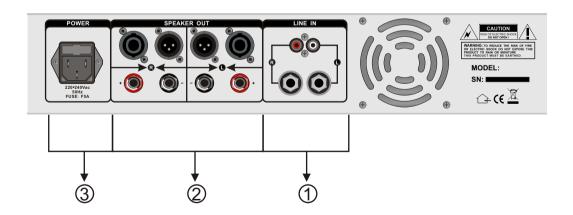


# FRONT PANEL



# **REAR PANEL**





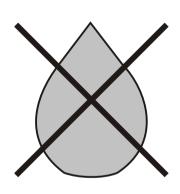
# **MAGNETIC FIELD**

CAUTION! Do not locate sensitive highgain equipment such as preamplifiers or tape decks directly above or below the unit. This unit has a high power, it has a strong magnetic field which can induce hum into unshielded devices that are located nearby. The field has strongest spots just above and below the unit. Locate the amplifier at the bottom of the rack and the preamplifier or other sensitive equipment at the top.

# **CAUTION**

RISK OF ELECTRIC SHOCK DO NOT OPEN

To prevent electric shock, do not remove top or bottom covers. No user serviceable parts inside.
Refer servicing to qualified servicing personnel. Disconnect power cord before removing back panel cover to access gain switch.



# WARNING

To reduce the risk of electric shock, do not expose this equipment to rain or moisture!

# **WATCH FOR THESE SYMBOLS:**



The exclamation point triangle is used to alert the user to important operating or maintenance instructions.



The lighting bolt triangle is used to alert the user to the risk of electric shock.

## FRONT PANEL

#### 1. POWER SWITCH WITH POWER ON LED

On-off switch, LED indicating when the amplifier is switched on.

#### 2. INPUT ATTENUATORS

Input gain attenuator potentiometers. Attenuate the level of the external signal sent to the respective channels of the amplifier. Continuously variable values, expressed in dB, are between:

Fully closed (the signal is completely attenuated and therefore not sent to the channel of the amplifier) and fully open, i.e. nominal level (the signal is not attenuated in any way, so is fed to the amplifier channel at the same level at which it arrives on input).

#### 3. LED DISPLAY

Displays the Master output level.

## **REAR PANEL**

#### 1. LINE IN

### RCA and TRS connection

These connectors are connected in parallel with the respective TRS or RCA connectors.

This enables a second unit (e.g. another amplifier) to be daisy-chained to the first. It is thus possible to power several amplifiers using the same signal, forming more powerful sound reinforcement systems.

#### 2. SPEAKER OUT

BINDING POSTS SPEAKON and XLR connection (minimum impedance 4  $\Omega$ ).

NOTE: To avoid possible damage to the loudspeaker enclosures, only connect enclosures or speaker systems compatible with the power load and impedance limits indicated for the amplifier (refer to Technical Specifications chapter for your specific amplifier model.)

#### 3. POWER

Power connector.

#### Connection to the mains supply

Before connecting the amplifier to the mains socket, always make sure that:

- •The electric system and mains socket have an adequate grounding, compatible with the safety norms ( if you are uncertain, consult specialized personal ).
- The mains voltage corresponds to that shown on the rear of the unit (an allowance of up  $\pm$  /  $\pm$  10% is accepted).
- •The power cord is not damaged and that no bare wires.
- •The ON / OFF switch is in the OFF position.
- •Make sure the amplifier is also off before disconnecting the power cord from the mains socket.

### Switching on and off

In your sound reinforcement system, always switch on the amplifier after all the other equipment and always switch it off before anything else, if possible with the gain controls set at minimum: this will avoid annoying and sometimes dangerous signal peaks.

#### Installation and use

Your LIQUID POWER amplifier generates decidedly high power, so install it in locations with ensure correct air circulations. Avoid long exposure to direct sunlight, sources of strong heat, powerful vibrations, very dusty or Particularly damp surroundings or (even worse) rain: this will avoid possible faulty operation, deterioration or even electric shocks and fires.

#### **Installation and use (cont.)**

The air for cooling the unit is forced in though the vents in the front panel and out though those on the rear panel, so make certain that there sufficient space round the amplifier to allow adequate air circulation.

If racks or flight-cases are used, make sure that airflow is unobstructed: don not install the amplifiers in racks or flight-cases with closed backs.

Since part of the heat is dissipated via the metal bottom of the amplifier, it is advisable to install the amplifiers with at least one rack unit space between them.

### **Audio connections**

Remember to always connect and disconnect other units with the amplifier switched off.

Always use good quality cables of the appropriate type, opportunely described in the connection cables chapter of this manual. Take care of your connector cables, a very frequent cause of small/big problems. Check their condition frequently. Always grip them by the connector, avoid pulling them forcefully and wind them without forming knots or sharp bends: they will last longer this way and be more reliable, which is a definite advantage.

#### Preventing or identifying interference

First of all, check that the amplifier is installed in a place free from industrial of RF (radio frequency) Interference.

Avoid installing your equipment very near radio or TV sets, mobile phones, etc., as these can cause noisy interference.

When connecting the other components of your sound system, watch out for the so-called round loops, which could cause hum and jeopardize the amplifier excellent signal-to-noise and low distortion characteristics.

The best way (even if not always feasible) to avoid ground loops is to connect the electric ground of all the equipment to a single central point (the so-called star system). In this case, the central point in sound systems is the mixer.

To help identify the cause of any interference, connect the various sections of the mixer to the rest of the equipment in the following order, listening to the resultant sound as your proceed with connection:

Outputs: amplifiers + loudspeaker enclosures (master outputs);

Amplifiers + monitors (AUX outputs);

Effects (AUX outputs or EFF send/return);

Inputs: instruments with line signals (keyboards, samples, recorders, etc.);

Microphones (lastly and one by one).

# **SPECIFICATIONS**

IMPEDANCE:  $4-8\Omega$ 

Model Specifications	PRO-480	PRO-600	PRO-1000
Rated output power Twin channel watts @4 Ω	2 x 240W@4Ω	2 x 300W@4Ω	2 x 500W@4Ω
Total harmonic distortion (20~20000Hz)	≤0.5%	≤0.5%	≤0.5%
Frequency response (20~20000Hz)	Under 0.5dB	Under 0.5dB	Under 0.5dB
Noise	≥98dB	≥98dB	≥98dB
Channel isolation (f=1KHz)	≥82dB	≥98dB	≥98dB
Input level	≥0dB	≥0dB	≥0dB
Input impedance	≥10K Ω	≥10K Ω	≥10K Ω
Power requirements	230V, 50~60Hz	230V, 50~60Hz	230V, 50~60Hz



AMPLIFIER

