

# CLEVER

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## CPA 40 Two Channel Amplifier

Order code: **GRAM01**

**USER MANUAL**

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**WARNING**



**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY  
BEFORE YOUR INITIAL START-UP!**

	<p><b>CAUTION!</b></p> <p><b>Keep this equipment away from rain, moisture and liquids.</b></p>	
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**SAFETY INSTRUCTIONS**

Every person involved with the installation, operation & maintenance of this equipment should:

- Be competent
- Follow the instructions of this manual

	<p><b>CAUTION! TAKE CARE USING THIS EQUIPMENT! HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!</b></p>	
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Before your initial start-up, please make sure that there is no damage caused during transportation. Should there be any, consult your dealer and do not use the equipment.

To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.

Please note that damages caused by user modifications to this equipment are not subject to warranty.

**IMPORTANT:**

**The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.**

- Never let the power-cable come into contact with other cables. Handle the power-cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Do not carry the unit with only one handle. Always carry using both handles.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the mains supply voltage is between 110V/240V.
- Make sure that the power-cable is never crimped or damaged. Check the equipment and the power-cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately.  
Have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- WARRANTY; One year from date of purchase.

**OPERATING DETERMINATIONS**

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void.

Incorrect operation may lead to danger e.g.: short-circuit, burns, electric shocks.  
Do not endanger your own safety and the safety of others!  
Incorrect installation or use can cause serious damage to people and property.

This amplifier was designed specifically for use in permanent audio installations, where reliability and premium sound quality are a must. Highly rugged construction and high efficiency design make this amplifier perfect for continuous duty applications in situations where power will be left on for indefinite periods of time.

This amplifier is warranted from defects for one year from the date of purchase. Should your amplifier require service, either within or beyond that warranty period, please contact your Prolight Dealer.

This unit includes a host of features, along with an impressive list of specifications, which are detailed over the next pages. Please take the time to read this document completely prior to installation of this product.

### **Features**

- Ultra compact Class D amplifier
- Stereo 2 x 20W 4ohms
- Rugged steel chassis with wall/panel mount ears
- High efficient about 85%, low heat-generation technology
- Environment-protection green technology to save power consumption
- Stereo RCA unbalanced line level inputs with gain control
- Independent L/R volume controls
- Independent bass and treble controls
- Stereo left & right channel outputs
- Built-in intelligent limiter to eliminate the earth line noise when connected with laptop or MP3
- Automatic standby when no input signal is detected for 5 minutes
- Automatic power on when input signal is detected
- Switch on delay for added speaker protection
- Convenient push terminal speaker outputs
- Overload, high temp and short-circuit protection
- Supplied with DC 24V power adaptor

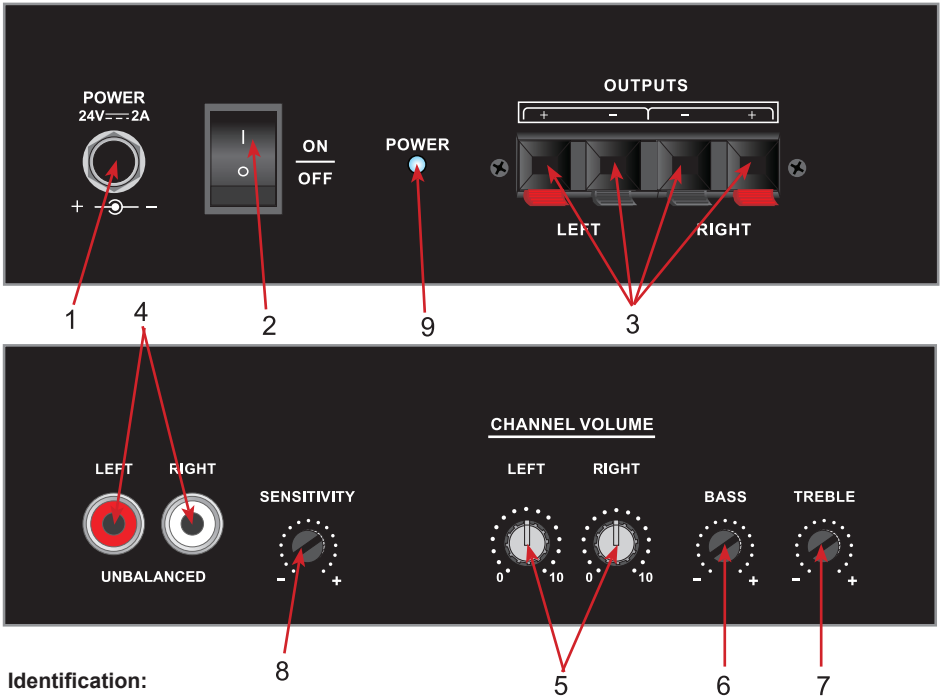
### **Specifications**

- Power Output: Both channels 20W x 2 driven at 4Ω, 10W x 2 driven at 8Ω
- Frequency Response: 50Hz ~ 18KHz
- S/N Ratio: <85dB
- Total Harmonic Distortion (THD): 0.1% @1kHz, 1/3 power
- Controls: Power, input sensitivity, gain control, treble and bass
- Protection: Overload, high temp and short circuit
- Power requirements: DC 24V, AC (adaptor supplied)
- Dimensions: 56mm (H) x 230mm (W) x 115mm (D)
- Weight: 1kg

### **Applications**

- Installation behind flat panel monitors to power local speakers
- Kiosk and retail displays
- Powering additional zones on an existing distributed audio system
- Audio program material for digital signage installations
- Classroom installations, especially where video projectors are used
- Gaming & Vending machines

**Overview:**



**Identification:**

1. **DC Power Input** – Supplied AC adaptor provides 24VDC, 3A.
2. **Power ON/OFF Selector** – Turns amplifier power on or off. When on, the blue LED immediately to the right of this switch will illuminate.
3. **Speaker Output Connection** – Spring Clips
4. **Unbalanced Input Connection** – Accepts standard line level signal from conventional consumer devices such as CD/DVD players, television monitors, tape decks and tuners. Note that stereo operation requires connection to left and right inputs.
5. **Left / Right Channel Level Controls** – Independent controls set output level for the amplifier.
6. **Bass Control** – This control adjusts low frequencies centered at 100Hz, at a rate of  $\pm 10\text{dB}$ .
7. **Treble Control** – This control adjusts high frequencies centered at 10,000Hz, at a rate of  $\pm 10\text{dB}$ .
8. **Sensitivity control** – Gain control
9. **Power LED** – Indicates the amplifier is powered on

### Inputs

Short cables runs improve the sound quality remarkably. Input cables should be short and direct, since high frequencies will mostly be absorbed if the cables are unnecessarily long. Besides that a longer cable may lead to humming and noise problems. If the cable runs are unavoidable, you should use balanced cables.

### Outputs

The high damping factor of your amplifier supplies a clear sound reproduction. Unnecessarily long and thin cables will influence the damping factor and thus the low frequencies in a negative way. In order to safeguard good sound quality, the damping factor should lie around 50. The longer a cable has to be the thicker it should be.

### Connection To The Mains

The CPA 40 requires a 24V DC power source (mains power supply included). Do not connect the CPA 40 directly to the mains voltage outlet. If a replacement PSU is required contact your local Prolight dealer.

### Operation

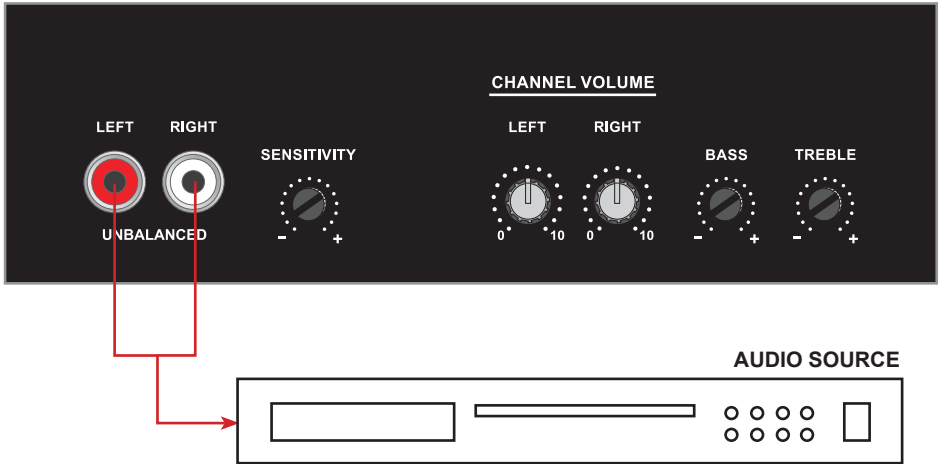
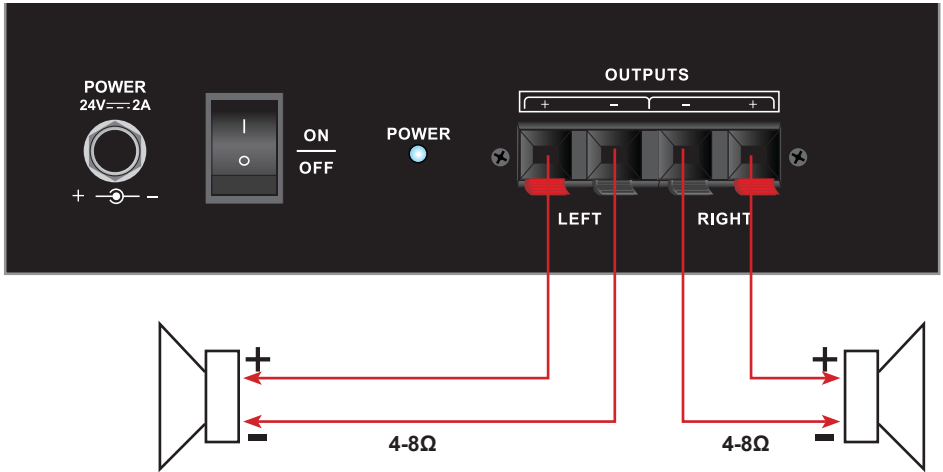
After having connected your amplifier to the mains, turn both gain controls counter clockwise to the “min” position. The last product to be switched on is the amplifier.

If you want to switch off the system, **switch off the amplifier first** in order to avoid acoustic shocks on the speakers.

### Problem Chart

PROBLEM	CAUSE	REMEDY
No Power	The power cord is not connected	Check the power cord and any extension cables
No Sound	The power cord of the respective product is not connected properly or not at all.  The connection socket or the plug is dirty.	Check the power cord and if the plugs are properly connected with the sockets.  Clean the socket and/or the plug.
Noise	The input signal is too strong	Reduce the input signal via the gain control.

Connections:





**CAUTION - DANGER TO LIFE  
DISCONNECT FROM THE MAINS BEFORE  
STARTING MAINTENANCE OPERATION**



**Cleaning and Maintenance**

We recommend a frequent cleaning of the product. Please use a soft lint free and moistened cloth. Never use alcohol or solvents.

There are no serviceable parts inside the product except for the fuse. Maintenance and service operations are only to be carried out by authorised dealers.

**Replacing the fuse**

Only replace the fuse by a fuse of the same type and rating.

**Before replacing the fuse, unplug the mains lead.**

Should you need any spare parts, please use genuine parts.

Should you have any further questions, please contact your dealer.



**English**



**Correct Disposal of this Product  
(Waste Electrical & Electronic Equipment)**

**(Applicable in the European Union and other European countries with separate collection systems)**

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



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