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# **IMPORTANT WARNINGS & SAFETY INSTRUCTIONS**

- 1. Read these instructions
- 2. Follow all instructions
- 3. Keep these instructions
- 4. Heed all warnings
- 5. Do not use this apparatus near water
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with these instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including other amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of a polarised or grounding plug. A polarised plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding blade. The wide blade or the third blade is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at the plug, receptacle and at the point where it exits from the apparatus.
- 11. Only use attachments/accessories specified by Wharfedale Pro.
- 12. Only use a stand, tripod, bracket or rack specified by Wharfedale Pro, or sold with the apparatus. When a rack is used, use caution when moving the rack and apparatus combination to avoid tip-over or injury.



- 13. Unplug the apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way including but not limited to power supply cord or plug damage, liquid ingress, foreign objects in the chassis, exposure to rain/moisture or impact damage. In addition, the unit must be serviced when you experience any abnormal operation.
- 15. CAUTION: Servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not attempt to perform any servicing other than that contained in the User Manual unless you are qualified to do so. In addition, opening the casing will result in your warranty becoming null and void.
- 16. Do not install this apparatus in a confined space such as a book case or similar unit. Good ventilation should be maintained around the apparatus. Any vents, air-inlets or fans should not be obstructed by objects such as paper, table-cloths, curtains etc.
- 17. WARNING: To reduce the risk of fire or electric shock, do not expose the apparatus to rain or moisture. The apparatus should not be exposed to dripping or splashing and objects filled with liquids, such as vases, should not be placed on the apparatus.



# **IMPORTANT WARNINGS & SAFETY INSTRUCTIONS**

- 18. WARNING: The mains plug/appliance coupler is used as a disconnect device, the disconnect device should always remain readily operable and accessible.
- 19. The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

- Warning: To reduce the risk of electric shock, do not remove the cover (or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

- 21. Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use local return and collection systems or contact the retailer where the product was purchased. They can take this product for safe environmentally friendly recycling.

## **INTRODUCTION**

Congratulations on the purchase of your DP-4030 4-channel power amplifier. Wharfedale Pro DP amplifiers are the result of many years of experience in the use, design and manufacture of professional audio equipment. We take great pride in engineering and building every Wharfedale Pro product and wish to thank you for entrusting us with your sound. From the time Gilbert Briggs built his first loudspeaker in 1932, to the present day, Wharfedale have maintained the same standard of quality in components, workmanship and performance. Please take the time to read this manual completely in order to ensure that you get the most from your DP power amplifier.

#### **DP-4030 FEATURES**

- Stereo/mono/bridge selectable
- 0.775 V and 32 dB gain selectable
- Balanced XLR inputs and speakON compatible outputs
- Internal clip limiter to prevent square wave output damage to connected speakers
- Amplifier output DC protection
- Output overload/short-circuit protection
- High temperature power and over-heating protection
- Undervoltage power supply protection.

#### UNPACKING

Open packaging and check whether the equipment has experienced any damage during transportation. If the equipment is damaged, please inform your reseller immediately.

It is recommended that you save all packaging materials for future transportation use. Do not transport the equipment without an outer package, to avoid damage to the equipment.

PACKING LIST			
Amplifer	1 pcs		
Power cord	1 pcs		
Rubber feet	4 pcs		
User manual	1 pcs		



#### **COOLING INSTRUCTIONS**

Cold air is sucked through the ventilation hole in the front panel and the heat is taken out from the rear panel. In order to ensure good heat dissipation, please use the equipment in an environment of 0°C~40°C and ensure that the front and rear panels are unobstructed for clear airflow.

If the temperature exceeds 85 degrees, the output voltage will be reduced so avoid excessive rises in temperature. If the temperature continues rise up to 90 degrees, the power amplifier will be shut down. When the temperature drops down to a safe temperature, the equipment will restart automatically.

After prolonged use dust may build up and this can reduce the cooling efficiency. As regular maintenance always keep vents and fans free from excess dust.

#### **POWER CORD**



The grounding end of the power cord must be grounded, otherwise there is a risk of electric shock!

The power cord must have sufficient current capacity, AC power supply voltage and frequency must be in range of  $\pm 10\%$  of the nominal value.

#### POWER CONSUMPTION AND HEAT

Test signal: Pink Noise, bandwidth limited from 22 Hz to 22 kHz

1/8 power is typical of program material with occasional clipping. Refer to these figures for most applications.

1/3 power represents program material with extremely heavy clipping.

#### DP-4030

		Line Current(A)		Power(W)		Thermal Dissipation		
	LOAD	220 V	110 V	IN	OUT	Dissipated	Btu/h	kcal/h
standby		0.2	0.4	40.0	0.0	40.0	136.5	34.4
1/8 power	8 Ω/CH	1.1	2.2	243.1	175.0	68.1	232.3	58.5
	4 Ω/CH	1.8	3.7	402.0	297.5	104.5	356.7	89.9
1/3 power	8 Ω/CH	2.6	5.2	576.1	466.7	109.5	373.6	94.1
	4 Ω/CH	4.4	8.8	967.5	793.3	174.1	594.3	149.8



#### **INPUT OUTPUT CONNECTORS**

Try to use shielded cables. Higher density shielding gives better results.

Try to select balanced connections. This will reduce any noise interference.

When using unbalanced cables, always use the shortest possible - preferably not more than 3 m. Avoid putting unbalanced cables near AC power lines otherwise undesirable noise could happen. Before changing any connections, please turn off all equipment. Otherwise, it may cause damage to hearing and connected speakers.



Balanced input cable



Unbalanced input cable

## **STEREO / MONO MODE**







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**BRIDGE MODE** 



#### **OPERATING INSTRUCTIONS**



Before installation, make sure that the power cord is not connected to the power outlet; the power switch is turned off; the volume knob is completely closed (counter clockwise to the limit).

#### **SPEAKER PROTECTION**

Clipping not only makes sound distortion, but also can damage the tweeter of loudspeakers. You can reduce the input signal to avoid input stage clipping.

Strong sub signals can also damage woofers. A transient low frequency signal caused by dropping a microphone is a typical sub acoustic signal. For added protection it is recommended to:

a. Install a high pass filter between the mixer and amplifier.

b. Turn on the high pass filter in the mixer. Without affecting the sound set the filter frequency as high as possible. For example, for a music signal set to 35 Hz, for a microphone set it to 75 Hz.

#### WARNINGS

In order to achieve the best performance and the highest system protection, please take note...

- 1. Before use, you need to configure the amplifier. Improper wiring will lead to the equipment not working properly. For information about connection and configuration, please refer to the "installation" section of this manual.
- 2. Be careful when connecting, selecting the input signal and when controlling the output level.
- 3. Do not connect the ground wire of the input and output cables together. Doing so will form a ground loop and cause humming and sonic oscillations.
- 4. Do not connect the output cable to the power supply. It may cause electric shock.
- 5. Do not modify the electronics.
- 6. Do not use the amplifier if the SIG LED continuously flashes yellow.
- 7. Do not overload the input stages. It will send clipped signals to the amplifier and can result in loudspeaker damage.
- 8. Do not use the amplifier under the condition of lower than the nominal impedance load. This can cause amplifier output protection to be activated and risks premature clipping. This can damage the connected loudspeakers.
- 9. When the amplifier is turned on, the output sockets are powered. Risk of electric shock.

#### FRONT PANEL OPERATION



ICON	FUNCTION	STATUS
•	SIGNAL	If the input signal is greater than -32 dB then the LED is green.
•	CLIP	If the output signal is distorted by more than 1% then the LED is yellow.
•	FAULT	When system protection is activated, the LED turns Red.
۰	POWER	When the power supply is working normally, the LED will be green.
	VOLUME	These adjust the output amplitude of the amplifier channel.
	POWER SWITCH	ON/OFF Control. "I" is ON.

#### **REAR PANEL OPERATION**



ICON	FUNCTION	STATUS
	Power Supply Input	For connection with the supplied IEC AC power cable.
	Signal Input	XLR balanced input socket.
32 dB STEREO	Sensitivity Switch	Switches the input sensitivity between 0.775 V and 32 dB.
0.776V <sup>€</sup> 32 dB BRIDGE	Mode Switch	Stereo mode/Mono mode/Bridge mode

### **DP-4030 SPECIFICATION**

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Model	DP-4030		
Rated Output Power 8 Ω	4 x 300 w		
Rated Output Power 4 $\Omega$	4 x 450 w		
Rated Output Power 2 Ω	4 x 675 w		
BTL Rated Output Power 8 Ω	2 x 900 w		
BTL Rated Output Power 4 $\Omega$	2 x 1350 w		
Output RMS voltage (THD=1%,1 KHz)	49.0 v		
THD+N (10% Rated Power, typical,1 KHz)	0.05%		
Crosstalk (20 Hz-1 KHz,below Rated Power)	≥75 dB		
Freq response (10% Rated Power,20 Hz-20 KHz,8 $\Omega$ )	±0.2 dB		
Damping factor (8 Ω, 20 Hz-200 Hz)	≥1000		
Input sensitivity	0.775 Vrms, 32 dB switchable		
Input impedance	20 kΩ(Balanced), 10 kΩ(Unbalanced)		
SNR (A weighted 20 Hz-20 KHz)	≥100 dB		
Topology	Class D		
Input connection	4 x Balanced XLR		
Power supply	100-240 VAC (±10%), 50/60 Hz		
Size ( Height×Width×Depth mm )	483 x 45 x 290 mm		
Netweight	4.4 kg		
Gross weight	5.9 kg		

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#### WHARFEDALE PRO LIMITED WARRANTY

Wharfedale Pro products are warranted of manufacturing or material defects for a period of three years from the original date of purchase. In the event of malfunction, contact your authorised Wharfedale Pro dealer or distributor for information.

Please be aware that the warranty details may differ from country to country. Contact your dealer or distributor for information (available at www.wharfedalepro.com). These terms do not infringe your statutory rights.



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