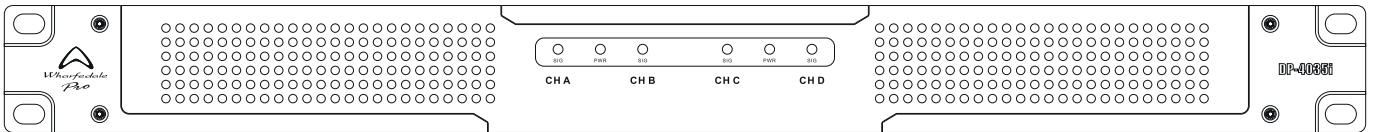




DP-4035i

Multi-channel Amplifier





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 the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including 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 or the point where it exits from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Only use a stand, tripod, bracket or rack specified by the manufacturer, 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: These 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 operating instructions 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.
18. WARNING: The mains plug/appliance coupler is used as a disconnect device, the disconnect device shall remain readily operable.



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.
20.  (Protective earthing terminal) The apparatus should be connected to a mains socket outlet with a protective earthing connection.
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.

About your DP-4035i Multi-Channel Amplifier

4-CHANNELS OF POWER. PERFECT FOR FIXED INSTALL.

With the DNA from our DP series, the new DP-4035i has the hardware features for installation.

The DP-i Series is suitable for fixed installation applications.

Compact, lightweight and stable structure in a rugged 1U, 19 " rack mount enclosure.

The built in PFC (Power Factor Correction) allows worldwide operation with any AC mains voltage, from 90 to 260 V.

DP-i Series is designed to work with Lo-Z mode (2 -16 Ω) and Hi-Z mode (100 V / 70 V distributed lines).

A full suite of protection includes thermal , over-current, DC, short circuit protect and power on/ off mute.

The variable speed fans keep the amplifier rack quiet when standby.

The DP-i series features 3 different operating modes. Mono, Stereo and Bridge.



FEATURES

- 765 W* 4@2 Ohm (RMS),765 W* 4@4 Ohm (RMS),450 W* 4@8 Ohm (RMS).
- 1530 W* 2@4 Ohm (BTL,RMS),1530 W* 2@8 Ohm (BTL, RMS),900 W*2@16 Ohm (BTL,RMS).
- 765 W*4@100 V (Hi-Z),450 W*4@70 V (Hi-Z)
- Remote ON/OFF (Standby).
- Remote Level Adjustment.
- Phoenix PC 5/8-STF-7,62 plug for loudspeaker.
- Phoenix MC 1,5/12-ST-3,81 plug for input.
- 3 operation modes (MONO, STEREO and BRIDGE).
- Power, Protect, Signal and Limiter indicators.
- Thermal protect, over current protect, DC protect, output short protect.
- Ultra quiet variable speed fans.
- Stable at 2 Ω operation.

1 How to use this manual

This manual provides the basic information for the proper installation and use of the equipment. It may not cover all the conditions that may arise in the actual project. For more information, please visit our website or contact our technical support, system installation personnel or agents.

Warning sign

	Important operation or special note
	Risk of electrical shock

1 Installation

Unpacking

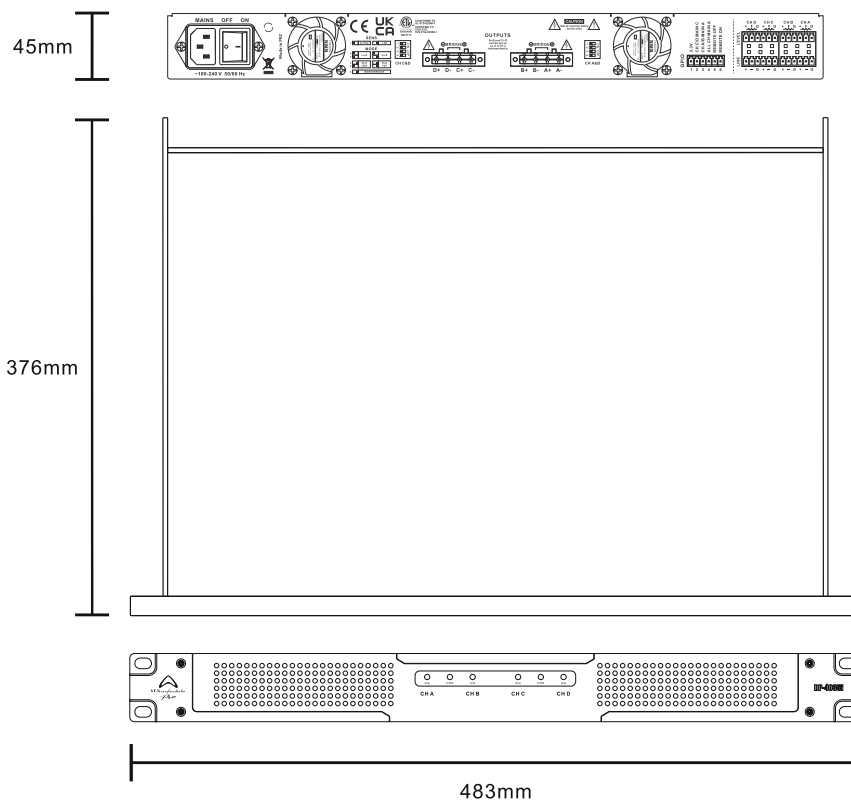
Open packaging and check that the equipment has not been damaged in transportation . If the equipment is damaged, please contact the shipping company or reseller immediately.

It is recommended that you save all packaging materials for future use. Do not transport the equipment without protection to avoid risk of damage.

PACKING LIST

Amplifier	1 pc	Phoenix 6P-3.81 mm plug	5 pcs
Power cord	1 pc	Phoenix 4P-7.62 mm plug	2 pcs
User manual	1 pc	Rubber feet	4 pcs

Outline dimensions



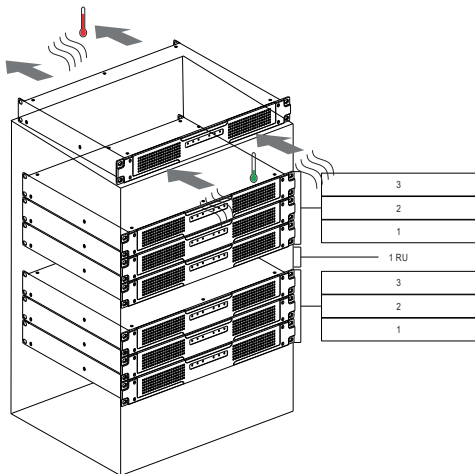
Installation preparation

	Warning: before installation, please confirm that you see and read the safety warning.
	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).
	The equipment is high power, around a strong magnetic field. Keep the signal sensitive equipment away (preferably not less than 20cm), otherwise may produce noise.

For standard operation, the following parts are needed:

1. Input connection cable
2. Output connection cable
3. Cabinets or equipment mounting rack

Cooling instructions



The cooling mode of the equipment is as follows:

Cold air is sucked through the ventilation holes of the front panel and the heat is expelled from the rear panel. In order to ensure good heat dissipation, please keep the equipment in the 0~40 degrees range and ensure that the front and rear panel airways are clear.

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

After long term use, if the cooling effect becomes reduced, please turn off the equipment and remove the front dust net cover to clean out any dust that may have built up.

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.

Input / output cabling

Always try to use shielded cables. Higher density shielding layers are better.

Always try to select balanced connections for inputs. This reduces noise interference.

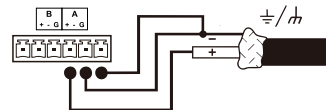
If using unbalanced connections and cables, the shorter the better. Preferably not more than 3 m.

The weak signal line should avoid to parallel with the power line and the power output line, otherwise it might produce noise.

Before changing any connection, always turn off all equipment. Otherwise, it may cause damage to hearing and any connected loudspeakers.



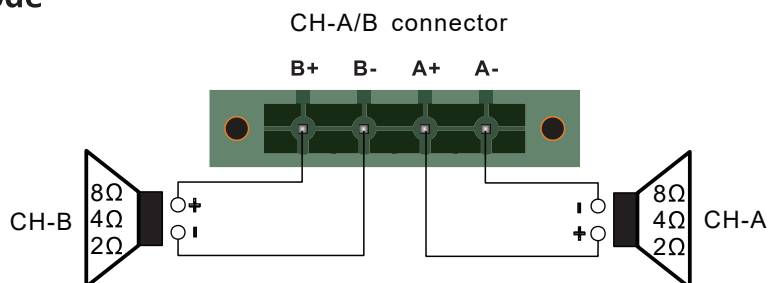
Balanced analog input connection



Non balanced analog input connection

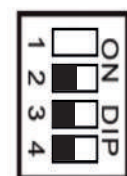
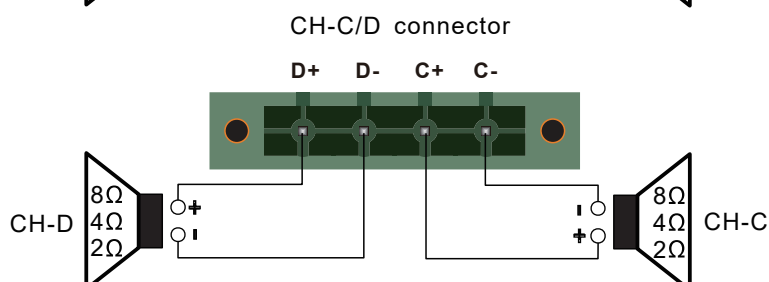
Low-Z Stereo Mode

MODE			
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3	<input type="checkbox"/>	Lo-Z	<input type="checkbox"/>
2	<input type="checkbox"/>	Hi-Z	<input type="checkbox"/>
3	<input type="checkbox"/>	100V	<input type="checkbox"/>
4	<input type="checkbox"/>	MONO/BRIDGE	<input type="checkbox"/>



CH A&B

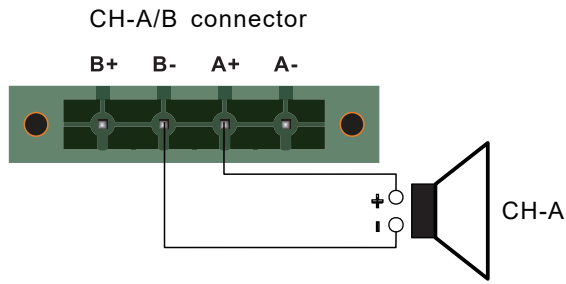
MODE			
2	<input type="checkbox"/>	Lo-Z	<input type="checkbox"/>
3	<input type="checkbox"/>	Lo-Z	<input type="checkbox"/>
2	<input type="checkbox"/>	Hi-Z	<input type="checkbox"/>
3	<input type="checkbox"/>	100V	<input type="checkbox"/>
4	<input type="checkbox"/>	MONO/BRIDGE	<input type="checkbox"/>



CH C&D

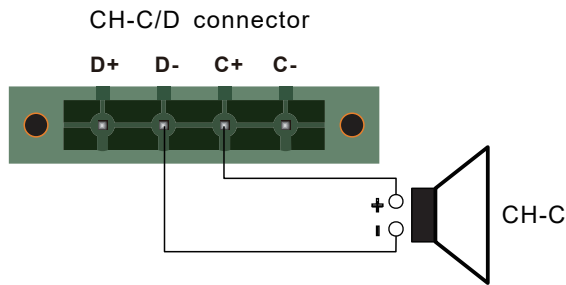
Low-Z Bridge Mode

MODE			
2	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
3	<input type="checkbox"/> Hi-Z	<input type="checkbox"/> Hi-Z	
2	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
3	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
4	<input type="checkbox"/> MONO/BRIDGE		



CH A&B

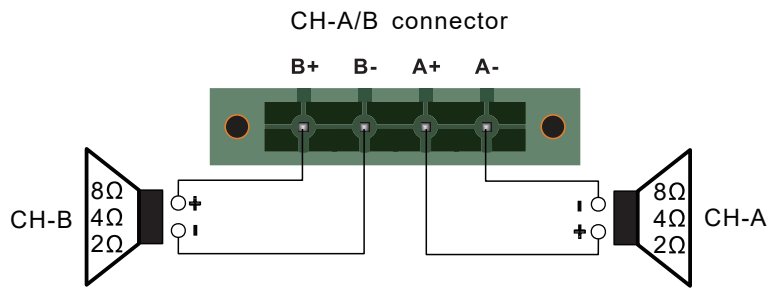
MODE			
2	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
3	<input type="checkbox"/> Hi-Z	<input type="checkbox"/> Hi-Z	
2	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
3	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
4	<input type="checkbox"/> MONO/BRIDGE		



CH C&D

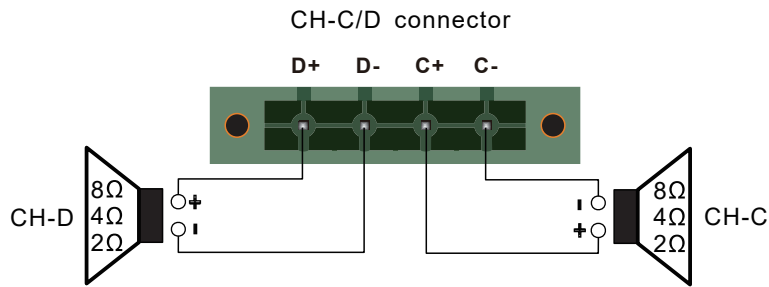
Low-Z MONO Mode

MODE			
2	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
3	<input type="checkbox"/> Hi-Z	<input type="checkbox"/> Hi-Z	
2	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
3	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
4	<input type="checkbox"/> MONO/BRIDGE		



CH A&B

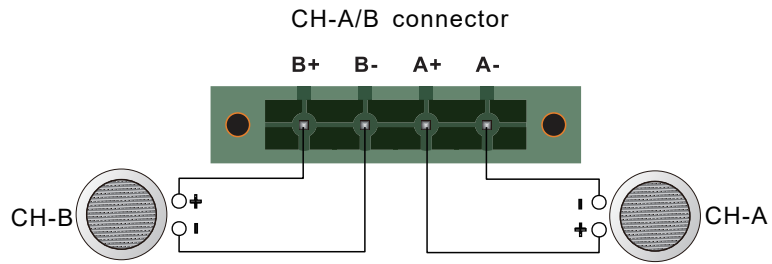
MODE			
2	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
3	<input type="checkbox"/> Hi-Z	<input type="checkbox"/> Hi-Z	
2	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
3	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
4	<input type="checkbox"/> MONO/BRIDGE		



CH C&D

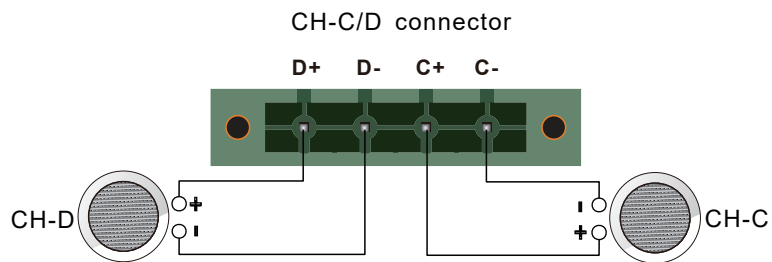
High-Z 100 V Mode

MODE			
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3	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
2	<input type="checkbox"/> Hi-Z	<input type="checkbox"/> Hi-Z	
3	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
4	<input type="checkbox"/> MONO/BRIDGE		



CH A&B

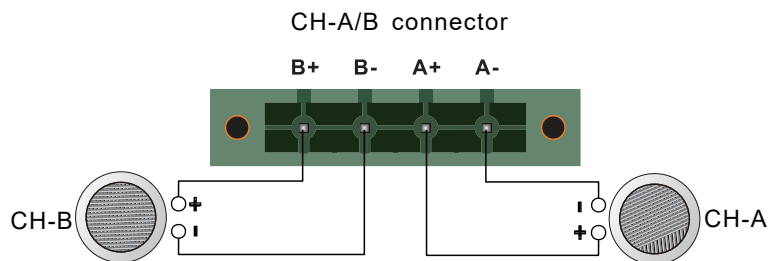
MODE			
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3	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
2	<input type="checkbox"/> Hi-Z	<input type="checkbox"/> Hi-Z	
3	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
4	<input type="checkbox"/> MONO/BRIDGE		



CH C&D

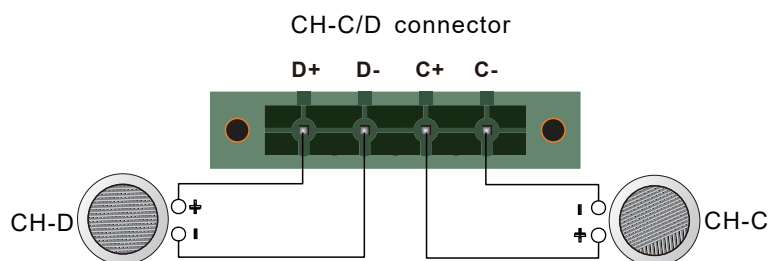
High-Z 70 V Mode

MODE			
2	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
3	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
2	<input type="checkbox"/> Hi-Z	<input type="checkbox"/> Hi-Z	
3	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
4	<input type="checkbox"/> MONO/BRIDGE		



CH A&B

MODE			
2	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
3	<input type="checkbox"/> Lo-Z	<input type="checkbox"/> Lo-Z	
2	<input type="checkbox"/> Hi-Z	<input type="checkbox"/> Hi-Z	
3	<input type="checkbox"/> 100V	<input type="checkbox"/> 70V	
4	<input type="checkbox"/> MONO/BRIDGE		



CH C&D

4 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 distorts the sound, but it also damages the transducers (drivers) of your loudspeakers.

If clipping occurs, reduce the input signal level to avoid clipping.

Strong sub signals can also burn low frequency drivers. The high level low frequency signal caused by (eg) dropping a microphone is a typical sub acoustic signal. Always use methods to prevent sub sonic signals a. Install a high pass filter between the mixer and the amplifier.

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

Attention

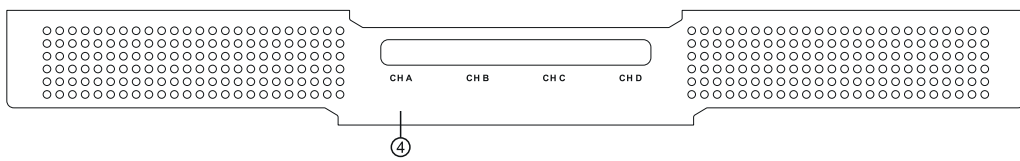
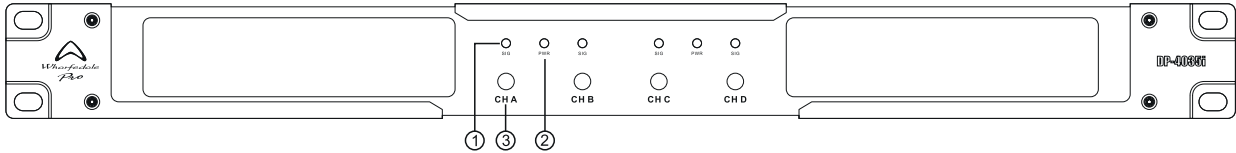
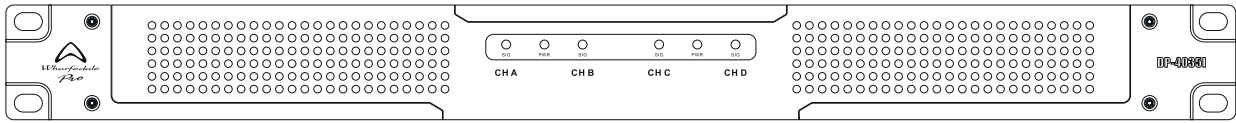
In order to achieve the best performance and the highest security, please pay attention:









- 1、 Before use, you need to configure the amplifier, including the input and output cables. Improper wiring will lead to the equipment not working correctly and can cause damage. For information about connections please refer to the "installation" section of this manual.
- 2、 Be careful when connecting, selecting the input signal and controlling the output level.
- 3、 Do not connect the ground wire of the input and output cable together. This will form a ground loop and will cause oscillations.
- 4、 Never connect the output cable to a power supply, It will cause electric shock.
- 5、 Never make any modifications to the circuitry. It will void any warranty or support.
- 6、 Do not use the amplifier if the SIG LED continuously flashes yellow.
- 7、 Do not overload the mixer outputs. Overloading will send clipped signals to the amplifie inputs. The amplifier will accurately reproduce such signals, and the connected loudspeakers can easily be damaged.
- 8、 Do not use the amplifier under the condition of lower than the nominal load. Too low load may cause amplifier output protection and premature clipping.
- 9、 When the amplifier is turned on, the output connections are active. Never touch as the power output can be fatal.

QUICK START GUIDE

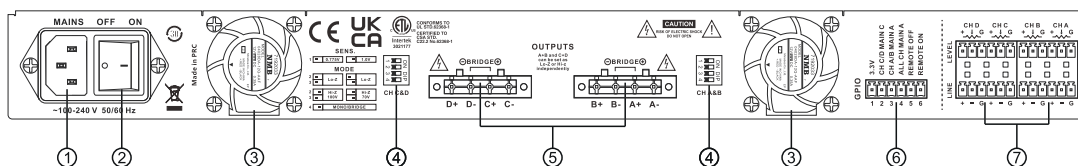
1. Make sure the power switch is in the off position while connecting with the power amplifier.
2. Connect all devices in the signal path and make sure each connection is correct and secure.
3. Set all level and gain controls to their minimum.
4. After powering up all other devices, press the power switch of the amplifier to the ON position and check whether or not the POWER LED lights correctly.
5. Turn the amplifier volume control up to the "7" setting. (After set-up, according to your demand, this setting can be adjusted higher or lower). When the source signal is present, set each gain stage in your signal path from the beginning of the chain. It is the best choice for you to make the overall volume changes with the master fader of your mixing console once the amplifier input trim has been calibrated.
6. When powering down, make sure the power amplifier is turned off first.

Operation panel



	Icon	Function	Illustraton
1	 SIG	Signal LED	When the input signal is above "-32 dB", the color of the LED is green.
	 SIG		When the output signal distortion exceeds 1%, or the power is compressed, the color of the LED is yellow;
	 SIG		When protection occurs, the color of the LED is red.
2	 PWR	Power LED	When the power switch is turned on, the color of the LED is solid green;
	 PWR		When the temperature limiter set to work, the color of the LED is yellow;
	 PWR		When the amplifier is in standby state, the color of the LED is blinking green,
3		Volume	Adjust the output amplitude of the amplifier.
4		Magnetic suction front panel	After removing the front panel, you can adjust the volume and clean or replace the air filter.

Operation panel



	Icon	function	illustration
1		Power Input	IEC 10 A Connector ,3x1.0 mm ² Power cord.
2		Power Switch	The power input starts working after "on" is pressed down.
3		FAN	Ultra quiet variable speed fans.
4		SENS. Switch	Set to 0.775 V, the amplifier Sensitivity is 0.775 V. Set to 1.0 V, the amplifier Sensitivity is 1.0 V.
		Mode Switch	STEREO: Stereo mode Channels A, B, C and D work independently. The input signal of channel A is output through the output socket of channel A; The input signal of channel B is output through the output socket of channel B; and so on MONO: Mono mode The signal that is input from the input socket of channel A would be output to the output sockets of channel A and B. The signal that is input from the input socket of channel C would be output to the output sockets of channel C and D. BRDG: Bridge Mode The signal that is input from the input socket of channel A would be output to the output sockets of channel A+ and B-, The signal that is input from the input socket of channel C would be output to the output sockets of channel C+ and D-. and can choose all the three modes in the above. Lo-Z: In this mode, the power amplifier can drive the fixed resistance speaker, and can choose stereo, single channel or bridge. Hi-Z 100 V: In this mode, the amplifier can drive 100 V speakers. Hi-Z 70 V: In this mode, the amplifier can drive 70 V speakers.
5		Output Connector	Phoenix PC 5/8 STF1-7,62: When the amplifier is in the Stereo or Mono mode, Loudspeaker A connect to A+ and A-, Loudspeaker B connect to B+ and B-, and so on; When the amplifier is in the Bridge mode, Loudspeaker A connect to A+ and B-, Loudspeaker C connect to C+ and D-.
6		GPIO Connector	PORT 1(3.3V) PORT 2(CH C/D MSTR C) When PORT 1 and PORT 2 are connected, the volume of CH C and CH D is controlled by the REMOTE LEVEL port of CH C. PORT 3(CH A/B MSTR A) When PORT 1 and PORT 3 are connected, the volume of CH A and CH B is controlled by the REMOTE LEVEL port of CH A. PORT 4(ALL CH MSTR A) When PORT 1 and PORT 4 are connected, the volume of ALLCH is controlled by the REMOTE LEVEL port of CHA, PORT 5(REMOTE OFF) When PORT 1 and PORT 5 are connected, the amplifier is in standby mode. PORT 6(REMOTE ON) When PORT 1 and PORT 6 are connected, the power amplifier is turned on.
7		LEVEL Connector	Remote Level Adjustment : 10 kΩ potentiometer connected to the LEVEL connector allows the volume of each channel to be remotely controlled.
		LINE Connector	Analog Audio Input :Balanced audio input plug.

• Specification

Model	DP-4035i
Stereo Power Output	
8 ohms	4 x 450 W
4 ohms	4 x 765 W
2 ohms	4 x 765 W
Stereo Power Output	
16 ohms	2 x 900 W
8 ohms	2 x 1530 W
4 ohms	2 x 1530 W
100 V Hi-Z	4 x 765 W
70 V Hi-Z	4 x 450 W
Rear panel	
Input Connectors	Phoenix MC 1,5/12-ST-3,81
Remote Level control (10 K Ω) connectors	Phoenix MC 1,5/12-ST-3,81
Output Connectors	Phoenix PC 5/8-STF-7,62
Remote ON/OFF - Link connectors	Phoenix Mc 1,5/12-ST-3,81
Mode Switch	LO-Z, HI-Z 100 V, HI-Z 70 V, MONO-BRIDGE
Input Sensitivity Switch	1 V (35 dB), 0.775 V (38 dB)
Front Panel	
Signal LED	Green / -32 dBu- Yellow/ Limit- Red 1 Protection
Power LED	Green / ON - Yellow / High Temperature
Level Control	
THD+N	Typical: 0.05%. (10% Rated Power, 8 Ω)
Cross-Talk	≥ 80 dB (20 Hz-1 KHz, Below Rated Power)
Input Impedance Lo-Z, 8 Ω	Typical: ± 0.5 dB (10% Rated Power, 20 Hz-20 kHz)
Input Impedance Hi-Z	Typical: ± 0.5 dB (10% Rated Power, 40 Hz-16 kHz)
Input Impedance	20 k Ω (Balanced), 10 k Ω (Unbalanced)
Damp Factor	Typical:300 (20 Hz-200 Hz, Lo-Z, 8 Ω)
SNR	≥ 100 dB (A weighted, 20 Hz-20 kHz, 8 Ω)
Main Power	100~240 V AC $\pm 10\%$, 50/60 Hz
Protection	Under voltage, DC, Over temperature; Limiter,Overload, Short .
Net Size	483 x 45 x 370 mm (W \times H \times D)
Net Weight	8.4 kg

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.

4x450 W

	LOAD	Line Current(A)		Power(W)			Thermal Dissipation	
		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	1.4	2.8	312.5	225.0	87.5	298.6	75.3
	4 Ω /CH	2.3	4.7	516.9	382.5	134.4	458.6	115.6
1/3 power	8 Ω /CH	3.4	6.7	740.7	600.0	140.7	480.3	121.0
	4 Ω /CH	5.7	11.3	1243.9	1020.0	223.9	764.1	192.6

Gain comparison table

Input Sensitivity	GAIN(8 Ω)	GAIN(100 V)	GAIN(70 V)
0.775 V	38 dB	42 dB	39 dB
1 V	36 dB	40 dB	37 dB

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.



Wharfedale Pro

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www.wharfedalepro.com

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