

whnest

Reference Series Phonostage
PS.30R/ PS.30RDT/ SE 2015

Operating manual

Contents

Introduction

Safety

Cleaning

Connections

Cartridge gain and loading

Technical specification – 2010 onwards

Fig.1 PS.30 Series rear panel connections

Fig.2 Basic audio connection

Fig.3 Removing the lid – pre July 2010

Fig 4 Gain and load selector **all versions**

Note – from July 2010 the gain and load access panel is now underneath the unit.

Warranty

Introduction

Thank you for buying the Whest Audio PS.30R/ RDT/ SE phonostage.

As you know, this unit is designed to retrieve the maximum amount of information from your vinyl LPs. It does this by using proprietary low noise audio circuitry as well as a newly developed filter which together with the RIAA filter enables the PS.30R to playback up to 60Khz.

Brief history

The RIAA curve was designed many years ago to enable the use of vinyl as a playback medium. Back then the humble stylus and audio electronics could really only playback a very limited bandwidth. A system bandwidth of 12Khz was quite rare. Nowadays most systems have a bandwidth of 100Khz; the modern day cartridge can playback frequencies beyond 60Khz – **so why continue to use a phonostage with a filter curve designed for systems designed in the 1950s?**

Forward thinking

Because of our close links with the music recording industry we were able to measure several Neumann cutter heads prior to cutting a master onto acetate. What we found was that the cutter head would cut high frequency all the way to 50Khz!

With these results and the research acquired from the DAP programme we then designed a hf filter that would complement the RIAA filter we had designed for the MC REF V. This has now been incorporated into the PS.30 Series phonostage. Because of the extended hf response of the PS.30 Series phonostage, large amounts of information are now able to be heard when it was once thought there was nothing there!

The extended hf enables you to hear further into the soundstage by bringing to life the lowest frequencies of a kick drum and positioning all instruments to form a three dimensional soundstage.

It is because of the extended hf response and the PS.30Rs relationship with the MC REF V that the PS.30R excels where others just plainly fail.

The PS.30R also incorporates a new power supply configuration which enables the phono stage to occupy the same case as the transformer without the need of a separate box. This means the critical electronics can now utilise the ultra stable, low noise and high speed power source in an instant – no delay lines! This translates into a lower noise floor, far better micro detail resolution, far better image stability and soundstaging which **will** bring you closer to the recording.

Safety

Place your unit on a firm level surface where it is not exposed to dripping or splashing of any liquid. Position it away from radiators and other heat sources and leave a space of at least 5cms around the unit for ventilation.

Please note that there are **no user serviceable parts inside**.

In the unlikely event that this unit needs to be serviced please return it to an authorised Whest Audio service agent.

There is a risk of electrical shock if this unit is opened!

Please do not attempt to open this unit for servicing or modification unless authorised as it **WILL** invalidate your warranty.

Cleaning

When cleaning the unit please do not use any liquids as it may enter the unit causing it to malfunction. We recommend applying a **very** small amount of engineering oil such as WD40® to a lint free cloth and then wipe the unit in the direction of the grain on the lid. Engineering oil is a tried and tested method of cleaning grained aluminium panels. You only need to do this a few times a year. The other parts of the PS.30R case maybe cleaned with a **damp/near dry** cloth or a non-silicone based polish applied to a non-abrasive sponge.

Connections

Please read the safety section before connecting your unit.

Before connecting to the mains, check that the mains supply voltage corresponds to the voltage printed next to the power inlet. If the mains voltage is different, please consult your authorised Whest Audio dealer.

All PS.30R units come supplied with an Audiophile grade interconnect as well as a computer grade interconnect for transferring your LPs to your computer.

Although all listening tests were conducted with this interconnect please feel free to use your preferred interconnect or ask your dealer for advice.

1. When connecting the PS.30R please make sure that your system's source selector is switched to an input **OTHER THAN** the input to which the PS.30R unit is to be connected.

2. **Please make sure that the PS.30 Series phono stage unit is connected to a switched wall socket or similar switched socket using an appropriate power lead and is in the OFF position.**
3. **First disconnect** the turntable from the amplifier/preamplifier or other phono stage.
4. Connect the turntable leads to the PS.30 Series phono stage observing the colour codes for channel ID.
5. Connect the 'grounding' lead from the turntable arm lead to the grounding post on the PS.30R.
6. Connect the output of the PS.30 to the amplifier/preamplifier aux/line input.
7. Once you are happy that all inputs and outputs have been connected properly, switch the power on- on the wall socket and then switch the PS.30 on via the rear panel on/off switch located next to the power inlet.

8. If all is OK, just switch on. A small RED LED will glow on the front panel of the PS.30 Series phono stage – this indicates that all is OK.

10. Select the correct source input on the amplifier/preamplifier.

11. You are now ready to enjoy, so, play an LP, sit back and *****!

It may take several hours before the PS.30 Series phono stage settles down to work efficiently, but generally 6-12 hours is sufficient time for the sensitive components to find their 'steady state' working temperature.

The PS.30 Series phono stage has been designed to be simple to integrate into any audio or computer based system.

Please familiarise yourself with the rear panel layout **Fig. 1** as it will make connecting, unplugging and cleaning easier. For basic connectivity follow **Fig. 2**.

Connecting to a computer soundcard for transferring to hard-drive

The PS.30 Series phonostage comes supplied with a special interconnect to connect to your computer soundcard analog input. With this interconnect and using the Whest Audio recommended software <http://audacity.sourceforge.net/download> (or as a download from our website – www.whestaudio.co.uk) you will be able to transfer your vinyl collection to your computer hard drive.

The PS.30 can be connected to your computer sound card analogue audio input while the PS.30 and computer are in the 'on' position.

Once connected install the correct software for your computer system (MAC or Windows). <http://audacity.sourceforge.net/download/>

Follow the on-screen instructions and read the instructions in the help files or online at www.whestaudio.co.uk . The help files also contain information on how to maximise the software's capabilities with regard to editing, etc. In case of any transferring problems, please check the help files. *To get the best possible quality from your transfers please do read the instructions fully before attempting to transfer your vinyl.*

Cartridge gain and loading (Fig. 4) *THIS ONLY APPLIES TO PRE- JULY 2010 UNITS.*

Caution: THIS OPERATION CAN ONLY BE DONE WHEN THE UNIT IS DISCONNECTED FROM BOTH THE MAINS POWER SUPPLY AND THE AUDIO SYSTEM –

Your PS.30R comes preset for a moving coil cartridge requiring a gain setting of 60dB and a load setting of 100ohms. This will be fine for the majority of moving coil cartridges. If however your cartridge requires a different setting you can either ask your dealer to set it for you OR you can easily do it yourself in just a few minutes:

- i) A small cross-head screw driver is used to remove the 9 screws holding down the lid to gain access to the PS.30Rs gain and load settings. (Fig. 4)*
- ii) place the PS.30R with it's rear panel to your left hand side.*

- iii) you will notice a 4 x RED 6 position switches near the gold RCA socket end. These switches control the gain and loading characteristics. There are 2 x 6 way switches per channel. As mentioned previously the unit is supplied set up for MC60/100ohms (60dB gain and 100ohm load). **Note MC gain starts at 50dB.**
- iv) look at the switch and you will see an 'on' position
- to set the PS.30R for moving magnet with a load value of 47K ohms:
 - set all the switch positions to the 'off' position
 - slide GAIN switch no. 1 indicating 40dB and LOAD switch no. 6 indicating 47kohms (MM)
 - to set the PS.30R for moving coil with a output value of 0.2mV
 - set all the switch positions to the 'off' position
 - slide GAIN switch no. 5 indicating 65dB and LOAD switch no. 2 indicating 100ohms (MC)
- v) once your gain and load characteristics are set, just place the lid back on then replace the 9 screws. (Fig. 4) **That's it!**

FROM JULY 2010 ONWARDS – Fig 4.3

*The PS.30 series phonostages comes setup for 65dB gain and 100ohm load.
For any reason if you require a different gain or load value just follow these steps:*

1. Turn the power switch to 'off' and unplug the power cable. Disconnect your phonostage from your system. Place the phonostage up-side-down on a soft, flat surface and unscrew the two M3 hex bolts near the left rear foot. You will see a series of switches. For the appropriate gain and load switch please look further in the manual for the gain and load diagram for July 2010 models. After selection please replace the cover and tighten the 2 x M3 hex bolts.

If your cartridge requires a different loading value, please ask your Whest Audio dealer or contact Whest Audio Ltd on whestworld@fastmail.fm or tel: +44 (0) 20 3 176 0376

Alternatively, if you find that you have just purchased a cartridge that requires gain and load values outside of the parameters used by any other phonostage manufacturer, please call Whest Audio Ltd on +44 (0) 20 3176 0376 or email whestworld@fastmail.fm .

Our technical department will be able to advise how to setup the PS.30 Series phonostage for your new cartridge as the unit has the ability to be 'trimmed' for absolutely **any** cartridge manufactured via the 'user' load setting.

Whilst changing the load and gain settings, the lid and/or front panel may end up covered with fingerprints – please read the section on cleaning to bring the PS.30 Series phonostage up to its former glory!

Technical specification

Model No.:	PS.30R /PS.30RDT/SE dual mono phono stage
RIAA curve accuracy:	17Hz – 20.5Khz +/- 0.2dB or better
Frequency response:	5Hz – 68Khz +/- 1.0dB
Working band:	15Hz – 57Khz
MM Gain:	40dB @ 47Kohm
MC Gain:	50dB - 72dB to suit all 0.15 – 2.5mV cartridges
Cartridge Loading	100ohm - 47Kohm in 6 steps plus 'USER'
THD+N:	0.002%
Connections:	Unbalanced RCA, Impedance Balanced on 3-XLR
Connectors:	SILVER Audiophile RCA,
Unpacked weight:	6.5Kgs
Packed weight:	7.5Kgs
Dimensions:	1 x 480mm x 300mm x 83mm
Operating voltage:	230VAC 50Hz or 115VAC 60Hz (see dealer)

Supplied in package:

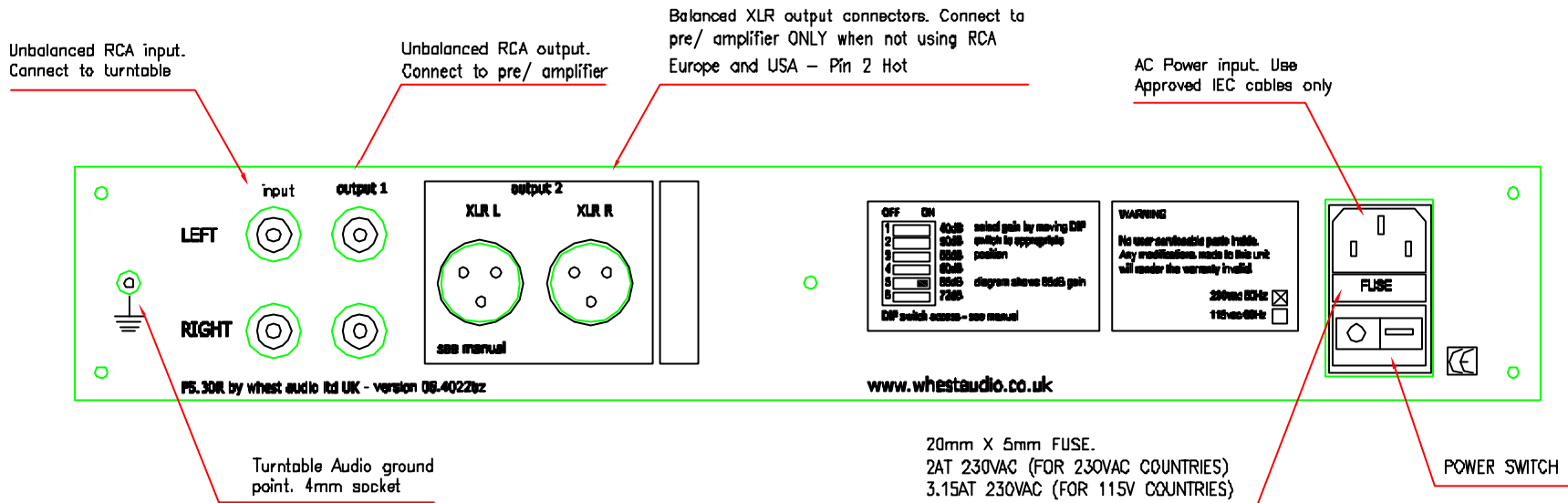
1 x PS.30R or PS.30RDT/SE dual mono phono stage

1 x Audiophile RCA interconnect

1 x Audiophile 3.5mm plug to 2 x RCA computer/ audio cable

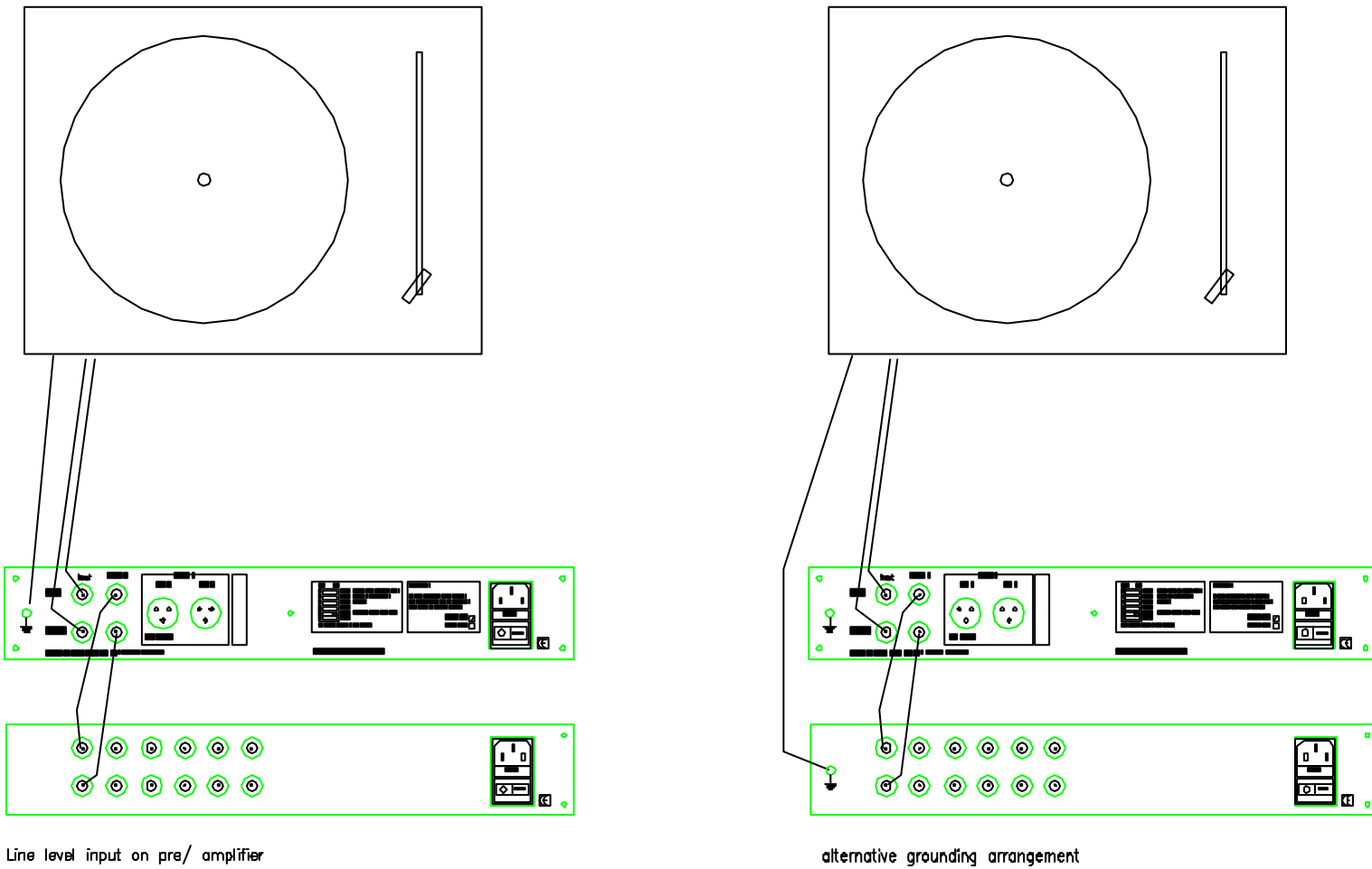
1 x IEC power cable

Fig 1. PS.30R Rear Panel



- NB:
1. Only use balanced XLR when not using unbalanced RCA. Do Not Use both together!
 2. Only use approved mains power cables.
 3. Only use approved 20mm x 5mm fuses.
 4. The PS.30R is equipped for balanced use. Pin 2 Hot for Europe and USA. Note that there are 2 versions of the PS.30R. Both are designated 06.4022bz.
 5. The turntable audio ground socket is not a power ground/ earth socket. Please do not attempt to star earth this terminal to your system! This terminal is 100ohms away from mains earth.

Fig 2. Basic Audio Connection



Line level input on pre/ amplifier

alternative grounding arrangement

Fig 3. Lid Removal

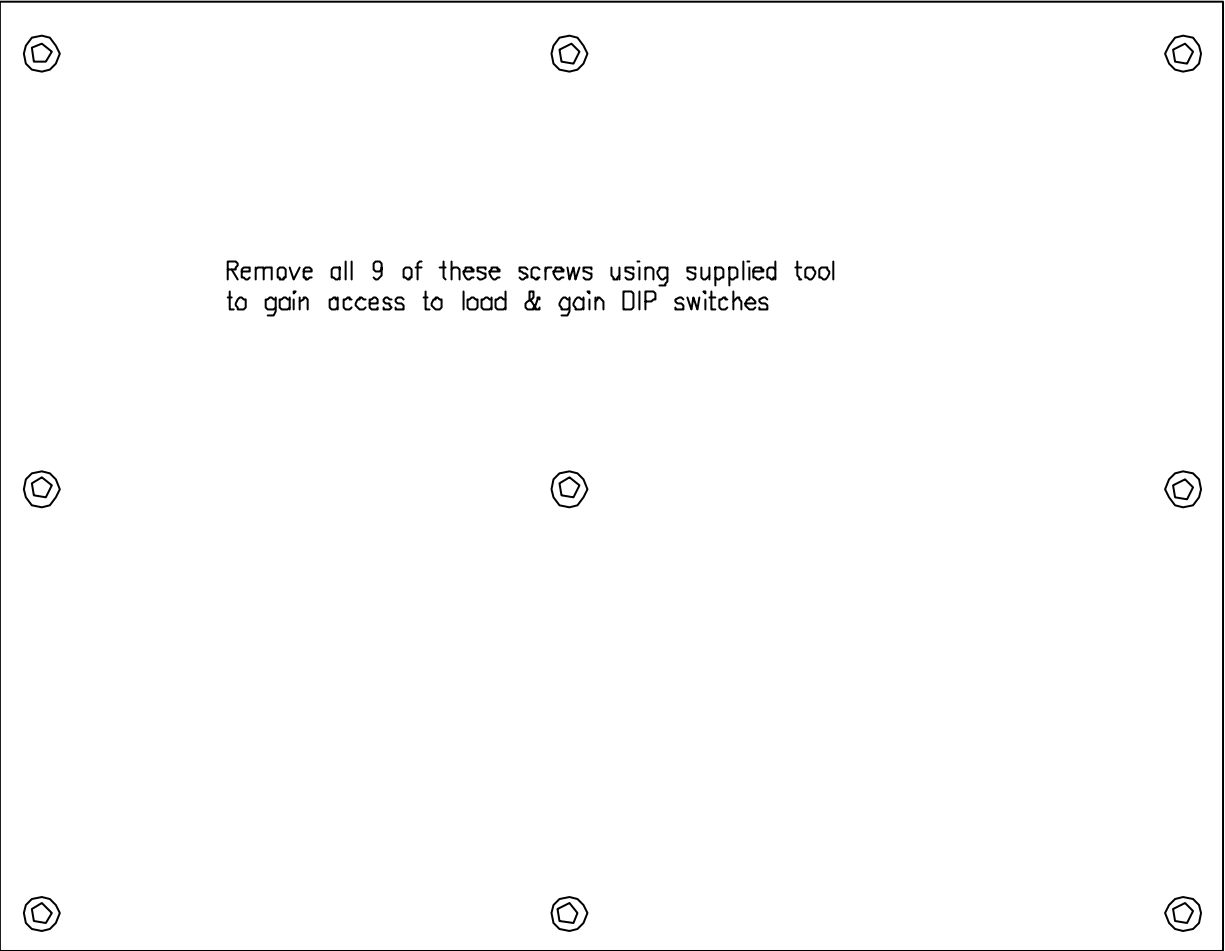


Fig 4. Gain and Load Setting

THIS DIAGRAM IS ONLY SHOWING 1 CHANNEL.

GAIN

40dB	1	<input type="checkbox"/>	←	MM
50dB	2	<input type="checkbox"/>	←	HIGH OUTPUT MC
55dB	3	<input type="checkbox"/>	←	0.6-0.35mV MC
60dB	4	<input checked="" type="checkbox"/>	←	0.4-0.25mV MC
65dB	5	<input type="checkbox"/>	←	LOW OUTPUT MC or TO PASSIVE PREAMP
72dB	6	<input type="checkbox"/>	←	0.15-0.1mV MC or TO PASSIVE PREAMP

50	1	<input type="checkbox"/>	
100	2	<input checked="" type="checkbox"/>	
470	3	<input type="checkbox"/>	
800	4	<input type="checkbox"/>	
1k6	5	<input type="checkbox"/>	
47k	6	<input type="checkbox"/>	← MM (TYP)

LOAD ○ USER ○

NB:

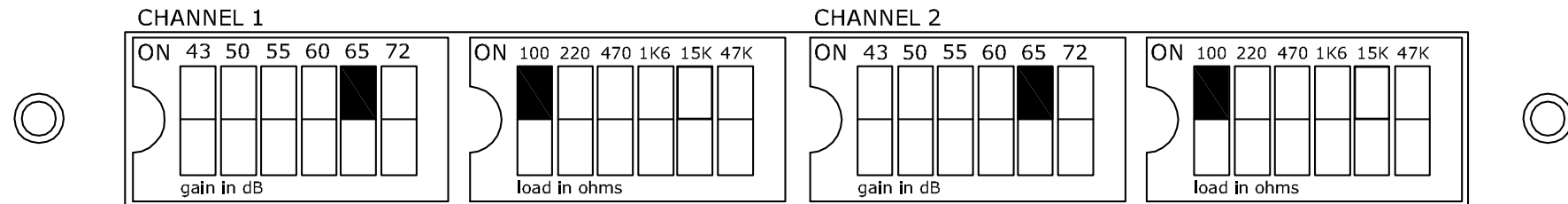
1. Only adjust gain and load when the PS.30R power is off and the pre/ amplifier volume down to zero.
2. Use a semi-hard plastic nib to select switches.
3. Check the cartridge manufacturers specification for correct setting.
4. After adjusting the settings, replace the lid and screw in all 9 screws.
5. Go to the 'connections' section in the manual to find out how to connect the PS.30R to your system.

PS.30R and PS.30RDT - from 1st Jan 09 Load Options:
refer to previous page for selecting 'gain and load settings'

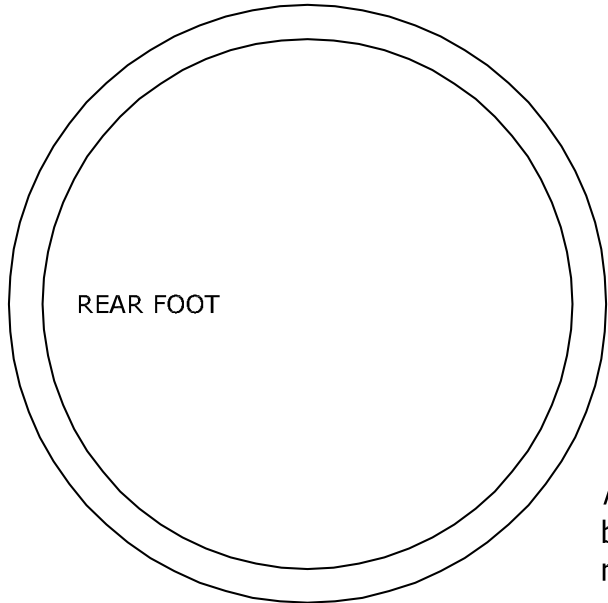
100	1	<input type="checkbox"/>	MC (TYP)
220	2	<input type="checkbox"/>	
470	3	<input type="checkbox"/>	
1k0	4	<input type="checkbox"/>	
15k	5	<input type="checkbox"/>	
47k	6	<input type="checkbox"/>	MM (TYP)

LOAD USER

PS.30 Series - 1st July 2010 onwards - gain and load options



Access panel must be replaced after selection



Access to gain and load settings can be found on the base of the unit. Please switch off the unit before making a selection.

NB. The selection switches in the diagram above show the default setting of 65dB/100ohm for low output moving coil.

Warranty

All Whest Audio products are covered by a limited warranty against defects in design, materials and workmanship for a period of one (1) year from the original date of purchase to the original purchaser only. This warranty is available upon proper registration of ownership within thirty (30) days of first purchase.

Proper registration is made by filling out and returning the attached warranty registration card along with a copy of the original sales receipt as proof of the original date of purchase.

If during the warranty period this product fails to operate under normal use and service due to defects in design, materials or workmanship, Whest Audio will, at their option, either repair or replace the product in accordance with the terms and conditions stipulated herein.

Whest Audio reserves the right to charge a handling fee if a returned product is found to be not under warranty, according to the conditions below.

Warranty Conditions

1. This limited warranty is valid only if proper registration of this product is made in the way described above.
2. If Whest Audio repairs or replaces the product, the repair for the defect concerned, or the replaced product shall be warranted for the remaining time of the original warranty or for ninety (90) days from the date of repair, whichever is longer.
3. This warranty does not cover any failure of the product due to normal wear and tear, or due to misuse, including but not limited to use in other than the normal and customary manner, in accordance with the Whest Audio instruction for use and maintenance of the product. Nor does this warranty cover any failure of the product due to accident, modification or adjustment, acts of God or damage resulting from liquid.
4. This warranty does not cover product failures caused by modification or repair of the product performed by a non-Whest Audio authorised person.

5. In no event will Whest Audio Limited be liable for incidental or consequential damages of any nature whatsoever arising from purchase, use or inability to use this product.

6. There are no express warranties, whether written or oral, other than this printed limited warranty. All implied warranties, including without limitation the implied warranties of merchantability or fitness for a particular purpose are limited to the duration of this limited warranty.

The warranty does not affect the consumer's statutory rights under applicable legislation in force.

Please complete the Warranty Registration Card and send it together with a copy of the original sales receipt to:

WHEST AUDIO LIMITED
WARRANTY REGISTRATION DEPARTMENT
Q West Suite 2.07
Great West Road
London TW8 0GP