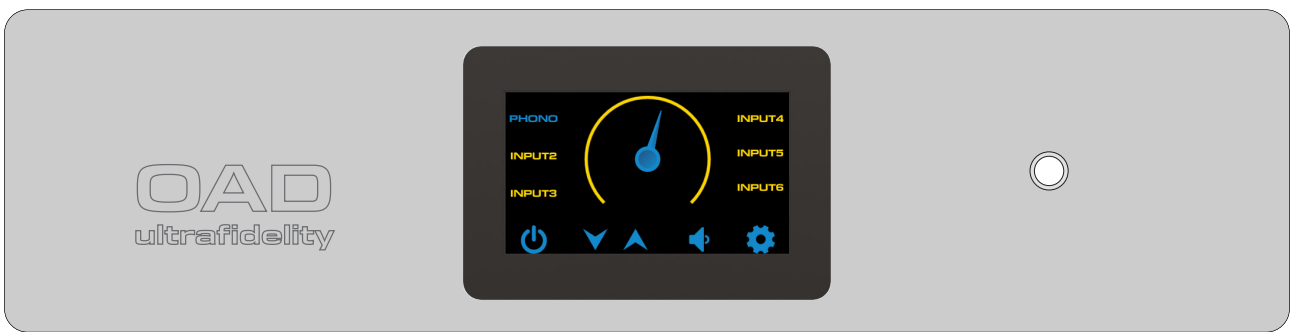




# CP1

Stereo Control Preamplifier

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Owner's Manual

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## Introduction

Thank you for choosing the CP1 to be a part of your high performance music listening system. Each CP1 is handcrafted, using the very latest, no compromise, cutting edge technology and componentry. This ensures the best possible sound reproduction currently available and guarantees many years of listening enjoyment.

We understand that you are eager to begin listening; however, please take a few minutes to read through this guide for useful information concerning the operation of your new preamplifier. OAD Ultrafidelity equipment takes a considerable time to run in before it performs at its best. The duration varies, but under some conditions the sound may continue to improve for over a month. Better and more consistent performance will be achieved if the system is left switched on for long periods. It is worth remembering however that equipment left connected to the mains can be damaged by lightning.

After reading this manual, if you have any further questions regarding your preamplifier, contact your dealer or OAD Ultrafidelity customer service – they will be happy to help you to make the most of your new component.

Happy Listening!

## Warnings

- To prevent fire, or shock hazard, do not expose your CP1 to rain or moisture.
- Do not place objects containing water on top of this unit.
- This unit contains voltages which can cause serious injury or death.
- Do not operate with covers removed. Refer servicing to your authorized OAD Ultrafidelity dealer or service personnel.
- A power cord is shipped with your CP1 that meets the required safety standards. It is important for both safety and performance that the standard cable supplied is not modified.
- A switch at the rear of the CP1 must be accessible in case of emergency power disconnect. The power button on the front touch display panel of this unit, when off, does not disconnect all power from this unit.

This unit is in standby mode when not on. For continued protection against fire hazard, replace the fuse only with the same type and rating (see page 8 for fuse information).

- Your hi-fi system, including the CP1, can be damaged by lightning and should be turned off and disconnected from the mains when there is risk of lightning strike.
- We recommend that all connections to the CP1 are made with either the mains power cord disconnected or the rear mains switch left in the '0' (OFF) position. When all connections are made and checked, move the rear mains switch to '1' (ON) position.

## Ventilation

Due to its highly sophisticated five power supplies, the CP1 will run slightly warm when not in standby. You must allow for this in installation, by providing for free air circulation around the product. Never block any ventilation openings. Allow at least 50 mm of clearance around these products for proper ventilation. Electronics should not be subjected to sources of excessive radiant heat. Excessive heat can shorten the life of the product.

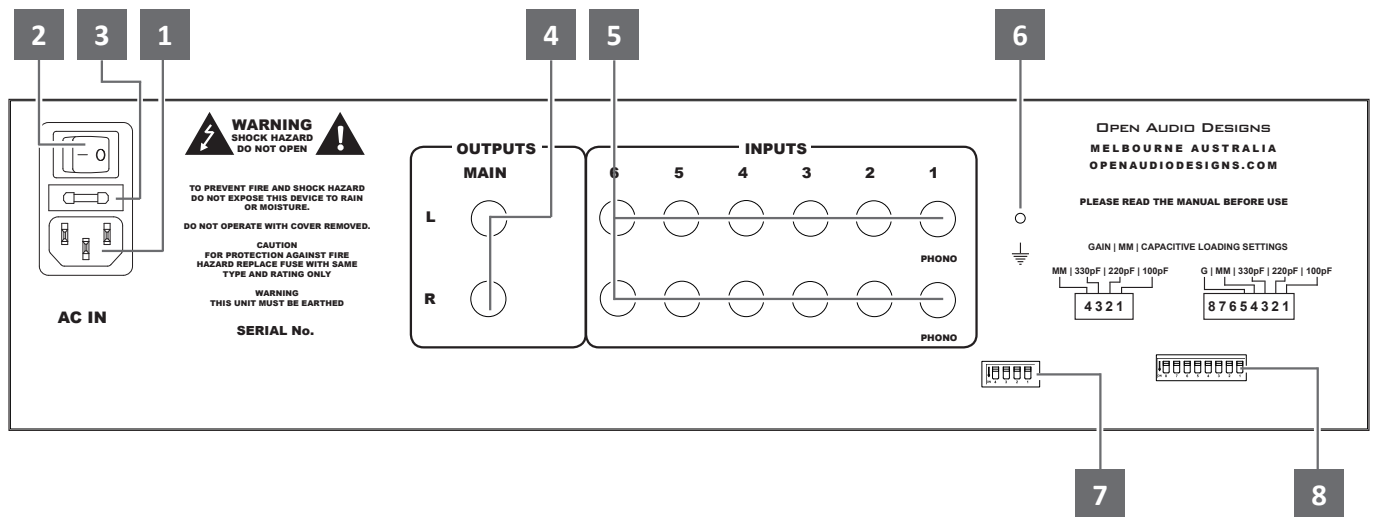
## Packaging

Save all packaging in a dry place away from fire hazard. Your CP1 is a precision electronic instrument and should be properly boxed any time shipment is made. It is very unlikely that you will have to return your unit to the factory for service, but if that should prove necessary, the original packaging will protect your CP1 from unnecessary damage or delay.

## Interconnect Cables

RCA/Phono Interconnect plugs and sockets should be kept clean and free from corrosion.

The CP1 is fitted with silver plated oxygen free copper input and output sockets that will tarnish over time. Tarnished or oxidised silver does not degrade the quality of contact. This is a distinctive property of silver plating. If you wish to clean the connectors, switch off the equipment, pull the plugs out of their sockets, and push them back in again. Contact cleaners and "enhancers" should not be used as the film they deposit may leave a deposit and degrade the sound.



**1 AC MAINS INPUT**

- The CP1 comes supplied with a detachable mains power cord. Connect corresponding end of the mains power cord to the AC mains input of CP1 and the plug connected to a mains power source.
- Always disconnect the mains power plug from the mains power source first, before disconnecting the cable from the CP1’s AC Mains input socket.

**2 POWER SWITCH**

- Supplies the AC mains power to the CP1.
- When the POWER switch is set to ON (1) position, the CP1 will run through its boot up procedure and within 30 sec will be ready to play.
- If you do not intend to use the CP1 for long periods of time (such as when on holidays), switch off (0) the POWER switch. With POWER switched off, neither the front touch panel display (Standby) button nor the remote control’s power button can activate the CP1.

**3 FUSE HOLDER**

- Your CP1 is fitted with a fuse. If it needs to be replaced you must use the same type and rating. Installing an incorrect fuse may cause damage and this will void the warranty of your CP1.

**4 AUDIO OUT**

- The main outputs that connects the CP1 to the corresponding audio inputs of external power amplifiers.

**5 AUDIO IN**

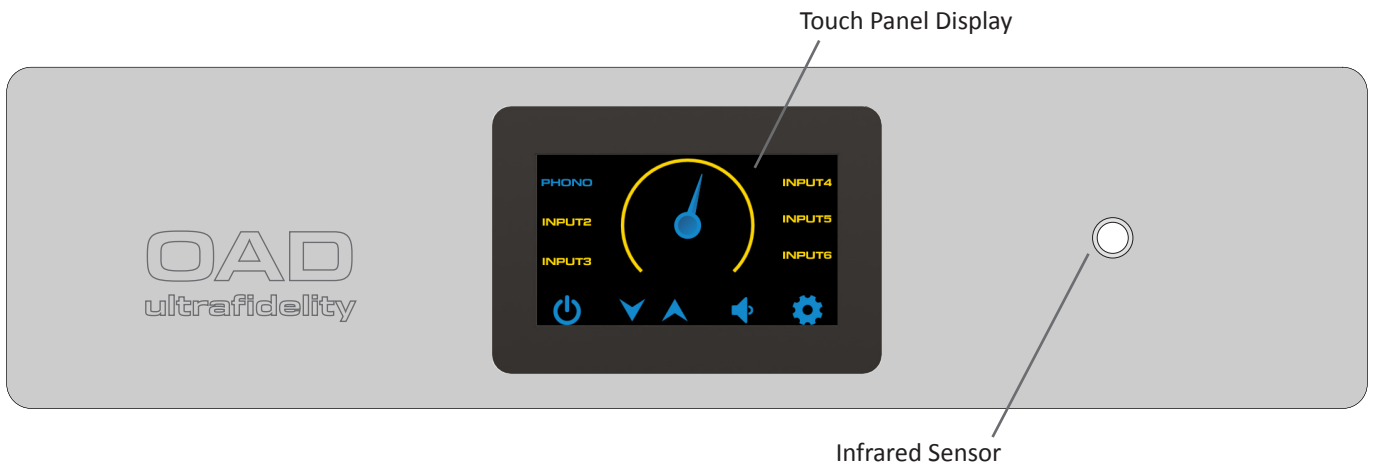
- Use single-ended analog audio input for sources (CD Player, tuner, DAC or other applicable devices).
- If your CP1 has the optional PHONO card installed then connect the twin RCA lead from your turntable to INPUT 1.

**6 PHONO GROUND CONNECTOR**

- Turntables normally include a single wire earth lead. Use the CP1 phono ground connector to connect this lead. Unscrew the terminal to connect the earth lead. Tighten the terminal to secure the lead.

**7 & 8 PHONO DIP SWITCHES**

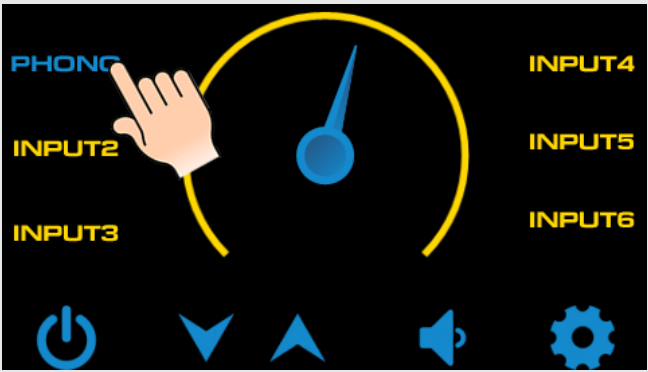
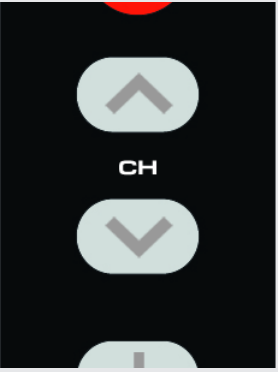
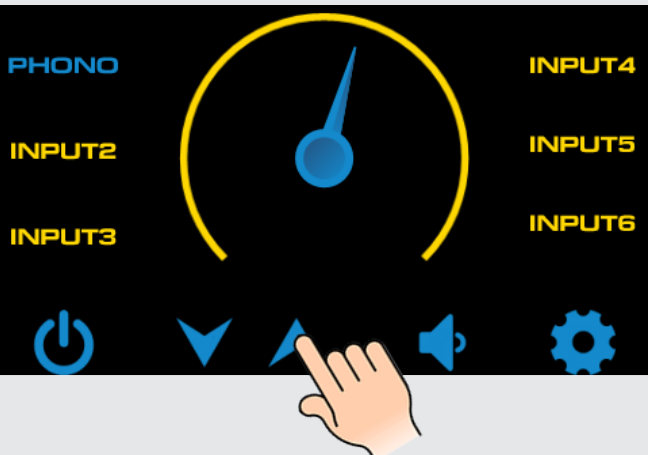

- Adjust switches to suit your type of MM cartridge, gain level and parallel capacitance. See pages 8 & 9.



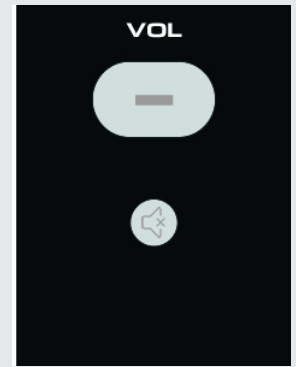
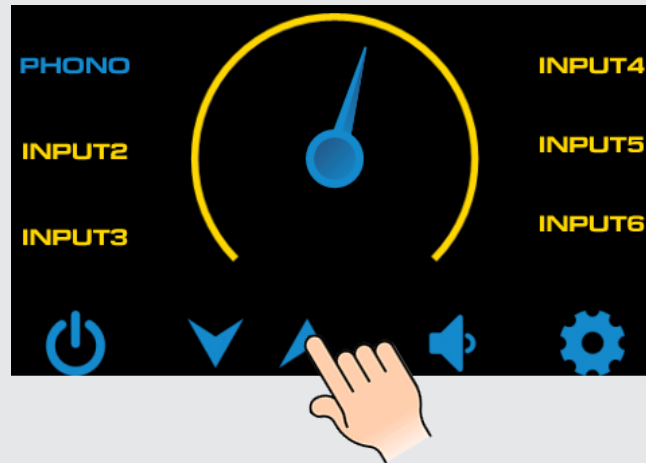
**Navigating the CP1 features and making changes**

Use the CP1 remote control or touch panel display icons to select sources, and to navigate through the CP1 features and access to other functions.

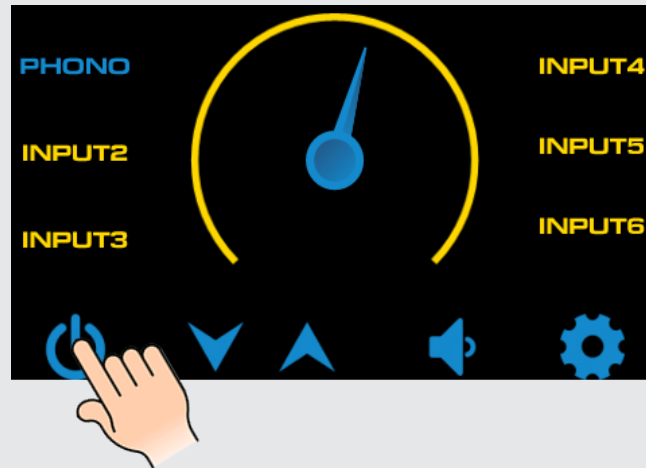
*Note: Images show CP1 with optional phono card installed.*

FUNCTION/FEATURE	TOUCH PANEL DISPLAY	REMOTE CONTROL
<p><b>Selecting Sources</b></p> <p>To select a source either select up or down on the remote control or just touch on source name on the display. The selected source will change colour to blue.</p>	<p><b>MAIN HOME SCREEN</b></p> 	
<p><b>Increasing or decreasing Volume</b></p>		

## Muting volume

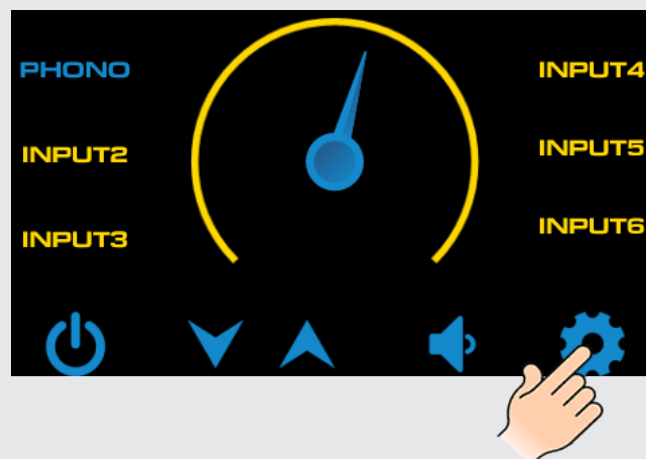


## Standby



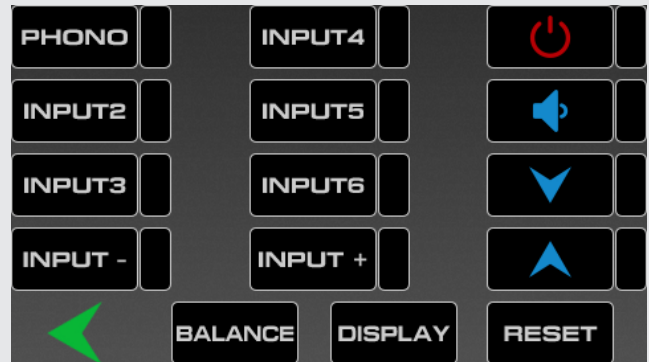
- Touch panel display or press Standby button on remote control for the CP1 to switch ON from standby mode.
- Pressing Standby button on touch panel display or standby button on remote control again switches back CP1 to standby mode.
- The Standby button on Touch Panel Display or remote control cannot activate the CP1 with the rear panel POWER switched off.

## To access more CP1 features touch the Settings icon



The remote control cannot process these functions.

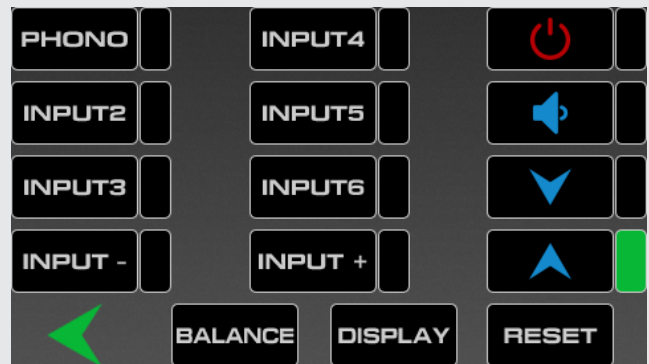
### Settings Menu



### The CP1 has the ability to learn codes from any Infra Red (IR) Remote Control

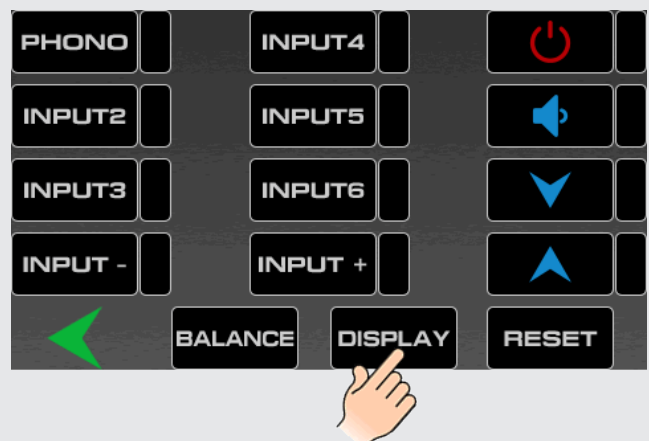
Source selection, Volume Up, Volume Down, Mute, Next Source, Previous Source and Standby can be controlled from any remote control by simply touching on the desired selection to be changed and then pressing the button on the remote control. Successful learning will result in a green button to the right of the selection. The CP1 will not allow 2 identical codes to be learned and will result in a red button next to the selection. Image at right shows a successful learning for Volume Up button.

Touch on the green back arrow to return to the main home screen.



### Display Menu

To access the display settings, simply touch on the display button as shown.

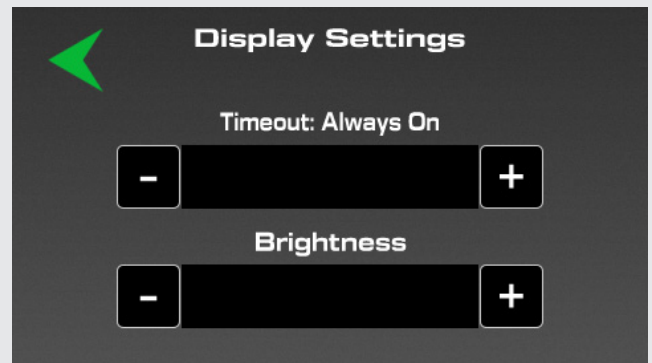


### Display Settings

The home screen of the Touch Panel Display can be set to time out (in 10 sec intervals) or to stay on permanently. To adjust timeout touch the '+' for longer time or '-' for less time.

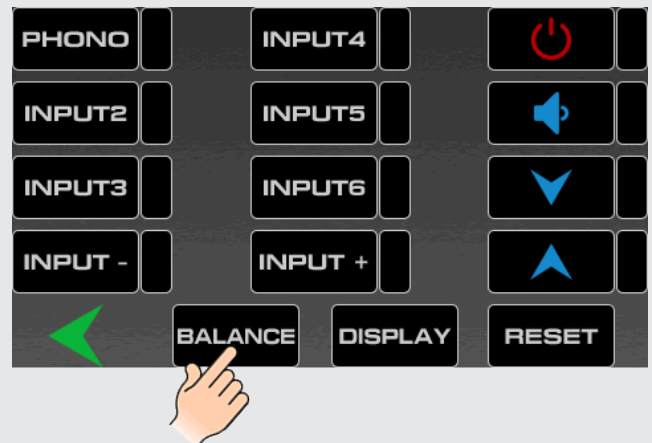
The Touch Panel Display has 15 levels of brightness. To adjust brightness, touch the '+' for more brightness or '-' for less brightness.

Once set just touch on the green back arrow to return to the Settings menu.



### Volume Balance Control

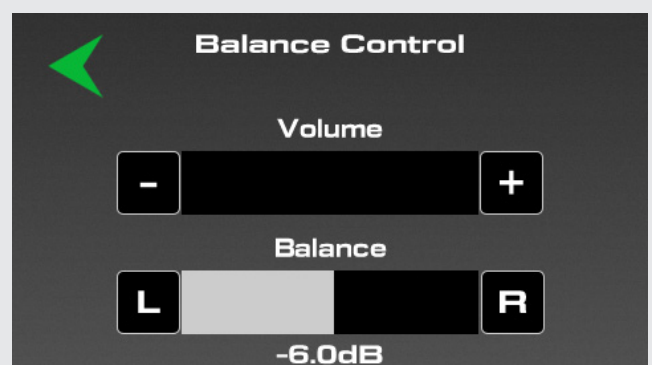
To access the balance settings, touch on the balance button as shown.



### Balance Control

The Left Channel - Right Channel balance can be adjusted over a 12dB range in 0.5dB steps. To adjust balance touch the 'R' to increase right channel volume relative to left channel and 'L' to increase left channel volume relative to right channel.

Once set touch on the green back arrow to return to the Settings menu.



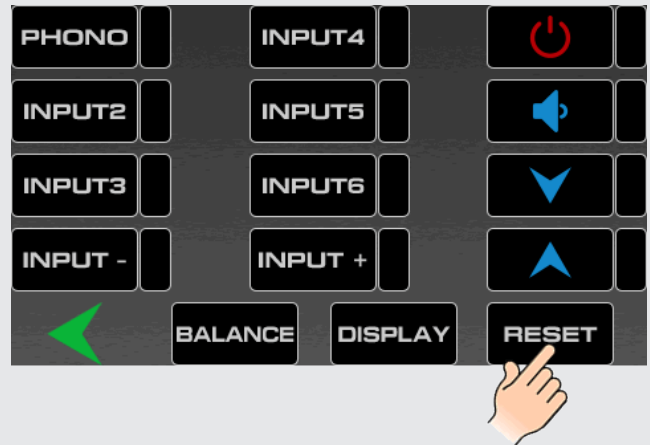


**FUNCTION**

**TOUCH PANEL DISPLAY**

The CP1 can be reset to its factory state, deleting all learned commands and other setup information as well as reverting all keys to their pre-programmed library commands.

To navigate to the factory settings menu touch the RESET button.



**Factory Settings**

This page shows important information such as the serial number of your CP1.

To reset the CP1 back to its factory settings, touch on the RESET button. With a green button confirming a factory reset, touching the green back arrow will reset the CP1.



**Line Stage Specifications**

- Input Sensitivity: 80mV
- Main Output Level: 0.775V, <47R
- Overload Margins: 40dB (all inputs all audio frequencies).
- Mains Fuse: Model 220-240V 1A/250V anti surge (T) M205  
Model 100-120V 2A/250V anti surge (T) M205
- Weight ..... 7 kg (15.5 lbs)      Shipping Weight ..... 8.6kg (18.96 lbs)
- Dimensions ..... 126(H) x 438(W) x 353(D)mm      (4.96" x 17.25" x 13.9")
- Shipping Dimensions ..... 235 (H) x 570 (W) x 500 (D) mm      (9.25" x 22.44" x 19.68")
- Mains Supply ..... 110-120V or 220-240V, 50/60Hz

**Warranty**

OAD Ultrafidelity products are covered by a 3-Year Limited Warranty. This Limited Warranty initiates from the date of purchase, and is limited to the original purchaser. Outside Australia, the authorized importing retailer or distributor has accepted the responsibility for warranty of OAD Ultrafidelity products sold by them. The specific terms and remedies for fulfilment of the Limited Warranty may vary from country to country. Warranty service should normally be obtained from the importing retailer or distributor from whom the product was purchased. In the unlikely event that technical service beyond the ability of the importer is required, OAD Ultrafidelity will fulfil the terms and conditions of the Limited Warranty. Such product must be returned at the purchaser’s expense to the OAD Ultrafidelity factory, along with a photocopy of the dated purchase receipt for the product, a written description of the problem(s) encountered, and any information necessary for return shipment. The cost of return shipment is the responsibility of the purchaser.

## **Phono Specifications**

Frequency response: RIAA within +/- 0.05dB

Signal to Noise Ratio (10mV input)

MM cartridge: >107 dB A-weighted, input shorted

MC cartridge: > 85 dB A-weighted, input shorted

Input Sensitivities:

MM cartridge: 2mV/47kOhm/100pF

MC cartridge: 100uV/200R balanced differential/1nF

Overload Margins:

MM cartridge: 40dB (20 - 20kHz) for 2mV input

MC cartridge: 40dB (20 - 20kHz) for 100uV input.

*All technical specifications are subject to change without prior notification.*

## **Introduction**

The CP1 phono card gives vinyl playback with the lowest noise figure possible. The phono card is able to play extremely low output moving coil (MC) cartridges without a step-up transformer. The extremely low noise and high gain design of the phono card is capable of cleanly and quietly delivering a line level signal output with a phono cartridge input of down to 80 micro-volts.

Cartridge loading is automatic when connecting a MC cartridge due to its unique design. For moving magnet (MM) cartridges, parallel capacitance loading is provided for. Parallel capacitance can be adjusted from 100 pF to 750 pF.

## **Adjustment of switches**

Adjustment is to be made with the CP1 switched off or better still with your power amplifier switched off. Changes made to the phono card loading have the possibility of sending pulses to your power amplifier that could damage speakers if the volume of the preamp is set sufficiently high.

On the rear panel you will see two sets of DIP switches. These switches allow you to select cartridge type (moving magnet or moving coil), select gain, and adjust cartridge loading.

Just above these DIP switches you will see graphic representation of how the two pairs of switches can be adjusted. Switches 6,7 & 8 of DIP switch on the right have no effect and should be ignored. The phono card ships from the factory with a default setting of moving coil at 100 ohms with a gain of 71 dB.

In order to set the switches for your particular cartridge, you will need to have some knowledge of its specifications. If you do not have that cartridge information, please contact your dealer or OAD directly. We will attempt to help you with that data, however we do not have factory data on every cartridge ever built. Select Moving Magnet (MM) or Moving Coil (MC) according to the type of cartridge you have. In all instances the switch-tab for any selection will need to be down for 'on' and up for 'off'.

## **Gain setting (G)**

The gain control attenuates the overall gain of the phono card stage in such a way that when the gain is reduced, the noise levels seen at the output of the CP1 are reduced proportionally. In this way, there is no penalty in selecting one gain setting over another. The exemplary signal, distortion and noise figures of the CP1 are never compromised by changing gain settings.

Choose a gain setting that allows the volume control to operate within a range similar to that of your other source components. If phono is your only source component, then pick a gain setting that allows your preamp a fairly advanced gain setting at whatever you consider to be a comfortable listening level. In most cases, set gain switch up for MC cartridges and down for MM cartridges.

## **Moving Coil setup**

For MC cartridges, switch 4 (MM) of both DIP switches are set to up for 'off'.

In MC mode, parallel capacitance is switched out and has no effect.

Depending on the output voltage of your MC cartridge, you may need to adjust DIP switch 5 (G). Up will set the phono card to 71dB and down will set the gain to 61dB. For most MC cartridges, the higher gain setting will be necessary to achieve normal listening levels.

**Moving Magnet setup.**

For MM cartridges, switch 4 of both DIP switches are set to down for 'on'.

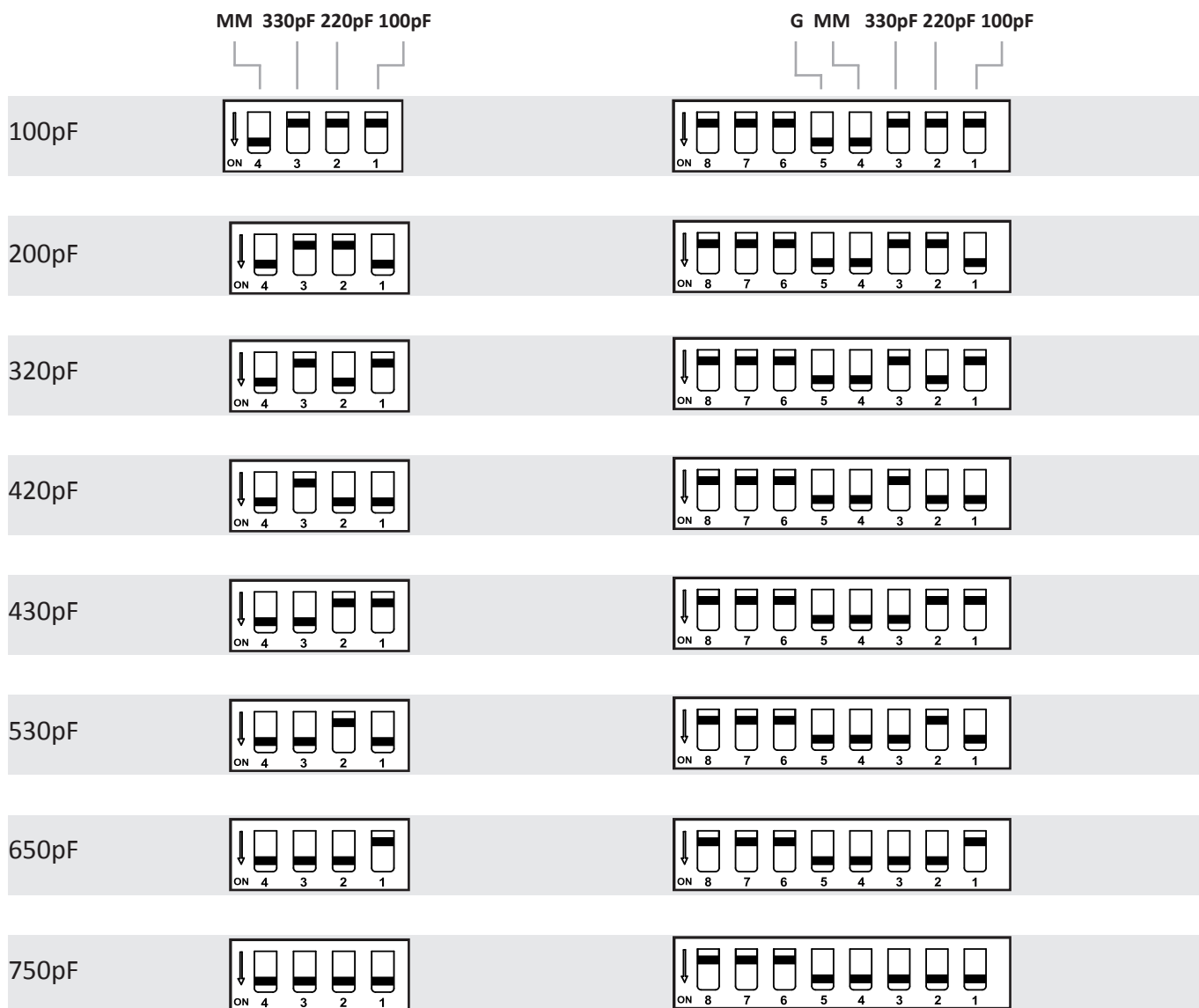
It will be impossible to give suggestions for correct capacitance with any given cartridge, due to the huge variation in capacitance of turntable cables. The optimal value is selected by listening.

There are three capacitive loading switches with values of 100pF, 220pF and 330pF. These are in addition to a fixed value of 100pF. You may select any switch or number of switches; the values are additive. The range of values available is 100pF – 750pF. The correct value is that which gives the best overall tonal balance. Typically, if the cartridge sounds too bright, then more capacitive loading is required. Set switches 1,2 & 3 of both left and right DIP switches to the same positions when setting the parallel capacitance. For most MM cartridges, the lower gain of 35dB will be the preferred setting.

Resistive loading for moving magnet is fixed at 47kOhm. If you require something other than 47kOhm, please contact the OAD factory.

Do not set the preamp so that it enhances one recording only. Listen to a variety of material and adjust accordingly.

**Moving Magnet Parallel Capacitance Settings.**



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