

**OVATION HIGH FIDELITY PRODUCT USER MANUAL**



**MODEL 1547 MC/MM PHONO  
AMPLIFIER**

Engineered for Art™

# **O V A T I O N**

---

## **H I G H F I D E L I T Y**

**Engineered for Art™**

**Model 1547 MC/MM RIAA Phono Equalizer Preamplifier**

**User Manual**

**February 2019 rev 1.0**



### **Welcome to Ovation High Fidelity.**

Thank you for purchasing this Ovation High Fidelity product. We have taken every care in the design, engineering and manufacture to ensure the highest levels of craftsmanship and quality so that you will have many years of trouble free operation and musical enjoyment.

### **Proof of Purchase**

Should the item be returned under warranty, proof of purchase will be required. Therefore, you must keep the original purchase invoice and receipt. We suggest you staple this into the rear inside cover of this user manual and retain it in a safe place after reading it. We always include a hardcopy of the purchase invoice with every shipment.

### **Product Usage Declaration**

This product is designed for use in hi-fi systems to amplify and equalize input signals from moving coil (MC) or moving magnet (MM) turntable pickup cartridges.

### **Warranty: -**

- This product is warranted free of manufacturing defects for a period of five years from date of purchase.
- This warranty excludes cases where the product is abused, or used for purposes other than which it was intended, or modified in anyway whatsoever
- The warranty is not transferable
- Remote controls (where applicable) are warranted for a period of one year from date of purchase. The warranty does not cover damage due to battery leakage
- The costs of sending the product back to the company under warranty, and its subsequent return, are for the account of the purchaser

### Returns Policy/30 Day Money Back Guarantee

Should you not be 100% satisfied with your product for any reason, you may return it within 30 days from date of receipt of the product for a full refund provided

- The product is returned packed in the original packaging
- The product is not damaged in anyway whatsoever either electrically or cosmetically
- The company reserves the right to deduct from the refund any costs required to make good any damage to products returned by customers.
- The costs of returning the product back to the company under the 30-day money back guarantee are for the account of the purchaser.

The Ovation High Fidelity Company reserves the right to modify and/or make technical and/or design changes to the design of its products without obligation to prior purchasers

## Unpacking Your New Product

**Do not damage the carton or the associated packaging materials. Retain the packaging material until after your 30 day money-back guarantee has expired.**

Retain all packaging (outer box, internal foam buffers, polythene anti-scratch bags, documentation) in a safe, dry place.

Check that you have the following items in the carton: -

- Model 1547 Preamplifier
- IEC mains lead with appropriate mains plug for your region
- User manual (this document)
- 

## Where to Locate Your New Model 1547 Phono Preamplifier

Locate your Model 1547 Phono Preamplifier in a well-ventilated area away from sources of heat, dust and humidity and direct sunlight. You should position the product alongside your existing preamplifier or turntable. We do not recommend that you stack high fidelity components on top of one another as this could interfere with ventilation.

You may *not* place any Ovation High Fidelity product directly on a carpet as this will obstruct airflow and will lead to overheating.

Make sure when locating the product, that no liquids or any other foreign objects can enter the unit through the ventilation holes.

Keep this equipment out of the reach of children.

## Warning!

Ovation High Fidelity products contain no user serviceable parts.

There are lethal mains voltages present inside the unit.

**DO NOT open the product under any circumstances - If faulty, refer it back to Ovation High Fidelity if still within the warranty period or to a qualified, authorized service engineer if not.**

**This product must be Earthed when in use. Use the supplied mains cable to ensure this.**

**Never use an 'Earth Lifter' or any similar device that interferes with the electrical safety of this product**

If you are not going to be using your equipment for any length of time – e.g. going away on vacation - it is advisable to unplug it from the mains.

### **Cleaning your Ovation High Fidelity Product**

1. Unplug the unit from the mains supply
2. Use a soft, slightly damp cloth or chamois leather wipe to clean the unit.
3. Use a dry, lint free cloth to wipe the unit down after step 2 is completed
4. Never use any abrasive cleaning agent to clean the unit – e.g. Cif, Vim, CLR or Softscrub
5. Never use furniture polish or similar oil based agents to clean your unit
6. Never use any solvent based cleaner like petroleum (i.e. gasoline), turpentine, benzene, methylated spirits or similar

## Model 1547 Front Panel

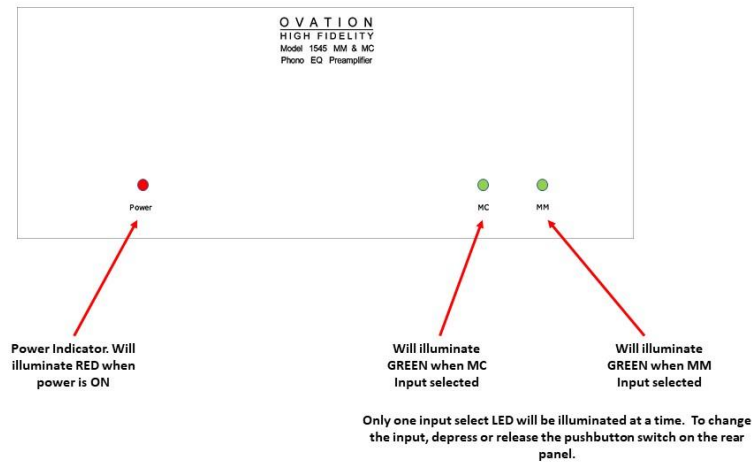


Figure 1 - Model 1547 Front Panel

## Model 1547 Rear Panel

The figure below identifies the key components on the Model 1547 Phono Preamplifier rear panel. Note the switch assignments which you will need to know to set up the Model 1547 gain and cartridge loading depending on whether you are employing a MC or MM cartridge on your turntable.

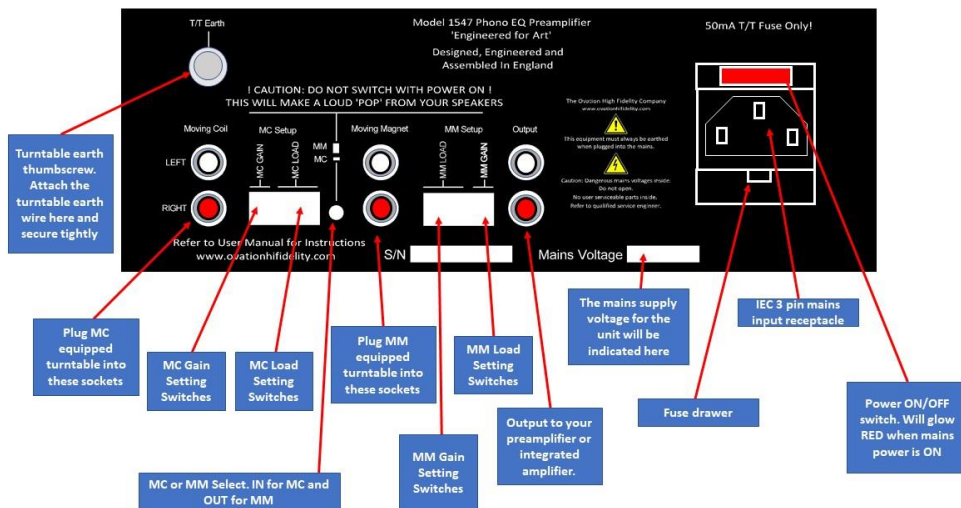


Figure 2 - Model 1547 Rear Panel

## Connecting your Model 1547 Phono Preamplifier into your System

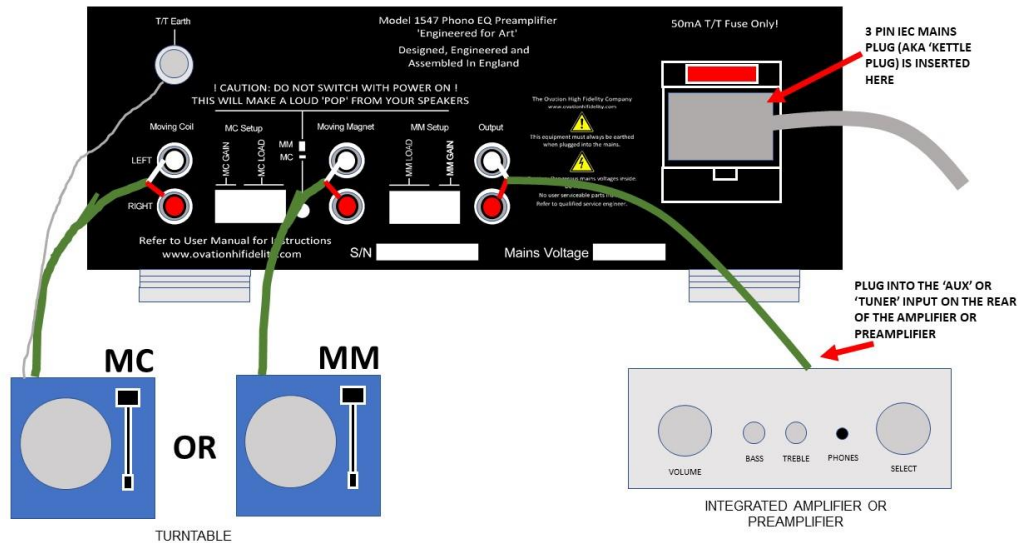


Figure 3 - Model 1547 Connection Diagram

Note: You if you connect two turntables (one MC equipped and one MM equipped) to the Model 1547, you can use the MC/MM switch to select between the two.

**Do not** switch between the two without first turning the volume control to minimum on your preamplifier or integrated amplifier.

### Important Note!

**On the Model 1547, DO NOT make any switch adjustments, select between MC or MM, or power the unit up or down without first turning the volume control on your preamplifier or integrated amplifier down to minimum. Failure to do this will result on a very loud noise being emitted from your loudspeakers.**



**We recommend you set all the relevant gain switches per Table 1 (for MC inputs) or Table 2 (for MM inputs) before powering the unit up.**

**We recommend you set all the relevant load switches for MC (Table 3) and or MM (table 4) before powering the unit up.**

**Gain Setting for Moving Coil (MC) Usage**

The table below is for turntable input via the MC input receptacles on the rear panel of the unit. *MM/MC switch on rear panel is depressed.*

Your MC Cartridge Output		Setting for 350 to 500 milli-Volt Output	
In micro Volts (' $\mu$ V')	In milli-Volts		
200	0.2	MC Gain both OFF	MM Gain Both ON
400	0.4	MC Gain both OFF	MM Gain Both ON
600	0.6	MC Gain both OFF	MM Gain Both OFF
800	0.8	MC Gain both OFF	MM Gain Both OFF
1000	1	MC Gain both OFF	MM Gain Both OFF
1200	1.2	MC Gain both OFF	MM Gain Both OFF
1400	1.4	MC Gain both ON	MM Gain Both OFF
1600	1.6	MC Gain both ON	MM Gain Both OFF
1800	1.8	MC Gain both ON	MM Gain Both OFF
2000	2	MC Gain both ON	MM Gain Both OFF

**TABLE 1 – MC GAIN SETTINGS**

**Gain Setting for Moving Magnet (MM) Usage**

The table below is for turntable input via the MM input receptacles on the rear panel of the unit. *MM/MC switch on rear panel not depressed.*

Your MM Cartridge Output	Setting for 350 to 500
In milli-Volts	milli-Volt Output
2	MM Gain Both ON
3	MM Gain Both ON
4	MM Gain Both ON
5	MM Gain Both ON
6	MM Gain Both ON
7	MM Gain Both OFF
8	MM Gain Both OFF

**TABLE 2 – MM GAIN SETTINGS**

**Resistive Load Setting for Moving Coil (MC) Usage**

If you are using an MC Cartridge, you will need to set the load in accordance with the cartridge manufacturers recommended settings.

Note: It is recommended that for MC operation, all of the MM load switches are set in the OFF position (this is the physical UP position).

**Table 3 – Setting MC Load Resistance**

Your MC Cartridge Specified Load in Ohms	Push the following switch Positions DOWN
270 Ohms or higher	All switches in UP position
150 Ohms to 270 Ohms	Switches 2 and 4 DOWN
100 Ohms to 150 Ohms	Switches 1 and 3 DOWN
75 Ohms to 100 Ohms	Switches 1 to 4 DOWN
<75 Ohms	Switches 1 to 4 DOWN

Unspecified switches in the above table must be left in the UP position.

Refer to your MC cartridge user manual for the required load resistance

**Capacitance Load Setting for Moving Magnet (MM) Usage**

**Table 4 – Setting MM Load Capacitance**

Your MM Cartridge Load in pico-Farads ('pF')	Push the following switch Positions DOWN
100 pF	All Switch in UP position
200 pF	Switches 2 and 4 DOWN
300 pF	Switches 1 and 3 DOWN
400 pF	All Switches DOWN

Unspecified switches in the above table must be left in the UP position.

Refer to your MM cartridge user manual for the required load capacitance. The above table assumes a *minimum load capacitance* of 100 pF which corresponds to a 1-meter interconnect cable between your turntable and the Model 1547 Phono Preamp.

*Important note: Incorrect load settings will not damage your cartridge or prevent it from working. However, the sound will be suboptimal. We therefore recommend that you spend some time on getting these settings correct to ensure maximum enjoyment from your system.*

### Powering ON and OFF

Before powering up, make sure that your preamplifier or integrated amplifier volume control is *turned to minimum*. If you power up the Model 1547 with the volume on your amplifier set high, you will cause a very loud and unpleasant noise to be emitted from the loudspeakers.

The unit is equipped with a standard IEC 3 pin power receptacle located on the rear. Plug the provided mains cable into the same power socket or strip as the rest of your system, and the other end into the socket on the rear of the unit.

Turn the rocker switch located just above the receptacle ON – when ON, it will glow RED. The RED front panel power LED will illuminate to indicate the presence of power, along with either MC or MM LED's located on the LHS of the front panel.

See Addendum 1 at the end of this User Manual for some guidance on how to dress the cables between your turntable, the Model 1547 and the preamplifier or integrated amplifier to get the best performance from your system.

**LEAVE THE MODEL 1547 PERMANENTLY POWERED UP. THE  
STANDBY POWER IS < 1.5 WATT.**

## Replacing the Fuses on your Model 1547 MC/MM Phono Preamplifier

In the unlikely event that the mains fuse on your unit should blow, you should check the following carefully before replacing it: -

1. You are using the correct mains voltage. The mains voltage for your product is set at the factory at the time of shipping and shown on bottom of the rear panel.
2. Make sure the mains power at the wall socket is not inadvertently switched OFF.
3. If your unit still does not operate, you need to replace the fuse as detailed below

**Important! Always unplug the unit from the mains before attempting to replace the fuse!**

Use a flat bladed screw driver and insert it into the slot located along the top edge of the fuse drawer to gently lever it open.

Replace the Model 1547 fuse with the ratings as indicated below

Mains Voltage	Fuse Rating	Remarks
100 VAC to 130 VAC	50 mA T	slow acting 'T' fuse
200 VAC to 240 VAC	50 mA T	slow acting 'T' fuse

Firmly push the drawer closed, after which you can reconnect the unit to the mains and then apply power.

Do not use fuses marked FF, F or M as these are fast/medium acting and will likely blow when you power the Model 1547 up. Only use 'T' fuses.

If the fuse blows again, refer your unit to a qualified repair technician, or if still under warranty, contact the factory via the 'Contact' page at [www.ovationhifidelity.com](http://www.ovationhifidelity.com) for support

**Never use fuses rated higher than shown in the table above on your Model 1547. Equipment fuses are designed and rated to prevent fire hazard and are a legal requirement in all countries.**

**Trouble Shooting – Model 1547 Phono Preamplifier**

<b>Problem</b>	<b>Likely Cause</b>	<b>Action</b>
Unit will not power up with the rear panel POWER switch in the ON position. The front panel Power LED is not illuminating. The rear panel light is not illuminating.	No AC mains power is coming to the unit	Check that the wall socket is switched ON and is providing power. You could for example plug another appliance like a lampshade into the same socket to verify this
		If still not working, check that the mains cable plug (UK only) fuse is intact or try another mains cable
		If the wall socket is ON and the power cable fuse is intact, check the Model 1547 mains fuse – see Page 12
There is no sound coming from the system but the power LED is illuminated on the front panel	Incorrect input selected on your amplifier or preamplifier	Select the correct input on your preamplifier or integrated amplifier. Make sure the volume control is not accidentally set to minimum
	If above is ok but there is still no input signal from the preamplifier	Make sure the interconnect cable from the Model 1547 is in place and the correct source signal is selected on the preamplifier
There is a hum coming from the loudspeakers	Interconnect cable is faulty or is not properly seated in its associated receptacle	Check all interconnects - they must to be fully seated in their associated receptacles to prevent hum
		If after checking the above, you still have hum or buzzing from your loudspeakers, ensure that the turntable earth wire is attached to the TT thumbscrew on the rear panel of the Model 1547. See Figure 3 for details.
The output from the amplifier is <i>very loud</i> even when the volume dial is set quite low – e.g. the 9 o'clock position	You are feeding a MM (moving magnet) cartridge input into the MC (moving coil) input on the unit	Ensure you are using the correct input and that the gain settings laid out in Table 1 or Table 2 are correct.
The output from the amplifier is still <i>very loud</i> even when the volume dial is set quite low – e.g. the 9 o'clock position	The Model 1547 gain is probably set too high.	To correct this problem, assume that your cartridge output is 2 to 3 times <b>higher</b> than you understood, and then re-adjust the gain using either Table 1 (MC) or Table 2 (MM)
The output from the loudspeakers is <i>very low</i> even when your amplifier volume is set very high e.g. between 3 o'clock and maximum	You are feeding a MC (moving coil) cartridge input into the MM (moving magnet) input on the unit	Ensure you are using the correct input and that the gain settings laid out in Table 1 or Table 2 are correct.
The output from the loudspeakers is <i>very low</i> even when your amplifier volume is set very high e.g. between 3 o'clock and maximum	The Model 1547 gain is probably set too low.	To correct this problem, assume that your cartridge output is 2 to 3 times <b>lower</b> than you understood, and then re-adjust the gain using either Table 1 (MC) or Table 2 (MM)

**Always turn your preamplifier or integrated amplifier volume to MINIMUM before making and gain adjustments, changing the inputs or applying power to the Model 1547**

**If your unit is still not working correctly, kindly contact Ovation High Fidelity via the 'Contact' page at [www.ovationhifidelity.com](http://www.ovationhifidelity.com)**

## Specifications

### Model 1547 MC/MM Phono EQ Preamplifier

#### General Description

A very high-performance MC/MM phono EQ featuring a single ended JFET input stage and all-active RIAA equalization for superior overload and noise performance. Switchable gain and loading options for both MC and MM are provided on the rear panel. The power supply is integrated into the housing for minimal installation wiring and contributes to the outstanding hum and noise performance.

Inputs	Moving Coil or Moving Magnet - selected via pushbutton switch on rear of unit
Input sensitivity	For 350 ~ 500 mV output: MC - 250uV to 1.2mV - gain selected via DIP switch on rear of unit; MM 2.5 mV to 8 mV selectable via DIP switch on rear of unit
System Gain	MC Amplifier 7x or 16x; MM Amplifier 39x or 90x
RIAA Conformance	Typically to within <0.2 dB 100 Hz to 20 kHz; 0.3 dB max
Distortion	Better than 0.005% at 1 kHz ref 500mV output; Better than 0.007% 20 Hz to 20 kHz
Signal to Noise Ratio	Ref 500 mV output: MC > 75 dB; MM > 78dB; MC and MM > 82 dB 'A' weighted
Overload Margin	MC >: 40 dB ref 250uV input; MM > 30 dB ref 3mV input for 350mV output
Rumble Filter	-0 dB at 20 Hz; -16 dB at 2 Hz
Output	350 to 500mV nominal via RCA phono connector; output impedance 220 $\Omega$ s; recommended load is 10 k $\Omega$ s per channel or higher and 500 pF or less per channel (a 2-metre RCA interconnect is 200 pF per channel)
Operating voltages	100-130 VAC or 200 to 260 VAC. Factory set at time of order
Power consumption	5 VA Max; ~0.5W in standby mode (we recommend you do not power the unit down)
Dimensions	240 mm wide x 95 mm high x 190 mm deep
Weight	2.5 kgs unit only; 5 kgs when packed for shipment
Operating Temperature	-10 deg C to +45 deg C non-condensing
Warranty	5 years on parts and labour. Terms and conditions apply – kindly see our website for details.

---

**The Ovation High Fidelity Company Limited**  
Norfolk, England

[www.ovationhifidelity.com](http://www.ovationhifidelity.com)

**The Ovation High Fidelity Company<sup>®</sup>**

**Engineered for Art<sup>™</sup>**

and the

**O V A T I O N<sup>®</sup>**  
H I G H F I D E L I T Y

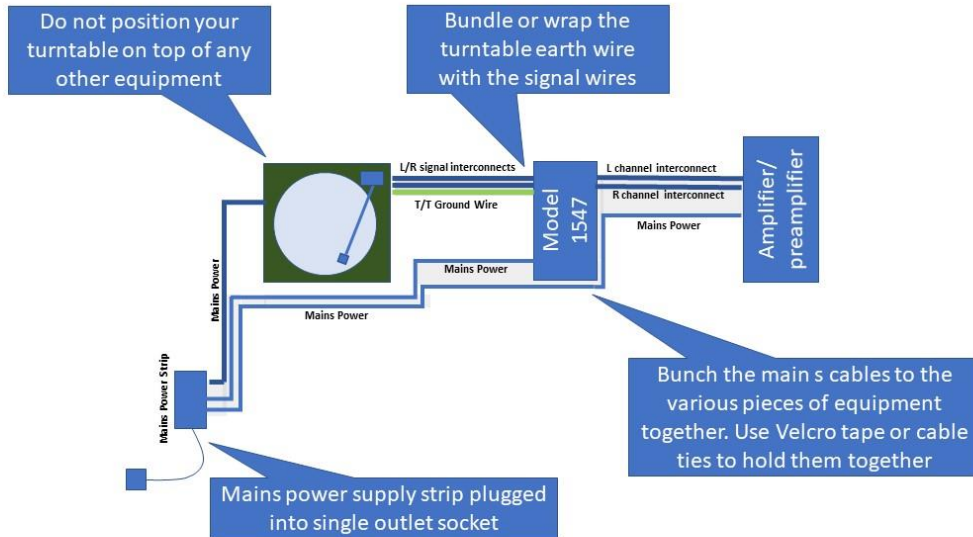
logo are registered copyright and trademarks of  
The Ovation High Fidelity Company.  
All Rights Reserved. Subject to International Law

## Glossary – Some General Terms

AC	Alternating Current – the type of electricity supply used in normal house wiring and to power consumer appliances like TV's, washing machines and high fidelity systems
A-D or A/D	Analog to Digital – an electronic technique whereby an analog signal is sampled at short, regular intervals and the sampled value converted into a representative numeric value that is stored in computer memory, CD or some other mass storage media
Analog Signal	A voltage or current signal that varies continuously with time. Examples are the pickup signal from a turntable, or the output signal from a microphone. All natural world signals are analog.
Balanced Audio Signals	A method whereby audio is transferred between equipment using two floating connections without reference to ground, making it highly immune to ground loop induced hum and extraneous noise pickup. Uses XLR connectors. See Unbalanced or single-ended audio signals
Bipolar Transistor	A three-terminal semiconductor amplifying device
CMT	Current Mode Topology – a type of audio amplifier wherein the peak current into the main amplifier stage is determined directly by the output voltage and the gain setting resistor. Also known as CFA (Current Feedback Amplifier)
D-A or D/A	Digital to Analog – the technique of converting digitally stored samples into a continuous analog signal
Damping factor	A measure of an amplifiers load impedance divided by its output impedance. The higher the figure the better. In a modern amplifier, any figure above 50 should be considered adequate and above 100 excellent
DC	Direct Current. Examples would be the type of electric current supplied by a battery
Decibel or dB	A logarithmic measure of an analog signal with respect to a reference, or expressed as the difference between two signals. 20 dB = 10x and 40 dB = 100x while 100 dB = 100 000x. By way of an example, if the S/N of a preamplifier is - 100 dBV, it means that the noise is 100 000 times lower than 1V – i.e. 10 millionths of a Volt. The 'V' in dBV refers to the reference which is 1V and is a standard measure used in audio
Digital Audio Signal	An audio analog signal is sampled at discrete time intervals by an A-D and the resultant samples converted to a numerically representative value. An example is a CD, where the original analog signal (e.g. the voice of a singer) is sampled 44100 times a second and each sample converted to a 16 bit digital representation. See also A-D
Digital signal	A binary coded numerical value represented by 0's and 1's where the '0' value corresponds to 0V and the '1' corresponds to 3.3V, 5V or some other non-zero voltage. Digital signals are either parallel or serial format. Examples of digital signals would be the co-ax output from a CD drive (serial digital signal), or the data on an Ethernet cable used in communications (also a serial digital signal)
Distortion and Noise	The presence in any electrical audio signal of unintended harmonics and/or noise. Reducing distortion and noise are key goals in any equipment that reproduces audio signals
EMI or Electro-Magnetic Interference	Noise and/or extraneous signal introduced into a system through magnetic or capacitive coupling mechanisms. Filtering, bandwidth limiting and careful design and equipment layout can reduce the effects orders of magnitude below human hearing threshold, and/or render it of no consequence to the correct operation of the equipment.
EQ or Equalization	A technique whereby an electrical signal which is intentionally or unintentionally altered from the original, is corrected. Examples would be RIAA (intentionally altered during the disc cutting process) or room EQ whereby acoustic imperfections of the environment are corrected
Frequency Response or Bandwidth	The extent of frequencies an amplifier or transducer (e.g. a microphone or a loudspeaker) can reproduce to within a specified range. Human hearing covers 20Hz to 20 kHz. Audio amplifiers typically cover at least 5 Hz to 100 kHz (-3 dB) to ensure a flat response to within 0.2dB across the human hearing range of 20 Hz to 20 kHz
Input Sensitivity	The level of input signal required to produce a given output from a preamplifier or a power amplifier.
IR Remote	Infra-red Remote control
JFET	Junction Field Effect Transistor – a three terminal semiconductor amplifying device that somewhat emulates vacuum tube triodes in its performance characteristics.
Moving Magnet Phono Cartridge	A type of transducer used to retrieve signals from an LP groove that relies on the movement of small magnets to generate a voltage in a coupled pickup coil. See MC or moving coil
Moving Coil Phono Cartridge	A type of transducer used to retrieve signals from an LP groove that relies on the movement of small coils coupled to a magnet field to generate a pickup signal. See MM or moving coil
Ω	Ω is the unit of electrical resistance. Most loudspeakers are rated at 8 Ω
Output Power	Measured in Watts, the amount of electrical power that can be delivered into a loudspeaker load by an amplifier. Always quoted into a known resistive load – usually 4 or 8 Ω
Phono socket	The small round sockets – usually grouped in Left (WHITE) and Right (RED) pairs on the rear side of audio equipment. Also referred to as 'RCA Phono' sockets
RC5 IR	The protocol by which commands from the remote are encoded and transmitted via infra-red to the receiving equipment which then executes them. Invented by Philips in the 1970's and now one amongst 4 or 5 industry standards
RIAA	Recording Industry Association of America – The association that standardized the LP/vinyl playback equalization curve in the early 1960's that is still the standard for LP/vinyl today
Signal to noise ratio (SNR)	A measure of the amount of noise in a system against the nominal output signal of that system. In modern equipment, any figure lower than -90 dBV should be considered excellent
Slew Rate or S/R	The fastest rate of output voltage change that an amplifier can sustain. A typical design goal for an audio amplifier is 1V/us per volt of output swing. For a 100 Watt amplifier, this corresponds to a figure of about 80V/us
Small signal rise time	A measure of the speed (i.e. rate of change) of an amplifier or preamplifier when dealing with low level signals in the 1-2 Volt range. Small signal rise time and slew rate (S/R) are not equivalent
Unbalanced or single-ended audio signals	With this type of interconnection, audio is transferred between equipment using a ground connection and a signal connection. It is more common than balanced audio signals due to its lower implementation cost, but much more susceptible to noise pick-up
VMT or VFA	Voltage Mode Topology – a type of amplifier wherein the peak current into the main gain stage is limited to that of the input stage 'Long Tail Pair' (LTP) current source. Also known as VFA (Voltage Feedback Amplifier)
XLR	The standard interconnect receptacle format for balanced audio signals

## Addendum 1

### Cable routing: how to ensure you get the best performance from your turntable set-up



The figure above shows how to route the interconnect wiring between the turntable, the Model 1547 and the power amplifier or preamplifier to get the best performance and lowest noise from your system.



## Owners Information

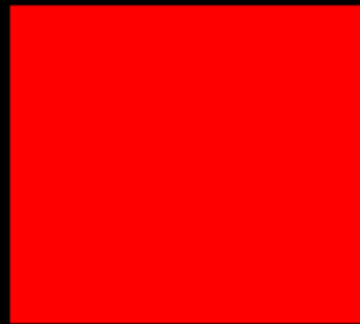
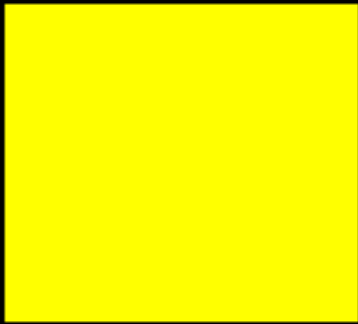
Date Purchased: \_\_\_\_\_

Dealer (if Applicable): \_\_\_\_\_

Warranty Registration Date: \_\_\_\_\_

Serial Number: \_\_\_\_\_





The Ovation High Fidelity Company  
Norfolk, England

[www.ovationhifidelity.com](http://www.ovationhifidelity.com)