



MODEL 200i/200iP

DUAL CHANNEL INTEGRATED AMPLIFIER

OWNERS MANUAL

200i / P

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WARNING: THE 200iP IS AN EXTREMELY HIGH POWERED CONVECTION COOLED AMPLIFIER. THE FINNED OUTER HEAT SINKS MAY BECOME VERY HOT WHEN DELIVERING HIGH VOLUME LEVELS - TO AVOID INJURY CARE SHOULD BE TAKEN NOT TO TOUCH THE HEAT SINKS DURING OPERATION.

INTRODUCTION

Congratulations on your Perreaux Model 200iP purchase. To realise the full potential of your unit you will need to appreciate all aspects of its' operation.

Before installing the 200iP into your system, read the entire manual carefully. Endeavour to understand every detail by familiarising yourself with the controls and features as you read. You will find it easier to install using the relevant sections of this manual as a reference.

We have attempted to explain every feature and operation facet clearly and concisely. Your Perreaux dealer will be happy to assist if you encounter any unforeseen problems.

Read this manual, install your 200iP correctly and realise the sonic significance of your investment in Perreaux.

Perreaux products are designed to provide the utmost in sonic realism and electronic reliability with a functional yet elegant appearance, that reflects the care and craftsmanship applied during all stages of construction.

To maintain the consistently high quality that you expect from us, and we expect from ourselves, Perreaux products are essentially hand-crafted.

We maintain the human-link throughout, from design and construction, through to the ultimate test, your music, your system, your ears.

Because we too listen to our products we know that with your Perreaux you will discover many more of the musical secrets we strive to reveal.

Note. All references to Models 200iP are also applicable to Model 200i Classic series product other than the front panel cleaning instructions .

Care should be taken to avoid the use of solvents for cleaning particularly on plated Classic series products. Use only a soft cleaning cloth with a mild solution of non caustic detergent if necessary.

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SAFETY INSTRUCTIONS

1. Please read all instructions carefully before the 200iP is operated. Keep the Owners Manual in a safe place for future reference.
2. **Follow Instructions**
All installation, operation and other instructions should be followed.
3. **Warnings**
All warnings on the 200iP and in the Owners Manual should be strictly adhered to.
4. **Water and Moisture**
The 200iP should not be used near water, for example near a bathtub, washbowl, kitchen

sink, laundry tub, in a wet basement, near a swimming pool, etc.

5. Rack / Wall / Ceiling Mounting

The 200iP should be rack mounted only in a heavy duty rack or stand that is recommended for audio equipment use. Mounting to a wall or ceiling should be via a heavy duty bracket or shelf designed for audio equipment use.

6. Heat

The 200iP should be situated away from heat sources such as radiators, stoves, or other appliances that produce excessive amounts of heat. Always ensure the 200iP heat sinks have adequate ventilation enabling air circulation both above and below. Do not place the 200iP directly onto carpeted surfaces.

7. Power Sources

The 200iP should be connected to a mains power supply only of the type described in the operating instructions, or as marked on the rear of the unit.

8. Power Cord Protection

The mains power supply cord should be routed so that it is not likely to be walked on or pinched by items placed on or against it. Pay particular attention to the cord at power points, convenience receptacles, and the point where it exits from the 200iP.

9. Cleaning

When cleaning 'P' series product use luke warm water with a few drops of a mild non caustic detergent .

DO NOT USE SOLVENTS.

10. Non-use Periods

The mains power cord of the 200iP should be unplugged from the mains/line outlet when the unit is to be left unused for long periods of time.

11. Object and Liquid Entry

Care should be taken so that objects and/or liquids do not accidentally fall inside the 200iP.

12. Damage Requiring Service

The 200iP should be serviced by qualified service personnel if any of the following occur :

- a. The mains power-supply cord, and/or plug have been damaged
- b. Objects have fallen, or liquid has been spilt into the 200iP
- c. The 200iP has been exposed to rain and/or excessive moisture
- d. The 200iP does not appear to operate normally, or exhibits a marked change in performance
- e. The 200iP has been dropped, or the chassis damaged.

13. Servicing

The user should not attempt to service the 200iP beyond those means described in the owners manual. All other servicing should be referred to qualified service personnel.

14. Grounding or Polarisation

Precautions should be taken so that the grounding or polarisation of the 200iP are

correct, and are maintained through-out the entire system.

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IMPORTANT INFORMATION

Always make sure the volume control on your 200iP is set to zero prior to performing any switching functions or connection alterations of any type to your 200iP, or to any other part of your entire system. This caution also applies to the normal use of your Compact Disc player, Tuner, Cassette Deck, etc.

NOTE : When using a tuner it is not necessary to alter the volume when changing stations, at a moderate listening level.

FRONT PANEL

1 VOLUME INCREASE ▲ / DECREASE ▼ BUTTONS

These buttons when depressed increase or decrease the volume setting. The volume adjustment range is 00 - 59.

2 PREVIOUS ▼ / NEXT ▲ SOURCE BUTTON

These buttons when depressed select either the previous or next source (input).

NOTE: The source selector has six positions and supplies the chosen source to the Main Preamp outputs and VCR/ Tape outputs. If the VCR or Tape source is selected no signal is supplied to its applicable output to avoid the potential damaging feed back loop which can occur if inadvertently attempting to record and playback the same source simultaneously. The order of sources (inputs) and display indication is as follows:

<u>Source</u>	<u>Display</u>
CD	CD
Tuner	TU
Direct In	dI
Laser Disc	Ld
VCR	VR
Tape	TA

3 ALPHANUMERIC DISPLAY

The display will illuminate when the power is turned on at the mains power switch or when various remote or front panel adjustments are made (see remote control) At turn-on the display will illuminate with "00" and default to

the CD input. If no commands are selected within 2 minutes the display will revert to the standby mode displaying a red dot only to indicate power is still on.

4 REMOTE SENSOR WINDOW

Located to the right of the display this area houses the remote sensor and should not be covered

REAR PANEL

(Looking at the rear from left to right)

5 CD INPUT

The 200i has 2 pairs of CD inputs, the first pair being "Neutrik" type balanced inputs and secondly the more common coaxial unbalanced inputs.

The Balanced inputs are intended to give you the option to connect a Compact Disc player with Balanced outputs such as the Perreux CD1P and take advantage of the improved noise rejection properties of a balanced system.

Balanced line input pin configuration.

Pin 1	EARTH / Ground
Pin 2	HOT/ Phase
Pin 3	COLD/ Anti-phase

Note: Operate the small silver toggle switch located adjacent to the upwards if using the balanced input and downwards if using unbalanced input

6 TUNER INPUT

Connect your tuner to this input for optimum amplification.

7 DIRECT INPUT

This input is designed to accept the input from a surround processor or other volume controllable source such as a CD player with variable output. The dI input completely bypasses the preamplifier effectively turning the 200iP into a 200Watt power amplifier.

WARNING

BECAUSE THE dI INPUT COMPLETELY BYPASSES THE PREAMPLIFIER SECTION AND EFFECTIVELY CONVERTS THE 200iP INTO A 200 WATT POWER AMPLIFIER DO NOT CONNECT A NON VOLUME CONTROLLED SOURCE TO THIS INPUT AS FULL POWER WILL BE AVAILABLE WITH A 1.5V INPUT VOLTAGE

8 LD INPUT

This input is designed to accept the signal from the analogue audio output of your laser disc or DVD player.

9 VCR INPUT

Connect the audio output of your VCR to this input.

10 TAPE INPUT

Connect the audio output of your tape deck to this input.

11 VCR OUTPUT

Connecting your VCR input to this output will provide a suitable level for recording.

12 TAPE OUTPUT

Connecting your tape deck input to this output will provide a suitable level for recording.

13 PREAMP OUT

This output supplies the output signal from the preamplifier of the 200iP and is usually linked to the 200iP power amplifier via the SEPARATE / COUPLE toggle switch. This output can be used for a number of functions such as driving an additional power amplifier in a bi-amp system or supplying signal for a Multi-room application or as an output to a processor, graphic equaliser or similar signal processor between the pre and power amplifier sections. (see sections 14,15 and notes at the end of this section),

14 SEPARATE / COUPLE TOGGLE SWITCH

The function of this switch is to connect or disconnect the preamplifier and power amplifier sections. The down or "Couple" position connects the 2 sections together. The up or "Separate" position disconnects the preamplifier and power amplifier sections (see sections 13,15 and notes at the end of this section)

15 MAIN IN

These sockets are connected directly to the input of the power amplifier section in the 200iP and are usually linked to the internal preamplifier by the SEPARATE / COUPLE toggle switch. These sockets can be used as an additional preamplifier output for bi or tri-amping or for supplying signal for a multiroom application (see sections 13, 14 and notes at the end of this section).

Note: When the rear switch is in the down or couple position, the preamp and power amplifier sections of the 200iP are connected internally and effectively the pre out and main in sockets are joined in parallel .(Note that when using the "di" input the same signal level being fed into that input will be available at all of these sockets)

When the rear panel switch is in the up or separate position the pre out and main in sockets are disconnected along with the internal connection between pre and power amplifier.

When inserting a processor or other piece of equipment between the pre and power amplifier sections the selector switch should be in the up position.

When using the 200iP as a power amp or preamp only, the toggle switch should be in the up (separate) position ie disconnected

16 SERIAL NUMBER

See page 8

17 MAINS VOLTAGE / FUSE RATING LABEL

Indicated factory set voltage and mains fuse rating - see page 8

18 MAINS POWER ON/OFF SWITCH

Depress this switch to the right (I) to turn power ON. As mute relay circuitry is employed in the 200iP, full output is muted for 1 to 2 second after the power switch is actuated.. Depress this switch to the left (0) to turn the 200iP off at which time the preamplifier and power amplifier outputs will be disconnected.

I = ON
0 = OFF

Note: The 200ip resets the volume to minimum and balance to centre at turn on

19 MAINS/LINE INPUT RECEPTACLE & FUSE HOLDER

This receptacle accepts the female end of the mains power cord. For more information regarding MAINS/LINE VOLTAGE and connection see the relevant sections on page 8. Located in a small drawer below the MAINS/LINE RECEPTACLE is the MAINS/LINE FUSE. The drawer can only be opened when the mains/line cord is removed See the relevant section for more details on replacement fuses.

20 LOUDSPEAKER OUTPUT TERMINALS - LEFT & RIGHT

These are high quality gold plated terminals. All terminals are clearly marked and colour coded RED Positive (+) and BLACK Negative (-).

This polarity must be strictly observed when connecting up loudspeakers, i.e. positive terminal of the 200iP to the positive terminal of the loudspeaker. negative terminal of the 200iP to the negative terminal of the loudspeaker.

Good quality, preferably gold plated spade or banana type terminals are recommended together with a high quality loudspeaker cable. The loudspeaker leads, both left and right channels should be cut to equal lengths and be as short as possible. This is to

maintain uniform resistance at the lowest possible level.

If your installation demands that your 200iP Integrated Amplifier be closer to one loudspeaker than the other, avoid neatly coiling any excess loudspeaker cable as this can create inductance and may cause high frequency roll off. Always ensure connections are clean, firm and tight.

Note : You will also find on the rear panel written information and relevant precautions. Read and observe the information to ensure your safety and a lifetime of trouble free operation from your PERREAUX 200iP.

REMOTE CONTROL

The 200iP comes supplied with a 29 button PERREAUX Universal infra-red remote control.

Note: Press the red PRE button on the remote to select the code-set required for the 200iP

The 200iP uses the following functions:

 MUTE

Depressing this control causes minimum volume to be selected. The display will indicate "MU" until any front panel or remote control button is actuated or the mute button is depressed again at which stage volume will be returned to the previous setting.

Note: After 1 minute the 200iP will revert to standby mode volume will set to zero. The display will revert to a red dot indicating standby.

Note : The Mute control has a 'punch through' function and will operate regardless of the code-set selected ie You can be operating the CD player remote functions and still use the Mute control without selecting the 'PRE' button first.

DISPLAY (Labelled '7')

Pressing this button will cause the display to revert to the standby indication (one red dot) and is intended for use if the light of the display is distracting. (for instance in a darkened room). Depressing any key will cause the display to revert to its normal operation.

BALANCE LEFT (Labelled 10)

BALANCE RIGHT (Labelled 10+)

The balance controls allow you to vary the level of either the Left or Right channel to obtain the correct stereo balance for your listening position. Pushing the BALANCE Left button will cause the level of the right channel to be attenuated (decreased in volume). Pushing the BALANCE Right button will cause the level of the left channel to be attenuated. During any balance adjustment the display will indicate the direction of adjustment, left or right, with an "L" or an "R" followed by a number indicating the level of adjustment. The range is L1 - L9 and R1 - R9. "L R" on the display indicates the balance is centred. Pushing either button will initially cause the display (1) to indicate the current balance position. (i.e. in most cases "LR").

Note that balance adjustments are not memorised should the 200iP be turned off at the mains power switch.

TU (Tuner) SOURCE SELECT

Depressing this control selects the 'TUNER' source (input) and Tuner Code-set

CD SOURCE SELECT

Pressing this control selects the 'CD' source (input) and CD Code-set.

TAPE SOURCE SELECT

Pressing this control selects the 'TAPE' source (input).

VCR SOURCE SELECT

Pressing this control selects the 'VCR' source (input).

LD SOURCE SELECT

Pressing this control selects the 'LD source' (input).

AUX (DIRECT) SOURCE SELECT (Labelled 9)

Pressing this control selects the 'Direct' source. (input).

VOLUME - (Down)

Depressing this button decreases the volume.

VOLUME + (Up)

Depressing this button increases the volume.

Note : The Volume control (+ and -) have a 'punch through' function and will operate regardless of the code-set selected ie You can be operating the CD player remote functions and still use the volume controls without selecting the 'PRE' button first.

The Remote control uses 2 internal "AAA" batteries and may be changed by sliding forward the plastic cover located on the bottom of the remote

TAPE DUBBING

Dubbing from any selected source (refer FRONT PANEL information) to a cassette or VCR deck is simple. Select the source that you wish to record and proceed recording by activating the tape recording facility on your cassette deck, VCR or other recording device.

A built-in inhibiting device mutes the signal at the tape output when TAPE is selected and VCR output when VR is selected with the source selector. This inhibiting device prevents a feedback loop occurring if accidentally trying to playback and record off a single source simultaneously.

CONNECTIONS

Connect your loudspeakers to the binding posts on the rear of the 200iP Integrated Amplifier (20). Ensure that both channel and phase integrity are maintained throughout your entire system set-up.

Follow the sequence given in the next section, INSTALLATION/OPERATION PROCEDURES. This section incorporates all the information in the various areas of this manual to assist installation.

When connecting the 200iP Integrated Amplifier to auxiliary equipment terminate the interconnect cables with a red plug for the right channel and

white, black or blue for the left channel. Terminate speaker cables using red for positive (+) and black, white or blue for negative (-).

These are the most commonly accepted colour coding combinations in use internationally to help maintain channel and phase integrity (i.e. left to left, right to right, positive to positive, and negative to negative). After making all the connections, lay the leads and cables out in such a way so that speaker leads are well away from the interconnect cables, and both are well separated from mains/line power cables.

INSTALLATION AND OPERATION PROCEDURES

Position all the separate components of your system close enough to your 200iP to avoid having to stretch or extend any of the interconnect cables.

Avoid errors by adopting a systematic approach when connecting your system together. Make all connections logically and carefully, outputs first then inputs.

Note : Always ensure the volume control is set to zero on your 200iP before making any connections or alterations.

A recommended sequence of connections is as follows :

- Connect your loudspeakers to the output terminals (20) of the 200iP. Be careful to maintain channel integrity, i.e. left to left, right to right, and phase integrity, positive (+) to positive (+), and negative (-) to negative(-).

- Connect your CD player to the CD inputs (5)
- Refer to the sections in this manual covering Installation / Operating precautions. Make any necessary adjustments
- Connect the MAINS/LINE CORD (19) to the closest available power point and switch on the power if the socket is equipped with a mains switch.
- Turn on the CD player. Ensure the right hand rear toggle switch on the 200iP is in the down or "couple" position. Turn on the 200iP (18). Without programme source material slowly increase the volume on the 200iP listening for undesirable noises. A certain amount of hiss may become apparent as the volume is increased.
- After establishing that there are no problems, play a CD checking that the system operates correctly. Operate the balance control to confirm channel integrity.
- Connect all of the other source components in your system utilising the numbered key to assist you. As you connect each component select that input on the 200iP (using either the remote or manual input select buttons). Check for hum or noise and channel integrity with each component as you go. **Always remember to zero the volume in- between checking each input**

WARNING - DO NOT CONNECT ANY SOURCE EQUIPMENT TO THE DI INPUT UNTIL THE INSTRUCTIONS ON THIS INPUT HAVE BEEN READ AND UNDERSTOOD AS SERIOUS DAMAGE TO SPEAKERS COULD RESULT - refer page 4

If problems occur, re-check all connections or consult your Perreux dealer. Otherwise your installation is now complete and ready for you to sit back and enjoy.

INSTALLATION AND OPERATION PRECAUTIONS

- Leave the top and bottom of the 200iP clear at all times allowing adequate airflow through and around the 200iP, and any equipment above. Do not site this unit directly on carpet or other soft surfaces.
- Always operate in a horizontal position.
- Install away from excessive heat and moisture. Do not allow the ambient temperature around the amplifier to exceed 40 degrees Celsius (105 Fahrenheit).
- Check the mains/line voltage stated on the rear panel of your 200iP. Supply voltage must be within +/- 5% of the stated voltage -see relevant section MAINS/LINE VOLTAGE
- Connect all your HiFi equipment to the same mains/line source to avoid possible earthing problems.

- Do not change the fuse to any type or rating other than that indicated on the rear panel or owners manual of the 200iP.
- Always ensure your 200iP is disconnected from the mains/line supply if changing any fuse.
- Do not drive the inputs with a voltage source greater than that which required to drive the 200iP to its maximum dynamic output.
- Do not run the outputs in series or parallel.
- Do not earth any positive terminal or connect the input to the output earth.
- Do not connect the output of the 200iP to any other voltage source at all.
- Do not run the outputs into the inputs of your 200iP.
- Operation of the 200iP in the vicinity of a strong radio frequency (RF) source should be countered by RF filtering on all inputs and outputs including the mains/line supply. Any doubts or suspicions should be conveyed to your Perreux dealer. RF interference can cause serious loudspeaker damage.
- Always turn your Perreux 200iP on last and off first making sure the volume control is set to zero in both cases. This will eliminate the possibility of damage to loudspeakers or channel fuses, caused by clicks and pops due to inferior switching in some equipment. Perreux products do not have this problem.

- Always switch off your 200iP before making any connection alterations.
- Make all connections logically and carefully - outputs first then inputs, checking that you are maintaining channel integrity.
- Keep all inter-linking cables and loudspeaker leads as far apart as possible and well away from all mains/line cables.
- When cleaning the exterior of your Perreux 200iP or any Perreux products use luke warm water with a few drops of mild detergent and a damp cloth.

Note: Never use strong detergents, window cleaner, or any solvents as these may damage surfaces.

MAINS/LINE VOLTAGE

It is important that the 200iP be operated from the correct mains/line voltage. The unit is factory set for the voltage applicable to the original country of destination. The correct operating voltage is indicated by the MAINS VOLTAGE / FUSE RATING LABEL (17) on the rear panel . The 200iP will operate satisfactorily within a voltage variation of up to +/- 5% either side of that voltage at which the unit has been set. If you require the voltage setting to be altered, e.g. relocation to another area, city or country, or extraordinarily high or low voltages, contact your Perreux dealer. This modification must only be performed by qualified service personnel.

Note: Always ensure the unit is disconnected from the Mains/Line supply before any covers are removed.

MAINS/LINE FUSE

The Perreaux 200iP is equipped with a user serviceable mains/line fuse. Below the mains/line cord is the mains/line fuse holder. In the unlikely event of fuse failure always replace with the same type and value fuse. Remember, fuses do not usually blow without a reason. Any doubts about fuse failure should be conveyed directly to your Perreaux dealer.

The fuse ratings are:

100-125V	2SB	SLOW	BLOW	8A
Continuous				
200-250V	2SB	SLOW	BLOW	6A
Continuous				

Note: Always ensure your 200iP is disconnected from the Mains/Line supply before attempting to change the Mains/Line fuse.

RAIL FUSES

The Perreaux 200iP has 4 internal fuses for amplifier protection. In the unlikely event of internal fuse failure consult your Perreaux dealer. The internal fuses are not user serviceable and only authorised personnel may replace the internal fuses.

Fuse Rating - 3AG Normal Acting 6 Amp

SERIAL NUMBER

All Perreaux units are allocated a unique serial number which is recorded at the factory against build details. If you should require information about your 200iP, by providing the serial number, this will help achieve a prompt reply. Keep a copy of all your serial numbers in a safe place. The ability to identify and prove ownership can be very useful.

SPECIFICATIONS

Tested at 120 / 220 / 230 / 240V ac mains voltage after initial 10 minute warm up period

PREAMPLIFIER SECTION

RATED OUTPUT	1.5V RMS
INPUT SENSITIVITY	205mV
INPUT IMPEDANCE	10,000 ohms
TAPE-OUTPUT LEVEL	200mV
MINIMUM RECOMMENDED LOAD	10k ohms
DISTORTION (THD) (All Inputs 20Hz to 20kHz at rated output)	0.006%

POWER AMPLIFIER SECTION

POWER OUTPUT	200 Watts RMS
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(Continuous Per channel both channels driven into 8Ω from 20Hz to 20kHz at no more than 0.020 THD)

4 Ohm Rating	300 Watts RMS	
FREQUENCY RESPONSE	± 0.25dB	
THD (Worst case prior to clipping 20Hz – 20kHz)	0.020%	
@ 1kHz	0.004%	
HUM, NOISE (Unweighted referenced to rated output)	-95dB	
INPUT SENSITIVITY	1.5V RMS	
INPUT IMPEDANCE	22kΩ	
DYNAMIC HEADROOM	1.9dB (Min)	
CURRENT OUTPUT (Fuse Limited)	24A	
DRIVER STAGE	Class A	
OUTPUT STAGE	Class A / AB	
DIMENSIONS (not including handles and terminals)		
Height x	Width x	Depth
88mm x	482mm x	460mm
3.5" x	19.0" x	18.1"
NETT WEIGHT	18.0kg (39.7lb)	

PERREAUX Model 200iP
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New Zealand By**

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