

C-1000f Control Amplifier

Owner's Manual

## LUXMAN

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enRiskclosure that may be of sufficient magnitude to constitute a risk of





The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Risk of Electric Shock

WARNING - TO REDUCE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. To prevent the risk of electric shock, do not remove cover or back plate. No user serviceable parts inside.

# IMPORTANT SAFETY INSTRUCTIONS!

## PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT.

- 1. Read these instructions.
- 2. Heed all warnings.
- 3. Follow all instructions.
- 4. Do not use this apparatus near water.
- 5. Clean only with a dry cloth.
- 6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 8. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- 9. Only use attachments/accessories specified by the manufacturer.
- 10. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 12. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases or beverages, are placed on the equipment.
- 13. To completely disconnect this equipment from the AC. mains, disconnect the power supply cord plug from the AC socket.
- 14. The power supply cord should be kept in good condition, if it gets chewed up by a pet, it should be replaced.

## LUXMAN

#### Thank You

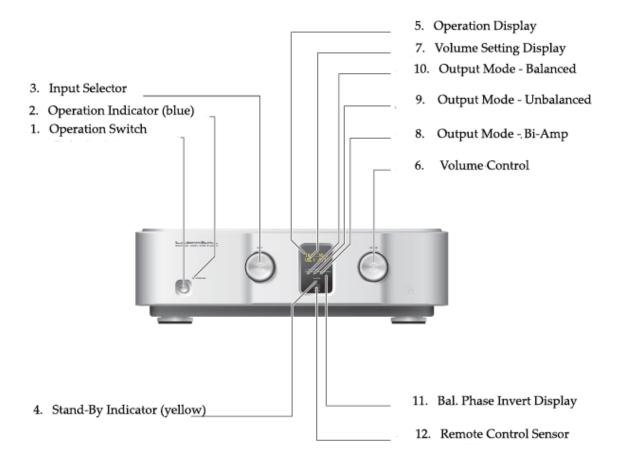
Your decision to purchase this Luxman C-1000f Control Amplifier singles you out as one of the most discriminating music listeners. Luxman have been hand-crafting exquisite audio reproducing equipment in Japan since 1925. Luxman's relentless dedication to *Quality* is your assurance that you will receive many years of musical enjoyment from this unit.

Please take a short time to read the information in this manual. We want you to be as familiar as possible with all the features and functions of your new Luxman.

## Contents

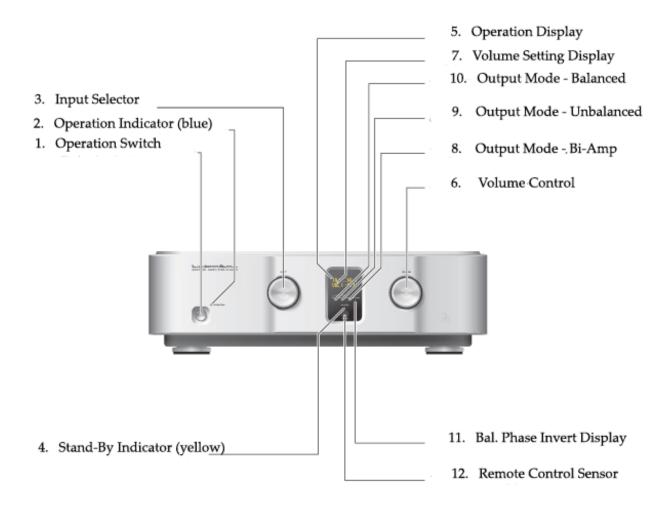
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### Front Panel Controls



- OPERATION SWITCH / Power Stand-by / On, push button turns the C-1000f either ON or OFF (stand-by).
- 2. **OPERATION INDICATOR**; LED blinks gently initially to show that it is warming up, will shine constantly once the C-600f is fully operational. The legend *Warming Up* will be displayed meanwhile.
- 3. **NPUT SELECTOR;** select any one of the eight music signal sources, either from this knob on the front panel or from the remote control
- 4. **STAND-BY INDICATOR**, glows yellow while in stand-by.
- 5. **OPERATION DISPLAY**; the illuminated display makes it easy to view the selected music source & the volume setting, even from a distance.
- 6. **VOLUME CONTROL**; adjust the Volume Control for the desired listening level. The VOLUME control adjusts the overall loudness of the signals being fed to the loudspeakers. It is fully electronic and can also be adjusted from the remote control handset. The VOLUME control does not affect recordings made using the Tape outputs.

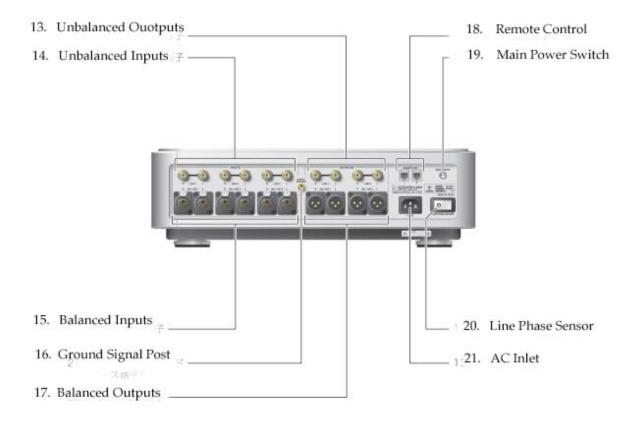
## Front Panel Controls



- 7. **VOLUME DISPLAY**, the illuminated display makes it easy to view the gain setting even from a distance.
- 8. **OUTPUT MODE Bi Amp** The blue LED shows that the unbalanced output is active.  $\rightarrow$
- 9. **OUTPUT MODE Unbal**. The blue LED shows that the unbalanced output is active.
- 10. **OUTPUT MODE Bal**. The blue LED shows that the balanced output is active.
- 11. **BAL INVERT INDICATOR**; The blue LED shows that the phase is inverted.
- 12. **REMOTE SENSOR** receives commands from the Remote Control. There must be a clear line-of-sight path from the remote control to this window; if that path is obstructed, the remote control may not work.

**NOTE:** Direct sunlight or very bright ambient lighting may affect the operating range and angle for the remote control handset.

## Rear Panel Controls



- 13. UNBALANCED OUTPUTS need to be connected to an outboard amplifier(s).
- **14. UNBALANCED INPUTS, Line 1 3** These inputs accept the stereo output signal from CD, SACD, DVD-Audio, Tuner (XM, Sirius).
- **15. BALANCED INPUTS 1 2.** These inputs accept the stereo output signal from CD, SACD, DVD-Audio, or Tuner.

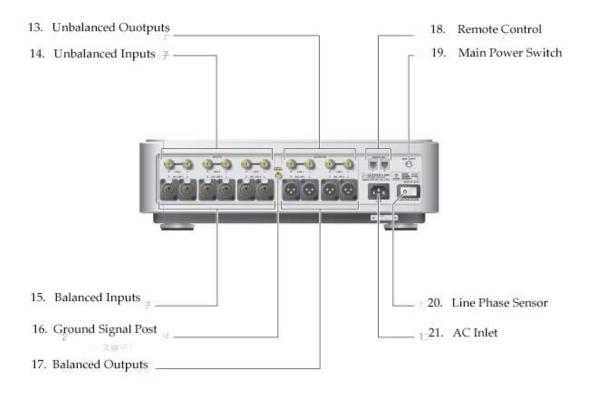
The balanced input is desirable for minimizing earth loop generated mains hum and ripple, or high frequency interference, if a noise problem occurs.

**16. GROUND POST.** Accepts a ground wire from an external phono stage.

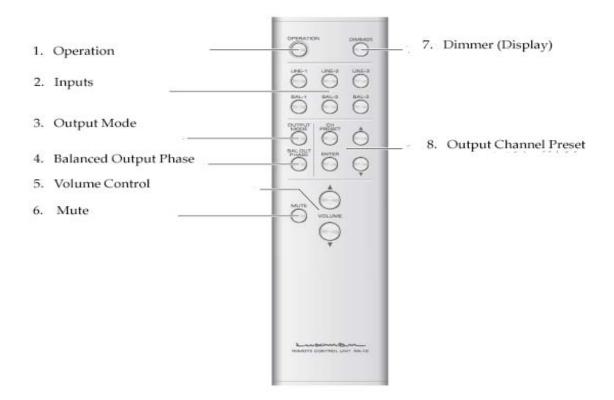
This terminal does not have to be used, but you may connect it to a suitable ground on an amplifier for example, which under some circumstances will reduce hum and ripple.

- 17. BALANCED OUTPUTS need to be connected to an outboard amplifier(s).
- **18. REMOTE CONTROL TRIGGER.** Generates a 12 volt DC trigger signal which will activate a LUXMAN B-1000f, M-800A or M-600A. It toggles between Stand-By and Operate. Uses a simple RJ-11 connector (normally used for the phone lines).

## Rear Panel Controls



- **19. MAIN POWER Switch.** If you are not using your C-1000f for an extended period of time and want to turn off the power completely. The remote control will not be able to activate the control amplifier.
- 20. **LINE PHASE SENSOR.** Here is a clever device found on the back of almost every Luxman powered product. You press the button and it will check the phase of the electricity it is receiving. If the AC outlet in the wall is incorrectly wired, meaning the live and neutral are swapped, a red LED will turn on to warn you. You only need to press it once, when you are installing a product to check that everything is in order. It's a simple mistake, that occurs often, and one that can undermine your listening enjoyment.
- 21. **AC INLET** Connect the C-1000f power cord to a live AC outlet. Refer to information on the back panel to deter-mine the correct voltage.



1. **Operation** (On / Stand-by) push button turns the C-1000f either ON or OFF (stand-by).

The muting circuit operates for about 60 seconds after the power is turned on, until the circuitry stabilizes. No sound is heard during this period.

While the unit is warming up, you will see the legend:

WARMING UP

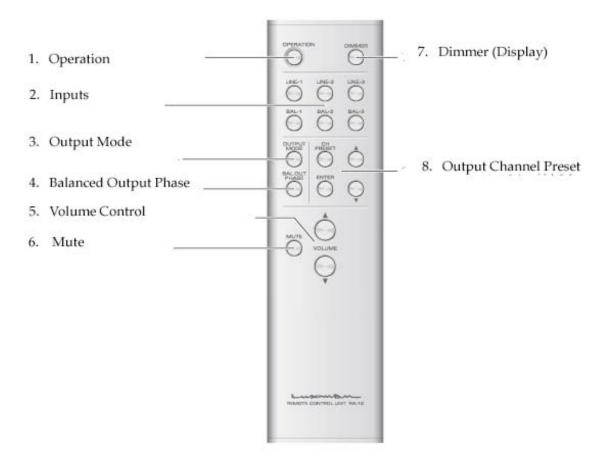
**Input Selection**; select any one of the eight music signal sources, either from the rotary 2. selector on the front panel or from the remote control. The front panel display will show the Input Selected on the top line, with the Volume setting underneath, as in:

> IN: LINE -1 VOL: -71 dB

While the balanced inputs will look like this:

IN: BAL. -1 VOL: -71 dB

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- 3. **Output Mode** cycles between modes: BAL  $\rightarrow$  Bi-Amp  $\rightarrow$  UNBAL  $\rightarrow$  .The blue LEDs will illuminate which outputs are active on the front panel display.
- 4. **Balanced Output Phase Invert**; this will invert the phase from where it is set. The blue LED shows that the phase is inverted.
- 5. **Volume Control**; adjust the Volume Control for the desired listening level. The VOLUME control adjusts the overall loudness of the signals being fed to the loudspeakers.

It is electronic with 72 discrete steps and can be adjusted from the remote control handset.

IN : BAL. -1 VOL: --dB

At this setting the volume is turned off. You can raise the volume using the riangle volume button.

You should acquire the habit of lowering the volume, when changing between inputs or before playing a record.

6. **Mute (Volume).** Press the MUTE Button to temporarily lower the sound to the speakers. Mute mode is indicated by the active Legend flashing.

MUTE

Press MUTE again to restore sound. Mute does not affect recordings made using the Tape outputs (REC OUT) but will affect the signal going to the Preamplifier output (Pre Out).

7. **Dimmer** (Display) Cycles through four levels of intensity:

Normal  $\rightarrow$  Dim  $\rightarrow$  Dimmest  $\rightarrow$  Display Off  $\rightarrow$  Normal.

8. **Output Channel Preset** Depends on which Output Mode is selected. UnBalanced and Balanced offer LR Balance . While Bi-Amp Cycles through two controls: LR Balance → L-Hi R-Hi (Output Balance between the two different outputs) → LR Balance (Channel Balance between the two different L & R channels)

**BALANCE** Control will adjust the Balance between the Left and Right channels. Plus or minus 8 dB.

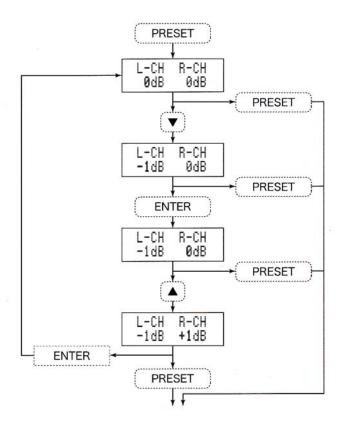
## PRESET - Balance

- i. Press PRESET once, LR Balance will appear.
- ii. Press ENTER once,

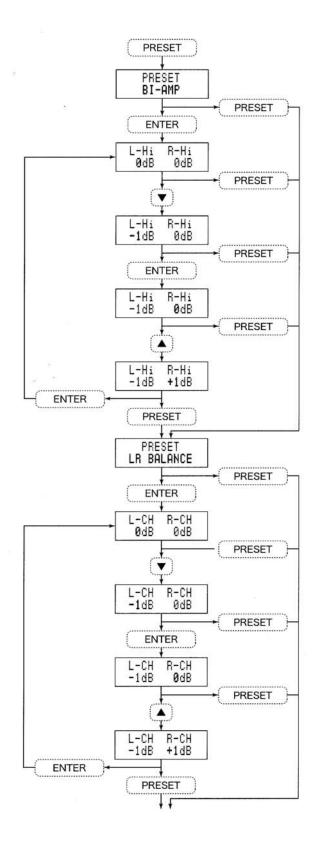
L-CH R-CH 0 dB 0 dB

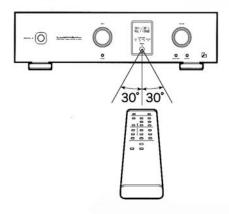
- iii. Use the ▼ button to lower by 1 dB increments. To raise, press ▲ each time for 1 dB increments.
- iV. Press ENTER once, to lock the setting.

## Bal. & Unbal. PRESET



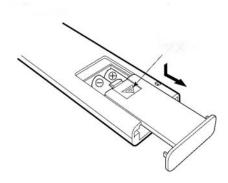
## Bi-Amp. PRESET





**THE REMOTE CONTROL'S RANGE** is approximately 16' or 5 meters, within a 30 degree window.

**NOTE:** Direct sunlight or very bright ambient lighting may affect the operating range and angle for the remote control handset



**BATTERY REPLACEMENT.** The battery well is easily accessed by sliding back the lower rear cover. Two good quality AA batteries will need to be replaced approx. once a year.

## Installation

The C-1000f can be placed upright on a table or shelf, standing on its four feet. It also can be custom installed in piece of furniture or cabinet of your choice.

Always provide adequate ventilation for your C-1000f. Cool operation ensures the longest possible operating life for any electronic instrument. Do not install the C-1000f directly above a heat generating component such as a high powered amplifier. If all the components are installed in a single cabinet, a quiet running ventilation fan should be utilized to maintain all the system components at the coolest temperature.

Allow at least 2' above the control amplifier, 2" all around.

#### SINGLE ENDED INPUT & OUTPUT CONFIGURATION (LINE -1)

INPUT LINE -1
OUTPUT MODE UNBALANCE
VOLUME -36dB
BAL INVERT INVERT

LR BALANCE L-CH:0dB, R-CH: 0dB

MUTE OFF DIMMER MAX

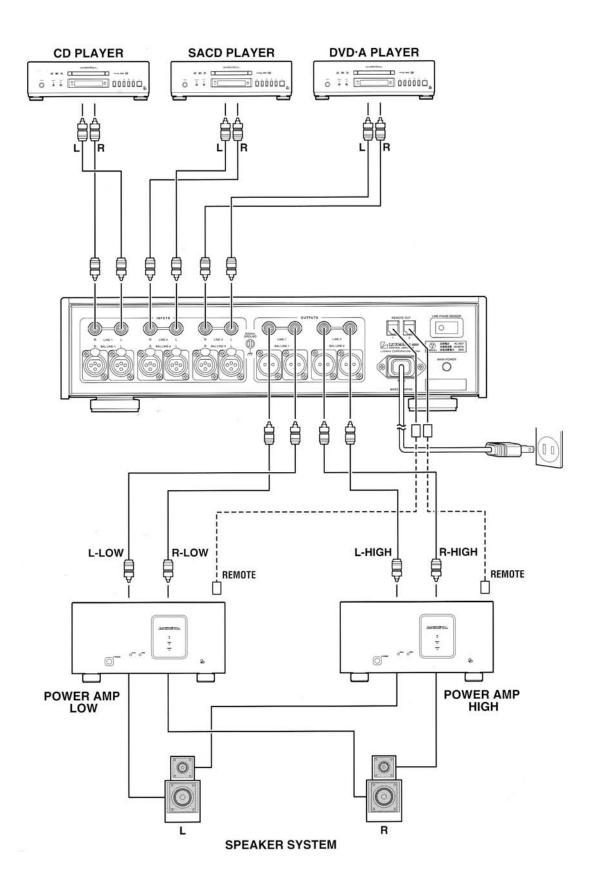
#### **BALANCED INPUT & OUTPUT CONFIGURATION (BAL -1)**

INPUT BAL -1
OUTPUT MODE BALANCE
VOLUME -36dB
BAL INVERT INVERT

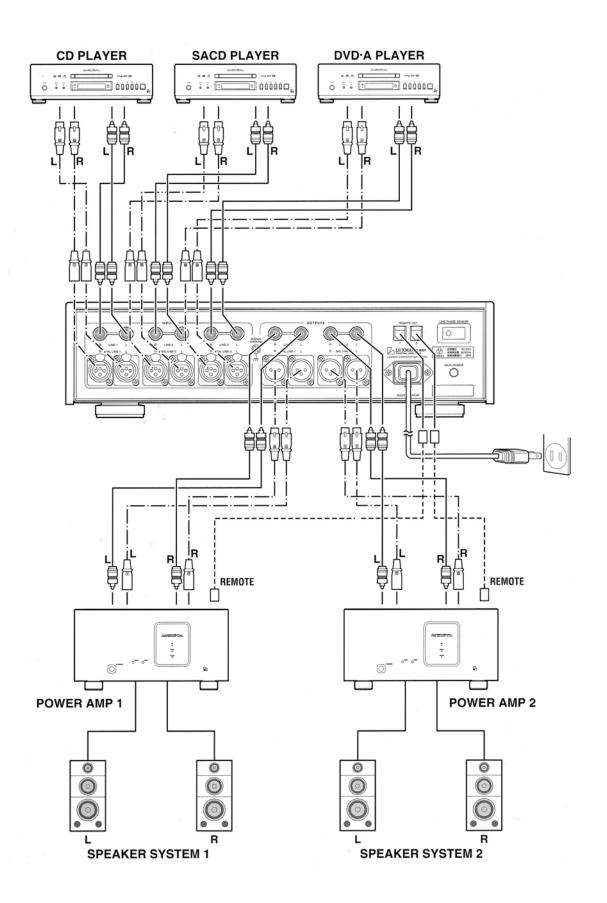
LR BALANCE L-CH:0dB, R-CH: 0dB

MUTE OFF DIMMER MAX

## Connections



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Now you are ready to take advantage of Luxman's long standing tradition of excellence in the C-1000f Control Amplifier. The C-1000f's reproduction is sonically transparent and absolutely accurate.

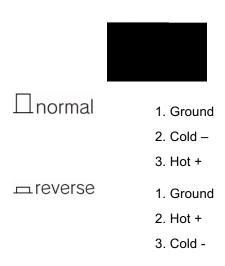
**CD**, **DVD**, **SACD**, **TUNER** connection Input for a CD or other line-level signal source. Use a twin RCA-to-RCA lead to connect the CD player's left and right 'Audio Outputs' to this input. The C-1000f only accepts analogue signals from your CD player.

#### **PHONO (Record Player)**

You will need to connect the output from your phono cartridge to an outboard phono stage (such as the E-1, E-600 or EQ-88 + MT-88 + OPEQ-88), then connect the output of the phono stage to an input on the C-600f. If you hear a lot of hum, you will most likely need to run a copper cable between the record player's chassis to the phono stage and possibly to the SIGNAL GROUND (No.21).

#### **Balanced Connection Pin Out**

Please refer to **Balanced Output Phase Invert**; on Page 10 for details on how to change the phase for the output.



In the USA, most balanced products use Pin 2 = Hot or +. So Luxman's Japanese products use the reverse mode from the American POV. The output phase can be adjusted from the remote control.

**NOTE:** Always turn the amplifier off before connecting or disconnecting cables from the **Output** sockets.

#### Connections

#### SUBWOOFER CONNECTION

Quite often there are two ways to connect one or two subwoofer(s) to one's system. Speaker output (High Level) or Line Level.

#### Speaker (High Level) Connection

Simply connect a speaker cable either to the Speaker Terminals and then to the Speaker terminal INPUT on the Subwoofer. Or alternatively connect an additional speaker cable to the speaker's binding post and the other end to the Subwoofer's Speaker terminal INPUT.

Please ensure that you do not invert the phase by mixing the Left and Right Channel connections. Best to run one cable at a time and connect Left to Left at each end, then repeat the process for the Right channel.

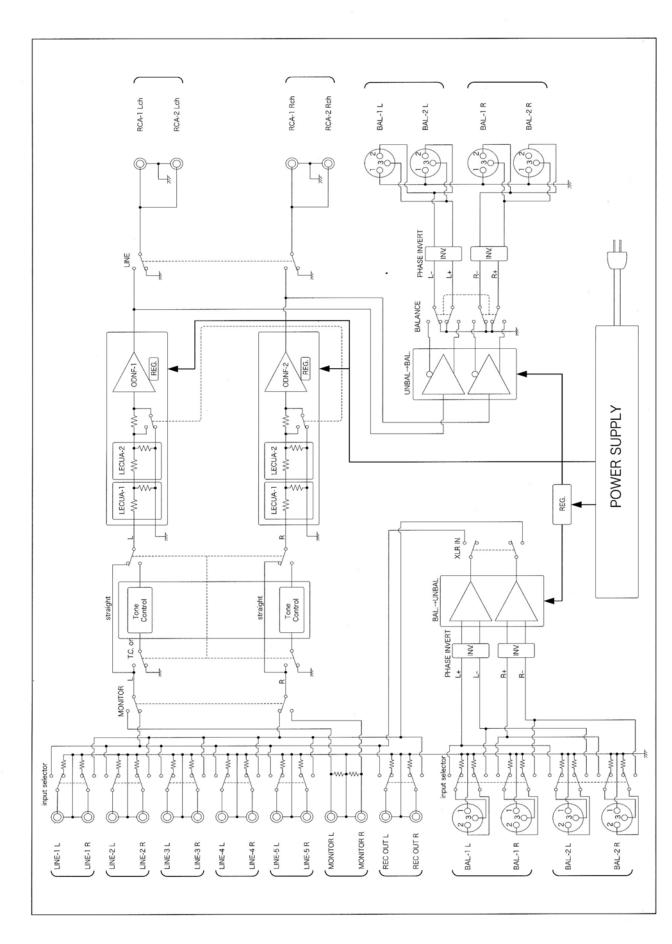
#### Preamplifier (Line Level) Connection

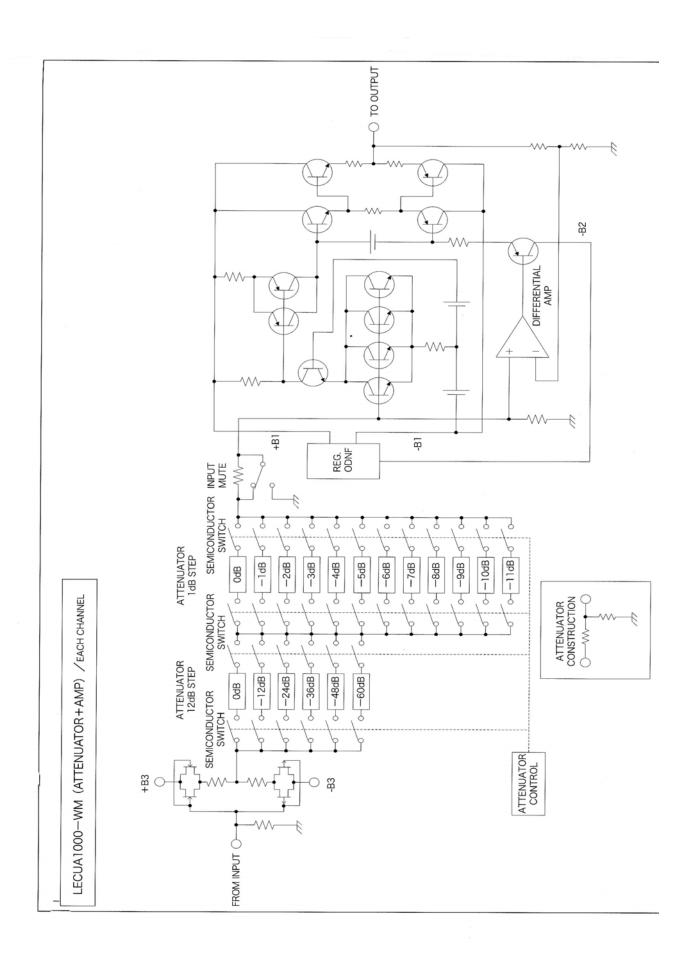
- 1. Connect the L female RCA (white) end of your interconnect cable to the C-600f's L OUTPUT and connect the other end to the L INPUT on your subwoofer.
- 2. Ditto for the R channel (red), repeat as above.

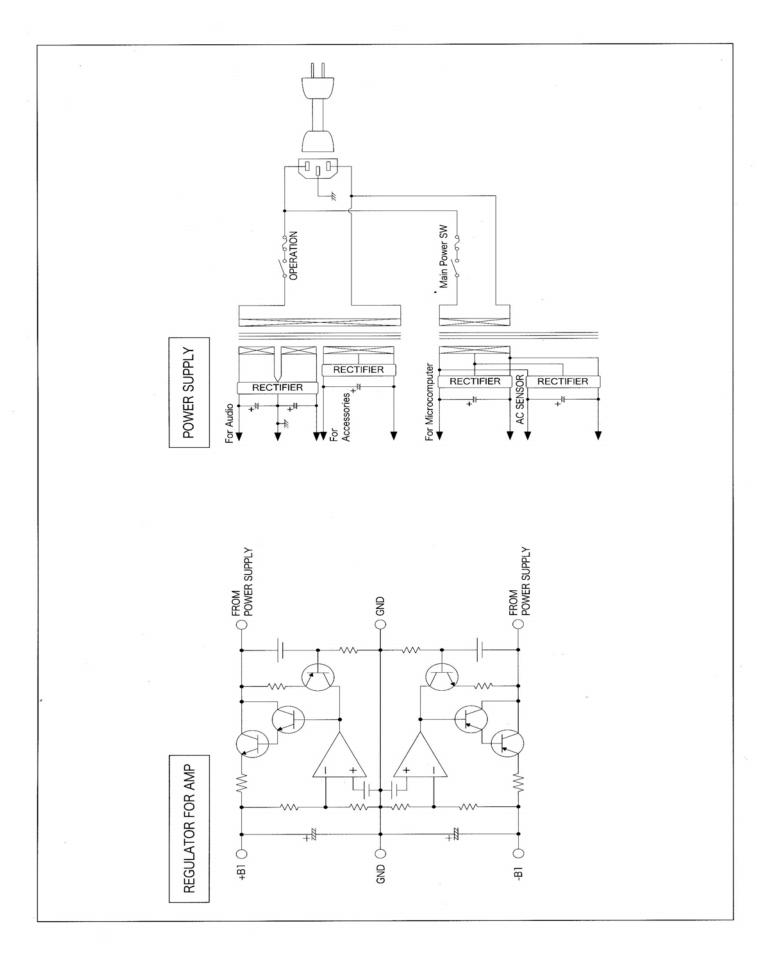
#### **HOME THEATER PROCESSOR**

In the situation where you would like your C-1000f to drive the front Left and Right speakers of your Home Theater audio system and still be able to enjoy stereo CDs & LPs played through the C-1000f.

- 1. Connect an RCA cable from the Output of you HT Processor, this will connect to the input that you assign of the C-1000f.
- 2. Select the assigned input on your Luxman control amplifier from the Input Selector
- 3. Set the volume control to -21 dB. (Actual Unity Gain is -11 dB)
- 4. Now calibrate the output volume of your Home Theater Processor to have an equal amplitude measurement from all your multi-channel speakers as measured at the central listening position.
- 5. When you are finished with the Home Theater and want to listen to music again, simply turn the volume back down to -50 dB and change inputs.
- 6. You should acquire the habit of lowering the volume, when changing between inputs or before playing a record.







## C-1000f Specifications



Single-ended / mV/47.5K 300 ohms, Balanced / mV/67.0K 300 Ω		
Single-ended / rated 1 V/564 $\Omega$ maximum 5.8 V, Balanced / rated 1 V/600 $\Omega$ maximum 6.2 V		
Single-ended / 0.009% (20 Hz ~ 20KHz),Balanced / 0.018% (20 Hz ~ 20KHz)		
20 Hz to 20KHz (+0, - 0.1dB), 5Hz to 116KHz (+0, - 3.0dB)		
Single-ended / 123 dB (A-IHF), Balanced / 120 dB (A-IHF)		
5 x RCA Single-ended, 2 x XLR Balanced inputs		
2 x RCA Single-ended, 2 x XLR Balanced outputs		
Front Panel Stand-by / Operate Switch, Input Selector Volume Control and monitor switch, Output Mode & Balanced Invert.		
Rear Panel Main power switch and signal ground post Remote Output RJ-11 (two) Phase-line sensor, AC inlet.		
Remote Stand-by / Operate Switch, Input Selector Control Volume up / down, mute, output mode, phase invert, functions Display Dimmer, preset controls, tone controls, REC output		
21 W (Normal Operation), 2.3 W (Standby)		
440 (W) x 117 (H) x 407 mm (D), 29 lbs (13.0Kg)		
es Supplied Remote Control (RA-60), power cables (JPA-10000)		

### Warranty

#### TERMS AND CONDITIONS

#### LIMITED WARRANTY

Luxman warrants the product designated herein to be free of manufacturing defects in material and workmanship, subject to the conditions hereinafter set forth, for a period of five (5) years from the date of purchase by the original purchaser or no later than six (6) years from the date of shipment to the authorized Luxman dealer, whichever comes first, excepting vacuum tubes which are warranted for 90 days only (See 6).

#### CONDITIONS

This Warranty is subject to the following conditions and limitations. The Warranty is void and inapplicable if the product has been used or handled other than in accordance with the instructions in the owner's manual, abused, or misused, damaged by accident or neglect or in being transported, or the defect is due to the product being repaired or tampered with by anyone other than Luxman or an authorized Luxman repair center. The product must be packed and returned to Luxman or an authorized Luxman repair center by the customer at his or her sole expense. Luxman will pay return freight of its choice. A RETURNED PRODUCT MUST BE ACCOMPANIED BY A WRITTEN DESCRIPTION OF THE DEFECT AND A PHOTOCOPY OF THE ORIGINAL PURCHASE RECEIPT. This receipt must clearly list model and serial number, the date of purchase, the name and address of the purchaser and authorized dealer and the price paid by the purchaser. Luxman reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.

#### 3. REMEDY

In the event the above product fails to meet the above Warranty and the above conditions have been met, the purchaser's sole remedy under this Limited Warranty shall be to return the product to Luxman or an authorized Luxman repair center where the defect will be rectified without charge for parts or labor, except vacuum tubes (See 6).

#### 4. LIMITED TO ORIGINAL PURCHASER

This Warranty is for the sole benefit of the original purchaser of the covered product and shall not be transferred to a subsequent purchaser of the product.

#### 5. DURATION OF WARRANTY

This Warranty expires on the third anniversary of the date of purchase or no later than the fifth anniversary of the date of shipment to the authorized Luxman dealer, whichever comes first.

#### 6. VACUUM TUBES

Vacuum tubes are warranted for the original 90-day period only.

#### 7. DEMONSTRATION EQUIPMENT

Equipment used by an authorized dealer for demonstration purposes is warranted to be free of manufacturing defects in materials and workmanship for a period of three (3) years from the date of shipment to the dealer. Vacuum tubes are warranted for 90 days.

### Warranty contd.

After the first year, demo equipment needing warranty service must be packed and returned to Luxman Service Center by the dealer at his sole expense. Luxman will pay return freight of its choice. A returned product must be accompanied by a written description of the defect on an LUXMAN RETURNED GOODS AUTHORIZATION form. Dealer-owned demonstration equipment sold at retail within three (3) years of date of shipment to the dealer is warranted to the first retail customer to be free of manufacturing defects in materials and workmanship for the duration of the 3-Year Limited Warranty remaining (as measured from the date of shipment of the equipment to the dealer). Vacuum tubes are not warranted for any period under these conditions of sale. In the event warranty service is needed under these conditions, the owner of the equipment must provide a copy of his purchase receipt, fulfilling the requirements described under "2. Conditions" above. The product must be packed and returned to Luxman or an authorized Luxman repair center by the customer at his or her sole expense. Luxman will pay return freight of its choice.

#### 8. MISCELLANEOUS

ANY IMPLIED WARRANTIES RELATING TO THE ABOVE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS WARRANTY. THE WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER. Some states do not allow limitations on how long an implied warranty lasts or exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### 9. US WARRANTOR

Inquiries regarding the above Limited Warranty may be sent to the following address: On A Higher Note, PO Box 698, San Juan Capistrano, CA 92693.

## RC Code.

#### Remote Control code & data NEC Format

```
key CU-80
               C-1000f
                                Custom Code
  key name
             key name
                                D0 D1 D2 D3 D4 D5 D6 D7 DEC
K1 power on/off operation
                                   0 0 0 0 0 0 0 0 0 ---: (non-use)
K2 multi-1
                             100000001
K3 multi-2
                        01000002
K4 multi-3
                         1 1 0 0 0 0 0 0 3
K5 line-1
                         00100004
            line-1
K6 line-2
                         10100005
            line-2
K7 bal-1
            bal-1
                         0 1 1 0 0 0 0 0 6
K8 bal-2
            bal-2
                         1 1 1 0 0 0 0 0 7
                         000100008
K9 monitor
             ---
K10 output mode output mode
                                 100100009
                               0 1 0 1 0 0 0 0 10
K11 balout phase bal out phase
K12 dimmer
              dimmer
                             1 1 0 1 0 0 0 0 11
K13 mute
              mute
                           0 0 1 1 0 0 0 0 12
                           1 0 1 1 0 0 0 0 13
K14 downmix-c
K15 downmix-sw
                            0 1 1 1 0 0 0 0 14
K16 straight
                         1 1 1 1 0 0 0 0 15
K17 enter
             enter
                          0000100016
K18 up
            up (▲)
                          1 0 0 0 1 0 0 0 17
                            0 1 0 0 1 0 0 0 18
K19 down
              down (▼)
                         1 1 0 0 1 0 0 0 19
K20 bass
             ---
                         0 0 1 0 1 0 0 0 20
K21 treble
                             1 0 1 0 1 0 0 0 21
K22 ch preset
              ch preset
K23 volup
             volume up (▲)
                             0 1 1 0 1 0 0 0 22
K24 vol down
              volume down (▼)
                               1 1 1 0 1 0 0 0 23
K25 rename
                          0 0 0 1 1 0 0 0 24
K26 light
                        1 0 0 1 1 0 0 0 25
K27 store
                         0 1 0 1 1 0 0 0 26
K28 recall
                        1 1 0 1 1 0 0 0 27
             ---
K29 ---
                        0 0 1 1 1 0 0 0 28
            line-3
                        1 0 1 1 1 0 0 0 29
K30 ---
            bal-3
```



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