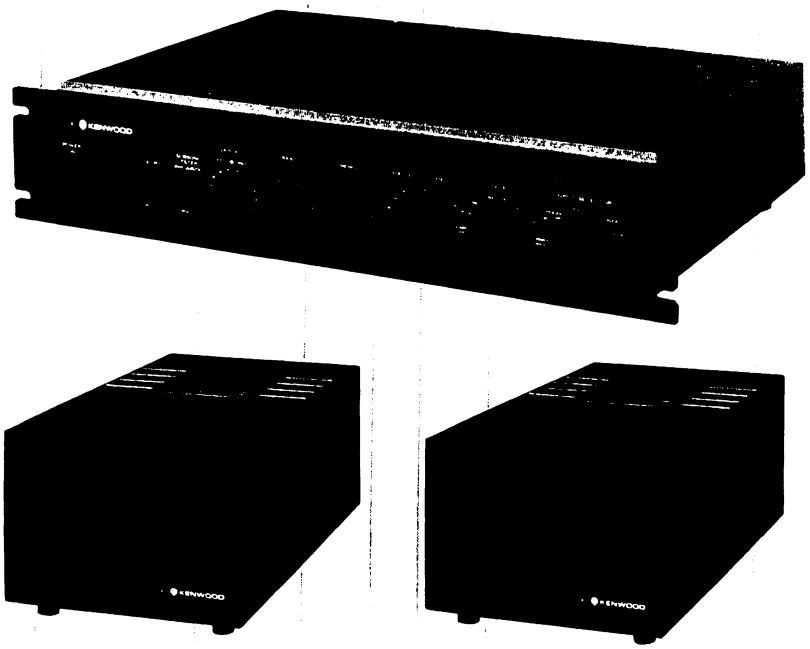
STEREO CONTROL AMPLIFIER

MODEL L-07C

DC POWER AMPLIFIER

MODEL L-07M

INSTRUCTION MANUAL



the sound approach to quality

KENWOOD

PRINTED IN JAPAN B50-1613-00 (PM) (T)

INTRODUCTION

The purpose of this manual is to acquaint you with the operating features of your new amplifier. You will notice that in every detail of planning, engineering, styling, operating convenience, and adaptability, we have sought to anticipate your needs and desires.

In order to make the best use of your new amplifiers, we suggest that you carefully read through this INSTRUCTION MANUAL and the DIRECT DRIVE AMPLIFIER SYSTEM DESCRIPTION furnished together.

Knowing how to set up your amplifier, to the best advantage, will enhance your listening pleasure right from the start. You will also become aware of the ease with which you can adjust your amplifier to meet your special requirements.

(This INSTRUCTION MANUAL is available for both L-07C and L-07M amplifiers.) If any power amplifiers other than L-07M are used, please refer to the relevant instruction manuals prepared for them.

SERIAL NUMBER

Record your SERIAL NUMBER on the spaces designated on the warranty card. You will find the serial number on the back of the unit.

AFTER UNPACKING

After unpacking, we recommend you inspect and examine the unit for any possible shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend you retain the original carton and packing materials to prevent any damage should you transport or ship your unit in the future.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

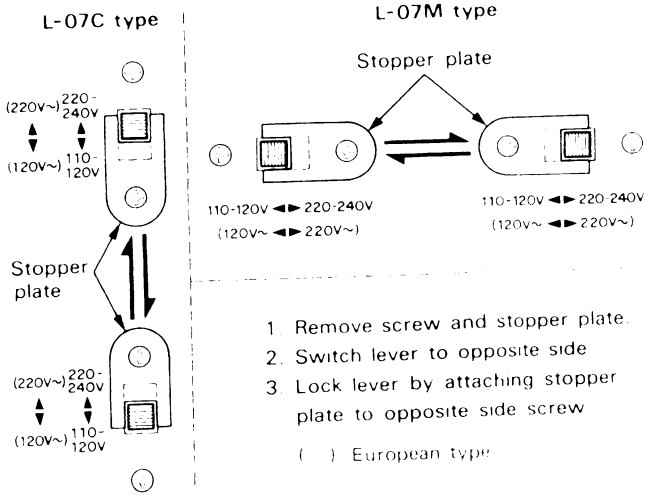
NOTES

1. **Units shipped to the U.S.A. and CANADA are designed to be operated with 120 volts AC only. Units shipped to the Scandinavian countries are designed to be operated with 220 volts AC only. Therefore the above units are not equipped with an AC Voltage Selector Switch so all reference to such a switch throughout this manual should be disregarded.**
2. **Units shipped to all other countries are equipped with an AC Voltage Selector Switch on the rear panel that is preset at the factory to the voltage generally available in the destination area.**

The L-07C and L-07M operate on 110–120 volts or 220–240 volts AC. The AC Voltage Selector Switch on the rear panel is set to the voltage that prevails in the area to which the amplifiers are shipped. Before operating these units, make sure that the position of the AC Voltage Selector Switch matches your line voltage. If not, it must be changed to the proper setting.

To change, first remove the stopper plate and slide the AC Voltage Selector Switch to the opposite side. Then reattach the stopper plate to the other side.

Note:
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC Voltage Selector Switch.



AC VOLTAGE SELECTOR SWITCH

CONTENTS

GENERAL NOTES FOR CORRECT USAGE

PRECAUTIONS CONCERNING INSTALLATION

(a) Avoid locations subject to direct sunlight.
(b) Avoid high or low temperature extremes.
(c) Keep the amplifier away from heat radiating source.

CLEANING PRECAUTIONS

Do not use alcohol, thinner or gasoline when cleaning the amplifier surface. Use a silicon cloth or soft dry cloth.

HANDLING OF POWER PLUG

When you connect or disconnect the power plug from the wall outlet, never do it with wet hands to avoid unexpected accident from electric shock. Hold the power plug itself when you pull it out of the outlet. It will be a good habit if you pull out the power plug before you leave your house for a long time.

POWER CORD

The power cord must not be pulled strongly, nor bent forcibly, nor extended by connecting an extra cord. This will damage the cord and be a cause of electric shock and a fire.

PREVENTION OF INTRUSION OF METALLIC SUBSTANCE IN UNITS

The case top is provided with ventilation holes. Never close these holes with ornamental cloth, etc. Be careful not to put a coin, hair pin, needle, etc. into the unit through the holes. Otherwise, it will be a case of malfunction and electric shock. Such trouble is often caused by infants.

PREVENTION OF MODIFICATION

Each unit is shipped after passing careful adjustments to the optimum operating conditions. The unit interior must not be modified. Some parts of the interior are applied with high voltage. Never dismantle the case and touch the internal parts. Only the qualified servicemen are in charge of check-in the interiors.

HEAT GENERATION IN THE L-07C

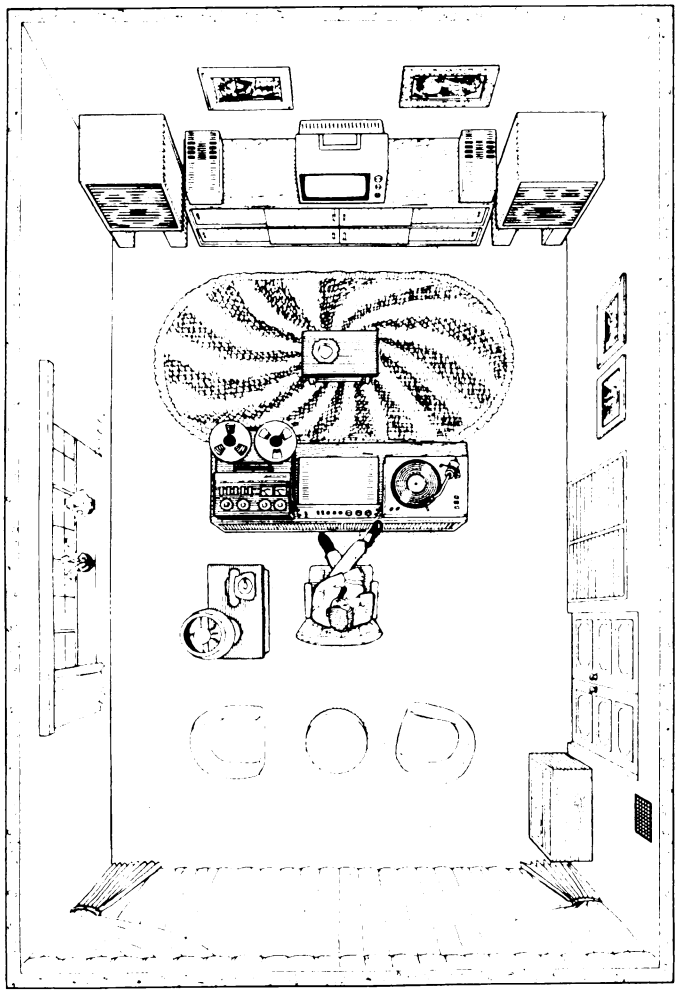
The L-07C is provided with many high-current circuits which ensure high performance. Therefore, compared with ordinary preamplifiers, more heat is generated and there is a considerable temperature rise. However, it is not because of abnormality. Under usual operating conditions the temperature rise in the L-07C may be greater than that in the L-07M. Since the L-07C is carefully designed in this respect, its duarability is never impaired by the generated heat.

BEFORE USE

1. In this system the L-07C is operated near at hand and the L-07M is positioned near each speaker. Therefore all control functions are eliminated from the L-07M.
   The right and left gain attenuators which correspond to the gain controls of power amplifiers are installed in the L-07C.
2. The power cord for the L-07M is not stretched as far as the external power outlet of the L-07C. Instead, a remote power switch function is provided to utilize wall outlets near the speaker systems. The L-07M is provided with a remote cord through which a small DC control current flows, and it can be switched on and off interlocked with the power switch of the L-07C.
3. In the KENWOOD direct drive amplifier system, the control unit and the power units are connected through the audio cables. Particularly in the KENWOOD system, length of these cables seems to be longer than other systems. If former RCA type pin jacks are used, they may be imperfectly inserted or the ground-side connection may be disconnected by careless pulling of a connecting cable during amplifier operation. Such a careless mistake will often destroy precious speaker systems by driving at full power. To avoid this type of trouble, screw-lock type pin jacks (patent applied for) have been devised and they are employed in these amplifiers.
4. For connections for signals from the L-07C to the L-07M, use two audio cables (12m) supplied with the L-07C.

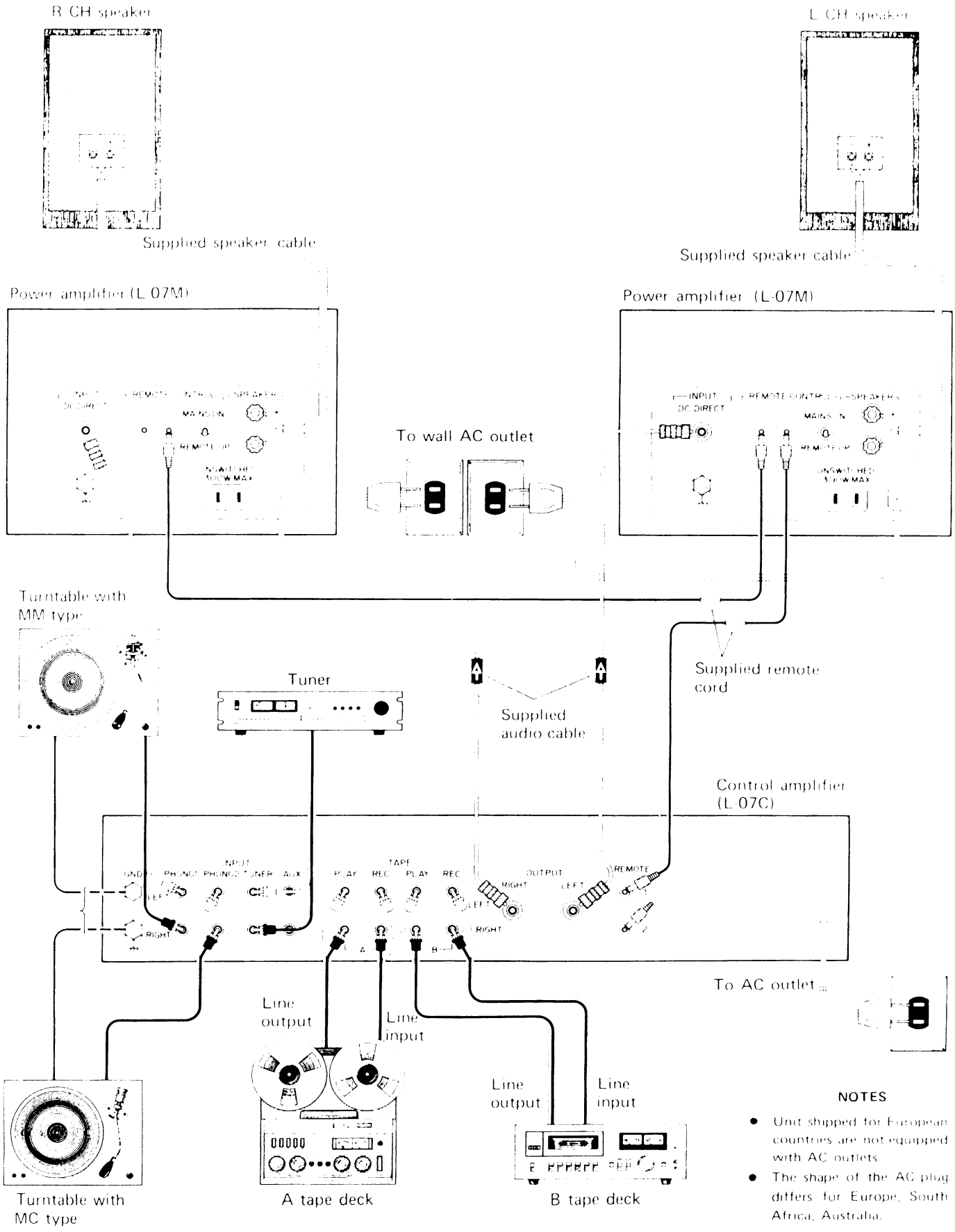
NOTES FOR INSTALLATION OF THE KENWOOD STEREO REPRODUCTION SYSTEM

- To raise the grade of sound from the audio systems, the L-07M should be installed within the reach of the attached 1 meter speaker cable.
- If the L-07M is put on a speaker box, a suitable cushion should be used.
- The power for the L-07M should be taken from a wall outlet near the speaker system.
- The tape deck should be away from a television set, often being a medium which interferes with recording by injecting noise.
- Other amplifiers or measuring instruments must not be put on the L-07C. The L-07C should not be put on these instruments directly.
- Give a separation of about 5 cm when a turntable is installed at the right side of the L-07C. It is absolutely prohibited to put the turntable on a speaker box.



- The speakers will generate more low-frequency sound if they are installed in front of hard structure such as a wall. They should not be positioned near glass windows, etc.
- In stereo reproduction, both right and left speakers should be driven under the same acoustic conditions.
- The listener should sit at a vertex of a regular triangle, the other two vertexes of which are right and left speakers.
- On the opposite side of the speakers should be installed curtains or similar materials which absorb much sound.

INTERCONNECTING DIAGRAM



NOTES

- Unit shipped for European countries are not equipped with AC outlets.
- The shape of the AC plug differs for Europe, South Africa, Australia.

CONNECTING INSTRUCTIONS

POWER AMPLIFIER CONNECTION

The L-07M must always be used with the L-07C control amplifier. Two L-07M units are required for stereo reproduction.

Signal Connection: Connect OUTPUT terminals of the L-07C with INPUT terminals of the power amplifiers, carefully confirming the descriptions of RIGHT and LEFT. Use audio cables supplied with the L-07C.

Remote Connection: The power supply of the L-07M can be remotely controlled from the L-07C. The REMOTE terminals of both the L-07C and the L-07M are connected in parallel (simultaneously functional) and either of the following methods is available:

1. L-07C REMOTE 1 → L-07M → L-07M
2. L-07C REMOTE 1 → L-07M
   L-07C REMOTE 2 → L-07M

In the remote control mode, REMOTE CONTROL switch mounted on the rear panel of the L-07M must be set to REMOTE OP position.

TURNTABLE CONNECTION

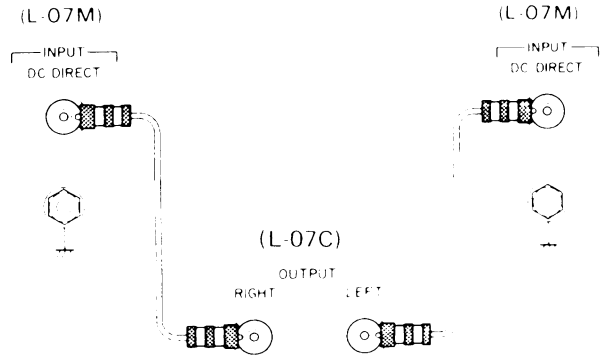
The L-07C is provided with two stereo PHONO input arrays. PHONO 1 is used for an MM type cartridge, while PHONO 2 is for an MC type cartridge. If the MC type cartridge is high-output type, then PHONO 1 can be used. Connect the two audio cables of the stereo turntable with the PHONO terminals, confirming the descriptions of RIGHT and LEFT.

TUNER CONNECTION

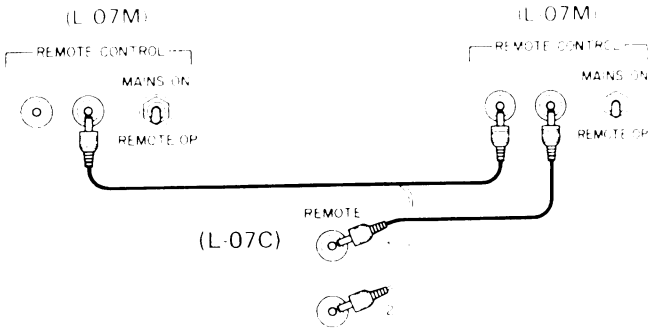
Use both-pin cords to provide connections between OUTPUT terminals of the tuner and TUNER terminals of the L-07C. Confirm the descriptions of RIGHT and LEFT, and make correct connections between the same channels.

AUX (Auxiliary Input Terminal) CONNECTIONS

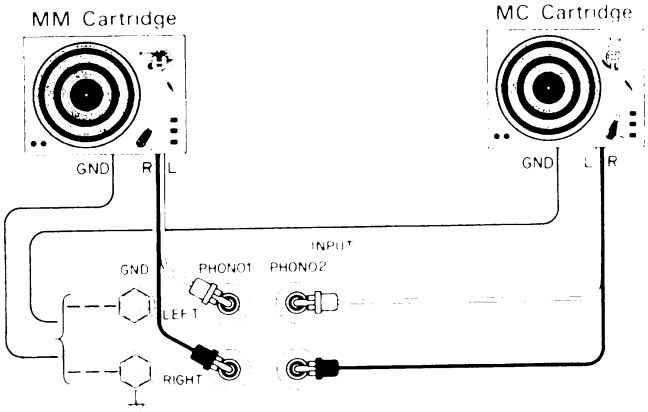
The AUX input jacks are available for connections with an additional tuner, a tape deck used only for reproduction, a cassette deck, an 8-track stereo, etc. The input sensitivity is 140mV and the input impedance is 50 kΩ.



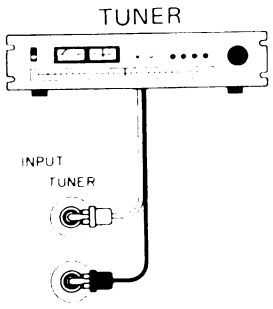
Signal Connection



Remote Connection



Turntable Connections



Tuner Connection

CONNECTING INSTRUCTIONS

TAPE DECK CONNECTION

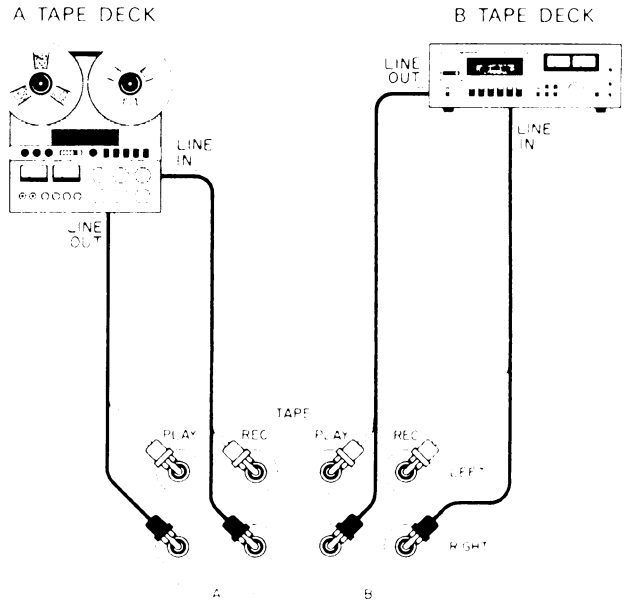
The L-07C is provided with two TAPE terminal systems, A and B. When simultaneous recording or dubbing is attempted, two tape decks are connected to the terminals of TAPE A and TAPE B.

Playback

Connect PLAY terminal with the playback output terminal (LINE OUT) of the tape deck. Both RIGHT and LEFT channels must be connected correctly.

Recording

Connect REC terminal with the recording input terminal (LINE IN) of the tape deck. Both RIGHT and LEFT channels must be connected correctly.



Tape Deck Connection

GROUND (GND) TERMINAL CONNECTION

The L-07C is provided with two GND terminals. These terminals are used for grounding when a turntable, tape deck, etc. are connected. They are different from each other; one is directly connected to the ground circuit of internal circuits, while the other is connected to chassis.

Hum and external noise enter in complicated ways. In some cases the chassis GND terminal is effective in removing noise trouble, and in some cases the other GND terminal is more effective. Therefore, when connecting your tape deck or turntable, its grounding cord should be connected temporarily to both GND terminals to determine the better one with which the noise component can be reduced.

GENERAL NOTES FOR CONNECTIONS

1. When connecting or disconnecting audio cables, the power amplifiers must be power off without fail.
2. The audio cable employs special lock type pin jacks which prevent the speakers from being destroyed by careless pulling out of the audio cable. These pin jacks must be locked exactly.
3 The pin plugs must be inserted exactly in PHONO, TUNER, AUX, and TAPE terminals. Insufficient insertion may result in no-sound trouble or generation of noise.

AC OUTLETS

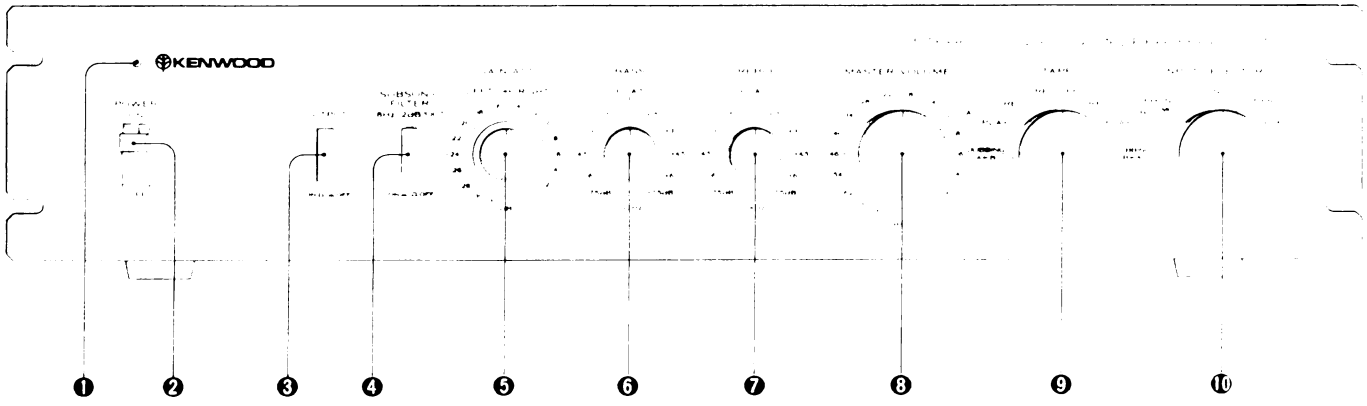
The AC outlets on the rear panel of the L-07C may be used to supply power to other audio components such as a tuner, record player, tape deck, etc. An iron, toaster, vacuum cleaner, or a similar device with a large power capacity must not be connected to these outlets.

1. SWITCHED outlets:
   These outlets are controlled by the POWER switch of the L-07C. If the connected components are switched on in advance, their operations are interlocked with the ON-OFF condition in the L-07C. The total capacity is 300 watts (200W*) maximum.
2. UNSWITCHED outlet:
   This outlet supplies power at all times regardless of the switching condition in the L-07C. The capacity is 100 watts maximum.

Notes:

1. These AC outlets are designed for audio components only. Total power consumption must not exceed their maximum capacity.
2. *For the AC voltage selector switch with the description of 110~120V/220~240V, the total power capacity is 200W maximum.
3. Units shipped for European countries are not equipped with AC outlets.

CONTROLS & THEIR FUNCTIONS



❶ Pilot Lamp

When POWER switch is turned on, this lamp (LED) is lit up to indicate that the unit is in operation.

❷ POWER switch

ON position turns the amplifier on, OFF position turns the amplifier off. If this unit is connected to the power amplifiers L-07M or L-09M installed remotely and the remote control switch on the rear panel of each L-07M or L-09M is set to REMOTE OP or REMOTE position in advance, then these units are switched on and off under the control of the L-07C.

❸ OUTPUT switch

This is an ON-OFF switch for the control amplifier output. When it is depressed (OFF), the output is interrupted. This switch easily suspends the output without operating MASTER VOLUME control. It is useful when a disk is reversed on the turntable or the output must be suspended temporarily.

❹ SUBSONIC FILTER switch

The subsonic filter is used to remove super-low-frequency noise due to warp in the record disk. If this switch is ON, a low frequency range is cut off from 18 Hz at an inclination of 12 dB per octave. This switch may be set to ON at all times since low frequency noise deviating from the acoustic range and affecting the speakers adversely can be cut off effectively.

❺ GAIN ATT control

This GAIN ATT should be set to an optimum position according to the efficiency of speaker systems, the level of cartridge output voltage, and the volume of sound usually accepted. The sound disappears in $-\infty$ setting, and begins to increase when this knob is turned clockwise. This knob is generally set to $-10 \sim -15$ dB. When high-efficiency speaker systems are connected, this knob should be moved until small residual noise cannot be sensed easily.
GAIN ATT should be adjusted so that the usual setting position of MASTER VOLUME comes near −20 dB. Then the MASTER VOLUME control will permit easier and finer adjustments. GAIN ATT has the double knobs. They may be moved independently for the control of sound balancing between right and left channels. If this balance setting is finished once, both knobs can be turned at the same time to a wanted gain without changing the balanced condition.

❻ BASS control

This knob is for adjusting the base tone. "0" position setting provides a completely flat frequency response. Turning the knob clockwise increases the bass tone, while turning it counterclockwise reduces the sound of low frequency. Each step accurately provides a 1.5 dB change at 100 Hz and the amount of total variation is ±7.5 dB.

❼ TREBLE control

This knob is for adjusting the treble tone. "0" position setting provides a completely flat frequency response. Turning the knob clockwise increases the treble tone, while turning it counterclockwise reduces the sound of high frequency. Each step accurately provides a 1.5 dB change at 10 kHz and the amount of total variation is ±7.5 dB.

Note:
The tone controls are used to compensate the acoustic characteristics of your listening room and speaker systems. The conditions in the listening room vary in close relation to its construction and size. Therefore, speakers and furniture must be carefully positioned, though it is difficult to obtain ideal conditions. In particular, perfect balancing is extremely difficult to achieve.
These tone controls should be set to the optimum positions always taking environmental conditions into account.

❽ MASTER VOLUME

MASTER VOLUME control is for usual adjustments of the sound volume. The scale is provided with dB graduations. The sound disappears at $-\infty$, and gradually increases when the knob is turned clockwise.

CONTROLS & THEIR FUNCTIONS

⑨ TAPE switch (See Fig. on page 11.)

This switch is used for tape playback, recording, and dubbing.

REC OFF: In this position, output is not obtained at REC terminal. This is equivalent to a condition that a wiring toward the tape deck is disconnected. A source from the broadcast or the disk can directly be reproduced at the speakers without influenced by external conditions.

A REC: Used for recording without monitoring. The sound of program source selected with the INPUT SELECTOR switch is obtained at the A (or B) REC terminal. If both A and B TAPE terminals are connected with two tape decks, two program sources can be recorded simultaneously. The sound of program source can be heard at the speakers.

B REC: The same as for A REC.

A PLAY: Monitored recording or tape playback is possible at the tape deck which is connected with TAPE A terminal.

B PLAY: Monitored recording or tape playback is possible at the tape deck which is connected with TAPE B terminal.

DUBBING (A ▶ B): Used for dubbing from A tape deck to B tape deck. The recording condition of the B tape deck can be monitored.

DUBBING (B ▶ A): Used for dubbing from B tape deck to A tape deck. The recording condition of the A tape deck can be monitored.

Note:
For further details refer to instructions on page 11.

⑩ INPUT SELECTOR switch

This switch is for selecting a wanted program.

PHONO 1: In this position the turntable is available if connected to PHONO 1 terminal.

PHONO 2 (MC): In this position the turntable is available if connected to PHONO 2 terminal.

TUNER: Used for listening to a broadcast program if the tuner is connected to TUNER terminal.

AUX: Used when listening to a program source from a component connected to AUX terminal.

STEREO BALANCE

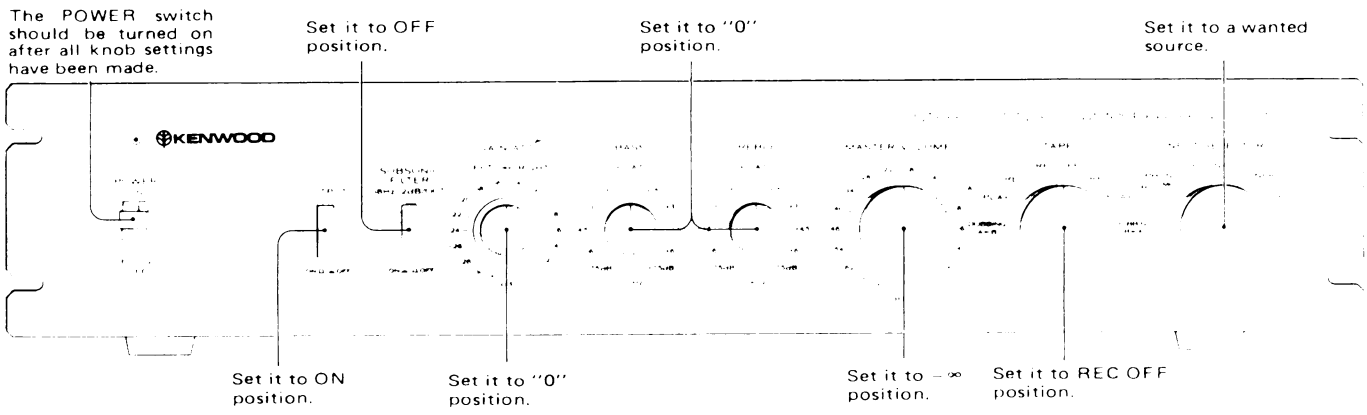
In stereo reproduction, the expanse of stereophonic sound and movements of performance can not be felt effectively if there is sound imbalance between right and left speakers. The stereophonic balancing is influenced by the difference in efficiencies in both speakers and the positioning of furniture. The easy method in obtaining an exactly balanced condition is to listen to a monaural record with MASTER VOLUME set to an ordinary sound volume and adjust the double GAIN ATT knobs so that the sound can be heard in the midst of both speakers.

EXAMPLE OF GAIN ATT SETTING

The optimum position of GAIN ATT knob depends on the efficiency of each speaker connected, the sound volume usually maintained, and the output voltage of the cartridge. Setting is easy in the following manner:

1. Set GAIN ATT to $-\infty$.
2. Set MASTER VOLUME near −20 dB where the master volume control is easily operable.
3. Gradually turn the GAIN ATT knob to the right to obtain a sound volume which is usually maintained.
4. GAIN ATT need not be handled once it has been adjusted to the audio system in the optimum condition. Since then, MASTER VOLUME is used at all times.

OPERATING INSTRUCTIONS



Location of Control Knobs

PRIOR TO SWITCHING POWER ON

When listening to a record or an FM program, set the knobs and switches as shown above before switching the L-07C on.

RADIO RECEPTION

1. Confirm that a stereo tuner is connected to TUNER terminals of the L-07C.
2. Set INPUT SELECTOR switch to TUNER position.
3. Operate the stereo tuner and catch a wanted station.
4. Adjust MASTER VOLUME knob to a required sound volume.

REPRODUCTION THROUGH AUX TERMINAL

1. Set INPUT SELECTOR switch to AUX position.
2. Operate a component connected to AUX terminal.
3. Adjust MASTER VOLUME knob to a required sound volume.

TURNTABLE OPERATION

1. Both MM and MC type cartridges are available. The MM type or high-output MC type cartridge is connected to PHONO 1 terminal. Low output MC type cartridge is connected to PHONO 2 terminal.
2. Set INPUT SELECTOR switch to PHONO 1 or PHONO 2 according to PHONO terminal at which the required turntable is terminated.
3. Set the turntable in operation.
4. Adjust MASTER VOLUME knob to a required sound volume.

Notes:

1. When reversing the disk or changing the cartridge, MASTER VOLUME must be set to −∞ position or OUTPUT switch must be turned off without fail for the protection of speakers.
2. Do not vibrate the turntable during performance. Vibration can be a serious cause of damaging the record surface by the stylus tip.
3. For the prevention of howling, the turntable must not be installed near the speaker systems.
   If howling occurs, the distance must be increased between speaker systems and the record player. Howling can be removed if hard materials such as blocks are laid beneath the speaker boxes and sound insulators or a thick cushion is laid beneath the turntable.
4. A shock noise may be generated during record performance. This is not because of trouble in amplifiers. Such noise is often generated by switching at adjacent fluorescent lamps or a washing machine. Check for the source of radio interference.

OPERATING INSTRUCTIONS

TAPE DECK OPERATION

PLAYBACK

1. Set TAPE switch to A PLAY or B PLAY position according to the connection at A or B TAPE jack on the rear panel of the tape deck.
2. Reproduce the recorded tape at the selected tape deck.
3. Adjust MASTER VOLUME knob to a required sound volume.

Notes:

1. If tape reproduction is not performed, TAPE switch must be set to REC OFF or A REC, B REC position, without fail.
2. INPUT SELECTOR switch can be in any position during tape reproduction.

RECORDING

1. Confirm that the required tape deck is connected to TAPE jack on the rear panel.
2. Set INPUT SELECTOR switch to a program source being recorded and set TAPE switch to A REC (or B REC) position.
3. Start the tape deck under the recording condition.
4. Adjustment of the recording level can be effected with a level control at the tape deck. There is no relation to MASTER VOLUME and GAIN ATT of the L-07C.

Note:

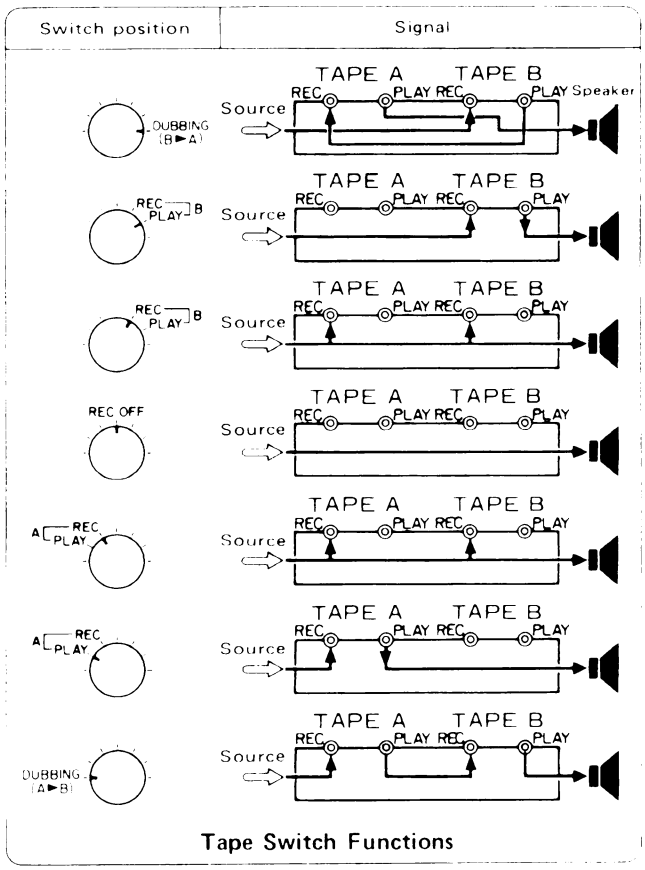
Simultaneous recording is possible with two tape decks if they are connected to TAPE A and TAPE B jacks respectively.

TAPE MONITORING

When a 3-head tape deck is employed, the recording condition can be checked by means of TAPE switch. In the A REC (or B REC) setting, the sound before being recorded is reproduced at the speakers. If TAPE switch is set to A PLAY (or B PLAY), the sound just after being recorded is reproduced at the speakers and the recording condition can be monitored.

Note:

For the monitored recording, connections for both recording and playback are required.



Tape Switch Functions

TAPE DUBBING

Tape dubbing is for copying a recorded tape to another tape by the use of two tape decks. In this case tape dubbing is possible from A to B and vice versa, using TAPE switch.

Connect one tape deck to TAPE A jacks and the other to TAPE B jacks on the rear panel.

- **Dubbing from A tape deck to B tape deck**

1. Set TAPE switch to DUBBING (A ▸ B).
2. Start A tape deck under the playback condition, and B tape deck under the recording condition.
3. Dubbing is possible from A to B while monitoring the sound of B tape deck.

- **Dubbing from B tape deck to A tape deck**

1. Set TAPE switch to DUBBING (B ▸ A).
2. Start B tape deck under the playback condition, and A tape deck under the recording condition.
3. Dubbing is possible from B to A while monitoring the sound of A tape deck.

L-07C FEATURES

The circuit blocks are arranged on a flat plane according to the flow of signal. This arrangement is unique and a bold attempt.

The entire configuration is simplified as much as possible. Drastic improvement has been conducted on the basic performance characteristics. In particular, a careful attention has been paid to the elimination of distortion, S/N ratio, and acoustic balance that may greatly affect the sound quality. Consequently, the circuit blocks are arranged according to the flow of signal, all circuit elements are arranged on both sides of a single large printed circuit board, and total wiring length is extremely reduced. Switches and volume controls are aligned in the center of the PC board to separate the front, rear, right, and left circuits.

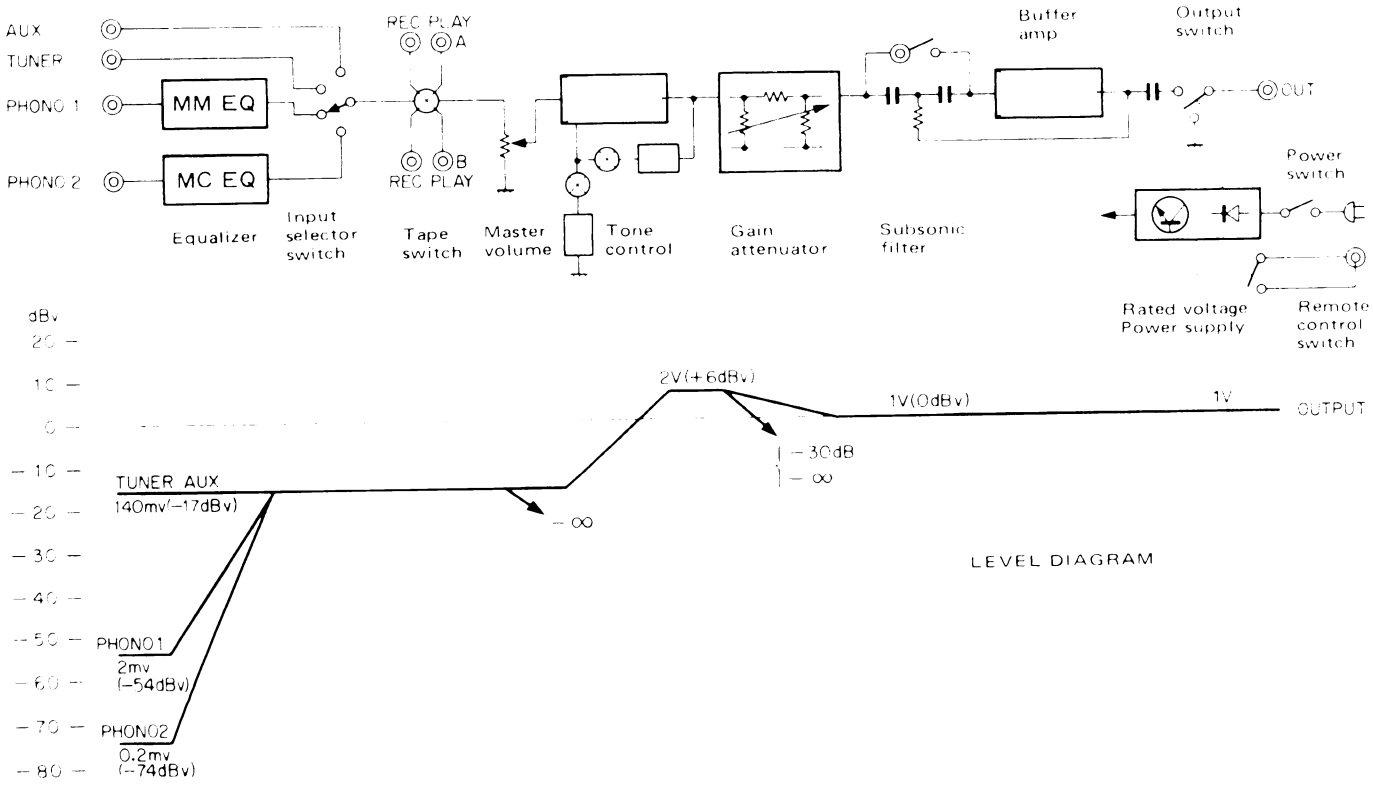
Standard Equalizer + High-Gain Equalizer

In general cases, an ordinary pre amplifier may be provided with only one equalizer amplifier and connection of two phono systems are made possible with the aid of an input selector switch. Such phono systems may impair the sound quality as well as S/N ratio. The L-07C is provided with two independent equalizer amplifiers for maximization of performance. In addition, the PHONO 2 terminal is terminated with a high-gain equalizer amplifier designed exclusively for an MC type cartridge. Thus any type of MC cartridge can be connected. In most cases, even when a control amplifier is provided with an amplifier for MC type cartridges, such a circuit is connected to the input circuit of an ordinary equalizer through a selector switch. The L-07C, on the other hand, has an exclusively designed high gain type equalizer amplifier which is absolutely free from various difficulties concerned with coupling capacitors, switch contacts, etc. In other words, the L-07C offers an ideal arrangement with its outstanding input ICL circuit and two exclusively designed equalizers for the connection to any turntables. The adoption of an ICL circuit in the amplifier for the MC type cartridges is the first attempt and the first such innovation has occurred in the L-07C.

Low-Impedance and High-Output Design

In order to avoid the effect of long audio cables to remote power amplifiers, input impedance is extremely reduced to 10 ohms. Such a low impedance can avoid the characteristical deterioration by cables and external induction. The output circuit is in the complementary push-pull configuration which offers a wide dynamic margin against the rated output of 1 volt. As a result, the maximum output is about 10 volts.

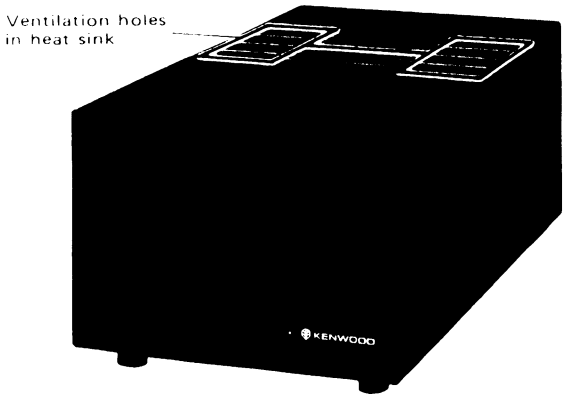
BLOCK DIAGRAM

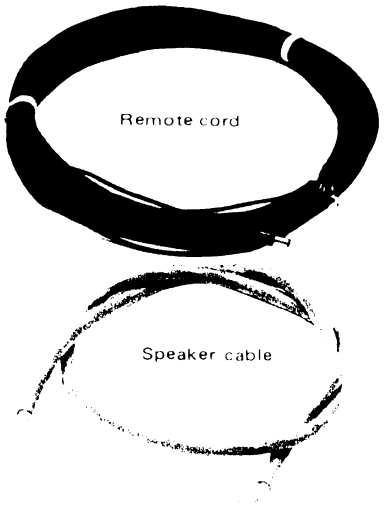


LEVEL DIAGRAM

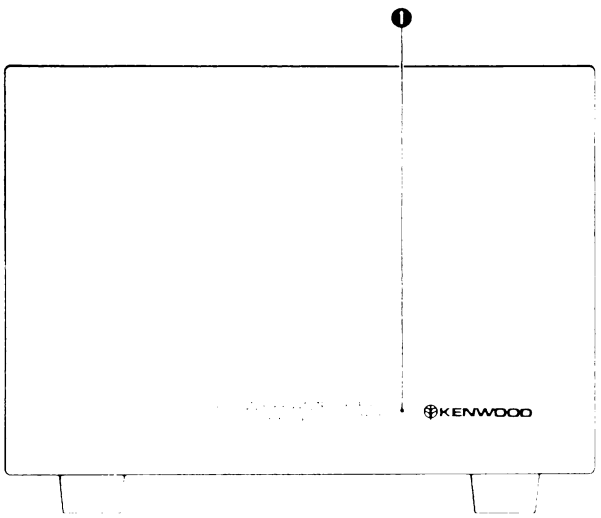
L-07M BEFORE USE

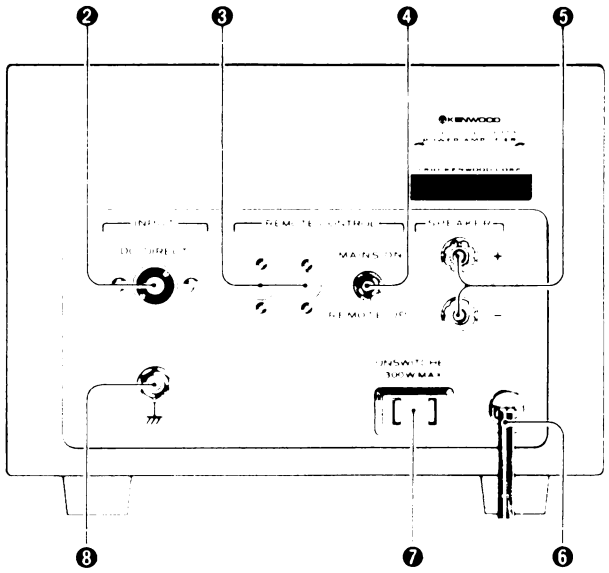
1. The L-07M is a single channel amplifier. Two units are required for stereo reproduction.
2. Confirm that a 1-meter speaker cable and a 15-meter remote cord are furnished.
3. The L-07M is provided with a remote POWER switch, through which a wall outlet near the speaker box can be used. In this case the power plug need not be inserted in the external AC outlet mounted on the L-07C.
4. The remote cord can be extended in the following manner:
   L-07C → L-07M → L-07M
5. The L-07M is installed within 1 meter from the speaker. If it is put on the speaker box, it should be installed through a suitable cushion. In another case, a separate shelf or a stand should be installed near the speaker box.
6. When a cushion is laid beneath the L-07M unit, the ventilation holes at the bottom must not be covered. In particular, the bottom holes of the chimney type heat sink must be kept opened.





CONTROL & CONNECTING INSTRUCTIONS





❶ Pilot lamp

This lamp is lit when the L-07M is switched on. In this case, (1) the remote control switch on the rear panel is set to MAINS ON, or (2) it is set to REMOTE OP and the POWER switch of the L-07C is turned on while the L-07M is remotely connected with the L-07C.

❷ INPUT: DC DIRECT jack

This terminal is connected to the OUTPUT terminal of the L-07C through the audio cable supplied.
Insert the pin plug of the audio cable and lock it by turning the screw. Since the "gold-galvanized pin-jack" system is adopted, contact resistance is very low. Such a design concept leads to improvement of sound quality.

❸ REMOTE CONTROL

This terminal is connected to the REMOTE terminal of the L-07C through a remote cord furnished. For detailed information, refer to "Remote Connection" on page 6.

❹ Remote control switch

MAINS ON: Used for independent operation of the L-07M. The unit is energized when this switch is set to MAINS ON position.

REMOTE OP: This switch must be set to REMOTE OP position when the L-07M is remotely connected with the L-07C and switched on and off at the POWER switch of the L-07C.

❺ SPEAKER terminals

This terminal is used to connect the speaker cable. It must be connected in the correct polarity (+, –) of the speaker system.

❻ Power cord

This cord can be connected to a wall outlet near the speaker box.

❼ UNSWITCHED (AC outlet for external component)

This outlet can be connected with an external audio component. The power consumption is 300W maximum.

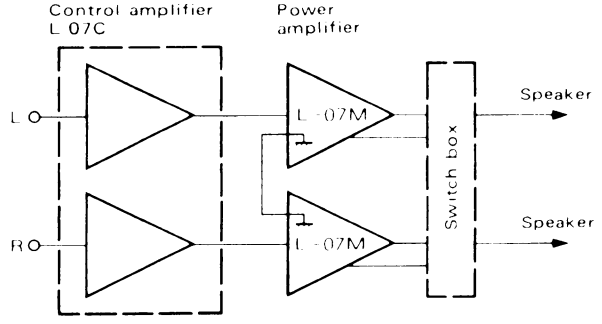
Note:
Units shipped for European countries are not equipped with unswitched outlet.

❽ GND terminal

This terminal is generally left unused. However, in some cases, a very small hum noise may come out of the speaker systems even though the GAIN ATT of the L-07C is turned to $-\infty$. This occurs according to the connecting conditions of various audio components. Such trouble can often be removed by connecting GND terminals together of both right and left the L-07M units.

Note:
It is not recommendable for you to use a switch box in the KENWOOD Direct Amplifier System.
However, when you have no choice but to use it, be sure to follow the instructions, though not the natural usage.

1. Connect the GND terminal for R Ch on the L-07M's rear panel and that for L Ch.
2. Replace the supplied audio cable with a pin cable of a suitable length.



Use of Switch Box

CONNECTING INSTRUCTION

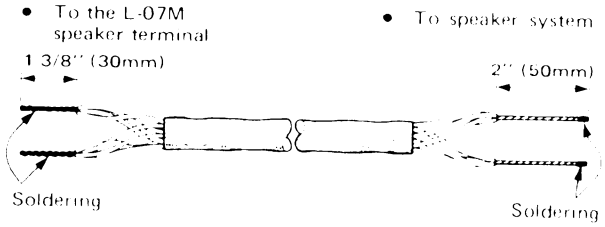
CONNECTION OF SPEAKER SYSTEM

The L-07M is designed for installation within the reach of the 1-meter speaker cable. Connections must employ the furnished speaker cable.

- Impedance of the speaker systems to be connected must be 4 ~ 16Ω.
- Speaker terminal (+) must be connected to the (+) side of speaker systems, and also for the (−) terminals.
- Do not use speakers with too small input capacities. The permissible input capacity of each speaker system should be suitable for a large output capacity of the L-07M.

CONNECTION OF CONTROL AMPLIFIER

- **Signal connection:** Since the L-07M is a power amplifier, it must be used always with a control amplifier. The L-07M is designed to offer the best performance when it is used with the control amplifier, the L-07C. Use an audio cable supplied with the L-07C to connect the input terminal (DC DIRECT) of the L-07M for each channel and the OUTPUT terminal of the L-07C.



How to Connect Speaker Cable

- **Remote connection:** The power supply for the L-07M can be controlled remotely from the POWER switch of the L-07C if the furnished remote cord is connected between the REMOTE terminal of the L-07C and the REMOTE CONTROL terminal of the L-07M. In this case, the REMOTE CONTROL switch must be set to REMOTE OP position on the rear panel of the L-07M.

L-07M FEATURES

Power Amplifier from a New Design Concept

It is our basic belief that "the power amplifier amplifies the input signal to drive the speaker systems." The section which supplies sufficient power to speakers is a "power company" and the input signal to be received by the power amplifier should have been controlled already. Hence, a large power circuit including a power-supply circuit must be arranged as compact as possible to reduce the total length of wiring. Thus the newly developed amplifier configuration permits a very smooth flow of signals.

DC Amplifier which Reminds us of Significance of Wide-Range Characteristics

Frequency characteristics have been analyzed for a very wide range to improve the quality of sound. Development of excellent high-frequency characteristics has been promoted to make them well balanced with the low-frequency characteristics of DC amplifier. For this purpose, transistors with high cut-off frequency f_T are adopted and a high-voltage operating circuit is used to actuate these transistors in a high-frequency domain. In addition, a large power circuit is assembled into a compact construction and elements are carefully allocated to obtain a smooth flow of signals.

Effective Chimney Type Heat Sink

To dispose of generated heat arising from transistors of 150W output, the L-07M is equipped with a chimney type heat sink made up of aluminum die-cast. This radiator effectively disperses heat into air by convection. There is no remarkable temperature rise during operation.

SPECIFICATIONS

L-07C (Stereo control amplifier)

Specifications described here are based on the measured values at the tip of special 12-meter audio cable provided, at its connection to the output terminal of Model L-07C.

PERFORMANCE

Input Sensitivity/Impedance/Signal to Noise Ratio (IHF A Curve)	
Phono 1 (for MM use)	2.0 mV/ 50 k ohms/ 83 dB
Phono 2 (for MC use)	0.2 mV/ 600 ohms/ 65 dB
Tuner	140 mV/ 50 k ohms/ 110 dB
AUX	140 mV/ 50 k ohms/ 110 dB
Tape Play	140 mV/ 50 k ohms/ 110 dB
Maximum Input Voltage for Phono 1	350 mV (rms), T.H.D. 0.003% at 1,000 Hz
Maximum Input Voltage for Phono 2	35 mV (rms), T.H.D. 0.009% at 1,000 Hz
Frequency Response	
	RIAA Standard Curve
Phono 1	+0.2 dB (20 Hz ~ 20 kHz)
Phono 2	+0.2 dB (50 Hz ~ 20 kHz) −0.8 dB (20 Hz)
Tuner, AUX & Tape Play	20 Hz ~ 50 kHz (+0 dB, −0.1dB) 10 Hz ~ 200 kHz (+0 dB, −0.5dB) 3 Hz ~ 500 kHz (+0 dB, −2 dB)
Channel Separation	100 dB throughout 20 Hz ~20kHz (short-circuited)
Tone Control	
BASS	±7.5 dB at 100 Hz
TREBLE	±7.5 dB at 10 kHz
Subsonic Filter	at 18 Hz, 12 dB/Octave
Total Harmonic Distortion	
Tuner, AUX, Tape Play (20 Hz ~ 20 kHz)	0.003% at 1V Output 0.005% at 7V Output
Phono 1 (20 Hz~20 kHz)	0.003% at 1V Output (VOLUME at −20 dB & GAIN ATT at −10 dB)
Phono 2 (20 Hz ~20 kHz)	0.009% at 1V Output (VOLUME at −20 dB & GAIN ATT at −10 dB)
Output Voltage & Impedance	
Output	1 V/ less than 10 ohms
Maximum Output	10V/ less than 10 ohms
Tape Rec	140 mV/ 100 ohms
Load Impedance	50 k ohm

GENERAL

Power Consumption	50 watts
AC Outlet	1 UNSWITCHED /100W max. 3 SWITCHED / 300W max.
Dimensions	W 18-29/32" (480 mm) H 3-15/16" (100 mm) D 13-1/16" (332 mm)
Weight (Net)	15.4 lbs. (7.0 kg)
(Gross)	18.2 lbs. (8.3 kg)

L-07M (Single channel power amplifier)

Specifications described here are based on the measured values at the tip of the special speaker cable provided, at its connection to Model L-07M.

PERFORMANCE

150 watts* minimum RMS at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.008% total harmonic distortion.

Continuous Power	150 watts 8 ohms at 1,000 Hz 200 watts 4 ohms at 1,000 Hz
Dynamic Power Output	300 watts 4 ohms at 1,000 Hz
Total Harmonic Distortion (T.H.D.)	0.008% at rated power output into 8 ohms 20 Hz ~ 20 kHz 0.008% at 15 watts into 8 ohms 20 Hz ~ 20 kHz 0.002% at rated power into 8 ohms 1 kHz 0.003% at 15 watts into 8 ohms 1 kHz 0.003% at rated power into 4 ohms 1 kHz 0.003% at 20 watts into 4 ohms 1 kHz
Intermodulation Distortion (60 Hz : 7 kHz = 4 : 1)	0.002% at rated power into 8 ohms 0.002% at 15 watts into 8 ohms 0.003% at rated power into 4 ohms 0.003% at 20 watts into 4 ohms
Frequency Response	DC ~ 50,000 Hz +0, −0.5 dB DC ~ 150,000 Hz +0, −1.5 dB
Signal to Noise Ratio (IHF A Curve)	120 dB (short-circuited)
Damping Factor	100 into 8 ohms load 120 into 8 ohms load without Speaker Cable
Input Sensitivity/Impedance	1 V/50 k ohms
Speaker Impedance	Accept 4 ohms to 16 ohms
Speaker Cable Loss	0.01 ohms

GENERAL

Power Consumption	630 watts at full power 45 watts at non-signal
AC Outlet	1 UNSWITCHED (Maximum 300 watts)
Dimensions	W 7-7/8" (200 mm) H 6-3/32" (155 mm) D 15-11/32" (390 mm)
Weight (Net)	28.5 lbs. (13 kg)
(Gross)	30.7 lbs. (14 kg)

*Measured pursuant to Federal Trade Commission's Trade Regulation rule in U.S.A. on Power Output Claims for Amplifier.

Note: Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.