



## **COMPACT COMPONENT SYSTEM**

SISTEMAS DE COMPONENTES COMPACTOS SISTEMA DE COMPONENTE COMPACTO 小型組合系統

## **MX-J170V**

Consists of CA-MXJ170V and SP-MXJ170V Consta del CA-MXJ170V el SP-MXJ170V Consta do CA-MXJ170V e SP-MXJ170V 由 CA-MXJ170V及SP-MXJ170V 組成



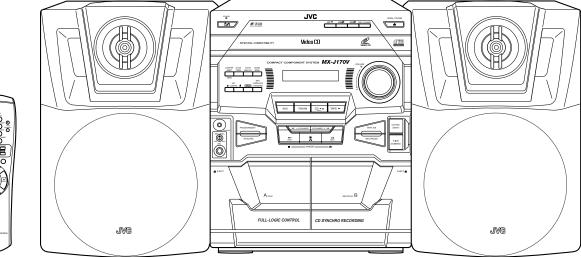


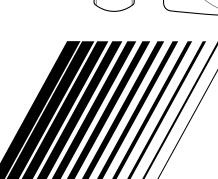


Video CD

PlayBack Control

SP-MXJ170V CA-MXJ170V SP-MXJ170V





/ INSTRUCTIONS

MANUAL DE INSTRUCCIONES
INSTRUÇÕES

使用说明书

#### For Customer Use:

Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.

Serial No.

## Warnings, Cautions and Others Avisos, precauciones y otras notas Advertências, precauções e outras notas

#### 警告,注意及其他须知事项

تحذيرات، تنبيهات وأشياء أخرى

#### Caution — $\circlearrowleft$ /| switch!

Disconnect the mains plug to shut the power off completely. The  $\circlearrowleft$ /I switch in any position does not disconnect the mains line. The power can be remote controlled.

#### Precaución — Interruptor 🕛/|!

Desconectar el cable de alimentación para desactivar la alimentación totalmente. Cualquier que sea la posición de ajuste del interruptor  $\bigcirc / |$ , la alimentación no es cortada completamente. La alimentación puede ser controlada remotamente.

#### Precaução — Interruptor 🕛/|!

Desconectar o cabo de alimentação para desligar a alimentação por completo. Qualquer que seja a posição de ajuste do interruptor ტ/I, a alimentação não é completamente cortada. A alimentação pode ser controlada remotamente.

#### 注意一 心/ | 开关!

无论 **O/I** 开关在任何位置,电源线的电源还是没有被切断,若要将电源完全关闭,应把电源插头拔离插座。电源开关可用遥控器控制。

#### تحذير - ٥/١ الطاقة

انزع قابس الطاقة الكهربائية من اجل فصل الطاقة الكهربائية عن الجهاز كليا. لا يفصل مفتاح الطاقة الكهربائية عندما يكون باي وضع 0/ الطاقة الكهربائية عن الجهاز. يمكن التحكم عن بعد بالطاقة الكهربائية.

#### **CAUTION**

To reduce the risk of electrical shocks, fire, etc.:

- 1. Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

#### **PRECAUCIÓN**

Para reducir riesgos de choques eléctricos, incendio,

- 1. No extraiga los tornillos, los cubiertas ni la caja.
- 2. No exponga este aparato a la lluvia o a la humedad.

#### **PRECAUÇÃO**

Para reduzir riscos de choques elétricos, incêndio, etc.:

- 1. Não remova parafusos e tampas ou desmonte a
- 2. Não exponha este aparelho à chuva nem à umidade.

#### 警告

为了减低触电,火灾等危险:

- 1.请勿擅自卸下螺丝钉,盖子或机壳。
- 2. 切勿让本机受雨淋或置潮湿环境中。

لتجنب خطر الحريق، الصدمات الكهربائية، الخ.: ١. لا تقم بفك البراغي، الاغطية أو الخزانة.

٢. لا تقم بتعريض هذا الجهاز للمطر أو للرطوبة.

#### **Caution: Proper Ventilation**

To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

1 Front: No obstructions and open spacing.

2 Sides/Top/ Back: No obstructions should be placed in the areas shown by the dimensions below.

3 Bottom: Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand

with a height of 10 cm or more.

#### Precaución: el aparato debe estar bien ventilado

Para evitar posibles riesgos de descargas eléctricas e incendios y prevenir cualquier posible daño, coloque el aparato del modo siguiente:

1 Parte delantera: No ponga nada delante, deje el espacio libre.

2 Laterales/ parte superior/ parte trasera: No se debería colocar nada en las áreas y las distancias que se detallan a continuación.

3 Parte inferior: Coloque el aparato sobre una superficie recta. Debe haber buena circulación de aire; para

ello, coloque el aparato sobre una base a una altura mínima de 10 cm.

#### Precaução: Ventilação adequada

Para evitar riscos de choques elétricos e incêndios, e prevenir avarias, instale o aparelho como segue:

1 Parte frontal: Sem obstruções e espaços abertos.

2 Partes laterais/Tampa/Posterior: Nenhuma obstrução deverá ser colocada entre as áreas cujas dimensões são indicadas abaixo.

3 Parte inferior: Instale-o sobre uma superfície plana. Deverá ser mantido espaço suficiente para a ventilação

se este for instalado numa posição que tenha uma altura de 10 cm ou mais.

#### 注意:正确通风

为免发生触电和火警的危险,及防止本机受损,请将本机如下放置:

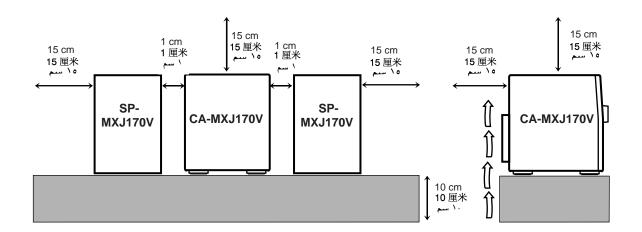
1. 前面: 没有障碍物及地方开阔。

2. 侧面/顶面/背面: 在图中所示范围中,不应放置任何障碍物。

3. 底部: 放置在水平面上。放置在一个高 10 厘米或以上的台上,以保持足够的通风道。

تحذير: التهوية الصحيحة

لتجنّب حصولٌ صدمات كهربائية واخطار الحريق ومنع حصول تلف وضرر للجهاز، ركّب الجهاز كما يلي: ١ الجهة الامامية: يجب ان لا يكون هنالك عوائق ويجب ان تكون المنطقة مفتوحة امام الجهاز. ٢ الجهات الجانبية / العلوية / الخلفية: يجب عدم وضع عوائق في المناطق المبينة بالابعاد في الاسفل. ٣ القاعدة: يجب وضع الجهاز على سطح منبسط. اترك مسافة كافية من اجل التهوية بواسطة وضع الجهاز على حامل بارتفاع ١٠ سم او اكثر.



## IMPORTANT FOR LASER PRODUCTS / IMPORTANTE PARA PRODUCTOS LÁSER / IMPOTANTE PARA PRODUTOS LASER / 雷射产品的重要说明 / مهم للمنتجات الليزرية

## REPRODUCTION OF LABELS / REPRODUCCIÓN DE ETIQUETAS / REPRODUÇÃO DE ETIQUETAS 标签内容说明 / إنتاج اللاصقات

- ① CLASSIFICATION LABEL, PLACED ON REAR ENCLO-SURE
- ① ETIQUETA DE CLASIFICACIÓN, PEGADA EN LA PARTE POSTERIOR DE LA CAJA
- ① ETIQUETA DE CLASSIFICAÇÃO LOCALIZADA NA PARTE POSTERIOR DA CAIXA DO APARELHO.
- ① 分类标签,贴在机壳背后

التصنيف، موضوعة على المرفق الخلفى

- ② WARNING LABEL, PLACED INSIDE THE UNIT
- ② ETIQUETA DE ADVERTENCIA, PEGADA EN EL INTE-RIOR DE LA UNIDAD
- ② ETIQUETA DE ADVERTÊNCIA LOCALIZADA NA PARTE INTERNA DA UNIDADE.
- ② 警告标签,贴于机内

لاصقة التحذير، موضوع بداخل الجهاز

CLASS 1 LASER PRODUCT DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e) VARNING: Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej ai strålen. (s) i te

ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling (d) VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

- 1. CLASS 1 LASER PRODUCT
- DANGER: Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- CAUTION: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.
- 1. PRODUCTO LÁSER CLASE 1
- 2. **PELIGRO**: En el interior hay radiación láser invisible. Evite el contacto directo con el haz.
- PRECAUCIÓN: No abra la tapa superior. En el interior de la unidad no existen piezas reparables por el usuario; deje todo servicio técnico en manos de personal calificado.
- 1. PRODUTO LASER CLASSE 1
- PERIGO: O laser emite uma rediação invisível que é perigosa, caso o aparelho esteja aberto e a trava inoperante ou danificada. Evite exposição direta ao feixe dos raios.
- CUIDADO: Não abra a caixa do aparelho. Não existem peças reparáveis pelo usuário na parte interna da unidade. Solicite assistência técnica somente a pessoal técnico qualificado.

- 1. 一级雷射产品
- 2. **危险**: 当内部锁定装置失效或者损坏后,打开盖板可能会产生不可见的雷射幅射。应避免受到光束直接照射。
- 3. **注意**:请勿打开顶盖板。本机内部没有用户可自行维修的部件;所有维修工作应由有资格的人员完成。
  - ١. صنف ١ منتج ليزري
- خطر: أشعة ليزرية غير مرئية عند الفتح والأغلاق الفاشل أو غير الصحيح.
   تجنب التعرض المباشر للاشعة.
- تحذير: لا تفتح الغطاء العلوي. ليس في داخل الجهاز أقسام بمستطاع الستخدم صيانتها؛ إعهد بكافة الأعمال الصيانية لفني مختص.

## Introduction



We would like to thank you for purchasing one of our JVC products.

Before operating this unit, read this manual carefully and thoroughly to obtain the best possible performance from your unit, and retain this manual for future reference.

#### **About This Manual**

This manual is organized as follows:

- The manual mainly explains operations using the buttons and controls on the unit. You can also use the buttons on the remote control if they have the same or similar names (or marks) as those on the unit.
   If operation using the remote control is different from that using the unit, it is then explained.
- Basic and common information that is the same for many functions is grouped in one place, and is not repeated in each procedure. For instance, we do not repeat the information about turning on/off the unit, setting the volume, changing the sound effects, and others, which are explained in the section "Common Operations" on pages 9 and 10.
- The following marks are used in this manual:



Gives you warnings and cautions to prevent from a damage or risk of fire/electric shock. Also gives you information which is not good for obtaining the best possible performance from the unit.



Gives you information and hints you had better know.

#### **Precautions**

#### Installation

- Install in a place which is level, dry and neither too hot nor too cold — between 5°C (41°F) and 35°C (95°F).
- Install the unit in a location with adequate ventilation to prevent internal heat built-up in the unit.
- Leave sufficient distance between the unit and the TV.
- Keep the speakers away from the TV to avoid interference with TV.



DO NOT install the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or vibration.

#### **Power sources**

• When unplugging from the wall outlet, always pull the plug, not the AC power cord.



DO NOT handle the AC power cord with wet hands.

#### **Moisture condensation**

Moisture may condense on the lens inside the unit in the following cases:

- · After starting heating in the room
- In a damp room
- If the unit is brought directly from a cold to a warm place Should this occur, the unit may malfunction. In this case, leave the unit turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

#### **Others**

- Should any metallic object or liquid fall into the unit, unplug the unit and consult your dealer before operating any further.
- If you are not going to operate the unit for an extended period of time, unplug the AC power cord from the wall outlet.



DO NOT disassemble the unit since there are no user serviceable parts inside.

If anything goes wrong, unplug the AC power cord and consult your dealer.

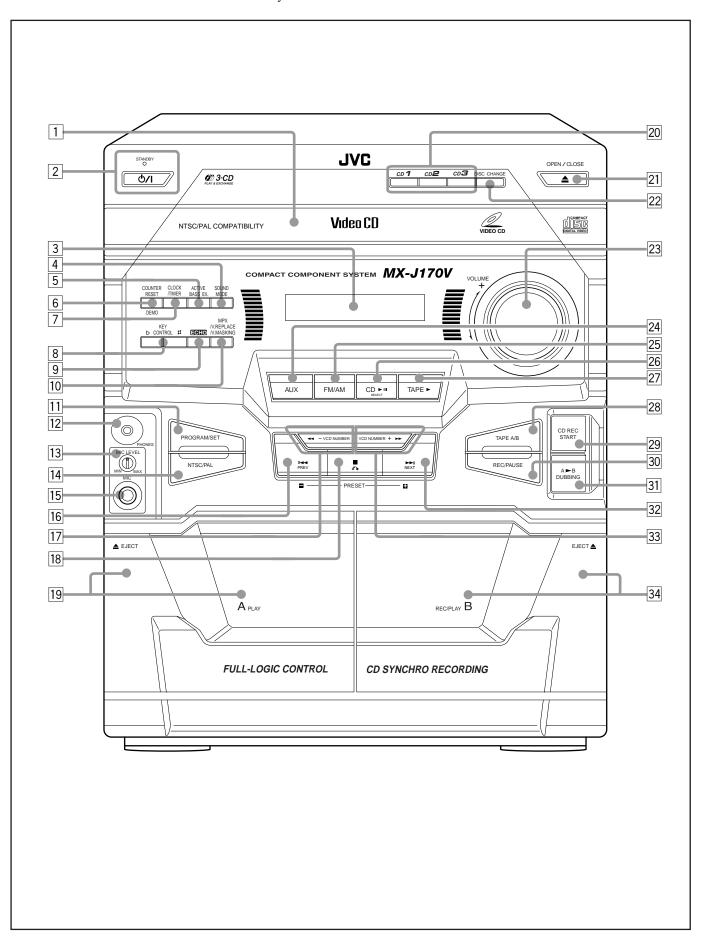
# **Contents**

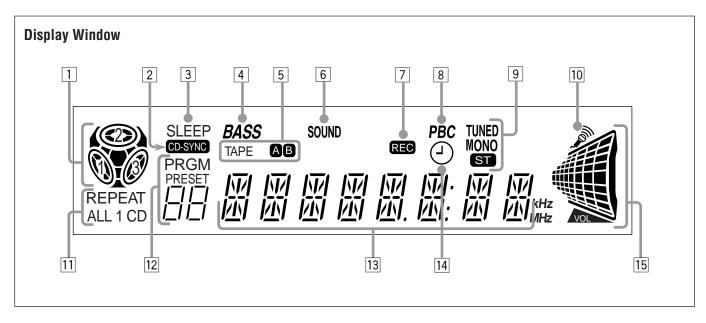


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## **Location of the Buttons and Controls**

Become familiar with the buttons and controls on your unit.





See pages in the parentheses for details.

#### **Front Panel**

- 1 Carousel
- 2 (5) (standby/on) button and STANDBY lamp (9)
- 3 Display window
- 4 SOUND MODE button (10)
- 5 ACTIVE BASS EX. (extension) button (10)
- 6 COUNTER RESET button (18) DEMO button (8)
- 7 CLOCK/TIMER button (9, 21)
- 8 KEY CONTROL b /# buttons (20)
- 9 ECHO button (20)
- 10 MPX/V.REPLACE/V.MASKING button (19)
- 11 PROGRAM/SET button (9, 11, 13, 21)
- 12 PHONES jack (10)
- 13 MIC LEVEL control (19)
- 14 NTSC/PAL button (14)
- 15 MIC jack (19)
- 16 I (reverse search) button (9, 13, 17, 21)
  PREV button (15)
  PRESET button (11)
- 17 **◄** button (10, 11)

VCD NUMBER – button (15)

- 18 (stop) button (12, 17, 18, 19)
  - (return) button (15)
- 19 Deck A cassette holder (17)
  - Pressing the ≜ EJECT portion opens the holder.
- Disc number buttons (CD 1, CD 2, CD 3) (12)

  Pressing one of these buttons also turns on the unit.
- 21 OPEN/CLOSE ▲ button (12)

  Pressing this button also turns on the unit.
- 22 DISC CHANGE button (12)
- 23 VOLUME control (10)
- 24 AUX button (9)

Pressing this button also turns on the unit.

25 FM/AM button (11)

Pressing this button also turns on the unit.

- 26 CD ►/**II** (play/pause) button (12, 14)

  Pressing this button also turns on the unit.

  SELECT button (15)
- 27 TAPE ► button (17)

Pressing this button also turns on the unit.

- 28 TAPE A/B button (17)
- 29 CD REC START button (18)
- 30 REC/PAUSE button (18)
- 31 A ► B DUBBING button (18)
- 32 ►►I (forward search) button (9, 13, 17, 21) NEXT button (15)

PRESET + button (11)

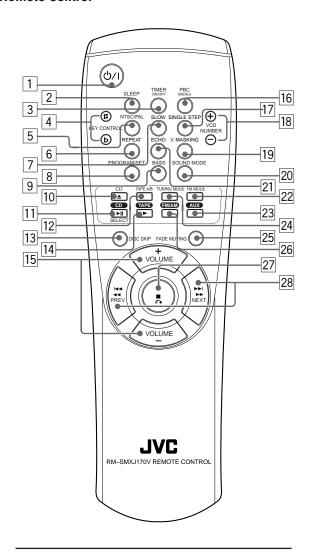
- 33 ►► button (10, 11) VCD NUMBER + button (15)
- 34 Deck B cassette holder (18)
  - Pressing the EJECT **≜** portion opens the holder.

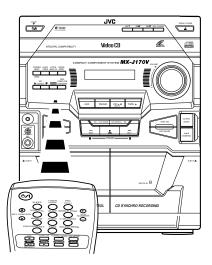
#### Display window

- 1 Disc indicators
- 2 CD-SYNC indicator
- 3 SLEEP indicator
- 4 BASS indicator
- 5 Tape operation indicators
  - TAPE A/B (operating deck) indicators
- 6 SOUND indicator
- 7 REC indicator
- 8 PBC indicator
- 9 Tuner operation indicators
  - TUNED, MONO and ST (stereo) indicators
- 10 Karaoke ( ) and echo ( ) indicators
- [1] CD play mode indicators
  - REPEAT and (ALL/1/CD) indicators
- 12 PRESET and PRGM (program) number indicators
- 13 Main display
  - Shows the source name, frequency, etc.
- 14 (timer) indicator
- 15 Volume level indicators



#### **Remote Control**





When using the remote control, point it at the remote sensor on the front panel.

#### **Remote Control**

- 1 (standby/on) button (9)
- 2 SLEEP button (23)
- 3 TIMER ON/OFF button (23)
- 4 KEY CONTROL # / b buttons (20)
- 5 NTSC/PAL button (14)
- 6 REPEAT button (12)
- 7 SLOW button (14)
- 8 PROGRAM/SET button (9, 11, 13, 21)
- 9 BASS button (10)
- 10 CD ▲ (open/close) button (12)

  Pressing this button also turns on the unit.
- 11 CD ► II button (12, 14)

  Pressing this button also turns on the unit.

  SELECT button (15)
- 12 TAPE A/B button (17)
- 13 DISK SKIP button (12)
- TAPE ► button (17)

  Pressing this button also turns on the unit.
- 15 VOLUME + / buttons (10)
- 16 PBC (MENU) button (15)
- 17 SINGLE STEP button (14)
- 18 VCD NUMBER + / buttons (15)
- 19 V.MASKING button (19)
- 20 SOUND MODE button (10)
- 21 ECHO button (20)
- 22 FM MODE button (11)
- 23 AUX button (9)

Pressing this button also turns on the unit.

- 24 TUNING MODE button (11)
- 25 FADE MUTING button (10)
- 26 FM/AM button (11)

Pressing this button also turns on the unit.

- 27 (stop) button (12, 17, 18, 19)
  - (return) button (15)
- 28 (reverse search/fast rewind) button (9, 11, 13, 17, 21)

PREV button (15)

►► (forward search/fast forward) button (9, 11, 13, 17, 21)

NEXT buttons (15)

### **Unpacking**

After unpacking, check to be sure that you have all the following items.

The number in the parentheses indicates the quantity of the pieces supplied.

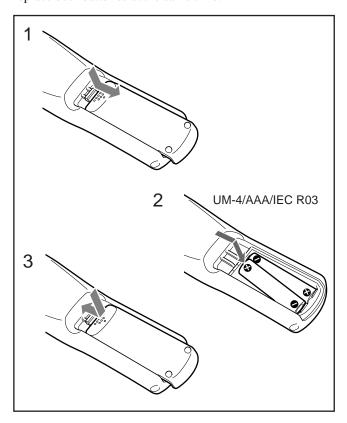
- AM loop antenna (1)
- FM antenna (1)
- Remote control (1)
- Batteries (2)
- AC plug adaptor (1)
- Video cord (1)

If any is missing, consult your dealer immediately.

### **Putting the Batteries into the Remote Control**

Insert the batteries — UM-4/AAA/IEC R03 — into the remote control, by matching the polarity (+ and -) on the batteries with the + and - markings on the battery compartment.

When the remote control can no longer operate the unit, replace both batteries at the same time.

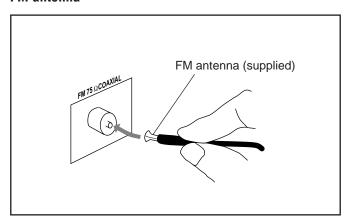




- DO NOT use an old battery together with a new one.
- DO NOT use different types of batteries together.
- DO NOT expose batteries to heat or flame.
- DO NOT leave the batteries in the battery compartment when you are not going to use the remote control for an extended period of time. Otherwise, it will be damaged from battery leakage.

### **Connecting Antennas**

#### FM antenna



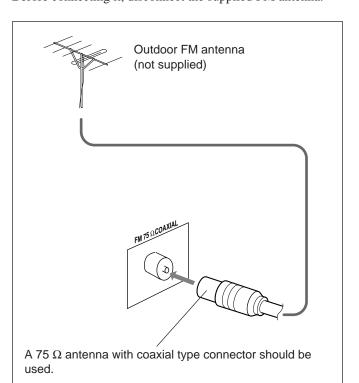
- 1 Attach the FM antenna to the FM 75  $\Omega$  COAXIAL terminal.
- 2 Extend the FM antenna.
- 3 Fasten it up in the position which gives you the best reception, then fix it on the wall, etc.

## About the supplied FM antenna

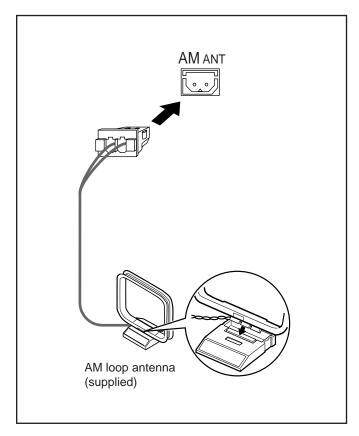
The FM antenna supplied with this unit can be used as temporary measure. If reception is poor, you can connect an outdoor FM antenna.

#### To connect an outdoor FM antenna

Before connecting it, disconnect the supplied FM antenna.



#### AM antenna



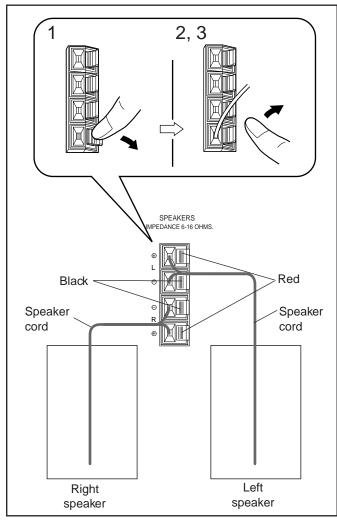
- 1 Connect the AM loop antenna to the AM ANT terminal as illustrated.
- 2 Turn the AM loop antenna until you have the best reception.

## For better reception of both FM and AM

- Make sure the antenna conductors do not touch any other terminals and connecting cords.
- Keep the antennas away from metallic parts of the unit, connecting cords, and the AC power cord.

## **Connecting Speakers**

You can connect a pair of the front speakers.



- 1 Press and hold the clamp of the speaker terminal on the rear of the unit.
- 2 Insert the end of the speaker cord into the terminal.

Match the polarity of the speaker terminals: Red (+) to red (+) and black (-) to black (-).

3 Release the finger from the clamp.

**IMPORTANT:** Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the unit.



#### **Connecting Other Equipment**

You can connect ordinary audio equipment as well as audiovisual equipment. When connecting VCR, you can record Video CDs program easily.

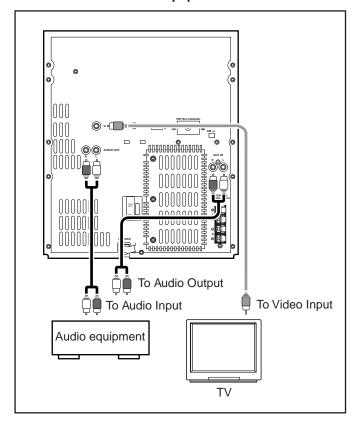
When you connect and use this equipment, refer also to its manual.

Be sure that the plugs of the audio- and video cords are color coded: White plugs and jacks are for left audio signals, red ones for right audio signals, and yellow one for video signal.



- DO NOT connect any equipment while the power is on
- DO NOT plug in any equipment until all connections are complete.

#### To connect audio-visual equipment



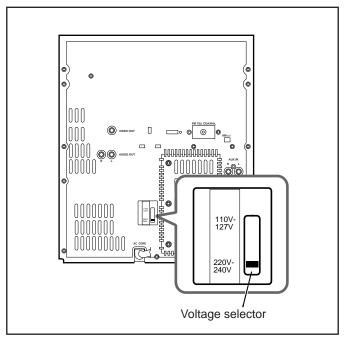
Connect the audio output jacks on the other equipment and the AUX IN jacks on the rear, the audio input jacks on the other equipment and AUDIO OUT jacks on the rear, as well as the video input jacks and the VIDEO OUT jacks on the rear, using an audio and/or video cords.

## **Adjusting the Voltage Selector**

Before plugging in the unit, set the correct voltage for your area with the voltage selector on the rear of the unit.

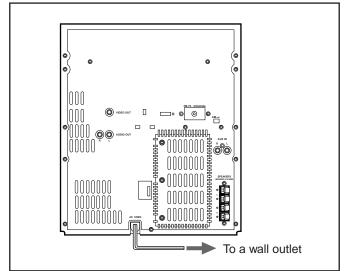


 DO NOT plug in before setting the voltage selector on the rear of the unit and all connection procedures are complete.



Using a tool with sharp tips such as a ballpoint pen, set the voltage selector to the correct voltage range position matching your local voltage. (See the back cover page.)

## NOW, you can plug in the unit and other connected equipment to FINALLY!



To start the display demonstration Press DEMO while the unit is turned off (on standby).



To stop the display demonstration, press any button.

## **Common Operations**

#### Setting the Clock

Before operating the unit any further, first set the clock built in this unit.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- If you want to stop clock setting, press CLOCK/TIMER once or wait until the time limit of 15 seconds comes.

## **1** Press CLOCK/TIMER twice.

The "CLOCK" appears on the display.





The hour digits start flashing on the display.

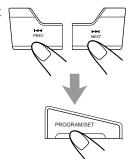


**3** Press | ◀ or ▶ l to adjust the hour, then press PROGRAM/SET.

After hour digits are set, the minute digits start flashing on the display.



**4** Press | ◀ or ▶ to adjust the minute, then press PROGRAM/SET.



**5** Press CLOCK/TIMER twice to finish the clock setting.



#### To check the clock time

Press CLOCK/TIMER while playing any source. The clock time appears on the display for a while.



#### To adjust the clock again

If you have adjusted the clock before, you need to press CLOCK/TIMER until the "CLOCK" is selected.

• Each time you press the button, the clock/timer setting modes change as follows:

notes If the

If there is a power failure

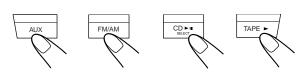
The clock loses the setting and is reset to "0:00." You need to set the clock again.

## **Turning On the Power and Selecting the Sources**

When you press the play button for a particular source (AUX, FM/AM, CD ►/II, and TAPE ►), the unit turns on (and the unit starts playing the source if it is ready — COMPU PLAY CONTROL).

**To listen to the FM/AM broadcasts,** press FM/AM. (See page 11.)

To play back CDs, press CD ►/II. (See pages 12 and 13.)
To play back tapes, press TAPE ►. (See page 17.)
To select the external equipment as the source, press AUX.



To turn on the unit without playing, press (b)/ (standby/on) so that the STANDBY lamp

goes off.



HELLO

To turn off the unit (on standby), press  $\circlearrowleft$ /l (standby/on) again so that the STANDBY lamp lights up.



600I-34E

A little power is always consumed even while the unit is on standby.

**To switch off the power supply completely,** unplug the AC power cord from the AC outlet.



The clock is reset to "0:00" right away, while the tuner preset stations (see page 11) will be erased in a few days.



### **Setting the AM Tuner Interval Spacing**

Some countries space AM stations 9 kHz apart, and some countries use 10 kHz spacing.

#### On the unit ONLY:

When shipped, the unit is set to 9 kHz spacing.

To select 10 kHz interval, press ★ while holding down ★ when the unit is in standby mode. "AM -- 10" appears on the display.



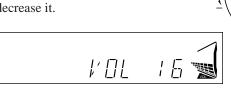
To change back to 9 kHz, press **()/|** while holding down **◄** when the unit is in standby mode. "AM -- 9" appears on the display.



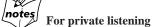
### **Adjusting the Volume**

You can adjust the volume level only while the unit is turned on.

Turn VOLUME clockwise to increase the volume or counterclockwise to decrease it.



When using the remote control, press VOLUME + to increase the volume or press VOLUME – to decrease it.



Connect a pair of headphones to the PHONES jack. No sound comes out of the speakers. Be sure to turn down the volume before connecting or putting on headphones on the unit.



DO NOT turn off (on standby) the unit with the volume set to an extremely high level; otherwise, a sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the unit or start playing any source next time.

REMEMBER you cannot adjust the volume level while the unit is on standby.

#### To turn down the volume level temporarily

Press FADE MUTING on the remote control.





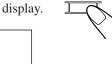
To restore the sound, press the button again.

#### **Reinforcing the Bass Sound**

The richness and fullness of the bass sound is maintained regardless of how low you set the volume. You can use this effect only for playback.

**To get the effect,** press ACTIVE BASS EX. so that the BASS indicator appears on the display.

3855



**To cancel the effect,** press the button again so that the indicator also goes off.

 $\Pi N$ 

1955 OFF

#### **Selecting the Sound Modes**

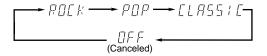
You can select one of the 3 preset sound modes (3 SEA - Sound Effect Amplifier - modes). The sound modes can be applied only to playback sounds, and cannot be used for recording.

To select the sound modes, press SOUND MODE until the sound mode you want appears on the display. The SOUND indicator also lights up on the display.





 Each time you press the button, the sound modes change as follows:



**SEA modes:** 

**ROCK**: Boosts low and high frequency. Good for

acoustic music.

**POP**: Good for vocal music. **CLASSIC**: Good for classical music.

**OFF**: Cancels the sound mode.

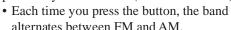
## **Listening to FM and AM Broadcasts**



### Tuning in a Station

## **1** Press FM/AM.

The unit automatically turns on and tunes in the previously tuned station (either FM or AM).

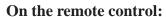




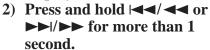
## **2** Select a station.

#### On the unit:

Press and hold ◀◀ or ▶▶ for more than 1 second.



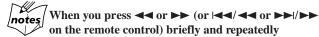
1) Press TUNING MODE so that "MANUAL" appears on the display.



The unit starts searching for stations and stops when a station of sufficient signal strength is tuned in.

If a program is broadcast in stereo, the ST (stereo) indicator lights up.

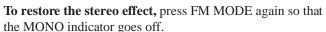
To stop during searching, press ◀◀ or ▶▶ (or |◀◀/◀◀ or ▶►I/►► on the remote control).



The frequency changes step by step.

#### To change the FM reception mode

When an FM stereo broadcast is hard to receive or noisy, press FM MODE on the remote control so that the MONO indicator lights up on the display. Reception improves.



In this stereo mode, you can hear stereo sounds when a program is broadcast in stereo.

The FM reception mode is restored even when the unit is turned off.

## **Presetting Stations**

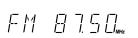
You can preset 30 FM, 15 AM stations.

In some cases, test frequencies have been already memorized for the tuner since the factory examined the tuner preset function before shipment. This is not a malfunction. You can preset the stations you want into memory by following the presetting method.

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

## **1** Tune in the station you want to preset.

• See "Tuning in a Station" to the left.



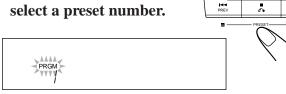
### **2** Press PROGRAM/SET.

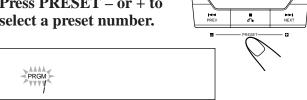




The PRGM flashes on the display.

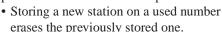
# $\mathbf{3}$ Press PRESET – or + to





## Press PROGRAM/SET again.

The tuned station in step 1 is stored in the preset number selected in step 3.







#### When you unplug the AC power cord or if a power failure occurs

The preset stations will be erased in a few days. If this happens, preset the stations again.

## Tuning in a Preset Station

## 1 Press FM/AM.

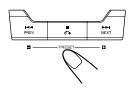
The unit automatically turns on and tunes in the previously tuned station (either FM or AM).



• Each time you press the button, the band alternates between FM and AM.

## **2** Select a preset number. On the unit:

Press PRESET - or +.



#### On the remote control:

1) Press TUNING MODE so that "PRESET" appears on the display.

2) Press |**◄◄**/**◄◄** or **▶►**|/**▶▶** 



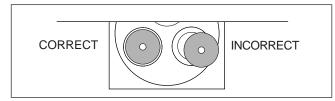
#### **Loading CDs**

**1** Press OPEN/CLOSE **△** on the unit or CD **△** on the remote control.

The unit automatically turns on and the carousel comes out.



**2** Place one or two discs correctly on the front slots of the carousel, with its label side up.



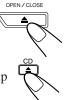
- When using a CD single (8 cm), place it on the inner circle of the disc tray.
- **3** If you wish to load a third disc, press DISC CHANGE on the unit (or DISC SKIP on the remote control).

The carousel rotates by 120°.



**4** Press OPEN/CLOSE **≜** on the unit or CD **≜** on the remote control again.

The carousel closes, and the corresponding disc number indicator (disc 1 to disc 3) lights up on the display.



About the disc indicators

Each disc indicator corresponds to the disc tray of the same number.



- The disc indicator flashes while the corresponding CD is currently selected
- The disc indicator goes off when the unit has detected that there is no CD on the corresponding disc tray.

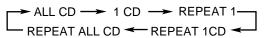
#### Playing Back CDs

You can play CDs continuously.

- 1 Load CDs.
- **2** Press REPEAT on the remote control to select a play mode you want.

REPEAT

Each time you press the button, play modes change as follows:



ALL CD: Plays all loaded CD. (When you turned on

the unit, "ALL CD" is automatically

selected.)

**1CD:** Plays back one CD.

**REPEAT 1:** Repeats one track on one CD. **REPEAT 1CD\***: Repeats all the tracks on one CD.

**REPEAT ALL CD**: Repeats all the tracks on all the CDs,

or all the tracks in the program.

\*REPEAT 1CD is not used for Program play.

**3** Select the disc you want to start play from. On the unit:

Press one of the disc number buttons (CD 1, CD 2, and CD 3).

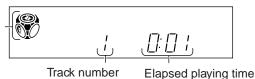


On the remote control: Press DISC SKIP repeatedly.

CD play starts from the first track of the selected disc.



Disc No. flashes



• Pressing CD ►/III instead of the disc number buttons starts playing back if a CD is on the trays.

To stop during play, press ■.

## To stop play for a moment

Press CD ▶/II.





"PAUSE" appears on the display.

To resume play, press CD ►/II again.

**To remove the disc,** press OPEN/CLOSE **△** on the unit or CD **△** on the remote control.

### **Basic CD Operations**

While playing a CD, you can do the following operations.

#### To exchange CDs during playback of another

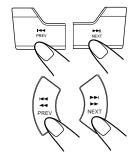
Press DISC CHANGE to eject and exchange the CD.

#### To locate a particular point in a track

During play, press and hold I◀◀ or

- I◄ : Fast reverses the disc.
- ▶►I: Fast forwards the disc.

When using the remote control, press and hold  $| \blacktriangleleft | / \blacktriangleleft |$  or  $| \triangleright | / \triangleright \triangleright |$ .



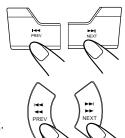
#### To go to another track

Press I or ▶ repeatedly before or during playback.

- I◄ : Goes back to the beginning of the current or previous tracks.
- >>: Skips to the beginning of the next or succeeding tracks.

When using the remote control, press





## **Programming the Playing Order of the Tracks Program Play**

You can arrange the order in which the tracks play before you start playing. You can program up to 24 tracks.

• To repeat the program, select "REPEAT ALL CD" by pressing REPEAT repeatedly.

## Load discs.

• If the current playing source is not the CD player, press  $CD \triangleright / \blacksquare$ , then  $\blacksquare$  before going to the next step.

## **2** Press PROGRAM/SET.

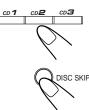


## **3** Select the disc number.

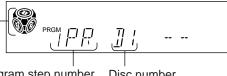
#### On the unit:

Press one of the disc number buttons (CD 1, CD 2, and CD 3). On the remote control:

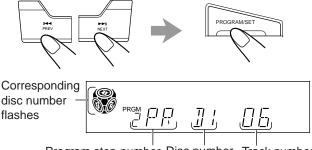
Press DISC SKIP repeatedly.







Program step number Disc number **4** Press | **◄** or **▶** | (or | **◄** / **◄** or **▶** | / **▶** ▶ on the remote control) to select the track number, then press PROGRAM/SET.



Program step number Disc number Track number

## **5** Program other tracks you want.

- To program tracks from the same disc, repeat step 4.
- To program tracks from a different disc, repeat steps 3 and 4.

## **6** Press CD ►/II.

The tracks are played in the order you have programed.

#### To add more tracks into the program

Press PROGRAM/SET.

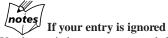
You can add the tracks into the program before or after play. If you have already programed all 24 tracks, you cannot add more. If you do, it will overwrite the 1st track and so on.

- You cannot erase or modify the programmed tracks.
- If you want to modify the program, erase all the program and start from the beginning.

To stop during play, press  $\blacksquare$ .

#### To erase the entire program before or after play, press ■.

• Ejecting the Carousel will also erase the program.



You have tried to program a track from an empty tray, or a track number that does not exist on the CD (for example, selecting track 14 on a CD that only has 12 tracks). Such entries are ignored.

#### **Playing Video CDs**

You can play Video CDs either with or without the PBC (PlayBack Control) function.

Before playing, set video output correctly according to your TV system. Refer to "Connecting Other Equipment" on page 8.

# **1** Turn on the TV and select the video input so that you can view the pictures from the unit.

• Refer also to the manual supplied with your TV.

## **2** Prepare the discs.

• Refer to "Loading CDs" on page 12. When you load video CDs, "VIDEO CD" appears on the display.



## **3** Start playback of the discs.

You can play Video CDs by using same buttons for playing audio CD both on the unit and on the Remote Control.

• Refer to "Basic CD operations" on page 13.

**To stop during play,** press and hold ■.

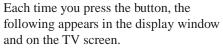
To stop play and remove the disc, press ≜ for the disc being played.

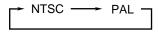


Please make sure that the Video CDs to be played is not flawed optically, as this may cause a distorted sound or the unit to malfunction.

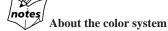
#### To adjust the color system — NTSC/PAL

According to a Video CD or the color system used on your TV, press NTSC/PAL during play.





• Be sure to select either NTSC or PAL position when the picture on the TV screen appears correctly.

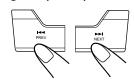


When wrong position selected, picture on TV screen will lose the color and change into monochrome view.

#### To locate a particular point in a program (SCAN)

During play, press and hold ► PREV or ► NEXT.

- I◀◀ PREV: Quick reverses a program about 25 seconds.
- NEXT: Quick forwards a program about 25 seconds.

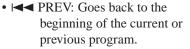


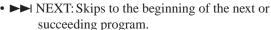
Each time you press the button, "SCAN" appears upper left on the TV screen. When using the remote control, press and hold I◀◀ / ◀◀ PREV or ▶► / ▶► NEXT.



#### To go to another track (SEARCH)

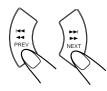
Press I PREV or ► NEXT repeatedly before or during playback.





Each time you press the button, "Search XX" appears upper left on the TV screen. When using the remote control, press





#### To adjust Playback Speed

During play, press SLOW on the remote control. When you press the button, moving picture speed is set to lower speed than that of normal playback. Each time you press the button, moving picture runs at 1/2, 1/4, 1/8 of the normal playing speed.

 To resume normal playback, press CD ►/II SELECT.



notes

**During slow motion playback** 

No sound comes out, and you can select only forward operation.

#### To play Still- and Frame-by-Frame pictures

During play, press SINGLE STEP on the remote control.

When you press the button, playback pauses and a still picture is shown on the TV screen. Each time you press the button, still pictures advance repeatedly by one frame.

• To resume normal playback, press CD ►/II SELECT.





During frame-by-frame playback

No sound comes out, and you can select only forward operation.

### **Playing Video CDs with PBC Function**

The PBC (Playback Control) function allows you to enjoy menu-driven operation and high resolution still pictures.



This unit is designed for playback of video CDs, version 1.1 and 2.0. Only with version 2.0, you can call up "on screen menu" function. This unit will not play back any other video CDs other than 1.1 and 2.0 versions.

#### Menu-driven operation

You can interact with the TV screen using menu screens to select and play items of the disc.

#### High-resolution still pictures

You can view high-resolution still pictures having quality four times higher than playback pictures.

#### Playing Video CDs with Using Menu Screens

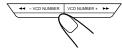
When you start playing a video CD with the PBC function, a selection menu appears on the TV screen. This menu shows a list of items to select and play.

 The playback operation procedure may differ depending on the disc you use.

#### **Button controls:**

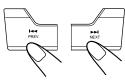
#### VCD NUMBER - or +

Select a specific menu item from the TV screen or the monitor.



#### ► PREV or ► NEXT

Move through menu screens.



#### CD ▶/ II SELECT

When "SELECT XX" appears on the TV screen, pressing this button jumps to the selected picture or program.



#### (return)

Press the button once, return to the previous menu or screen.



#### (stop)

Press and hold the button for a few seconds, quit the operation of the video CDs.

#### PBC

Each time you press the button, PlayBack Control function is set to on/off. When you change the function, video CDs program automatically starts again from the beginning of selected function.



• You cannot call up menu screen by pressing this button.

# **1** Turn on the TV and select the video input so that you can view the pictures from the unit.

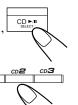
Refer also to the manual supplied for your TV.

## **2** Prepare Video CDs.

Refer to "Loading CDs" on page 12. "VIDEO CD" and then "PBC" indicator lights on the display.

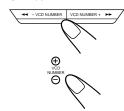
## ${m 3}$ Start playback of the Video CD.

Press the CD ►/II SELECT to start playback of the currently selected CD or press the CD1, CD2 or CD3 to select the disc and start playback.



# **4** Select the item you want to playback when a selection menu appears on the TV.

Press VCD NUMBER – or + to select the item number. Then press  $CD \triangleright / \blacksquare$  SELECT to start the playback.

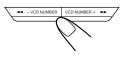




#### **Basic Flow of Menu Play Operation**

Some discs may show moving pictures or divided screens.

 When a list of items appears, you can select the item you want to play back by pressing VCD NUMBER
 or + repeatedly.



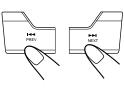
For example, "SELECT 01" appears on the screen and "1 SEL" on the display.

- When moving picture appears, you can select a moving picture by either pressing I

  PREV or ►►I NEXT or pressing CD ►/II

  SELECT after selecting the item number by

  VCD NUMBER or + while the moving picture you want to view is being played back. "SELECT XX" appears on the screen.
- When a menu appears after the item you selected has finished playing, you can select another number of the item you want to view next.
- If the video CD has more than 2 pages of menu, you can view the remaining items by pressing the ►►! NEXT. If you want to go back to the previous menu, press the I►►! PREV.



• After playback, press (return) to go back to the previous screen. Each time you press the button, you can go back to the previous screen up to the beginning of the program one by one.



 If you want to stop Menu Play, press and hold ■ for more than 2 seconds. Some discs may return you to the menu screen shown before playback.

#### Playing Video CDs without Using Menu Screen

You can cancel the PBC function and play the disc without using menu screen.

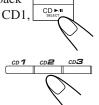
- 1 Turn on the TV and select the video input so that you can view the pictures from the Unit. Refer also to the manual supplied for your TV.
- **2** Prepare a Video CD.

  Refer to "Loading CDs" on page 12.
- ${m 3}$  Press PBC on the remote control.



4 Start playback of the Video CD.

Press the CD ►/II SELECT to start playback of the currently selected CD or press the CD1 CD2 or CD3 to select the disc and start playback.

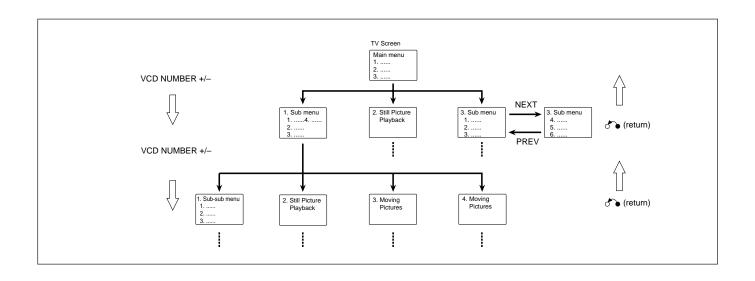


**To stop during playback,** press and hold ■. **To restore the PBC function,** press PBC.

When the PBC function is canceled, some pictures, such as still pictures, may not be played back.

If "NEXT" or "PREV" is shown on the TV screen (for some Video CDs it may be hidden or illustrated),

you can move to the next or previous screen by pressing ►►I NEXT or ►► PREV. By pressing ►► (return), you can also go back to the previous screen, the opening menu screen, or some other screen (this depends on how the Video CD has been programmed.)

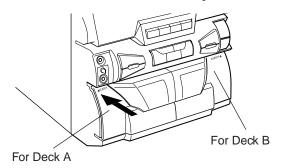


## **Playing Back Tapes**



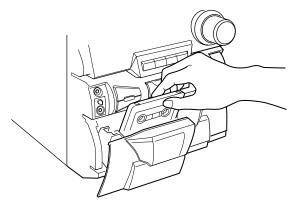
### **Playing Back a Tape**

**1** Press EJECT (♠) for the deck you want to use.



# **2** Put a cassette in, with the exposed part of the tape down.

• You can play back only the type I tapes.



## ${\it 3}$ Close the cassette holder gently.

If you put cassettes in both decks A and B, the deck which you have put a cassette into last is selected.

To operate the other deck, press TAPE A/B.

## **4** Press TAPE ▶.

The tape play starts.



When the tape plays to the end, the deck automatically stops.

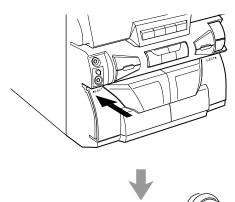
To stop during play, press ■.

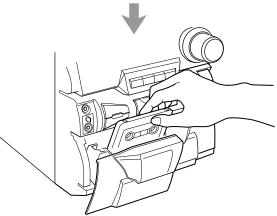
To operate the other deck, press TAPE A/B, then TAPE  $\triangleright$ .

To fast-forward the tape, press  $\triangleright \triangleright \mid$  (or  $\triangleright \triangleright \mid / \triangleright \triangleright \triangleright$  on the remote control).

To fast-rewind the tape, press  $| \blacktriangleleft \triangleleft |$  (or  $| \blacktriangleleft \triangleleft |$  on the remote control).

To remove the cassette, press ≜ EJECT for deck A or EJECT ≜ for deck B.







The use of the C-120 or thinner tape is not recommended, since characteristic deterioration may occur and this tape easily jams in the pinchrollers and the capstans.

## Recording

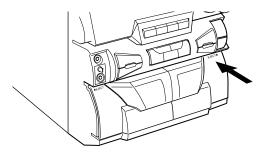


#### IMPORTANT:

- It may be unlawful to record or play back copyrighted material without the consent of the copyrighted owner.
- The recording level is automatically set correctly, so it is not affected by the VOLUME control. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.
- While recording, you can hear tunes with sound modes and/or the active bass extension effect through the speakers or headphones. However, the sound is recorded without these effects (see page 10).
- If the sound recorded have excessive noise or static, the unit may be too close to a TV. Please separate the TV from the unit.
- You can use only type I tapes for recording.

### **Recording Tapes on Deck B**

**1** Press EJECT **△** for the deck B.



- **2** Put in a recordable cassette, with the exposed part of the tape down.
- **3** Close the cassette holder gently.
- **4** Start playing the source FM, AM, CD player, or auxiliary equipment connected to AUX IN jacks.
  - When the source is CD, you can also use CD Direct Recording.
- **5** Press REC/PAUSE. Start recording.

The REC indicator lights up on the display and recording starts.



To stop during recording, press  $\blacksquare$ .

**To stop recording temporarily,** press REC/PAUSE on the unit. The REC indicator starts flashing on the display. **To resume recording,** press REC/PAUSE again.

To remove the cassette, press EJECT  $\triangle$  for deck B.

#### **Resetting the Tape Counter**

If you wish to take a note on the counter value at the beginning of each track, reset the counter before starting a recording.

## Press COUNTER RESET on the unit to reset the counter.

The counter reading becomes "0000."

• The counter reading also becomes "0000" when the unit is turned off (stands by).

#### **Dubbing Tapes**

- **1** Press TAPE  $\triangleright$ , then  $\blacksquare$ .
- **2** Put the source cassette in deck A, and a recordable cassette into deck B.



3 Press A ► B DUBBING.

Dubbing starts.

"DUBBING" and REC indicators light up on the display.



To stop during dubbing, press ■.

**To remove the cassette,** press  $\triangle$  EJECT for deck A and EJECT  $\triangle$  for deck B.

## **CD Direct Recording**

Everything on the CD goes onto the tape in the order it is on the CD, or according to the order you have made for Program play

- **1** Put a recordable cassette into deck B.
- **2** Place a disc correctly on the circle of the disc tray, with its label side up.
- **3** Press one of the disc number buttons (CD 1 to CD 3) to select the disc, then ■.



**4** Press CD REC START.

"SYNCHRO" appears, and the CD-SYNC, REC and 1CD indicators light up on the display. Deck B starts recording and the CD player starts playing.



When the recording is done, the CD player and deck B stop

To stop during CD Direct Recording, press ■.

To remove the cassette, press EJECT  $\triangle$  for deck B.

## **Using the Microphones**

You can enjoy singing along and microphone mixing.

• The MIC LEVEL control adjustment is valid for microphone connected to the MIC jack.

#### IMPORTANT:

- Always set MIC LEVEL to MIN when connecting or disconnecting the microphone.
- When you do not use the microphone, keep the microphone unconnected.

## Singing Along with Audio CDs — Vocal Masking

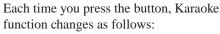
When you use conventional audio CDs or tapes for the Karaoke source, you can reduce (not erase) the recorded vocal and replace it with your vocal by singing into the microphone.

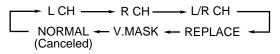
**1** Rotate MIC LEVEL to MIN.



V.MASKING

- **2** Connect the microphone (not supplied) by plugging it into the MIC jack.
- **3** Start playing the source CD, tape or other connected component.
- 4 Press V.MASKING on the remote control or MPX/V.REPLACE/V.MASKING on the unit repeatedly until "V.MASK" appears on the display.





**5** Rotate MIC LEVEL and VOLUME controls as you sing into the microphone.

When you finish singing, restore the Karaoke function by pressing the MPX/V.REPLACE/

V.MASKING button until

- "NORMAL" appears on the display.
- By pressing REC/PAUSE, you can record your singing along if you want. (For more details, see page 18.)
- To stop during recording, press ■.

If you use the following sources as the playing source for Vocal Masking, you cannot get the satisfactory results

- Radio programs a radio signal is not as reliable as the signals coming from a tape or CD.
- Monaural sources.
- · Poorly dubbed tapes.
- Sources recorded with duets, strong echo, a chorus, or only a few instruments.

#### Singing Along with Multiplex Karaoke Discs

When you use multiplex karaoke discs or tapes, you can use Multiplex Sound and Vocal Replace.

#### **Multiplex Sound**

In a multiplex karaoke disc or tape, the instrumental part is recorded on the left channel and the vocal part is recorded on the right channel. By using Multiplex Sound function, you can select the channel to playback.

#### **Vocal Replace**

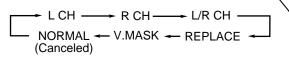
You can replace the recorded vocal with your vocal while singing along. If you stop singing while a source is still playing, the recorded vocal will be resumed.

**1** Rotate MIC LEVEL to MIN.



- **2** Connect the microphone (not supplied) by plugging it into the MIC jack.
- **3** Start playing the source CD, tape or other connected component.
- 4 Press V.MASKING on the remote control or MPX/V.REPLACE/
  V.MASKING on the unit repeatedly to select the output sound.

Each time you press the button, Karaoke function changes as follows:



L CH: Only the left channel (instrumental parts) is

played back through both right and left

speakers.

R CH: Only the right channel (vocal parts) is played

back through both right and left speakers.

REPLACE: Your voice replaces the right channel (vocal

part) when you sing into the microphone. This cannot be used for multiplex karaoke

V.MASK: This cannot be used for multiplex karaoke sources. Refer to previous section for details.

NORMAL: Cancels the Karaoke function.

# **5** Rotate MIC LEVEL and VOLUME controls as you sing into the microphone.

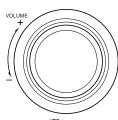
When you finish singing, cancel the Karaoke function by pressing the MPX/V.REPLACE/ V.MASKING button until "NORMAL" appears on the

"NORMAL" appears on the display.

• By pressing REC/PAUSE v

• By pressing REC/PAUSE, you can record your singing along if you want. (For more details, see page 18.)

• To stop during recording, press ■.

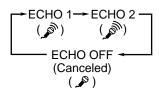




#### To apply an echo to your voice

Press ECHO on the front panel and on the remote control so that the echo indicator lights up on the display.

Each time you press the button, the echo level changes as follows:



As the number increases, a stronger echo effect applies to your voice.

### **Adjusting Key Control**

You can adjust the key of the source if it's not suite on you.

• This function is available only when you use CDs for karaoke source.

## 1 Start the source CD.

### **2** Press KEY CONTROL on the unit or on the remote control.

To lower the key, press KEY CONTROL b. To raise the key, press KEY CONTROL #.

• To cancel key control, press the button or KE the  $\sharp$  button until "KEY STEP  $\pm$  0" appears on the TV.





#### If you use the key control function

When you change the key, the key position remains unless you change it again. To restore the original key of the source, refer to "To cancel key control" above.

#### Microphone Mixing

When you use microphone with any playback source, follow the procedure below.

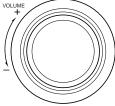
### **1** Rotate MIC LEVEL to MIN.



- $oldsymbol{2}$  Connect the microphone (not supplied) by plugging it into the MIC jack.
- $oldsymbol{3}$  Start playing the source CD, tape or other connected component.
- 4 Rotate MIC LEVEL and VOLUME controls as you sing into the microphone.



- By pressing REC/PAUSE, you can VOLUME record your singing along if you want. (For more details, see page
- To stop during recording, press





If howling or squealing (feedback) occurs while using the microphone

Take the following actions to prevent these noises.

- Adjust the MIC LEVEL and VOLUME controls
- Avoid pointing the microphone towards the speakers.

## **Using the Timers**

There are three timers available — Recording Timer, Daily Timer, and Sleep Timer.

Before using the timers, you need to set the clock built in the unit. (See page 9.)

### **Using Daily Timer**

With Daily Timer, you can wake to your favorite music or radio program.

#### **How Daily Timer actually works**

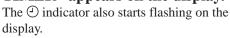
The unit automatically turns on, set the volume level to the preset level, and starts playing the specified source when the on-time comes. Then, when the off-time comes, the unit automatically turns off (stands by).

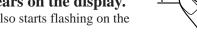
The timer setting remains in memory until you change it.

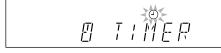
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- If you have made a mistake while setting timer, press CLOCK/TIMER twice and start from step 1 again.

#### On the unit ONLY:

**1** Press CLOCK/TIMER until "① TIMER" appears on the display.







• Each time you press the button, the timer setting modes change as follows:

## **2** Press PROGRAM/SET.

"ON TIME" appears for 2 seconds, then the unit enters on-time setting mode.



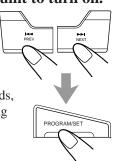


## **3** Set the on-time you want the unit to turn on.

1) Press | ◀ or ▶ I to set the hour, [ then press PROGRAM/SET.

2) Press I or ► to set the minute, then press PROGRAM/ SET.

> "OFF TIME" appears for 2 seconds, then the unit enters off-time setting mode.



### 4 Set the off-time you want the unit to turn off (on standby).

1) Press | ◀ or ▶ ▶ to set the hour, then press PROGRAM/SET.

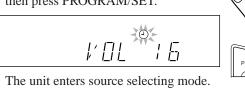
2) Press | ◀ or ▶ I to set the minute, then press PROGRAM/SET.

The unit enters the volume setting mode.



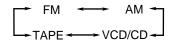
### **5** Set the volume level when the unit is turned on.

Press | ◀ or ▶ I to set the volume, then press PROGRAM/SET.



## **6** Press | **◄** or **▶** to select the source to play, then press PROGRAM/SET.

• Each time you press | ◀ or ▶ ▶ I, the source changes as follows:



tunes into a specified preset FM station. → go FM:

to step 7.

tunes into a specified preset AM station. → go AM: to step 7.

VCD/CD: plays a disc from the first track.  $\rightarrow$  go to step 8.

• Make sure there is a CD on the currently selected disc number tray.

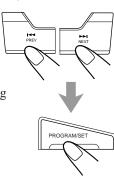
TAPE: plays a tape in deck A or B.  $\rightarrow$  go to step 8.

## **7** When selecting "FM" or "AM."

Press | ◀ or ▶ ▶ to select the preset station number, then press PROGRAM/SET.

The unit enters recording timer setting mode.

If you want to continue the Recording Timer setting, go to step 3 of the Recording Timer setting procedure.



## **8** Press CLOCK/TIMER.

The ② indicator stops flashing and remains lit. If you have set the Daily Timer with the unit turned on, turn off the unit.



## **Using Recording Timer**

With Recording Timer, you can make a tape of a radio broadcast automatically.

#### **How Recording Timer actually works**

The unit automatically turns on, tunes into the specified station, sets the volume level to the preset level and starts recording when the on-time comes. Then, when the off-time comes, the unit automatically turns off (stands by).

The timer setting remains in memory until you change it.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- If you have made a mistake while setting the timer, press CLOCK/TIMER once and start from step 1 again.

#### On the unit ONLY:

**1** Put a recordable cassette into deck B.

## **2** Press CLOCK/TIMER until "① REC" appears on the display.

The ① indicator also starts flashing on the display.



• Each time you press the button, the timer setting modes change as follows:

## **3** Press PROGRAM/SET.

"ON TIME" appears for 2 seconds, then the unit enters on-time setting mode.

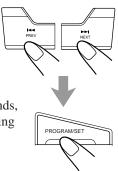




## 4 Set the on-time you want the unit to turn on.

- 1) Press I or ► to set the hour, then press PROGRAM/ SET.
- 2) Press | ◀ or ▶ I to set the minute, then press PROGRAM/

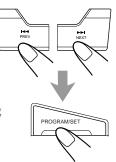
"OFF TIME" appears for 2 seconds, then the unit enters off-time setting



### **5** Set the off-time you want the unit to turn off (on standby).

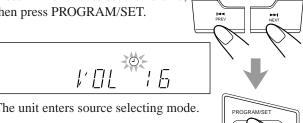
- 1) Press I or ► to set the hour, then press PROGRAM/ SET.
- 2) Press I or ▶►I to set the minute, then press PROGRAM/

The unit enters the volume setting mode.



## **6** Set the volume level when the unit is turned

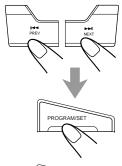
Press I or ▶►I to set the volume, then press PROGRAM/SET.





## **7** Select the preset station.

- Press I or I to select the band ("FM" or "AM"), then press PROGRAM/SET.
- 2) Press I or I to select a preset channel number.



## **8** Press PROGRAM/SET.

If you have set the Recording Timer with the unit turned on, turn off the unit.

The REC indicator lights up when the unit is turned off (on standby).

# The ① indicator stops flashing and remains lit. If you have set the Recording Timer with

## To select Recording or Daily Timer after its setting has been done

## Press TIMER ON/OFF on the remote control.

Each time you press the button, the timer mode changes as follows:



TIMER

TIMER: Select this when you want to use only the

Daily Timer.

② REC: Select this when you want to use only the

Recording Timer.

① TIM+REC: Select this when you want to use both the

Daily Timer and the Recording Timer.

OFF: Select this when you do not want to use

the timer.

Recording or Daily Timer does not work.

 When the timer is set to OFF, the ① indicator and/or REC indicator goes off from the display.
 Even if the Recording or Daily Timer is canceled, but the setting condition for the Recording or Daily Timer remain

setting condition for the Recording or Daily Timer remains in memory.

• When any timer setting is activated, the ① indicator and/

or REC indicator lights up again.

notes

If the unit is operating when the timer-on time comes

### **Using Sleep Timer**

With Sleep Timer, you can fall asleep to music. You can set Sleep Timer when the unit is operating.

#### **How Sleep Timer actually works**

The unit automatically turns off after the specified time length passes by.

#### On the remote control ONLY:

### **1** Press SLEEP.

The time length until the shut-off time appears and the SLEEP indicator lights up on the display.



• Each time you press the button, the time length changes as follows:

# **2** Wait for about 5 seconds after specifying the time length.

The SLEEP indicator remains lit.

To check the remaining time until the shut-off time, press SLEEP once so that the remaining time until the shut-off time appears for about 3 seconds.

To change the shut-off time, press SLEEP repeatedly until the desired time length appears on the display.

**To cancel the setting,** press SLEEP repeatedly so that the SLEEP indicator goes off.

• Sleep Timer is also canceled when you turn off the unit.

## **Maintenance**



To get the best performance of the unit, keep your discs, tapes, and mechanism clean.

#### Handling discs



- Remove the disc from its case by holding it at the edge while pressing the center hole lightly.
- Do not touch the shiny surface of the disc, or bend the disc.
- Put the disc back in its case after use to prevent warping.



- Be careful not to scratch the surface of the disc when placing it back in its case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.



#### To clean the disc

Wipe the disc with a soft cloth in a straight line from center to edge.



DO NOT use any solvent — such as conventional record cleaner, spray, thinner, or benzine — to clean the disc.

#### Handling cassette tapes



- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.



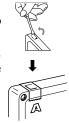
• Be careful not to touch the tape surface.



- Avoid the following places to store the tape:
  - In dusty places
  - In direct sunlight or heat
  - In moist areas
  - Near a magnet

#### To protect your recording

Cassettes have two small tabs on the back to protect unexpected erasure or re-recording. To protect your recording, remove these tabs. To re-record on a protected tape, cover the holes with adhesive tape.



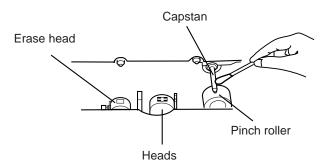
#### Cassette decks

If the heads, capstan, and pinch roller of the cassette decks become dirty, the following will occur:

- Impaired sound quality
- · Discontinuous sound
- Fading
- Incomplete erasure
- · Difficulty in recording

#### To clean the heads, capstan, and pinch roller

Use a cotton swab moistened with alcohol.



#### To demagnetize the heads

Turn off the unit, and use a head demagnetizer (available at electronics and record shops).

## **Troubleshooting**



If you are having a problem with your unit, check this list for a possible solution before calling for service. If you cannot solve the problem from the hints given here, or the unit has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Cause	Action
No sound is heard.	Connections are incorrect or loose.	Check all connections and make corrections. (See pages 6 to 8.)
Hard to listen to broadcasts because of noise.	Antennas are disconnected.	Reconnect the antennas correctly and securely.
	• The AM loop antenna is too close to the unit.	Change the position and direction of the AM loop antenna.
	• The FM antenna is not properly extended and positioned.	• Extend the FM antenna at the best position.
The disc sound is discontinuous.	The disc is scratched or dirty.	Clean or replace the disc. (See page 25.)
The disc tray does not open or close.	The AC power cord is not plugged in.	Plug the AC power cord.
The disc does not play.	The disc is placed upside down.	Place the disc with the label side up.
The cassette holders cannot be opened.	Power supply from the AC power cord has been cut off while the tape was running.	Turn on the unit.
Impossible to record.	Small tabs on the back of the cassette are removed.	Cover the holes with adhesive tape.
Stereo effect is lost.	The MPX sound, Vocal Masking or Vocal Replace function is in use.	Press the MPX/V.REPLACE/V.MASKING button until "NORMAL" appears on the display. (See page 20.)
Operations are disabled.	The built-in microprocessor may malfunction due to external electrical interference.	Unplug the AC power cord and then plug it back in.
Unable to operate the unit from the remote control.	<ul> <li>The path between the remote control and the remote sensor on the unit is blocked.</li> <li>The batteries are exhausted.</li> </ul>	<ul><li>Remove the obstruction.</li><li>Replace the batteries.</li></ul>
The image on the TV screen loses its colour.	Video Out selection is unmatching.	Select the correct video out. (See "Connecting Other Equipment" on page 8.)
The pictures of the video CD is distorted.	When you pause or advance the pictures manually, the pictures are distorted. This is not a malfunction.	

## **Specifications**

Design and specifications are subject to change without notice.



#### Amplifier — CA-MXJ170V

Output Power:

40 W per channel, min. RMS, both channels driven into 6  $\Omega$  at 1 kHz with no more than 10 % total harmonic distortion

Audio input sensitivity Impedance (at 1 kHz)

AUX:  $400 \text{ mV}/50 \text{ k}\Omega$ MIC:  $2.5 \text{ mV}/5 \text{ k}\Omega$ 

Speakers Impedance:  $6 \Omega - 16 \Omega$ 

Tuner

FM tuning range: 87.50 MHz – 108.00 MHz

AM tuning range:

At 9 kHz intervals: 531 kHz – 1 602 kHz At 10 kHz intervals: 530 kHz – 1 710 kHz

**CD** player

CD Capacity: 3 CDs
Dynamic range: 85 dB
Signal-to-noise ratio: 90 dB
Wow and flutter: Immeasurable

Cassette deck

Frequency response

Normal (type I):  $50 \text{ Hz} - 14\ 000 \text{ Hz}$ Wow and flutter:  $0.15\ \%$  (WRMS)

General

Power requirement: AC 110 V – AC 127 V/AC 220 V – AC

240 V  $\sim$  (adjustable with the voltage

selector), 50 Hz/60 Hz

Power consumption: 68 W (at operation)

13 W (on standby)

Maximum power consumption (for Taiwan only): 590 W

Dimensions (approx.): 270 mm x 317 mm x 385 mm (W/H/D)

 $(10^{11}/_{16} \text{ in. } \times 12^{1}/_{2} \text{ in. } \times 15^{3}/_{16} \text{ in.})$ 

Mass (approx.): 7.8 kg (17.2 lbs)

#### Supplied accessories

See page 6.

#### Speaker section — SP-MXJ170V

Type: 2-way bass-reflex type

Speaker units: Woofer:  $12 \text{ cm } (4 \sqrt[3]{4} \text{ in.}) \text{ cone } x1$ Tweeter:  $2 \text{ cm } (1\sqrt[3]{16} \text{ in.}) \text{ piezo } x1$ 

Power handling capacity: 40 W

Impedance:  $6 \Omega$ 

Frequency range: 50 Hz - 18 000 Hz Sound pressure level: 87 dB/w•m

Dimensions (approx.): 219 mm x 317 mm x 219 mm (W/H/D)

 $(8^{5/8} in. x 12^{1/2} in. x 8^{5/8} in.)$ 

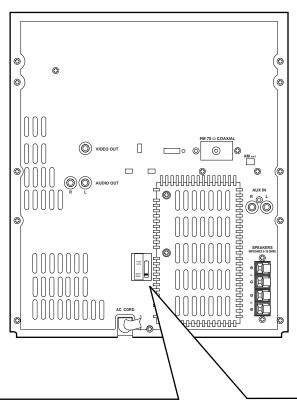
Mass (approx.): 3.1 kg (6.9 lbs) each

Mains (AC) Line Instruction (not applicable for Europe, U.S.A., Canada, Australia, and U.K.)

Instrucción sobre la línea de la red (CA) (no aplicable para Europa, EE.UU., Canadá, Australia, ni el Grã-Bretanha)

Instrução sobre a tensão da rede eléctrica (CA) (não aplicável para a Europa, os E.U.A., o Canadá, a Austrália e o Reino Unido)

主(AC)电源线路说明(不适用于欧洲、美国、加拿大、澳洲及英国型号)



#### **IMPORTANT** for mains (AC) line

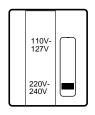
BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from damage or risk of fire/electric shock.

#### IMPORTANTE para la línea de la red (CA)

ANTES DE ENCHUFAR EL EQUIPO, compruebe si la tensión de la línea de la red (CA) corresponde con la posición del selector de tensión situado en la parte exterior del equipo, y si es diferente, reajuste el selector de tensión para evitar el riesgo de incendios/descargas eléctricas.

#### IMPORTANTE para a ligação à tensão da rede (CA)

ANTES DE LIGAR O APARELHO A UMA TOMADA DA REDE, verifique se a tensão da rede CA corresponde à posição do seletor de voltagem localizado na parte externa deste equipamento. Caso não corresponda, reajuste o seletor de voltagem a fim de evitar avarias ou riscos de incêndio e choque elétrico.



#### 有关主(AC) 电源线路的重要事项

接插电源以前,务请检查当地的主(AC) 电源线路电压是否和位于本机外面的电 压选择开关设定的位置一致。如果不一 致,即重新设定电压选择开关使符合当 地电压,以免损坏机器或引起火灾/触 电的危险。



