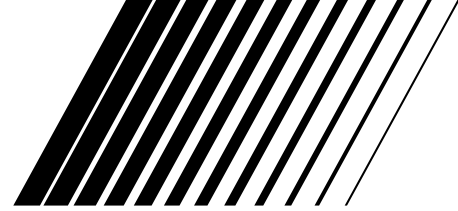


JVC



COMPACT COMPONENT SYSTEM

小型組合系統

نظام اجهزة صوتية مركبة

MX-J270V

Consists of CA-MXJ270V and SP-MXJ270V

由 CA-MXJ270V 及 SP-MXJ270V 組成

يتكون الجهاز مز SP-MXJ270V و CA-MXJ270V



Video CD

PlayBack
Control

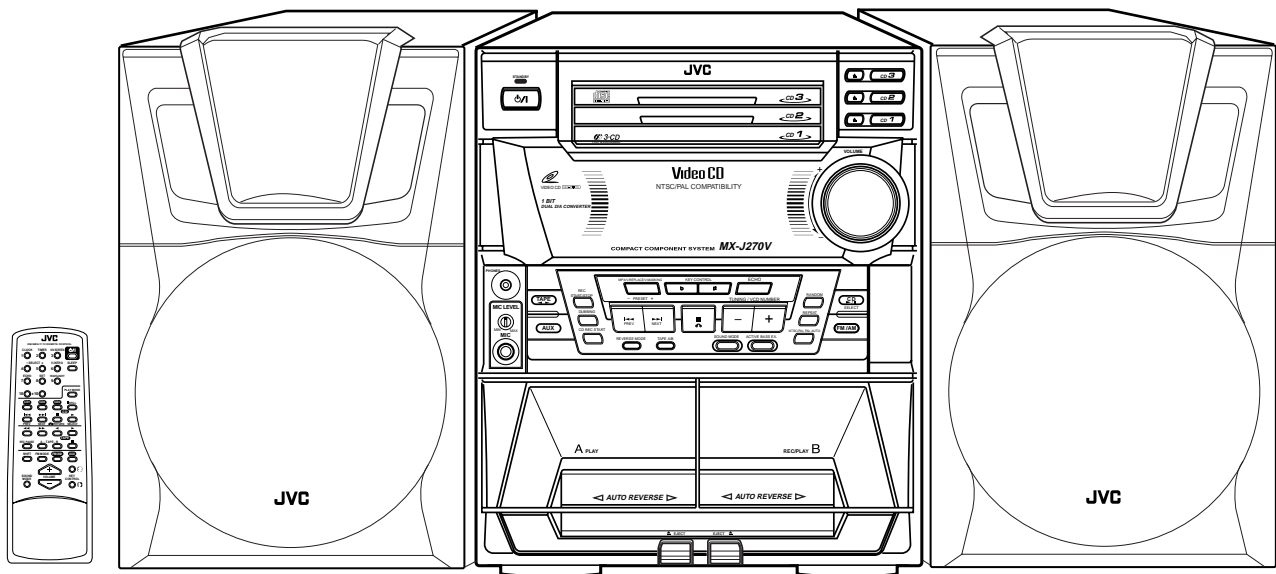


VIDEO CD

SP-MXJ270V

CA-MXJ270V

SP-MXJ270V



INSTRUCTIONS

使用说明书

كتيب تعليمات التشغيل

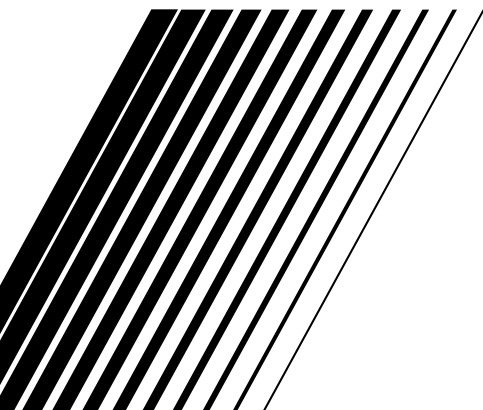
For Customer Use:

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. _____

LVT0555-001A
[US, UX]



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 — ⏻/⏻ switch!

Disconnect the mains plug to shut the power off completely. The ⏻/⏻ 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. Cualquiera que sea la posición de ajuste del interruptor ⏻/⏻, 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 ⏻/⏻, a alimentação não é completamente cortada. A alimentação pode ser controlada remotamente.

注意— ⏻/⏻ 开关！

无论 ⏻/⏻ 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 - ⏻/⏻ الطاقة

انزع قابس الطاقة الكهربائية من أجل فصل الطاقة الكهربائية عن الجهاز كلياً. لا يفصل مفتاح الطاقة الكهربائية عندما يكون باي وضع ⏻/⏻ 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, etc.:

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 caixa.
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。

تحذير

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.

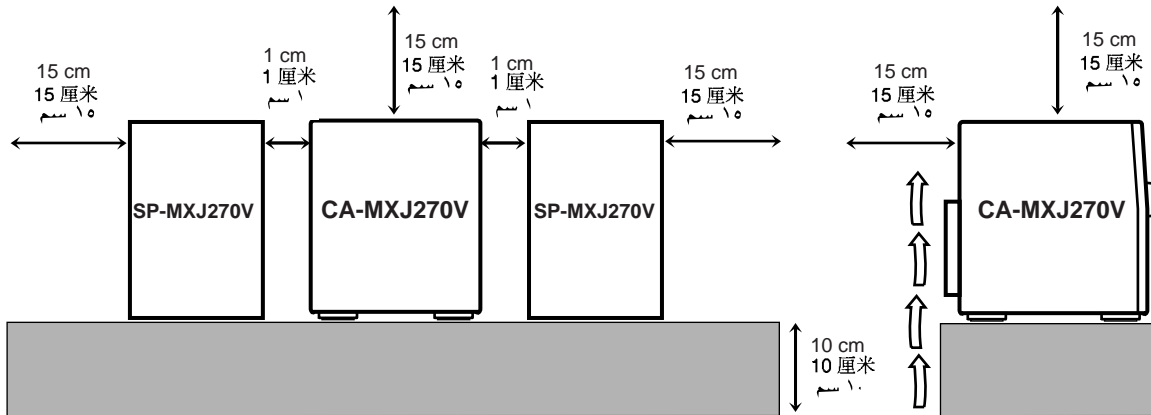
注意：正确通风

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

لتجنب حصول صدمات كهربائية واطار الحريق ومنع حصول تلف وضرر للجهاز، ركب 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.



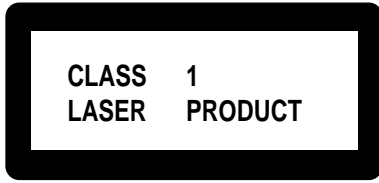
IMPORTANT FOR LASER PRODUCTS / IMPORTANTE PARA PRODUCTOS LÁSER / IMPOTANTE PARA PRODUTOS LASER / 雷射产品的重要说明 / مهم للمنتجات الليزرية

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

- | | |
|---|---|
| ① CLASSIFICATION LABEL, PLACED ON REAR ENCLOSURE | ② WARNING LABEL, PLACED INSIDE THE UNIT |
| ① ETIQUETA DE CLASIFICACIÓN, PEGADA EN LA PARTE POSTERIOR DE LA CAJA | ② ETIQUETA DE ADVERTENCIA, PEGADA EN EL INTERIOR DE LA UNIDAD |
| ① ETIQUETA DE CLASSIFICAÇÃO LOCALIZADA NA PARTE POSTERIOR DA CAIXA DO APARELHO. | ② ETIQUETA DE ADVERTÊNCIA LOCALIZADA NA PARTE INTERNA DA UNIDADE. |
| ① 分类标签，贴在机壳背后 | ② 警告标签，贴于机内 |

① لاصق التصنيف، موضوعة على المرفق الخلفي

② لاصقة التحذير، موضوعة بداخل الجهاز



DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)	WARNING: Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)	ADVARSEL: Usynlig laserstrålning ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling (d)	VARO: Avattaessa ja suojalukitus ohitettaessa olet alltiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)
---	---	---	---

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

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辐射。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。

1. PRODUCTO LÁSER CLASE 1
2. **PELIGRO:** En el interior hay radiación láser invisible. Evite el contacto directo con el haz.
3. **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. صنف ١ منتج ليزري
2. **خطر:** أشعة ليزرية غير مرئية عند الفتح والأغلاق الفاشل أو غير الصحيح. تجنب التعرض المباشر للأشعة.
3. **تحذير:** لا تفتح الغطاء العلوي ليس في داخل الجهاز أقسام بمستطاع المستخدم صيانتها؛ إعهد بكافة الأعمال الصيانية لفني مختص.

1. PRODUTO LASER CLASSE 1
2. **PERIGO:** O laser emite uma radiação invisível que é perigosa, caso o aparelho esteja aberto e a trava inoperante ou danificada. Evite exposição direta ao feixe dos raios.
3. **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.

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.

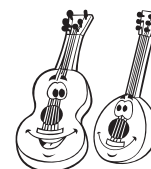
Others

- 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.

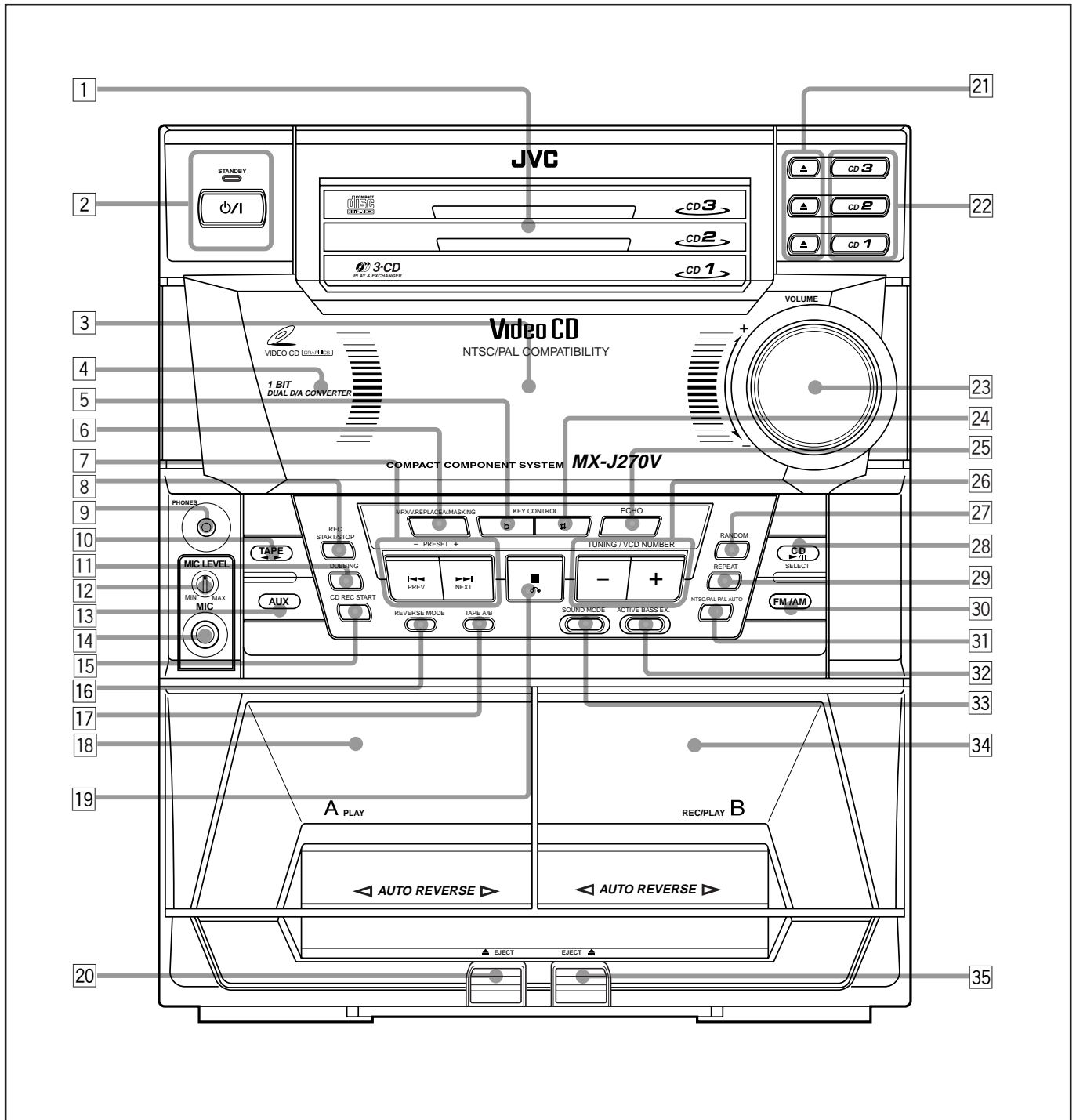
If anything goes wrong, unplug the AC power cord and consult your dealer.



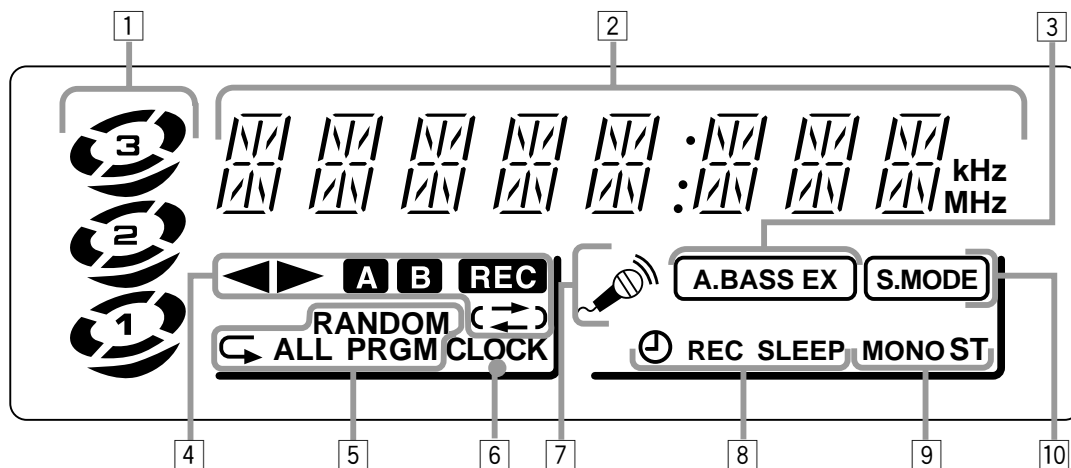
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Location of the Buttons and Controls

Become familiar with the buttons and controls on your unit.



Display Window



See pages in the parentheses for details.

Front Panel

- 1 Disc trays
- 2 **⏻/⏻** (standby/on) button and STANDBY lamp (9)
- 3 Display window
- 4 Remote sensor
- 5 KEY CONTROL **b** button (24)
- 6 MPX/V.REPLACE/V.MASKING button (23, 24)
- 7 PRESET - / + buttons (11)
◀◀ / ▶▶ (reverse search/forward search) buttons (13)
◀◀ / ▶▶ (fast left/fast right) buttons (19)
 PREV/NEXT buttons (17)
- 8 REC START/STOP button (21)
- 9 PHONES jack (10)
- 10 TAPE **◀▶** button and lamp (19)
Pressing this button also turns on the unit.
- 11 DUBBING button (22)
- 12 MIC LEVEL control (23)
- 13 AUX button and lamp (9)
Pressing this button also turns on the unit.
- 14 MIC jack (23)
- 15 CD REC START button (22)
- 16 REVERSE MODE button (19, 22)
- 17 TAPE A/B button (19)
- 18 Deck A cassette holder (19)
- 19 **■** (stop) button (12, 17, 19, 21)
↺ (return) button (17)
- 20 **▲** EJECT button for Deck A (19)
- 21 **▲** (CD tray open/close) buttons (12)
Pressing one of these buttons also turns on the unit.
- 22 Disc number buttons (CD 1, CD 2, and CD 3) (12, 22)
Pressing one of these buttons also turns on the unit.

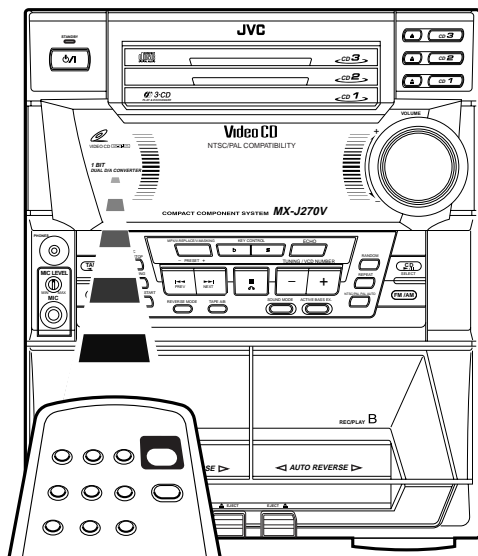
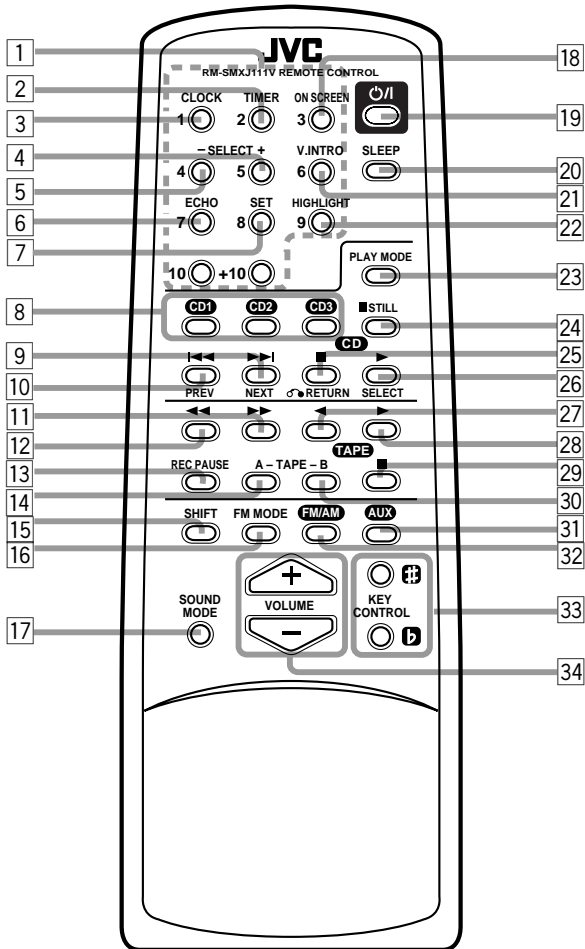
- 23 VOLUME control (10)
- 24 KEY CONTROL # button (24)
- 25 ECHO button (23)
- 26 TUNING - / + buttons (11)
 VCD NUMBER - / + buttons (17)
- 27 RANDOM button (14)
- 28 CD **▶/||** (play/pause) button and lamp (12)
 SELECT button (17)
Pressing this button also turns on the unit.
- 29 REPEAT button (15, 18, 22)
- 30 FM/AM button and lamp (11)
Pressing this button also turns on the unit.
- 31 NTSC/PAL PAL AUTO button (15)
- 32 ACTIVE BASS EX. (extension) button (10)
- 33 SOUND MODE button (10)
- 34 Deck B cassette holder (21)
- 35 EJECT **▲** button for Deck B (21)

Display window

- 1 Disc indicators
- 2 Main display
 - Shows the source name, frequency, etc.
- 3 A.BASS EX (active bass extension) indicator
- 4 Tape operation indicators
 - **◀▶** (tape direction), A/B (operating deck), **REC** and **↺** (reverse mode) indicators
- 5 CD play mode indicators
 - RANDOM, **↺** (repeat), **↺** ALL and PRGM (program) indicators
- 6 CLOCK indicator
- 7 Karaoke (**🎤**) and echo (**🔊**) indicators
- 8 Timer indicators
 - **⌚**, REC, and SLEEP indicators
- 9 Tuner operation indicators
 - MONO and ST (stereo) indicators
- 10 S.MODE indicator



Remote Control



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

Remote Control

- 1 Number buttons (11, 13)
- 2 TIMER button (25)
- 3 CLOCK button (9)
- 4 SELECT + button (9, 25)
- 5 SELECT - button (9, 25)
- 6 ECHO button (23)
- 7 SET button (9, 25)
- 8 Disc number buttons (CD 1, CD 2, and CD 3) (12, 22)
Pressing one of these buttons also turns on the unit.
- 9 ►► (forward search) button (13)
NEXT button (17)
- 10 ◀◀ (reverse search) button (13)
PREV button (17)
- 11 ►► (fast right) button (19)
- 12 ◀◀ (fast left) button (19)
- 13 REC PAUSE button (21)
- 14 TAPE A button (19)
- 15 SHIFT button (9, 16, 23, 25)
- 16 FM MODE button (11)
- 17 SOUND MODE button (10)
- 18 ON SCREEN button (16)
- 19 ⏻ (standby/on) button (9)
- 20 SLEEP button (26)
- 21 V.INTRO button (16)
- 22 HIGHLIGHT button (16)
- 23 PLAY MODE button (13, 14)
- 24 ■ STILL button (16)
- 25 CD ■ (stop) button (12)
◀ (return) button (17)
- 26 CD ► button (13)
SELECT button (17)
Pressing this button also turns on the unit.
- 27 TAPE ◀ button (19)
Pressing this button also turns on the unit.
- 28 TAPE ► button (19)
Pressing this button also turns on the unit.
- 29 TAPE ■ (stop) button (19)
- 30 TAPE B button (19)
- 31 AUX button (9)
Pressing this button also turns on the unit.
- 32 FM/AM button (11)
Pressing this button also turns on the unit.
- 33 KEY CONTROL # / b button (24)
- 34 VOLUME + / - buttons (10)

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.

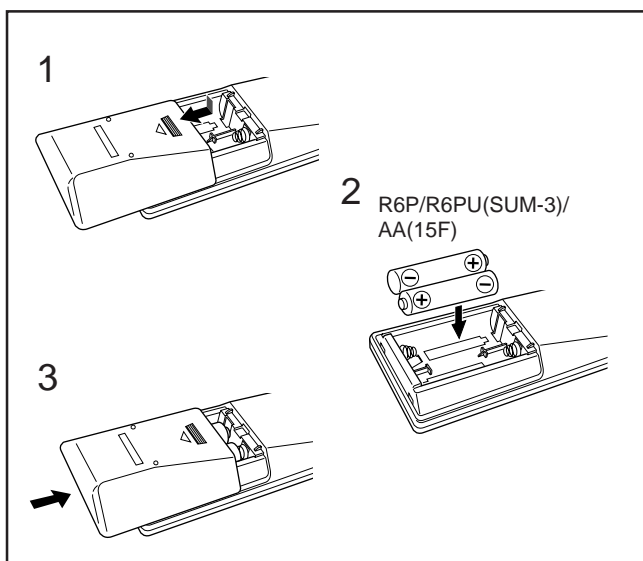
- AM loop antenna (1)
- FM antenna (1)
- Remote control (1)
- Batteries (2)
- Video cord (1)
- AC plug adaptor (except for Argentina: 1)

If any is missing, consult your dealer immediately.

Putting the Batteries into the Remote Control

Insert the batteries — R6P/R6PU(SUM-3)/AA(15F) — into the remote control, by matching the polarity (+ and -) on the batteries with the + and - markings on the battery compartment.

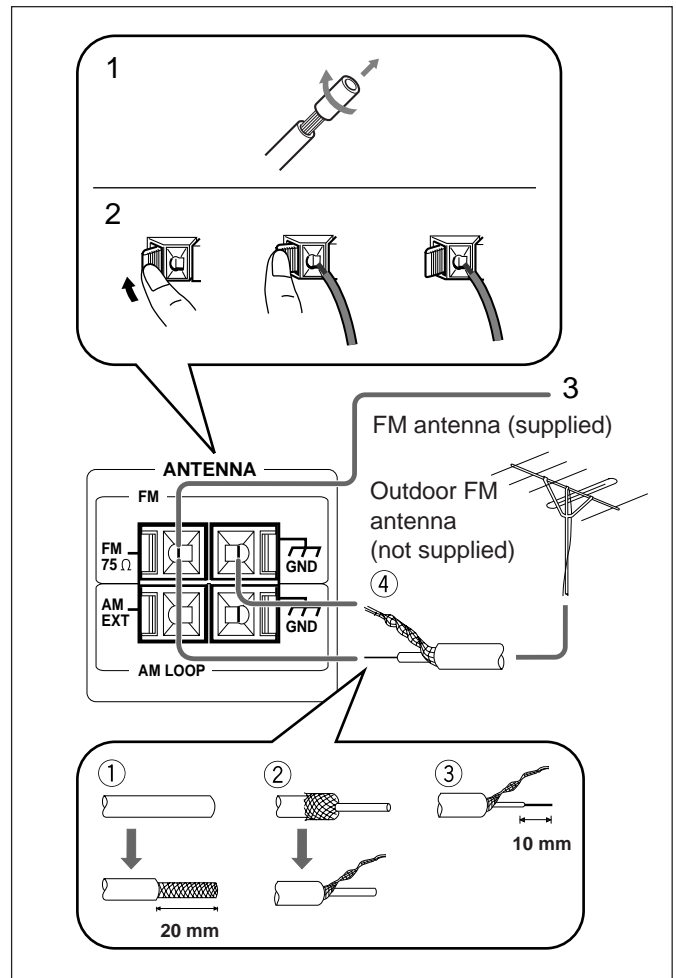
When the remote control can no longer operate the unit, replace both batteries at the same time.



- 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 If cords are covered with insulation, twist the core of the cord at the end of each cord, then remove the insulation.
- 2 Connect the FM antenna to the FM 75 Ω terminal as illustrated.
- 3 Extend the FM antenna (supplied) horizontally.



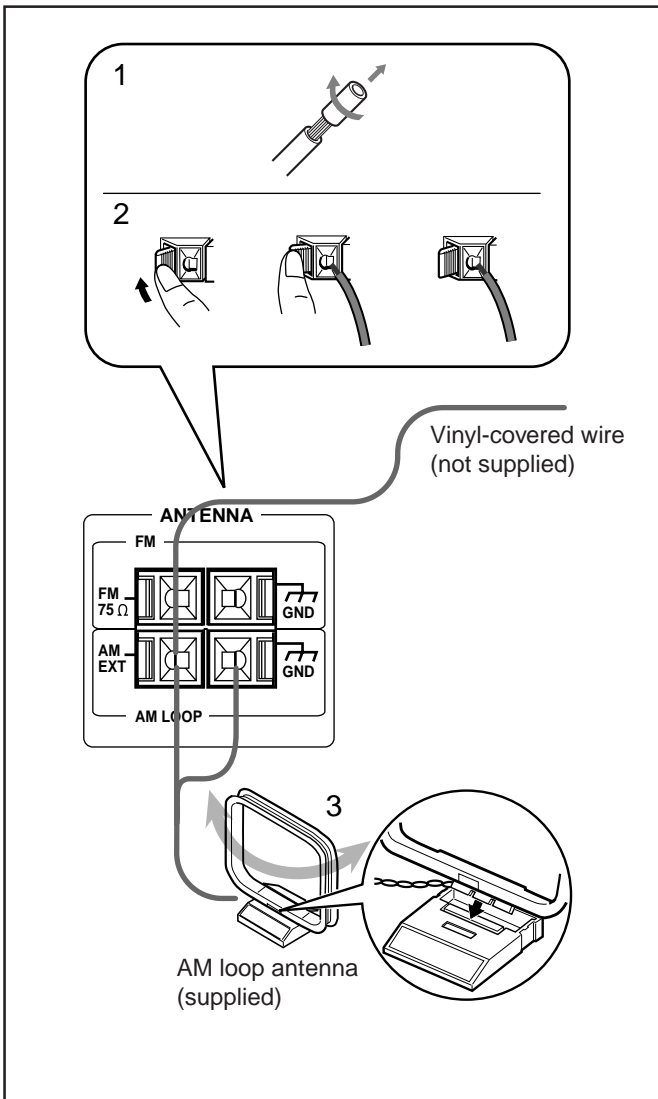
If reception is poor

- Connect the outdoor antenna.
- Before attaching a 75 Ω coaxial cable (the kind with a round wire going to an outdoor antenna), disconnect the supplied FM antenna.

How to strip the 75 Ω coaxial cable and connect it to the FM terminals

- ① Strip off the outside covering of the 75 Ω coaxial cable to expose the braided metallic mesh about 20 mm (13/16 inches).
- ② Pull the mesh back and twist it into a single connector as shown in the illustration above.
- ③ Strip the insulation about 10 mm (7/16 inches) back from the central wire.
- ④ Insert the twisted mesh and the central wire to the FM terminals, as shown in the illustration above.

AM antenna



- 1 If cords are covered with insulation, twist the core of the cord at the end of each cord, then remove the insulation.
- 2 Connect the AM loop antenna to the AM LOOP terminals as illustrated.
- 3 Turn the AM loop antenna until you have the best reception.

To connect an outdoor AM antenna

When reception is poor, connect a single vinyl-covered wire to the AM EXT terminal and extend it horizontally. (The AM loop antenna must remain connected.)

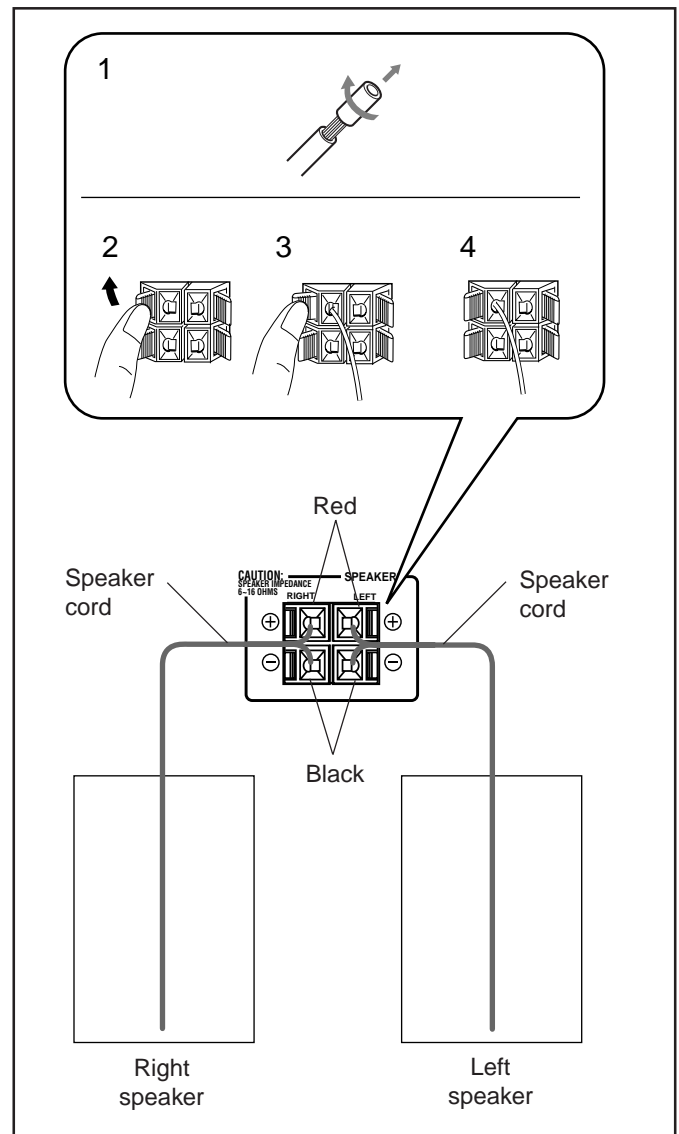


For better reception of both FM and AM

- 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 If cords are covered with insulation, twist the core of the cord at the end of each cord, then remove the insulation.
- 2 Press and hold the clamp of the speaker terminal on the rear of the unit.
- 3 Insert the end of the speaker cord into the terminal.
Match the polarity of the speaker terminals: Red (+) to red (+) and black (-) to black (-).
- 4 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 audio-visual equipment. When connecting VCR, you can record Video CDs program easily.

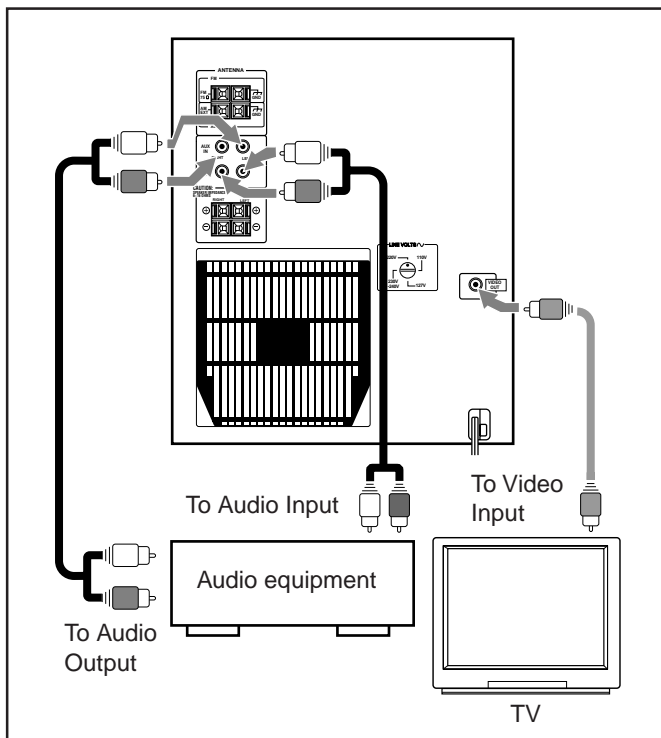
When you connect and use this equipment, refer also to its manual.

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



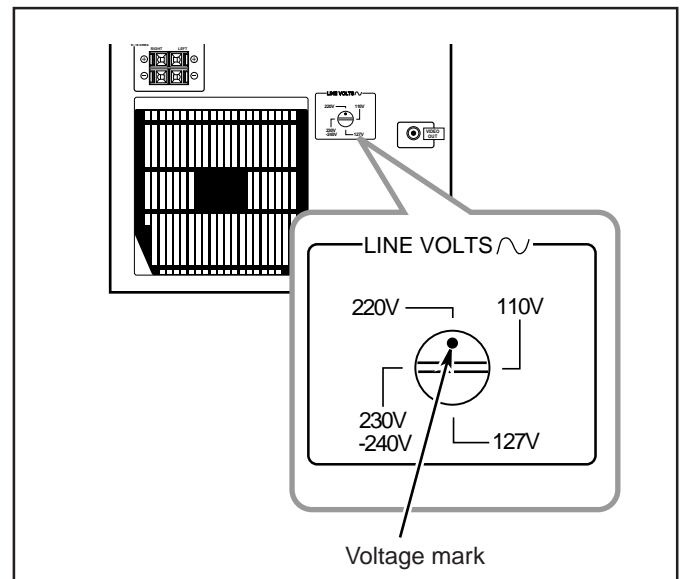
Connect the audio output jacks on the other equipment and the AUX IN jacks on the rear, the audio input jacks on the other equipment and AUX OUT jacks on the rear, as well as the video input jacks and the VIDEO OUT jack on the rear, using an audio and/or video cords.

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.

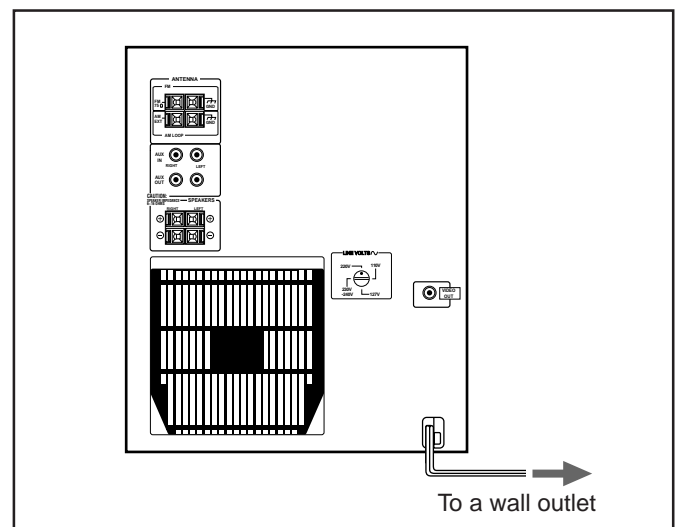


- DO NOT plug in before setting the voltage selector on the rear of the unit and all connection procedures are complete.



Use a screwdriver to rotate the voltage selector so the voltage number the voltage mark is pointing at is the same as the voltage where you are plugging in the unit.

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



Common Operations

Setting the Clock

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

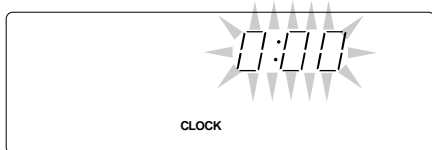
- As you plug in the AC power cord, the clock starts counting from "0:00."

On the remote control ONLY:

1 Press and hold **SHIFT** during the setting procedure.



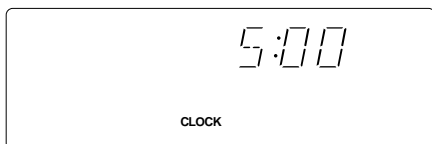
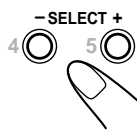
2 Press **CLOCK**.



The "CLOCK" indicator on the display lights up and the clock time start flashing.

3 Press **SELECT –** or **+** to set the time.

Pressing **SELECT +** increases the time and pressing **SELECT –** decreases the time. Pressing the button continuously advances or postpones the time in 10 minute intervals.



4 Press **SET**.

The time display stops flashing.



5 Release **SHIFT**.



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 (FM/AM, CD ▶/■, TAPE ◀▶, and AUX), the unit turns on.

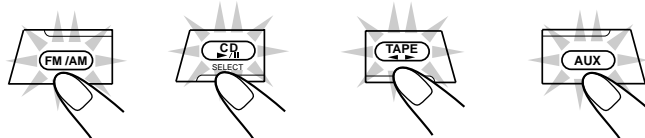
The unit starts playing the source if it is ready — **COMPU PLAY CONTROL**.

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

To play back CDs, press CD ▶/■. (See pages 12 – 18.)

To play back tapes, press TAPE ◀▶. (See pages 19 – 20.)

To select the external equipment as the source, press AUX.



To turn on the unit without playing, press **⏻/⏪** (standby/on) so that the **STANDBY** lamp goes off.



To turn off the unit (on standby), press **⏻/⏪** (standby/on) again so that the **STANDBY** lamp lights up.

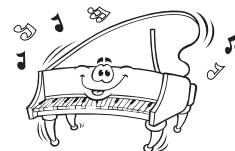
A little power is always consumed even while the unit is on standby.

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



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

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



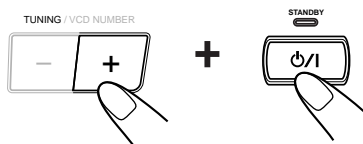
Setting the AM Tuner Interval Spacing

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

On the unit ONLY:

You can only change the AM tuner interval spacing while tuning into an AM station.

To select the 10 kHz interval, be sure that the Unit is in STANDBY mode. Turn on by pressing the **⏻/I** button while pressing the TUNING + on the unit. “AM --10” appears on the display.



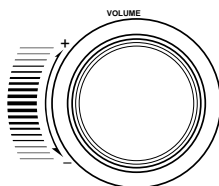
To select the 9 kHz interval, be sure that the Unit is in STANDBY mode. Turn on by pressing the **⏻/I** button while pressing the TUNING – on the unit. “AM -- 9” appears on the display.



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.



For private listening

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.



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.

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. The frame around the “A.BASS EX” indicator lights up.



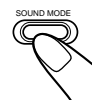
To cancel the effect, press the button again. The frame around the “A.BASS EX” indicator goes out.



Selecting the Sound Modes

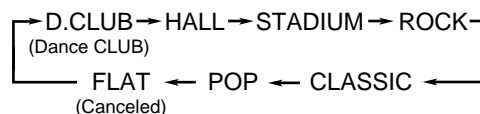
You can select one of the 6 preset sound modes (3 surround modes and 3 SEA – Sound Effect Amplifier – modes.) The sound modes can be applied only to playback sounds, and cannot be used for recording.

To select the sound modes, press SOUND MODE until the sound mode you want appears on the display.



The frame around the “S.MODE” indicator lights up.

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



Surround modes:

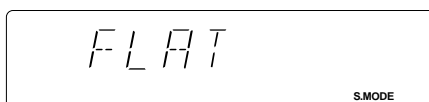
- D.CLUB:** Increases resonance and bass.
- HALL:** Adds depth and brilliance to the sound.
- STADIUM:** Adds clarity and spreads the sound, like in an outdoor stadium.

SEA modes:

- ROCK:** Boosts low and high frequency. Good for acoustic music.
- CLASSIC:** Good for classical music.
- POP:** Good for vocal music.
- FLAT:** Cancels the sound mode.

To cancel the effect, press SOUND MODE until “FLAT” appears on the display.

The frame around the “S.MODE” indicator goes out.



To recall the previous sound mode, press SOUND MODE again.

Listening to FM and AM Broadcasts

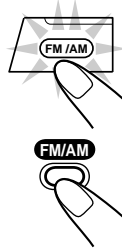


Tuning in a Station

1 Press FM/AM.

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

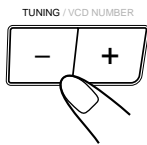
- Each time you press the button, the band alternates between FM and AM.



2 Press and hold TUNING – or + for more than 1 second.

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 TUNING – or +.



When you press TUNING – or + briefly and repeatedly
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.



To restore the stereo effect, press FM MODE again so that the MONO indicator goes off.

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

Presetting Stations

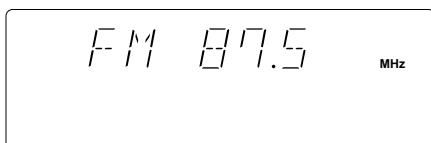
You can preset 30 FM and 15 AM stations.

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” above.



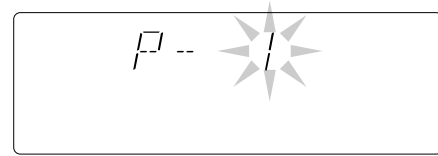
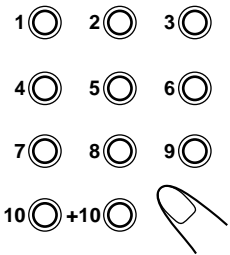
2 Press number button on the remote control to select a preset number.

For preset number 1 to 10, press and hold the number button for the preset number you want to set.

For preset number 10 to 20, press +10 and hold 1 to 10 after pressing +10.

For preset number 20 to 30, press and hold 1 to 10 after pressing +10 twice.

Release the button after the number starts flashing. This completes the preset setting.



The tuned station in step 1 is stored in the preset number selected in step 2.

- Storing a new station on a used number erases the previously stored one.



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

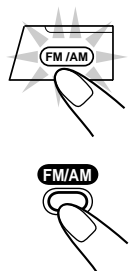
The preset stations will be erased in a few days. If this happens, preset the stations again.

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:

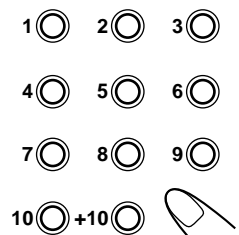
Press the number buttons.

For preset number 5, press 5.

For preset number 15, press +10 then 5.

For preset number 20, press +10, then 10.

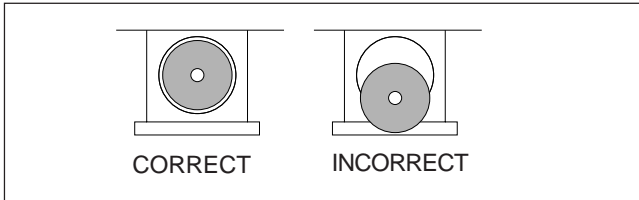
For preset number 25, press +10, +10, then 5.




Loading CDs

1 Press  for the disc tray (CD 1 to CD 3) you want to load a CD onto. The unit automatically turns on and the disc tray comes out.


2 Place a disc correctly on the circle of the disc tray, with its label side up.



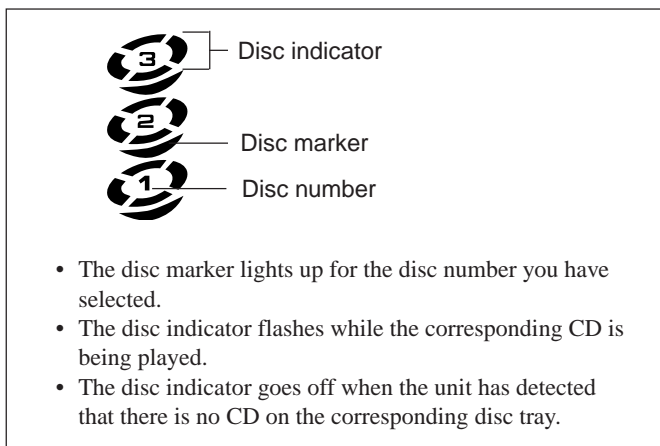
- When using a CD single (8 cm), place it on the inner circle of the disc tray.

3 Press the same  you have pressed in step 1. The disc tray closes, and the corresponding disc number indicator (CD 1 to CD 3) lights up on the display.

4 Repeat steps 1 to 3 to place other CDs.

notes When loading more than one CD continuously When you press  for the next tray you want to place another CD onto, the first disc tray automatically closes and then the next tray comes out.

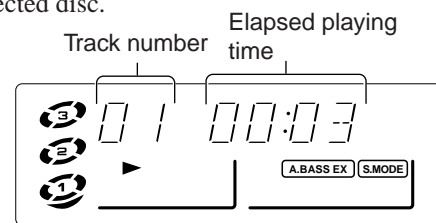
notes About the disc indicators Each disc indicator corresponds to the disc tray of the same number.




Playing Back the Entire Discs — Continuous Play

You can play CDs continuously.

1 Load CDs. **2** Press one of the disc number buttons (CD 1, CD 2, and CD 3) on the unit or on the remote control for the disc you want to play. CD play starts from the first track of the selected disc.



- Pressing CD  instead of the disc number buttons starts playing back if a CD is on the trays.

To stop during play, press  on the unit (or CD  on the remote control.)

To remove the disc, press  for the corresponding disc tray.


notes CD playback sequence When 3 CDs are loaded in the disc trays, they are played in one of the following sequences.

- When CD 1 is pressed : CD 1 ⇒ CD 2 ⇒ CD 3 (then stops)
- When CD 2 is pressed : CD 2 ⇒ CD 3 ⇒ CD 1 (then stops)
- When CD 3 is pressed : CD 3 ⇒ CD 1 ⇒ CD 2 (then stops)
- * When only 2 CDs are loaded, they are played in the same order, but the disc tray without a CD is skipped.

Basic CD Operations

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

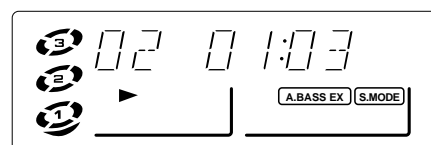
To exchange CDs during playback of another

Press  corresponding to a CD, not playing or selected currently, to eject and exchange the CD.

If you exchange CDs during play, the current play will not stop until all CDs you have exchanged are played.

To stop play for a moment

Press CD .



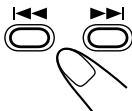
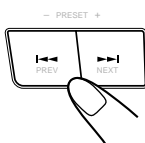
While pausing, the elapsed playing time flashes on the display.

To resume play, press CD  again.

To locate a particular point in a track

During play, press and hold ◀◀ or ▶▶.

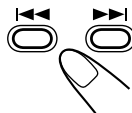
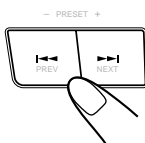
- ◀◀: Fast reverses the disc.
- ▶▶: Fast forwards the disc.



To go to another track

Press ◀◀ or ▶▶ repeatedly before or during playback.

- ◀◀: Goes back to the beginning of the current or previous tracks.
- ▶▶: Skips to the beginning of the next or succeeding tracks.



To go to another track directly using the number buttons

Pressing the number button(s) before or during play allows you to start playing the track number you want.

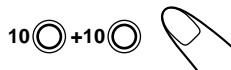
When a track number button is pressed, CD play starts from the track of the currently selected disc.

Ex.: For track number 5, press 5.

For track number 15, press +10 then 5.

For track number 20, press +10, then 10.

For track number 32, press +10, +10, +10, then 2.



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 32 tracks.**

- To use Repeat play for Program play, press REPEAT after starting Program play.

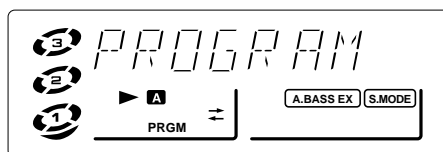
1 Load discs.

- If the current playing source is not the CD player, press CD ▶/II, then ■ on the unit (or CD ■ on the remote control) before going to the next step.

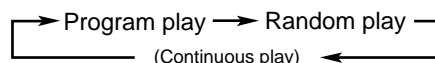
2 Press PLAY MODE on the remote control repeatedly until “PROGRAM” appears on the display.



The PRGM indicator lights up on the display.

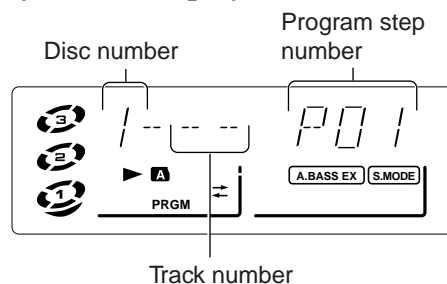
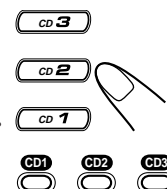


Each time you press the button, the CD play mode changes as follows:

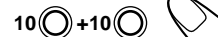
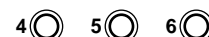


- If a program has been stored in memory, the program is called up.

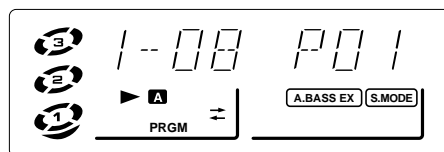
3 Press one of the disc number buttons (CD 1, CD 2, and CD 3) on the unit, or on the remote control to select the disc number you want to play.



4 Press the number buttons on the remote control to select a track from the CD selected in the above step.



- For how to use the number buttons, see “To go to another track directly using the number buttons” described to the left.



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 on the unit (or CD ▶ on the remote control.)

The tracks are played in the order you have programmed.



To stop during play, press ■ on the unit (or CD ■ on the remote control).

To exit from program play mode

Press PLAY MODE on the remote control repeatedly until all the CD play mode indicator goes off from the display.

- The program you have made is stored in memory until you erase the program.

To erase the entire program before or after play, press ■ on the unit (or CD ■ on the remote control) repeatedly until “PROGRAM” and PRGM indicator go off from the display.

- Ejecting a CD will also erase the track numbers programmed from the ejected CD.



If your entry is ignored

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 at Random — Random Play

The tracks of all loaded CDs will play at random.

- To use Repeat play for Random play, press REPEAT after starting Random play.

1 Prepare CDs.

- If the current playing source is not the CD player, press CD ►/■, then ■ on the unit (or CD ■ on the remote control) before going to the next step.

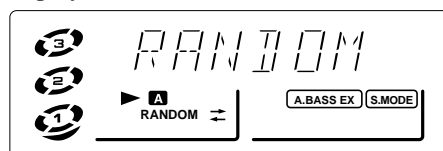
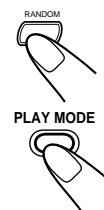
2 Start the Random play mode.

On the unit:

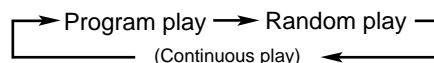
Press RANDOM.

On the remote control:

- 1) Press PLAY MODE repeatedly until “RANDOM” appears on the display. The RANDOM indicator lights up on the display.



Each time you press PLAY MODE, the CD play mode changes as follows:



- 2) Press CD ► on the remote control (or CD ►/■ on the unit.)



The tracks are played at random.

Random play ends when all the tracks are played once.

To stop during play, press ■ on the unit (or CD ■ on the remote control).

- Random play also stops when one of the disc trays is opened.

To exit from random play mode

On the unit:

Press RANDOM again before or after play so that the unit enters Continuous play mode.

On the remote control:

Press PLAY MODE repeatedly until all the CD play mode indicator goes off from the display.



Even if you press ◀◀

You cannot go back to the previous tracks during Random play.

- If you press ▶▶, you can go to next random tracks.

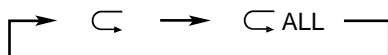
Repeating Tracks or CDs — Repeat Play

You can have all the CDs, the program or the individual track currently playing repeat as many times as you like.

To repeat play, press REPEAT during or before playing. To use Repeat play for Program play and Random play, press the button after starting playback.



- Each time you press the button, Repeat play mode changes as follows, and the following indicator lights up on the display:



- ◀: Repeats one track on one CD.
- ◀ ALL: Repeats all the tracks on all the CDs (continuously or at random), or all the tracks in the program.

To cancel Repeat play, press REPEAT repeatedly until the REPEAT indicator (◀ ALL, or ▶) goes off from the display.

Prohibiting Disc Ejection — Tray Lock

You can prohibit CD ejection from the unit and can lock discs.

- This operation is possible only when the unit is off (on standby.)
- This operation is possible only using the buttons on the unit.

To prohibit disc ejection, press ▲ for CD 1 disc tray while holding ■. (If there is any disc tray opened, close it first.) “LOCKED” appears for a while, and the loaded CDs are locked.

To cancel the prohibition and unlock the CDs, press ▲ for CD 1 disc tray while holding ■. “UNLOCKED” appears for a while, and the loaded CDs are unlocked.



If you try to eject CDs

“LOCKED” appears to inform you that the Tray Lock is in use.

Playing Video CDs and CD-Gs

You can play Video CDs either with or without the PBC (PlayBack Control) function. But when the Repeat Play is activated, you cannot play a Video CD with the PBC 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 play video CDs, “VIDEO CD” appears on the display.

V I D E O C D

When you play CD-Gs, “GRAPHICS” appears on the display.

G R A P H I C S

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 12.

To stop during play, press and hold ■.

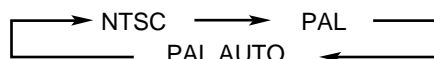
To stop play and remove the disc, press ▲ for the disc being played.



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 PAL AUTO

According to a Video CD or the color system used on your TV, press NTSC/PAL PAL AUTO during play. Each time you press the button, the following appears on the display.



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



About the color system

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

Special Plays for Video CDs

You can use the following special plays for video CDs both with and without PBC function.

To play Still- and Frame-by-Frame pictures

Press **|| STILL** on the remote control during playback.

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 by one frame.

- To resume normal playback, press CD ▶.



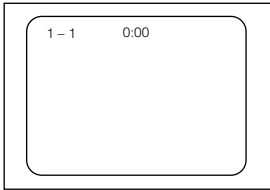
notes During frame-by-frame playback

No sound comes out.

To view Operation Status

You can view operation status about the track being played on the TV screen.

When you start playback a disc, information about the disc being played are shown on TV: disc number, track number and playing time.

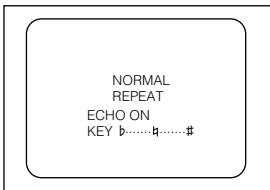


To exit operation status, press ON SCREEN while press and hold SHIFT. "DISP. OFF" appears on the TV screen, and all the information about the track being played disappear.



Press ON SCREEN again while press and hold SHIFT.

When you press the button, the following operation status about the track being played is shown for a while: CD play mode, karaoke function mode, echo effect and key of the track.

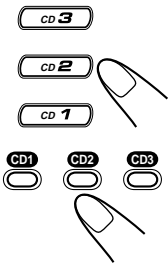


To view the Video Intro of a Video CD

You can view contents of a video CD, the first 5 seconds of each track on the disc.

- For a video CD with PBC function, cancel the PBC function. Refer to "To play Video CDs without Using Menu Screen" on page 18.

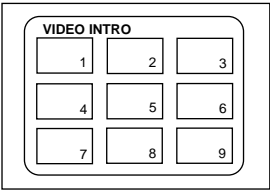
1 Press one of the disc number buttons (CD 1, CD 2 and CD 3) on the unit or on the remote control to select the disc you want to view the video intro.



Playback starts.

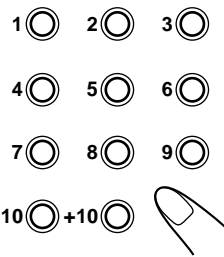
2 Press V.INTRO while press and hold SHIFT after a picture appears on the TV screen.

The video intro starts and shows in sequence (the first 5 seconds of nine tracks) on the TV screen. If the disc consists more than 9 tracks, remaining tracks are shown after the first 9 tracks finish showing.



3 Press the number button of the video intro you want to playback.

Playback starts from the selected track.

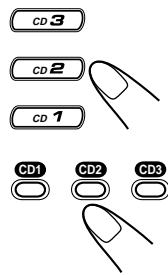


To stop and cancel the video intro, press ■.

To view the Highlights of a Video CD

You can view 9 highlight scenes of the selected track on a video CD. These highlight scenes are created by dividing the track equally into 9 portions and the beginning (5 seconds each) of those 9 scenes are shown on the TV screen.

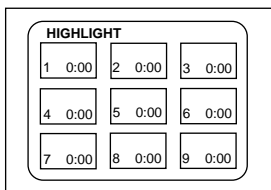
1 Press one of the disc number buttons (CD 1, CD 2 and CD 3) on the unit or on the remote control and the number button of the track you want to view the highlights.



Playback starts.

2 Press HIGHLIGHT while press and hold SHIFT after a picture appears on the TV screen.

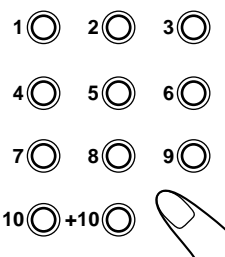
The highlight starts and shows in sequence (the first 5 seconds of nine divided highlight scenes) on the TV screen for 1 minute.



3 Press the number button of the highlight scene you want to playback.

Playback starts from the beginning of the selected scene.

- If you do not select any highlight scene to playback for 1 minute, another 9 highlight scenes of the next track will be shown on the TV screen.



To stop and cancel the highlight, press ■.



During video intro or highlight play

The picture shown on the TV screen may be partially distorted, resulting from noises or incorrect manufacturing of the disc.

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 the 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.

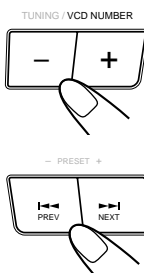
Button controls:

VCD NUMBER - or +

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

◀ PREV or ▶ NEXT

Move through menu screens.



CD ►/|| SELECT

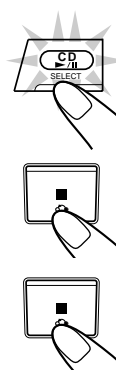
When "SELECT XX" appears on the TV screen, pressing this button jumps to the selected picture or program.

● (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.



To play 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.

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

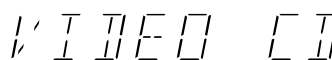
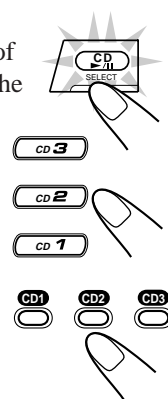
Refer also to the manual supplied for your TV.

2 Prepare Video CDs.

Refer to "Loading CDs" on page 12.

3 Start playback of the Video CD.

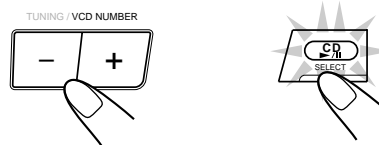
Press CD ►/|| SELECT to start playback of the currently selected CD or press one of the disc number button (CD 1, CD 2 and CD 3) on the unit or on the remote control to select the disc and start playback.



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

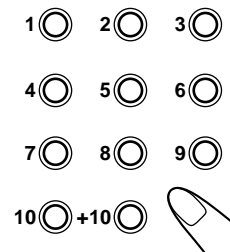
On the unit:

Press VCD NUMBER - or + to select the item number. Then press CD ►/|| SELECT to start the playback.



On the remote control:

Press number button to select the item number and start playback.



"SEL-XX" appears on the display.



Basic Flow of Menu Play Operation

Some disc 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.
- When moving pictures appear, you can select a moving picture by either pressing ◀◀ PREV or ▶▶ NEXT or number buttons 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 have selected finishes 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 ◀◀ 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.



If the menu is shown on the TV screen for more than 10 minutes,

the screen background fades out automatically to avoid screen burn-in.

To play Video CDs without Using Menu Screen

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

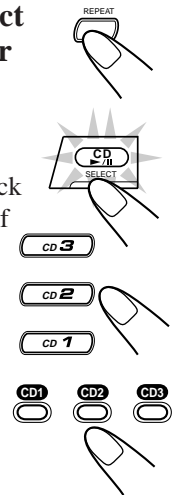
1 Turn on the TV and select the video input so that you can view the pictures from the Unit.
Refer also to the manual supplied for your TV.

2 Prepare a Video CD.
Refer to “Loading CDs” on page 12.

3 Press REPEAT on the unit to select REPEAT indicator either “⏪” or “⏪ ALL.”

4 Start playback of the Video CD.

Press the CD ▶/|| SELECT to start playback of the currently selected CD or press one of the disc number button (CD1, CD2 and CD3) on the unit or on the remote control to select the disc and start playback.



To stop during playback, press ■.

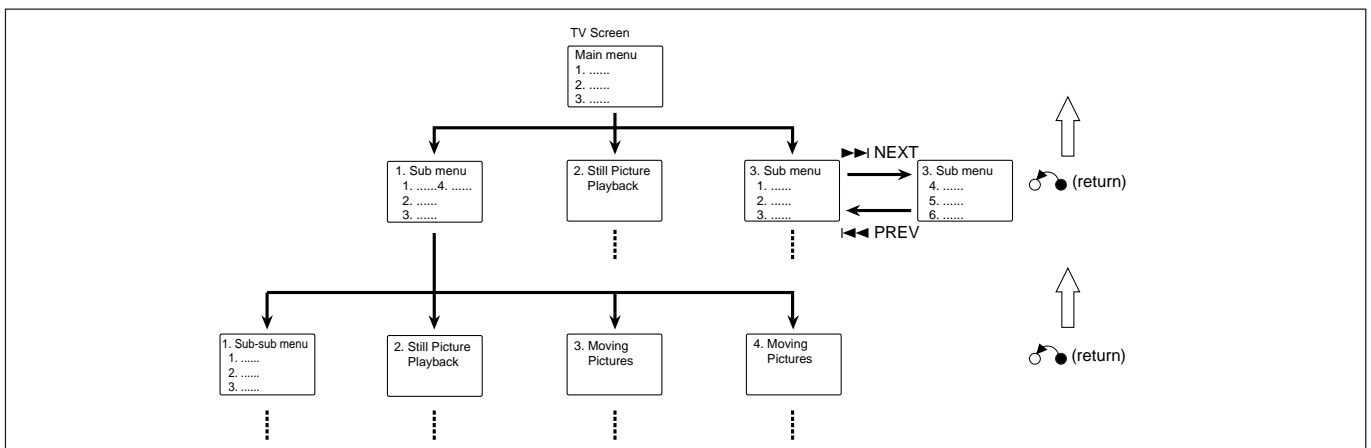
To restore the PBC function, press REPEAT repeatedly until the repeat indicator goes off.



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 ▶▶ 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.)

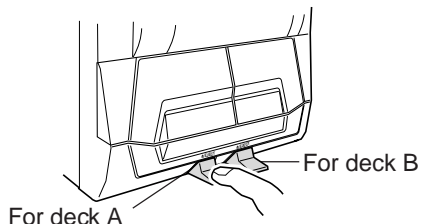


Playing Back Tapes

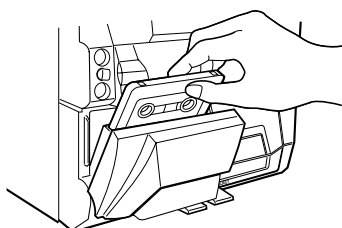
You can play back type I, type II and type IV tapes without changing any settings.

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.



- 3** Close the cassette holder gently.

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

To operate the other deck, press TAPE A/B (or TAPE A or TAPE B on the remote control.)

- 4** On the unit:

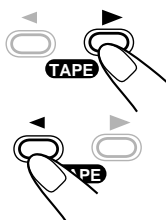
Press TAPE ◀▶.

- Each time you press the button, the tape direction changes:
 - ▶ : plays the front side.
 - ◀ : plays the reverse side.



On the remote control:

Press TAPE ▶ for forward direction playback, or press TAPE ◀ for reverse direction playback.



When the tape plays to the end, the deck automatically stops if the Reverse Mode is not on. (See “To play both sides repeatedly — Reverse Mode.”)

To stop during play, press ■ (or TAPE ■ on the remote control.)

To operate the other deck, press TAPE A/B (or TAPE A or TAPE B on the remote control), then TAPE ◀▶ (or TAPE ▶ or TAPE ◀ on the remote control.)

To fast wind to the left or to the right, press ◀◀ or ▶▶ (or ◀◀ or ▶▶ on the remote control) while the tape is not running. The tape direction indicator (◀▶) starts flashing quickly on the display.

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

To play both sides repeatedly — Reverse Mode

Reverse Mode works for both deck A and deck B.

When it is in use, the tape automatically reverses at the end of a side and the unit starts playing the other side of the tape, and repeats the same process.

To use Reverse Mode, press REVERSE MODE repeatedly so that the Reverse Mode indicator on the display lights up as — (↻).



- Each time you press the button, Reverse Mode changes as follows:

- ↻ : The cassette deck automatically stops after playing both sides of the tape. (Stops when playback in the ◀ direction is finished.)
- ↻ : The cassette deck continues to play both sides of the tape until the ■ button is pressed.
- ↔ : The cassette deck automatically stops after playing one side of the tape.



When Reverse Mode is on with cassettes in both decks A and B

After the reverse (◀) side of the tape finishes playing, the tape in the other deck starts playing.

Locating the Beginning of a Song — Music Scan

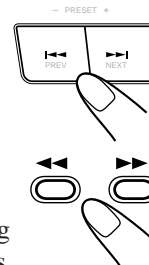
You can use Music Scan to locate the beginning of a song. Music Scan searches for blank portions that usually separate recorded songs, then plays the next song.

To find the beginning of the current song

During play, press ◀◀ / ▶▶ (◀◀ or ▶▶ on the remote control) in the opposite direction to the tape play.

The tape direction indicator of the opposite direction to the tape play starts flashing slowly and quickly alternately.

Searching stops automatically at the beginning of the current song, and the current song starts automatically.



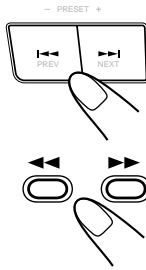


To find the beginning of the next song

During play, press **⏮ / ⏭** (**⏮** or **⏭** on the remote control) **in the same direction** as the tape play.

The tape direction indicator of the same direction as the tape play starts flashing slowly and quickly alternately.

Searching stops automatically at the beginning of the next song, and the next song starts automatically.



Music Scan works by detecting a 4-second long blank between each song, so it will not work well in the following cases

- No blank at the beginning of a song.
- Noise (often caused by much use or poor quality dubbing) which fills the blank.
- Long, very soft passages or pauses in a song.



The use of the C-120 or thinner tape is not recommended, since characteristic deterioration may occur and this tape easily jams in the pinch-rollers 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 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 recordings you have made have excessive noise or static, the unit may be too close to a TV. Increase the distance between the TV and the unit.
- You can use type I and II tapes for recording.

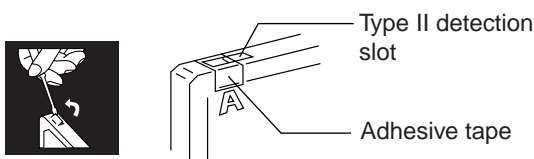
To protect your recording

Cassettes have two small tabs on the back to protect unexpected erasure or re-recording.

To protect your recording, remove these tabs.

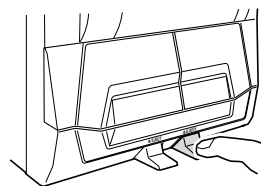
To re-record on a protected tape, cover the holes with adhesive tape.

When using type II tape, be careful not to cover the holes used to detect the tape type.



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 Check the tape direction of deck B.

- When using the unit:
If the tape direction is not correct, press TAPE ◀▶ twice then ■ to change the tape direction.
- If you want to record on both sides of a tape, press REVERSE MODE until the ↺↻ indicator is lit.

5 Start playing the source — FM, AM*, CD player, deck A, or auxiliary equipment connected to AUX jacks.

- When the source is CD, you can also use CD Direct Recording (see page 22).
- When the source is deck A, you can also use the dubbing method. (See “Dubbing Tapes” on page 22.)

* See “To record an AM station — Beat Cut” on page 22.

6 Start recording.

On the unit:

Press REC START/STOP.

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



On the remote control:

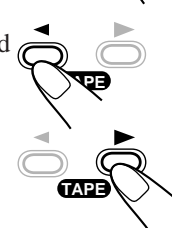
1) Press REC PAUSE.

The **REC** indicator starts flashing on the display.



2) Press TAPE ◀ or TAPE ▶.

The **REC** indicator stops flashing and remains lit, and recording starts.



To stop during recording, press REC START/STOP again, or press ■ on the unit (or TAPE ■ on the remote control).



On the remote control:

To stop recording temporarily (except when the playback source is deck A), press REC PAUSE

on the remote control.

REC PAUSE



To resume recording, press TAPE ◀ or TAPE ▶ on the remote control.

The REC indicator stops flashing and remains lit.

To remove the cassette, press EJECT ▲ for deck B.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as — ↺.

REVERSE MODE



- When using the Reverse Mode for recording, start recording in the forward (▶) direction first. Otherwise, recording will stop when recording is done only on one side (reverse) of the tape.

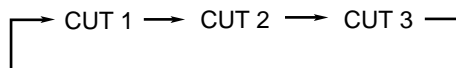
To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as — ↻.

To record an AM station — Beat Cut

While recording an AM broadcast, beats may be heard (which are never heard when listening to the broadcast without recording it.)

If this occurs, press REPEAT repeatedly, while recording, until the beats are reduced.

- Each time you press the button, the display changes to show the following:



REPEAT



Dubbing Tapes

When dubbing tapes, make sure that the playback direction of deck A and deck B are the same.

1 Press TAPE ◀▶, then ■.

2 Put the source cassette in deck A, and a recordable cassette into deck B.

- Put the cassettes in both decks so that the tapes will run in the forward (▶) direction.

3 Press DUBBING.

Dubbing starts.

DUBBING



To stop during dubbing, press ■ on the unit (or TAPE ■ on the remote control.)

To remove the cassette, press ▲ EJECT for deck A and EJECT ▲ for deck B.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as — ↺.

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as — ↻.

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 ■.

CD 3

CD 2

CD 1



4 Press CD REC START.

The REC indicator lights 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.

CD REC START



To stop during CD Direct Recording, press ■ on the unit (or TAPE ■ on the remote control.)

To remove the cassette, press EJECT ▲ for deck B.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as — ↺.

- When using the Reverse Mode for CD Direct Recording, put a recordable cassette tape into deck B with the front side facing the holder and start recording in the forward (▶) direction first. When the tape reaches its end while recording a song in the forward direction (▶), the last song will be recorded at the beginning of the reverse side (◀). If you start recording on the reverse side (◀), recording will stop when recording is done only on one side (reverse) of the tape.

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as — ↻.

Using the Microphone

You can enjoy singing along (Karaoke) and microphone mixing.

IMPORTANT:

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

Singing Along

Vocal Masking

Vocal Masking reduces the lead vocal of the playing source, and allows you to replace it by singing into the microphone as the music plays.

On the unit ONLY:

1 Rotate MIC LEVEL to MIN.



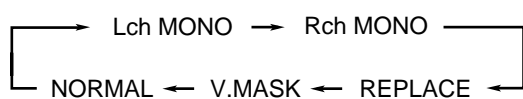
2 Connect the microphone (not supplied) by plugging it into the MIC jack.

3 Start playing the source — CD, tape, or other connected component.

4 Press MPX/V.REPLACE/V.MASKING repeatedly until “V.MASK” appears on the display.



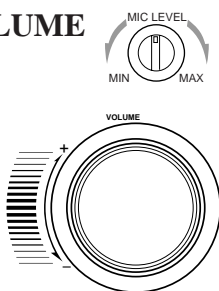
The karaoke indicator (🎤) also lights up on the display. Each time you press the button, Karaoke function changes as follows:



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 until “NORMAL” appears on the display.

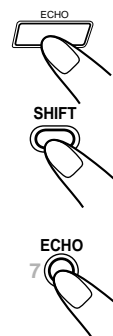
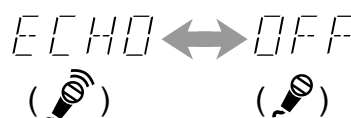
- By pressing REC START/STOP, you can record your singing along if you want. (For more details, see page 21.)



To apply an echo to your voice

Press ECHO on the unit (or press and hold SHIFT, then press ECHO on the remote control) so that the echo (🎤) indicator lights up on the display.

When echo is activated, “ECHO” and echo (🎤) indicator appear on the display. When echo is canceled “OFF” appears on the display.



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.



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.

On the unit ONLY:

1 Rotate MIC LEVEL to MIN.



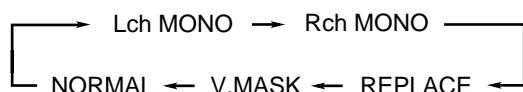
2 Connect the microphone (not supplied) by plugging it into the MIC jack.

3 Start playing the source — CD, tape or other connected component.



4 Press MPX/V.REPLACE/V.MASKING repeatedly to select the output sound.

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



Lch MONO: Only the left channel (instrumental parts) is played back through both right and left speakers.

Rch MONO: Only the right channel (vocal parts) is played back through both right and left speakers.

REPLACE: Your voice replaces the right channel (vocal parts) when you sing into the microphone.

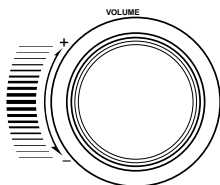
V.MASK: This cannot be used for multiplex karaoke sources. Refer to previous section for details.

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 until "NORMAL" appears on the display.

- By pressing REC START/STOP, you can record your singing along if you want. (For more details, see page 21.)



To stop during recording, press ■.

Adjusting Key Control

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

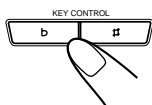
- This function is available only when you use CDs for karaoke source.

1 Start the source CD.

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

To lower the key, press KEY CONTROL ♭.

To raise the key, press KEY CONTROL #.



To cancel key control, press ♭ or # until "KEY 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.
- You cannot adjust the key while recording.
- When you change the source, key control function is canceled and the key returns to "KEY 0."

Microphone Mixing

When you sing along with multiplex tapes or CDs, follow the procedure below:

On the unit ONLY:

1 Rotate MIC LEVEL to MIN.

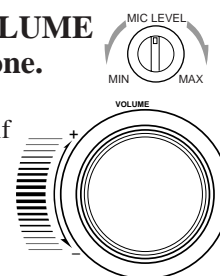


2 Connect the microphone (not supplied) by plugging it into the MIC jack.

3 Start playing the source — CD, tape or other connected component.

4 Rotate MIC LEVEL and VOLUME as you sing into the microphone.

- By pressing REC START/STOP, you can record your singing along if you want. (For more details, see page 21.)



To use microphone only

Without any background sound, you can use your microphone, and record it if you want.

1 Rotate MIC LEVEL to MIN.

2 Connect the microphone (not supplied) by plugging it into the MIC jack.

3 Press CD ►/II, then ■.

No background sound will be heard.

4 Rotate MIC LEVEL and VOLUME as you sing or speak into the microphone.

- By pressing REC START/STOP, you can record your singing along if you want. (For more details, see page 21.)

Using the Timers

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

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

Using the Daily and Recording Timer

You can set the timer whether the unit is turned on or turned off.

- In the source “TUNER,” “CD,” or “TAPE,” the timer acts as a Daily Timer. Once the Daily Timer has been set, it will be activated at the same time every day until the setting is turned off.
- In the source “TUNER REC,” the timer acts as a Recording Timer. After the Recording Timer has been performed, the details of the setting remain stored but the timer status is set to off.
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

Before you start...

- When using a TUNER or TUNER REC as the source to play, make sure to select the station.

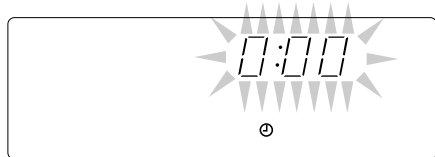
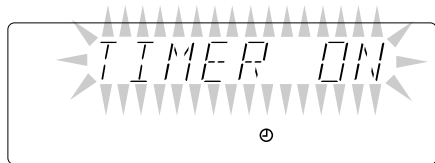
On the remote control ONLY:

1 Press and hold **SHIFT** during the setting procedure.

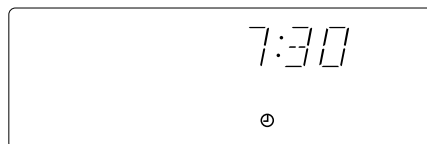
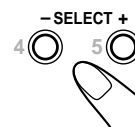


2 Press **TIMER**.

The timer indicator lights up on the display. “TIMER ON” appears for 2 seconds, then the unit enters on-time setting mode.

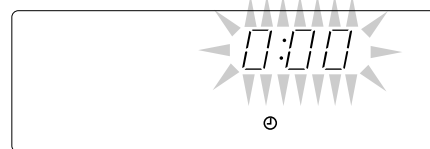
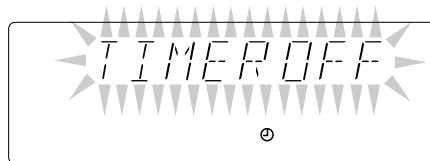


3 Press **SELECT –** or **SELECT +** to set the on-time you want the unit to turn on.

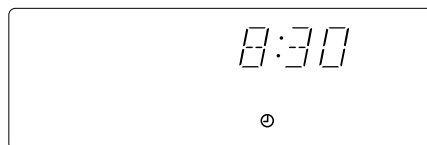
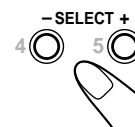


4 Press **SET**.

“TIMER OFF” appears for 2 seconds, then the unit enters off-time setting mode.



5 Press **SELECT –** or **SELECT +** to set the off-time you want the unit to turn off (on standby).

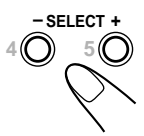
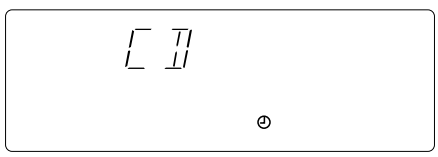


6 Press **SET**.

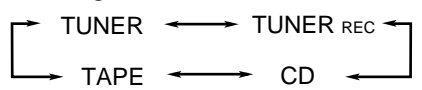
The unit enters source selecting mode.



7 Press SELECT – or SELECT + to select the source to play.



- Each time you press SELECT – or SELECT +, the source changes as follows:



- TUNER:** tunes into the last station you were listening to.
- TUNER REC*:** records the last station you were listening to.
- CD:** plays the last CD you were listening to.
 - Make sure there is a CD on the selected disc number tray.
- TAPE:** plays the last tape you were listening to.
 - Make sure that a tape is in the deck whose deck indicator (A or B) is lit on the display.
 - Make sure that the tape direction is correct.

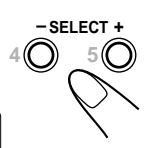
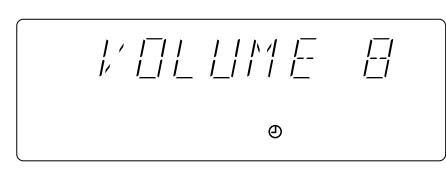
* When you select TUNER REC, the timer mode enters Recording Timer mode. The REC indicator lights up on the display.

8 Press SET.

The volume level flashes on the display.



9 Press SELECT – or SELECT + to adjust the volume level.



10 Press SET.

The display returns to the display before you set the timer.



11 Release SHIFT.



To cancel the setting, press TIMER while press hold SHIFT. The timer indicator goes off from the display.

Using Sleep Timer

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

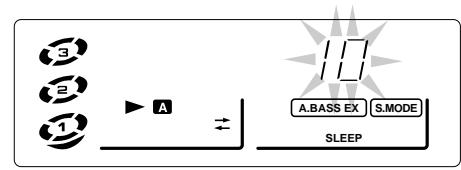
How Sleep Timer actually works

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

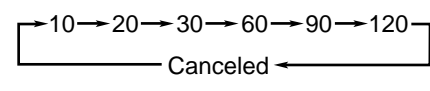
On the remote control ONLY:

1 Press SLEEP.

The time length until the shut-off time appears and starts flashing on the display. 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 stops flashing and 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 5 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.



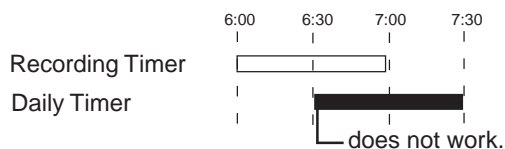
Timer Priority

Since each timer can be set separately, you may wonder what happens if the setting for these timers overlaps.

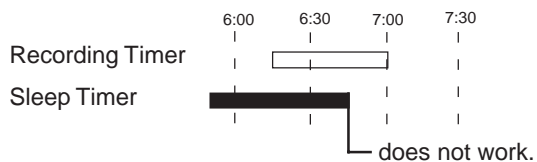
Here are examples.

- **Recording Timer has priority over Daily Timer and Sleep Timer.**

If Daily Timer is set to come on while Recording Timer is operating, Daily Timer will not come on at all.



If Recording Timer is set to come on while Sleep Timer is operating, Sleep Timer will not work (the SLEEP indicator does not go off.)



Maintenance

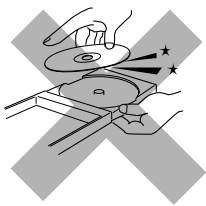


To get the best performance of the unit, keep your discs, tapes, and mechanism clean.

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.



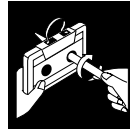
To clean the disc

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

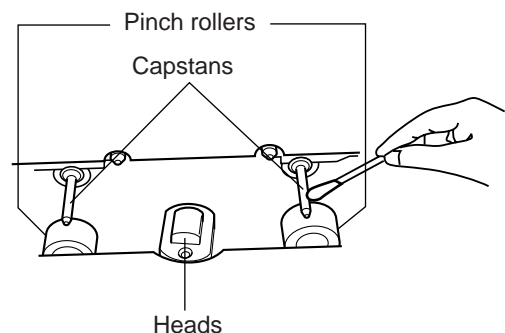
Cassette decks

If the heads, capstans, and pinch rollers 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, capstans, and pinch rollers

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



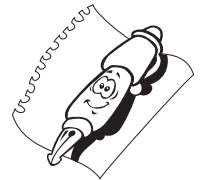
If you are having a problem with your unit, check this list for a possible solution before calling for service.

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.	<ul style="list-style-type: none"> • Antennas are disconnected. • The AM loop antenna is too close to the unit. • The FM antenna is not properly extended and positioned. 	<ul style="list-style-type: none"> • Reconnect the antennas correctly and securely. • Change the position and direction of the AM loop antenna. • 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 28.)
The disc tray does not open or close.	<ul style="list-style-type: none"> • The AC power cord is not plugged in. • Trays are locked. 	<ul style="list-style-type: none"> • Plug the AC power cord. • Unlock the trays. (See page 18.)
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 23.)
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 unit.	<ul style="list-style-type: none"> • The path between the remote control unit and the remote sensor on the unit is blocked. • The batteries are exhausted. 	<ul style="list-style-type: none"> • Remove the obstruction. • Replace the batteries.
The image on the TV screen loses its colour.	Video Out selection is unmatching.	<ul style="list-style-type: none"> • Remove the obstruction. • Replace the batteries.
The pictures of the video CD or CD-G is distorted.	When you pause or advance the pictures manually, the pictures are distorted. This is not a malfunction.	Select the correct video out. (See "Connecting Other Equipment" on page 8.)

Specifications

Design and specifications are subject to change without notice.



Amplifier — CA-MXJ270V

Output Power: 40 W per channel, min. RMS, both channels driven into 6 Ω at 1 kHz with no more than 10 % total harmonic distortion

Audio input sensitivity/Impedance (at 1 kHz)

AUX: 300 mV/50 k Ω

MIC: 2.5 mV/5 k Ω

Speakers/Impedance: 6 Ω – 16 Ω

Tuner

FM tuning range: 87.50 MHz – 108.00 MHz

AM tuning range:

For Saudi Arabia:

At 9 kHz intervals : 531 kHz – 1 602 kHz

At 10 kHz intervals : 530 kHz – 1 600 kHz

For other countries:

At 9 kHz intervals : 531 kHz – 1 710 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 Hz — 14 000 Hz

CrO₂ (type II): 50 Hz — 14 000 Hz

Metal (type IV): 50 Hz — 14 000 Hz (only for playback)

Wow and flutter:

0.15 % (WRMS)

General

Power requirement: AC 110 V/AC 127 V/AC 220 V/AC 230 V –
AC 240 V \sim
(adjustable with the voltage selector),
50 Hz/60 Hz

Power consumption: 85 W (at operation)
12 W (on standby)

Maximum power consumption (for Taiwan only): 185 W

Dimensions (approx.): 265 mm x 315 mm x 361 mm (W/H/D)
(10⁷/₁₆ in. x 12⁷/₁₆ in. x 14¹/₄ in.)

Mass (approx.): 7.5 kg (19.2 lbs)

Supplied accessories

See page 6.

Speaker section — SP-MXJ270V

Type: 3-way bass-reflex type
(Magnetically-shielded)

Speaker units: Woofer: 16 cm (6⁵/₁₆ in.) cone x1

Midrange: 4 cm (1⁵/₈ in.) cone x1

Tweeter: 2 cm (1³/₁₆ in.) piezo x1

Power handling capacity: 60 W

Impedance: 6 Ω

Frequency range: 45 Hz – 22,000 Hz

Sound pressure level: 88 dB/w•m

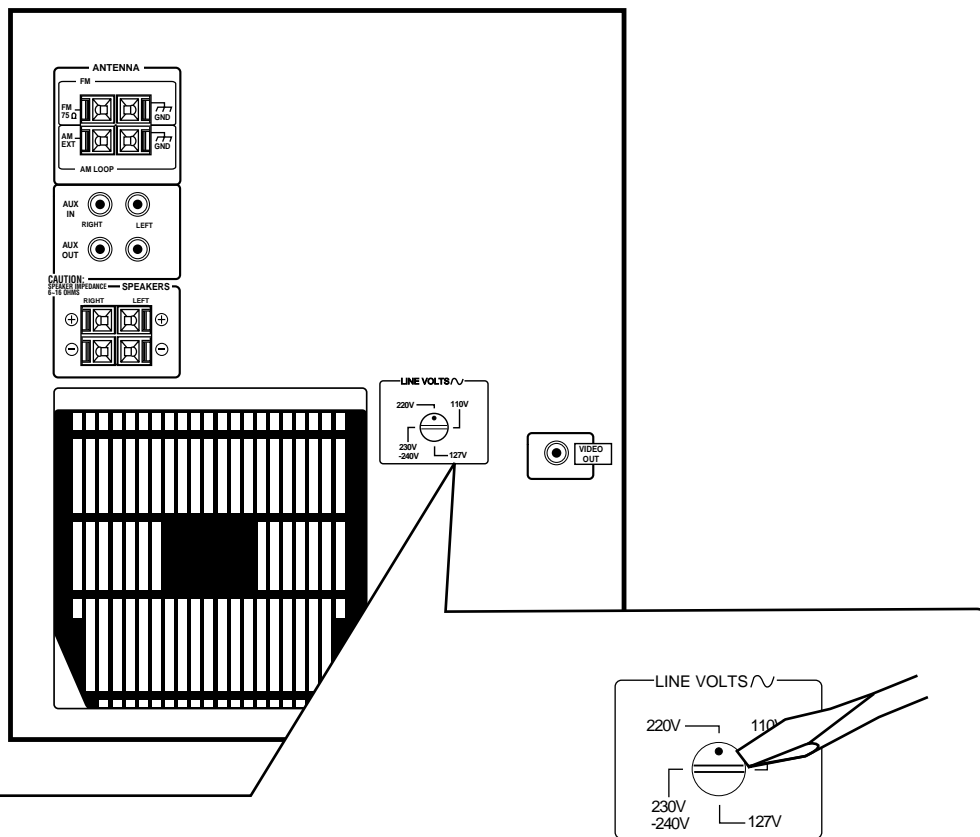
Dimensions (approx.): 215 mm x 315 mm x 273 mm (W/H/D)
(8¹/₂ in. x 12⁷/₁₆ in. x 10³/₄ in.)

Mass (approx.): 3.5 kg (7.8 lbs) each

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

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)

تعليمات خط التيار الكهربائي الرئيسي (المتردد) (لا تنطبق على أوروبا والولايات المتحدة الأمريكية وكندا وأستراليا والمملكة المتحدة)



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 a damage or risk of fire/electric shock.

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。

هام من اجل خط التيار الكهربائي الرئيسي (المتردد) قبل ادخال قابس الطاقة الكهربائية، تأكد من تطابق منتخب فولطية التيار الكهربائي الرئيسي (المتردد) الموجود على خلفية الجهاز مع فولطية التيار الكهربائي في بلدك. في حالة عدم التطابق، اعد ضبط مفتاح منتخب الفولطية على فولطية التيار الكهربائي المتردد في بلدك. عدم عمل ذلك، يمكن يؤدي الى حصول ضرر او حريق او صدمة كهربائية.