

Radio Cassette-Corder

Operating Instructions



WALKMAN is a registered trademark of Sony Corporation.

WM-GX670

Sony Corporation © 1999 Printed in Japan Printed on recycled paper

Sony online <http://www.world.sony.com/>

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

This warranty is valid only in the United-States.

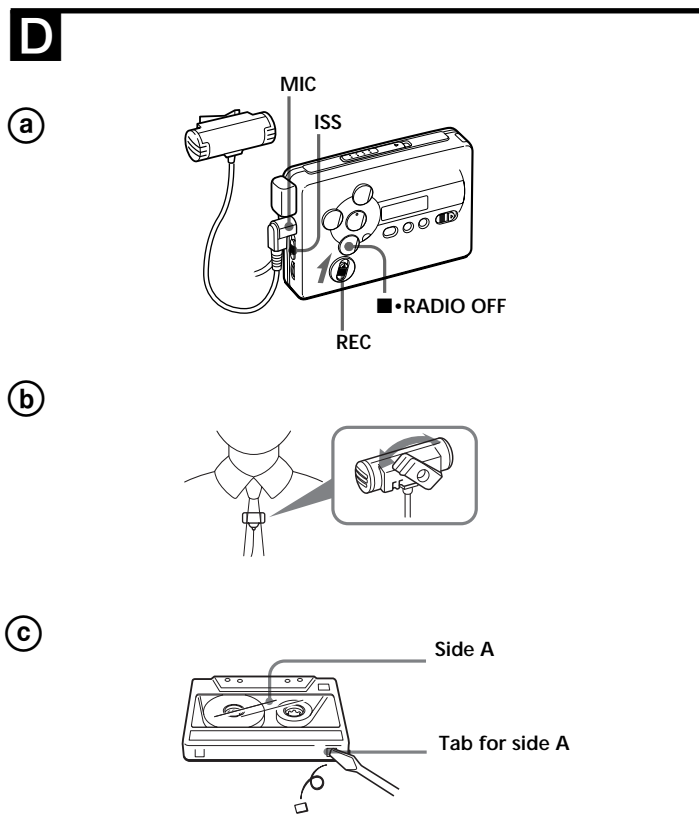
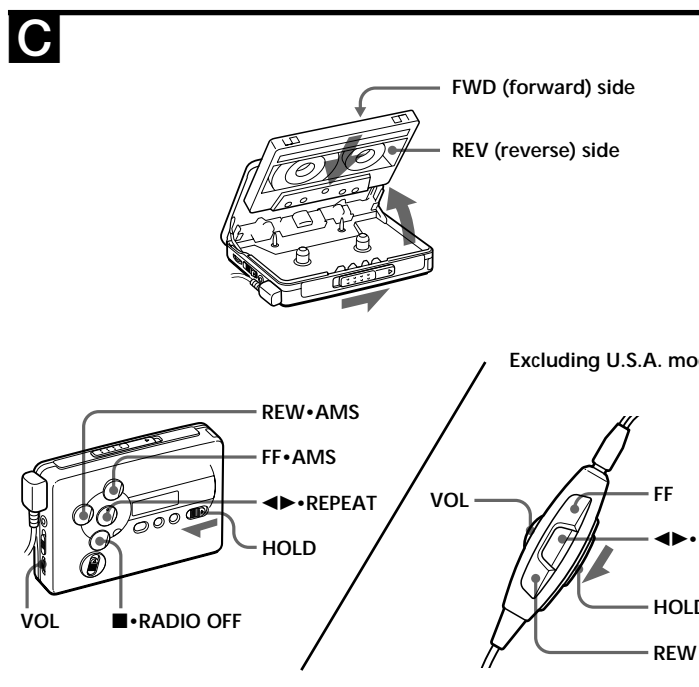
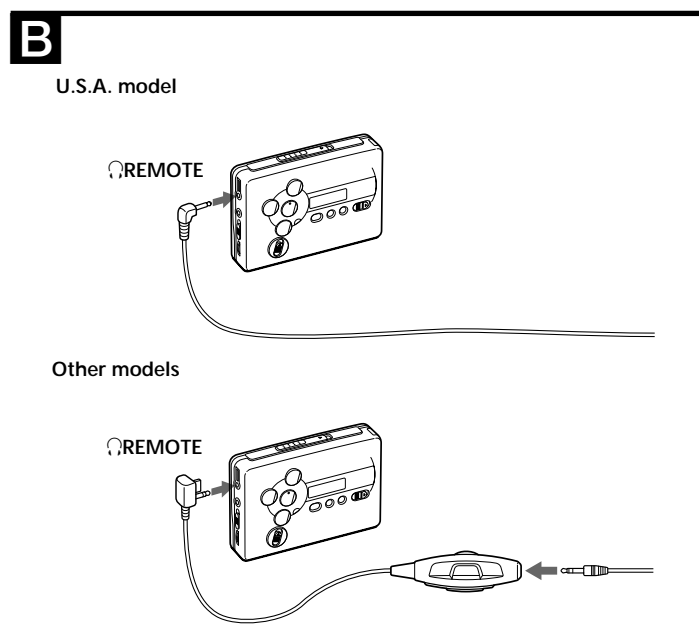
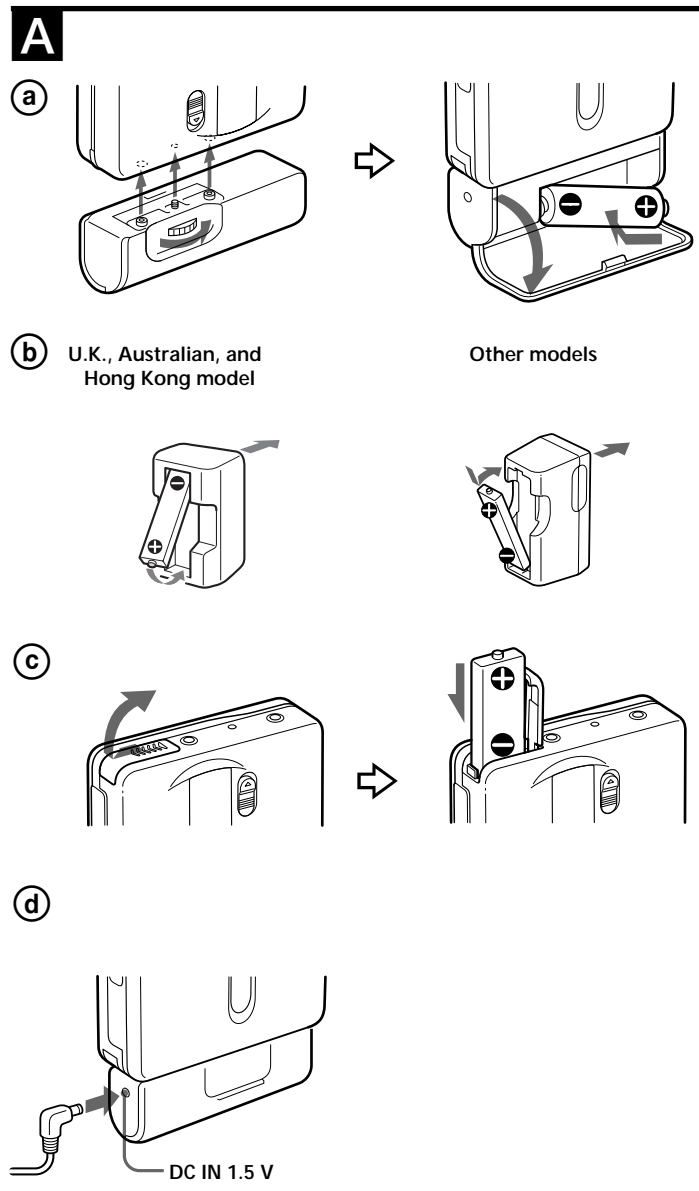
Owner's Record
The model number is located at the front and the serial number is located inside the tape holder. Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. WM-GX670
Serial No. _____

INFORMATION
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.



Getting Started
Choosing a Power Source
Dry Battery (see Fig. A-①)
Attach the supplied battery case, and then insert one R6 (size AA) battery with correct polarity.

Note
• For maximum performance we recommend that you use a Sony alkaline battery.

Rechargeable Battery (see Fig. A-②)
1 Insert the supplied rechargeable battery (NC-6WM) into the charger with correct polarity.
2 Plug in the charger to the house current (mains).
U.K., Australian, and Hong Kong model: Full charging takes about 3.5 hours.
U.S.A., Canadian, European Continent, and Arabian model: Full charging takes about 2.5 hours.
Korean model: The full charging time depends on the voltage of your mains.
110 V: 10 hours
220 V: 2.5 hours
Other models: The full charging time depends on the voltage of your mains.
120 V: 10 hours
220-240 V: 2.5 hours
If the plug does not fit to your mains, attach the supplied AC plug adaptor (Excluding Chinese model).

3 Insert the fully charged battery into the rechargeable battery compartment (see Fig. A-②).

You can charge the battery about 300 times.

When to replace/charge the battery
Replace or charge the battery when " " flashes in the display. The battery remainder mark has 3 steps to show the remaining battery power.

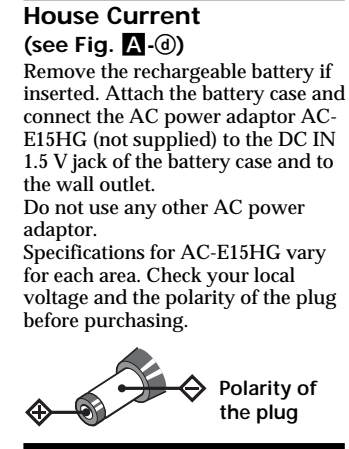
Display	Condition
	There is enough battery power.
	The battery power is decreasing.
	The battery is exhausted. Replace it with a new battery.

Battery life (Approx. hours) (EIAJ)*

Sony alkaline LR6 (SG)	
Tape playback	31.5
Radio reception	32
MIC recording	10
Radio recording	6.5

* Measured value by the standard of EIAJ (Electronic Industries Association of Japan). (Using a Sony HF series cassette tape)

House Current (see Fig. A-③)
Remove the rechargeable battery if inserted. Attach the battery case and connect the AC power adaptor AC-E15HG (not supplied) to the DC IN 1.5 V jack of the battery case and to the wall outlet. Do not use any other AC power adaptor. Specifications for AC-E15HG vary for each area. Check your local voltage and the polarity of the plug before purchasing.



Connecting the Headphones/Earphones (see Fig. B)

- 1 Connect the stereo mini plug firmly to the remote control (excluding U.S.A. model).
- 2 Connect the headphones/earphones to REMOTE.
- 3 Wear the "L" marked side to the left ear and the "R" marked side to the right ear. If the earphones do not fit to your ears or the sound is unbalanced, adjust the earphones to fit to your ears firmly.

Operating the Walkman

- Playing a Tape (see Fig. C)**
- 1 Open the cassette holder and insert a cassette.
 - 2 Make sure the HOLD function is turned off. If it is on, slide the HOLD switch to turn it off.
 - 3 Press ◀▶•REPEAT on the main unit, or if using the remote control (excluding U.S.A. model), press ▶▶•(play)•■(stop). Adjust the volume with VOL.

When adjusting the volume on the main unit (excluding U.S.A. model)
Set the VOL control on the remote control at maximum.

When adjusting the volume on the remote control (excluding U.S.A. model)
Set the VOL control on the main unit to around 6.

Note on the cassette holder
When opening the cassette holder on the main unit, make sure the tape is stopped, then slide the OPEN switch. If the cassette holder is opened when the tape is running, the tape may loosen and be damaged.

Operation on the main unit

To	Press
Play the other side	◀▶•REPEAT during playback
Stop playback	■(stop)•RADIO OFF
Fast forward	FF•AMS during stop
Rewind	REW•AMS during stop

Operation on the remote control (excluding U.S.A. model)

To	Press
Play the other side	◀▶•■ for 2 seconds or more during playback
Stop playback	◀▶•■ once during playback
Fast forward*	FF during stop
Rewind*	REW during stop

* If ◀▶•■ on the remote control is pressed during fast forward or rewind, the Walkman switches to playback.

Other tape operations
On the remote control, press FF or REW (excluding U.S.A. model).

To	Press
Play the next track/succeeding 9 tracks from the beginning (AMS*)	FF•AMS once/repeatedly during playback
Play the current track/previous 8 tracks from the beginning (AMS*)	REW•AMS once/repeatedly during playback
Play the other side from the beginning (Skip Reverse function)	FF•AMS for 2 seconds or more during stop
Play the same side from the beginning (Rewind Auto Play function)	REW•AMS for 2 seconds or more during stop

* Automatic Music Sensor

Note on AMS
• The AMS function detects a blank of 4 seconds or longer between the tracks. If there is noise between the blank and may not operate. Likewise, if there is a low-level segment within a track, AMS may recognize it as a blank space.

A-B Repeat
A-B Repeat plays back repeatedly any portion of the tape you specified. Specify by tagging the beginning (point A) and the end (point B) of the portion during playback.

- On the main unit**
- 1 Press ◀▶•REPEAT for 2 seconds or more during playback to tag point A. "A" will flash in the display of the main unit.
 - 2 Press ◀▶•REPEAT again to tag point B. "A-B" will flash and the tape will be rewound to point A. Then "REP" appears in the display and the specified portion is played repeatedly.

On the remote control (excluding U.S.A. model)

- 1 Press ◀▶•■ twice quickly during playback to tag point A.
- 2 Press ◀▶•■ once more to tag point B. The tape will be rewound to point A. Then the specified portion is played repeatedly.

To cancel the A-B Repeat playback
Press ◀▶•REPEAT on the main unit. On the remote control, press ◀▶•■ (excluding U.S.A. model).

Notes

- You cannot specify a repeat portion to include both sides of the tape.
- You cannot specify a repeat portion of shorter than 2 seconds.
- After repeated operation, the actual portion that is played back may shift off somewhat from the exact portion specified with the tags due to tape slack.
- A-B Repeat will repeat 50 times before returning to normal playback if not canceled manually.
- Do not use the A-B Repeat function with tapes longer than 90 minutes. If you do, the tape may be damaged.

Recording (see Fig. D-①)

- You can record radio programs from the built-in radio, or record with the supplied microphone. In either case, use a new or fully charged battery.
- Note**
• If the record-protect tab is broken, you cannot record on that side.
- 1 Insert a normal (TYPE I) tape.
To record on both sides
Insert the cassette with the side to be first recorded on as the FWD (forward) side*.
* Make sure that "FWD" is displayed. If not, press and hold ■•RADIO OFF until "REV" changes to "FWD".
To record on one side only
Insert the cassette with the side to be recorded on as the REV (reverse) side**.
** Make sure that "REV" is displayed. If not, press and hold ■•RADIO OFF until "FWD" changes to "REV".

Note
• When the cassette holder is opened, the direction of the tape will be automatically set to "FWD".

- 2 Select a recording source:
To record with the microphone
Connect the supplied microphone to the MIC (PLUG IN POWER) jack. You can attach the microphone to your clothes as illustrated (see Fig. D-②).
To record from the radio
Tune in to the station you want to record (see "Listening to the Radio").

Slide REC.
"REC" appears in the display and recording starts after about two seconds. If you have started recording from the FWD side, recording will switch to reverse side automatically at the end of the FWD side.

To stop recording
Press ■•RADIO OFF (Excluding U.S.A. model: on the remote control, press ◀▶•■ to stop recording).

To reduce noise while recording AM programs
Set the ISS (Interference Suppress Switch) to the position that reduces noise the most.

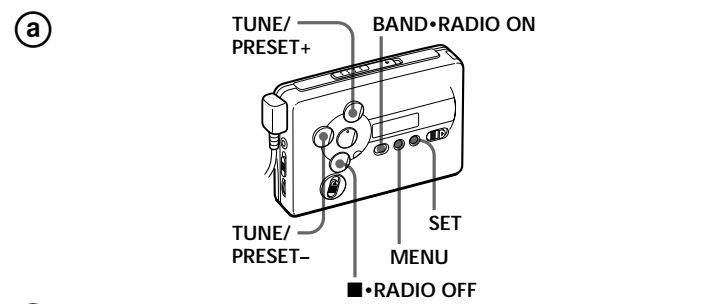
To monitor the recording sound
You can monitor the recording sound through headphones/earphones. Adjust monitoring level using VOL.

Notes on recording

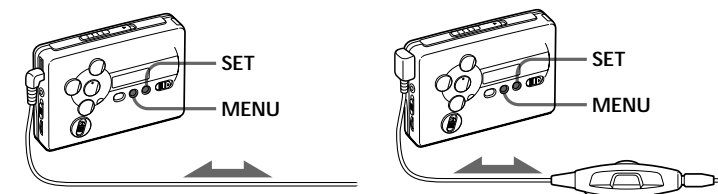
- The recording level is fixed.
- Sound emphasis (RV, MB, or GRV), AVLS and Dolby B NR settings do not affect recording.
- Actual recording will start about 2 seconds after you slide REC. Slide REC about 2 seconds before the moment you want to start recording, or you will miss the beginning of your recording.
- When recording on both sides, recording will not be made for about 10 seconds while the tape is switching sides.
- Do not use a CrO₂ (TYPE II) or metal (TYPE IV) tape. If you do, the sound may be distorted when you play back the tape, or the previous recording may not be erased completely.
- Do not connect or disconnect the headphones/earphones to/from REMOTE while recording from the radio. The recording condition may change abruptly, or noise may be recorded.
- To avoid noise interference, do not place it near a lamp cord or a fluorescent lamp when recording with the microphone.
- If a howling effect occurs, turn down the volume.
- All other operation cannot be made while recording. For other operation, stop recording first.

To prevent a tape from being accidentally recorded over (see Fig. D-③)
Break off the tabs from side A and/or B. To reuse the tape for recording, cover the tab hole with adhesive tape.

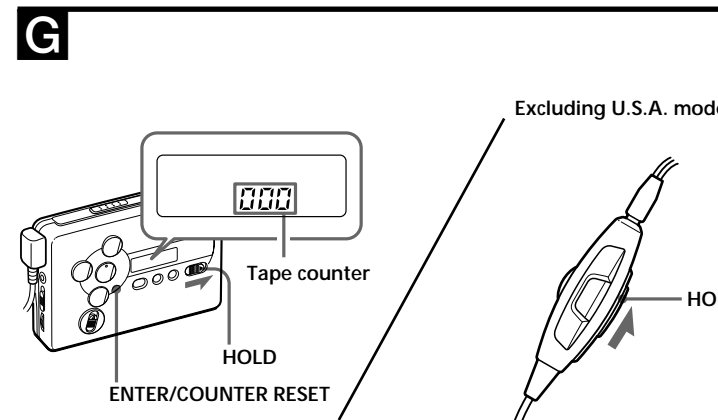
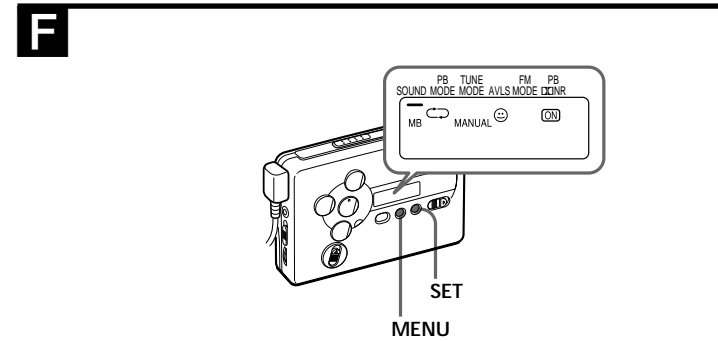
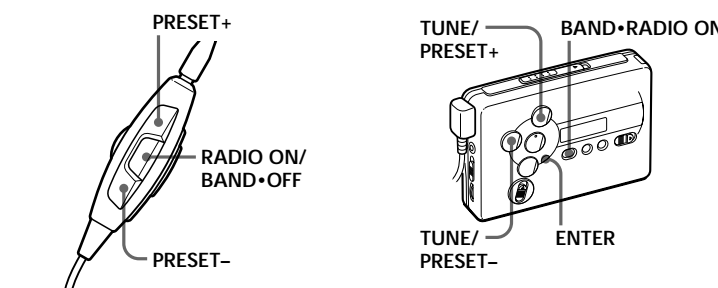
(turn over)



(a) U.S.A. model Other models



(c) Excluding U.S.A. model (d)



Listening to the Radio (see Fig. E-①)

1 Press BAND • RADIO ON to turn on the radio.

2 Press BAND • RADIO ON repeatedly to select AM, FM1, or FM2.

3 Press MENU on the main unit repeatedly and set " " (the cursor) in the display to TUNE MODE.

4 For manual tuning

① Press SET to choose MANUAL.
② Press TUNE/PRESET + or - repeatedly to tune in to the desired station. Keep pressing TUNE/PRESET + or - to scan for stations.

For preset tuning
① Press SET to choose PRESET.

② Press TUNE/PRESET + or - repeatedly to recall the desired preset station. To use preset tuning, preset stations first (see "Presetting Radio Stations").

To turn off the radio
Press ■•RADIO OFF.

To improve the broadcast reception

• **For AM:** The Walkman has a built-in antenna. Reorient the Walkman horizontally to obtain optimum AM reception.
• **For FM (see Fig. E-②):** Extend the headphones cord, the aerial (U.S.A. model only). Extend the cord of the remote control, the aerial (excluding U.S.A. model). If the reception is still not good, press MENU repeatedly to set the cursor in the display to FM MODE. Then press SET to choose from "MONO" (monaural), "LOCAL" or none (stereo) for best reception.

To operate from the remote control (excluding U.S.A. model) (see Fig. E-②)

To turn on the radio, press RADIO ON/BAND•OFF for more than one second (while the tape is in stop mode only).
To tune in or recall a preset station, press PRESET+ or -.
To turn off the radio, press RADIO ON/BAND•OFF.

Presetting Radio Stations (see Fig. E-②)

Once you store your favorite stations in memory, you can play them easily. You can preset up to 32 stations—12 each for FM1 and FM2 and 8 for AM (for the JpN area*, up to 16 stations—8 each for FM and AM).

* See "Receiving Stations Outside Your Country" (Excluding European, Saudi Arabian, and Chinese model).

Tuning in to and Storing Radio Stations Automatically (Auto-Memory Scanning function)

1 Press BAND • RADIO ON to turn on the radio.

2 Press BAND • RADIO ON repeatedly to select AM, FM1, or FM2.

3 Press ENTER until "A" appears in the display. The Walkman starts searching and storing stations. Then the preset number appears.

Note

• Do not remove the power sources until all the stations are stored.

Storing Radio Stations Manually (Manual-Memory function)

You can preset the stations in any order.

1 Press BAND • RADIO ON to turn on the radio.

2 Press BAND • RADIO ON repeatedly to select AM, FM1, or FM2.

3 Press ENTER. The frequency digits will flash in the display.

4 Press TUNE/PRESET + or - repeatedly to tune in to the desired station and press ENTER.

The preset number will flash in the display.
5 Press TUNE/PRESET + or - repeatedly to select the desired preset number and press ENTER. The station is preset to the number of your choice.

Notes

• If you cannot complete step 4 or 5 while the indications are flashing, repeat from step 3.
• If you preset a new station to the same preset number, the previously stored station will be erased.

To cancel the stored station

Follow the procedure above and in step 4, instead of tuning in to a station, press and hold TUNE/PRESET + or - until "----" is displayed. Press ENTER while "----" is flashing. The preset number will flash in the display. Press TUNE/PRESET + or - repeatedly to select the preset number you want to cancel and press ENTER.

Receiving Stations Outside Your Country (Excluding European, Saudi Arabian, and Chinese model) (see Fig. E-②)

1 Press BAND • RADIO ON to turn on the radio.
2 Press ENTER. The frequency digits will flash in the display.
3 Press and hold BAND • RADIO ON until "Eur", "JpN", or "USA" flashes.

4 Press BAND • RADIO ON repeatedly to select "Eur", "JpN", or "USA" and press ENTER.
5 Tune in to and store stations as necessary following the procedure of "Listening to the Radio" and "Presetting Radio Stations".

Area indication and frequency range

Area*	Frequency range FM (MHz)	AM (kHz)
Eur	87.5-108	531-1,602
JpN	76-90	531-1,710
USA	87.5-108	530-1,710

*Eur : European and other countries
JpN : Japan
USA: USA, Canada, and Central and South America

Using the Menu (see Fig. F)

Adjusting playback modes

To select playback direction mode

Press MENU repeatedly to set " " (the cursor) in the display to PB MODE. Then press SET to select the desired mode.

To play	Select
both sides repeatedly	↔
both sides once from the FWD side	→

To play a tape recorded with Dolby® NR system

Press MENU repeatedly to set the cursor in the display to PB D1 NR (Dolby noise reduction). Then press SET to show " NR".

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Emphasizing Sound

1 Press MENU repeatedly to move " " in the display to SOUND.
2 Press SET repeatedly to select the sound emphasis of your choice.

RV : Sound Revitalizer. Emphasizes treble sound.
MB : Mega Bass. Emphasizes bass sound (moderate effect).
GRV : Groove. Emphasizes bass sound (strong effect).
no message : normal (no effect).

Note

• If the sound becomes distorted with the GRV effect, select the mode MB or no message.

Protecting Your Hearing (AVLS)

When you set the AVLS (Automatic Volume Limiter System) function to active, the maximum volume is kept down to protect your ears.

1 Press MENU repeatedly in the playback, stop or radio mode to set the cursor to AVLS in the display. Then press SET to show " ".

To cancel the AVLS function
Press SET so that " " disappears.

Note

• If the sound is distorted when you listen to the bass-boosted sound with the AVLS function, turn down the volume.

Note on the menu mode

• The menu setting (except for AVLS) is stored even after the battery is replaced.

Using Other Functions (see Fig. G)

To lock the controls — Hold function

Slide HOLD switch on the main unit in the direction of the arrow to lock the controls of the main unit. To lock the controls on the remote control, slide the HOLD switch on the remote control in the direction of the arrow (excluding U.S.A. model).

• The nameplate indicating the operating voltage, power consumption, etc. is located on the bottom exterior of the battery charger.

On batteries

• Do not charge a dry battery.
• Do not carry the dry or rechargeable batteries with coins or other metallic objects. It can generate heat if the positive and negative terminals of the batteries are accidentally contacted by a metallic object.
• When you do not use the Walkman for a long time, remove the battery to avoid any damage caused by battery leakage and subsequent corrosion.

Notes

• The tape counter may show some deviation.
• The tape counter will not be displayed when the cassette compartment is empty.

► Additional Information

Precautions

For the customers in the U.S.A. RECYCLING NICKEL-CADMIUM BATTERIES

Nickel Cadmium batteries are recyclable. You can help preserve our environment by returning your unwanted batteries to your nearest point for collection, recycling or proper disposal.

Note: In some areas the disposal of nickel cadmium batteries in household or business trash may be prohibited.

RBRC (Rechargeable Battery Recycling Corporation) advises you about spent battery collection by the following phone number. Call toll free number: 1-800-822-8837 (United States and Canada only)

Caution: Do not handle damaged or leaking nickel-cadmium batteries.

On rechargeable battery and charger

• Remove the charger unit from the wall outlet as soon as possible after the rechargeable battery has been charged. Overcharging may damage the rechargeable battery.

• The battery charger and the rechargeable battery may become warm during charging, but this is not a problem.
• Do not tear off the film on the rechargeable battery.
• Use only the supplied battery charger to charge the supplied rechargeable battery.

• Be sure not to short-circuit the battery. When you carry it with you, use the supplied carrying case. If you are not using the case, do not carry the battery with other metallic objects such as keys rings in your pocket.
• If the rechargeable battery is new or has not been used for a long time, it may not be charged completely until you use it several times.

• The nameplate indicating the operating voltage, power consumption, etc. is located on the bottom exterior of the battery charger.

On batteries

• Do not charge a dry battery.
• Do not carry the dry or rechargeable batteries with coins or other metallic objects. It can generate heat if the positive and negative terminals of the batteries are accidentally contacted by a metallic object.
• When you do not use the Walkman for a long time, remove the battery to avoid any damage caused by battery leakage and subsequent corrosion.

On the unit

• Do not drop the unit or give a shock to the unit, or it may cause a malfunction.
• Do not leave the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or sand, moisture, rain, mechanical shock, or in a car with its windows closed.
• The LCD display may become hard to see or slow down when using the unit at high temperatures (above 40°C/104°F) or at low temperatures (below 0°C/32°F). At room temperature, the display will return to its normal operating condition.
• If the unit has not been used for long period of time, set it in the playback mode and warm it up for a few minutes before you start using again.

On tapes longer than 90 minutes

We do not recommend the use of tapes longer than 90 minutes except for a long continuous recording or playback. They are very thin and tend to be stretched easily.

On the remote control (excluding U.S.A. model)

Use the supplied remote control only with this unit.

On headphones/earphones

Road safely
Do not use headphones/earphones while driving, cycling, or operating any motorized vehicle. It may create a traffic hazard and is illegal in some areas. It can also be potentially dangerous to play your headphones/earphones at high volume while walking, especially at pedestrian crossings.

You should exercise extreme caution or discontinue use in potentially hazardous situations. Preventing hearing damage

Do not use headphones/earphones at high volume. Hearing experts advise against continuous, loud and extended play. If you experience a ringing in your ears, reduce volume or discontinue use. Caring for others
Keep the volume to a moderate level. This will allow you to hear outside sounds and to be considerate to the people around you.

Maintenance

To clean the tape head and path

Use the cleaning cassette CHK-1W (not supplied) for every 10 hours of use.

Note

• Use only the recommended cleaning cassette.

To clean the exterior

Use a soft cloth slightly moistened in water. Do not use alcohol, benzine or thinner.

Note

• Clean the battery case terminals (both inside and outside) periodically.

Troubleshooting

The sound drops out or comes with excessive noise.

• Clean the headphones/earphones and remote control plugs.

The unit does not operate at all.

• Charge the battery or replace the dry battery with a new one.
• HOLD is activated. Deactivate HOLD.

Tape operation is not possible.

• Insert a cassette tape.

The volume cannot be turned up.

• If AVLS is on, turn it off.
A beep sounds and recording is not possible when REC is slid.
• If the tab of the tape is broken off, cover the tab hole with adhesive tape.

The display and the operations are not normal.

• Remove the power sources for 15 seconds or more, and then set them again.

The radio and playback operates but recording is not possible.

• This condition may occur when the battery becomes weak. Replace or charge the battery.

Specifications

Radio section

Frequency range
FM: 65-74/87.5-108 MHz (Eastern Europe)
87.5-108 MHz (other countries)
AM: 530-1,710 kHz (North, Central, and South America)
531-1,602 kHz (other countries)

Tape section

Frequency response (Dolby NR off)
Playback: 40-15,000 Hz
Recording/playback: 100-8,000 Hz
Output
Headphones (◀) REMOTE jack
Load impedance 8-300 ohms

Input
Microphone (MIC) jack

General

Power requirements
1.5 V
Rechargeable battery
One R6 (size AA) battery
Dimensions (w/h/d)
Approx. 108.4 x 77.7 x 23.8 mm
(4 1/4 x 3 1/4 x 1 5/16 inches), incl. projecting parts and controls
Mass
Approx. 150 g (5.3 oz)
Approx. 215 g (7.6 oz) incl. rechargeable battery and a cassette

Supplied accessories

Battery case (1)
Stereo earphones with remote control (1) (except for U.S.A. model)
Stereo headphones (1) (U.S.A. model only)
Battery charger (1)
AC plug adaptor (1) (except for European, Australian, Saudi Arabian, Chinese, Hong Kong, U.S.A., Canadian, and Korean model)
Rechargeable battery (NC-6WM, 1.2 V, 600 mAh, Ni-Cd) (1)
Rechargeable battery carrying case (1)
Carrying pouch (1)
Stereo microphone (1)

Design and specifications are subject to change without notice.