

Radio Cassette Player

Operating Instructions



©2003 Sony Corporation Printed in Malaysia



http://www.sony.net/

"WALKMAN" is a registered trademark of Sony Corporation to represent Headphone Stereo products.

WALKMAN is a registered trademark of Sony Corporation.

The validity of the CE marking is restricted to only those countries where it is legally enforced, mainly in the countries EEA (European Economic Area).

WARNING

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

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

For customers in the United States

Owner's Record

The model number is located on the front and the serial number is located inside the cassette 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-FX890

Serial No. _____

Product registration

Please register this product on line at www.sony.com/productregistration.
<<http://www.sony.com/productregistration>>

Proper registration will enable us to send you periodic mailings about new products, services, and other important announcements. Registering your product will also allow us to contact you in the unlikely event that the product needs adjustment or modification. Thank you.

INFORMATION

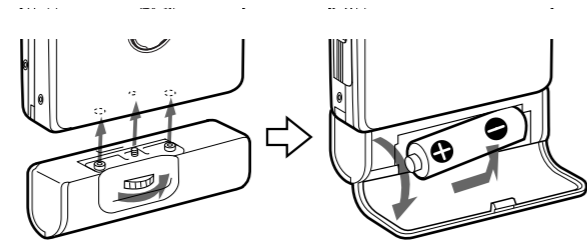
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate 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:

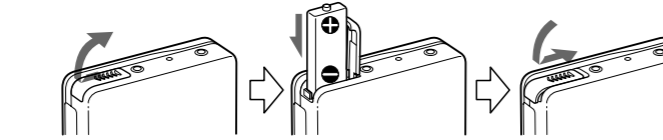
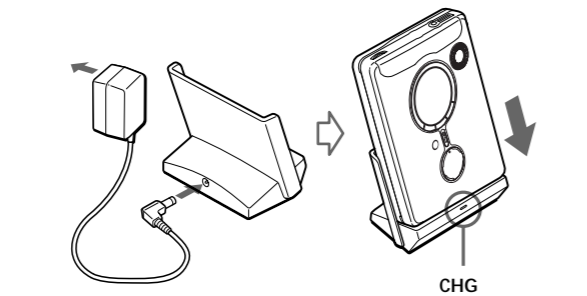
- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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

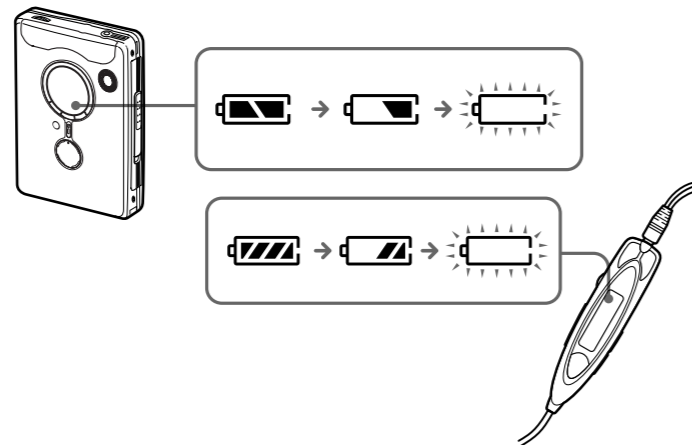
A



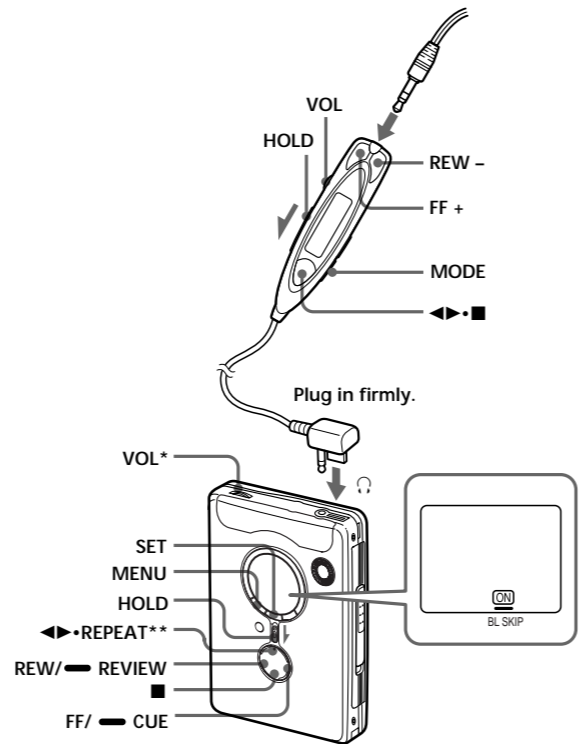
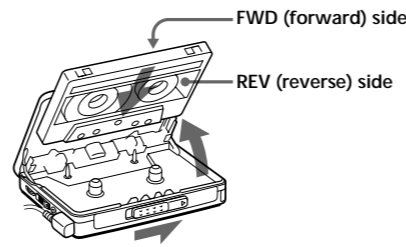
B



C



D



- * There is a tactile dot beside VOL on the main unit to show the direction to turn up the volume.
- ** The button has a tactile dot.

- To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.
- To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.
- Certain countries may regulate disposal of the battery used to power this product. Please consult with your local authority.

Preparations

Prepare a dry battery (not supplied) or the rechargeable battery (supplied).

Dry Battery A

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 B

Charge the rechargeable battery before using it for the first time.

- 1 Insert the supplied rechargeable battery NH-14WM (A) into the rechargeable battery compartment with correct polarity.
- 2 Connect the supplied AC power adaptor to the charging stand, plug in the AC power adaptor to the house current (mains).
- 3 Place the main unit on the charging stand. The CHG lamp will light up during charging. Full charging takes about 6 hours regardless the battery power remaining. The CHG lamp will go off when the battery is fully charged.

Notes

- This charging stand charges the rechargeable battery based on a timer. If you remove the unit from the charging stand while it is charging, the timer will be reset and full charging will take about 6 hours when you place the unit on the charging stand again.
- You can use the unit before the CHG lamp goes off, but in that case, battery life will be shorter depending on the charging time.

- Do not use the unit while it is charging. Remove the unit from the charging stand when using it.
 - If you operate the unit while it is charging, the battery will not be charged.
 - If you operate the unit while it is charging, this may cause a malfunction.
- Do not place the unit on the charging stand without the rechargeable battery. Otherwise, this may cause malfunction.

When to replace/charge the battery C

Replace or charge the battery when "BL SKIP" flashes in the display.

Battery life* (Approx. hours)

Sony alkaline LR6 (SG)**	
Tape playback	50
Radio reception	56

Rechargeable battery NH-14WM (A)	
Tape playback	30
Radio reception	34

Sony alkaline LR6 (SG)** and Rechargeable NH-14WM (A)	
Tape playback	80
Radio reception	90

* Measured value by the standard of JEITA (Japan Electronics and Information Technology Industries Association). (Using a Sony HF series cassette tape)

** When using a Sony LR6(SG) alkaline dry battery (produced in Japan).

Notes

- The battery life may be shorter depending on the operating condition, the surrounding temperature and battery type.
- The AVLS setting (see "Using the Menu") will be cancelled when you replace the battery.

Playing a Tape

D

- 1 Insert a cassette and if the HOLD function is on, slide the HOLD switch in the opposite direction of the arrow to unlock the controls.
- 2 Press ◀▶•REPEAT on the main unit and adjust the volume with VOL. (On the remote control, press ◀▶(play)•■(stop).)

When adjusting the volume on the remote control
Set the VOL control on the main unit to around 6.

When adjusting the volume on the main unit
Set the VOL control on the remote control at maximum.

Operation on the remote control

To	Press
Switch playback to the other side	◀▶•■ for 2 seconds or more during playback
Stop playback	◀▶•■ once during playback

Repeat the current track (Repeat Single Track function)

◀▶•■ twice during playback
To stop a single repeat, press ◀▶•■ once.

Fast forward*	FF + during stop
Rewind*	REW - during stop

Search forward during playback (CUE)

Press and hold FF + and release it at the point you want

Search backward during playback (REVIEW)

Press and hold REW - and release it at the point you want

Play the next track/succeeding 9 tracks from the beginning (AMS**)

FF + once/repeatedly during playback

Play the current track/previous 8 tracks from the beginning (AMS**)

REW - once/repeatedly during playback

Play the other side from the beginning (Skip Reverse function)

FF + for 2 seconds or more during stop

Play the same side from the beginning (Rewind Auto Play function)

REW - for 2 seconds or more during stop

Operation on the main unit

To	Press
Switch playback to the other side	◀▶•REPEAT during playback
Stop playback	■ (stop)
Repeat the current track (Repeat Single Track function)	◀▶•REPEAT for 2 seconds or more during playback To stop a single repeat, press ◀▶•REPEAT once.

Fast forward* FF/CUE during stop

Rewind* REW/REVIEW during stop

Search forward during playback (CUE)

Press and hold FF/CUE and release it at the point you want

Search backward during playback (REVIEW)

Press and hold REW/REVIEW and release it at the point you want

Play the next track/succeeding 9 tracks from the beginning (AMS**)

FF/CUE once or repeatedly during playback

Play the current track/previous 8 tracks from the beginning (AMS**)

REW/REVIEW once or repeatedly during playback

Play the other side from the beginning (Skip Reverse function)

FF/CUE for 2 seconds or more during stop

Play the same side from the beginning (Rewind Auto Play function)

REW/REVIEW for 2 seconds or more during stop

* Press ◀▶• REPEAT (on the remote control, press ◀▶•■) during fast forward or rewind to start playback.

**Automatic Music Sensor

To skip a long blank space (BL SKIP* function)

On the remote control:

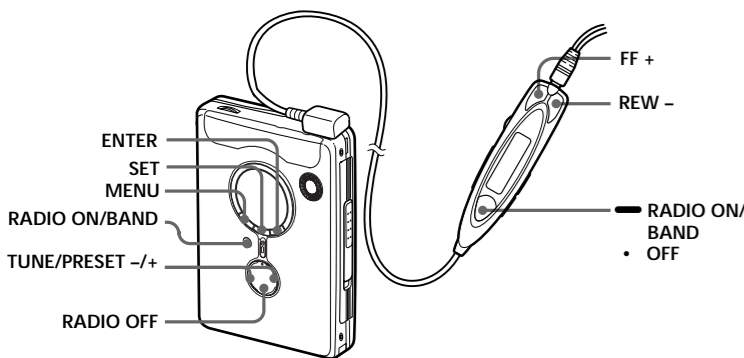
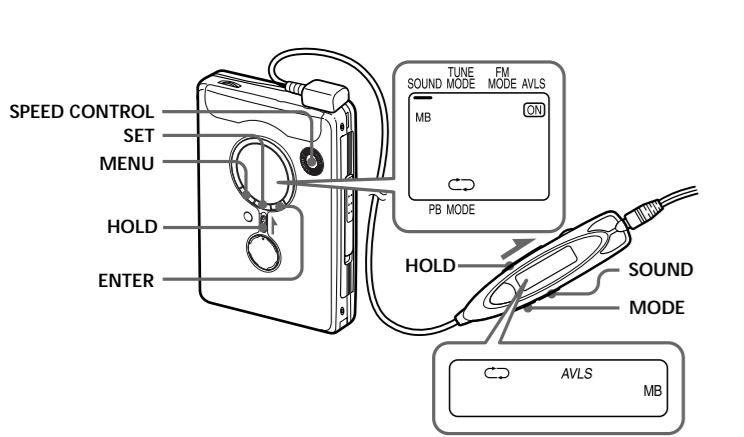
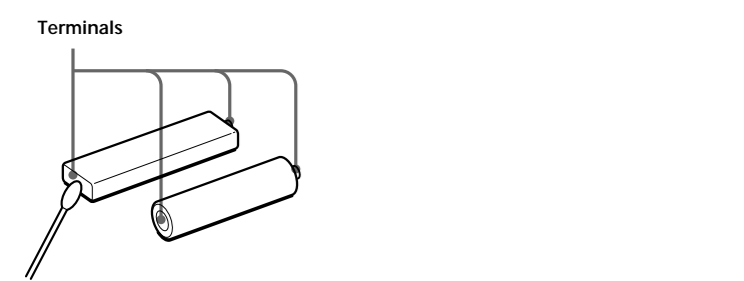
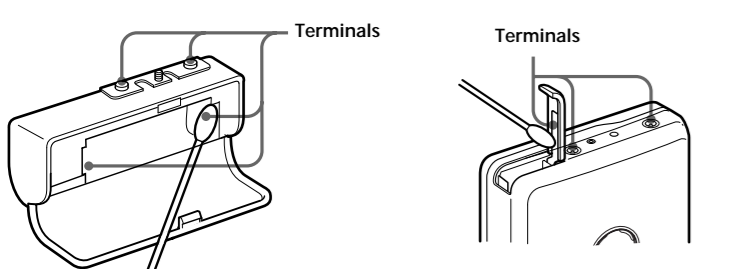
- 1 Press MODE repeatedly to show "BL SKIP".

On the main unit:

- 1 Press MENU repeatedly to set " " (the cursor) in the display to BL SKIP.
- 2 Press SET to show "☺".

* When the BL SKIP function is on, the tape is fast-forwarded to the next track if there is a blank space longer than 12 seconds.

(turn over)

E**F****G**

Listening to the Radio **E**

- 1 Press RADIO ON/BAND to turn on the radio.
- 2 Press RADIO ON/BAND repeatedly to select AM or FM.
- 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. Hold down TUNE/PRESET + or - for a few seconds 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: Reorient the unit itself.
 - For FM: Extend the remote control cord (antenna). 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

To turn on the radio, press RADIO ON/BAND•OFF for more than 1 second (while the tape is in stop mode only). To select the band, press RADIO ON/BAND•OFF for more than 1 second while the radio is on. To tune in or recall a preset station, press FF + or REW -. To turn off the radio, press RADIO ON/BAND•OFF.

Presetting Radio Stations **E**

You can preset up to 30 stations—20 for FM and 10 for AM (for the JPn area*, up to 16 stations—8 for FM and 8 for AM).

* Only if available. See "Receiving Stations Outside Your Country/Region".

Presetting Automatically Scanned Stations

- 1 Press RADIO ON/BAND to turn on the radio.
- 2 Press RADIO ON/BAND repeatedly to select AM or FM.
- 3 Press and hold ENTER for more than 3 seconds. Preset number 1 will flash in the display and the main unit starts scanning the stations from the lower frequencies and stops for about 5 seconds when a station is received.

- 4 If you wish to preset the currently received station, press ENTER while the preset number is flashing. The received station is preset on preset number 1 and the unit starts scanning for the next receivable station.
- 5 Repeat step 4 until all receivable stations are preset.

To stop scanning
Press RADIO OFF. The radio is turned off at the same time.

- Notes**
- If stations are already stored, the newly preset stations replace the old ones when the above procedure is completed.
 - If stations cannot be preset automatically, preset them manually.

Presetting Stations Manually

- 1 Press RADIO ON/BAND to turn on the radio.
- 2 Press RADIO ON/BAND repeatedly to select AM or FM.
- 3 Press ENTER. The frequency digits will flash in the display.
- 4 While the frequency digits are flashing, tune in to a station you wish to store using TUNE/PRESET + or - and press ENTER. The preset number will flash in the display.

- 5 While the preset number is flashing, select the preset number you want using TUNE/PRESET + or - and press ENTER.

- Notes**
- If you cannot complete step 4 or 5 while the indicators are flashing, repeat from step 3.
 - If a station is already stored, the new station replaces the old one.

Playing the Preset Radio Stations

- 1 Press RADIO ON/BAND to turn on the radio.
- 2 Press RADIO ON/BAND repeatedly to select AM or FM.
- 3 Press MENU repeatedly to set the cursor in the display to TUNE MODE. Then press SET to display "PRESET".
- 4 Press TUNE/PRESET + or -.

To cancel a stored station

- 1 Follow the procedure above and in step 4, select the preset number you want to cancel and then press ENTER. The frequency digits will flash in the display.
- 2 Press and hold TUNE/PRESET + or -. The frequency digit starts running up or down. Keep holding down the button until "----" is displayed.
- 3 Press ENTER while "----" is flashing. A preset number will flash in the display.
- 4 Press ENTER to cancel the stored station.

Scanning the Preset Radio Stations — DAPS (Digital Auto Preset Scanning)

- 1 Press RADIO ON/BAND to turn on the radio.
- 2 Press RADIO ON/BAND repeatedly to select AM or FM.
- 3 Press and hold RADIO ON/BAND for 2 seconds or more.

- The preset stations of the selected band will be played for about 5 seconds each. (During DAPS the indicators in the display flash.)
- 4 Press RADIO ON/BAND again to select the station while the desired preset station is being played.

- Notes**
- If there are no stations stored, the DAPS function does not work.
 - Until a station is selected in step 4, the DAPS function turned on in step 3 will continue.

Receiving Stations Outside Your Country/Region (Excluding European, Saudi Arabian, and Chinese models)

- 1 Press RADIO ON/BAND to turn on the radio.
- 2 Press ENTER. The frequency digits will flash in the display.
- 3 Press and hold RADIO ON/BAND until "Eur", "USA" or "JPn" flashes.
- 4 Press RADIO ON/BAND repeatedly to select "Eur", "USA" or "JPn" 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
USA	87.5 - 108	530 - 1 710
JPn	76.0 - 90.0	531 - 1 710

* Eur :European and other countries/regions
USA :USA, Canada, and Central and South America
JPn: Japan

Using the Menu **F**

Adjusting Playback Modes

On the remote control:
Press MODE repeatedly. With each press, the indications change.

On the main unit:
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	→

Emphasizing Sound

On the remote control:
1 Press SOUND repeatedly. With each press, the indications change.

The indications change as follows:
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)

- On the main unit:**
- 1 Press MENU repeatedly to set the cursor in the display to SOUND.
 - 2 Press SET repeatedly to select the sound emphasis of your choice.

Note
If the sound is distorted with the mode "GRV", turn down the volume of the main unit or select other modes.

Protecting Your Hearing — AVLS (Automatic Volume Limiter System)

The maximum volume is kept down to protect your ears.

On the remote control:
Hold down MODE for more than 10 seconds until "AVLS" appears in the display.

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

To cancel the AVLS function

On the remote control:
Hold down MODE again for more than 3 seconds until "AVLS" disappears.

On the main unit:
Press SET so that "AVLS" disappears from the display.

Using Other Functions **F**

Adjusting the Tape Playback Speed

You can adjust the playback speed using SPEED CONTROL. Turn SPEED CONTROL to:
- (slow) to play back at a slower speed.
Center position to play back at normal speed.
+ (fast) to play back at a faster speed.

Locking the Controls — HOLD Function

Slide the HOLD switch in the direction of the arrow to lock the controls of the main unit (except SPEED CONTROL) or the remote control.

Precautions

For the customers in the USA and Canada
RECYCLING NICKEL METAL HYDRIDE BATTERIES
Nickel Metal Hydride batteries are recyclable. You can help preserve our environment by returning your used rechargeable batteries to the collection and recycling location nearest you.



For more information regarding recycling of rechargeable batteries, call toll free 1-800-822-8837, or visit <http://www.rbrc.org/>.

Caution: Do not handle damaged or leaking Nickel Metal Hydride batteries.

On charging

- The supplied charging stand can be used only with this unit. No other model can be charged using this stand.
- Remove the AC power adaptor from the wall outlet as soon as possible after the rechargeable battery has been charged. Overcharging may damage the rechargeable battery.
- The charging stand 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 charging stand 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.

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 are not going to use the main unit for a long time, remove the battery to prevent any damage from battery leakage and corrosion.

On AC power adaptor

- Use only the supplied AC power adaptor (for charging stand). Do not use any other AC power adaptor.



- Connect the AC power adaptor to an easily accessible AC outlet. Should you notice an abnormality in the AC power adaptor, disconnect it from the AC outlet immediately.
- Do not touch the AC power adaptor with wet hands.

On handling

- 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.
- We do not recommend the use of tape longer than 90 minutes. They are very thin and tend to be stretched easily. This may cause malfunction of the unit or sound deterioration.
- 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, set it in the playback mode to warm up for a few minutes before you start using again.

On the remote control

Use the supplied remote control only with this unit.

On headphones/earphones

Road safety
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.

On maintenance

- Clean the tape head and tape path, using a cotton swab and commercially available cleaning solvent after every 10 hours of use.
- To clean the exterior, use a soft cloth slightly moistened in water. Do not use alcohol, benzine or thinner.
- Clean the headphones/earphones and remote control plugs periodically.
- Clean the battery case terminals (both inside and outside) and the terminals periodically with a cotton swab or soft cloth as illustrated. **G**

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.

The display and the operations are not normal.
• Remove the power sources for 15 seconds or more, and then set them again.

Specifications

Radio section
Frequency range
FM: 76.0 - 90.0 MHz (Japan)
87.5 - 108 MHz (other countries/regions)
AM: 531 - 1 710 kHz (Japan)
530 - 1 710 kHz (North, Central, and South America)
531 - 1 602 kHz (other countries/regions)

Tape section
Frequency response
Playback: 40 - 15 000 Hz
Output
Headphones (7) jack
Load impedance 8 - 300 Ω

General
Power requirements
1.5 V
Rechargeable battery
One R6 (size AA) battery

Dimensions (w/h/d)
Approx. 77.1 × 108.0 × 22.5 mm
(3¼ × 4¼ × ¾ inches) excl. projecting parts and controls

Mass
Approx. 153 g (5.4 oz) (main unit only)

Supplied accessories
AC power adaptor (1), Battery case (1)
Stereo headphones or earphones with remote control (1), Charging stand (1)
Rechargeable battery (NH-14WM(A), 1.2 V, 1 350 mAh (min), Ni-MH) (1)
Rechargeable battery carrying case (1)
Carrying pouch (1)

Design and specifications are subject to change without notice.

SONY

Tape Cassette Player/Recorder/CD Player/Mini Disc
DAT/Radio/Head Phone/Speaker/MIC/Personals

Portable Audio

LIMITED WARRANTY

Sony Electronics Inc. ("Sony") warrants this Product (including any accessories) against defects in material or workmanship as follows:

1. LABOR: For a period of 90 days from the date of purchase, if this Product is determined to be defective, Sony will repair or replace the Product, at its option, at no charge, or pay the labor charges to any Sony authorized service facility. After the Warranty Period, you must pay for all labor charges.

2. PARTS: In addition, Sony will supply, at no charge, new or rebuilt replacements in exchange for defective parts for a period of one (1) year. After 90 days from the date of purchase, labor for removal and installation is available from Sony authorized service facilities or a Sony Service Center at your expense.

To obtain warranty service, you must take the Product, or deliver the Product freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to any authorized Sony service facility.

This warranty does not cover customer instruction, installation, set up adjustments or signal reception problems.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of, or to any part of the Product, including the antenna. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by Sony to service the Product. This warranty does not cover Products sold AS IS or WITH ALL FAULTS, or consumables (such as fuses or batteries). This warranty is valid only in the United States.

Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

This warranty is invalid if the factory applied serial number has been altered or removed from the Product.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. SONY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. In addition, if you enter into a service contract with the Sony Partnership within 90 days of the date of sale, the limitation on how long an implied warranty lasts does not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

For your convenience, Sony Electronics Inc. has established telephone numbers for frequently asked questions:

To locate the servicer or dealer nearest you, or for service assistance or resolution of a service problem, or for product information or operation, call:

Sony Customer Information Services Center
1-800-222-7669
or visit the Sony Web Site:
www.sony.com

For an accessory or part not available from your authorized dealer, call:

1-800-488-SONY (7669)