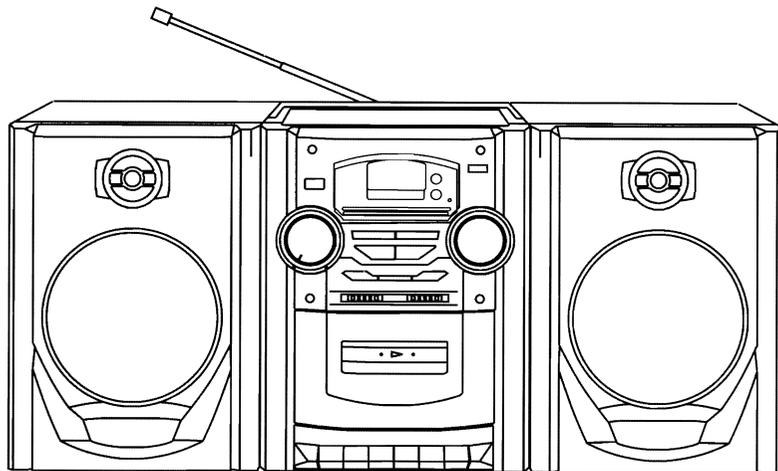# Hamilton

CD-563

Stereo Component System

OPERATING GUIDE

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates that dangerous voltage constituing a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompany-ing this unit.

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

CAUTION-USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED IN THE OPERATING INSTRUCTIONS MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

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

FCC INFORMATION
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.

CAUTION:
WHEN INSTALLING THE BATTERIES
To prevent leakage from the batteries, which is corrosive and can cause personal injury and damage to the unit, observe the following precautions:
1. The batteries must be installed correctly, Match the polarities (+ and - signs) on the batteries to the polarities shown on the back of the unit.
2. Do not mix new batteries with old used batteries.
3. Only use batteries of the same type and brand.
4. If the unit will not be used for an extended period of time, remove the batteries and store them in a cool place.
5. Carefully follow the battery manufacturer's instructions for proper use and disposal.
6. DO NOT ALLOW YOUNG CHILDREN TO HANDLE BATTERIES.

NOTE:
When the batteries have become discharged, they must be disposed of in a safe manner that complies with all applicable laws.

IMPORTANT SAFETY INSTRUCTIONS

1. **Read Instructions** - All the safety and operating instructions should be road before theproduct is operated.

2. **Retain Instructions** - The safety and operating Instructions should be retained for future reference.

3. **Heed Warnings** - All warnings on the product and in the operating instructions should be adhered to.

4. **Follow Instructions** - All operating and use instructions should be followed.

5. **Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. **Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

7. **Water and Moisture** - Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

8. Accessories - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn(Figure 131.2)

Figure 131.2

9. **Ventilation** - Slots and openings in the cabinet are providedfor ventilation and to ensure reliable operation of the product audio protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

10. **Power Sources** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

11. **Grounding or Polarization** - This product may be equipped with a polarized alternating-current lone plug (a plug having one blade wider than the other). This plug will fir into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

12. **Power-Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, playing particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

13. **Outdoor Antenna Grounding** - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANS/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. (Figure 131.1)
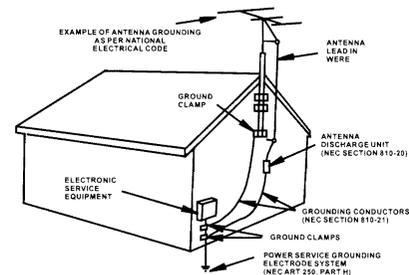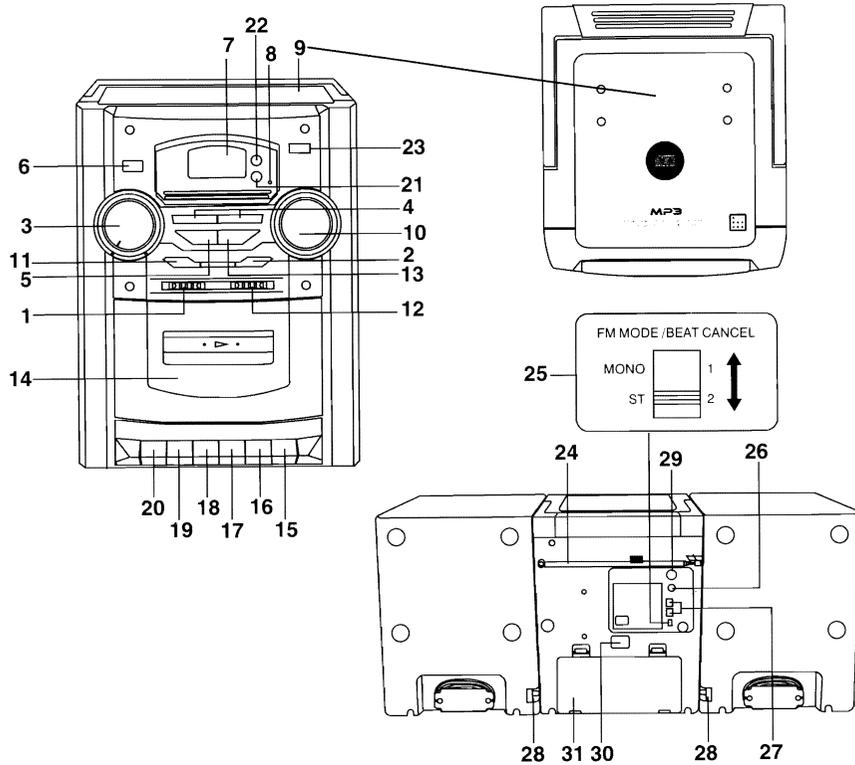

Figure 131.1

14. **Lightning** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

15. **Power Lines** - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

16. **Overloading** - Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shook.

17. **Object and Liquid Entry** - Never push objects of any kind into this product though openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock, Never spill liquid of any kind on the product.

18. **Servicing** - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

19. Damage Requiring Service- Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    a) when the power-supply cord or plug is damaged,
    b) If liquid has been spilled, or objects to have fallen into the product,
    c) If the product has been exposed to rain or water,
    d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product its normal operation.
    e) If the product has been dropped or damaged in any way, and
    f) when the product exhibits a distinct change in performance-this indicates a need for service.

20. **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristic as the original part. Unauthorized substitutions may result in fire, electric shook, or other hazards.

21. **Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

22. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Location of Controls

1. Function switch
   (TAPE/OFF,RADIO,CD/USB)
2. USB function button (USB)
3. Volume control (VOLUME)
4. Skip/Search Buttons (DOWN/REW,FF/UP)
5. Stop button (■)
6. Bass expander button (BASS)
7. CD track number display (TRACK NO.)
8. Indicator (STEREO)
9. CD compartment
10. Tuning control (TUNING)
11. CD function button (CD)
12. Radio band switch (AM,FM)
13. Play/Pause button (►/II)
14. Cassette holder
15. Pause button (PAUSE)
16. Stop/ Eject button (STOP/EJECT)

17. Fast forward button (FFWD)
18. Rewind button (REW)
19. Play button (PLAY)
20. Record button (REC)
21. Repeat button (REPEAT/RANDOM)
22. Memory button (MEMORY/FOLDER)
23. USB port
24. Telescopic aerial Antenna
25. FM mode/ Beat cancel switch
26. Headphones socket (PHONES)
27. Speaker terminals (SPEAKERS)
28. Speaker release levers
29. Microphone socket
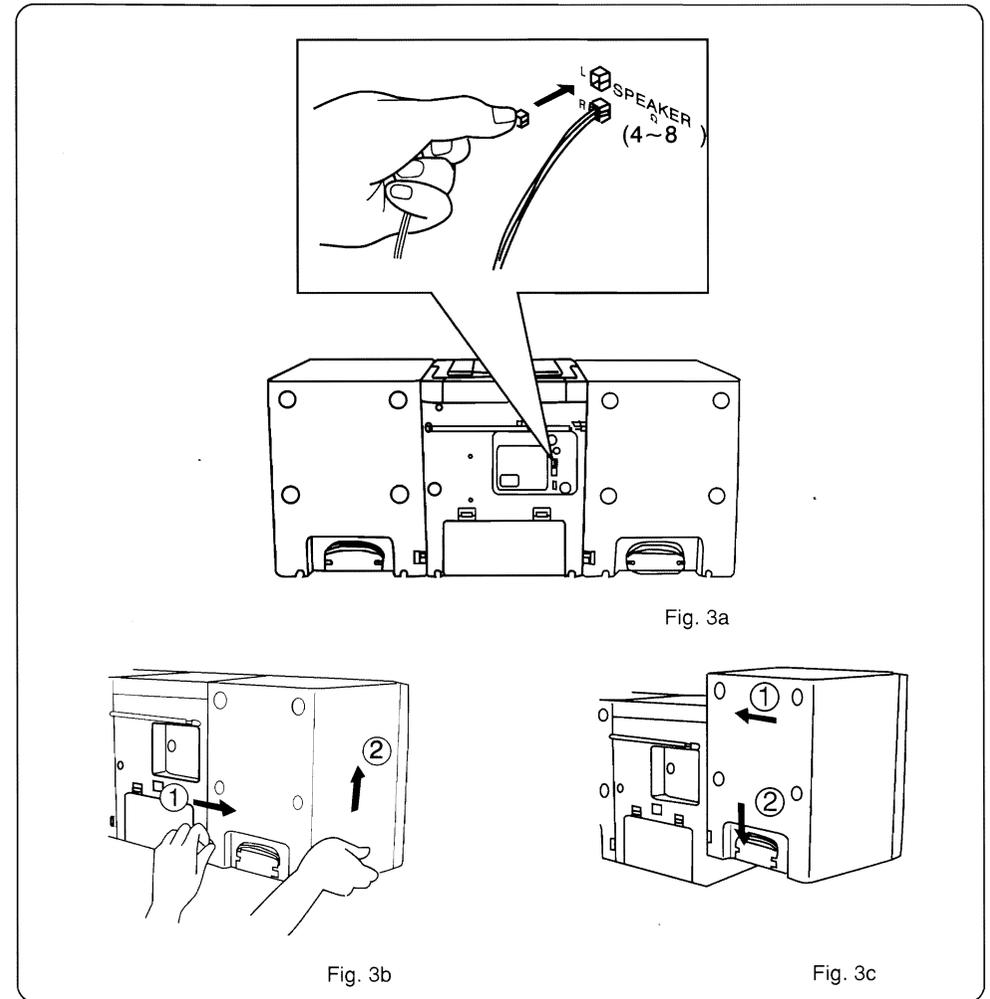30. AC input socket (AC INPUT)
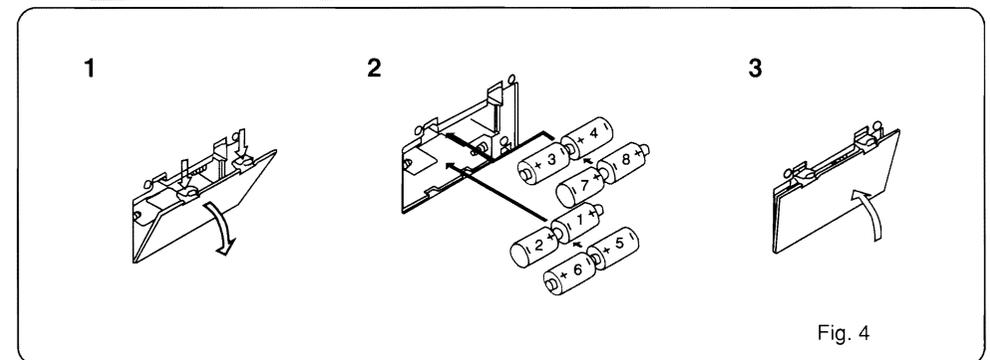31. Battery compartment lid

Fig. 3a

Fig. 3b

Fig. 3c
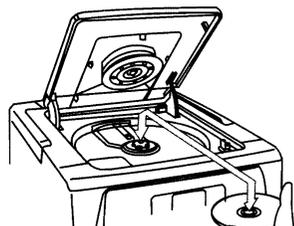
Fig. 4

COMPACT
disc
DIGITAL AUDIO
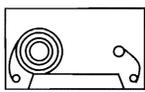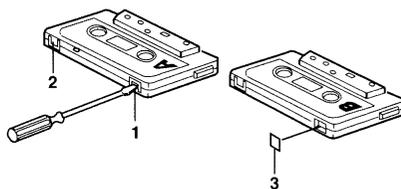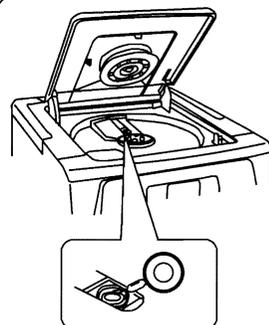
Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

GENERAL OPERATION

Adjusting the volume: Turn the VOLUME control.

Press the DBBS button to ON to enhance the bass sound.

Connect stereo headphones (not supplied) to the PHONES socket for monitoring or for private listening.

The speakers are automatically disconnected when headphones are connected.

CD PLAY

Use compact discs bearing the symbol shown in Fig. 4 In addition to conventional 12 cm CDs, this system can be used to play 8 cm CDs without an adaptor

1. Set the FUNCTION switch to CD.
2. Press the CD compartment lid (CD OPEN/ CLOSE portion) to open it.
3. Place the disc with the label facing up on the turntable (Fig. 5). (Place only one disc at a time.)
4. Press the CD compartment lid (CD OPEN/CLOSE portion) to close it. The total number of tracks on the disc appears on the TRACK NO. display.
5. Press the ►/II button.
   - To start play from the desired track, select the track by using the I◄◄/◄◄ or ►►/►►I buttons, then press the ►/II button.

Note:

If a disc is loaded upside down, or if no disc is loaded, 00 appears and the CD player will not operate.

6. Press the button to end disc play. When the last track has been played, the player stops automatically.
7. To turn the CD Player off, set the function switch to TAPE/OFF.

Note:

- Do not open the CD compartment during CD play. Always press the button and wait for the disc to top rotating before opening the CD compartment.
  - This unit can play back the CD-R/RW as well. however, some CD-R/RWS can not be played back depending on the recording conditions.

Notes on handling compact discs

- Do not expose the disc to direct sunlight, high humidity or high temperatures for extended periods of time.
- Discs should be returned to their cases after use.
- Do not apply paper or write anything on the disc surface.
- Handle the disc by its edge. Do not touch the playing surface (glossy side).
- Fingerprints and dust should be carefully wiped off the playing surface of the disc with a soft cloth. Wipe in a straight motion from the center to the outside of the disc.
- - Never use chemicals such as record cleaning sprays, antistatic sprays or fluids, benzene or thinner to clean compact discs.

Temporarily stopping play

Press the ►/II button . The CD PLAY indicator Press the button. The CD PLAY indicator blinks. To resume play, press the button again.

Skip play

To skip to track 6 while track 3 is playing, press the ►►/►►I button repeatedly until 6 appears on the display. To skip back to track 3 while track 6 is playing, press the I◄◄/◄◄ button repeatedly until 3 appears.

Search(forward/reverse)

If the ►►/►►I or I◄◄/◄◄ button is pressed during play, the player will search at high speed in the forward or reverse direction while the button is being pressed. When the button is released normal play will continue.

Repeat play

Press the REPEAT/RANDOM button before or during play. Each time the button is pressed, the repeat mode changes.

PROGRAMMED PLAY

Up to 20 tracks on a disc can be programmed for play in any order.
- To begin the programming procedure, select CD function first.
- The same track can be programmed more than once.
- Load a disc that you want to program before starting programmed play.

1. Press the ■ button if necessary.
2. Press the MEMORY/FOLDER button
3. Select a track by using the ►►/►►I and I◄◄/◄◄ buttons.
4. Press the MEMORY/FOLDER button.
5. Repeat steps 3 - 4 to program additional tracks.
6. Press the button to start play. When all programmed tracks have been played, the player stops automatically. ---the player stops automatically. memory.
    - To cancel programmed play, press the ■ button twice.

Checking the program

Press the MEMORY/FOLDER button twice in the stop mode, the programmed tracks sequentially appear on the display.

Changing the program

To add a new selection to a program:
1. In the stop mode, press the MEMORY/FOLDER button.
2. Select the track number as explained above.
3. Press the MEMORY/FOLDER button.

WHAT TO DO IF...

If an abnormal display indication or an operating problem occurs, disconnect the mains lead and remove all batteries. Wait at least5 seconds, then reconnect the mains lead and reinstall the batteries. Resume the operation.

MP3 CD Play

1. Load the MP3 CD
   The total number of tracks on the MP3 CD appear on the display.
2. Press the FOLDER - or + button on the remote control to select the desired folder.
3. Press the FILE - or + button on the remote control (or Press the I◄◄/◄◄ of ►►/►►I button on the main unit) to select the desired file.
4. Press the ■ button to start play.

Note: Do not open the MP3 compartment during MP3 play. Always press the ■ button and wait for the disc to top rotating before opening the MP3 compartment

Programmed playback [MP3 CD]

Up to 20 tracks on a MP3 CD can be programmed for play in any order.
1. Press the ■ button if necessary.
2. Press the MEMORY/FOLDER button.
3. Press the FOLDER - or + button to select desired folder.
4. Press the FILE- or +button (or I◄◄/◄◄ or ►►/►►I button on the main unit) to select desired file.
5. Press the MEMORY/FOLDER button.
6. Repeat steps 3 - 5 to program additional tracks
7. Press the ►/II button to start program. play "PRO." remains lit.
8. Press the ■ button at any time to stop the program play.

When all programmed tracks have been played, the player stops automatically.
- The program contents are retained in memory. If you want to listen the programmed track again, press the ►/II button.
- To cancel programmed play, press the ■ button twice or set the FUNCTION switch to RADIO or TAPE.

Changing a program

To add a new track to a program:
1. In the stop mode, press the MEMORY/FOLDER button repeatedly until last programmed number appears on the display.
2. select a track as explained above.
3. Press the MEMORY/FOLDER button.

To change a track:

1. In the stop mode, press the MEMORY/FOLDER button repeatedly until the programmed number to change its track number is displayed
2. Select a track as explained above.
3. Press the MEMORY/FOLDER button.
Note:
Programmed details cannot be partially or inserted.

Checking the program

Press the MEMORY/FOLDER button repeatedly in the stop mode. After last programmed number appears, the programmed details sequentially appear on the display.If an abnormal display occurs, disconnect the AC cord and remove the batteries.After 5-10 seconds reconnect and try again.

USB MEMORY DEVICE OPERATION

IMPORTANT IMFORMATIONS:
- Copyright protection files cannot be played back.
- Copyright protection files on the USB memory device are skipped automatically when played back.
- Recommended use:
  Flash memory type USB memory player Not recommended:
  Hard Disc Memory type USB player.
- Some flash memory player does not play successfully with this unit.

Before use
Open the cover of USB port, Connect the USB memory device to the USB PORT OF THE MAINS
UNIT CORRECTLY AS SHOWN BELOW.
- Some USB memory devices cannot be used.
- This unit can recognize only MP3 or WMA(Window Media Audio)files.
- This unit can recognize up to 999 files or folders in USB memory device. However some cannot be recognized depending on the folder structure.
- It may take more time for the reading operation depending on the recording condition.
- Please refer to "MP3/WMA CD information"

Basic playback
1. Set the FUNCTION switch to CD/USB.
2. Press the USB button to select USB. The last folder number in the USB memory device appears.
   - If the connection of the USB memory device is failed or the unit cannot recognize the USB memory device. "no" appears.
   - If there`s no file in the USB memory device, or just some empty folders in the USB memory device, "no" appears.
3. Press the PLAY/PAUSE ►/II button to select the desired folder.
4. Press the MEMORY/FOLDER button, "Folder" blinks on the display, then press the I◄◄/◄◄ or ►►/►►I to select the desired folder.
5. When the first file number of selected folder appears press the I◄◄/◄◄ or ►►/►►I button to select a desired file and playback start automatically.
6. Press the STOP ■ button to end play back. When the last file has been played, the player stops automatically.
7. To turn the USB player off, set the FUNCTION switch to TAPE/OFF.

Note:
Only select the folder in playing mode.

Temporarily stopping playback
Refer to the same description of "CD PLAY"

Programmed play
Refer to the description of "MP3/WMA CD OPERATION"

Removing the USB memory device
Do one of the followings:
- Press the STOP ■ button
- To change to other functions.
- Turn off the power.

Note:
- Do not disconnect the USB memory device during playback. or the data may be damaged.
- Always close the cover of USB port when you don't use the USB memory device for a long period.

LISTENING TO TAPES

1. Set the FUNCTION switch to TAPE .
2. Press the STOP/EJECT button. The cass-ette holder opens.
3. Load the cassette into the cassette holder(Fig.7). After Loading the cassette, press the cassette holder back into position.
4. Press the PLAY button to begin playback.
5. Press the STOP/EJECT button to stop playback at any time. Press it again to remove the cassette.

Note:
- Use the normal tape (TYPE 1).
- Endless tapes cannot be used. Do not use C - 100 (or longer) tapes. They may jam in the mechanism.

Pause
Press the PAUSE button to temporarily stop
playback or recording. Press it again to resume operation.

Fast forward and rewind
Press the FFWD or REW button. When the desired location has been reached, press the STOP/EJECT button.

LISTENING TO THE RADIO

1. Set the FUNCTION switch to RADIO.
2. Set the BAND switch to FM or AM as desired.
3. Tune in a desired station by turning the TUNING control.
4. To turn the radio off, set the FUNCTION switch to TAPE/OFF.

To receive FM stereo broadcasts
Set the FM MODE switch to ST.
- If the signal from an FM stereo station is weak and reception is poor, set the FM MODE switch to MONO. The reception may be improved, but the sound will be monaural.

To improve reception
FM: Pull out the telescopic aerial and adjust its
AM: Rotate the unit.

RECORDING

Recording copyright material without permission of the copyright owners is usually an infringement.If you wish to record copyright material, permission from the copyright owner is necessary. Hamilton does not approve of, and cannot be held responsible for, any unlawful use of this machine.

Recording compact discs
1. Load a blank cassette.
2. Select CD function.
3. Load the disc to be recorded.
    - Select the track number if required.
    - For programmed recording, program the material in advance (as described under PROGRAMMED PLAY).
    - Press CD PLAY button.
3. Press the REC button. The PLAY button is engaged simultaneously and CD recording starts.
4. Press the STOP/EJECT button to stop recording.

Recording from the radio
1. Load a blank cassette.
2. Tune in the radio station to be recorded.
3. Press the REC button to start recording.
4. Press the STOP/EJECT button to stop recording.

When beat is heard
Beat (a high pitched noise) may sometimes be heard during the recording of radio AM broadcasts. If this occurs, set the BEAT CANCEL switch to the position that reduces the level of the beat noise.

Recording from the microphone
1. Insert the microphone plug into the "MIC" jack on the back of the main unit.
2. Follow the same steps as above for recording from the radio.
3. Also, with no tape inserted voices can still be heard through the speakers.

Safeguards against accidental erasure Fig.8
Break out tab 1 to protect Side A, break out tab 2 to protect Side B.
- To erase or record over a protected cassette, Cover the tab openings with adhesive tape.
Note:
The Record button cannot be used whenusing a protected tape.

MAINTENANCE

Cleaning the tape heads
To ensure continued high performance, use a cleaning tape (available from your local audio dealer) to clean the head block of the deck after about every 10 hours of use.

Cleaning the unit
Clean the outside of the unit with a clean soft cloth, moistened with lukewarm water. Do not use benzene, thinner, or alcohol since they will mar the finish of the surfaces.

Cleaning the CD player lens
The lens should never be touched. If dust is on the lens, blow it off using a camera lens blower. (Fig.9). (Consult your dealer.)

SPECIFICATIONS

CD Player
Channels:
    2-channel stereo
Sampling frequency:
    44.1 kHz
Pick-up:
    Semiconductor laser
Laser output:
    0.6 mW (Continuous wave max.)
Wave length:
    790 nm
Wow/Flutter:
    Below measurable limits

Radio
Reception frequency:
    FM 88 - 108 MHz
    AM 530 - 1710 KHz

Cassette deck
Track system:
    4-track, 2-channel stereo
Erasing system:
    Magnet erase
Tape speed:
    4.75 cm/sec.
Frequency response:
    80 ~ 12,000 Hz
Fast forward/rewind time:
    Approx. 110 sec. (C-60)

General
Output power:
    5.5 Watts RMS per side
Speakers: 4 Ohms
    Woofer - 4.33 in.
    Tweeter - 1.77 in.
Headhone Jack:
    3.5 mm@32 Ohms Impedance
Microphone Jack:
    1/4" @ 5 - 10mv Sensitivity
Power Source:
    AC - 120 Volts. 60Hz
    DC - 1.5 Volt D Battery x 8
Dimensions:
    22"W. x 11"H. x 10.5"D
Weight: 11.25 Lb.

Hamilton Electronics

Hamden, CT 06514

www.hamiltonelectronics.com