COMPACT DISC STEREO RADIO CASSETTE RECORDER

CSD-TD20
CSD-TD21

OPERATING INSTRUCTIONS

WARNING
FOR USE IN THE UNITED KINGDOM
This appliance is supplied with a fitted three pin mains plug. A 3 amp fuse is fitted in the plug. Should the fuse need to be replaced, use a 3 amp fuse approved by ASTA or BSI to BS1362. When replacing the fuse, you must ensure that any removable fuse covers are correctly refitted.
If you should lose the fuse cover, please contact your nearest AIWA dealer.

DO NOT CUT OFF THE PLUG FROM THIS APPLIANCE. If the plug fitted is not suitable for the power points in your home, or the cable is too short to reach a power point, obtain an appropriate safety approved extension lead or adaptor. If in any doubt please consult a qualified electrician.

If the plug is cut off, remove the fuse and dispose of the plug immediately. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please ensure it contains a 3 amp fuse, otherwise the circuit should be protected by a 5 amp fuse at the distribution board.

IMPORTANT
The wires in the mains lead are coloured in accordance with the following code:

- BLUE — NEUTRAL
- BROWN — LIVE

As the colours of the wires in the mains lead of this appliance may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked by the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked by the letter L or coloured RED.

DO NOT connect either the BLUE or BROWN wires in the mains lead to the earth terminal (marked with the letter E or by the earth symbol ⚡ or coloured GREEN or GREEN/YELLOW) of a three pin plug.
WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

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

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the exterior.

CAUTION!
Invisible laser radiation when open and interlocks defeated. Avoid exposure to beam.

Precautions
Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation
1 Water and moisture - Do not use this unit near water, such as near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, swimming pool, or the like.
2 Heat - Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
3 Mounting surface - Place the unit on a flat, even surface.
4 Ventilation - The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit and 5 cm (2 in.) from each side.
   - Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
   - Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.
5 Objects and liquid entry - Take care that objects or liquids do not get inside the unit through the ventilation openings.
6 Carts and stands - When placed or mounted on a stand or cart, the unit should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.
7 Condensation - Moisture may form on the CD pickup lens when:
   - The unit is moved from a cold spot to a warm spot
   - The heating system has just been turned on
   - The unit is used in a very humid room
   - The unit is cooled by an air conditioner
When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
8 Wall or ceiling mounting - The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power
1 Power sources - Use on batteries or AC house current, as specified in the Operating Instructions and marked on the unit.
2 AC power cord
   - When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
   - Never handle the AC power plug with wet hands, as this could result in fire or shock.
   - Power cords should be firmly secured to avoid being bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
   - Avoid overloading AC power sockets and extension cords beyond their capacity, as this could result in fire or shock.
3 When not in use - Unplug the AC power cord from the AC power socket or remove all the batteries if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Maintenance
Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service
Have the units serviced by a qualified service technician if:
   - The AC power cord or plug has been damaged
   - Foreign objects or liquid have got inside the unit
   - The unit has been exposed to rain or water
   - The unit does not seem to operate normally
   - The unit exhibits a marked change in performance
   - The unit has been dropped, or the cabinet has been damaged
DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.
Power Supply

The  STANDBY OPE/BATT indicator lights up while electric current flows to the unit.

Using on AC House Current

Connect the AC cord as illustrated below.

CAUTION
Use only the supplied AC cord. Use with other cords may result in the risk of fire.

Using on Batteries

Open the lid of the battery compartment on the rear and insert eight R14 (size C) batteries, not supplied, with the 0 and 9 marks correctly aligned. Then close the lid.

To switch from AC power supply to battery power supply, disconnect the AC cord from the AC inlet.

When to replace the batteries

The STANDBY OPE/BATT indicator becomes dim, the tape speed slows down, volume decreases, or sound is distorted during operation.

Notes on batteries

• Do not mix different types of batteries or old batteries with new ones.
• When the unit is not to be used for a long period, remove the batteries to prevent needless battery wear.
• Never recharge the batteries, apply heat to them or take them apart.
• Remove dead batteries.

If liquid leaks from the batteries, wipe thoroughly to remove.

Specifications

Tuner section
Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, MW: 531/530 - 1,602/1,710 kHz (9/10 kHz step) Ferrite bar antenna, LW: 153 - 288 kHz Ferrite bar antenna

Deck section
Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section
Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General
Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10%), 1.9 W + 1.9 W (DIN 1% Rated Power) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 230 V, 50 Hz / Power consumption — 16 W
Dimensions (W × H × D) — 435 × 184 × 277 mm
Weight (excluding batteries) — 3.7 kg
Accessory — AC cord (1)

• Specifications and external appearance are subject to change without notice.
• Specifications, trade mark, model name and the double square symbol are marked on the bottom of the unit.

COPYRIGHT
Please check the copyright laws relating to recordings from disc, radio or external tape for the country in which the machine is being used.

Maintenance

To clean the cabinet
Use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents such as alcohol, benzine or thinner.

To clean the heads
When the tape heads are dirty;
- high frequency sound is not emitted
- the sound is not adequately high
- the sound is off-balance
- the tape cannot be erased
- the tape cannot be recorded on

After every 10 hours of use, clean the tape heads with a head cleaning cassette.
Use separately sold dry-type or wet-type cleaning cassette.
Refer to the instructions of the cleaning cassette for details.

To clean the lens
Use a cotton swab slightly moistened with cleaning fluid.
Wipe gently from the center to the edge.
NOTE
If the unit picks up noise from other electrical appliances nearby, like a TV or fluorescent lights, move the unit away.

PRESETTING STATIONS
You can preset up to 15 stations in each band.

1 Select a station.
2 Press STOP/MEMORY once so that “M” is displayed to store the station.

A station is assigned a preset number, beginning from 1 in consecutive order for each band.

To listen to preset stations
Select a band then press PLAY/PAUSE/PRESET repeatedly.

To clear a preset station
Select the preset number first. Within 4 seconds, Keep STOP pressed until “M” and the preset number disappear in the display.

The higher numbers in the band are decreased by one.

For better reception
Extend the rod antenna and orient it for the best reception.

For quick tuning
Keep pressed until the tuner starts searching for a station. When a station is tuned to, the search stops. If the broadcast signal is weak, it does not stop. To stop the search manually, press or .

REPEAT/FM MODE/OSC
- If an FM stereo broadcast contains noise, press the button so that MONO is displayed.
  Noise is reduced, although reception is monaural.
  To restore stereo reception, press the button again.
- If a high-pitched sound is heard during MW or LW recording, press the button repeatedly until the noise is reduced. Its position can be checked by “•” being on or off the display.

To change the MW tuning interval
The default setting of the MW tuning interval is 9 kHz/step.
If you use this unit in an area where the frequency allocation system is 10 kHz/step, change the interval as follows.

1 Press RADIO/BAND to display FM.
2 Press while pressing RADIO/BAND to display the MW frequency.
When the MW tuning interval is changed, the preset stations are cleared.
NOTE
• The unit may not play a CD-R/RW disc that is recorded on personal computers or some kinds of CD-R/RW recorders because of differences in recording platforms.
• Do not attach any seal or label to either side (the recordable side or the labeled side) of a CD-R/RW disc. It may cause malfunction.
• Do not load an unrecorded CD-R/RW disc. It will take over 30 seconds to read the disc. The disc may be damaged if you try to open the disc compartment while reading the disc.
• Do not use irregular shape CDs (example: heart-shaped, octagonal ones). It may result in malfunctions.
• Do not place more than one disc in the disc compartment.
• Do not try to open the disc compartment during play.
• Do not touch the lens. Doing so may cause malfunctions.

PROGRAMMED PLAY
Up to 30 tracks can be programmed from the disc.

1 In stop mode, keep ■ STOP/MEMORY pressed until “M” flashes in the display.
2 Press ▶▶ or ◄◄ to select a track, then press ■ STOP/MEMORY to store it.

REPEAT/FM MODE/OSC – Repeats a single track or all tracks. Select as follows.
                                 1: A single track is played repeatedly. Select a track with ▶▶ or ◄◄.
                                 r: All tracks are played repeatedly.

To start play when the power is off, press CD. The power is turned on and play of the loaded disc begins (Direct Play Function).
If you load a disc while the CD indicator flashes in step 2, play starts without pressing ▶▶ or ◄◄.
After listening, press POWER ◄ STANDBY to turn the power off.

CD OPEN
Total number of tracks and total playing time are displayed. It will take about 15 seconds when loading a CD-RW disc.

3 Press ▶▶ PLAY/PAUSE/PRESET to start play.
The number of the track being played and elapsed playing time are displayed.

STOP/MEMORY – Stops play.
▶▶ PLAY/PAUSE/PRESET – Pauses play. To resume play, press again.
▼▼▼▼ SKIP/SEARCH – Searches for a particular point during playback. Keep ▼▼▼▼ or ▶▶ pressed and then release it.
– Skips to the beginning of a track. Press ▼▼▼▼ or ▶▶ repeatedly.

To listen with the headphones
Connect headphones with a stereo mini plug to the Ω jack.
C TAPE OPERATION

Use Type I (normal) tapes only.

INSERTING A TAPE
Press ■/△ STOP/EJECT to open the cassette holder and insert a tape with the exposed side up and the side to be played facing out.

PLAYING A TAPE
Press ▶ PLAY while the power is off. The power is turned on and play of the inserted tape begins. The volume level is displayed during tape operation.

■/△ STOP/EJECT – Stops play. The power will be automatically turned off.
■ PAUSE – Pauses play. To resume play, press again.

RECORDING
Note that recording is done on only one side of the tape.

1 Insert a tape with the side to be recorded facing out.
2 Get ready to record from the source.
   To record from a CD, press CD and load the disc.
   To record from a radio broadcast, press RADIO/BAND and tune to a station.
3 Press ● REC to start recording.
   ▶ PLAY is pressed simultaneously.
   When the selected function is CD, CD play and recording starts simultaneously.

To record only the selected tracks of a CD
1 Follow steps 1 to 3 of PROGRAMMED PLAY on page 5 to program tracks.
2 Press ● REC.

To stop recording, press ■/△ STOP/EJECT.
When recording from a CD, play pauses. To stop CD play, press ■ STOP/MEMORY.
To pause recording, press ■ PAUSE. To resume recording, press again.
To erase recording, press ● REC while the power is off.
After recording, press POWER 6 STANDBY to turn the power off.

To prevent accidental erasure
Break off the plastic tabs on the cassette tape with a screwdriver or other pointed tool after recording.

To record on the tape again
Cover the tab openings with adhesive tape, etc.

If an erroneous display or malfunction occurs
Make sure that none of the deck operation buttons is pressed.
Press ■ while pressing POWER 6 STANDBY.
If the unit cannot be reset in the way above, disconnect the AC cord and remove all the batteries to turn off the display. Leave the unit for a while and turn the power back on.
GENERAL

SOUND ADJUSTMENT

VOL (volume)
Press VOL ▲ or ▼. The volume level is displayed as a number from 0 to MAX (25).
• The volume level is automatically set to 14 if the power is turned off when the volume level is set to 15 or more.
  (except when turning the power back on within 4 seconds)

To display the volume level when a function other than TAPE function is selected
Press VOL ▲ or ▼. The volume level is displayed for 4 seconds.

3-MODE EQUALIZER
Press 3-MODE EQUALIZER until one of the indicators lights up.
The equalizer mode changes to ROCK, POP, JAZZ or no equalization, cyclically.
ROCK - Emphasizes the high and low range of music.
POP - Emphasizes voice and midrange of music.
JAZZ - Emphasizes the low range of music.

T-BASS system
The T-BASS system enhances the realism of low-frequency sound.
Press T-BASS and the T-BASS indicator lights up.

QSOUND system (CSD-TD21 only)
This system provides a rich, three dimensional sound area for stereo sources.
You can enjoy more enhanced sound.
Press QSOUND and the QSOUND indicator lights up.
• At higher volumes, turning QSOUND on may cause sound distortion. In this case, make the volume down.

SETTING THE SLEEP TIMER

The unit can be turned off automatically at a specified time.

1 Keep SLEEP pressed until “10” flashes in the display.

2 Within 4 seconds, press ◀ or ▶ to specify the time until the power is turned off.
Each time it is pressed, the time changes between 10 and 90 minutes in 10-minute steps.

To check the time remaining until the power is turned off
Repeat step 1 shown above. The remaining time is displayed for 4 seconds.

To cancel the sleep timer
Display the remaining time and press ◀ or ▶ repeatedly until OFF is displayed.

NOTE
If the unit is turned off during tape playback, ◄ on the deck will not be released. Press ■/▲ to release ◄.