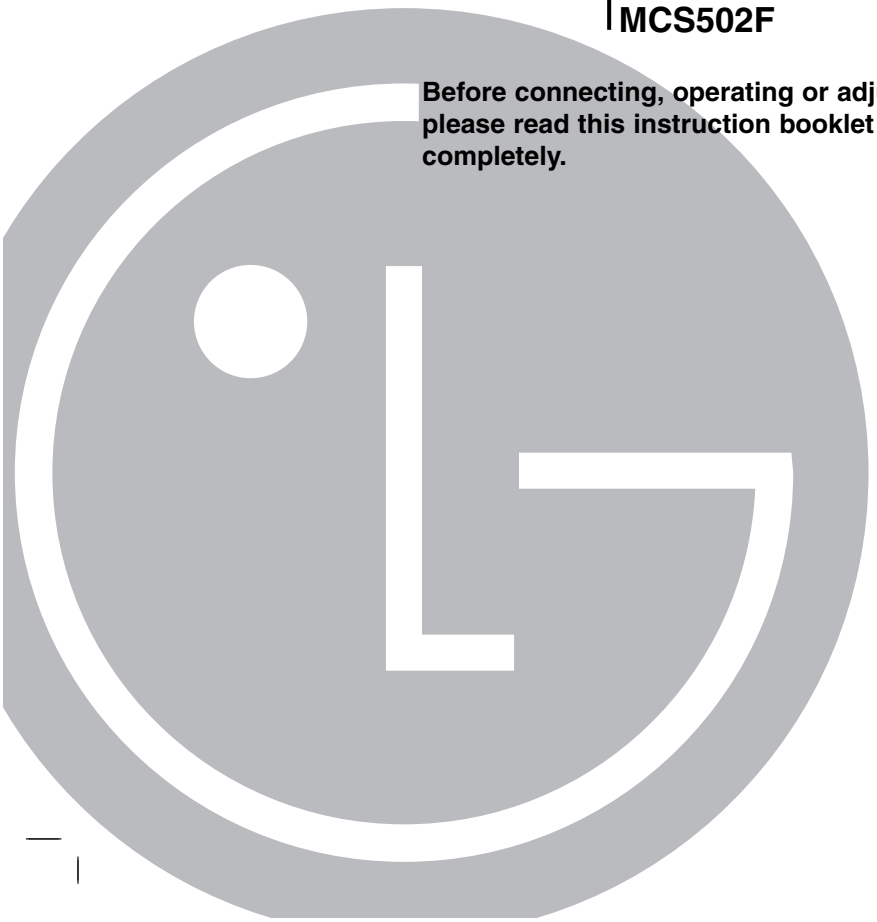
MINI Hi-Fi SYSTEM
OWNER'S MANUAL

MODEL: MCV902
MCV902-A0U/D0U/X0U,
MCS902F, MCS902S,
MCS902AW, MCS902W

MCD502
MCD502-A0U/D0U/X0U,
MCS502F

Before connecting, operating or adjusting this product, please read this instruction booklet carefully and completely.



USB

Plays Windows Media™

Safety Precaution

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

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.

This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

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

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

CAUTION: Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from over heating.
The openings should be 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 instruction has been adhered to.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
CLASSE 1 PRODUIT LASER

CAUTION:
This product employs a Laser System.
To ensure proper use of this product, please read this owner's manual carefully and retain it for future reference. Should the unit require maintenance, contact an authorized service center.
Use of controls, adjustments or the performance of procedures other than those specified herein may result in hazardous radiation exposure.
To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.

CAUTION concerning the Power Cord

Most appliances recommend they be placed upon a dedicated circuit;
That is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer.

Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

To disconnect power from the mains, pull out the mains cord plug. When installing the product, ensure that the plug is easily accessible.

POWER SAVE MODE - OPTIONAL
You can set up the unit into an economic power save mode.
In the power-on status, press and hold ⏻/I (POWER) button for about 3 seconds.
- Nothing is displayed in the display window when the unit goes into the power save mode.

To cancel power save mode, press ⏻/I (POWER).

Before use

Contents

Before use
About the Symbols for instruction / Notes on Discs / Notes on Tapes 3
Front / Back Panel 4
Remote Control 5
Connections
Speaker System Connections 6
Antenna (Aerial) Connections / Auxiliary Equipment Connections / Optional Equipment Connections 7
Operation
Audio Adjustment 8-9
Sleep Timer Function / Setting the Clock . .9
Timer Function 10
Presetting the Radio Stations / Listening to the Radio 11
RDS Function - OPTIONAL 12
Tape Playback / Tape Recording 13
CD Playback 14
To Program Play / Repeat / To check MP3 file information 15
About MP3/WMA 16
USB Function 17
Reference
Troubleshooting 18
Specifications 19

About the symbols for instruction

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

Note Indicates special notes and operating features.

Notes on Discs

Handling discs

Do not touch the playback side of the disc. Hold the disc by the edges so that fingerprints do not get on the surface. Never stick paper or tape on the disc.

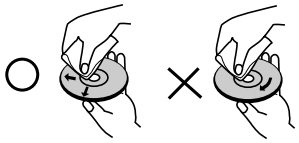


Storing discs

After playing, store the disc in its case. Do not expose the disc to direct sunlight or sources of heat and never leave it in a parked car exposed to direct sunlight.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center outward.

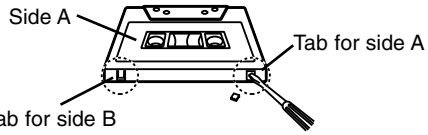


Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

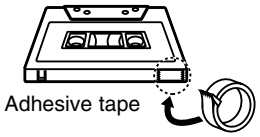
Notes on Tapes

Preventing record

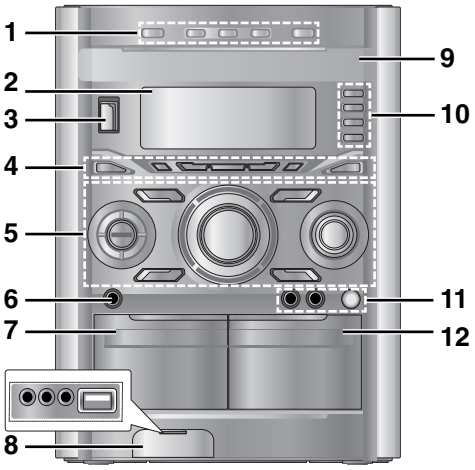
Removing the tab(s) of the cassette (with a small screwdriver) will prevent accidental erasure.



To record again, cover the hole of the tab with an adhesive tape.

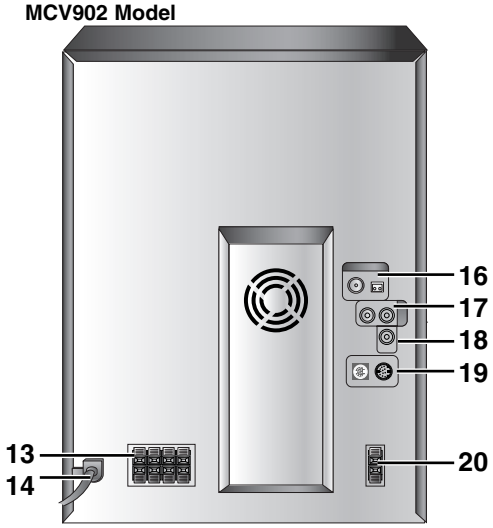


Front / Back Panel

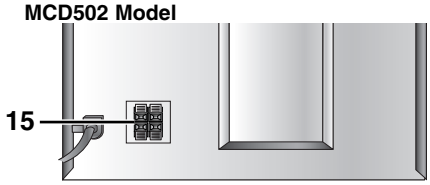


1. • DISC SKIP button
   • CD SELECT buttons (DISC1, DISC2, DISC3)
   • ⏏ OPEN/CLOSE button
2. DISPLAY WINDOW
3. ⏻/ I (POWER) button
4. • XDSS button
   • AUTO TUNING DOWN/UP button
   REWIND/ FAST FORWARD (◀◀/▶▶) button
   • PRESET DOWN/UP button
   BACKWARD PLAY (◀) button : OPTIONAL
   FORWARD PLAY (▶) button
   • STOP (■)/ CLEAR button
   • OAO button
5. • FUNCTION SELECT buttons
   [TUNER, TAPE, CD, AUX / AV, USB]
   • PLAY MODE (DEMO) button
   • PROG. MEMO. button
   • REC●/ PAUSE❚❚ (RECORD/ RECORD PAUSE) button
   • SET/ RDS(OPTIONAL)/ CD❚❚/ AM-NOISE button
   • VOLUME CONTROL KNOB
   • EQ button
   • SURROUND button
   • USER EQ button
   • MP3 OPT (MP3 OPTIMIZER) button
   • MULTI JOG
   MANUAL TUNING
   CD SKIP (I◀◀/▶▶I)
   CLOCK ADJUST
6. 🎧 PHONES (HEADPHONE JACK)
   : ∅6.3mm

MCV902 Model

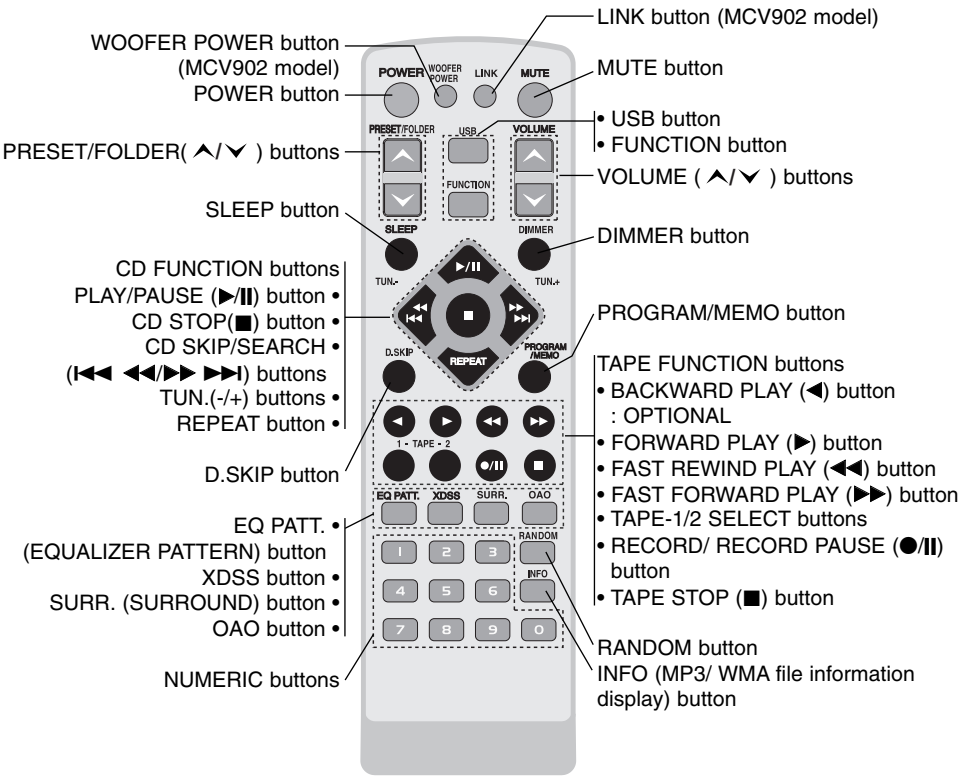


MCD502 Model



7. ⏏ PUSH EJECT position - TAPE 1
8. • GAME LINK connector
   (VIDEO IN, AUDIO L/R)
   • USB connector
9. CD DOOR
10. • CLOCK button
    • TIMER button
    • ST./ MONO/ NOR. DUBB. button
    • CD SYNC./ HI-DUBB. button
11. • MIC1/ MIC2 (MIC JACK)
    : ∅6.3 mm - OPTIONAL
    • MIC VOL. (MIC VOLUME KNOB)
    - OPTIONAL
12. ⏏ PUSH EJECT position - TAPE 2
13. SPEAKER TERMINAL (MCV902 model)
14. POWER CORD
15. SPEAKER TERMINAL (MCD502 model)
16. AM/ FM ANTENNA TERMINAL
17. AUX IN (AUXILIARY INPUT connector)
18. VIDEO OUT connector
19. WOOFER SYSTEM connector
    (MCV902 model)
20. SUB WOOFER SPEAKER TERMINAL
    (MCV902 model)

Remote Control



Remote Control battery installation



Detach the battery cover on the rear of the remote control, and insert two R03 (size AAA) batteries with ⊕ and ⊖ aligned correctly.

Caution

: Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Remote Control Operation Range

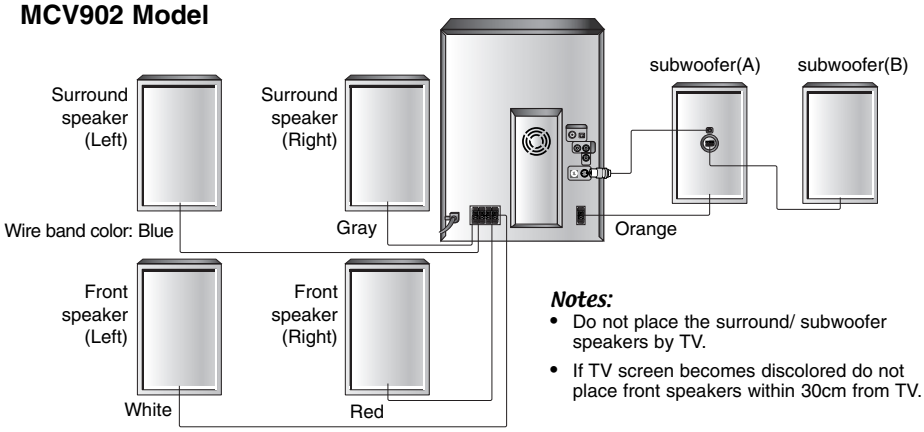
Point the remote control at the remote sensor and press the buttons.

- Distance : About 23 ft (7 m) from the front of the remote sensor.
- Angle : About 30° in each direction of the front of the remote sensor.

Connections

Speaker System Connections

MCV902 Model



Notes:

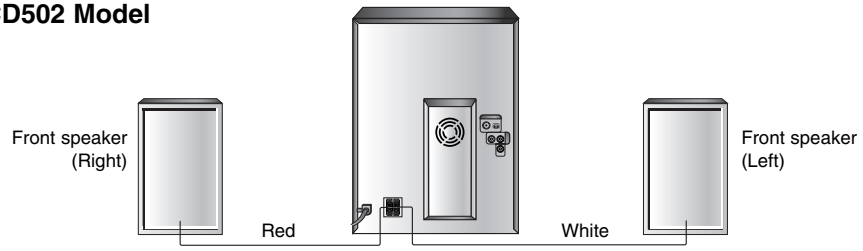
- Do not place the surround/ subwoofer speakers by TV.
- If TV screen becomes discolored do not place front speakers within 30cm from TV.

Connection of the front speakers
Connect the speaker cables to the front speaker terminals.

Connection of the surround speakers
Connect the speaker cables to the surround speaker terminals.

Connection of the subwoofer
Connect the subwoofer(A) cables to the subwoofer terminals and the woofer system cable to the woofer system connector. Connect the subwoofer(B) speaker cables to the subwoofer(A) speaker terminals.

MCD502 Model



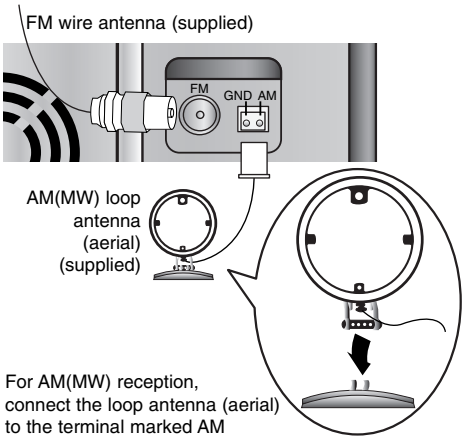
Connection of the front speakers
Connect the front speaker cables to the speaker terminals.

Notes:

- Connect the speakers using the supplied speaker cables by matching the colors of the terminals and those of the cords.
- Be sure to match the speaker cord to the appropriate terminal on the components: + to + and – to –. If the cords are reversed, the sound will be distorted and will lack base.
- If you use front speakers with low maximum input rating, adjust the volume carefully to avoid excessive output on the speaker.
- Connect the Left/Right speaker correctly. If it reversed, the sound may be distorted.

Antenna (Aerial) Connections

Connect the supplied FM/AM antennas for listening to the radio.

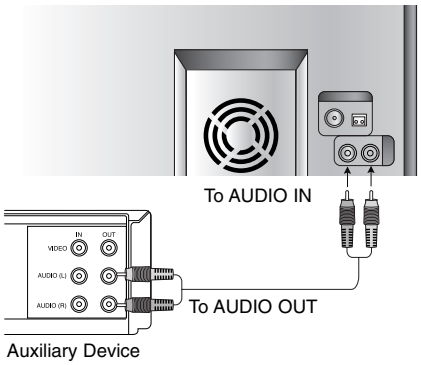


Notes:

- To prevent noise pickup, keep the AM loop antenna away from the unit and other components.
- Be sure to fully extend the FM wire antenna.
- After connecting the FM wire antenna, keep it as horizontal as possible.

Auxiliary Equipment Connections

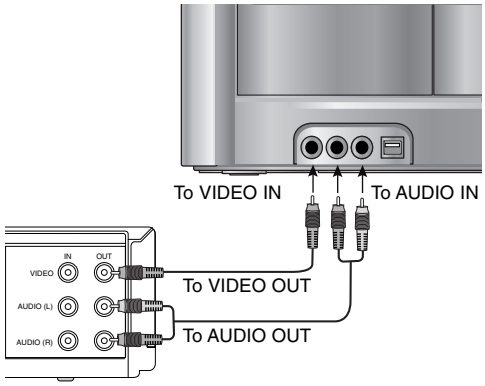
1. Connect the audio output connector of auxiliary device to the AUX connector.
2. Press **AUX/AV** on the front panel or **FUNCTION** on the remote control repeatedly until "AUX" appears in the display window.



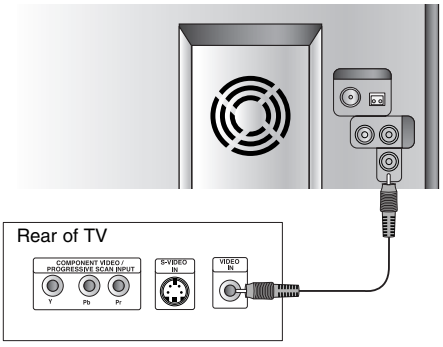
Optional Equipment Connections

Connection of the TV/Monitor, Video Game or DVD, etc.

1. Connect the video/audio output connector of a auxiliary device to the GAME LINK (VIDEO IN, AUDIO L/R) connector.



2. Connect the video input connector of a TV/Monitor to the VIDEO OUT connector.



3. Press **AUX/AV** on the front panel or **FUNCTION** on the remote control repeatedly until "A/V" appears in the display window.

Operation

Audio Adjustment

Headphone jack

Connect a stereo headphone plug (∅6.3mm) into the headphone jack to listen to the sound through headphones. The speakers are automatically disconnected when you plug in the headphones (not supplied).

MUTE

Press **MUTE** to temporarily stop the sound such as when you answer the telephone. The "🔇" indicator flashes in the display window.

To cancel it, press **VOLUME (∧/∨)** or **MUTE** again.

EQUALIZER Effect

You can choose 12 fixed sound impressions and adjust the BASS, MIDDLE and TREBLE.

- You can select a desired sound mode by using **EQ** on the front panel or **EQ PATT.** on the remote control.
  When a sound mode passes by with the left side from the right, press **EQ** or **EQ PATT.**.
  NORMAL → POP → CLASSIC → ROCK → DRAMA → JAZZ → SALSA → MUSICAL → SAMBA → ADVENTURE → PUMP → EXTREME → NORMAL...
- You can select a mode by using **USER EQ** on the front panel.
  1. Press **USER EQ** for more than 1 second. "BASS 0" will be appeared in the display window.
  2. Turn the **MULTI JOG** clockwise or counter-clockwise to select the setting you want.
  3. Press **USER EQ**.
  4. Adjust the MIDDLE and TREBLE as shown above.
  5. To cancel the USER MODE, press **USER EQ** until "USER MODE OFF" appears.

XDSS
(Extreme Dynamic Sound System)

Press **XDSS** to reinforce treble, bass and the surround effect. The "XDSS ON" or "NORMAL" indicator lights. To cancel, press **XDSS** again.

OAO (Orientation Acoustic Optimizer)

Press **OAO** to reinforce the bass sound. The "OAO ON" or "NORMAL" indicator lights in the display window. To cancel, press **OAO** again.

MP3 Optimizer

This function is optimized for compressible MP3 file. It improves the bass sound to make sweet sound.
Each time you press **MP3 OPT.** on the front panel the setting changes in the following order.
MP3 - OPT ON ↔ NORMAL

SURROUND Effect

You can select a desired surround mode by using **SURROUND** on the front panel or **SURR.** on the remote control.
When a surround mode passes by with the left side from the right, press **SURROUND** or **SURR.**.
SURROUND OFF → CINEMA → EALA → TUNNEL → HALL → THEATER → VOCAL → CHURCH → DISCO → SURROUND OFF...

DIMMER

This function is turns off the LED (Light-emitting diode) on the front panel and darkens the display window by half in power-on status.
Press **DIMMER** once.
To cancel it, press **DIMMER** again.

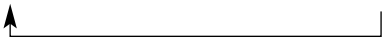
DEMO

Press **PLAY MODE** in power off state to demonstrate the function in the display window.

To cancel it, press **⏻/❙ (POWER)** or **PLAY MODE** again.

Selecting the sound system (MCV902 model)

You can enjoy different sounds by selecting the sound mode you want.
Press **LINK** on the remote control repeatedly to select the sound mode.
LINK ON → SURROUND 1 → SURROUND 2



Using the subwoofer (MCV902 model)

You can use the sound of the subwoofer to enhance the bass.
Press **WOOFER POWER** on the remote control repeatedly (or press **POWER** on the subwoofer) to turn on the subwoofer.
SUB_WOOFER ON ↔ SUB_WOOFER OFF

Using Microphone - OPTIONAL

You can sing to a music source by connecting a microphone to the unit.

1. Connect your microphone (not supplied) to the MIC jack.
   " 🎤 " will be shown in the display window.
2. Play a music you want.
3. Sing along with the accompaniment.
   Adjust the microphone volume by turning **MIC VOLUME KNOB**.

Notes:

- When not using the microphone, set the MIC volume knob to minimum or turn off the MIC and remove the microphone from the MIC jack.
- If the microphone is set too near the speaker, a howling sound may be produced. In this case, move the microphone away from the speaker or decrease the sound level by using the MIC volume control.
- If sound through the microphone is extremely loud, it may be distorted. In this case, turn the MIC volume control toward minimum.

Sleep Timer Function

When the sleep timer is used, the power is automatically turned off after the specified time has elapsed.

1. Press **SLEEP** to set the desired sleep time. The SLEEP indicator and sleep time appear in the display window.
2. Each time you press **SLEEP**, the setting changes in the following order.
   SLEEP 180 → 150 → 120 → 90 → 80 → 70 → 60 → 50 → 40 → 30 → 20 → 10 → OFF (No display) → SLEEP 180 ...

Note:

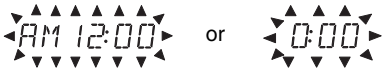
If you press **SLEEP** while the sleep time is displayed, the SLEEP time is reset.

To cancel the sleep timer mode

If you have to stop the function, press the **SLEEP** repeatedly until "SLEEP 10" appears, and then press **SLEEP** once again while "SLEEP 10" is displayed.

Setting the Clock

1. Press **CLOCK**.
2. Select a 24 hour cycle or a 12 hour cycle by turning **MULTI JOG**.



(12HR) (24HR)

3. Press **SET** to confirm the selected hour cycle.
4. Turn **MULTI JOG** on the front panel to set the correct hours.
5. Press **SET**.
6. Turn **MULTI JOG** on the front panel to set the correct minutes.
7. Press **SET** and the correct time is shown on the display window.
8. Press **CLOCK** at any time, to display the time for about 5 seconds.

Note:

If you want to reset the clock, press and hold **CLOCK** for more than 2 seconds.

Timer Function

With the TIMER function you can have the radio reception, CD play, TAPE play and USB play turned on and off at the desired time.

1. Press **CLOCK** to check the current time.
   (If you don't set clock, the timer function doesn't work.)
2. Press **TIMER** to enter the timer setting mode.
   If you want to correct the previously memorized TIMER setting, press and hold the **TIMER** for more than 2 seconds.
   - The previous memorized time and "◷" indicator appear in the display window.
3. Each function (TUNER → CD → USB → TAPE) flashes in the display window in turn. Press **SET** when the desired function is flashing.
4. a. 1) When you select the TUNER function, 'PLAY' and 'REC' indicator flash in the display window alternately for about 3 seconds.
      'PLAY' indicator : TUNER play only
      'REC' indicator : TUNER play and recording
   2) Press **SET** when the desired function is flashing.
   3) Select the previous memorized preset number with **MULTI JOG** and press **SET**.
      - 'ON TIME' indicator appears for about 0.5 seconds in the display window and then disappears.

   b. When you select the CD, TAPE or USB function,
   - 'ON TIME' indicator appears for about 0.5 seconds in the display window and then disappears.
5. Set the hour to switch on by turning **MULTI JOG** on the front panel.
6. Press **SET** to confirm the hour to switch on.
7. Set the minute to switch on by turning **MULTI JOG** on the front panel.
8. Press **SET** to confirm the minute to switch on.
   - 'OFF TIME' indicator appears for about 0.5 seconds in the display window and then disappears.
9. Set the hour to switch off by turning **MULTI JOG** on the front panel.
10. Press **SET** to confirm the hour to switch off.
11. Set the minute to switch off by turning **MULTI JOG** on the front panel.
12. Press **SET**.
13. Adjust the volume level by turning **MULTI JOG** on the front panel.
14. Press **SET**.
    "◷" appears in the display window and the timer setting has been completed.
15. Switch the system off.
    The selected function is automatically switched on and off at the time set.

To cancel or check the timer

Each time the **TIMER** is pressed, you can select the timer set or cancel. You can also check the timer setting status.
To activate or check the timer, press the **TIMER** so that "◷" appears in the display window.
To cancel the TIMER, press the **TIMER** so that "◷" disappears in the display window.

Presetting the Radio Stations

You can preset 50 stations for FM and AM.
Before tuning, make sure that you have turned down the volume to the minimum.

1. Press **TUNER** on the front panel or **FUNCTION** on the remote control to select the frequency (AM or FM) you want.
2. Select a station you want by using **AUTO TUNING DOWN/ UP** or **MULTI JOG** on the front panel. Or press the **TUN. (-/+)** on the remote control.
   Tuning in automatically
   - Press **AUTO TUNING DOWN/ UP** on the front panel. Or press **TUN. (-/+)** on the remote control for more than 0.5 second. Scanning stops when the unit tunes in a station.

   Tuning in manually
   - Turn **MULTI JOG** on the front panel [or press **TUN. (-/+)** on the remote control] briefly and repeatedly.
3. Press **PROGRAM/ MEMO** on the remote control. Or **PROG. MEMO.** on the front panel. A preset number will flash in the display window.
4. Press **PRESET DOWN/ UP** [or **PRESET/ FOLDER (∧/∨)** on the remote control] to select the preset number you want.
5. Press **PROGRAM/ MEMO** or **PROG. MEMO.** again. The station is stored.
6. Repeat the steps 1 - 5.

To delete all the memorized stations

Press and hold **PROGRAM/ MEMO** on the remote control (or **PROG. MEMO.** on the front panel) for about two seconds, "ERASE ALL" appears in the display window. And then **PROGRAM/ MEMO** on the remote control (or **PROG. MEMO.** on the front panel) again, the stations are deleted.

For your reference

If all stations have already been entered, "FULL" message will appear in the display window for a moment and then a preset number will flash. To change the preset number, follow the steps 4-5.

To recall presets

Press and hold **PRESET/ FOLDER (∧/∨)** on the remote control until the desired preset number appears. Or press it repeatedly.

Listening to the Radio

1. Press **TUNER** on the front panel or **FUNCTION** on the remote control to select the frequency (AM or FM) you want.
   The last received station is tuned in.
2. Press **PRESET/ FOLDER (∧/∨)** on the remote control repeatedly to select the preset station you want.
   - Each time you press the button, the unit tunes in one preset station at a time.
3. Adjust the volume by rotating the **VOLUME control knob** [or pressing **VOLUME(∧/∨)** on the remote control] repeatedly.

To listen to non-preset radio stations

- For manual tuning, see "Tuning in manually" in the step 2 on the left.
- For automatic tuning, see "Tuning in automatically" in the step 2 on the left.

To turn off the radio

Press ⏻/I **(POWER)** to turn the unit off or select another function mode (CD, USB, AUX, A/V, TAPE).

For your reference

- If an FM program is noisy;
  Press **ST./MONO** so that "MONO" appears in the display window. There will be no stereo effect, but the reception will be improved. Press **ST./MONO** again to restore the stereo effect.
- To improve reception;
  Reposition the supplied antennas.

Notes:

When receiving the MW (AM) broadcast, beat noises may be occur. If it does, press **AM-NOISE** button once.
AM -- NOISE ON ⇔ AM -- NOISE OFF

RDS Function - OPTIONAL

About RDS

This unit is equipped with RDS (Radio Data System), which brings a wide range of information to FM radio. RDS, now in use in many countries, is a system for transmitting station call signs or network information, a description of station programme type text message about the station or specifics of musical selection and the correct time.

RDS Tuning

When a FM station is tuned in and it contains RDS data, the unit will automatically display the station's call sign and the RDS indicator will light in the Display Window as well as indicators for the programme type recognition (PTY), Radio Text (RT), Clock Time (CT) and RDS services programme (PS) if transmitted by the station.

RDS Display Options

The RDS system is capable of transmitting a wide variety of information in addition to the initial call sign that appears when a station is first tuned. In normal RDS operation the display will indicate the station name, broadcast network or call letters. Pressing RDS on the remote control enables you to cycle through the various data types in the sequence:

(FREQUENCY → PTY → RT → CT → PS)

- PTY (Programme type recognition)- The name of the programme type is shown in the Display Window.
- RT (Radio text recognition)- The name of the radio text is shown in the Display Window.
- CT (Time controlled by the channel)- Enables the unit to receive the actual time and show it in the Display Window.
- PS (Programme Service name)- The name of the channel is shown in the Display Window.

Note:

Some RDS stations may not choose to include some of these additional features. If the data required for the selected mode is not being transmitted, the Display Window will show a PTY NONE, RT NONE, CT NONE or PS NONE message.

Programme Search (PTY)

A major benefit of RDS is its ability to encode broadcasts with Programme Type (PTY) codes that indicate the type of material being broadcast. The following list shows the abbreviations used to indicate each PTY along with an explanation of the PTY.

NEWS	News
AFFAIRS	Current Affairs
INFO	Information
SPORT	Sports
EDUCATE	Educational
DRAMA	Drama
CULTURE	Culture
SCIENCE	Science
VARIED	Varied Speech Programme
POP M	Popular Music
ROCK M	Rock Music
EASY M	Easy Listening Music
LIGHT M	Light Music
CLASSICS	Classical Music
OTHER M	Other Music
WEATHER	Weather Information
FINANCE	Financial Programmes
CHILDREN	Children's Programmes
SOCIAL	Social Affairs Programmes
RELIGION	Religious Broadcasts
PHONE IN	Phone-In Programmes
TRAVEL	Travel and Touring
LEISURE	Leisure and Hobby
JAZZ	Jazz Music
COUNTRY	Country Music
NATION M	National Music
OLDIES	Oldies Music
FOLK M	Folk Music
DOCUMENT	Documentary Programmes
TEST	Station Alarm Test Message
ALARM !	Emergency Broadcast Information

You may search for a specific Programme Type (PTY) by following these steps.

1. Press **TUNER** (or **FUNCTION**) to select FM mode.
2. Select a desired station by pressing **AUTO TUNING DOWN/ UP**.
   When the RDS transmission is received, the display shows the program service name (PS) after RDS indicator appears.
3. Press **RDS** to select the PTY mode.
4. To search for a different PTY, press the **PRESET DOWN/ UP** while the last PTY in use is still displayed to scroll through the list of available PTY types.
5. When the PTY is selected, press **AUTO TUNING DOWN/ UP** within 5 seconds.
   The unit will go into the automatic search mode and attempt to find the next station with acceptable signal strength that matches the desired PTY type.

Tape Playback

Use only normal tapes.

Basic Playback

1. Press **TAPE** (or **FUNCTION**) to select TAPE function.
   ("NO TAPE" appears in the display window.)
2. Load a tape.
3. Press **PLAY** (▶ or ◀: OPTIONAL).

To Stop Play

Press **STOP(■)** during playback.

To Play Rewind or Fast Forward

After pressing ◀◀/▶▶ on the front panel or on the remote control during playback or stop, press **PLAY(▶)** at the point you want.

AUTO STOP DECK (TAPE 1/2)

After auto stop deck plays only the front side, the unit stops automatically.

AUTO REVERSE DECK (TAPE2)- OPTIONAL

You can select the direction of the cassette you want by pressing **PLAY MODE**.

Display	Function
⇄	After the cassette TAPE 2 plays the front or reverse (backward play) side, stops automatically.
⇄)	After the cassette TAPE 2 plays the front and reverse side, stops automatically.
(⇄)	After the cassette TAPE 2 plays six times repeatedly the front and reverse side, stops automatically.

Dubbing

This function shows how to record from tape to tape.

1. Press **TAPE** (or **FUNCTION**) to select tape function.
   • Cassette TAPE 1- Insert a playback tape to dub.
   • Cassette TAPE 2- Insert a blank tape.
2. Press **NOR. DUBB./ HI-DUBB.** as shown below.
   To stop dubbing, press **STOP(■)**.

Display	Function
NOR DUBB	Normal speed dubbing
HI DUBB	Double speed dubbing

Tape Recording

Wind the tape to the point recording starts.
Use only normal tapes.

Basic Setting

1. Select a function you want to record except tape function.
2. Open the cassette TAPE 2 and insert a blank cassette into the cassette compartment.
   To set the recording direction: OPTIONAL
   Press the **PLAY MODE** repeatedly to set the recording direction.

General Recording

1. Press **REC ●/ PAUSE❚❚** on the front panel or **●/❚❚** on the remote control.
   - "REC" flashes and holds the cassette in pause mode.
2. Press **REC ●/ PAUSE❚❚** on the front panel or **●/❚❚** on the remote control again, then press **PLAY** (▶ or ◀: OPTIONAL) to start playing the source you want to record.
   The recording begins.

To pause recording

Press **●/❚❚** during recording.
- "REC" flashes in the display window.

To stop recording

Press **STOP(■)**.

CD to Tape Synchronized Recording

The CD synchro recording function dubs a complete CD and programmed titles automatically into a cassette.

1. Press **CD** and load a disc you want to record.
2. Press **CD SYNC.** in stop mode.
   "REC" flashes and "CD SYNC" indicator lights.
3. The synchronized recording is started automatically after about 8 seconds.

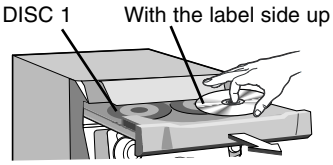
Notes:

- If you wish to record from the desired track, select the desired track with **CD SKIP/ SEARCH** (**I◀◀ ◀◀/▶▶ ▶▶I**) before commencing CD synchro recording.
- You cannot change any mode during recording.

CD Playback

Basic Playback

1. Press **CD** (or **FUNCTION**) to select CD function. If no disc is loaded then "NO DISC" is displayed.
2. Press ⏏ **OPEN/ CLOSE** and place the disc into the disc tray.
   The disc on the left (DISC 1) is played first.



Note:

To load an 8cm (3 inch) disc, put it onto the inner circle of the tray.

3. Press ⏏ **OPEN/ CLOSE** to close the disc compartment.
   Audio CD : "READING" appears in the display window, and then the total number of tracks and the playing time are displayed.
   MP3/ WMA CD : "READING" appears in the display window, and then the total number of files is displayed.
4. Press **PLAY (▶)** on the front panel or **PLAY/ PAUSE (▶/❚❚)** on the remote control.
   In addition, you can also play an Audio CD or MP3 CD using the **NUMERIC** buttons.

Pause Playback

Press **CD❚❚** on the front panel or **PLAY/ PAUSE (▶/❚❚)** on the remote control during playback. Press this button again to resume play.

Stop Playback

Press **STOP(■)** on the front panel or **CD STOP(■)** on the remote control during playback.

Skipping a Track

- Turn **MULTI JOG** on the front panel to select the track you want.
- Press **▶▶▶▶I** on the remote control to go to the next track.
- When the **I◀◀◀◀** on the remote control is pressed once midway through a track, the player returns to the start of that track. When it is pressed again, a track is skipped each time the button is pressed.

Searching a Track

Press **◀◀/▶▶** on the front panel, and then press once more at the point you want.
Or hold **I◀◀◀◀/▶▶▶▶I** on the remote control during playback, then release at the point you want.

Note:

This function is only available to play an Audio CD.

To go to the next discs

Press **DISC SKIP** or **D.SKIP** during playing or stopping.

To select a disc directly

Press **DISC 1**, **DISC 2** or **DISC 3** during playing or stopping.
When you press **DISC 1-3** before playing a disc, the unit will automatically start playing the selected disc.

To exchange discs during playback

You can open the disc tray while playing a disc to check what discs are to be played next and exchange discs, without interrupting playback of the current disc.

1. Press ⏏ **OPEN/ CLOSE**.
   The disc tray is opened. Two disc compartments appear. Even if the unit is playing a disc, it doesn't stop playing.
2. Replace discs in the compartments with other ones.
   The unit plays the disc in the left compartment after the current disc, and then the one in the right compartment.
3. Press ⏏ **OPEN/ CLOSE**.
   The CD door closes.

Notes:

- Do not place more than one disc on one disc tray at the same time.
- Do not push on the disc tray to close CD door, you may damage the unit.

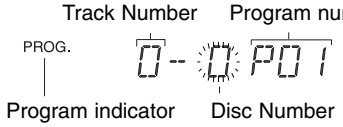
RANDOM

Press **RANDOM** on the remote control during playback. The tracks/ files on the CD/ MP3/ WMA/ USB will all play in random order.
"RANDOM" appears in the display window.
To cancel it, press **RANDOM** again.

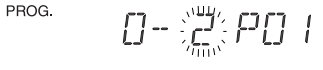
To Program Play

You can arrange the order of the tracks on the discs and create your own program. The program can contain up to 20 tracks.

1. Press **PROGRAM/ MEMO** on the remote control (or **PROG. MEMO.** on the front panel) on stop mode.
   "PROG." appears in the display window.



2. Press **D.SKIP**, **DISC SKIP** or **CD SELECT** (DISC 1/2/3) to select the disc.



3. Press **I◄◄ ◄◄/►► ►►I** to select the track. Or use **MULTI JOG**.



4. Press **PROGRAM/ MEMO** on the remote control (or **PROG. MEMO.** on the front panel).
5. Repeat the steps 1 - 4 above.
6. Press **PLAY (►)** on the front panel or **PLAY/ PAUSE (►/II)** on the remote control.

To check program contents

Press **PROGRAM/ MEMO** on the remote control (or **PROG. MEMO.** on the front panel) on stop mode.

- The disc, track and program number will be displayed in the display window.

To clear program contents

Press **PROGRAM/ MEMO** on the remote control (or **PROG. MEMO.** on the front panel) on stop mode. And then press **CD STOP(■)** on the remote control.

To add program contents

1. Press **PROGRAM/ MEMO** on the remote control (or **PROG. MEMO.** on the front panel) repeatedly in the program stop mode until the Track Number blinks.
2. Repeat the steps 2 - 4 above.

To modify program contents

1. Press **PROGRAM/ MEMO** on the remote control (or **PROG. MEMO.** on the front panel) to display the program number you want to modify.
2. Repeat the steps 2 - 4 above.

Repeat

To play one track repeatedly

Press **REPEAT** once during playback.

- "REPEAT" appears in the display window.

To play one folder repeatedly (only MP3/WMA file)

Press **REPEAT** again during playback.

- "REPEAT ALL" appears in the display window.

To play one disc repeatedly

Press **REPEAT** again during playback.

- "REPEAT DISC" appears in the display window.

To play all tracks on all discs repeatedly

Press **REPEAT** once more during playback.

- "REPEAT ALL DISC" appears in the display window.

To cancel repeat play

- Press **REPEAT** several times until repeat indicators disappear.

Program repeat play

- Press **REPEAT** once during program play.
  - "REPEAT" appears in the display window. (One track repeat)
- Press **REPEAT** again during program play.
  - "REPEAT ALL DISC" appears in the display window. (All program repeat)

To check MP3 file information

Press **INFO** during playing a MP3 file.

- The information (Title, Artist or Album) of the MP3 file will be shown in the display window.
- If there is no the information of the MP3 file, "NO ID3 TAG" indicator will be shown in the display window.

Note:

This unit can play a CD-R or CD-RW that contains audio titles or MP3 files.

MP3/WMA file folder function

Press **PRESET/ FOLDER (∧/∨)** on the remote control to select the folder you want.

Note:

It is applied in the case that has several folder in MP3/WMA file.

About MP3/WMA

MP3/WMA Disc compatibility with this unit is limited as follows:

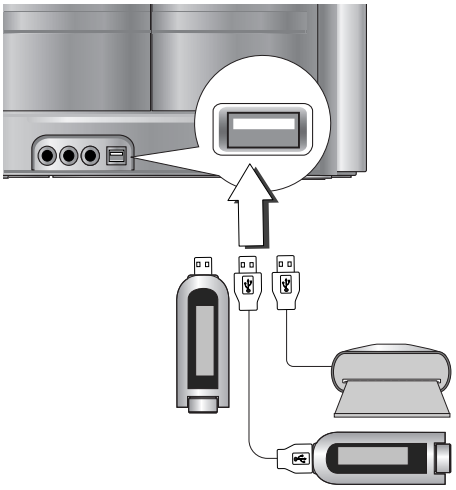
1. Sampling Frequency
   8 - 48kHz(MP3), 32 - 48kHz(WMA)
2. Bit rate
   8 - 320kbps(MP3), 48 - 320kbps(WMA)
3. CD-R physical format should be “ISO 9660”
4. If you record MP3/WMA files using the software which cannot create a FILE SYSTEM, for example “Direct-CD” etc., it is impossible to playback MP3 files. We recommend that you use “Easy-CD Creator”, which creates an ISO 9660 file system.
5. File names should be named using 30 letters or less and must incorporate “.mp3”,“.wma” extension e.g. “********.MP3” or “********.WMA”
6. Do not use special letters such as “/ : * ? “ < >”etc.
7. Even if the total number of files on the disc has more than 1000, it will only be shown up to 999.

About MULTI SESSION

- This function recognizes the multi session disc according to a disc of CD-ROM type.
  ex) If there are MP3/WMA files in the first session, the MP3/WMA file in the first session is only played.
  If there are only MP3/WMA files in the whole session, all of the MP3/WMA files in the session are played.
  If there is an Audio CD in the first session, only the Audio CD in the first session is played.

USB Function

You can enjoy the media files such as tunes (MP3/WMA) saved in an MP3 player or USB memory by connecting the storage device to the USB port of this unit.



Compatible Devices

1. Devices which require additional program installation when you have connected it to a computer, are not supported.
2. MP3 Player : Flash type MP3 player.
   • The MP3 player requiring installation of a driver is not supported.
3. USB Flash Drive : Devices that support USB2.0 or USB1.1.

Basic Playback

1. Connect the USB device to the USB connector of your unit.
2. Press **USB** to select USB function. "CHECKING" appears in the display window, and then the total number of files is displayed.
3. Press **PLAY/ PAUSE (▶/❚❚)**. In addition, you can also play using the **NUMERIC** buttons.

To Remove the USB from the unit

1. Choose the other functions except USB function in order to remove the USB.
2. Remove the USB from the unit.

Note:

Besides Basic Playback, if you want to operate other functions, see the CD Playback section.

Moving to other cards

When you use an MP3 player or a memory card, press **D.SKIP** on the remote control during playing or stopping.

Notes:

- **Do not extract the USB device in operating.**
- A back up demands to prevent a data damage.
- If you use a USB extension cable or USB hub, the USB device might not be recognized.
- A device using NTFS file system is not supported. (Only FAT (16/32) file system is supported.)
- The USB function of this unit does not support all USB devices.
- Digital camera and mobile phone are not supported.
- This unit is not supported when the total number of files is 1000 or more.

Reference

Troubleshooting

Symptom	Cause	Correction
No power	• The power cord is disconnected.	• Plug the power cord into the wall outlet securely.
No sound	• The audio cables (or SYSTEM connector jack) are not connected securely.	• Connect the audio cable (or SYSTEM connector jack) into the jacks securely.
	• The power of the external source equipment is switched off.	• Turn on the equipment connected with the audio cable.
	• The speaker cable is set to a wrong position.	• Set the speaker cable to the correct position, then turn on the unit again by pressing POWER.
The unit does not start playback	• No disc is inserted.	• Insert a disc.
	• An unplayable disc is inserted.	• Insert a playable disc.
	• The disc is placed upside down.	• Place the disc with the playback side down.
	• The disc is not placed within the guide.	• Place the disc on the disc tray correctly inside the guide.
	• The disc is dirty.	• Clean the disc.
The remote control does not work properly	• The remote control is not pointed at the remote sensor of the unit.	• Point the remote control at the remote sensor of the unit.
	• The remote control is too far from the unit.	• Operate the remote control within about 23 ft (7 m).
	• There is an obstacle in the path of the remote control and the unit.	• Remove the obstacle.
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.

Specifications

SECTION			MODEL MCV902	MODEL MCD502
[General]		Power supply	Refer to the back panel of the unit.	
		Power consumption	Refer to the back panel of the unit.	
		Net Weight	8.45 kg	8 kg
		External dimensions (WxHxD)	280 X 365 X 370 mm	
[CD]		Frequency response	40 - 20000 Hz	
		Signal-to-noise ratio	75 dB	
		Dynamic range	80 dB	
[Tuner]	FM	Tuning Range	87.5 - 108.0 MHz or 65 - 74 MHz, 87.5 - 108.0 MHz	
		Intermediate Frequency	10.7 MHz	
		Signal to Noise Ratio	60/55 dB	
		Frequency Response	140 - 10000 Hz	
	AM (MW)	Tuning Range	522 - 1620 kHz or 520 - 1720 kHz	
		Intermediate Frequency	450 kHz	
		Signal to Noise Ratio	30 dB	
		Frequency Response	140 - 1800 Hz	
[Amp]		Output Power	Front : 270 W + 270 W (MCV902 Model) 250 W + 250 W (MCD502 Model) Surround : 110 W + 110 W (MCV902 Model) Subwoofer : 180 W + 180 W (MCV902 Model)	
		T.H.D	0.7 %	
		Frequency Response	42 - 20000 Hz	
		Signal-to-noise ratio	75 dB	
[TAPE]		Tape Speed	3000 ± 3 % (MTT-111. NORMAL-SPEED)	
		Wow Flutter	0.25 % (MTT -111, JIS-WTD)	
		F.F/REW Time	120 sec (C-60)	
		Frequency Response	125 - 8000 Hz	
		Signal to Noise Ratio	43 dB	
		Channel Separation	50 dB (P/B)/45 dB (R/P)	
		Erase Ratio	55dB (MTT-5511)	
[Speakers]		Speaker Name	Front speaker (L/R) MCS902F / MCS502F	Surround speaker (L/R) MCS902S
		Type	Bass Reflex 2Way 2 Speaker	Bass Reflex 2Way 2Speaker
		Impedance	6 Ω	24 Ω
		Frequency Response	60 - 20000 Hz	70 - 20000 Hz
		Sound Pressure Level	86 dB/W (1m)	83 dB/W (1m)
		Rated Input Power	270W/ 250W	110 W
		Max. Input Power	540W/ 500W	220 W
		Net Dimensions (WxHxD)	272x455x320 mm	210x450x280 mm
		Net Weight (1EA)	9.17 kg	4.62 kg
[Subwoofer]		Speaker Name	MCS902AW	MCS902W
		Type	1 Way 1 Speaker	1 Way 1 Speaker
		Impedance	12 Ω	12 Ω
		Frequency Response	55 - 1500 Hz	55 - 1500 Hz
		Sound Pressure Level	85 dB/W (1m)	85 dB/W (1m)
		Rated Input Power	180 W	180 W
		Max. Input Power	360 W	360 W
		Net Dimensions (WxHxD)	273x370x322 mm	273x370x322 mm
		Net Weight (1EA)	7.3 kg	7.3 kg

Designs and specifications are subject to change without notice.



P/NO : MFL32702807