JVC

CD RECEIVER   **KD-LH2000**

中
文

CD 收音組合機   **KD-LH2000**

ไทย

ถาดใส่ซีดี   **KD-LH2000**

KD-LH2000

COMPACT
disc
DIGITAL AUDIO
TEXT
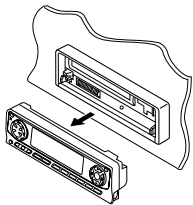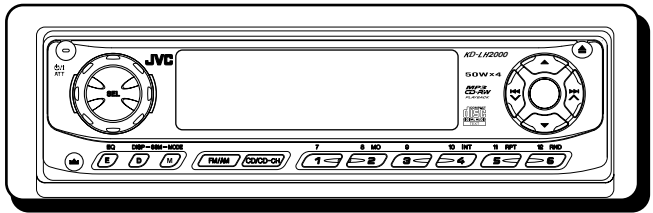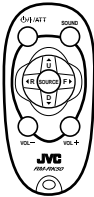
CD·RW *PLAYBACK*   *MP3*

This unit is equipped with the display demonstration. To cancel it, see page 8.
對本機具有顯示演示功能。要取消該功能,請參見第 8 頁。
เครื่องนี้ได้รับการติดตั้งการสาธิตภาพประกอบ หากต้องการยกเลิก โปรดดู หน้า 8

For installation and connections, refer to the separate manual.
有關安裝和連接方法,分別參閱操作手冊。
กรุณาดูคู่มือที่แยกต่างหาก ในการติดตั้งและการเชื่อมต่อ

INSTRUCTIONS
使用說明書
คำแนะนำ

IMPORTANT FOR LASER PRODUCTS

Precautions:
1. CLASS 1 LASER PRODUCT
2. **CAUTION:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the top cover. There are no user-serviceable parts inside. Leave all servicing to qualified service personnel.
4. **CAUTION:** This CD player uses invisible laser radiation, however, is equipped with safety switches to prevent radiation emission when unloading CDs. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Caution:

If the temperature inside the car is below 0° C, the movement of source animation and text scroll will be halted on the display to prevent the display from being blurred. When the temperature increases, and the operating temperature is resumed, these functions will be start working again.
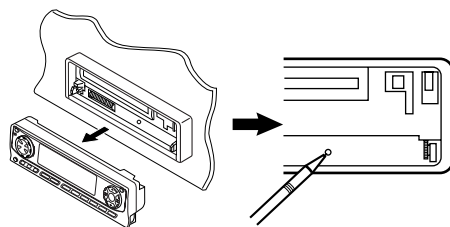

How to reset your unit

After detaching the control panel, press the reset button on the panel holder using a ball-point pen or similar tool.
This will reset the built-in microcomputer.

Note:
Your preset adjustments—such as preset channels or sound adjustments—will also be erased.

BEFORE USE

*For safety....

• *Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.*
• *Stop the car before performing any complicated operations.*

*Temperature inside the car....

If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

2

Thank you for purchasing a JVC product. Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

CONTENTS

How to use the MODE (M) button:

If you press MODE (M), the unit goes into functions mode and the number buttons work as different function buttons.

To use these buttons as number buttons again after pressing MODE (M), wait for 5 seconds without pressing any number button until the functions mode is cleared.
• Pressing MODE (M) again also clears the functions mode.

3

Control panel

[1] ⏻/ı ATT (standby/on/attenuator) button
[2] SEL (select) button
[3] Control dial
[4] Display window
[5] Number buttons
[6] I◄◄ ∨ /►►I ∧ buttons
[7] ▲ (up) button
[8] ▲ (eject) button
[9] ▼ (down) button
[10] ⏏ (control panel release) button
[11] EQ(E) (equalizer) button

[12] DISP (D) (display) button
  • *Also functions as SSM buttons when pressed together with MODE (M) button.*
[13] MODE (M) button
  • *Also functions as SSM buttons when pressed together with DISP (D) (display) button.*
[14] FM/AM button
[15] CD/CD-CH button
[16] MO (monaural) button
[17] INT (intro) button
[18] RPT (repeat) button
[19] RND (random) button
[20] Remote sensor

Remote controller

1 • Turns on the unit if pressed when the unit is turned off.
  • Turns off the unit if pressed and held for a few seconds.
  • Drops the volume level in a moment if pressed briefly.
    Press again to resume the volume.

2 • Selects the band while listening to the radio.
    Each time you press the button, the band changes.
  • Skips to the next disc while listening to the CD changer.
    Each time you press the button, the disc number increases, and the selected disc starts playing.
  • Skips to the first file of the next directory while listening to an MP3 disc. Each time you press the button, you can move to the next directory and start playing the first file.

3 • Selects the preset stations while listening to the radio.
    Each time you press the button, the preset station number increases, and the selected station is tuned in.
  • Skips to the previous disc while listening to the CD changer.
    Each time you press the button, the disc number decreases, and the selected disc starts playing.
  • Skips to the first file of the previous directory while listening to an MP3 disc. Each time you press the button, you can move to the previous directory and start playing the first file.

4 Functions the same as the control dial on the main unit.
  NOTE: *These buttons do not function for the preferred setting mode adjustment.*

5 Selects the sound (iEQ) mode.
  Each time you press the button, the sound (iEQ) mode changes.

6 Selects the source.
  Each time you press the button, the source changes.

7 • Searches for stations while listening to the radio.
  • Fast-forwards or reverses the track/file if pressed and held while listening to a disc.
  • Skips to the beginning of the next track/file or goes back to the beginning of the current (or previous) tracks/files if pressed briefly while listening to a disc.

5

Preparing the remote controller

Before using the remote controller:
• Aim the remote controller directly at the remote sensor on the main unit. Make sure there is no obstacle in between.
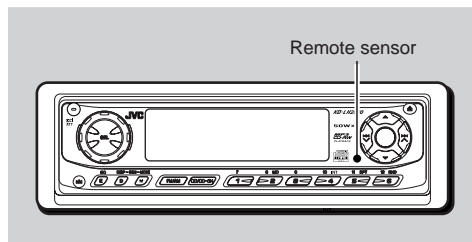
Remote sensor

• Do not expose the remote sensor to strong light (direct sunlight or artificial lighting).

Installing the battery

When the controllable range or effectiveness of the remote controller decreases, replace the battery.

1. Remove the battery holder.
  1) Push out the battery holder in the direction indicated by the arrow using a ball-point pen or a similar tool.
  2) Remove the battery holder.

(back side)
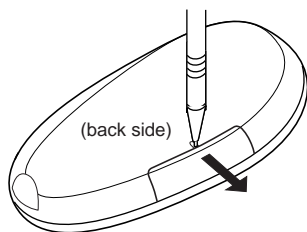
2. Place the battery.
  Slide the battery into the holder with the + side facing upwards so that the battery is fixed in the holder.
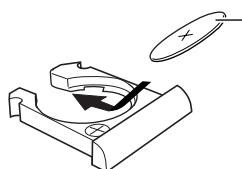
Lithium coin battery (product number: CR2025)

3. Return the battery holder.
  Insert again the battery holder pushing it until you hear a clicking sound.

(back side)
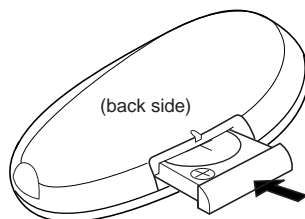
WARNING:
• *Store the battery in a place where children cannot reach.*
  If a child accidentally swallows the battery, consult a doctor immediately.
• *Do not recharge, short, disassemble or heat the battery or dispose of it in a fire.*
  Doing any of these things may cause the battery to give off heat, crack or start a fire.
• *Do not leave the battery with other metallic materials.*
  Doing this may cause the battery to give off heat, crack or start a fire.
• *When throwing away or saving the battery, wrap it in tape and insulate; otherwise, the battery may start to give off heat, crack or start a fire.*
• *Do not poke the battery with tweezers or similar tools.*
  Doing this may cause the battery to give off heat, crack or start a fire.

CAUTION:
DO NOT leave the remote controller in a place (such as dashboards) exposed to direct sunlight for a long time. Otherwise, it may be damaged.

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1 *3* *2*
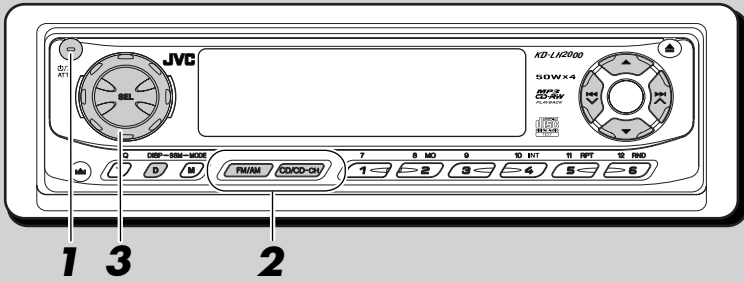
Turning on the power

1 Turn on the power.

Note on One-Touch Operation:
When you select a source in step 2 below, the power automatically comes on. You do not have to press this button to turn on the power.

2 Select the source.

To operate the tuner (FM or AM),
    see pages 9 – 13.
To play a CD,
    see pages 14 – 17 .
To play an MP3 disc,
    see pages 20 – 24.
To operate the CD changer,
    see pages 39 – 42.
To operate the external component
    (Line In), see page 43.

CAUTION on Volume Setting:
Discs produce very little noise compared with other sources. If the volume level is adjusted for the tuner, for example, the speakers may be damaged by the sudden increase in the output level. Therefore, lower the volume before playing a disc and adjust it as required during playback.

3 Adjust the volume.

To increase the volume.

To decrease the volume.
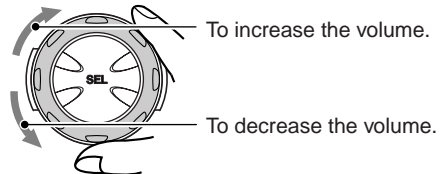
Volume level appears

4 Adjust the sound as you want. (See pages 25 – 28.)

To drop the volume in a moment

Press ⏻/I ATT briefly while listening to any source. "ATT" starts flashing on the display, and the volume level will drop in a moment.
To resume the previous volume level, press the button briefly again.
• If you turn the control dial, you can also restore the sound.

To turn off the power

Press ⏻/I ATT for more than one second.
• **If you turn off the power while listening to a disc,** CD play will start from where playback has been stopped previously, next time you turn on the power.

Note:
When you use this unit for the first time, set the built-in clock correctly, see page 29.

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Changing the display pattern

You can change the display pattern.
The number of the selectable display patterns varies according to the playback sources. However, the unit basically provides three main display patterns for each source, and once one of these three patterns is selected, the same pattern is used for all the sources.

Press DISP (D).

Each time you press the button, the display patterns change as follows:

EX.: When playing a CD

Large animation display

```
CD
TR-01
00'03"
FLAT
```

Small animation displays*

```
CD
TR-01    00'03"
           1:30   FLAT
```

Clock time display

```
CD
TR-01
00'03"    1:30
FLAT
```

* *Small animation displays are used for showing not only the source's main information (illustrated on this page as examples), but also showing some other information. For details, see each related section.*
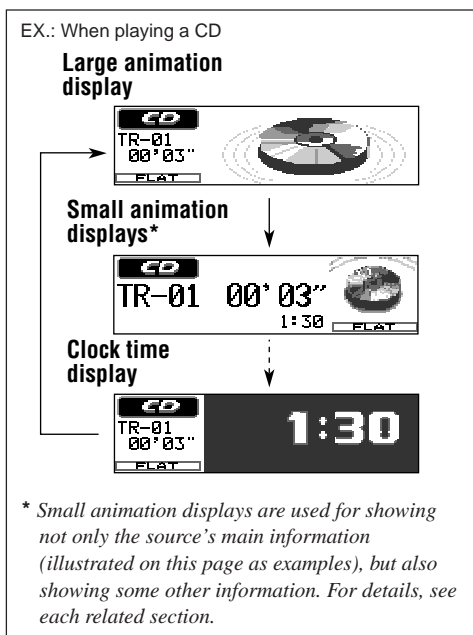
In this manual, the illustrations of the display are mainly of the large animation display (initial setting). If you have changed the display patterns or some PSM items, the actual displays you see will be different.

Note:
While playing a source, you can also show the level meter on the display. For details, see "Activating the level meter" on page 28.

Cancelling the display demonstration

When shipped from the factory, display demonstration (MovieDemo) has been activated, and starts automatically when no operations are done for about 20 seconds.
• It is recommended to cancel the demonstration before you use the unit for the first time.

To cancel the display demonstration, follow the procedure below:

1 **Press and hold SEL (select) for more than 2 seconds so that "MovieDemo" appears on the display.**
(PSM: see pages 30 and 31.)

2 **Select "Off."**

3 **Press SEL (select) to finish the setting.**

To activate the display demonstration, repeat the same procedure and select "Interval" or "All Time" in step 2.
• For more details, see "To set the movie demo—MovieDemo" on page 31.
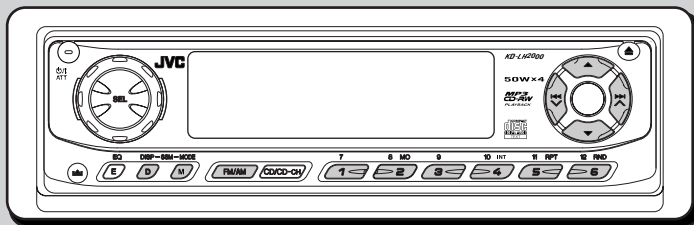
Listening to the radio

You can use either automatic searching or manual searching to tune in to a particular station.

Searching for a station automatically: Auto search

1 **Select the band (FM1 – 3, AM).**

FM/AM
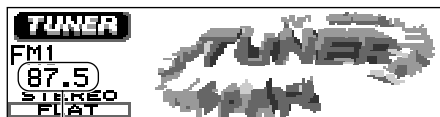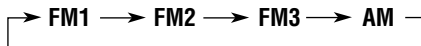
→ **FM1** → **FM2** → **FM3** → **AM** →

Last received station of the selected band is tuned in.

Note:
This receiver has three FM bands (FM1, FM2, FM3). You can use any one of them to listen to an FM broadcast.

2 **Start searching for a station.**
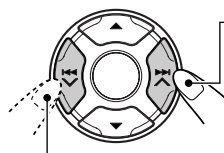
Press ►►|∧ to search stations of higher frequencies.

Press |◄◄ ∨ to search stations of lower frequencies.

Ex.: When the band is FM

When a station is received, searching stops.

To stop searching before a station is received, press the same button you have pressed for searching.

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Searching for a station manually: Manual search

1 **Select the band (FM1 – 3, AM).**
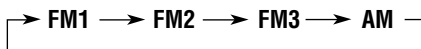
FM/AM

→ FM1 → FM2 → FM3 → AM

Note:
This receiver has three FM bands (FM1, FM2, FM3). You can use any one of them to listen to an FM broadcast.

2 **Press and hold ►►I ⌃ or I◄◄ ⌄ until "Manual Search" starts flashing on the display.**
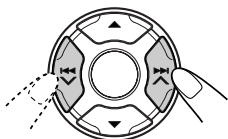
3 **Tune in to a station you want while "Manual Search" is flashing.**
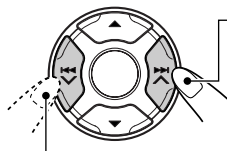
Press ►►I ⌃ to tune in to stations of higher frequencies.

Press I◄◄ ⌄ to tune in to stations of lower frequencies.

• If you release your finger from the button, the manual mode will automatically turn off after 5 seconds.
• If you hold down the button, the frequency keeps changing (in 50 kHz intervals for FM and 9 kHz intervals for AM until you release the button.

When an FM stereo broadcast is hard to receive:

MODE
M

1 Press MODE (M) to enter the functions mode while listening to an FM stereo broadcast. "Mode" appears on the display.

8 MO
2
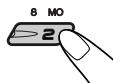
2 Press MO (monaural), while "Mode" is still on the display, so that the MO indicator is highlighted on the display. Each time you press MO, "Mono On" and "Mono Off" alternately appears.

TUNER
FM1
87.5
MONO

Mono
On
2 MO

MONO indicator   MO indicator

TUNER
FM1
87.5
STEREO

Mono
Off
2 MO

"STEREO" is lit when receiving an FM broadcast in stereo.

When the MONO indicator is lit on the display, the sound you hear becomes monaural but the reception will be improved.

If the sound quality decreases and the stereo effect is lost while listening to an FM station
In some areas, adjacent stations may interfere with each other. If this interference occurs, this unit can automatically reduce this interference noise (the initial setting when shipped from the factory). However, in this case, the sound quality will be degraded and the stereo effect will be also lost.
If you do not want to degrade the sound quality and to lose the stereo effect, rather than to eliminate the interference noise, see "To change the FM tuner selectivity—IF Filter" on page 33.

Storing stations in memory

You can use one of the following two methods to store broadcasting stations in memory.
• Automatic preset of FM stations: SSM (Strong-station Sequential Memory)
• Manual preset of both FM and AM stations

FM station automatic preset: SSM

You can preset 6 local FM stations in each FM band (FM1, FM2 and FM3).

1 Select the FM band (FM1 – 3) you want to store FM stations into.

Each time you press the button, the band changes as follows:

→ FM1 → FM2 → FM3 → AM
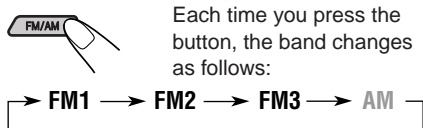
2 Press and hold both buttons for more than 2 seconds.

DISP – SSM – MODE
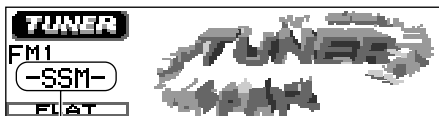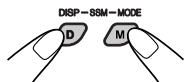
"–SSM–" appears, then disappears when automatic preset is over.

Local FM stations with the strongest signals are searched and stored automatically in the band number you have selected (FM1, FM2 or FM3). These stations are preset in the number buttons — No.1 (lowest frequency) to No.6 (highest frequency). When automatic preset is over, the station stored in number button 1 will be automatically tuned in.

Manual preset

You can preset up to 6 stations in each band (FM1, FM2, FM3 and AM) manually.

Ex.: Storing an FM station of 88.3 MHz into the preset number 1 of the FM1 band.

1 Select the band (FM1 – 3, AM) you want to store stations into (in this example, FM1).

Each time you press the button, the band changes as follows:

→ FM1 → FM2 → FM3 → AM
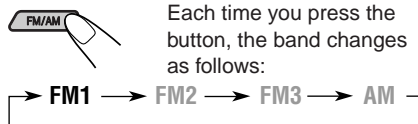
2 Tune in to a station (in this example, of 88.3 MHz).

Press ►►I ∧ to tune in to stations of higher frequencies.

Press I◄◄ ∨ to tune in to stations of lower frequencies.
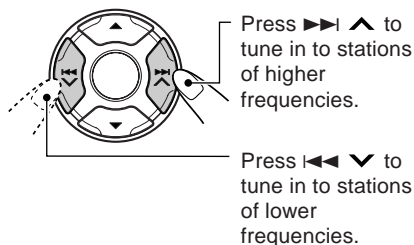
3 Press and hold the number button (in this example, 1) for more than 2 seconds.
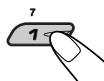
The display pattern automatically changes to the small animation display and the preset number flashes (then the previous display pattern resumes).

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4 **Repeat the above procedure to store other stations into other preset numbers.**

Note:
A previously preset station is erased when a new station is stored in the same preset number.

Tuning in to a preset station

You can easily tune in to a preset station.
Remember that you must store stations first. If you have not stored them yet, see "Storing stations in memory" on page 11.

Selecting a preset station directly

1 **Select the band (FM1 – 3, AM).**

FM/AM

→ FM1 ⟶ FM2 ⟶ FM3 ⟶ AM

2 **Select the number (1 – 6) for the preset station you want.**

| 7 | 8 MO | 9 | 10 INT | 11 RPT | 12 RND |

(1 ⟋ ⟍2) (3 ⟋ ⟍4) (5 ⟋ ⟍6)
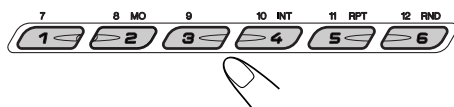
Note:
You can also use the ▲ (up) or ▼ (down) buttons on the unit to select the next or previous preset stations. Each time you press the ▲ (up) or ▼ (down) buttons, the next or previous preset station is tuned in.

Selecting a preset station using the preset station list

If you forget what stations are stored in what preset numbers, you can check the preset station list, then select your desired station on the list.

1 **Select the band (FM1 – 3, AM).**

FM/AM

→ FM1 ⟶ FM2 ⟶ FM3 ⟶ AM

2 **Press and hold ▲ (up) or ▼ (down) until the preset station list for the current band (FM1, FM2, FM3, or AM) appears on the display.**
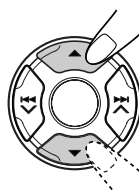
TUNER	1	87.5	4	105.7
FM1 P1	2	88.3	5	Rock
Preset				
STEREO FLAT	3	MHH	6	POP

Notes:
- *If one of FM band preset station lists (FM1, FM2, or FM3) is shown on the display, you can show the other lists by pressing ▲ or ▼.*
- *If a name has been assigned to a station (see page 37), it will be shown instead of the station frequency.*
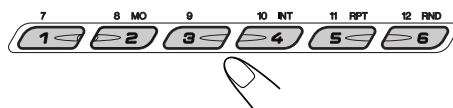
3 **Select the number (1 – 6) for the preset station you want.**

| 7 | 8 MO | 9 | 10 INT | 11 RPT | 12 RND |

(1 ⟋ ⟍2) (3 ⟋ ⟍4) (5 ⟋ ⟍6)

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Changing the display pattern

By pressing DISP (D), you can change the information shown on the display.

Each time you press the button, the display patterns change as follows:

• **When receiving an AM or FM station**

Large animation display

TUNER
FM1
87.5
STEREO
FLAT

Small animation display

TUNER
FM1   87.5 MHz
1:30 STEREO
FLAT
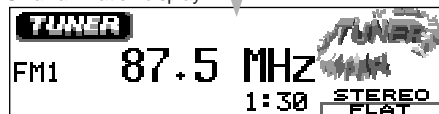
If a name has been assigned to a station, it will be shown instead of "NO NAME."

Small animation display

NO NAME
FM1   87.5 MHz
1:30 STEREO
FLAT

Clock time display

TUNER
FM1
87.5
STEREO
FLAT
1:30

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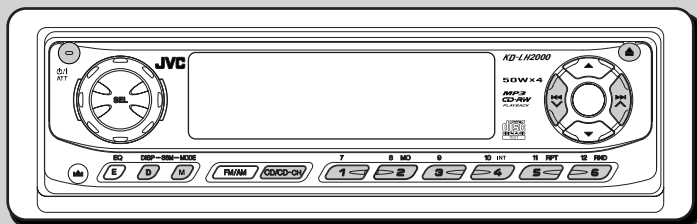
Playing a CD

1 Open the control panel.
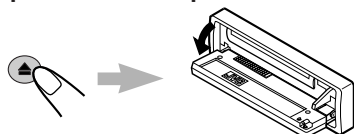
2 Insert a disc into the loading slot.
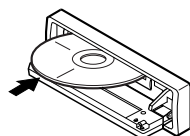
The unit turns on, draws a disc and starts playback automatically.

3 Close the control panel by hand.
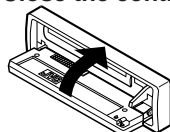
The opening display then source name display appears first....
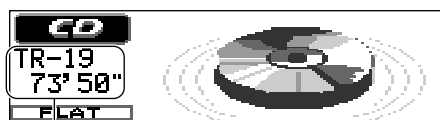
Total track number/Total playing time
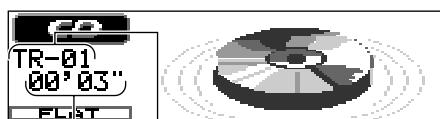
Current track

Elapsed playing time

All tracks will be played repeatedly until you stop playback.

Notes:
- *When a disc is already in the loading slot, selecting "CD" as the source starts CD play.*
- *When a disc is inserted upside down, the disc automatically ejects (if the control panel is open). If the control panel is closed, "Please Eject" appears.*
- *If you change the source, CD play also stops (without ejecting the disc). Next time you select "CD" as the source, CD play starts from where playback has been stopped previously.*

To stop play and eject the disc

Press ▲.
CD play stops, the control panel opens, then the disc automatically ejects from the loading slot. If you change the source, the CD play also stops (without ejecting the disc this time).

Notes:
- *If the ejected disc is not removed for about 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (CD play will not start this time.)*
- *You can eject the disc even when the unit is turned off.*

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Locating a track or a particular portion on a CD

To fast-forward or reverse the track

Press and hold ►►I ∧, while playing a disc, to fast-forward the track.

Press and hold I◄◄ ∨, while playing a disc, to reverse the track.

To go to the next or previous tracks

Press ►►I ∧ briefly, while playing a disc, to go ahead to the beginning of the next track.
Each time you press the button consecutively, the beginning of the next tracks is located and played back.
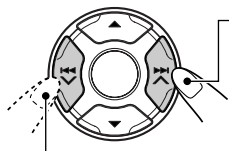
Press I◄◄ ∨ briefly, while playing a disc, to go back to the beginning of the current track.
Each time you press the button consecutively, the beginning of the previous tracks is located and played back.

To go to a particular track directly
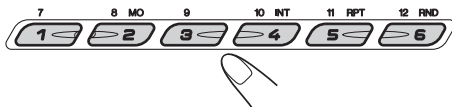
Press the number button corresponding to the track number to start its playback.
• To select a track number from 1 – 6:
  Press 1 (7) – 6 (12) briefly.
• To select a track number from 7 – 12:
  Press and hold 1 (7) – 6 (12) for more than 1 second.

Selecting CD playback modes

To play back tracks at random (Random Play)

You can play back all tracks on the disc at random.

1 Press MODE (M) to enter the functions mode while playing a disc.
"Mode" appears on the display.

2 Press RND (random), while "Mode" is still on the display, so that the RND indicator is highlighted on the display.
Each time you press RND, "Random On" or "Random Off" alternately appears.

RANDOM indicator

RND indicator is highlighted when "Random On" is selected.

When Random Play is turned on, the RANDOM indicator lights up on the display and a track randomly selected starts playing.

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To play back tracks repeatedly (Repeat Play)

You can play back the current track repeatedly.

1 Press MODE (M) to enter the functions mode while playing a disc.
"Mode" appears on the display.
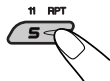
2 Press RPT (repeat), while "Mode" is still on the display, so that the RPT indicator is highlighted on the display.
Each time you press RPT, "Repeat On" or "Repeat Off" alternately appears.

REPEAT indicator   RPT indicator is highlighted when "Repeat On" is selected.

When Repeat Play is turned on, the REPEAT indicator lights up on the display.

To play back only intros (Intro Scan)

You can play back the first 15 seconds of each track sequentially.

1 Press MODE (M) to enter the functions mode while playing a disc.
"Mode" appears on the display.
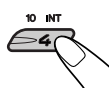
2 Press INT (intro), while "Mode" is still on the display, so that the INT indicator is highlighted on the display.
Each time you press INT, "Intro On" or "Intro Off" alternately appears.

INTRO indicator   INT indicator is highlighted when "Intro On" is selected.

When Intro Scan is turned on, the INTRO indicator lights up on the display.

Prohibiting CD ejection

You can prohibit CD ejection and can lock a disc in the loading slot.

While pressing CD/CD-CH, press and hold ⏻/I ATT for more than 2 seconds.

"No Eject" flashes on the display for about 5 seconds, and the disc is locked and cannot be ejected.

To cancel the prohibition and unlock the disc, press ⏻/I ATT again for more than 2 seconds, while pressing CD/CD-CH.
"Eject OK" flashes on the display for about 5 seconds, and the disc is unlocked.

16

Changing the display pattern

By pressing DISP (D), you can change the information shown on the display.

Each time you press the button, the display patterns change as follows:
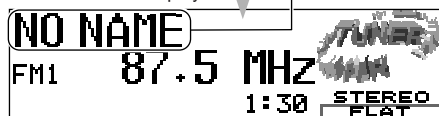
Large animation display

TR-01
00'03"
FLAT
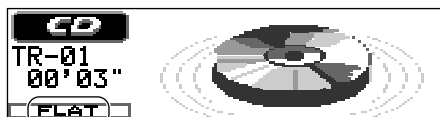
iEQ mode
(see page 26)

Small animation display 1
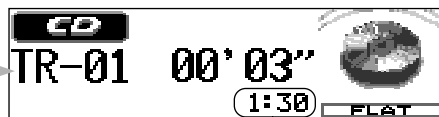
TR-01   00'03"
1:30   FLAT

Clock time

Small animation display 2

#1'S / MAR
TR-01   00'03"
1:30   FLAT

Small animation display 3

ALWAYS
TR-01   00'03"
1:30   FLAT

Clock time display

TR-01
00'03"
FLAT
1:30

Small animation display 4

#1'S / MAR
01 ALWAYS
1:30   FLAT
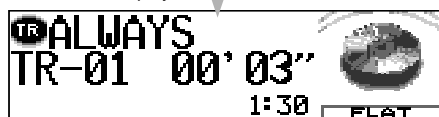
Notes:
- *When the disc title/performer is shown, the DISC indicator lights up. When the track title is shown, the TR indicator lights up.*
- *If the information cannot be shown at a time, it will scroll on the display.*
  Some characters or symbols will not be shown (will be blanked or substituted) on the display.
- *If no name is assigned to the audio CD, "NO NAME" will appear.*
  To assign a name to a conventional CD, see page 37.
- *If no disc title/performer or no track title is recorded for the CD Text, "NO NAME" will appear.*

17

MP3 INTRODUCTION

What is MP3?

MP3 is an abbreviation of Motion Picture Experts Group (or MPEG) Audio Layer 3. MP3 is simply a file format with a data compression ratio of 1:10 (128 Kbps*). That means, by using MP3 format, one CD-R or CD-RW can contain 10 times as much data volume as a regular CD can.

* Bit rate is the average number of bits that one second of audio data will consume. The unit used is Kbps (1000 bits/second). To get a better audio quality, choose a higher bit rate. The most popular bit rate for encoding is 128 Kbps.

This unit is incorporated with an MP3 decoder.
You can play back MP3 files (tracks) recorded on CD-Rs, CD-RWs, and CD-ROMs.

Compatible with ID3v1

Extra information data such as album title, performer name, song title, recording year, music genre and a brief comment can be stored within an MP3 file.

This unit can show ID3v1 tags (album name, performer name and song title) on the display. (See page 47.)
• Some characters cannot be shown correctly.
• This unit is not compatible with ID3v2.

Other Main Features in this unit:
• Maximum number of directories/files: 289
                                                            (Total)
• Available characters for directory/file names:
                          A–Z, 0–9, _ (underscore)
• Maximum number of characters for file name
  (ISO 9660 Level 1): 12 (inclusive of
                          separation mark—"**.**" and
                          extension code—"mp3")
  (ISO 9660 Level 2): 31 (inclusive of
                          separation mark—"**.**" and
                          extension code—"mp3")
  (Joliet):   64 (inclusive of
                          separation mark—"**.**" and
                          extension code—"mp3")
• Maximum number of characters for directory
  name: 64

Precautions when recording MP3 files on a CD-R or CD-RW

This unit can only read MP3 files that are recorded in the format that is compliant with ISO 9660 Level 1, Level 2 or Joliet.

How are MP3 files recorded and played back?

MP3 "**files (tracks)**" can be recorded in "**directories (folders)**"—in PC terminology. During recording, the files and directories can be arranged in a way similar to arranging files and directories/folders of computer data.
"**Root**" is similar to the root of a tree. Every file and directory can be linked to and be accessed from the root.

Playback order, file search order, and directory search order of the MP3 files recorded on a disc are determined by the writing (or encoding) application; therefore, playback order may be different from the one you have intended while recording the directories and the files.

The illustration on the next page shows an example of how MP3 files are recorded on a CD-R or CD-RW, how they are played back, and how they are searched for on this unit.

Notes:
* *The unit can read a CD-ROM containing MP3 files. However, if non-MP3 files are recorded together with MP3 files, this unit will take a longer time to scan the disc. It may also cause the unit to malfunction.*
* *The unit cannot read or play an MP3 file without the extension code—mp3.*
* *This player is not compatible with the data encoded with Layer1and Layer 2 formats.*
* *The unit is not compatible with Playlist**.*

** A playlist is a simple text file, used on a PC, which enables users to make their own playback order without physically rearranging the files.

MP3 directory/file configuration

ENGLISH
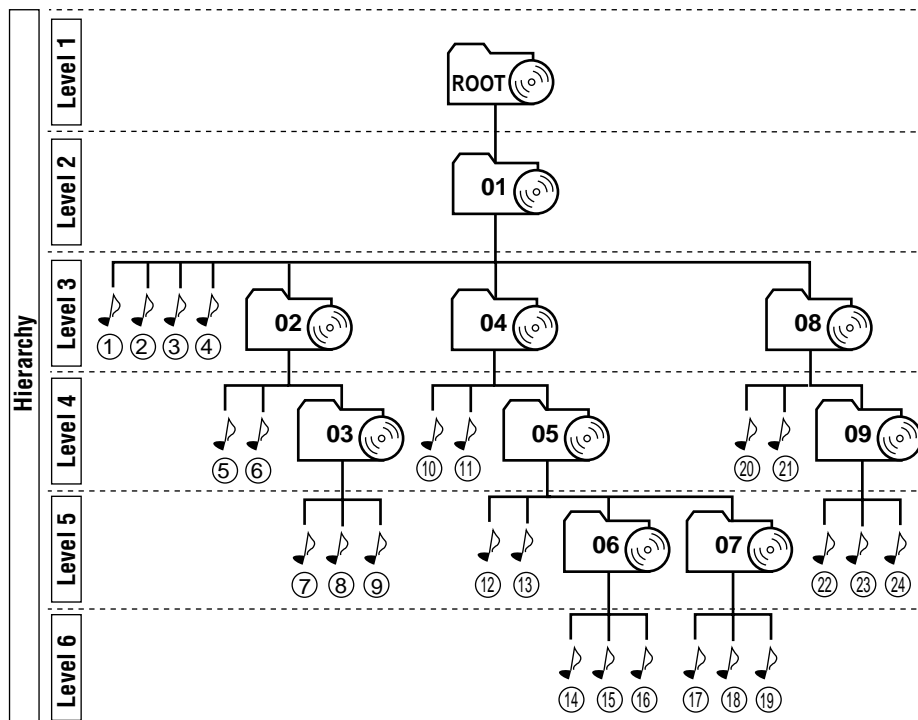
ROOT	: Root
01	: Directories
♪	: MP3 files

Note:
There is no limit on the number of the hierarchy levels (nested directories).
However, it is recommend to limit the numbers of hierarchy levels up to 8 for stable operations.

MP3 playback/search order
• The numbers in circles below the MP3 files (♪) indicate the playback order and search order of the MP3 files. Normally this unit plays back MP3 files in the recorded order.
• The numbers inside the directories indicate the playback order and search order of the directories on an MP3 disc. Normally this unit plays back MP3 files in the directories in the recorded order.

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MP3

MP3 OPERATIONS

ENGLISH
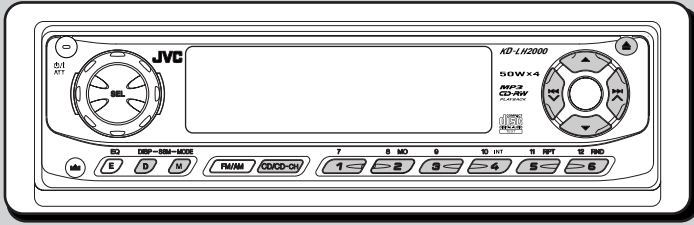
Refer also to "CD OPERATIONS" on pages 14 to 17.

Playing an MP3 disc

1 **Open the control panel.**
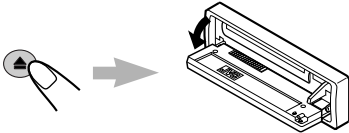
2 **Insert an MP3 disc into the loading slot.**
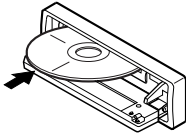
The unit draws the disc. Playback starts automatically from the first file of the first directory once disc check is completed.

3 **Close the control panel by hand.**
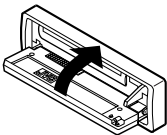
The display changes to show the following:
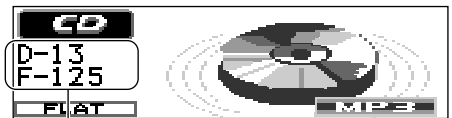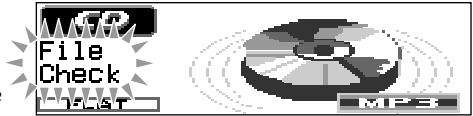
Ex.: When the disc contains 13 directories and 125 MP3 files.

Current file (track)

Elapsed playing time
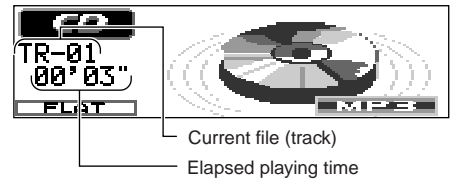
All the files (tracks) on the disc will be played repeatedly until you stop playback.

Notes:
- *MP3 discs require a longer readout time. (It differs due to the complexity of the directory/file configuration.)*
- *If you change the source or turn the power off, MP3 playback stops (without ejecting the disc). Next time you select disc play as the source or turn the power on, MP3 playback starts from where playback has been stopped previously.*

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MP3

To stop play and eject the disc

Press ⏏.
Playback stops, the control panel moves down, and the disc automatically ejects from the loading slot.

Locating a file or particular portion on an MP3 disc

To fast-forward or reverse the file
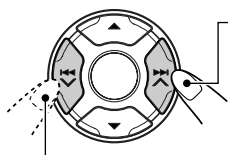
Press and hold ▶▶I ∧ while playing an MP3 disc, to fast-forward the file.

Press and hold I◀◀ ∨ while playing an MP3 disc, to reverse the file.

Note:
During this operation, you can only hear intermittent sounds. (The elapsed playing time also changes intermittently on the display.)

To skip to the next or previous files
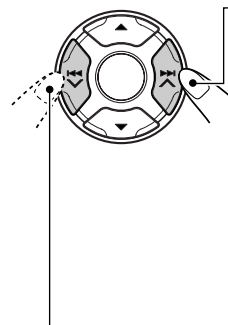
Press ▶▶I ∧ briefly while playing, to skip ahead to the beginning of the next file. Each time you press the button consecutively, the beginning of the next files is located and played back. (See "MP3 playback/search order" on page 19.)

Press I◀◀ ∨ briefly, while playing, to skip back to the beginning of the current file. Each time you press the button consecutively, the beginning of the previous files is located and played back. (See "MP3 playback/search order" on page 19.)

Selecting a directory

You can select a directory or skip to another directory easily.

To go to a particular directory directly

IMPORTANT:
To directly select the directories using the number button(s), it is required that directories are assigned 2 digit numbers at the beginning of their directory names. (This can only be done during the recording of CD-Rs or CD-RWs.)
Ex.: If directory name is "01 ABC"
→ press 1 to go to Directory 01 ABC. If directory name is "1 ABC," pressing 1 does not work.
If directory name is "12 ABC"
→ press and hold 6 (12) to go to Directory 12 ABC.

Press the number button corresponding to the directory number to start playing the first file in the selected directory.
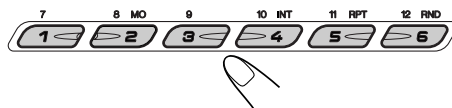
• To select a directory number from 01 – 06: Press 1 (7) – 6 (12) briefly.
• To select a directory number from 07 – 12: Press and hold 1 (7) – 6 (12) for more than 1 second.

Notes:
• *If "MP3" flashes on the display after you have selected a directory, it means that the directory does not contain any MP3 files.*
• *You cannot directly select a directory with a number greater than 12.*

To select a particular file in a directory, press ▶▶I ∧ or I◀◀ ∨ after selecting the directory.

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To skip to the next directory

Press ▲ (up) briefly while playing an MP3 disc.
Each time you press the button consecutively, the next directory is located (and the first file in the directory starts playing, if recorded). (See "MP3 playback/search order" on page 19.)

To skip to the previous directory

Press ▼ (down) briefly while playing an MP3 disc.
Each time you press the button consecutively, the previous directory is located (and the first file in the directory starts playing, if recorded). (See "MP3 playback/search order" on page 19.)

Note:
If the directory does not contain any MP3 files, it is skipped.

To select a directory on the list shown on the display

You can show the lists of directory names on the display (six names at a time), and can select a directory on the lists.

1 **Press and hold ▲ or ▼ so that the first list of the directory names (directory no.1 to no.6) appears on the display.**

Note:
When a directory does not contain any MP3 files, it may take time to show the lists.

2 **Find a directory you want to play.**
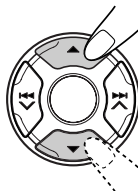
Each time you press ▲ or ▼, the directory name lists change.

3 **Select the number (1 – 6) for the directory you want.**
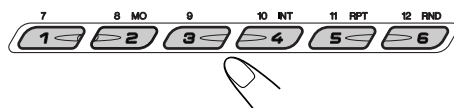
The first file in the selected directory starts playing.

Selecting MP3 playback modes

To play back files at random (Random Play)

You can play back all files on the MP3 disc at random.

1 Press MODE (M) to enter the functions mode while playing an MP3 disc.
"Mode" appears on the display.

2 Press RND (random) while "Mode" is still on the display, so that the RND indicator is highlighted on the display.
Each time you press RND, the random play mode changes as follows.

→ **Random 1** → **Random 2** ⌐
⌐← **Random Off** ←

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MP3
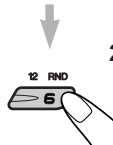
RANDOM indicator

RND indicator
(See the following table.)

Ex.: When you select "Random 1."

Mode	RND Indicator	Plays at random
Random 1	Highlighted	All files of the current directory, then the files of the next directory and so on.
Random 2	Flashes	All files on the disc.

When Random Play is turned on, the RANDOM indicator lights up or flashes on the display.

To play back files repeatedly (Repeat Play)

You can play back the current file or all the files in the current directory repeatedly.

1 Press MODE (M) to enter the functions mode while playing an MP3 disc.
"Mode" appears on the display.

2 Press RPT (repeat) while "Mode" is still on the display, so that the RPT indicator is highlighted on the display.
Each time you press RPT, the repeat play mode changes as follows.

→ **Repeat 1** → **Repeat 2** →
Repeat Off ←
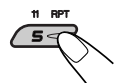
REPEAT indicator

RPT indicator
(See the following table.)

Ex.: When you select "Repeat 1."

Mode	RPT Indicator	Plays repeatedly
Repeat 1	Highlighted	The current file (or specified file).
Repeat 2	Flashes	All files of the current directory (or specified directory).

When Repeat Play is turned on, the REPEAT indicator lights up or flashes on the display.

To play back only intros (Intro Scan)

You can play back the first 15 seconds of each file sequentially.

1 Press MODE (M) to enter the functions mode while playing an MP3 disc.
"Mode" appears on the display.

2 Press INT (intro) while "Mode" is still on the display, so that the INT indicator is highlighted on the display.
Each time you press INT, the intro scan mode changes as follows:

→ **Intro 1** → **Intro 2** →
Intro Off ←
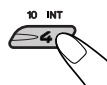
INTRO indicator

INT indicator
(See the following table.)

Ex.: When you select "Intro 1."

Mode	INT Indicator	Plays the beginnings
Intro 1	Highlighted	Of all files on the disc.
Intro 2	Flashes	Of the first file of all directories.

When Intro Scan is turned on, the INTRO indicator lights up or flashes on the display.

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Changing the display pattern

By pressing DISP (D), you can change the information shown on the display.

Each time you press the button, the display patterns change as follows:

Large animation display
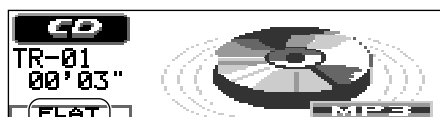
Small animation display 1

iEQ mode (see page 26)
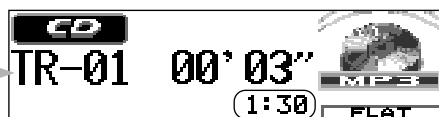
Clock time

Small animation display 2
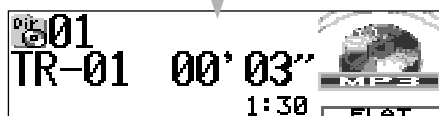
Small animation display 3
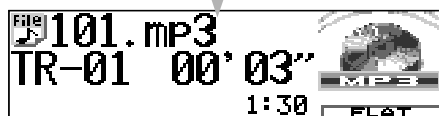
Clock time display

Small animation display 4

The above diagram shows the examples of the display when "ID3 Tag" is set to "Off."

Notes:
- *When the directory name is shown, the "Dir" indicator ( ) lights up. When the file name is shown, the "File" indicator ( ) lights up.*
- *If the information cannot be shown at a time, it will scroll on the display.*
  Some characters or symbols cannot be shown (blanked or substituted) on the display.
- *If "ID3 Tag" is set to "On" (see page 33) if a disc has an ID3 tag, ID3 tag information will appear on the display. The album name/performer appears on the display instead of the directory name, while track title appears instead of the file name.*

Adjusting the sound

You can adjust the sound characteristics to your preference.

1 Select the item you want to adjust.

Each time you press the button, the adjustable items change as follows:

Fad → Bal → S.Bass
(Fader) (Balance) (Super Bass)

(Canceled) ← Vol Adj ← Sub Out
(Volume Adjustment) (Subwoofer Output)
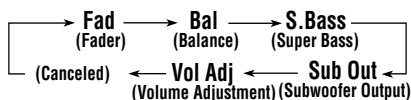
Indication	To do:	Range
Fad*1	Adjust the front and rear speaker balance.	R06 (Rear only)	F06 (Front only)
Bal	Adjust the left and right speaker balance.	L06 (Left only)	R06 (Right only)
S. Bass*2	Adjust the bass.	00 (min.)	08 (max.)
Sub Out*3	Adjust the subwoofer output level and cutoff frequency level.	00 (min.)	12 (max.) Low/Mid/High
Vol Adj*4	Adjust and store the input level of each source.	−12 (min.)	+12(max.)

*1 *If you are using a two-speaker system, set the fader level to "00."*
*2 *The richness and fullness of the bass sound is clearly maintained regardless of how low you set the volume.*
*3 *This takes effect only when a subwoofer is connected.*
*4 *By adjusting the input level to match it to the FM sound level, you will not need to adjust the volume level each time you change the source. This adjustment is memorized for each source except FM.*

2 Adjust the level.
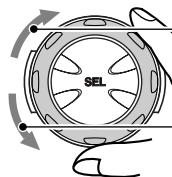
To increase the level.

To decrease the level.

While adjusting fader and balance —Fad, Bal:
You can make these two adjustments at the same time, by referring to the indication on the display.

SEL   FRONT ▲
Fad 00 ◄◄   ►►
Bal 00
                    ▼ REAR
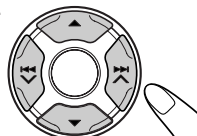
- Press ▲ or ▼ to adjust the fader.
- Press ►►I ∧ or I◄◄ ∨ to adjust the balance.

While adjusting subwoofer output —Sub Out:
You can also set an appropriate cutoff frequency level according to the subwoofer connected:

- Press ►►I ∧ or I◄◄ ∨ to select "Low," "Mid," or "High."

Low: Frequencies higher than 50 Hz are cut off to the subwoofer.
Mid: Frequencies higher than 80 Hz are cut off to the subwoofer.
High: Frequencies higher than 115 Hz are cut off to the subwoofer.

ENGLISH

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Selecting preset sound modes (iEQ: i-equalizer)

You can select a preset sound mode suitable to the music genre.

• There is a time limit in doing the following procedure. If the setting is canceled before you finish, start from step 1 again.

1 Press EQ (equalizer).

The last selected sound mode is called up.

Ex.: If you have selected "Flat" previously

2 Select the sound mode you want.

As you turn the control dial, the sound modes change as follows:

Flat ⇄ Hard Rock ⇄ R&B* ⇄ Pop ⇄ Jazz ⇄ Dance Music ⇄ Country ⇄ Reggae ⇄ Classic ⇄ User 1 ⇄ User 2 ⇄ User 3 ⇄ (back to the beginning)

* *Rhythm and Blues*

To cancel the sound mode, select "Flat" in step 2.

Note:
For details about the preset settings of each sound mode, see page 28.

Storing your own sound adjustments

You can adjust the sound modes to your preference and store your own adjustments in memory (User 1, User 2 and User 3).

• There is a time limit in doing the following procedure. If the setting is canceled before you finish, start from step 1 again.

1 Press EQ (equalizer).

2 Select the sound mode you want to adjust.

Ex.: If you have selected "R & B"

3 Enter the sound adjustment mode.
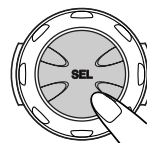
The following sound mode adjustment screen appears on the display.

4 **Make adjustments as you like, referring to the table "Sound adjustment items."**

Buttons used for adjustments
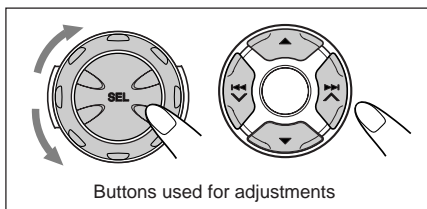
1) **Press ▶▶| ∧ or |◀◀ ∨ to select the frequency band—Low, Mid, or High.**

2) **Turn the control dial to select the center frequency for the selected band.**

3) **Press ▲ or ▼ to adjust the level of the selected band.**

4) **Press SEL (select) to enter the Q level (band width) adjustment mode for the selected band.**

5) **Turn the control dial to adjust the Q level for the selected band.**

6) **Repeat steps 1) to 5) to adjust the other frequency bands.**

5 **Exit from the sound adjustment mode.**

The confirmation message appears—whether you want to store the adjustment.

If you want to cancel the adjustments, press any button other than SEL (select).

6 **Select one of the user sound modes (User 1, User 2, User 3).**

7 **Store the adjustment in the selected user sound mode.**

Ex.:When you have selected "User 1"

Sound adjustment items

Band	Selectable values		
	Low	Mid	High
Center frequency	50 Hz 80 Hz 120 Hz	700 Hz 1 kHz 2 kHz	8 kHz 12 kHz
Q (band width)	Q1 (min.) | Q4 (max.)	Q1 (min.) | Q2 (max.)	——— (Fixed)
Level	–06 (min.) | +06 (max.)	–06 (min.) | +06 (max.)	–06 (min.) | +06 (max.)

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Activating the level meter

You can show the level meters on the display while playing any source.

This unit is equipped with three level meter patterns.

• There is a time limit in doing the following procedure. If the setting is canceled before you finish, start from step 1 again.

1 Press EQ (equalizer) *twice*.

The last selected level meter appears on the display.

2 Select the level meter pattern you want.
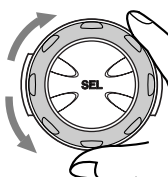
As you turn the control dial, the level meters change as follows:

$$\text{Off} \longleftrightarrow \text{Level 1} \longleftrightarrow \text{Level 2} \longleftrightarrow \text{Level 3}$$
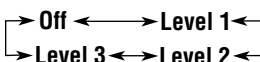
Level Meter 1:

The audio level meter fluctuates vertically.
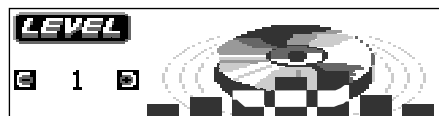
Level Meter 2:

The speaker on the display vibrates as input audio level changes.
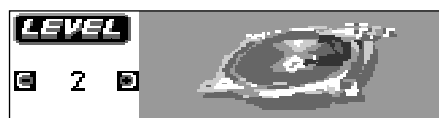
Level Meter 3:

The left and right audio level meters appear.

• If the small animation display is selected, only one audio level meter can be shown.

The list below shows the preset value settings for each sound mode (see also page 26).

Sound modes	Preset values							
	Low			Mid			High	
	C.Freq.	Q (Width)	Level	C.Freq.	Q (Width)	Level	C.Freq.	Level
Flat	50 Hz	Q1	+00	700 Hz	Q1	+00	8 kHz	+00
Hard Rock	80 Hz	Q2	+03	700 Hz	Q1	+00	8 kHz	+02
R & B	80 Hz	Q3	+03	2 kHz	Q2	+01	12 kHz	+03
Pop	120 Hz	Q1	+02	2 kHz	Q2	+01	12 kHz	+02
Jazz	80 Hz	Q1	+03	1 kHz	Q1	+01	8 kHz	+03
Dance Music	50 Hz	Q2	+04	700 Hz	Q1	−02	8 kHz	+01
Country	50 Hz	Q4	+02	700 Hz	Q1	+00	12 kHz	+02
Reggae	80 Hz	Q1	+03	2 kHz	Q2	+02	12 kHz	+02
Classic	120 Hz	Q1	+03	1 kHz	Q1	+00	8 kHz	+02
User 1	50 Hz	Q1	+00	700 Hz	Q1	+00	8 kHz	+00
User 2	50 Hz	Q1	+00	700 Hz	Q1	+00	8 kHz	+00
User 3	50 Hz	Q1	+00	700 Hz	Q1	+00	8 kHz	+00

Changing the general settings (PSM)

You can change the items listed on the next page by using the PSM (Preferred Setting Mode) control.
• The PSM items are grouped into five categories—"Disp (display)," "Clock," "Tuner," "Color," and "Audio."

Basic Procedure

1 **Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (See pages 30 and 31.)**

2 **Press ▲ (up) or ▼ (down) repeatedly until your desired PSM category appears on the left side of the display.**

3 **Select the PSM item you want to adjust.**

4 **Adjust the PSM item selected.**

5 **Repeat steps 2 to 4 to adjust the other PSM items if necessary.**

6 **Finish the setting.**
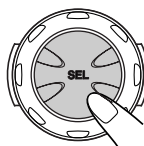
To set clock—Clock Hr, Clock Min

You can set the clock using the PSM control.

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2 Press ▲ or ▼ repeatedly until "Clock" is selected as the PSM category (it is shown on the left side of the display).
3 Press ▶▶I ∧ or I◀◀ ∨ to select "Clock Hr (hour)."
4 Turn the control dial to adjust the hour.
5 Press ▶▶I ∧ or I◀◀ ∨ to select "Clock Min (minute)."
6 Turn the control dial to adjust the minute.
7 Press SEL (select) to finish the setting.

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Preferred Setting Mode (PSM) items

The PSM items are grouped into five categories—"Disp (display)," "Clock," "Tuner," "Color," and "Audio." To select a desired item, first select the category where the desired item is listed.

	Indications		Selectable values		Factory-preset settings	See page
Disp (display)	**MovieDemo**	Movie demo	Interval ↔ Off ↳ All Time ↵		Interval	8, 31
	SRC Anime	Source animation	On	Off	On	31
	Scroll	Scroll mode	Once ↔ Auto ↳ Off ↵		Once	32
	Dimmer	Dimmer mode	Auto ↔ Off ↳ On ↵		Auto	32
	Contrast	Contrast	1 — 10		5	32
	LCD Type	Display type	Positive ↔ Negative ↳ Auto ↵		Positive	32
	Font Type	Font type	1	2	1	32
	ID3 Tag	ID3 Tag display	On	Off	On	33
Clock	**Clock Hr**	Hour adjustment	1 —12		1 (1:00)	29
	Clock Min	Minute adjustment	00 —59		00 (1:00)	29
Tuner	**IF Filter**	Intermediate frequency filter	Auto	Wide	Auto	33

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Indications			Selectable values		Factory-preset settings	See page
Color	**Mode**	Color mode	Source	User	Source	34
	Source[1]	Source color selection	See page 34 and 35 for details		All Source	34,35
	AllSource[2] (Selected source)		See page 34 and 35 for details		Every	34,35
	User[3]	User color selection	Day	Night	Day	35,36
	Red[3]	Red	0 — +11		Day:+7 / Night:+5	35,36
	Green[3]	Green	0 — +11		Day:+7 / Night:+5	35,36
	Blue[3]	Blue	0 — +11		Day:+7 / Night:+5	35,36
Audio	**Beep**	Key-touch tone	On	Off	On	33
	Ext Input[4]	External component	Changer	Line In	Changer	33
	Telephone	Telephone muting	Off ↔ Muting 1 ↰ Muting 2 ↲		Off	33

[1] *Displayed only when "Mode" is set to "Source."*
[2] *What appears actually here—source name—varies according to the "Source" setting.*

[3] *Displayed only when "Mode" is set to "User."*
[4] *Displayed only when one of the following sources is selected – FM, AM and CD.*

To set the movie demo—MovieDemo

When shipped from the factory, the movie demo has been activated ("Interval" is selected).

- Interval: If no operation is done for about 20 seconds, the movie demo and playback source indication alternately appears on the display.
- All Time: If no operation is done for about 20 seconds, the movie demo automatically starts.
- Off: Cancels the movie demo.

To set the source animation on the display—SRC Anime

When changing the source, the display shows the source animation. If you do not want this animation, you can turn it off.

- On: The source animation appears just after you change the source.
- Off: Cancels the source animation.

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To select the scroll mode—Scroll

You can scroll the disc information if it cannot be displayed at a time.

- Once: Scrolls only once.
- Auto: Repeats the scroll
            (in 5-second intervals).
- Off: Cancels Auto Scroll.

To select the dimmer mode—Dimmer

When you turn on the car headlights, the display automatically dims (Auto Dimmer).
When shipped from the factory, Auto Dimmer mode is activated.

- Auto: Activates Auto Dimmer.
- Off: Cancels Auto Dimmer.
- On: Always dims the display.

Note:
Auto Dimmer equipped for this unit may not work correctly on some vehicles, particularly on those having a control dial for dimming.
In this case, set the dimmer mode to "On" or "Off."

To adjust the display contrast level— Contrast

You can adjust the display contrast level among 1 (dark) to 10 (bright).

To select the display illumination pattern—LCD Type

You can select the display illumination patterns according to your preference.

- Auto: Positive pattern will be selected during the day time (while the headlights are turned off); on the other hand, negative pattern will be used during the night time (while the headlights are turned on.)
- Positive: Positive (normal) pattern of the display.
- Negative: Negative pattern of the display.

To select the font on the display—Font Type

You can change the font types used on the display. Select either "1" or "2" according to your preference.

To turn the tag display on or off – ID3 Tag

An MP3 file can contain file information called "ID3 Tag" where its album name, performer, track title, etc. are recorded.
There are two versions–ID3v1 (ID3 Tag version 1) and ID3v2 (ID3 Tag version 2). This unit is compatible only with ID3v1.

• On: Turns on the ID3 tag display while playing MP3 files.
         * If an MP3 file does not have ID3 tags, directory name and file name appear.

         Note:
         If you change the setting from "Off" to "On" while playing an MP3 file, the tag display will be activated when the next file starts playing.

• Off: Turns off the ID3 tag display while playing MP3 files. (Only the directory name and file name can be shown.)

To change the FM tuner selectivity— IF Filter

In some areas, adjacent stations may interfere with each other. If this interference occurs, noise may be heard.

• Auto: When this type of interference occurs, this unit automatically increases the tuner selectivity so that interference noise will be reduced. (But the stereo effect will also be lost.)
• Wide: Subject to the interference from adjacent stations, but sound quality will not be degraded and the stereo effect will not be lost.

To turn on/off the key-touch tone—Beep

You can deactivate the key-touch tone if you do not want it to beep each time you press a button.

• On: Activates the key-touch tone.
• Off: Deactivates the key-touch tone.

To select the external component to use— Ext Input

You can connect the external component to the CD changer jack on the rear using the Line Input Adaptor KS-U57 (not supplied).
To use the external component as the playback source through this unit, you need to select which component—CD changer or external component—to use.

• Changer: To use the CD changer.
• Line In: To use the external component other than CD changer.

Note:
For connecting the Line Input Adaptor KS-U57 and the external component, refer to the Installation/Connection Manual (separate volume).

To select the telephone muting—Telephone

This mode is used when a cellular phone system is connected. Depending on the phone system used, select either "Muting 1" or "Muting 2," whichever mutes the sounds from this unit.
When shipped from the factory, this mode is deactivated.

• Muting 1:   Selects this if this setting can mute the sounds.
• Muting 2:   Selects this if this setting can mute the sounds.
• Off: Cancels the telephone muting.

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Changing the display color

You can set the display color using the PSM control. By selecting "Source" as the "Mode" (color mode) setting, you can select your favorite color for each source (or for all sources).

Note:
When selecting "User" as the "Mode" setting, you can adjust and store your own colors as you like. See page 35.

Setting the desired color for each source—Source

Once you have set the color for each source (or for all sources), the display illuminates in the selected color when the source is selected.

1 **Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (See pages 30 and 31.)**

2 **Press ▲ (up) or ▼ (down) repeatedly until "Color" appears as the PSM category on the left side of the display.**

3 **Select "Mode."**
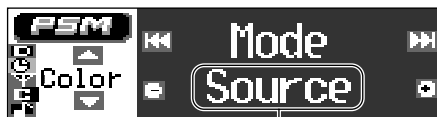
Currently selected setting for "Mode"

4 **Select "Source" as the "Mode" (color mode) setting.**
As you turn the control dial, the "Mode" settings alternate between "Source" and "User."
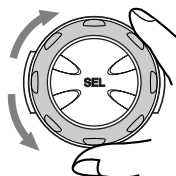
Source ←→ User

5 **Enter the source selecting mode.**
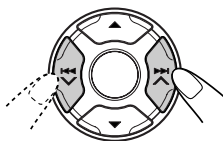
Currently selected setting for "Source"

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6 Select the source that you want to set the display color for.

As you turn the control dial, the source names change as follows:

→ AllSource*¹ ↔ CD ↔ Changer*²
                              (Line In)
→ AM ←   → FM ←
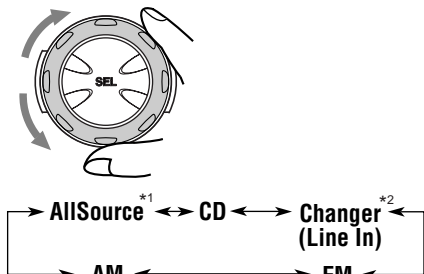
*¹ When you select "AllSource," you can use the same color for all sources.
*² Selected only when these components are connected.

7 Enter the color selecting mode.

8 Select the display color.

As you turn the control dial, the colors change as follows:

Every*¹ ⇄ Aqua ⇄ Sky ⇄ Sea ⇄
Leaves ⇄ Grass ⇄ Rose ⇄ Cherry ⇄
Orange ⇄ Honey ⇄ Violet ⇄ Grape ⇄
Snow ⇄ User*² ⇄ (back to the beginning)

*¹ When you select "Every," the color changes every two seconds (changing to every color listed above except "User.")
*² When you select "User," one of the original colors—"Day" or "Night" can be selected depending on the "User" setting.

9 Repeat steps 5 to 8 to select the color for each source (except when selecting "AllSource" in step 6).

10 Finish the setting.

Selecting or adjusting your own color— User

You can adjust and store your own colors—"Day" and "Night," and select one of them as the display color for any desired source.
• Day: Can be used as your user color during the day time (while the headlights are turned off).
• Night: Can be used as your user color during the night time (while the headlights are turned on.)

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (See pages 30 and 31.)
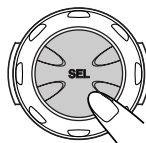
2 Press ▲ (up) or ▼ (down) repeatedly until "Color" appears as the PSM category on the left side of the display.
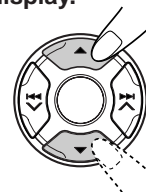
3 **Select "Mode."**

4 **Select "User" as the "Mode" (color mode) setting.**

| *FSM* | ◄◄ | Mode | ►►I |
| Color | ◱ | User | ◲ |

5 **Select "User."**

| *FSM* | ◄◄ | User | ►►I |
| Color | ◱ | Day | ◲ |

6 **Select either "Day" or "Night" as your user color.**
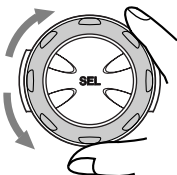
As you turn the control dial, the user color alternates between "Day" and "Night."

• If you want to select the user color, but do not need to adjust the color, go to step 9 to finish the setting.
• If you want to adjust the user color, go to the next step.

7 **Adjust the user color.**

1) **Press ►►I ∧ or I◄◄ ∨ to select one of three primary colors— "Red" "Green," and "Blue."**

→ **Red** ←→ **Green** ←→ **Blue** ←
→ **User** ←──────→ **Mode** ←
(Back to step 5 above)   (Back to step 3 above)
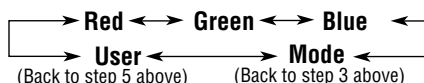
2) **Turn the control dial to adjust the selected primary color.**
You can adjust within the range of 0 to +11.

3) **Repeat steps 1) and 2) to adjust the other primary colors.**

8 **Repeat steps 6 and 7 to adjust the other user color—"Day" or "Night."**

9 **Finish the setting.**

Note:
To use the color adjusted in this procedure, select "User" in the step 8 ("Select the display color") of "Setting the desired color for each source—Source." (See page 35.)

Assigning names to the sources

You can assign names to discs (both in this unit and in the CD changer), station frequencies and the external component.
After assigning a name, it will appear on the display when you select the source.

Sources	Maximum number of characters
CDs*	up to 32 characters (up to 40 discs)
Station frequencies	up to 10 characters (up to 30 station frequencies including both FM and AM.)
External component	up to 8 characters

* *You cannot assign a name to a CD Text or an MP3 disc.*

1 Select a source you want to assign a name to.

When you select a source, the power automatically comes on.

2 Press and hold SEL (select) for more than 2 seconds while pressing DISP (D).

Ex.: When you select CD as the source

3 Select the character set you want while the first character position is flashing.

Each time you press the button, the character set changes as follows:

```
  ┌─→ A – Z    ──→    a – z  ─┐
  │  (capital)        (small) │
  └──  1 – 0 & Symbols  ←─────┘
          (numbers)
```
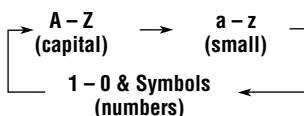
4 Select a character.
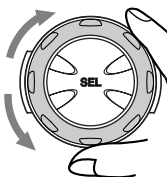
• About the available characters, see page 47.

5 Move the cursor to the next (or previous) character position.
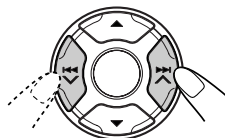
6 Repeat steps 3 to 5 until you finish entering the name.

7 Finish the procedure while the last selected character is flashing.

To erase the entered characters

Insert spaces using the same procedure described above. (About the available characters, see page 47.)

Notes:
- *When you try to assign a name to the 41st disc, you cannot enter the text entry mode (and will hear a beep sound if "Beep" has been set to "On":see page 33.) In this case, delete unwanted names before assignment.*
- *When the CD changer is connected, you can assign names to discs in the CD changer. These names can also be shown on the display if you insert the discs in this unit.*

Detaching the control panel

You can detach the control panel when leaving the car.
When detaching or attaching the control panel, be careful not to damage the connectors on the back of the control panel and on the panel holder.

Detaching the control panel

Before detaching the control panel, be sure to turn off the power.

1 Unlock the control panel.
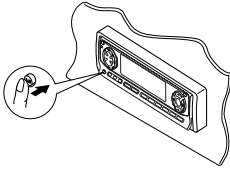
2 Pull the control panel out of the unit.
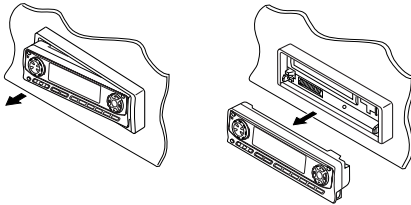
3 Put the detached control panel into the provided case.
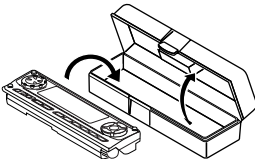
Attaching the control panel

1 Insert the right side of the control panel into the groove on the panel holder.
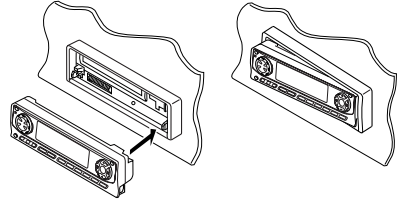
2 Press the left side of the control panel to fix it to the panel holder.
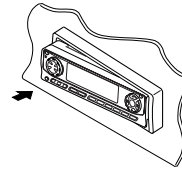
Note on cleaning the connectors:
If you frequently detach the control panel, the connectors will deteriorate.
To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.

Connectors
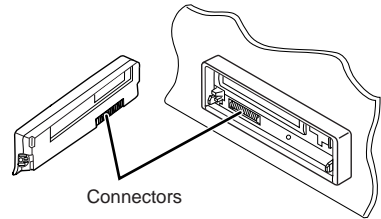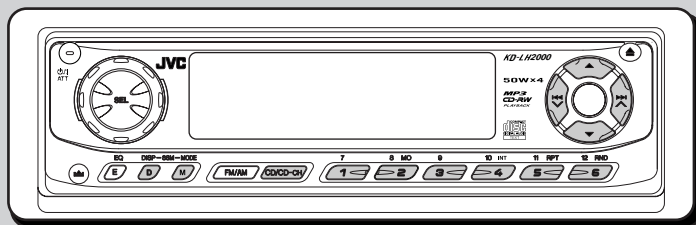
We recommend that you use one of the CH-X series with your unit.

If you have another JVC CD automatic changer, consult your car audio dealer for connections.

* *For example, if your CD automatic changer is one of the KD-MK series, you need a cord (KS-U15K) for connecting it to this unit.*

Before operating your CD automatic changer:
* Refer also to the Instructions supplied with your CD changer.
* If no discs are in the magazine of the CD changer or the discs are inserted upside down, "No Disc" will flash on the display. If this happens, remove the magazine and set the discs correctly.
* If "Reset 1" – "Reset 8" flashes on the display, something is wrong with the connection between this unit and the CD changer. If this happens, check the connection and make sure the cords are connected firmly. Then, press the reset button of the CD changer.

Playing CDs

Select the CD automatic changer (CD-CH).
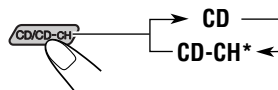
* If you have changed the "Ext Input" setting to "Line In" (see page 33), you cannot select the CD changer.

Playback starts from the first track of the first disc. All tracks of all discs are played back.

Current disc and track no.

Elapsed playing time
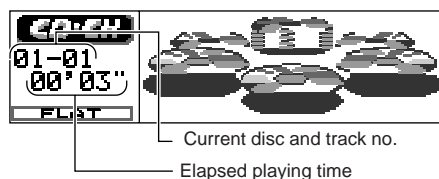
Note on One-Touch Operation:
When you press CD/CD-CH, the power automatically turns on. You do not have to press ⏻/I ATT to turn on the power.

To change the information shown on the display
Press DISP (D) repeatedly.
For details, see "Changing the display pattern" on page 17.

Note:
If you change the source or turn off the unit, CD play also stops.
Next time you select "CD-CH" as the source, CD play starts from where playback has been stopped previously.

Locating a track or a particular portion on a CD
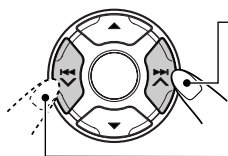
To fast-forward or reverse the track

Press and hold ►►⊢ ⋀, while playing a disc, to fast-forward the track.

Press and hold ⊢◄◄ ⋁, while playing a disc, to reverse the track.

To go to the next track or the previous tracks
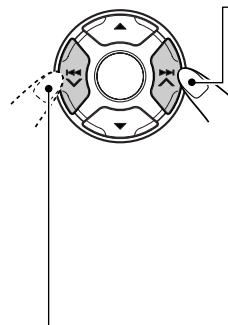
Press ►►⊢ ⋀ briefly, while playing a disc, to go ahead to the beginning of the next track. Each time you press the button consecutively, the beginning of the next tracks is located and played back.

Press ⊢◄◄ ⋁ briefly, while playing a disc, to go back to the beginning of the current track. Each time you press the button consecutively, the beginning of the previous tracks is located and played back.

Selecting a disc

To go to a particular disc directly

Press the number button corresponding to the disc number to start its playback (while the CD changer is playing).
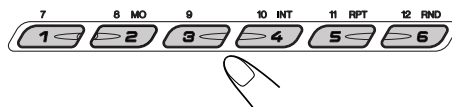
- To select a disc number from 1 – 6:
  Press 1 (7) – 6 (12) briefly.
- To select a disc number from 7 – 12:
  Press and hold 1 (7) – 6 (12) for more than 1 second.

To go to the next discs or the previous discs
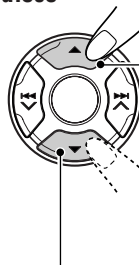
Press ⋀ (up), while playing a disc, to go to the next disc. Each time you press the button consecutively, the first track of the next disc is located and played back.

Press ⋁ (down) while playing a disc, to go back to the previous disc. Each time you press the button consecutively, the first track of the previous disc is located and played back.

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To select a disc using the disc lists

If you forget what discs are loaded in the CD changer, you can show the disc title list and select a disc on the list shown on the display.

• The display can show only six disc names at a time.

1 **While playing a CD, press and hold ▲ (up) or ▼ (down) until a disc name list appears on the display.**
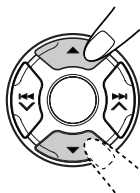
Note:
If a disc has an assigned disc name, it will be shown on the display. However, if the disc has not been played before, its disc number will appear.

2 **Press ▲ or ▼ to show the other disc name list, if necessary.**

3 **Select the number (1 – 6) for the disc you want to play.**
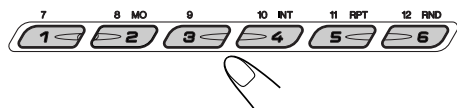
Selecting CD playback modes

To play back tracks at random (Random Play)

You can play back the tracks at random.

1 Press MODE (M) to enter the functions mode while playing a disc.
"Mode" appears on the display.

2 Press RND (random), while "Mode" is still on the display, so that the RND indicator is highlighted on the display.
Each time you press RND, the random play mode changes as follows:

Random 1 ⟶ Random 2 ⟶ Random Off ⟵
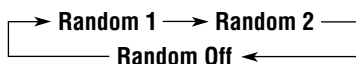
RANDOM indicator | RND indicator (See the following table.)

Ex.: When you select "Random 1."

Mode	RND Indicator	Plays at random
Random 1	Highlighted	All tracks of the current disc, then the tracks of the next disc and so on.
Random 2	Flashes	All tracks of all discs inserted in the magazine.

When Random Play is turned on, the RANDOM indicator lights up or flashes on the display.

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ENGLISH

To play back tracks repeatedly (Repeat Play)

You can play back the current track or the tracks on the current disc repeatedly.
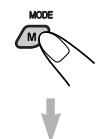
1 Press MODE (M) to enter the functions mode while playing a disc.
"Mode" appears on the display.

2 Press RPT (repeat), while "Mode" is still on the display, so that the RPT indicator is highlighted on the display.
Each time you press RPT, the repeat play mode changes as follows:

→ **Repeat 1** ⟶ **Repeat 2** ⟶
└─ **Repeat Off** ◄────────┘
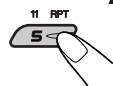
REPEAT indicator   RPT indicator
(See the following table.)

Ex.: When you select "Repeat 1."

Mode	RPT Indicator	Plays repeatedly
Repeat 1	Highlighted	The current track (or specified track).
Repeat 2	Flashes	All tracks of the current disc (or specified disc).

When Repeat Play is turned on, the REPEAT indicator lights up or flashes on the display.

To play back only intros (Intro Scan)

You can play back the first 15 seconds of each track sequentially.

1 Press MODE (M) to enter the functions mode while playing a disc.
"Mode" appears on the display.

2 Press INT (intro), while "Mode" is still on the display, so that the INT indicator is highlighted on the display.
Each time you press INT, the intro scan mode changes as follows:

→ **Intro 1** ⟶ **Intro 2** ⟶
└─ **Intro Off** ◄────────┘
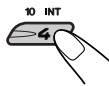
INTRO indicator   INT indicator
(See the following table.)

Ex.: When you select "Intro 1."

Mode	INT Indicator	Plays the beginnings
Intro 1	Highlighted	Of all tracks on all inserted discs.
Intro 2	Flashes	Of the first track on each inserted disc.

When Intro Scan is turned on, the INTRO indicator lights up or flashes on the display.

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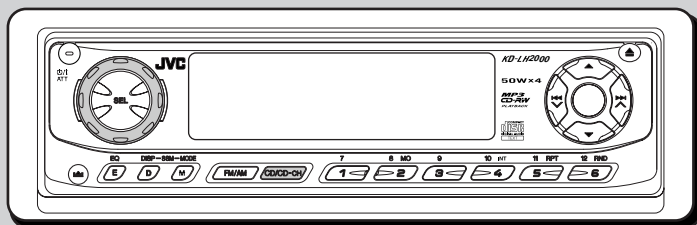
Playing an external component

You can connect the external component to the CD changer jack on the rear using the Line Input Adaptor KS-U57 (not supplied).

Preparations:
- *For connecting the Line Input Adaptor KS-U57 and the external component, refer to the Installation/Connection Manual (separate volume).*
- *Before operating the external component using the following procedure, select the external input correctly. (See "To select the external component to use—Ext Input" on page 33.)*

1 **Select the external component (Line In).**

* If "Line In" does not appear on the display, see page 33 and select the external input ("Line In").
* Displayed only when one of the following sources is selected—FM, AM and CD.

Note on One-Touch Operation:
When you press CD/CD-CH, the power automatically comes on. You do not have to press ⏻/I ATT to turn on the power.
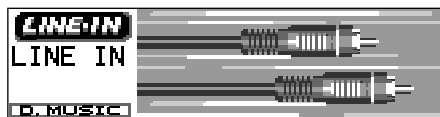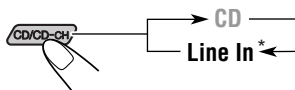
2 **Turn on the connected component and start playing the source.**

3 **Adjust the volume.**

4 **Adjust the sound as you want. (See pages 25 – 28.)**

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🤔 TROUBLESHOOTING

What appears to be trouble is not always serious. Check the following points before calling a service center.

	Symptoms	Causes	Remedies
General Playback	• Sound is sometimes interrupted.	You are driving on rough roads.	Stop playback while driving on rough roads.
		Disc is scratched.	Change the disc.
		Connections are incorrect.	Check the cords and connections.
	• Sound cannot be heard from the speakers.	The volume level is set to the minimum level.	Adjust it to the optimum level.
		Connections are incorrect.	Check the cords and connections.
	• CD cannot be played back.	Disc is inserted upside down.	Insert the disc correctly.
	• CD-R/CD-RW cannot be played back. • Tracks on the CD-R/CD-RW cannot be skipped.	CD-R/CD-RW is not finalized.	• Insert a finalized CD-R/CD-RW. • Finalize the CD-R/CD-RW with the component which you used for recording. (See page 46.)
	• "No Disc" flashes on the display .	No disc in the loading slot.	Insert a disc into the loading slot.
		Disc is inserted incorrectly.	Insert the disc correctly.
	• Disc cannot be ejected.	Disc is locked.	Unlock the disc (See page 16.)
	• This unit does not work at all.	The built-in microcomputer may have functioned incorrectly due to noise, etc.	Press the reset button on the panel holder using a ball-point pen after detaching the control panel. (The clock setting and preset stations stored in memory are erased.) (See page 2.)
	• "Panel Connect Error" appears on the display.	The control panel is not attached correctly and firmly.	Remove the control panel, wipe the connectors, then attach it again. (See page 38.)
FM/AM	• SSM (Strong-station Sequential Memory) automatic preset does not work.	Signals are too weak.	Store stations manually.
	• Static noise while listening to the radio.	The antenna is not connected firmly.	Connect the antenna firmly.

Symptoms	Causes	Remedies
• "No Disc" flashes on the display .	No disc in the magazine.	Insert a disc.
• "Reset 8" flashes on the display .	This unit is not connected to a CD changer correctly.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
• "Reset 1" – "Reset 7" flashes on the display.	———————	Press the reset button of the CD changer.
• Disc cannot be played back.	MP3 files do not have the extension code—mp3 in their file names.	Add the extension code—mp3 to their file names.
	MP3 files are not recorded in the format compliant with ISO 9660 Level 1, ISO 9660 Level 2, or Joliet.	Change the disc. (Record MP3 files using a compliant application.)
• Files skip, or 00'00" appears and playback stops.	Files are encoded in Layer 1 or Layer 2 format.	Insert a disc that contains files encoded in Layer 3 format.
• Noise is generated.	The file played back is not an MP3 file (although it has the extension code—mp3).	Skip to another file or change the disc. (Do not add the extension code—mp3 to non-MP3 files.)
• A longer readout time is required ("File Check" keeps flashing on the display).	Readout time varies due to the complexity of the directory/file configuration.	Do not use too many hierarchies and directories. Also, do not record any other types of audio tracks together with MP3 files.
• Files cannot be played back as you have intended them to play.	Playback order is determined when the files are recorded.	———————
• Elapsed playing time is not correct.	This sometimes occurs during play. This is caused by how the files are recorded on the disc.	———————
• "MP3" flashes on the display.	The current directory does not contain any MP3 files.	Select another directory.
• "No Files" appears on the display for a while, then "Please Eject" appears.	The current MP3 disc does not contain any MP3 files.	Insert a disc that contains MP3 files.
• Correct characters are not displayed. (e.g. album name)	This unit can only display alphabets (capital: A–Z, small: a–z), numbers, and a limited number of symbols.	———————

CD Changer

MP3 Playback

ENGLISH

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Handling discs

This unit has been designed to play back CDs and CD-Rs.
• You can also play back CD Text.
• You can also play back your original CD-Rs (Recordable) and CD-RWs (Rewritable) either in audio CD format or MP3 format.

How to handle discs

Center holder

When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.
• Always hold the disc by the edges. Do not touch its recording surface.

When storing a disc into its case, gently insert the disc around the center holder (with the printed surface facing up).
• Make sure to store discs into the cases after use.
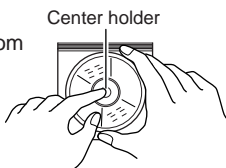
To keep discs clean

A dirty disc may not play correctly. If a disc does become dirty, wipe it with a soft cloth in a straight line from center to edge.
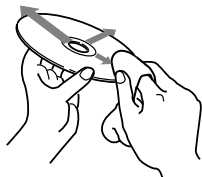
To play new discs

New discs may have some rough spots around the inner and outer edges. If such a disc is used, this unit may reject the disc.
To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.
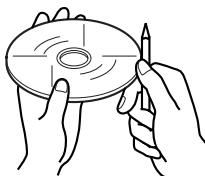
About mistracking:
Mistracking may result from driving on extremely rough roads. This does not damage the unit and the disc, but will be annoying.
We recommend that you stop disc playback while driving on such rough roads.

Moisture condensation

Moisture may condense on the lens inside the unit in the following cases:
• After starting the heater in the car.
• If it becomes very humid inside the car.
Should this occur, the unit may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

When playing a CD-R or CD-RW

You can play back your original CD-Rs or CD-RWs recorded in audio CD format or in MP3 format. However, they may not be played back depending on their characteristics or recording conditions.
• User-edited CD-Rs (Recordable) and CD-RWs (Rewritable) can be played back only if they are already "finalized."
• Before playing back CD-Rs or CD-RWs, read their instructions or cautions carefully.
• Some CD-Rs or CD-RWs may not be played back on this unit because of their disc characteristics, damage or stain on them, or if the player's lens is dirty.
• CD-Rs or CD-RWs are susceptible to high temperatures or high humidity; so do not leave them inside your car.
• CD-RWs may require a longer readout time. (This is caused by the fact that the reflectance of CD-RWs is lower than for regular CDs.)

CAUTIONS:
• *Do not insert 8 cm discs (single CDs) into the loading slot. (Such discs cannot be ejected.)*
• *Do not insert any disc of unusual shape—like a heart or flower; otherwise, it will cause a malfunction.*
• *Do not expose discs to direct sunlight or any heat source or place them in a place subject to high temperature and humidity. Do not leave them in a car.*
• *Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean discs.*

AUDIO AMPLIFIER SECTION

Maximum Power Output:
    Front: 50 W per channel
    Rear: 50 W per channel
Continuous Power Output (RMS):
    Front: 19 W per channel into 4 Ω, 40 Hz
                 to 20 000 Hz at no more than
                 0.8% total harmonic distortion.
    Rear: 19 W per channel into 4 Ω, 40 Hz
                 to 20 000 Hz at no more than
                 0.8% total harmonic distortion.
Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)
Equalizer Control Range:
    Low: ±06 (50 Hz, 80 Hz, 120 Hz)
    Mid: ±06 (700 Hz, 1 kHz, 2 kHz)
    High: ±06 (8 kHz, 12 kHz)
Frequency Response: 40 Hz to 20 000 Hz
Signal-to-Noise Ratio: 70 dB
Line-Out Level/Impedance: 2.0 V/20 kΩ load
Output Impedance: 1 kΩ

TUNER SECTION

Frequency Range:
    FM: 87.5 MHz to 108.0 MHz
    AM: 531 kHz to 1 602 kHz

[FM Tuner]
Usable Sensitivity: 11.3 dBf (1.0 μV/75 Ω)
50 dB Quieting Sensitivity: 16.3 dBf (1.8 μV/75 Ω)
Alternate Channel Selectivity (400 kHz): 65 dB
Frequency Response: 40 Hz to 15 000 Hz
Stereo Separation: 35 dB
Capture Ratio: 1.5 dB

[AM Tuner]
Sensitivity: 20 μV
Selectivity: 35 dB

CD PLAYER SECTION

Type: Compact disc player
Signal Detection System: Non-contact optical
    pickup (semiconductor laser)
Number of channels: 2 channels (stereo)
Frequency Response: 5 Hz to 20 000 Hz
Dynamic Range: 96 dB
Signal-to-Noise Ratio: 98 dB
Wow and Flutter: Less than measurable limit
MP3 recording format: MPEG 1/2 Audio Layer 3
Max. Bit Rate: 320 Kbps

GENERAL

Power Requirement:
    Operating Voltage: DC 14.4 V
                    (11 V to 16 V allowance)
Grounding System: Negative ground
Allowable Operating Temperature: 0°C to +40°C
Dimensions (W $\times$ H $\times$ D):
    Installation Size: 182 mm $\times$ 52 mm $\times$ 150 mm
    Panel Size: 188 mm $\times$ 58 mm $\times$ 14 mm
    Mass: 1.4 kg (excluding accessories)

Design and specifications are subject to change without notice.

Available characters

You can use the following characters to assign names to CDs, radio stations and external components (see page 37).

Capital

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	X	Y
Z	space			

Small

a	b	c	d	e
f	g	h	i	j
k	l	m	n	o
p	q	r	s	t
u	v	w	x	y
z	space			

Numbers and symbols

0	1	2	3	4
5	6	7	8	9
!	"	#	$	%
&	'	(	)	*
+	,	−	.	/
:	;	<	=	>
?	@	_	`	space

Having TROUBLE with operation?
Please reset your unit
Refer to page 2

JVC

KD-LH2000	راديو مع مشغّل اسطوانات مدمجة CD

عربي

KD-LH2000

Detachable
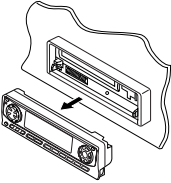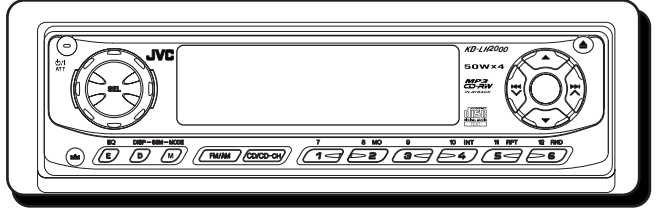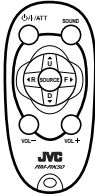
CD-R**W** PLAYBACK   **MP3**

هذا الجهاز مزوّد بوظيفة استعراض لشاشة العرض. لالغاء وظيفة الاستعراض،
انظر صفحة ٨.

لعمليات التركيب والتوصيلات، يرجى مراجعة كتيب التعليمات المنفصل.

دليل التعليمات

JVC

KD-LH2000/KD-LH1000
Installation/Connection Manual
安裝／連接手冊
การติดตั้ง/คู่มือการติดตั้ง
كتيّب تعليمات الت ركيب/التوصيل

LVT0856-002A
[U]
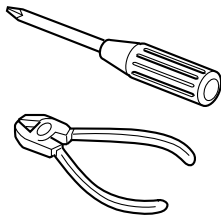
ENGLISH

• This unit is designed to operate on 12 V DC, NEGATIVE ground electrical systems.

INSTALLATION (IN-DASH MOUNTING)

• The following illustration shows a typical installation. However, you should make adjustments corresponding to your specific car. If you have any questions or require information regarding installation kits, consult your JVC car audio dealer or a company supplying kits.

1 Before mounting: Press ▲ (Control Panel Release button) to detach the control panel if already attached.
  * When shipped from the factory, the control panel is packed in the hard case.
2 Remove the trim plate.
3 Remove the sleeve after disengaging the sleeve locks.
  ① Stand the unit.
    Note: When you stand the unit, be careful not to damage the fuse on the rear.
  ② Insert the 2 handles between the unit and the sleeve, as illustrated, to disengage the sleeve locks.
  ③ Remove the sleeve.
    Note: Be sure to keep the handles for future use after installing the unit.
4 Install the sleeve into the dashboard.
  * After the sleeve is correctly installed into the dashboard, bend the appropriate tabs to hold the sleeve firmly in place, as illustrated.
5 Fix the mounting bolt to the rear of the unit's body and place the rubber cushion over the end of the bolt.
6 Do the required electrical connections.
7 Slide the unit into the sleeve until it is locked.
8 Attach the trim plate.
  Note: Ensure the recessed part is at the bottom. If not, the control panel will not open completely.
9 Attach the control panel.

中文

• 本機僅可使用直流 12V、負極接地的電源系統。

安裝（裝設、固定在儀表板內）

• 下面的圖解表示了典型的安裝程序。然而，您應當做些適當的調整，以便適應您自己的汽車。如果您有問題，或需要有關配套元件的資料，請向 JVC 汽車音響分銷商或配套元件供應公司詢問。

1 裝設之前：如果控制面板已經裝上，按下 ▲（控制面板解脫按鈕），拆脫控制面板。
  *當控制面板從工廠裝運時，它是包裝在硬盒中的。
2 取下裝飾框。
3 解開扣板，取下本機的外套機殼。
  ① 將本機豎起。
    注意：您豎起本機時，小心不要損壞底部的保險絲。
  ② 按圖所示，在本機和外套機殼之間插入兩片板條型的把手，解開外套機殼扣板。
  ③ 取下外套機殼。
    注意：安裝本機後，務必保存好兩片把手，以備將來使用。
4 將外套機殼裝入儀表板內。
  * 在外套機殼準確地裝入儀表板之後，按圖所示，彎曲機殼的突舌，把外套機牢固在儀表板內。
5 將緊固螺栓旋緊在本機機體上，並將橡膠防震墊套在緊固螺栓的尾部。
6 進行所需的電路連接。
7 將本機滑入外套機殼，直到扣板鎖住為止。
8 裝上裝飾框。
  注意：請確保凹進去的部分是在底部。如果不在底部，控制面板將不會完全打開。
9 裝上控制面板。

ไทย

• ชุดประกอบชุดนี้ได้รับการออกแบบมาเพื่อใช้งานกับระบบกระแสไฟฟ้าสายดินขั้วลบกระแสเสตรง 12 โวลท์

การติดตั้ง (การประกอบแผงหน้าปัทม์เข้า)

• ภาพตัวอย่างต่อไปนี้แสดงถึงการติดตั้งแบบทั่วไป อย่างไรก็ตาม คุณควรปรับแต่งให้เหมาะสมกับรถของคุณเอง หากคุณมีปัญหาหรือต้องการข้อมูลเกี่ยวกับชุดติดตั้ง กรุณาปรึกษากับผู้ขายเครื่องเสียงรถยนต์ JVC ของท่านหรือบริษัทที่ที่จำหน่ายชุดติดตั้งนี้

1 ก่อนประกอบ กดปุ่ม ▲ (ปลดแผงควบคุม) เพื่อออกจากแผงควบคุม
  * เมื่อผลิตภัณฑ์ถูกส่งออกมาจากโรงงาน แผงหน้าปัดจะบรรจุไว้ในลังแข็ง
2 ถอดแผ่นโลหะขอบแต่งออก
3 ถอดปลอกหุ้มออกหลังจากปลดตัวล็อคปลอกหุ้มออกแล้ว
  ① จับชุดประกอบตั้งขึ้น
    หมายเหตุ: เมื่อคุณตั้งชุดประกอบขึ้น ระวังอย่าทำให้ฟิวส์ชุดบริเวณส่วนท้ายเสียหาย
  ② ใส่คันบังคับ 2 อันระหว่างชุดประกอบกับปลอกหุ้ม (ดังภาพ) เพื่อปลดตัวล็อคปลอกหุ้มออกจากกัน
  ③ ปลดปลอกหุ้มออก
    หมายเหตุ: ระมัดระวังให้คันบังคับสามารถใช้งานได้ต่อไปหลังจากติดตั้งชุดประกอบแล้ว
4 ติดตั้งปลอกหุ้มลงในแผงหน้าปัทม์
  * หลังจากติดตั้งปลอกหุ้มลงในแผงหน้าปัทม์อย่างถูกต้องแล้ว ดัดร่องให้โค้งพอดีที่ปลอกหุ้มจะถูกยึดไว้อย่างแน่นหนา (ดังภาพ)
5 ติดสลักประกอบบริเวณด้านหลังโครงของชุดประกอบและวงแหวนกันกระแสแทไว้บนส่วนปลายของสลัก
6 ต่อสายไฟตามที่กำหนดไว้ทั้งหมด
7 เลื่อนชุดประกอบลงในปลอกหุ้มจนเข้ากันได้พอดี
8 ต่อแผ่นโลหะขอบแต่ง
  หมายเหตุ: เวลาใส่ต้องแน่ใจว่า ตัวล็อคอยู่ทางด้านล่าง มิฉะนั้นแล้ว จะเปิดแผงควบคุมออกไม่ได้ทั้งหมด
9 ต่อเข้ากับแผงควบคุม

عربي

• لقدصمم هذا الجهاز ليـعمل بـواسطة تيار كهربائي مباشر DC، ١٢ فولت، انظمة كهربائية تأريض سالب.

تركيب الجهاز (داخل-تابلو السيارة)

• يبيّن الرسم التوضيحي التالي طريقة التركيب المثالية. مع ذلك، يجب عليك عمل تعديلات تطابق نوع السيارة التي تمتلكها. اذا كان هناك استفسارات او حاجة لمعلومات بخصوص ادوات التركيب، يرجى استشارة موزع الاجهزة الصوتية للسيارات ماركة JVC او الشركة الموزعة لهذة الادوات.

١ قبل التركيب: اضغط الزر ▲ (زر تحرير لوحة التحكم) لفصل لوحة التحكم اذا كانت موصولة سابقا.
  *عند الشحن من المصنع، تموضع لوحة التحكم داخل الصندوق.
٢ انزع لوحة الزينة.
٣ انزع الهيكل الواقي بعد فصل مثبتات الهيكل الواقي.
  ① اوقف الجهاز بشكل عمودي.
    ملاحظة: عند توقيف الجهاز، تأكد من عدم تضرر او اتلاف الفيوز الموجود في الجهة الخلفية من الجهاز.
  ② ادخل المساكتين بين الجهاز والهيكل الواقي، كما هو مبين في الشكل، لفصل مثبتات الهيكل الواقي.
  ③ انزع الهيكل الواقي.
    ملاحظة: يرجى المحافظة على المساكات من اجل الاستعمال لاحقا بعد تركيب الجهاز.
٤ ركب الهيكل الواقي داخل تابلو السيارة.
  * بعد تركيب الهيكل الواقي كليا داخل تابلو السيارة بشكل صحيح، اثني الالسنة بشكل مناسب لتثبيت الهيكل الواقي بشكل محكم في المكان الصحيح، كما هو مبين في الشكل.
٥ ثبّت مسمار التركيب بالجهة الخلفية من هيكل الجهاز وبعد ذلك ضع الحشوة المطاطية فوق نهاية المسمار.
٦ اعمل التوصيلات المطلوبة.
٧ ادخل الجهاز داخل الهيكل الواقي حتى يثبت بشكل صحيح.
٨ ركّب لوحة الزينة
  ملاحظة: تأكد من وجود القسم المجوّف في الاسفل.
٩ ركّب لوحة التحكم.

---

1 Control panel / 控制面板 / หนาปด / اوحةالتحكم

2 Trim plate / 裝飾框 / แผ่นโลหะขอบแต่ง / لوحة الزينة

Dashboard / 儀表板 / แผงหน้าปัทม / تابلو السيارة

Rubber cushion / 橡膠防震墊 / ยางกันกระแทก / الحشوة المطاطية

Sleeve / 外套機殼 / ปลอกหุ้ม / الهيكل الواقي

184 mm

53 mm

Mounting bolt / 緊固螺栓 / สลักประกอบ / مسمار التركيب

3 Handle / 板條型把手 / คันบังคับ / المساكة

Slot / 卡槽 / ร่องใช้สำหรับพันลวด / شق صغير

Fuse / 保險絲 / ฟิวส / الفيوز

Lock Plate / 扣板 / แผ่นโลหะยึด (Lock Plate) / صفيحة التثبيت

Sleeve / 外套機殼 / ปลอกหุ้ม / الهيكل الواقي

Control panel / 控制面板 / หนาปด / اوحةالتحكم

Trim plate / 裝飾框 / แผ่นโลหะขอบแต่ง / لوحة الزينة

4 *

6 See "ELECTRICAL CONNECTIONS."
請參閱「電路連接」。
กรุณาดูหัวข้อ การต่ออุปกรณ์ไฟฟ้า
انظر قسم "التوصيلات الكهربائية".

1

When using the optional stay
若選用支撐架
เมื่อใช้ตัวยึดแบบเลือกได้ (ามรถเลือกเปิดค้างไว้ได้)
• عند استخدام مسند اضافي للتثبيت

Washer
墊圈
ประเก็นวงแหวน
حلقة احكام التوصيل

Dashboard
儀表板
แผงหน้าปัทม์
تابلو السيارة

Fire wall
防火板
ผนังกันไฟ
جدار الحماية من الحريق

Stay (option)
支撐架（選用的）
ตัวยึด (เลือกได้)
مسند تثبيت (اضافي)

Lock nut
鎖緊螺母
นอตล็อค
صمولة التثبيت

Screw (option)
螺絲釘（選用的）
สกรู (เลือกได้)
برغي (اضافي)

Sleeve
外套機殼
ปลอกหุ้ม
الهيكل الواقي

Mounting bolt
緊固螺栓
สลักติด
مسمار التركيب

When installing the unit without using the sleeve
若不使用外套機殼安裝本機
เมื่อติดตั้งชุดประกอบโดยไม่ใช้ปลอกหุ้ม
• عندما تركب الجهاز بدون استخدام الهيكل الواقي

In a Toyota for example, first remove the car radio and install the unit in its place.
以豐田牌（TOYOTA）汽車為例：首先取出汽車收音機，然後將本機裝入其空出的位置。
ตัวอย่างเช่น ในรถยนต์โตโยต้า ให้ถอดวิทยุติดรถยนต์ออกก่อนและติดตั้งชุดประกอบนี้เข้าไปแทน
على سبيل المثال، في سيارات نوع تويوتا، انزع راديو السيارة اولا بعد ذلك ركّب الجهاز في مكانه.

Flat type screws (M5 x 6 mm)*
平頭螺絲釘 (M5 x 6 mm)*
กรูหัวเรียบ (M5 x 6 มิลลิเมตร)*
براغي مستوية القاعدة (M5 x ٦ ملم)*

Pocket
空殼
กะเปา
جيب

Bracket*
托座*
แทนรองรับ*
كتفية التثبيت*

Bracket*
托座*
แทนรองรับ*
كتفية التثبيت*

* Not included with this unit.
* 不包括在本機中
* ไม่รวมกับชุดประกอบนี้
* غير مزوّد مع هذا الجهاز.

Flat type screws (M5 x 6 mm)*
平頭螺絲釘 (M5 x 6 mm)*
สกรูหัวเรียบ (M5 x 6 มิลลิเมตร)*
براغي مستوية القاعدة (M5 x ٦ ملم)*

Note: When installing the unit on the mounting bracket, make sure to use the 6 mm-long screws. If longer screws are used, they could damage the unit.
注意：把本機安裝在托座上時，務必使用 6mm 長的螺絲釘。如使用過長的螺絲釘，會損壞本機。
หมายเหตุ: เมื่อติดตั้งชุดประกอบลงในแทนรองรับนี้ ให้ใช้สกรูขนาด 6 มิลลิเมตร ถ้าใช้สกรูยาวกว่านี้อาจจะทำให้ชุดประกอบเสียหายได้
ملاحظة: عند تركيب الجهاز على كتفية التثبيت، تأكد من استخدام براغي طول ٦ ملم. في حالة استخدام براغي اطول من ٦ ملم، فان ذلك يمكن ان يسبب تلف او ضرر الجهاز.

Removing the unit
- Before removing the unit, release the rear section.
1 Remove the control panel.
2 Remove the trim plate.
3 Insert the 2 handles into the slots, as shown. Then, while gently pulling the handles away from each other, slide out the unit. **(Be sure to keep the handles after installing it.)**

拆卸本機
- 在拆卸本機前，應將本機後部的固定和連接部分鬆開。
1 拆下控制面板。
2 取下裝飾框。
3 按圖所示，將兩片板條型把手插入卡槽，然後輕穩地從兩側向外拉兩片把手，本機隨之拉出。
（安裝本機後，務必保存好兩片把手）

การถอดชุดประกอบ
- ก่อนจะถอดชุดประกอบ ให้ปลดหน้าตัดส่วนท้ายก่อน
1 ถอดหน้าปัด
2 ถอดแผ่นโลหะขอบแต่ง
3 ใส่คันบังคับ 2 อันลงในร่องสำหรับใช้พันลวด ดังภาพ จากนั้นให้เลื่อนชุดประกอบออก ในขณะที่ค่อย ๆ ดึงคันบังคับทั้งสองอันออกจากกัน
(ดูให้ตัวว่าคันบังคับทั้งสองอันอยู่ในตำแหน่งที่เหมาะสมหลังจากติดตั้งแล้ว)

نزع الجهاز من تابلو السيارة
- قبل نزع الجهاز، حرر الجزء الخلفي.
١ انزع لوحة التحكم.
٢ انزع لوحة الزينة.
٣ ادخل المساكتين داخل الشقوق، كما هو مبين في الشكل. بعد ذلك، اثناء سحب المساكتين بلطافة بعيدا الواحدة عن الاخرى، اسحب الجهاز الى الخارج. (تأكد من احتفاظك بالمساكتين بعد تركيب الجهاز)

1

Control panel
控制面板
หน้าปัด
لوحة التحكم

2

Trim plate
裝飾框
แผ่นโลหะขอบแต่ง
لوحة الزينة

3

Handle
板條型把手
คันบังคับ
المساكة

Parts list for installation and connection
The following parts are provided with this unit. After checking them, please set them correctly.

用於安裝和連接的零件裏
下列零件是隨本機提供的。清點以後，正確的將其裝配。

รายการส่วนประกอบสำหรับติดตั้งและเชื่อมต่อกัน
ส่วนประกอบต่อไปนี้มากับชุดประกอบนี้ หลังจากตรวจสอบแล้ว ปรับตั้งเครื่องให้ถูกต้อง

قائمة اجزاء التركيب والتوصيل
الاجزاء التالية مزودة مع الجهاز. بعد فحص هذه الاجزاء، يرجى تركيبهم بشكل صحيح.

Hard case/Control panel
硬盒 / 控制面板
ลังบรรจุ/หน้าปัด
صندوق/لوحة التحكم

Sleeve
外套機殼
ปลอกหุ้ม
الهيكل الواقي

Trim plate
裝飾框
แผ่นโลหะขอบแต่ง
لوحة الزينة

Remote controller
遙控器
รีโมคอนโทรล
وحدة التحكم عن بعد

Battery
電池
แบตเตอรี่
البطاريات

CR2025

Power cord
電路連接用的配線束
สายเคเบิลกำลัง (Power Cord)
سلك الطاقة الكهربائية

Handles
板條型把手
คันบังคับ
المساكات

Washer (ø5)
墊圈 (ø5)
ประเก็นวงแหวน (ø5)
حلقة احكام التوصيل (قطر ٥)

Lock nut (M5)
鎖緊螺母 (M5)
นอตล็อค (M5)
صمولة التثبيت (M5)

Mounting bolt (M5 x 20 mm)
緊固螺栓 (M5 x 20 mm)
สลักติด (M5 x 20 มิลลิเมตร)
مسمار التركيب (M5 x ٢٠ ملم)

Rubber cushion
橡膠防震墊
ยางกันกระแทก
الحشوة المطاطية

ELECTRICAL CONNECTIONS

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical connections before installing the unit. If you are not sure how to install this unit correctly, have it installed by a qualified technician.

Note:
This unit is designed to operate on **12 V DC, NEGATIVE ground electrical systems**. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC car audio dealers.

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC car audio dealer.
- If noise is a problem...
This unit incorporates a noise filter in the power circuit. However, with some vehicles, clicking or other unwanted noise may occur. If this happens, connect the unit's **rear ground terminal** (see connection diagram) to the car's chassis using shorter and thicker cords, such as copper braiding or gauge wire. If noise still persists, consult your JVC car audio dealer.
- Maximum input of the speakers should be no more than 50 W at the rear and 50 W at the front, with an impedance of 4 Ω to 8 Ω.
- **Be sure to ground this unit to the car's chassis.**
- The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.

Heat sink
散熱片
แผ่นระบายความร้อน
صفيحة خفض الحرارة

電路連接

為防止短路，建議在安裝本機之前，斷開電池的負極，並把所有電路都連接好。如果您不能確定如何正確地安裝本機，應請合格的技術人員來安裝。

注意：
本機僅可使用直流 **12V**、**負極接地的電源系統**。如果您的車輛沒有這一電源系統，則需要一個電壓變換器，可以在 JVC 汽車音響分銷商處買到。

- 把保險絲更換為額定負荷值的保險絲。如果保險絲經常燒壞，請向 JVC 汽車音響分銷商詢問。
- 若出現噪音問題
本機在電源回路帶有一個噪音濾波器。但是，在某些車輛上，會出現咯嗒聲或其它噪音。如果發生這類情況，將本機後面的接地端子用短而粗的導線，如編織銅線或標準電纜，連接到汽車底盤上（參閱電路接線圖）。如果噪音仍然持續存在，請向 JVC 汽車音響分銷商詢問。
- 後置揚聲器的最大輸入功率應不可大於 50W，前置揚聲器的最大功率則為 50W，其阻抗的為 4Ω – 8Ω。
- **務必將本機接到汽車底盤上。**
- 本機使用後，散熱片會很熱。因此，在移出本機時，小心不要觸摸散熱片。

การเชื่อมโดยใช้ไฟฟ้า

เพื่อป้องกันไฟฟ้าลัดวงจร เราขอแนะนำให้คุณเอาขั้ววลบแบตเตอรี่ออกก่อนและทำการเชื่อมโดยใช้ไฟฟ้าทุกจุดก่อนที่จะติดตั้งชุดประกอบ ถ้าคุณไม่แน่ใจว่าติดตั้งชุดประกอบนี้ถูกต้องหรือไม่ให้ทำงานผู้เชี่ยวชาญเป็นผู้ติดตั้ง

หมายเหตุ :
ชุดประกอบนี้ได้รับการออกแบบมาเพื่อใช้งานกับระบบกระแสไฟฟ้าสายดินเข้ายกับกระแสตรง **12 โวลท์**
หารถยนต์ของคุณไม่ใช้ระบบนี้ ต้องใช้เครื่องแปลงกระแสไฟช่วย ซึ่งสามารถหาซื้อได้จากร้านขายเครื่องเสียงรถยนต์ JVC

- ใช้ทักกิจฉาเพระแทนฟิวส์ หากฟิวส์ขาดบ่อย ให้ปรึกษาร้านขายเครื่องเสียงรถยนต์ JVC
- หากเสียงมีปัญหา...
ชุดประกอบนี้มีเครื่องกรองเสียงในวงจรกำลัง (Power Circuit) อย่างไรก็ดีในรถยนต์ บางคันก่อจะเกิดเสียงที่ไม่พึงปรารถนาขึ้นได้ หากปัญหานี้เกิดขึ้น **ให้ต่อขั้วสายดินด้านหลังของชุดประกอบ** (ดูแผนภูมิการต่อเชื่อม) เข้ากับเชสซิสของรถยนต์โดยใช้สายเคเบิลที่สั้นและหนากว่า เช่น สายไฟเครื่องวัดหรือสายประสานทองแดง เป็นต้น หากยังมีเสียงอยู่อีก ให้ปรึกษาร้านขายเครื่องเสียงรถยนต์ JVC
- กระแสไฟเข้าอำโพงสูงสุดบริเวณส่วนหลังควรเกินกว่า 50 วัตต์และบริเวณส่วนหน้าที่ 50 วัตต์ และมีค่าความหน่วง **4 - 8 โอห์ม**
- **ตรวจสอบให้ตัวได้ต่อชุดประกอบชุดนั้ลงในเชสซิสรถยนต์แล้ว**
- แผ่นระบายความร้อนจะมีอุณหภูมิสูงหลังจากใช้ ระมัดระวังอย่าไปสัมผัสเมื่อถอดชุดประกอบนี้

التوصيلات الكهربائية

لمنع حدوث تقصير في الدوائر الكهربائية، نوصي بفصل طرف البطارية السالب ثم عمل التوصيلات الكهربائية قبل تركيب الجهاز. في حالة عدم معرفتك بكيفية تركيب الجهاز بشكل صحيح، يرجى ترك عملية تركيب الجهاز لشخص مختص ومؤهل لتركيب مثل هذه الاجهزة.

ملاحظة:
لقد صمم هذا الجهاز ليعمل بواسطة تيار كهربائي مباشر **DC، ١٢ فولت، انظمة كهربائية تأريض سالب**. في حالة عدم وجود مثل هذا النظام في سيارتك، يجب استخدام محول فولتاج، ويمكن شراء هذا المحول من وكلاء الاجهزة الصوتية للسيارات ماركة JVC.

- استبدل الفيوز بآخر يحمل نفس القياسات الموصوفة. اذا تكرر احتراق الفيوز، يرجى استشارة وكلاء الاجهزة الصوتية للسيارات ماركة JVC.
- اذا كان الضجيج هو المشكلة...
يستخدم هذا الجهاز فلتر ضجيج داخل دائرة الطاقة الكهربائية. مع ذلك، في بعض السيارات، يمكن ان يحدث نوع من الطقطقة او الضجيج غير المرغوب. في حالة حدوث مثل ذلك، اوصل طرف التأريض **الموجود في خلفية الجهاز** (انظر رسم التوصيل) مع هيكل السيارة بواسطة استخدام اسلاك اقصر واسمك، مثل سلك النحاس المجدل او سلك مقياسي. في حالة عدم توقف الطقطقة او الضجيج، يرجى استشارة وكلاء الاجهزة الصوتية للسيارات ماركة JVC.
- يجب ان يكون الحد الاقصى لدخل السماعات اكثر من ٥٠ واط للسماعات الخلفية و٥٠ واط للسماعات الامامية، مع ممانعة بين ٤ الى ٨ اوم.
- **تأكد من تأريض الجهاز مع هيكل السيارة.**
- تصبح صفيحة خفض الحرارة ساخنة جدا بعد الاستخدام. تأكد من عدم ملامستها عند نزع الجهاز.

ENGLISH	中文	ไทย	عربي

A Typical Connections / 典型的接線方法 / การเชื่อมต่อแบบปกติ / التوصيلات النموذجية

ENGLISH

Before connecting: Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this unit.
The leads of the power cord and those of the connector from the car body may be different in colour.

1. Connect the colored leads of the power cord to the car battery, speakers and power aerial (if any) in the following sequence.
   ① Black: ground
   ② Yellow: to car battery (constant 12 V)
   ③ Red: to an accessory terminal
   ④ Blue with white stripe (Remote out): to other equipment
   ⑤ Blue: to automatic power antenna (250 mA max.)
   ⑥ Orange with white stripe: to car light control switch
   ⑦ Brown: to cellular phone system (For details, refer to the instructions of the cellular phone.)
   ⑧ Others: to speakers
2. Connect the aerial cord.
3. Finally connect the wiring harness to the unit.

中文

接前： 仔細檢查汽車內的線路。不正確的接線會導致本機嚴重損傷。
電力線的引線和車身的連接器引線在顏色上可能有所不同。

1. 按下述順序將配線束各個不同色標的導線接分別接至電池、揚聲器和自動升降天線（如有裝設）：
   ① 黑色：接地
   ② 黃色：接至車裝電池（恆定 12V）
   ③ 紅色：接至保險絲單元內的附屬端子
   ④ 藍色帶有白色條紋（遙控出）：接至其他音響設備
   ⑤ 藍色：接至自動升降天線（最大 250 毫安）
   ⑥ 橙色帶有白色條紋：接至汽車燈光控制開關
   ⑦ 棕色：接至行動電話系統（要了解更多資訊，請參閱行動電話的使用說明書。）
   ⑧ 其他：接至揚聲器
2. 將天線的電線連接起來。
3. 最後，把配線束的插頭插在本機上。

ไทย

ก่อนทำการเชื่อมต่อ : ตรวจสอบการเดินสายไฟในรถยนต์อย่างระมัดระวัง อย่าให้ผิดพลาดในการเชื่อมอุปกรณ์ชุดนี้ การเชื่อมต่อผิดพลาดอาจจะทำให้เกิดความเสียหายรุนแรงกับชุดประกอบนี้ สีของสายไฟ และของอุปกรณ์ต่อเชื่อมจากตัวถังรถอาจมีสีที่ไม่เหมือนกัน

1. เชื่อมต่อสายตะกั่วสีต่าง ๆ ของสายเคเบิลกำลัง (Power Cord) เข้ากับแบตเตอรี่รถ ลำโพง และสายอากาศ อัตโนมัติในรถยนต์ (ถ้ามี) ตามลำดับต่อไปนี้
   ① สีดำ : สายดิน
   ② สีเหลือง : ต่อกับแบตเตอรี่รถยนต์ (12 โวลท์คงที่)
   ③ สีแดง : ต่อกับขั้วส่วนประกอบ
   ④ สายสีฟ้าที่มีแถบขาว (สำหรับสัญญาณรีโมทออก): ต่อเข้ากับอุปกรณ์อื่น
   ⑤ สีฟ้า : ต่อกับสายอากาศอัตโนมัติ (ขนาดสูงสุด 250 mA)
   ⑥ สีส้มและมีแถบลายสีขาว : ต่อเข้ากับสวิตช์ควบคุมไฟรถยนต์
   ⑦ สีน้ำตาล : สำหรับระบบโทรศัพท์เซลลูลาร์ (สำหรับรายละเอียด โปรดอ่านคำแนะนำของโทรศัพท์เซลลูลาร์)
   ⑧ สีอื่น ๆ : ต่อกับลำโพง
2. เชื่อมต่อกับสายอากาศ
3. สุดท้าย ต่อส่วนควบคุมการเดินสายไฟเข้ากับชุดประกอบชุดนี้

عربي

قبل البدء بالتوصيل: تأكد من شبكة الاسلاك في السيارة بدقة حتى لا يحدث خطأ في عملية توصيل الجهاز. يمكن ان يسبب التوصيل الخاطئ الى حصول عطل حقيقي للجهاز.
يمكن ان يختلف لون سلك الطاقة الكهربائية وسلك الموصل عن لون هيكل السيارة.

١ اوصل الاسلاك الملونة لسلك تزويد الطاقة الكهربائية مع بطارية السيارة، السماعات والهوائي الاوتوماتيكي (ان وجد) حسب التسلسل التالي
   ① السلك الاسود: مع الارض (مع هيكل السيارة)
   ② السلك الاصفر: مع بطارية السيارة (ثابت ١٢ فولت)
   ③ السلك الاحمر: مع الطرف الاضافي
   ④ السلك الازرق المخطط بالابيض (تحكم من جهة خارجي): مع الاجهزة الاخرى.
   ⑤ السلك الازرق: مع الهوائي الاوتوماتيكي (الحد الاقصى ٢٥٠ ميللي امبير)
   ⑥ السلك البرتقالي المخطط بالابيض: مع مفتاح ضبط ضوء السيارة.
   ⑦ السلك البني: مع جهاز التلفون الخلوي (للتفاصيل، ارجع الى تعليمات التلفون الخلوي)
   ⑧ الاسلاك الاخرى: مع السماعات
٢ اوصل سلك الهوائي.
٣ اخيراً، اوصل حامل الاسلاك مع الجهاز.

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* Before connecting the CD changer, make sure that the unit is turned off.
* 連接 CD 轉換器之前，應先將本機關閉。
* ก่อนเชื่อมต่อเครื่องเล่นซีดี กรุณาตรวจสอบว่าได้ปิดเครื่องเล่นซีดีนั้นปิดอยู่
* قبل توصيل مبدل الاسطوانة المدمجة CD، تأكد من ايقاف تشغيل الجهاز.

JVC CD changer jack
JVC CD 轉換器插座
หัวเสียบของเครื่องซีดี ยี่ห้อ JVC
مقبس مبدل الاسطوانة المدمجة CD ماركة JVC

When connecting a CD changer, we recommend to use one of the CH-X series CD changers.
• If your CD changer is one of the KD-MK series, you need an optional cord (KS-U15K). You can also use an external component such as a portable MD player by connecting the Line Input Adaptor KS-U57 (not supplied). (See diagram B .)

我們建議您應當接上一個 CH-X 系列的 CD 轉換器。
• 如果您的 CD 轉換器是 KD-MK 系列，您需要選用一條連接線 KS-U15K。
您可以通過連接線輸入適配器 KS-U57（未提供）來使用外接部件，如手提式 MD 播放機等（見 B 圖示）

ในการเชื่อมต่อเครื่องซีดี เราขอแนะนำให้คุณใช้เครื่องเล่นซีดีรุ่นใดรุ่นหนึ่งในตระกูล CH-X
• หากเครื่องเล่นซีดีของคุณเป็นรุ่นที่อยู่ในตระกูล KD-MK คุณต้องใช้สายเพิ่มเติม (KS-U15K)
คุณสามารถใช้อุปกรณ์ภายนอกเช่นเครื่องเล่นเอ็มดีแบบพกพาได้ โดยนำมาเชื่อมต่อกับอแดปเตอร์สายสัญญาณเข้า KS-U57 (ไม่ได้ให้มาด้วย) (ดูแผนภูมิ B)

نوصي بتوصيل احد مبدلات الاسطوانات المدمجة CD التي تنتمك من سلسلة CH-X.
• اذا كان مبدل الاسطوانة المدمجة CD الذي تمتلكه من سلسلة KD-MK، سوف تحتاج الى سلك اضافي (KS-U15K).
يمكنك ايضا استعمال جهاز كمبيوننت خارجي مثل مبدل اسطوانة MD المبني ديسك بتوصيل مهايئ دخل الخط KS-U57 (غير مزود مع هذا الجهاز) (انظر الرسم التخطيطي B)

SUBWOOFER (see diagram B)
超重低音揚聲器（參閱圖表 B ）
ซับวูฟเฟอร์ (ดูแผนภูมิ B)
خرج سماعة الويفر الفرعية (انظر المخطط B)

Rear ground terminal
本機後背接地端子
จุดเชื่อมต่อสายดินด้านหลัง
طرف التأريض الخلفي

LINE OUT (see diagram B)
輸出端子（參閱圖表 B ）
LINE OUT (ดูแผนภูมิ B)
خرج الخط (انظر المخطط B)

Aerial terminal
天線端子
ขั้วสายอากาศ
طرف الهوائي

2 To aerial
接至天線
ต่อกับสายอากาศ
الى الهوائي

*1: Before checking the operation of this unit prior to installation, this lead must be connected, otherwise power cannot be turned on.
*1: 本機未安裝時，進行工作狀況檢查之前，必須把這導線接上，否則不能開啟電源。
*1: ก่อนการตรวจสอบการทำงานของชุดประกอบนี้ก่อนที่จะติดตั้ง ต้องต่อสายตะกั่วนี้ก่อน มิเช่นนั้นจะไม่สามารถเปิดเครื่องได้
١* : قبل فحص تشغيل هذا الجهاز قبل التركيب، يجب توصيل هذا السلك، حيث لا يمكن تشغيل الجهاز بدون توصيل السلك.

1 ★ Not included with this unit.
不包含在本機內。
ไม่ได้ให้มากับชุดประกอบนี้
غير مزود مع هذا الجهاز.

Ignition switch
點火開關
สวิตช์จุดระเบิด
مفتاح الاشتعال

Black / 黑色 / สีดำ / أسود ①
To metallic body or chassis of the car
接至金屬體或汽車底盤
ต่อกับโครงโลหะหรือตัวชัสซีของรถยนต์
الى الجسم المعدني او هيكل السيارة المعدني

Yellow*1 / 黃色*1 / สีเหลือง*1 / أصفر ١* ②
To a live terminal in the fuse block connecting to the car battery (bypassing the ignition swich)
接至保險絲單元內的附屬端子，保險絲單元於車裝電池相連接（用於旁路點火開關）
ต่อกับขั้วไฟฟ้าที่มีกระแสไฟฟ้าในแผงฟิวส์ ซึ่งต่อกับแบตเตอรี่รถยนต์ (โดยไม่ต้องใช้สวิตช์จุดระเบิด)
الى الطرف الحي في مجموعة الفيوز الموصولة مع البطارية (مرورا بمفتاح الاشتعال)

Red / 紅色 / สีแดง / أحمر ③
To an accessory terminal in the fuse block
接至保險絲單元內的附屬端子
ต่อกับขั้วส่วนประกอบในแผงฟิวส์
الى الطرف الاضافي في مجموعة الفيوز

Blue with white stripe / 藍色帶有白色條紋 / สีฟ้าและมีแถบลายสีขาว / السلك ازرق مخطط بالابيض ④
To other equipment (see diagram B)
接至其他音響設備（參閱圖表 B ）
ต่อเข้ากับอุปกรณ์อื่น(ดูแผนภูมิ B)
مع المعدات الاخرى (انظر المخطط B)

Blue / 藍 / สีฟ้า / الازرق ⑤
To automatic antenna if any
接至自動升降天線
ต่อกับสายอากาศอัตโนมัติ (ถ้ามี)
الى الهوائي الاوتوماتيكي ان وجد

Orange with white stripe / 橙色帶有白色條紋 / สีส้มและมีแถบสีขาว / السلك البرتقالي المخطط بالابيض ⑥ (ILLUMINATION)
To car light control switch
接至汽車燈光控制開關
ต่อเข้ากับสวิตช์ควบคุมไฟรถยนต์
الى مفتاح ضبط ضوء السيارة

Brown / 棕色 / สีน้ำตาล / بني ⑦
To cellular phone system
接至蜂窩式移動電話系統
สำหรับระบบโทรศัพท์เซลลูลาร์
مع جهاز التلفون الخلوي

Fuse block
保險絲單元
แผงฟิวส์
مجموعة الفيوز

⑧

White with black stripe / 白色帶有黑色條紋 / สีขาวแถบดำ / سلك ابيض مخطط بالاسود (−) (+) **White / 白色 / สีขาว / أبيض**
Left speaker (front)
左揚聲器（前置）
ลำโพงซ้าย (หน้า)
السماعة اليسرى (الامامية)

Gray with black stripe / 灰色帶有黑色條紋 / สีเทาแถบดำ / رمادي مخطط بالاسود (−) (+) **Gray / 灰色 / สีเทา / رمادي**
Right speaker (front)
右揚聲器（前置）
ลำโพงขวา (หน้า)
السماعة اليمنى (الامامية)

Green with black stripe / 綠色帶有黑色條紋 / สีเขียวแถบดำ / أخضر مخطط بالاسود (−) (+) **Green / 綠色 / สีเขียว / أخضر**
Left speaker (rear)
左揚聲器（後置）
ลำโพงซ้าย (หลัง)
السماعة اليسرى (الخلفية)

Purple with black stripe / 紫色帶有黑色條紋 / สีม่วงแถบดำ / ارجواني مخطط بالاسود (−) (+) **Purple / 紫色 / สีม่วง / ارجواني**
Right speaker (rear)
右揚聲器（後置）
ลำโพงขวา (หลัง)
السماعة اليمنى (الخلفية)

PRECAUTIONS on power supply and speaker connections:

ENGLISH
• DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.
• Connect the black lead (ground), yellow lead (to car battery, constant 12 V), and red lead (to an accessory terminal) correctly.
• BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car:
  – If the speaker wiring in your car is as illustrated in Fig. 1 and Fig. 2 below, DO NOT connect the unit using that original speaker wiring. If you do, the unit will be seriously damaged.
  Redo the speaker wiring so that you can connect the unit to the speakers as illustrated in Fig. 3.
  – If the speaker wiring in your car is as illustrated in Fig. 3, you can connect the unit using the original speaker wiring in your car.
  – If you are not sure of the speaker wiring of your car, consult your JVC car audio.

電源和揚聲器接線注意事項：
• 切勿把揚聲器導線接頭接至電池，否則本機將會嚴重損壞。
• 正確地連接黑色導線接頭（接地）、黃色導線接頭（接車裝電池，恆定12V）和紅色導線接頭（接至保險絲單元的附屬端子）。
• 在把揚聲器導線接頭接至揚聲器之前，檢查您汽車上的揚聲器線路：
  – 如果您汽車上揚聲器線路象圖1和圖2所示，不要使用原裝的揚聲器線路。如果使用，本機將嚴重損壞。要重新連接揚聲器線路，可按圖3所示，把本機與揚聲器相連接。
  – 如果您汽車上揚聲器線路象圖3所示，可使用原裝的揚聲器線路與本機相連接。
  – 如果您不能確定您汽車上揚聲器線路，請向您的汽車分銷商詢問。

ข้อควรระวังสำหรับการต่อแหล่งจ่ายกำลังและลำโพง :
• อย่าต่อสายตะกั่วเดินสายกำลังของลำโพงเข้ากับแบตเตอรี่รถยนต์ มิฉะนั้นชุดประกอบจะได้รับความเสียหายมาก
• ต่อสายตะกั่วเส้นสีดำ (สายดิน), สีเหลือง (เข้ากับแบตเตอรี่รถยนต์ให้มีกำลังคงที่ 12 โวลต์) และสีแดง (เข้ากับขั้วส่วนประกอบ) อย่างถูกต้อง
• ก่อนที่จะต่อสายตะกั่วเดินสายกำลังของลำโพงเข้ากับลำโพง ให้ตรวจสอบการเดินสายไฟลำโพงในรถของคุณให้เรียบร้อยเสียก่อน
  – หากการเดินสายไฟลำโพงในรถของคุณเป็นเหมือนในรูปภาพที่ 1 และรูปภาพที่ 2 ดังข้างล่างนี้ อย่าต่อส่วนประกอบที่ใช้การเดินสายไฟลำโพงแบบตั้งเดิมนั้น มิเช่นนั้นชุดประกอบจะได้รับความเสียหายมาก ให้จัดการการเดินสายไฟลำโพงใหม่ เพื่อที่คุณจะสามารถต่อชุดประกอบเข้ากับลำโพงตามรูปภาพที่ 3 ได้
  – หากการเดินสายไฟลำโพงในรถของคุณเป็นเหมือนในรูปภาพที่ 3 คุณสามารถต่อชุดประกอบที่ใช้การเดินสายไฟลำโพงแบบตั้งเดิมในรถของคุณได้เลย
  – หากคุณไม่แน่ใจว่าการเดินสายไฟลำโพงในรถของคุณเป็นแบบใด ให้ปรึกษาผู้ขายรถยนต์ของคุณ

تنبيهات حول تزويد الطاقة الكهربائية وتوصيل السماعات:
• لا توصل اسلاك تزويد طاقة السماعات مع بطارية السيارة، لان ذلك يؤدي الى حصول ضرر للسماعات.
• اوصل السلك الاسود (الارضي)، والسلك الاصفر (مع بطارية السيارة، ثابت ١٢ فولت)، والسلك الاحمر (مع الطرف الاضافي) بشكل صحيح.
• قبل توصيل اسلاك تزويد طاقة السماعات مع السماعات، افحص شبكة اسلاك السماعات داخل سيارتك.
  – اذا كانت شبكة اسلاك السماعات في سيارتك كما هي مبينة في الشكل ١ والشكل ٢ الموجودة في الاسفل، لا توصل الجهاز بواسطة استخدام شبكة اسلاك السماعات الاصلية. اذا قمت بهذه الطريقة، سيؤدي ذلك الى حصول ضرر. اعد عمل شبكة اسلاك السماعات بحيث يمكنك توصيل الجهاز مع السماعات كما هو مبين في الشكل ٣.
  – اذا كانت شبكة اسلاك السماعات داخل سيارتك كما هي مبينة في الشكل ٢، يمكنك توصيل الجهاز بواسطة استخدام شبكة اسلاك السماعات الاصلية داخل سيارتك.
  – في حالة عدم معرفتك لشبكة اسلاك السماعات داخل سيارتك، استشر الوكيل وذوي الخبرة بهذا الخصوص.
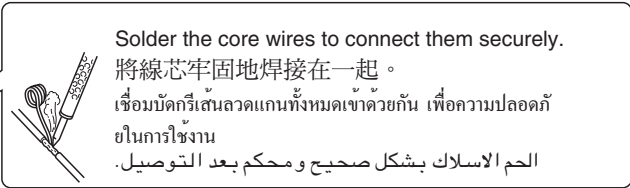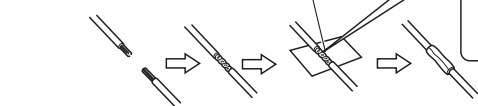
Fig. 1   Fig. 2   OK   Fig. 3

Connecting the leads / 導線接頭的連接 / ต่อสายตะกั่ว / توصيل الاسلاك

Twist the core wires when connecting.
連接時剝掉導線的外皮。
บิดเส้นลวดแกนเพื่อเชื่อมต่อ
ابرم الاسلاك
بشكل صحيح قبل التوصيل.

Solder the core wires to connect them securely.
將線芯牢固地焊接在一起。
เชื่อมบัดกรีเส้นลวดแกนทั้งหมดเข้าด้วยกัน เพื่อความปลอดภัยในการใช้งาน
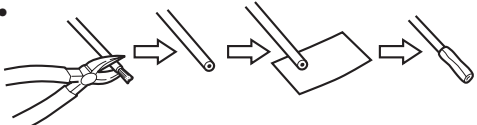الحم الاسلاك بشكل صحيح ومحكم بعد التوصيل.

CAUTION / 注意 / ข้อควรระวัง / تنبيه
• **To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.**
• 為防止電源短路，請用絕緣帶包住未使用電線的端子。
• การป้องกันการลัดวงจร จะต้องพันขั้วสายตะกั่วที่ไม่ใช้พันด้วยเทปพันสายไฟ (Insulating tape)
• من اجل منع التقصير في الدوائر – الكهربائية، ضع شريط عازل والصق على اطراف الاسلاك غير المستعملة.

B Connections Adding Other Equipment / 連接附加的其他音響設備 / การต่อเพิ่มเติมเข้ากับอุปกรณ์อื่น ๆ / توصيل الاجهزة الاخرى الاضافية

You can connect an amplifier and other equipment to upgrade your car stereo system.
• Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this unit.
• For amplifier only:
  – Connect this unit's line-out terminals to the amplifier's line-in terminals.
  – **Disconnect the speakers from this unit, connect them to the amplifier. Leave the speaker leads of this unit unused. (Cover the terminals of these unused leads with insulating tape, as illustrated above.)**
• For playback source components: After connection is done, adjust and store the input level of each component (See "Adjusting the sound" on the INSTRUCTIONS (separate volume).

你可以連接放大器和其他裝置以加強你的汽車音響系統功能。
• 將遙控引導端（藍色帶有白色條紋）和其他裝置上的遙控引導端連接起來，以便可以通過本機進行遙控。
• 僅適用於放大器：
  – 將本機的輸出終端和放大器輸入終端連接起來。
  – 將揚聲器和本機斷開，再接上放大器。將本機的揚聲器接線放置不用。（按照上面所示的方式，用絕緣膠把不用的線端包起來。）
• 要放大其他音源設備：連接完畢後，請調整各項設備的輸入水平，並儲存起來。（請參閱使用說明書上的"調整音量"部分）（另外一本）。

คุณสามารถต่อต่อเครื่องขยายและอุปกรณ์อื่น ๆ เพื่ออัพเกรดระบบเครื่องเสียงในรถยนต์ของคุณได้
• ต่อสายตะกั่วระยะไกล (สีน้ำเงินลายขาว) เข้ากับสายตะกั่วระยะไกลของอุปกรณ์อื่น ๆ เพื่อจะสามารถควบคุมผ่านชุดประกอบนี้ได้
• สำหรับเครื่องขยายเท่านั้น :
  – ต่อขั้วสายออก (Line-out) ของชุดประกอบนี้เข้ากับขั้วสายเข้า (Line-in) ของเครื่องขยาย
  – ดลดลั่วโพงออกจากชุดคอมบอนนี้ แล้วต่อเข้ากับเครื่องขยายทั้งสายตะกั่วลำโพงของชุดประกอบนี้ไว้
(พันขั้วของสายตะกั่วที่ไม่ได้ใช้เหล่านี้ให้ลอยด้วยเทปพันสายไฟ ดังตัวอย่างข้างต้น)
• สำหรับการเล่นแหล่งกำเนิดเสียงของชุดประกอบนี้ หลังจากต่ออุปกรณ์เข้ากับเครื่องเรียบร้อยแล้ว ให้ปรับและบันทึกระดับพลังเสียงขาเข้าของชุด ประกอบแต่ละชุด (ดูหัวข้อการปรับเสียงง่า ในคู่มือการใช้ (คนละเล่ม)

يمكنك توصيل مضخم صوت وجهاز اخر لتحسين اداء جهاز ستيريو السيارة.
• اوصل سلك التحكم عن بعد (الازرق المخطط بالابيض) مع سلك التحكم عن بعد للجهاز الاخر بحيث يتم التحكم بالجهاز من خلال هذا الجهاز.
• لمضخم الصوت:
  – اوصل اطراف خرج ـ الخط لهذا الجهاز مع اطراف دخل ـ الخط لمضخم الصوت.
  – افصل السماعات من هذا الجهاز، اوصلهم مع مضخم الصوت. اترك اسلاك سماعات هذا الجهاز بدون استعمال.
• لتشغيل اجهزة كمبونانت المصدر: بعد عمل التوصيل، اضبط واخزن مستوى الدخل لكل جهاز كمبونانت (انظر قسم «ضبط الصوت» الموجود في تعليمات التشغيل (كتاب منفصل).

Amplifier / 功率放大器 / เครื่องขยาย / مضخم الصوت
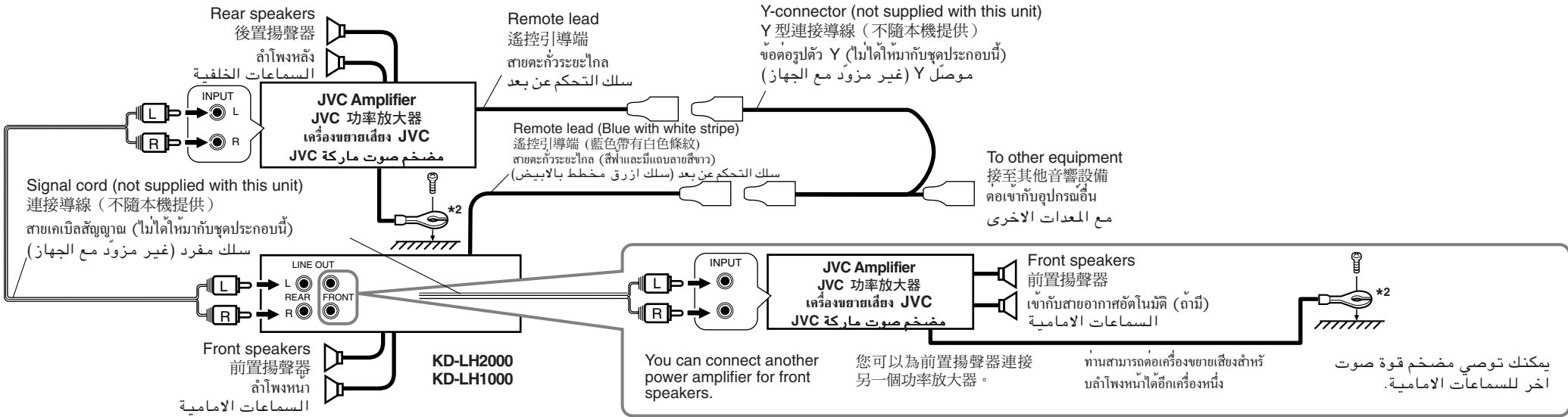
*2 Firmly attach the ground wire to the metallic body or to the chassis of the car—to the place not coated with paint (if coated with paint, remove the paint before attaching the wire). Failure to do so may cause damage to this unit.
*2 將地線與金屬車體或者汽車底盤緊密連接，連接處應該沒有被油漆覆蓋（如果已塗上油漆，在連接電線前，將油漆刮去）。如果不這樣做，可能會損壞本機。
*2 ต่อลวดสายดินให้แน่นเข้ากับตัวถังเหล็ก หรือตัวถังรถ – ตรงส่วน ที่ไม่มีสีเคลือบ (หากมีสีเคลือบอยู่ ให้ขูดสีออกก่อน ก่อนต่อลวดสายดิน) หากไม่ปฏิบัติตามคำแนะนำนี้ เครื่องอาจชำรุดหรือเสียหายได้
2* اوصل السلك الارضي بشكل محكم مع هيكل او جسم السيارة المعدني – مع الموضع غير المطلي بالدهان (اذا كان الموضع مطلي بالدهان، ازل الدهان قبل توصيل السلك). في حالة توصيل السلك مع الهيكل مع ازالة الدهان يمكن ان يسبب ذلك ضرر لهذا الجهاز.

External Component / 外接部件 / อุปกรณ์ภายนอก / جهاز الكمبونانت الخارجي

External component / 外接部件 / อุปกรณ์ภายนอก / جهاز الكمبونانت الخارجي

Line Input Adaptor KS-U57 (not supplied with this unit)
線輸入適配器 KS-U57（不隨本機提供）
อแดปเตอร์สายสัญญาณเข้า KS-U57 (ไม่ได้ให้มากับชุดประกอบนี้)
مهايءء دخل الخط KS-U57 (غير مزوّد مع هذا الجهاز)

CD changer jack
CD 轉換器插座
ช่องเสียบต่อของเครื่องเปลี่ยนซีดี
مقبس مبدّل الاسطوانة المدمجة CD

Signal cord (not supplied with this unit)
連接導線（不隨本機提供）
สายสัญญาณ (ไม่ได้ให้มากับชุดประกอบนี้)
سلك الاشارة (غير مزوّد مع هذا الجهاز)

External component
外接部件
อุปกรณ์ภายนอก
جهاز الكمبونانت الخارجي
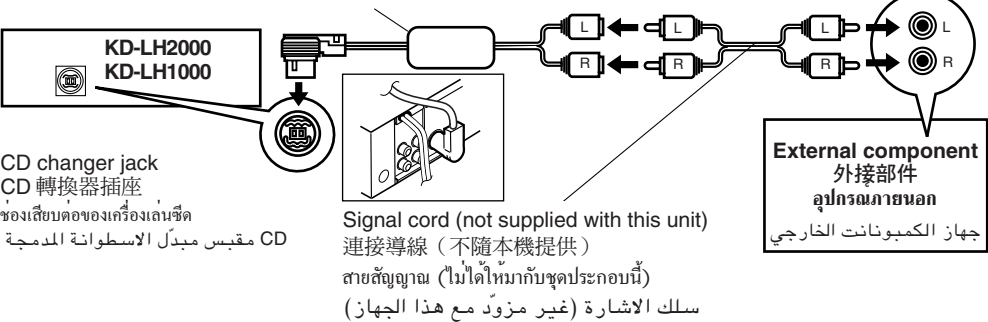
See page 34 on the INSTRUCTIONS (separate volume)
請參閱 34 頁使用說明書（另一冊）
ดูหน้า 34 ของคู่มือการใช้ (คนละเล่ม)
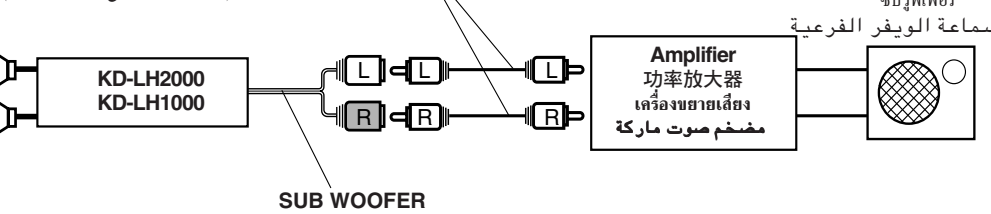انظر صفحة ٣٤ من كتيّب تعليمات التشغيل (كتاب منفصل)

Subwoofer / 超重低音揚聲器 / ซับวูฟเฟอร์ / سماعة الويفر الفرعية

Signal cord (not supplied with this unit)
連接導線（不隨本機提供）
สายสัญญาณ (ไม่ได้ให้มากับชุดประกอบนี้)
سلك الاشارة (غير مزوّد مع هذا الجهاز)

Subwoofer
超重低音揚聲器
ซับวูฟเฟอร์
سماعة الويفر الفرعية

SUB WOOFER

TROUBLESHOOTING / 故障排除 / การตรวจสอบปัญหาขัดข้อง / البحث عن الاعطال والاصلاح

• **The fuse blows.**
* Are the red and black leads connected correctly?
• **Power cannot be turned on.**
* Is the yellow lead connected?
• **No sound from the speakers.**
* Is the speaker output lead short-circuited?
• **Sound is distorted.**
* Is the speaker output lead grounded?
* Are the "–" terminals of L and R speakers grounded in common?
• **Unit becomes hot.**
* Is the speaker output lead grounded?
* Are the "–" terminals of L and R speakers grounded in common?

• 保險絲燒斷。
* 檢查紅色導線接頭和黑色導線接頭是否連接正確？
• 電源不能接通。
* 檢查黃色導線接頭是否接上？
• 揚聲器沒有聲音。
* 檢查揚聲器輸出導線接頭是否短路？
• 聲音失真。
* 檢查揚聲器輸出端子是否接地？
* 檢查揚聲器輸出的左（L）、右（R）端子的負極（–）是否共同接地？
• 本機發熱。
* 檢查揚聲器輸出端子是否接地？
* 檢查揚聲器輸出的左（L）、右（R）端子的負極（–）是否共同接地？

• ฟิวส์ขาด
* มีการเชื่อมสายตะกั่วสีดำและแดงอย่างถูกต้องหรือไม่
• ไม่สามารถเปิดเครื่องได้
* มีการเชื่อมสายตะกั่วสีเหลืองหรือไม่
• ไม่มีเสียงออกจากลำโพง
* สายตะกั่วส่วนที่ออกทางลำโพงเกิดไฟฟ้าลัดวงจรหรือไม่
• เสียงเพี้ยน
* สายตะกั่วส่วนที่ออกทางลำโพงต่อลงดินหรือไม่
* สายขั้วลบ ของลำโพงด้านซ้ายและขวาต่อลงดินตามปกติหรือไม่
• ชุดประกอบร้อนขึ้น
* สายตะกั่วที่ออกทางลำโพงต่อลงดินหรือไม่
* สายขั้วลบ ของลำโพงด้านซ้ายและขวาต่อลงดินตามปกติหรือไม่

• يحترق الفيوز.
* هل السلك الاحمر والاسود موصولة بشكل صحيح؟
• لا يمكن توصيل الطاقة الكهربائية.
* هل السلك الاصفر موصولا؟
• لا يصدر صوت من السماعات.
* هل هنالك تقصير في دائرة سلك خرج السماعة؟
• الصوت مشوه.
* هل سلك خرج السماعة موصولا بالارض؟
* هل الاطراف السالبة «–» للسماعة اليسرى L واليمنى R موصولة بالارض مع بعض؟
• يسخن الجهاز.
* هل سلك خرج السماعة موصولا بالارض؟
* هل الاطراف السالبة «–» للسماعة اليسرى L واليمنى R موصولة بالارض مع بعض؟