JVC

CD RECEIVER   KD-SC945
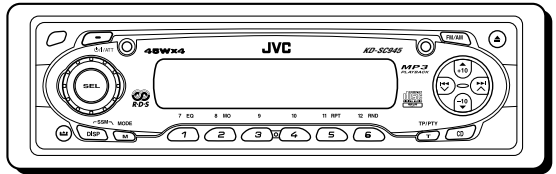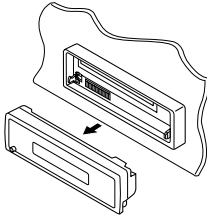
CD 收音組合機   KD-SC945

中

文

ไทย

เครื่องเล่น CD   KD-SC945

Detachable

COMPACT disc
DIGITAL AUDIO
TEXT

R·D·S

MP3
PLAYBACK

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

GET0143-001A
[U]

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.

How to reset your unit

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

Note:
Your preset adjustments—such as preset channels or sound adjustments—will also be erased.
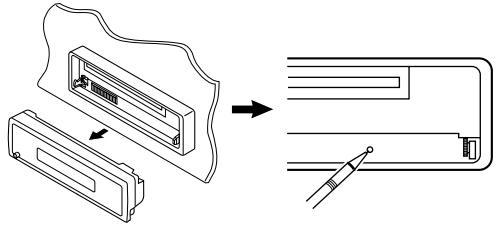
How to use the M (MODE) button

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

Ex.: When number button 2 works as MO (monaural) button.

MODE
M

7 EQ   8 MO   9   10   11 RPT   12 RND

1   2   3   4   5   6

FM1   MO

MONO
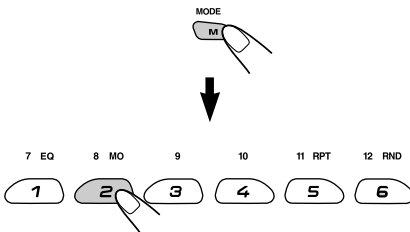
Time countdown indicator

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

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

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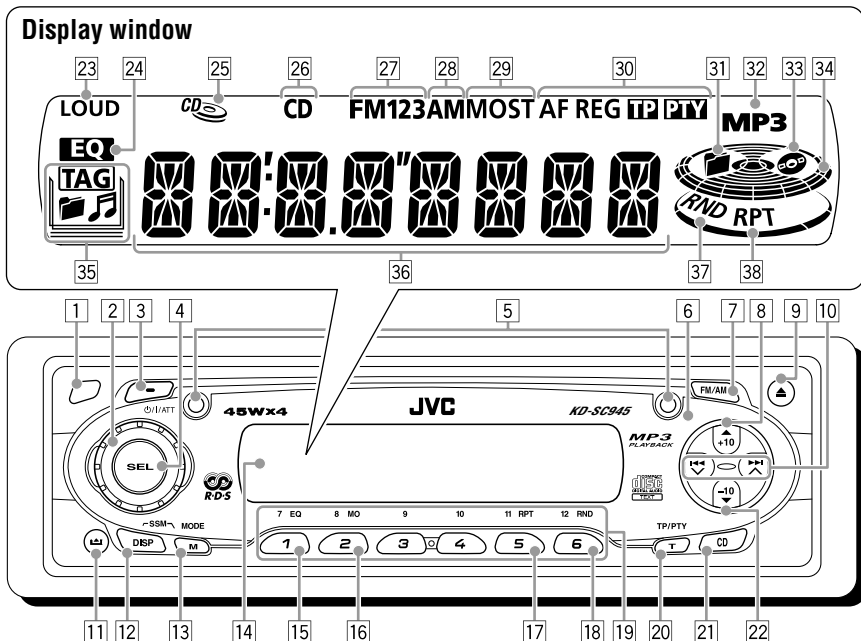
Temperature inside the car....
If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

Control panel

Display window

LOUD   CD▱   **CD**   **FM123** **AM** **MOST** **AF REG** **TP PTY**   **MP3**

EQ

TAG

RND **RPT**

1 Remote sensor
2 Control dial
3 ⏻/I/ATT (standby/on/attenuator) button
4 SEL (select) button
5 Screws—M2 × 5 mm
6 Plate cover and standard plate
7 FM/AM button
8 ▲ (up) button
  +10 button
9 ▲ (eject) button
10 |◄◄ ∨/►►| ∧ buttons
11 ◢◣ (control panel release) button
12 DISP (display) button
  • *Also functions as SSM buttons when pressed together with M (MODE) button.*
13 M (MODE) button
  • *Also functions as SSM buttons when pressed together with DISP (display) button.*
14 Display window
15 EQ (equalizer) button
16 MO (monaural) button
17 RPT (repeat) button
18 RND (random) button
19 Number buttons
20 T (TP/PTY: traffic programme/programme type) button

21 CD button
22 ▼ (down) button
  −10 button

Display window

23 LOUD (loudness) indicator
24 EQ (equalizer) indicator
25 CD–in indicator
26 CD indicator
27 FM band indicators (FM1, FM2, FM3)
28 AM band indicator
29 Tuner reception indicators
  MO (monaural), ST (stereo)
30 RDS indicators
  AF, REG, TP, PTY
31 ▰ (folder) indicator
32 MP3 indicator
33 ◉ (disc) indicator
34 Volume (or audio) level indicator
35 Disc information indicators
  TAG (ID3 tag), ▰ (folder), ♫ (track/file)
36 Main display
37 RND (random) indicator
38 RPT (repeat) indicator

4

Remote controller
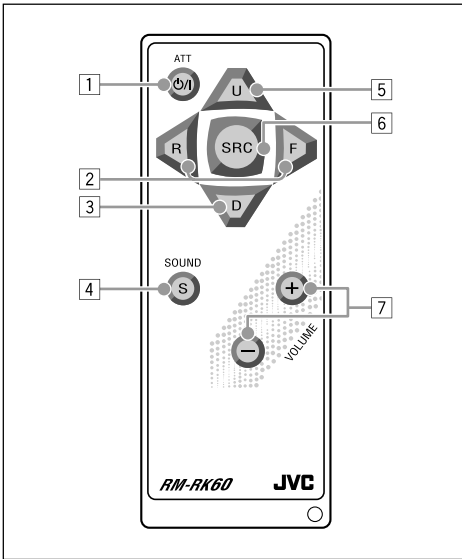
1 • Turns on the unit if pressed when the unit is turned off.
   • Turns off the unit if pressed and held until "SEE YOU" appears on the display.
   • Drops the volume level in a moment if pressed briefly.
     Press again to resume the volume.

2 • 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.

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 first file of the previous folder while listening to an MP3 disc.
     Each time you press the button, you can move to the previous folder and start playing the first file.

4 Selects the sound mode (C-EQ: custom equalizer).
   Each time you press the button, the sound mode (C-EQ) changes.

5 • Selects the band while listening to the radio.
     Each time you press the button, the band changes.
   • Skips to the first file of the next folder while listening to an MP3 disc.
     Each time you press the button, you can move to the next folder and start playing the first file.

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

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

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.
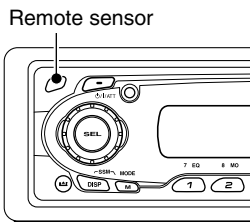
Remote sensor

• 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)
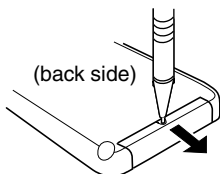
2. Place the battery.
  Slide the battery into the holder with the
  + side facing upwards so that the battery
  is fixed in the holder.

Lithium coin
battery (product
number: CR2025)
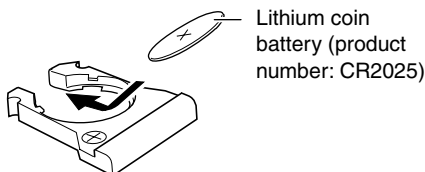
3. Return the battery holder.
  Insert again the battery holder by pushing it
  until you hear a clicking sound.

(back side)
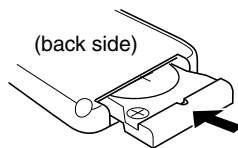
WARNING:
• *Store the battery in a place where children
  cannot reach.
  If a child accidentally swallows the battery,
  consult a doctor immediately.*
• *Do not recharge, short, disassemble, or heat the
  battery or dispose of it in a fire.
  Doing any of these things may cause the battery
  to give 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.*
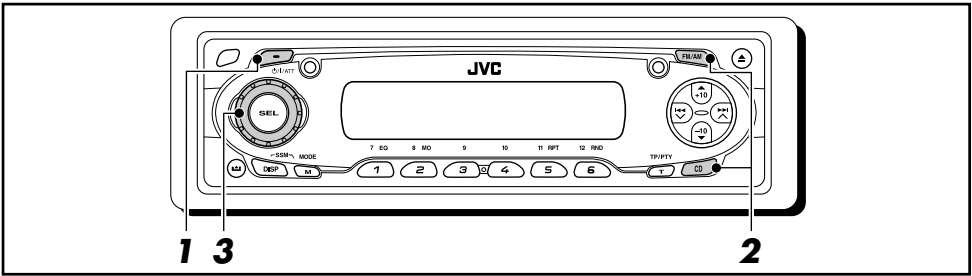
Turning on the power

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 – 18.
To play a CD,
    see pages 19 – 22.
To play an MP3 disc,
    see pages 25 – 28.

3 Adjust the volume.
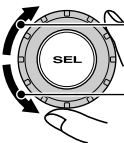
To increase the volume

To decrease the volume

Volume (or audio) level indicator
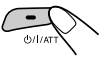(see page 33)

Volume level appears.

4 Adjust the sound as you want. (See pages 29 and 30.)

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 and hold ⏻/I/ATT for more than one second.
"SEE YOU" appears, then the unit turns off.
• **If you turn off the power while listening to a disc,** disc play will start from where playback has been stopped previously, next time you turn on the power.

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.

7
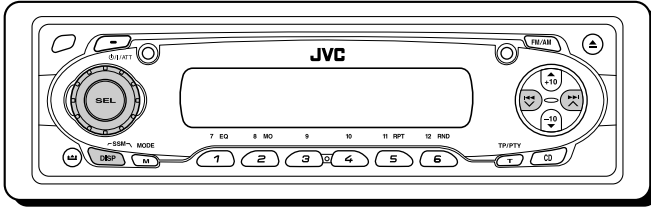
Setting the clock

You can also set the clock system to either 24 hours or 12 hours.

1 **Press and hold SEL (select) for more than 2 seconds so that one of the PSM item appears on the display. (PSM: see page 32.)**

2 **Set the hour.**
   ① Select "CLOCK H" (hour) if not shown on the display.
   ② Adjust the hour.
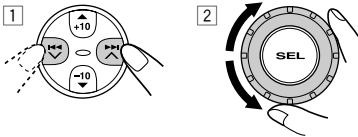
3 **Set the minute.**
   ① Select "CLOCK M" (minute).
   ② Adjust the minute.
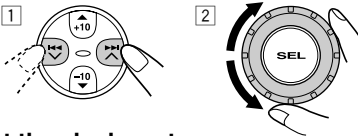
4 **Set the clock system.**
   ① Select "24H/12H."
   ② Select "24H" or "12H."
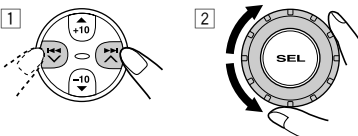
5 **Finish the setting.**

To check the current clock time or change the display mode

Press DISP (display) repeatedly. Each time you press the button, the display changes as follows:

• **During tuner operation:**

   Frequency ⟷ **Clock**

Note:
For the indication change during RDS operation, see page 17.

• **During disc operation:**

   Elapsed playing time → **Clock** → **Disc title / performer** → **Track title** →
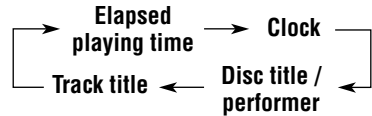
Notes:
* *While playing a conventional CD, "NO NAME" appears for the disc title/performer and the track title.*
* *For indication change while playing a CD Text or an MP3 disc, see also pages 22 and 26.*

• **During power off:**
   The power turns on and the clock time is shown for 5 seconds, then the power turns off.

8
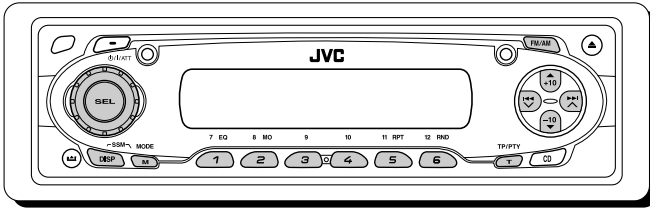
Listening to the radio

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

Searching a station automatically: Auto search

1 **Select the band (FM1 – 3, AM).**

Each time you press the button, the band changes as follows:
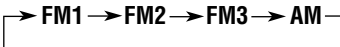
→ **FM1** → **FM2** → **FM3** → **AM** →

Selected band appears.
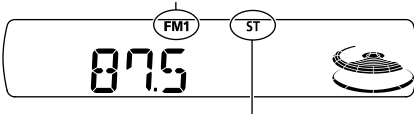
Lights up when receiving an FM stereo broadcast with sufficient signal strength.

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 a station.**
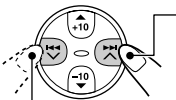
To search stations of higher frequencies

To search stations of lower frequencies

When a station is received, searching stops.

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

Searching a station manually: Manual search

1 **Select the band (FM1 – 3, AM).**
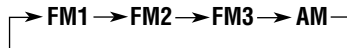
Each time you press the button, the band changes as follows:

→ **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 ►►⏐ ⋀ or ⏐◄◄ ⋁ until "M" (manual) starts flashing on the display.**

9

ENGLISH
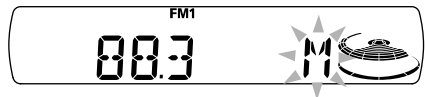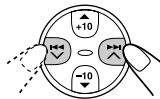
3 Tune in to a station you want while "M" (manual) is flashing.

To tune in to stations of higher frequencies

To tune in to stations of lower frequencies
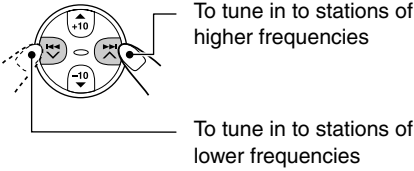
- If you release your finger from the button, the manual mode will automatically turns off after 5 seconds.
- If you hold down the button, the frequency keeps changing (in 50 kHz intervals for FM and 9 kHz for AM—MW/LW) until you release the button.

When an FM stereo broadcast is hard to receive

**MODE**
M

1 Press M (MODE) to enter the functions mode while listening to an FM stereo broadcast.

8 MO
2

2 Press MO (monaural), while still in the functions mode, so that the MO indicator lights up on the display.
Each time you press the button, the MO indicator lights up and goes off alternately.

MO (monaural) indicator

FM1 MO
MONO
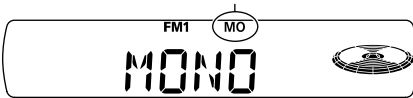
When the MO indicator is lit on the display, the sound you hear becomes monaural but the reception will be improved.

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.

FM/AM

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

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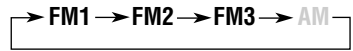
2 Press and hold both buttons for more than 2 seconds.

SSM   MODE
DISP   M

FM1
SSM
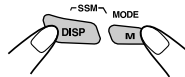
"- -SSM- -" appears, then disappears when automatic preset is over.

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 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** ─┐
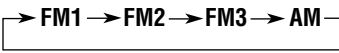
2 **Tune in to a station (in this example, of 88.3 MHz).**
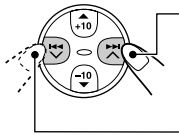
To tune in to stations of higher frequencies

To tune in to stations of lower frequencies

FM1

88.3
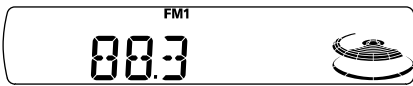
3 **Press and hold the number button (in this example, 1) for more than 2 seconds.**

7 EQ

FM1

88.3 *P1*
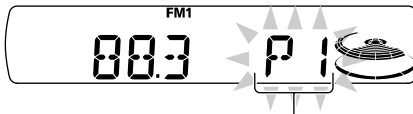
"P1" flashes for a few seconds.

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

Notes:
- *A previously preset station is erased when a new station is stored in the same preset number.*
- *Preset stations are erased when the power supply to the memory circuit is interrupted (for example, during battery replacement). If this occurs, preset the stations again.*

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 pages 10 and 11.

1 **Select the band (FM1 – 3, AM).**

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

→ **FM1** → **FM2** → **FM3** → **AM** ─┐
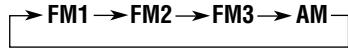
2 **Select the number (1 – 6) for the preset station you want.**

7 EQ	8 MO	9	10	11 RPT	12 RND
1	2	3	4	5	6
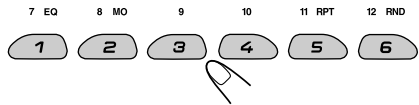
Note:
You can also use the ▲ (up) or ▼ (down) button on the unit to select the next or previous preset stations. Each time you press the ▲ (up) or ▼ (down) button, the next or previous preset station is tuned in.

11

☯ RDS OPERATIONS

What you can do with RDS

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular programme signals. For example, the stations send their station names, as well as information about what type of programme they broadcast, such as sports or music, etc.
Another advantage of RDS function is called "Enhanced Other Networks." By using the Enhanced Other Networks data sent from a station, you can tune in to a different station of a different network broadcasting your favorite programme or traffic announcement while listening to another programme or to another source such as CD.

By receiving the RDS data, this unit can do the following:
• Tracing the same programme automatically (Network-Tracking Reception)
• Standby Reception of TA (Traffic Announcement) or your favorite programme
• PTY (Programme Type) search
• Programme search
• And some other functions

Tracing the same programme automatically (Network-Tracking Reception)

When driving in an area where FM reception is not good, the tuner built in this unit automatically tunes in to another RDS station, broadcasting the same programme with stronger signals. So, you can continue to listen to the same programme in its finest reception, no matter where you drive. (See the illustration on page 18.)
Two types of the RDS data are used to make Network-Tracking Reception work correctly—PI (Programme Identification) and AF (Alternative Frequency).
Without receiving these data correctly from the RDS station you are listening to, Network-Tracking Reception will not operate.

To use Network-Tracking Reception

You can select the different modes of network-tracking reception to continue listening to the same programme in its finest reception.
When shipped from the factory, "AF" is selected.

• AF: Network-Tracking Reception is activated with Regionalization set to "off."
          With this setting, the unit switches to another station within the same network when the receiving signals from the current station become weak. (In this mode, the programme may differ from the one currently received.)
          The AF indicator lights up but the REG indicator does not.

• AF REG: Network-Tracking Reception is activated with Regionalization set to "on."
          With this setting, the unit switches to another station, within the same network, broadcasting the same programme when the receiving signals from the current station become weak.
          Both the AF indicator and the REG indicators light up.

• OFF: Network-Tracking Reception is deactivated.
          Neither the AF indicator nor the REG indicator lights up.
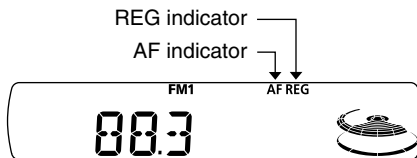
REG indicator ─────┐
AF indicator ───┐ │

12

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (PSM: see page 32.)

2 Select "AF-REG" (alternative frequency/regionalization reception) if not shown on the display.
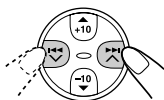
3 Select the desired mode—"AF," "AF REG," or "OFF."
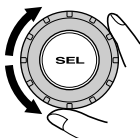
4 Finish the setting.

Using TA Standby Reception

TA Standby Reception allows the unit to switch temporarily to Traffic Announcement (TA) from the current source (another FM station or CD).

• *TA Standby Reception will not work if you are listening to an AM station.*

Press T (TP/PTY) to activate TA Standby Reception.

TP/PTY

■ **When the current source is FM,** the TP indicator either lights up or flashes.
  • If the TP indicator lights up, TA Standby Reception is activated.
    If a station starts broadcasting a traffic announcement, "TRAFFIC" appears on the display, and this unit automatically tunes in to the station. The volume changes to the preset TA volume level (see page 17) and the traffic announcement can be heard.
  • If the TP indicator flashes, TA Standby Reception is not yet activated since the station being received does not provide the signals used for TA Standby Reception.
    To activate TA Standby Reception, you need to tune in to another station providing these signals.
    Press ►►I ∧ or I◄◄ ∨ to search for such a station.
    When a station providing these signals is tuned in, the TP indicator stops flashing and remains lit. Now TA Standby Reception is activated.

■ **When the current source is other than FM,** the TP indicator lights up.
  If a station starts broadcasting a traffic announcement, "TRAFFIC" appears on the display, and this unit automatically changes the source and tunes in to the station.

To deactivate the TA Standby Reception, press T (TP/PTY) again. The TP indicator disappears.

13

Using PTY Standby Reception

PTY Standby Reception allows the unit to switch temporarily to your favorite programme (PTY: Programme Type) from the current source (another FM station or CD).

• *PTY Standby Reception will not work if you are listening to an AM station.*

You can select your favorite programme type for PTY Standby Reception.
When shipped from the factory, PTY Standby Reception is turned off. ("OFF" is selected for PTY Standby Reception.)

**1** **Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (PSM: see page 32.)**

2 **Select "PTY STBY" (standby) if not shown on the display.**
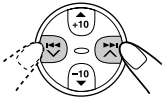
3 **Select one of the twenty-nine PTY codes. (See page 18.)**
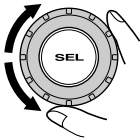
Selected code name appears on the display and is stored into memory.

4 **Finish the setting.**

■ **When the current source is FM,** the PTY indicator either lights up or flashes.
• If the PTY indicator lights up, PTY Standby Reception is activated.
  If a station starts broadcasting the selected PTY programme, this unit automatically tunes in to the station.
• If the PTY indicator flashes, PTY Standby Reception is not yet activated since the station being received does not provide the signals used for PTY Standby Reception.
  To activate PTY Standby Reception, you need to tune in to another station providing these signals.
  Press ►►I ∧ or I◄◄ ∨ to search for such a station.
  When a station providing these signals is tuned in, the PTY indicator stops flashing and remains lit. Now PTY Standby Reception is activated.

■ **When the current source is other than FM,** the PTY indicator lights up.
  If a station starts broadcasting the selected PTY programme, this unit automatically changes the source and tunes in to the station.

To deactivate the PTY Standby Reception, select "OFF" in step *3* on the left column. The PTY indicator disappears.

14

Searching your favorite programme

You can search any one of the PTY codes.
In addition, you can store your 6 favorite programme types in the number buttons.
When shipped from the factory, the following 6 programme types have been stored in the number buttons (1 to 6).

To store your favorite programme types, see below.
To search your favorite programme type, see page 16.

1	2	3
POP M	ROCK M	EASY M

4	5	6
CLASSICS	AFFAIRS	VARIED

To store your favorite programme types

1 Press and hold T (TP/PTY) for more than 2 seconds while listening to an FM station.

TP/PTY

FM1

POP M
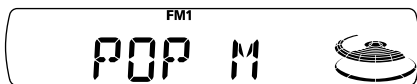
The last selected PTY code appears.

2 Select one of the twenty-nine PTY codes. (See page 18.)

SEL
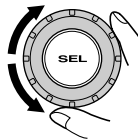
Selected code name appears on the display.

3 Press and hold the number button for more than 2 seconds to store the PTY code selected into the preset number you want.

7 EQ   8 MO   9   10   11 RPT   12 RND

1   2   3   4   5   6
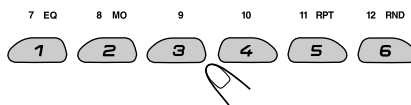
"MEMORY" and the selected code name alternate on the display.

4 Press and hold T (TP/PTY) for more than 2 seconds to exit from this mode.

TP/PTY

15

To search your favorite programme type

1 Press and hold T (TP/PTY) for more than 2 seconds while listening to an FM station.

TP/PTY

FM1

$$POP \ M$$

The last selected PTY code appears.

2 To select one of your favorite programme type

7 EQ	8 MO	9	10	11 RPT	12 RND
1	2	3	4	5	6
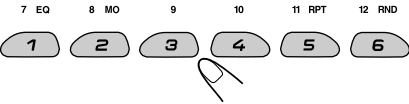
or

To select any one of the twenty-nine PTY-codes

SEL

FM1
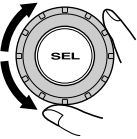
$$ROCK \ M$$

Ex.: When "ROCK M" is selected

3 Press ►►I ⋀ or I◄◄ ⋁ to start PTY search for your favorite programme.

+10
-10
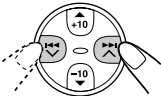
• If there is a station broadcasting a programme of the same PTY code as you selected, that station is tuned in.
• If there is no station broadcasting a programme of the same PTY code as you selected, the station will not change.

Note:
In some areas, the PTY search will not work correctly.

Other convenient RDS functions and adjustments

Automatic selection of the station when using the number buttons

Usually when you press the number button, the preset station is tuned in.
However, when the preset station is an RDS station, something different will happen. If the signals from that preset station are not sufficient for good reception, this unit, using the AF data, tunes in to another frequency broadcasting the same programme as the original preset station is broadcasting. (Programme search)
• The unit takes some time to tune in to another station using programme search.

To activate programme search, follow the procedure below.
• See also "Changing the general settings (PSM)" on page 31.

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2 Press ►►I ⋀ or I◄◄ ⋁ to select "P(Programme)-SEARCH."
3 Turn the control dial clockwise to select "ON." Now programme search is activated.
4 Press SEL (select) to finish the setting.

To cancel programme search, repeat the same procedure and select "OFF" in step **3** by turning the control dial counterclockwise.

Changing the display mode while listening to an FM station

You can change the initial indication on the display to station name (PS NAME), station frequency (FREQ), or clock time (CLOCK) while listening to an FM RDS station.
• See also "Changing the general settings (PSM)" on page 31.

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2 Press ►►I ∧ or I◄◄ ∨ to select "TU DISP" (tuner display).
3 Turn the control dial to set to the desired indication ("PS NAME," "FREQ," or "CLOCK").
4 Press SEL (select) to finish the setting.

Note:
By pressing DISP (display), you can change the display while listening to an FM RDS station. Each time you press the button, the following information appears on the display:

**Station name
(PS NAME)**
↓
**Station frequency
(FREQ)**
↓
**Programme type
(PTY)**
↓
**Clock
(CLOCK)**
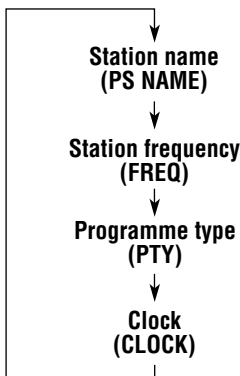
• *Then, the display goes back to the original indication in several seconds.*

Setting the TA volume level

You can preset the volume level for TA Standby Reception. When a traffic programme is received, the volume level automatically changes to the preset level.
• See also "Changing the general settings (PSM)" on page 31.

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2 Press ►►I ∧ or I◄◄ ∨ to select "TA VOL" (volume).
3 Turn the control dial to set to the desired volume. You can set it from "VOL 00" to "VOL 50."
4 Press SEL (select) to finish the setting.

Automatic clock adjustment

When shipped from the factory, the clock built in this unit is set to be readjusted automatically using the CT (Clock Time) data in the RDS signal.
If you do not want to use automatic clock adjustment, follow the procedure below.
• See also "Changing the general settings (PSM)" on page 31.

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
2 Press ►►I ∧ or I◄◄ ∨ to select "AUTO ADJ" (adjustment).
3 Turn the control dial counterclockwise to select "OFF."
Now automatic clock adjustment is canceled.
4 Press SEL (select) to finish the setting.

To reactivate clock adjustment, repeat the same procedure and select "ON" in step **3** by turning the control dial clockwise.

Note:
You must stay tuned to the same station for more than 2 minutes after setting "AUTO ADJ" to "ON." Otherwise, the clock time will not be adjusted. (This is because the unit takes up to 2 minutes to capture the CT data in the RDS signal.)

PTY codes

NEWS:	News	CHILDREN:	Entertainment programmes for children
AFFAIRS:	Topical programmes expanding on current news or affairs	SOCIAL:	Programmes on social activities
INFO:	Programmes which impart advice on a wide variety of topics	RELIGION:	Programmes dealing with any aspect of belief or faith, or the nature of existence or ethics
SPORT:	Sport events	PHONE IN:	Programmes where people can express their views either by phone or in a public forum
EDUCATE:	Educational programmes		
DRAMA:	Radio plays		
CULTURE:	Programmes on national or regional culture	TRAVEL:	Programmes about travel destinations, package tours, and travel ideas and opportunities
SCIENCE:	Programmes on natural science and technology	LEISURE:	Programmes concerned with recreational activities such as gardening, cooking, fishing, etc.
VARIED:	Other programmes like comedies or ceremonies		
POP M:	Pop music	JAZZ:	Jazz music
ROCK M:	Rock music	COUNTRY:	Country music
EASY M:	Easy-listening music	NATION M:	Current popular music from another nation or region, in that country's language
LIGHT M:	Light music		
CLASSICS:	Classical music		
OTHER M:	Other music	OLDIES:	Classic pop music
WEATHER:	Weather information	FOLK M:	Folk music
FINANCE:	Reports on commerce, trading, the Stock Market, etc.	DOCUMENT:	Programmes dealing with factual matters, presented in an investigative style

The same programme can be received on different frequencies.

Programme 1 broadcasting on frequency A

Programme 1 broadcasting on frequency E

Programme 1 broadcasting on frequency B

Programme 1 broadcasting on frequency C

Programme 1 broadcasting on frequency D
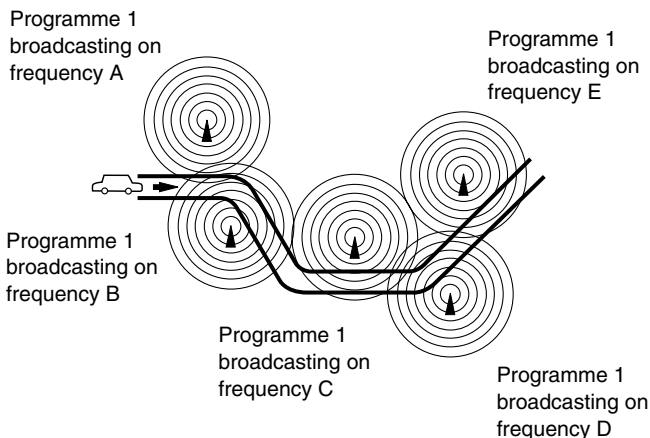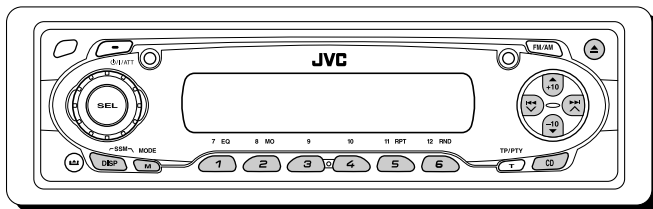
Refer to "MP3 OPERATIONS" on pages 25 to 28 for operating MP3 discs.

Playing a CD

1 Open the control panel.
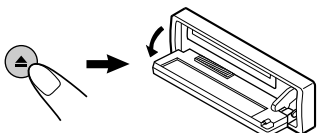
Note on One-Touch Operation:
When a CD is already in the loading slot, pressing CD turns on the unit and starts playback automatically.

2 Insert a CD into the loading slot.
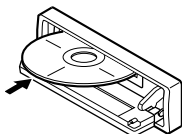
The unit turns on, draws the CD and starts playback automatically.

3 Close the control panel by hand.
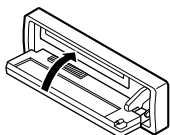
All tracks will be played repeatedly until you stop playback.

The display changes to show the following:

The CD–in indicator lights up.
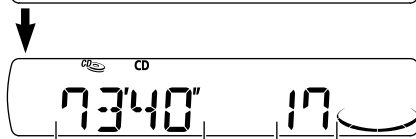
Total playing time of the inserted disc   Total track number of the inserted disc

Elapsed playing time   Current track

Notes:
- *When a CD is inserted upside down, the CD automatically ejects (if the control panel is open). If the control panel is closed, the source changes to the tuner, "PLEASE" and "EJECT" appear alternately on the display.*
- *When you open the control panel by pressing ⏏, the CD automatically ejects.*
- *If there is no CD in the loading slot, you cannot select CD as the source. "NO DISC" appears on the display.*
- *If a disc is a CD Text, disc title/performer and then track title will automatically appear.*

To stop play and eject the CD

Press ⏏.

CD play stops and the control panel flips down. The CD automatically ejects from the loading slot. The source changes to the tuner (you will hear the last received station).

• If you change the source or turn the power off, CD play also stops (without ejecting the CD). Next time you select "CD" as the source or turn the power on, CD play starts from where playback has been stopped previously.

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. (Disc play will not start this time.)*
• *You can eject the disc even when the unit is turned off.*

Locating a track or a particular portion on a CD

To fast-forward or reverse the track
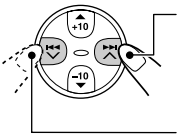
Press and hold ▶▶I ∧, while playing a CD, to fast-forward the track.

Press and hold I◀◀ ∨, while playing a CD, to reverse the track.

To go to the next or previous tracks
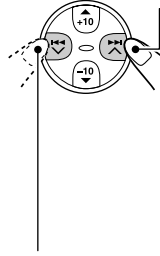
Press ▶▶I ∧ briefly, while playing a CD, to go ahead to the beginning of the next track.

Each time you press the button consecutively, the beginning of the next tracks is located and played back.

Press I◀◀ ∨ briefly, while playing a CD, 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.

7 EQ	8 MO	9	10	11 RPT	12 RND
1	2	3	4	5	6
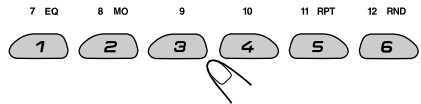
• To select a track number from 1 – 6: Press 1 (7) – 6 (12) briefly.
• To select a track number from 7 – 12: Press and hold 1 (7) – 6 (12) for more than one second.

To go to a track quickly (+10 and –10 buttons)

1 Press M (MODE) to enter the functions mode while playing a CD.

MODE
M

2 Press +10 or –10.

To skip 10 tracks* forwards up to the last track

To skip 10 tracks* backwards up to the first track
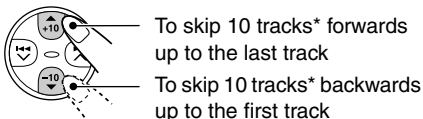
* The first time you press +10 or –10 button, the track skips to the nearest higher or lower track with a track number of multiple ten (ex. 10th, 20th, 30th).

Then each time you press the button, you can skip 10 tracks (see "How to use the +10 and –10 buttons" below).

• After the last track, the first track will be selected, and vice versa.

How to use the +10 and –10 buttons

• Ex. 1: To select track number 32 while playing track number 6

MODE
M ➡ **+10** ➡

(Three times)   (Twice)

Track 6   ➡ 10 ➡ 20 ➡ 30   ➡ 31 ➡ 32

• Ex. 2 : To select track number 8 while playing track number 36

MODE
M ➡ **–10** ➡

(Three times)   (Twice)

Track 36   ➡ 30 ➡ 20 ➡ 10   ➡ 9 ➡ 8

Selecting CD playback modes

To play back tracks at random (Disc Random Play)

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

MODE
M

1 Press M (MODE) to enter the functions mode while playing a CD.

12 RND
6

2 Press RND (random), while still in the functions mode, so that "DISC RND" appears on the display.
Each time you press the button, the disc random play mode turns on and off alternately.

(disc) indicator

DISC RND

RND indicator

When disc random play is turned on, the and RND indicators light up on the display. A track randomly selected starts playing.

To play back tracks repeatedly (Track Repeat Play)

You can play back the current track repeatedly.

MODE
M

1 Press M (MODE) to enter the functions mode while playing a CD.

11 RPT
5

2 Press RPT (repeat), while still in the functions mode, so that "TRK RPT" appears on the display.
Each time you press the button, the track repeat play mode turns on and off alternately.
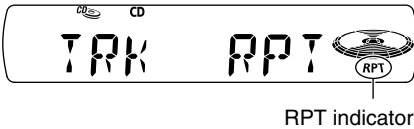
RPT indicator

When track repeat play is turned on, the RPT indicator lights up on the display. The current track starts playing repeatedly.

Playing a CD Text

In a CD Text, some information about the disc (its disc title, performer, and track title) is recorded. This CD Text information will be shown automatically when you play a CD Text.

To change the CD Text information manually, select text display mode while playing a CD Text.

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

Disc title / performer
↓
Track title
(♪ lights up on the display)
↓
Elapsed playing time and Current track number
↓
Clock and Current track number
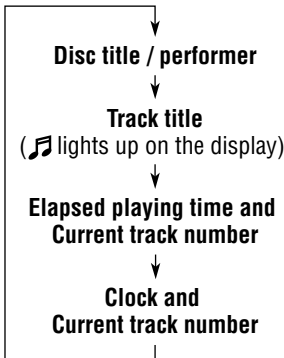
Notes:
* *The display shows up to 8 characters at one time and scrolls if there are more than 8 characters. See also "To select the scroll mode—SCROLL" on page 33.*
  Some characters or symbols will not be shown (and will be blanked) on the display.
  (Ex. "ABCå!d#" ⇨ "ABCA D ")
* *When you press DISP (display) while playing a conventional CD, "NO NAME" appears for the disc title/performer and the track title.*

Prohibiting disc ejection

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

While pressing CD, press and hold ⏻/I/ATT for more than 2 seconds.
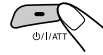
"NO EJECT" flashes on the display for about 5 seconds, and the disc is locked and cannot be ejected.

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

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 (1024 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 (Version 1)

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 (Version 1) tags (album name, performer name, and song title) on the display. (See page 26.)
• Some characters cannot be shown correctly.
• This unit is not compatible with ID3v2 (Version 2).

Other main features in this unit:
• Maximum number of folders/files: 289 (Total)
• Available characters for folder/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 folder 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 "**folders**" —in PC terminology.
During recording, the files and folders can be arranged in a way similar to arranging files and folders of computer data.
"**Root**" is similar to the root of a tree. Every file and folder can be linked to and be accessed from the root.

Playback order, file search order, and folder 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 folders 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 Layer 1 and 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

MP3 folder/file configuration
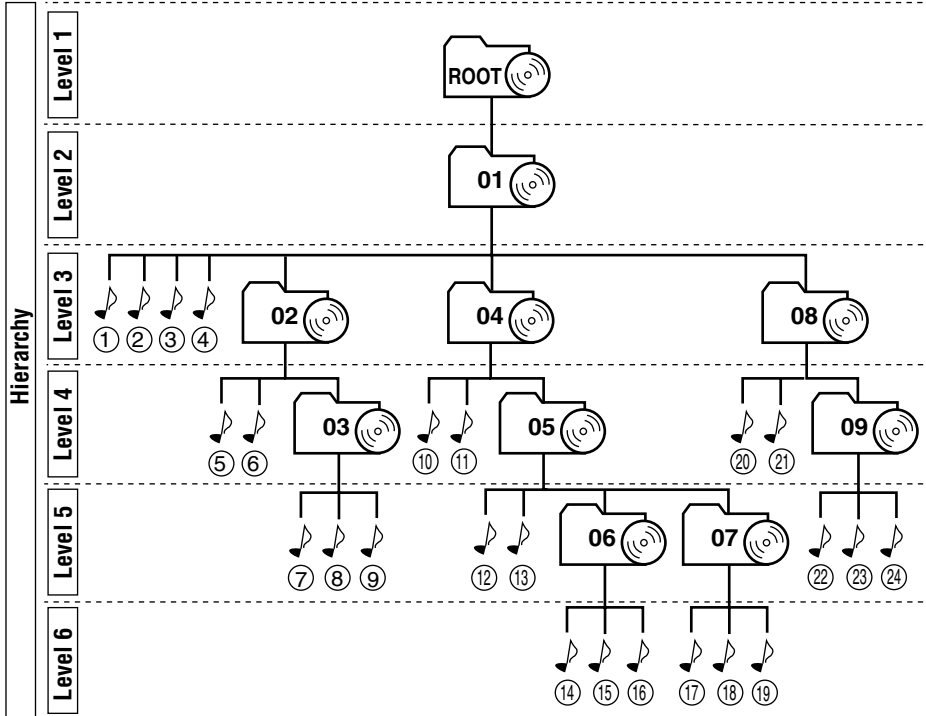
ROOT	: Root
01	: Folders
♪	: MP3 files

Note:
There is no limit on the number of the hierarchy levels (nested folders). However, up to 8 hierarchy levels is recommended 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 folders indicate the playback order and search order of the folders on an MP3 disc. Normally, this unit plays back MP3 files in the folders in the recorded order.

24
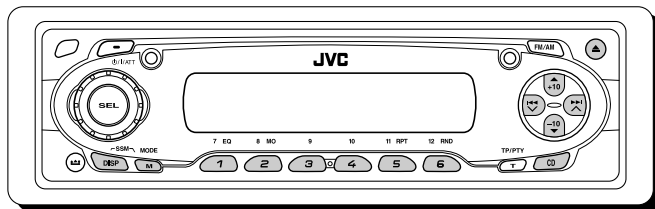
Refer also to "CD OPERATIONS" on pages 19 to 22.

Playing an MP3 disc

1 Open the control panel.
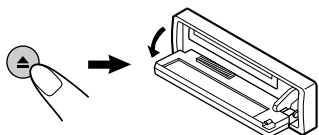
Note on One-Touch Operation:
When a disc is already in the loading slot, pressing CD turns on the unit and starts playback automatically.

2 Insert an MP3 disc into the loading slot.
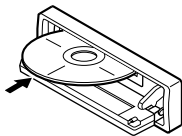
The unit turns on, draws the disc and starts playback automatically.

3 Close the control panel by hand.
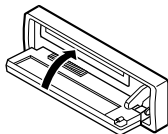
All files will be played repeatedly until you stop playback.

The display changes to show the following:

The CD–in indicator lights up.

MP3 indicator lights up.
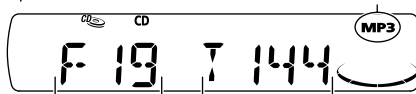
Total folder number   Total file number

Ex.: When the disc contains 19 folders and 144 MP3 files

Notes:
- *MP3 discs require a longer readout time.*
  (It differs due to the complexity of the folder/file configuration.)
- *When playback starts, folder and file names (or ID3 tags) will automatically appears. (See also page 26.)*
- *If you change the source or turn the power off, disc playback stops (without ejecting the disc).*
  Next time you select the CD player as the source or turn the power on, disc play starts from where playback has been stopped previously.

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MP3

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To stop play and eject the disc

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

To change the display information

While playing back an MP3 file, you can change the MP3 disc information shown on the display.

Each time you press DISP (display), the display changes to show the following:

- **When "TAG DISP" is set to "TAG ON" (initial setting: see page 33)**

> **Album name / performer (folder name*)**
> (TAG ☐ lights up on the display)
> ↓
> **Track title (file name*)**
> (TAG ♫ lights up on the display)
> ↓
> **Elapsed playing time and Current file number**
> ↓
> **Clock and Current file number**
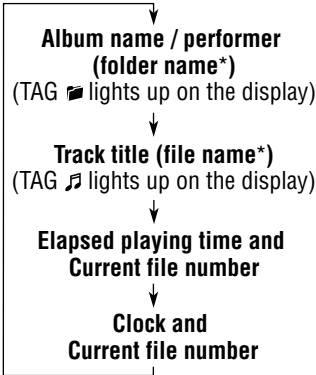
* *If an MP3 file does not have ID3 tags, folder name and file name appear. In this case, the TAG indicator will not light up on the display.*

- **When "TAG DISP" is set to "TAG OFF"**

> **Folder name**
> (☐ lights up on the display)
> ↓
> **File name**
> (♫ lights up on the display)
> ↓
> **Elapsed playing time and Current file number**
> ↓
> **Clock and Current file number**
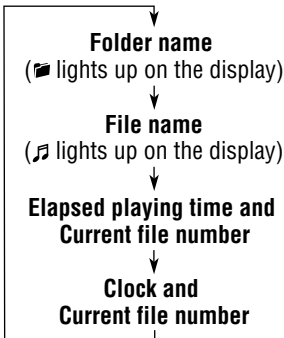
Note:
The display shows up to 8 characters at one time and scrolls if there are more than 8 characters.
See also "To select the scroll mode—SCROLL" on page 33.

Locating a file or a particular portion on an MP3 disc

For "MP3 playback/search order" see page 24.

To fast-forward or reverse the file
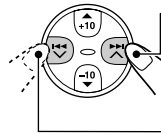
Press and hold ►►⏐ ⋀ while playing an MP3 disc, to fast-forward the file.

Press and hold ⏐◄◄ ⋁ 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
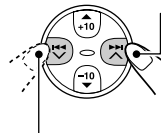
Press ►►⏐ ⋀ briefly while playing, to skip ahead to the beginning of the next file.
Each time you press the button consecutively, the beginning of the next files is located and played back.

Press ⏐◄◄ ⋁ 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.

To go to a particular file quickly within the current folder (+10 and –10 buttons)

1 Press M (MODE) to enter the functions mode while playing an MP3 disc.

MODE

26

MP3

2 Press +10 or –10.

To skip 10 files* forwards up to the last file

To skip 10 files* backwards up to the first file
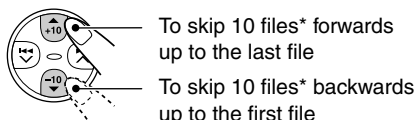
* The first time you press +10 or –10 button, the file skips to the nearest higher or lower file with a file number of multiple ten (ex. 10th, 20th, 30th).

Then each time you press the button, you can skip 10 files (see "How to use the +10 and –10 buttons" below).

• After the last file, the first file will be selected, and vice versa.

How to use the +10 and –10 buttons

• Ex. 1: To select file number 32 while playing file number 6

MODE M → +10 (Three times) → ►►| (Twice)

File 6 → 10 → 20 → 30 → 31 → 32
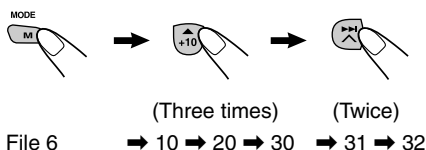
• Ex. 2 : To select file number 8 while playing file number 36

MODE M → –10 (Three times) → |◄◄ (Twice)

File 36 → 30 → 20 → 10 → 9 → 8

To go to a particular folder directly

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

Press the number button corresponding to the folder number to start playing the first file in the selected folder.

7 EQ 8 MO 9 10 11 RPT 12 RND
1 2 3 4 5 6
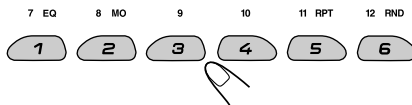
• To select a folder number from 01 – 06: Press 1 (7) – 6 (12) briefly.
• To select a folder number from 07 – 12: Press and hold 1 (7) – 6 (12) for more than one second.

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

To select a particular file in a folder, press ►►| ▲ or |◄◄ ▼ after selecting the folder.

To skip to the next or previous folder
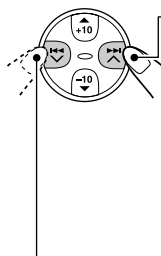
Press ▲ (up) while playing an MP3 disc to skip to the next folder.
Each time you press the button consecutively, the next folder is located (and the first file in the folder starts playing, if recorded).

Press ▼ (down) while playing an MP3 disc to skip back to the previous folder.
Each time you press the button consecutively, the previous folder is located (and the first file in the folder starts playing, if recorded).

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

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MP3

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Selecting MP3 playback modes

To play back files at random (Folder Random/Disc Random Play)

You can play back all files of the current folder or all files on the MP3 disc at random.

MODE
M

1 Press M (MODE) to enter the functions mode while playing an MP3 disc.

12 RND
6

2 Press RND (random), while still in functions mode, so that "FLDR RND" or "DISC RND" appears on the display. Each time you press the button, the random play mode changes as follows:

→ **FLDR RND** → **DISC RND** ─┐
└─── **Canceled** ◄─────

CD · CD · MP3

F L D R   R N D

📁 (folder) and RND indicators

Ex.: When you select "FLDR RND"

Mode	Active indicator	Plays at random
FLDR RND	📁 and RND indicators light up.	All files of the current folder, then files of the next folder and so on.
DISC RND	💿 and RND indicators light up.	All files on the disc.

To play back files repeatedly (Track Repeat/Folder Repeat Play)

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

MODE
M

1 Press M (MODE) to enter the functions mode while playing an MP3 disc.

11 RPT
5

2 Press RPT (repeat), while still in functions mode, so that "TRK RPT" or "FLDR RPT" appears on the display. Each time you press the button, the repeat play mode changes as follows:

→ **TRK RPT** → **FLDR RPT** ─┐
└─── **Canceled** ◄─────

CD · CD · MP3

T R K   R P T

RPT indicator

Ex.: When you select "TRK RPT"

Mode	Active indicator	Plays repeatedly
TRK RPT	RPT indicator lights up.	The current (or specified) file.
FLDR RPT	📁 and RPT indicators light up.	All files of the current (or specified) folder.

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SOUND ADJUSTMENTS

Selecting preset sound modes (C-EQ: custom equalizer)

You can select a preset sound mode (C-EQ: custom equalizer) 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 M (MODE) to enter the functions mode.

MODE
M

2 Press EQ (equalizer) while still in the functions mode.

7 EQ
1

The last selected sound mode is recalled and applied to the current source.

CD◌ CD
＊USER
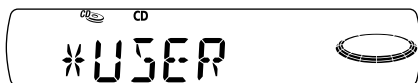
Ex.: If you have selected "USER" previously

3 Select the sound mode you want.

7 EQ
1

Each time you press the button, the sound modes change as follows:

→ USER → ROCK → CLASSIC ─
└ JAZZ ← HIP HOP ← POPS ←

The EQ indicator lights up when any sound mode other than "USER" is selected.

LOUD CD◌ CD
(EQ) ＊ROCK
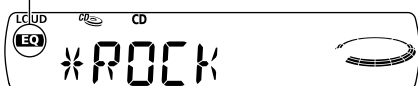
Ex.: When you select "ROCK"

Indication	For:	Preset values		
		BAS	TRE	LOUD
USER	(Flat sound)	00	00	OFF
ROCK	Rock or disco music	+03	+01	ON
CLASSIC	Classical music	+01	–02	OFF
POPS	Light music	+04	+01	OFF
HIP HOP	Funk or rap music	+02	00	ON
JAZZ	Jazz music	+02	+03	OFF

Note:
You can adjust each sound mode to your preference. Once you make an adjustment, it is automatically stored for the currently selected sound mode. See "Adjusting the sound" on page 30.

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:

```
→ BAS     →   TRE    →   FAD
  (bass)     (treble)    (fader)
  VOL    ←   LOUD   ←   BAL   ←
  (volume)  (loudness) (balance)
```
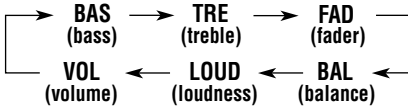
Indication	To do:	Range
BAS*¹	Adjust the bass.	–06 (min.) | +06 (max.)
TRE*¹	Adjust the treble.	–06 (min.) | +06 (max.)
FAD*²	Adjust the front and rear speaker balance.	R06 (Rear only) | F06 (Front only)
BAL	Adjust the left and right speaker balance.	L06 (Left only) | R06 (Right only)
LOUD*¹	Boost low and high frequencies to produce a well-balanced sound at low volume level.	LOUD ON | LOUD OFF
VOL*³	Adjust the volume.	00 (min.) | 50 (max.)

*¹ When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."

*² If you are using a two-speaker system, set the fader level to "00."

*³ Normally the control dial works as the volume control. So you do not have to select "VOL" to adjust the volume level.

2 Adjust the setting.

To increase the level or turn on the loudness

To decrease the level or turn off the loudness

Equalization pattern changes as you adjust the bass or treble.

Ex. 1: When you adjust "TRE" (treble)

Ex. 2: When you turn on the loudness

3 Repeat steps *1* and *2* to adjust the other items.

To reset each sound mode to the factory settings, repeat the same procedure and reassign the preset values listed in the table on page 29.

Changing the general settings (PSM)

You can change the items listed in the table on the next page by using the PSM (Preferred Setting Mode) control.

Basic Procedure

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

CD

CLOCK H

Ex.: If you have selected "CLOCK H" previously

2 **Select the PSM item you want to adjust. (See page 32.)**

CD
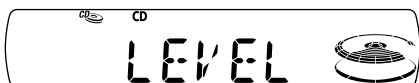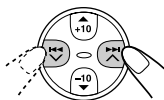
LEVEL

Ex.: When you select "LEVEL"

3 **Adjust the PSM item selected.**

CD
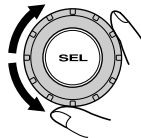
AUDIO 2

Ex.: When you select "AUDIO 2"

4 **Repeat steps 2 and 3 to adjust the other PSM items if necessary.**

5 **Finish the setting.**

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Preferred Setting Mode (PSM) items

• For detailed operations of each PSM items, refer to the pages listed in the table.

Indications		Selectable values/items		Factory-preset settings	See page
CLOCK H	Hour adjustment	Back	Advance	1:00	8
CLOCK M	Minute adjustment	Back	Advance		
24H/12H	24/12-hour time display	12H	24H	24H	8
AUTO ADJ	Automatic clock setting	OFF	ON	ON	17
TU DISP	Tuner display	PS NAME ↔ FREQ ↳ CLOCK ↩		PS NAME	17
AF-REG	Alternative frequency/ Regionalization reception	AF ↔ AF REG ↳ OFF ↩		AF	12, 13
PTY STBY	PTY standby	OFF → 29 programme types (see page 18)		OFF	14
TA VOL	Traffic announcement volume	VOL 00 — VOL 50		VOL 20	17
P-SEARCH	Programme search	OFF	ON	OFF	16
LEVEL	Level display	AUDIO 1 ↔ AUDIO 2 ↳ OFF ↩		AUDIO 2	33
DIMMER	Dimmer mode	AUTO ↔ OFF ↳ ON ↩		AUTO	33
TEL	Telephone muting	MUTING 1 ↔ MUTING 2 ↳ OFF ↩		OFF	33
SCROLL	Scroll mode	ONCE ↔ AUTO ↳ OFF ↩		ONCE	33
TAG DISP	Tag display	TAG OFF	TAG ON	TAG ON	33

To select the level meter—LEVEL

You can select the level display according to your preference.
When shipped from the factory, "AUDIO 2" is selected.

- AUDIO 1: Shows the audio level indicator.
- AUDIO 2: Alternates "AUDIO 1" setting and illumination display.
- OFF: Erases the audio level indicator.

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 with 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 select the telephone muting—TEL

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: Select this if this setting can mute the sounds while using the cellular phone.
- MUTING 2: Select this if this setting can mute the sounds while using the cellular phone.
- OFF: Cancels the telephone muting.

To select the scroll mode—SCROLL

You can select the scroll mode for the disc information (when the entire text cannot be shown all at once).
When shipped from the factory, scroll mode is set to "ONCE."

- ONCE: Scrolls only once.
- AUTO: Repeats the scroll (5-second intervals in between).
- OFF: Cancels scroll mode.

Note:
Even if the scroll mode is set to "OFF," you can scroll the display by pressing DISP (display) for more than one second.

To turn the tag display on or off—TAG DISP

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.
When shipped from the factory, "TAG ON" is selected.

- TAG ON: Turns on the ID3 tag display while playing MP3 files.
  - If an MP3 file does not have ID3 tags, folder name and file name appear.

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

- TAG OFF: Turns off the ID3 tag display while playing MP3 files. (Only the folder name and file name can be shown.)

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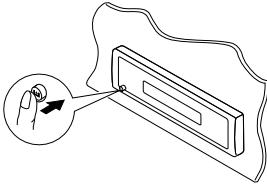
2 **Pull the control panel out of the unit.**
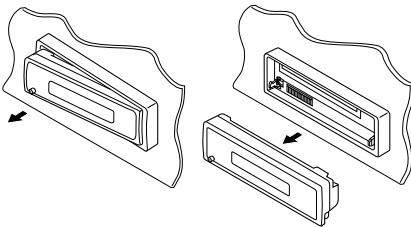
3 **Put the detached control panel into the provided case.**
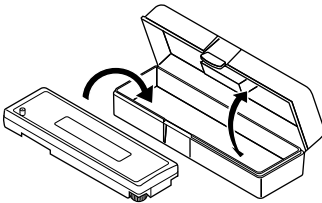
Attaching the control panel

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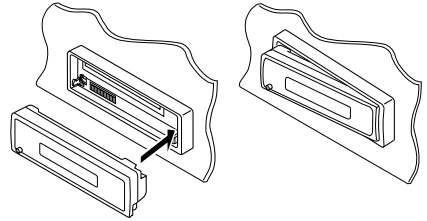
2 **Press the left side of the control panel to fix it to the panel holder.**
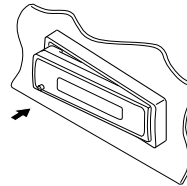
Note on cleaning the connectors:
If you frequently detach the control panel, the connectors will deteriorate.
To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.

Connectors

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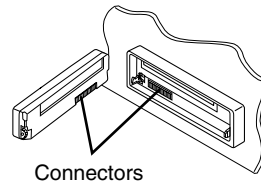
Changing the standard plate

You can change the standard plate with another plate supplied with your unit.
You can also download them by visiting
<http://www.jvc.co.jp/jvccar>.

• When changing the plate, be careful not to leave your fingerprints on the plate or cover.

1 **Loosen the screws with the supplied hex screwdriver.**
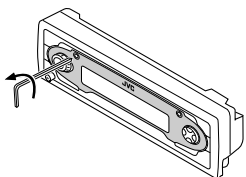
2 **Remove the plate cover and the standard plate.**

Standard plate

Plate cover
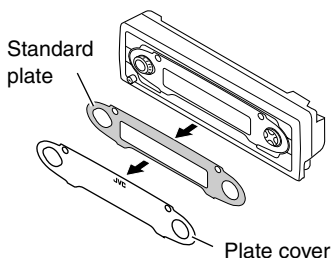
3 **Replace with another plate (a standard, cutout, or downloaded plate) of your preference.**

• **When attaching a standard plate**

Standard plate
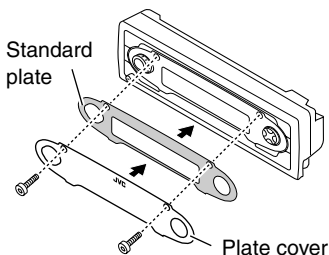
Plate cover

• **When attaching a cutout or downloaded plate**
Add the transparent plate (supplied) between the cutout or downloaded plate and the plate cover in order to attach the plate cover in place.

Cutout or downloaded plate

Plate cover

Transparent plate (supplied)
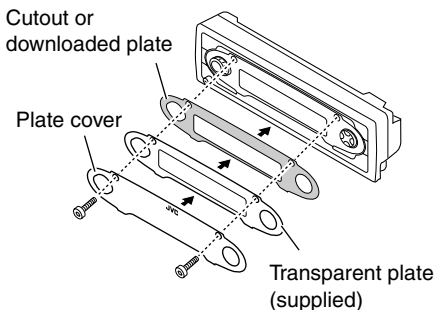
Notes:
• *Be sure to keep the hex screwdriver for future use.*
• *Four spare screws for the plate cover attachment are provided with the unit. (See the Installation/Connection Manual.)*
• *When you attach the plate cover, do not tighten the screws too hard; otherwise, the plate cover might be cracked.*

How to use the cutout plates

1 Unfold the supplied cutout plates.
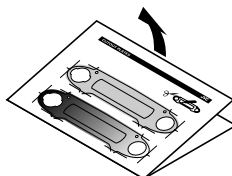
2 Cut the plates out using a scissors.
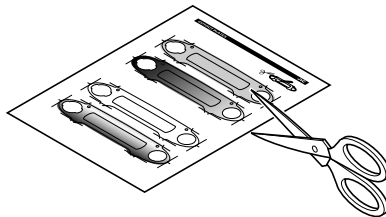
3 Trim out the window and two knobs using a knife on a rubber mat.

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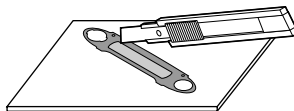
?! TROUBLESHOOTING

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

	Symptoms	Causes	Remedies
General	• 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.
	• The unit does not work at all.	The built-in microcomputer may have function incorrectly due to noise, etc.	Press the reset button on the panel holder after detaching the control panel. (The clock setting and preset stations stored in memory are erased.) (See page 2.)
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.
Disc Playback	• Disc 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.
	• Disc cannot be ejected.	Disc is locked.	Unlock the disc. (See page 22.)
	• Disc 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.
	• "NO DISC" appears on the display.	No disc is in the loading slot.	Insert a disc into the loading slot.
		Disc is inserted incorrectly.	Insert the disc correctly.

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Symptoms	Causes	Remedies	
• Disc cannot be played back.	No MP3 files are recorded on the disc.	Change the disc.	
	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, Level 2, or Joliet.	Change the disc. (Record MP3 files using a compliant application.)	
• 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 ("CHECK" keeps flashing on the display).	Readout time varies due to the complexity of the folder/file configuration.	Do not use too many hierarchies and folders. Also, do not record any other types of audio tracks together with MP3 files.	**MP3 Playback**
• 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 folder does not contain any MP3 file.	Select another folder.	
• "NO FILES" appears on the display for a while, then "PLEASE" and "EJECT" appear alternately.	The current disc does not contain any MP3 file.	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), numbers, and a limited number of symbols.	———————	

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 play while driving on such rough roads.

🔣 MAINTENANCE

ENGLISH

Handling discs

This unit has been designed to reproduce CDs, CD-Rs (Recordable), CD-RWs (Rewritable), and CD Texts.
• **This unit is also compatible with MP3 discs.**

How to handle discs

When removing a disc   Center holder
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 becomes 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.

Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:
• After starting the heater in the car.
• If it becomes very humid inside the car.
Should this occur, the CD player 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

Before playing back CD-Rs or CD-RWs, read their instructions or cautions carefully.
• Use only "finalized" CD-Rs or CD-RWs.
• Some CD-Rs or CD-RWs may not play back on this unit because of their disc characteristics, and for the following reasons:
  – Discs are dirty or scratched.
  – Moisture condensation on the lens inside the unit.
  – The pickup lens inside the unit is dirty.
• CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.
• CD-Rs or CD-RWs are susceptible to high temperatures or high humidity, so do not leave them inside your car.
• Do not use following CD-Rs or CD-RWs:
  – Discs with stickers, labels, or protective seal stuck to the surface.
  – Discs on which labels can be directly printed by an ink jet printer.
  Using these discs under high temperatures or high humidity may cause malfunctions or damage to discs. For example,
  – Stickers or labels may shrink and warp a disc.
  – Stickers or labels may peel off so discs cannot be ejected.
  – Print on discs may get sticky.
  Read instructions or cautions about labels and printable discs carefully.

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.*

Warped disc   Sticker ──── Sticker residue   Disc ──── Stick-on label

38

SPECIFICATIONS

AUDIO AMPLIFIER SECTION

Maximum Power Output:
    Front: 45 W per channel
    Rear: 45 W per channel
Continuous Power Output (RMS):
    Front: 17 W per channel into 4 Ω, 40 Hz
               to 20 000 Hz at no more than
               0.8% total harmonic distortion.
    Rear: 17 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)
Tone Control Range:
    Bass: ±10 dB at 100 Hz
    Treble: ±10 dB at 10 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 (full scale)
Output Impedance: 1 kΩ

TUNER SECTION

Frequency Range:
    FM: 87.5 MHz to 108.0 MHz
    AM: (MW)   522 kHz to 1 620 kHz
           (LW)   144 kHz to 279 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

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

[LW Tuner]
Sensitivity: 50 μV

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 decoding format:
    MPEG1/2 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 (approx.):
        182 mm $\times$ 52 mm $\times$ 150 mm
    Panel Size (approx.):
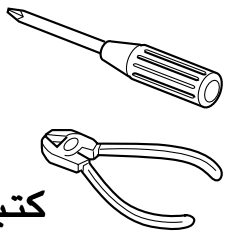   188 mm $\times$ 58 mm $\times$ 12 mm
    Mass (approx.):
        1.4 kg (excluding accessories)

Design and specifications are subject to change without notice.

If you want some additional downloaded plates, you can download them by visiting <http://www.jvc.co.jp/jvccar>.

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

JVC KD-SC945

Installation/Connection Manual
安裝／連接手冊
การติดตั้ง/คู่มือการติดตั้ง
كتيّب تعليمات التركيب/التوصيل

GET0143-003A
[U]

0203KKSMDTJEIN
EN, CH, TH, AR

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 ⏏（鬆開控制面板鍵），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，把外套機殼牢固在儀表板內。

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：確保凹入部分已在底部。
  如果不在低部，控制面板將不被完整打開。

9 裝上控制面板。

ไทย

• ชุดประกอบนี้ได้รับการออกแบบมาเพื่อใช้งานกับระบบ กระแสไฟฟ้าสายดินขั้วลบกระแสตรง 12 โวลต์ หากรถยนต์ของคุณไม่ได้ใช้ระบบนี้ ต้องใช้เครื่องแปลงกระแสไฟช่วย

การติดตั้ง (การประกอบแผงหน้าปัทม์เข้า)

• ภาพตัวอย่างต่อไปนี้แสดงถึงการติดตั้งแบบทั่วไป อย่างไรก็ตาม คุณควรปรับแต่งให้เหมาะสมกับรถของคุณเอง หากคุณมีปัญหาหรือต้องการข้อมูลเกี่ยวกับชุดติดตั้ง กรุณาปรึกษากับผู้ขายเครื่องเสียงรถยนต์ JVC ของท่านหรือบริษัทที่จำหน่ายชุดติดตั้งนี้

1 **ก่อนประกอบ** กดปุ่ม ⏏ (ใช้ถอดแผงควบคุมออก) เพื่อออกจากแผงควบคุม
  * เมื่อผลิตภัณฑ์ถูกส่งออกมาจากโรงงาน แผงหน้าปัดจะบรรจุไว้ในหลังแข็ง

2 ถอดแผ่นโลหะขอบแต่งออก

3 ถอดปลอกหุ้มออกหลังจากปลดที่ล็อคปลอกหุ้มออกแล้ว
  ① จับชุดประกอบตั้งขึ้น
   หมายเหตุ เมื่อคุณตั้งชุดประกอบขึ้น ระวังอย่าทำให้ฟิวส์บริเวณส่วนท้ายเสียหาย
  ② ใส่คันบังคับ 2 อันระหว่างชุดประกอบกับปลอกหุ้ม (ดังภาพ) เพื่อปลดที่ล็อคปลอกหุ้มออกจากกัน
  ③ ปลดปลอกหุ้มออก
   หมายเหตุ ระมัดระวังให้คันบังคับสามารถใช้งานได้ตอไปหลังจากติดตั้งชุดประกอบแล้ว

4 ติดตั้งปลอกหุ้มลงในแผงหน้าปัทม์
  * หลังจากติดตั้งปลอกหุ้มลงในแผงหน้าปัทม์อย่างถูกต้องแล้ว ดัดร่องให้โค้งพอดีที่ปลอกหุ้มจะถูกยึดไว้อย่างแน่นหนา (ดังภาพ)

5 ติดสลักประกอบบริเวณตำแหน่งหลังโครงของชุดประกอบและวางรองกันกระแทกไว้บนส่วนปลายของสลัก

6 ต่อสายไฟตามที่กำหนดไว้ทั้งหมด

7 เลื่อนชุดประกอบลงในปลอกหุ้มจนเข้ากันได้พอดี

8 ต่อแผ่นโลหะขอบแต่ง
  หมายเหตุ เวลาใส่ต้องแน่ใจว่า ตัวอื้อคอยู่ทางด้านล่าง มิฉะนั้นแล้ว จะเปิดแผงควบคุมออกไม่ได้ทั้งหมด

9 ต่อเข้ากับแผงควบคุม

عربي

• لقدصمم هذا الجهاز ليعمل فقط بواسطة تيار كهربائي مباشر DC، ١٢ فولت، انظمة كهربائية تأريض سالب.
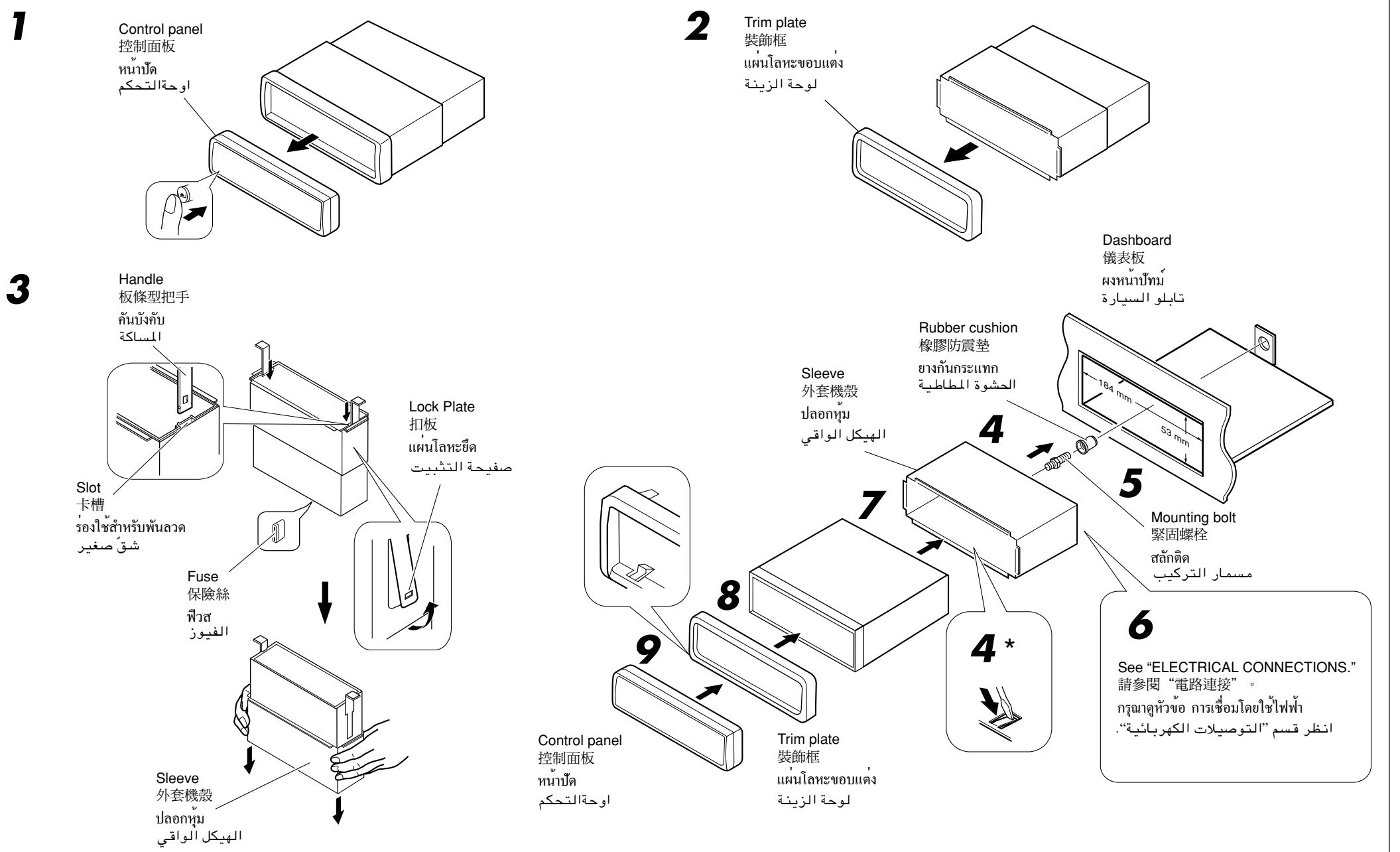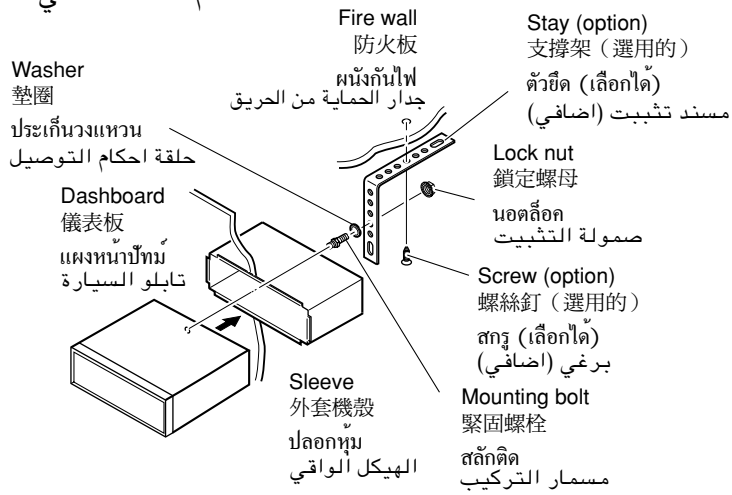
تركيب الجهاز (داخل ـ تابلو السيارة)

• 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 لهذه الادوات.

١ **قبل بدء التركيب:** اضغط الرز ⏏ (زر تحرير لوحة التحكم) من اجل فصل لوحة التحكم.
  * 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: يرجي 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 الكهربائية المطلوبة كما هو مشروح خلف هذه التعليمات.

٧ ادخل الجهاز داخل الهيكل الواقي حتى يثبت بشكل صحيح.

٨ ركب لوحة الزينة.
  ملاحظة: تأكد من ان القسم المجوف في الاسفل. بخلاف ذلك، سوف لا تفتح لوحة التحكم بصورة كاملة.

٩ ركّب لوحة التحكم.

1

Control panel
控制面板
หน้าปัด
اوحةالتحكم

2

Trim plate
裝飾框
แผ่นโลหะขอบแต่ง
لوحة الزينة

Dashboard
儀表板
ผงหน้าปัทม์
تابلو السيارة

3

Handle
板條型把手
คันบังคับ
المساكة

Lock Plate
扣板
แผ่นโลหะยึด
صفيحة التثبيت

Slot
卡槽
ร่องใช้สำหรับพันลวด
شقّ صغير

Fuse
保險絲
ฟิวส์
الفيوز

Sleeve
外套機殼
ปลอกหุ้ม
الهيكل الواقي

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
สลักติด
مسمار التركيب

4

5

7

8

9

4 *

6

See "ELECTRICAL CONNECTIONS."
請參閱 "電路連接"。
กรุณาดูหัวข้อ การเชื่อมโดยใช้ไฟฟ้า
انظر قسم "التوصيلات الكهربائية".

Control panel
控制面板
หน้าปัด
اوحةالتحكم

Trim plate
裝飾框
แผ่นโลหะขอบแต่ง
لوحة الزينة

1

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

Fire wall
防火板
ผนังกันไฟ
جدار الحماية من الحريق

Washer
墊圈
ประเก็นวงแหวน
حلقة احكام التوصيل

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

Dashboard
儀表板
แผงหน้าปัทม์
تابلو السيارة

Lock nut
鎖定螺母
นอตล็อก
صمولة التثبيت

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

Sleeve
外套機殼
ปลอกหุ้ม
الهيكل الواقي

Mounting bolt
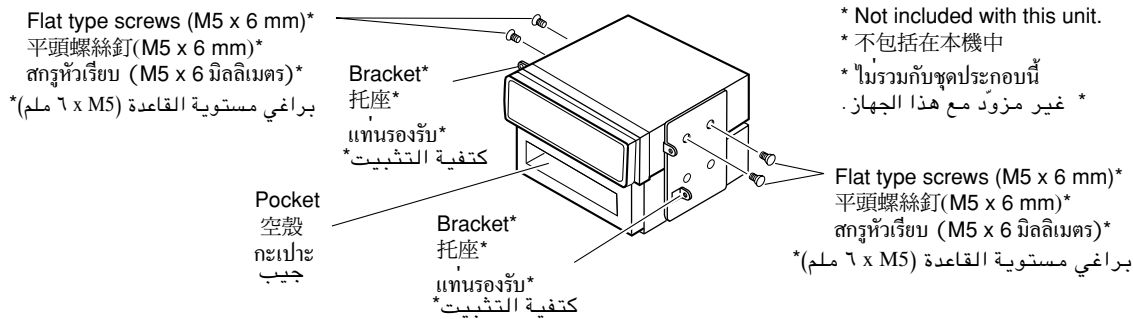緊固螺栓
สลักติด
مسمار التركيب

Less than 30°
少於 30°
น้อยกว่า 30 องศา
اقل من ٣٠ درجة

Install the unit at an angle of less than 30°
將本機安裝在少於 30° 的角度。
ติดตั้งชุดประกอบที่มุมต่ำกว่า 30 องศา
قم بتركيب الجهاز بزاوية اقل من ٣٠ درجة.

• 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)*
สกรูหัวเรียบ (M5 x 6 มิลลิเมตร)*
براغي مستوية القاعدة (M5 x 6 ملم)*

Bracket*
托座*
แท่นรองรับ*
كتفية التثبيت*

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

Pocket
空殼
กะเปา
جيب

Bracket*
托座*
แท่นรองรับ*
كتفية التثبيت*

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 6 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 6 mm 長的螺絲釘。如使用過長的螺絲釘，會損壞本機。
หมายเหตุ : เมื่อติดตั้งชุดประกอบลงบนแท่นรองรับไว้ ให้ใช้สกรูขนาด 6 มิลลิเมตร ถ้าใช้สกรูยาวกว่านี้อาจจะทำให้ชุดประกอบเสียหายได้
ملاحظة : عند تركيب الجهاز على كتفية التثبيت، تاكد من استخدام براغي طول 6 ملم. في حالة استخدام براغي اطول من 6 ملم، فان ذلك يمكن ان يسبب تلف او ضرر الجهاز.

Removing the unit
拆卸本機
การถอดชุดประกอบ
نزع الجهاز من تابلو السيارة

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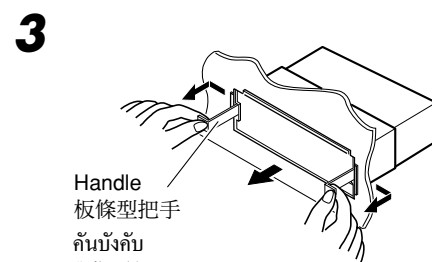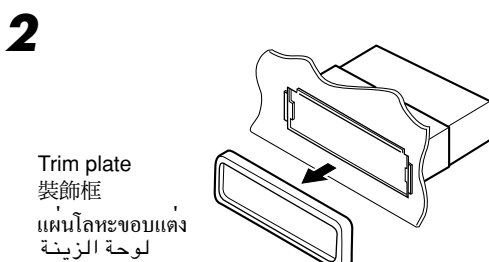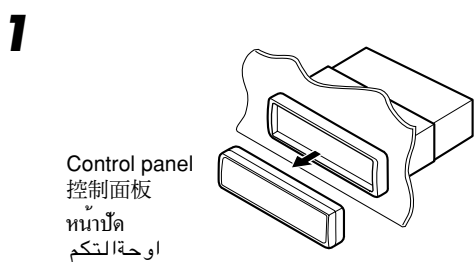
• 在拆卸本機前，應將本機後部的固定和連接部分鬆開。
1 拆下控制面板。
2 取下裝飾框。
3 按圖所示，將兩片板條型把手插入卡槽，然後輕輕地從兩側向外拉兩片把手，本機隨之拉出。（安裝本機後，務必保存好兩片把手。）

• ก่อนจะถอดชุดประกอบ ให้ปลดหน้าตัดส่วนท้ายก่อน
1 ถอดแผงควบคุม
2 ถอดแผ่นโลหะขอบแต่ง
3 ใส่คันบังคับ 2 อันลงในร่องสำหรับใช้พันลวด ดังภาพ จากนั้นให้เลื่อนชุดประกอบออก ในขณะที่ค่อย ๆ ดึงคันบังคับทั้งสองอันออกจากกัน **(ดูให้แน่ใจว่าคันบังคับทั้งสองอันอยู่ในตำแหน่งที่เหมาะสมหลังจากติดตั้งแล้ว)**

• 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
اوحة التكم

2
Trim plate
裝飾框
แผ่นโลหะขอบแต่ง
لوحة الزينة

3
Handle
板條型把手
คันบังคับ
المساكة

Parts list for installation and connection
用於安裝和連接的零件裏
รายการส่วนประกอบสำหรับติดตั้งและเชื่อมต่อกัน
قائمة اجزاء التركيب والتوصيل

The following parts are provided with this unit. The number in parentheses indicates the quantity of the pieces supplied.
After checking them, please set them correctly.

下列零件是隨本機提供的。每樣配件的數量各標明在括弧內。
清點以後，正確的將其裝配。

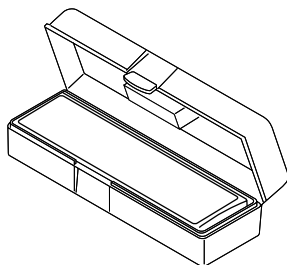ชิ้นส่วนต่อไปนี้จัดให้มาพร้อมกับเครื่องเล่น ตัวเลขที่อยู่ในเครื่องหมายวงเล็บแสดงถึงปริมาณชิ้นส่วนที่ให้มา
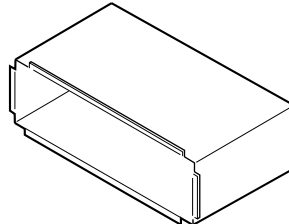หลังจากตรวจสอบแล้ว โปรดประกอบชิ้นส่วนให้ถูกต้อง

الاجزاء التالية مزودة مع الجهاز. يبيّن الرقم الموجود داخل الاقواس عدد القطع المرفقة مع الجهاز.
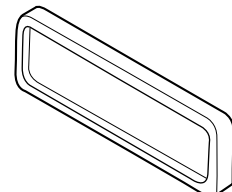بعد فحص هذه الاجزاء، يرجى تركيبها بصورة صحيحة.

Hard case/Control panel (1)
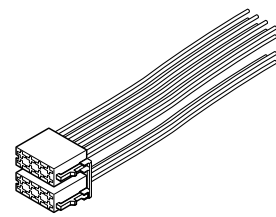硬盒 / 控制面板（1）
ลังบรรจุ/หน้าปัด (1)
صندوق صلب/اوحة التكم (١)
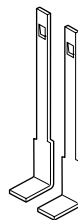
Sleeve (1)
外套機殼（1）
ปลอกหุ้ม (1)
الهيكل الواقي (١)

Trim plate (1)
裝飾框（1）
แผ่นโลหะขอบแต่ง (1)
لوحة الزينة (١)

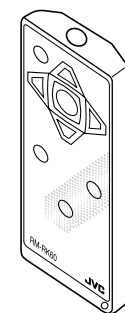Power cord (1)
電路連接用的配線束（1）
สายเคเบิลกำลัง (1)
سلك الطاقة الكهربائية (١)

Handles (2)
板條型把手（2）
คันบังคับ (2)
المساكات (٢)

Remote controller (1)
遙控器（1）
รีโมตคอนโทรล (1)
وحدة التحكم عن بعد (١)

Mounting bolt—M5 x 20 mm (1)
緊固螺栓—M5 x 20 mm（1）
สลักติด—M5 x 20 มิลลิเมตร (1)
مسمار التركيب—M5 x ٢٠ ملم (١)

Rubber cushion (1)
橡膠防震墊（1）
ยางกันกระแทก (1)
الحشوة المطاطية (١)

Battery (1)
電池（1）
แบตเตอรี่ (1)
البطاريات (١)

CR2025

Lock nut—M5 (1)
鎖定螺母—M5（1）
นอตล็อก—M5 (1)
صمولة التثبيت—M5 (١)

Washer—ø5 (1)
墊圈—ø5（1）
ประเก็นวงแหวน—ø5 (1)
حلقة احكام التوصيل—قطر ٥ (١)

See page 35 of the Instructions for the usage of the following parts.
請參閱第 35 頁有關以下配件的使用指示。
โปรดอ่านคำแนะนำการใช้ชิ้นส่วนต่อไปนี้ในหน้า 35
انظر صفحة ٣٥ من كتيّب تعليمات التشغيل من اجل استعمال الاجزاء التالية.

Additional standard plates (3) and transparent plate (1)
額外的標準圖板（3）和透明圖板（1）
เพลตมาตรฐานเพิ่มเติม (3) และเพลตใส (1)
صفائح قياسية اضافية (٣) مع صفيحة شفافة (١)
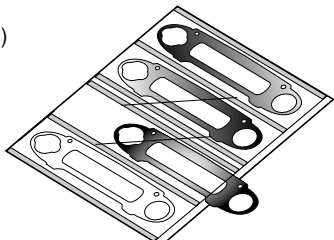
Cutout plates (printed on the sheet) (4)
剪切圖板（印在紙張上）（4）
เพลตคัตเอาท (พิมพ์บนแผ่นกระดาษสติกเกอร์) (4)
صفائح معدة مسبقا (مطبوعة على الورقة) (٤)
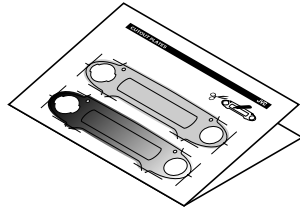
Spare screws for the plate cover attachment—M2 x 5 mm (4)
用以連接圖板蓋子的備用螺絲—M2 x 5 mm (4)
สกรูยึดสำรองสำหรับติดตั้งแผงปิดเพลท—M2 x 5 mm (4)
براغي احتياطية للحقة غطاء الصفيحة—M2 x ٥ ملم (٤)
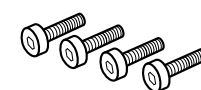
Hex screwdriver (1)
六角螺絲起子（1）
ไขควงหกเหลี่ยม (1)
مفك براغي سداسي (١)

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 more than 45 W at the rear and 45 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。如果保險絲經常燒斷，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，會出現略略聲或其它噪音。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大於 45 W，前置揚聲器的最大功率則為 45 W，其阻抗的為 **4 Ω – 8 Ω**。
• **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

เพื่อป้องกันไฟฟ้าลัดวงจรเราขอแนะนำให้คุณขั้วลบแบตเตอรี่ออกก่อนและทำการเชื่อมโดยใช้ไฟฟ้าทุกจุดก่อนที่จะติดตั้งชุดประกอบถ้าคุณไม่แน่ใจว่าติดตั้งชุดประกอบนี้ถูกต้องหรือไม่ให้หาช่างผู้เชี่ยวชาญเป็นผู้ติดตั้ง

หมายเหตุ:

ชุดประกอบนี้ได้รับการออกแบบมาเพื่อใช้งานกับระบบกระแสไฟฟ้าลงดินขั้วลบกระแสตรง **12V โวลท์**ซึ่งสามารถหาซื้อได้จากร้านขายเครื่องเสียงรถยนต์ JVC

• ใช้ทักดำจำเพาะเปลี่ยนแทนฟิวส์ หากฟิวส์ขาดบ่อยให้ปรึกษาร้านขายเครื่องเสียงรถยนต์ JVC
• หากเสียงมีปัญหา...
 ชุดประกอบชุดนี้มีเครื่องกรองเสียงในวงจรกำลัง อย่างไรก็ดีในรถบางคัน นอกจากเสียงที่ไม่พึงปรารถนาขึ้นได้ หากปัญหานี้เกิดขึ้น **ให้ต่อขั้วสายดินด้านหลังของชุดประกอบ** (ดูแผนภูมิการต่อเชื่อมต่อ) เข้ากับเชสซีของรถยนต์โดยใช้สายเคเบิ้ลที่สั้นและหนากว่า เช่น สายไฟเครื่องรัดหรือสายเปลวสายทองแดง เป็นต้น หากยัง มีเสียงอยู่อีกให้ปรึกษาร้านขายเครื่องเสียงรถยนต์ JVC
• ระดับอินพุทที่พึงรับของลำโพงควรดังเกินกว่า 45 วัตต์ และ 45 วัตต์ในลำโพงหลังและด้านหน้าทุกตัว โดยมีค่าแฟลนซ์ในระดับ 4 Ω – 8 Ω
• **ตรวจสอบให้แน่ใจต่อชุดประกอบชุดนี้ลงในเชสซีรถยนต์แล้ว**
• แผ่นระบายความร้อนจะระอนมากหลังจากใช้ 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 فقط بواسطة تيار **كهربائي مباشر DC، ١٢ فولت، أنظمة 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 في الاسلاك) مع هيكل السيارة بواسطة استخدام اسلاك اقصر واسمك، مثل سلك النحاس المجدول او سلك مقياسي. في حالة عدم توقف الطقطقة او الضجيج، يرجى استشارة وكلاء الاجهزة الصوتية للسيارات ماركة JVC.
• يجب ان يكون دخل صوت السماعات الاقصى اكثر من ٤٥ واط و ٤٥ واط لكل من الخلف والامام، مع ممانعة ٤ اوم 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.

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

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 color.

1 Connect the colored leads of the power cord to the car battery, speakers and automatic antenna (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: to remote lead of other equipment or to automatic antenna if any (200 mA max.)
 ⑤ Orange with white stripe: to car light control switch
 ⑥ Brown: to cellular phone system (For details, refer to the instructions of the cellular phone)
 ⑦ Others: to speakers

2 Connect the antenna cord.

3 Finally connect the wiring harness to the unit.

接線前： 仔細檢查汽車內的線路。不正確的接線會導致本機嚴重損壞。
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頭分別接至電池、揚聲器和自動電源升降天線（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：接至其他音響設備的遙控引導端或自動升降天線，若有裝設（最大 200 mA）
 ⑤ 橙色帶有白色條紋：接至汽車燈光控制轉換器
 ⑥ 褐色：接至流動電話系統（詳情請參閱組成電話手冊）
 ⑦ 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。

ก่อนทำการเชื่อมต่อ: ตรวจ อกการเดิน ายไฟในคดคดอย่างละมัดคะวั งอย่างที่พืดพาดทำการเชื่อมต่อชุดประกอบดีคดี กาคเชื่อมต่ออิดพาดตางจากที่ให้เกิดความ่ไ่ยหายต่อแคงอัคดูณ่ปะตะ ตกอดคดี หดอดคิ่ดของ ายไฟ และของอ ปดคดต่อเชอจากตัวคงคามข่างที่ไม่แหมคอกกาค

1 ต่อสายด่อสีของสายไฟบ้ากับแบตเตอรี่รถยนต์ สำโพง และเสาอากาศฆาว เวอร์อัดโนมัดิ (ถ้ามี) ตามลำดับต่อไปนี้
 ① สีดำ : สายดิน
 ② สีเหลือง : ต่อกับแบตเตอรี่รถยนต์ (12V โวลท์คงที่)
 ③ สีแดง : ต่อกับขั้วส่วนประกอบ
 ④ สายสีฟ้าที่มีแถบขาว : ต่อเข้ากับอุปกรณ์อื่น หรือ ต่อเข้ากับเสาอากาศอัตโนมัติ (ขนาดสูงสุด 200 mA)
 ⑤ สีส้มแถบขาว : ต่อกับสวิตช์ควบคุมไฟส่องรถยนต์
 ⑥ สีน้ำตาล : ต่อกับโทรศัพท์เคลื่อนที่ (อ่านรายละเอียดได้จากคู่มือที่ท้ายพร้อมกับโทรศัพท์เคลื่อนที่)
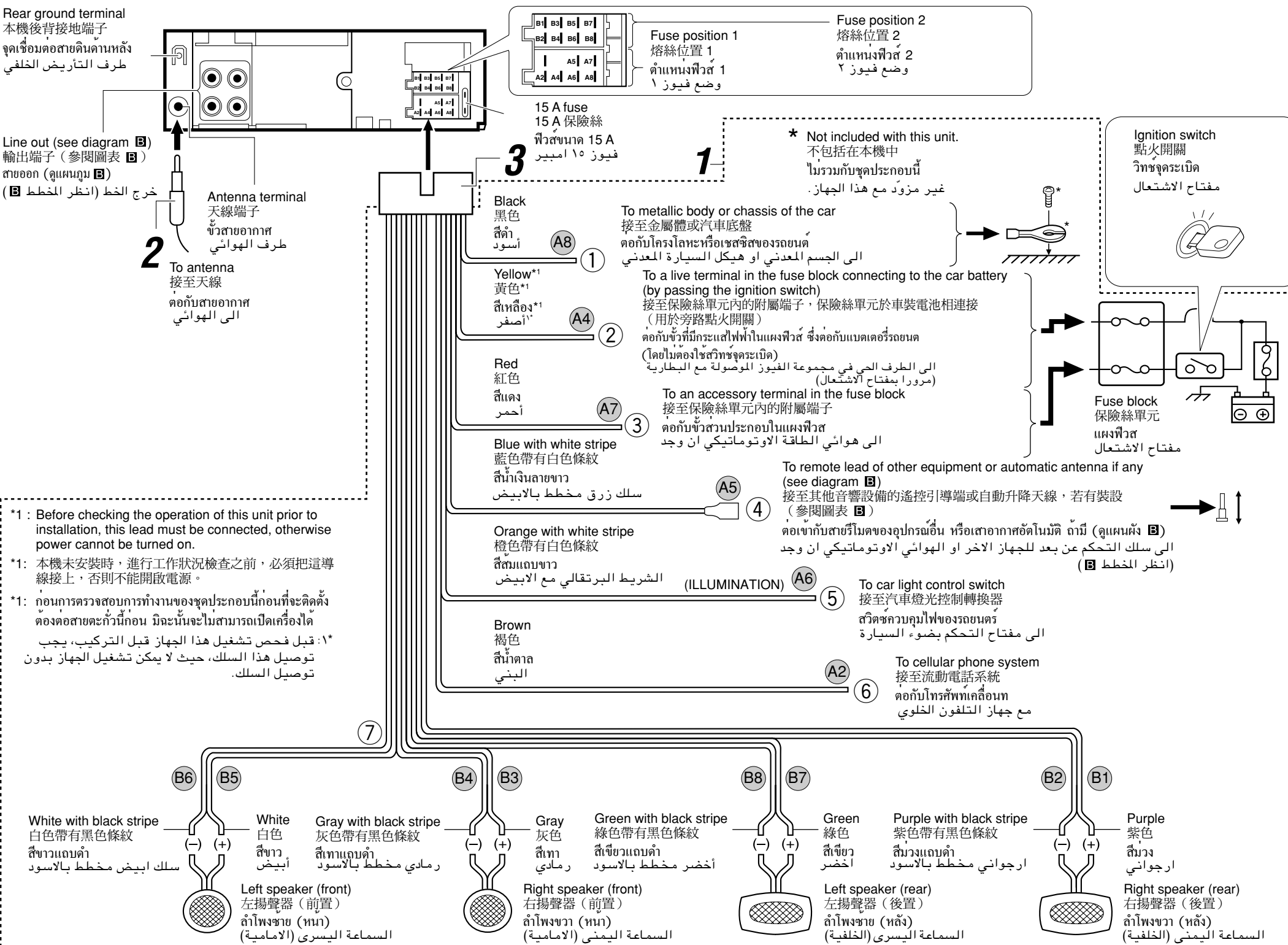 ⑦ อื่น ๆ : ต่อกับลำโพง

2 เชื่อมต่อกับสายอากาศ

3 สุดท้าย ต่อส่วนควบคุมการเดินสายไฟเข้ากับชุดประกอบชุดนี้

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 اللونة لسلك تزويد الطاقة الكهربائية مع بطارية السيارة، السماعات والهوائي الاوتوماتيكي (ان وجد) حسب التسلسل التالي.
 ① السلك الاسود: مع الارض
 ② السلك الاصفر: مع بطارية السيارة (ثابت ١٢ فولت)
 ③ السلك الاحمر: مع الطرف الاضافي
 ④ السلك الازرق المخطط بالابيض : مع الاجهزة الاخرى او السلك الازرق المخطط بالابيض : مع الهوائي الاوتوماتيكي (الحد الاقصى ٢٠٠ ميللي امبير)
 ⑤ الشريط البرتقالي مع الابيض: الى مفتاح التحكم بضوء السيارة
 ⑥ البني: الى جهاز الهاتف الخلوي (من اجل التفاصيل، ارجع الى تعليمات تشغيل الهاتف الخلوي)
 ⑦ الاسلاك الاخرى: مع السماعات

٢ اوصل سلك الهوائي.

٣ اخيرا، اوصل حامل الاسلاك مع الجهاز.

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**）
สายออก (ดูแผนภูมิ **B**)
خرج الخط (انظر المخطط **B**)

Antenna terminal
天線端子
ขั้วสายอากาศ
طرف الهوائي

2 To antenna
接至天線
ต่อกับสายอากาศ
الى الهوائي

Fuse position 1
熔絲位置 1
ตำแหน่งฟิวส์ 1
وضع فيوز ١

Fuse position 2
熔絲位置 2
ตำแหน่งฟิวส์ 2
وضع فيوز ٢

15 A fuse
15 A 保險絲
ฟิวส์ขนาด 15 A
فيوز ١٥ امبير

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

Ignition switch
點火開關
วิทช์จุดระเบิด
مفتاح الاشتعال

Black
黑色
สีดำ
أسود
(A8) ① To metallic body or chassis of the car
接至金屬體或汽車底盤
ต่อกับโครงโลหะหรือเชสซีสของรถยนต์
الى الجسم المعدني او هيكل السيارة المعدني

Yellow*1
黃色*1
สีเหลือง*1
أصفر *1
(A4) ② To a live terminal in the fuse block connecting to the car battery (by passing the ignition switch)
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（用於旁通點火開關）
ต่อกับขั้วที่มีกระแสไฟฟ้าในแผงฟิวส์ ซึ่งต่อกับแบตเตอรี่รถยนต์ (โดยต้องใช้สวิทช์จุดระเบิด)
الى الطرف الحي في مجموعة الفيوز الموصولة مع البطارية (مرورا بمفتاح الاشتعال)

Red
紅色
สีแดง
أحمر
(A7) ③ To an accessory terminal in the fuse block
接至保險絲單元內的附屬端子
ต่อกับขั้วส่วนประกอบในแผงฟิวส์
الى هوائي الطاقة الاوتوماتيكي ان وجد

Blue with white stripe
藍色帶有白色條紋
สีน้ำเงินลายขาว
سلك زرق مخطط بالابيض
(A5) ④ To remote lead of other equipment or automatic antenna if any (see diagram **B**)
接至其他音響設備的遙控引導端或自動升降天線，若有裝設（參閱圖表 **B**）
ต่อเข้ากับสายรีโมทของอุปกรณ์อื่น หรือเสาอากาศอัตโนมัติ ถ้ามี (ดูแผนผัง **B**)
الى التحكم عن بعد للجهاز الاخر او الهوائي الاوتوماتيكي ان وجد (انظر المخطط **B**)

Orange with white stripe
橙色帶有白色條紋
สีส้มแถบขาว
الشريط البرتقالي مع الابيض
(A6) (ILLUMINATION) ⑤ To car light control switch
接至汽車燈光控制轉換器
สวิตช์ควบคุมไฟของรถยนต์
الى مفتاح التحكم بضوء السيارة

Brown
褐色
สีน้ำตาล
البني
(A2) ⑥ To cellular phone system
接至流動電話系統
ตอกับโทรศัพท์เคลื่อนที
مع جهاز التلفون الخلوي

*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，必須把這導線連上，否則不能開啟電源。
*1: ก่อนการตรวจสอบการทำงานของชุดประกอบนี้ก่อนที่จะติดตั้งต้องต่อสายตะกั่วนี้ก่อน มิฉะนั้นจะไม่สามารถเปิดเครื่องได้
١*: قبل فحص تشغيل هذا الجهاز قبل التركيب، يجب توصيل هذا السلك، حيث لا يمكن تشغيل الجهاز بدون توصيل السلك.

Fuse block
保險絲單元
แผงฟิวส์
مفتاح الاشتعال

⑦

(B6) (B5) 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)

(B4) (B3) Gray with black stripe / 灰色帶有黑色條紋 / สีเทาลายดำ / سلك رمادي مخطط بالاسود (−) Gray / 灰色 / สีเทา / رمادي (+)
Right speaker (front) / 右揚聲器（前置）/ ลำโพงขวา (หน้า) / السماعة اليمنى (الامامية)

(B8) (B7) Green with black stripe / 綠色帶有黑色條紋 / สีเขียวลายดำ / أخضر مخطط بالاسود (−) Green / 綠色 / สีเขียว / أخضر (+)
Left speaker (rear) / 左揚聲器（後置）/ ลำโพงซ้าย (หลัง) / السماعة اليسرى (الخلفية)

(B2) (B1) Purple with black stripe / 紫色帶有黑色條紋 / สีม่วงลายดำ / 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:

- **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 car dealer.

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像以下圖1和圖2所示，不要使用原裝的揚聲器線路。如果使用，本機將會嚴重損壞。
    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像圖3所示，可使用原裝的揚聲器線路與本機相連接。
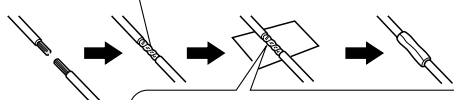 - 如果您不能確定您汽車上揚聲器線路，請向您的汽車分銷商詢問。

Fig. 1   **Fig. 2**   **Fig. 3**

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

Twist the core wires when connecting.
連接時扭轉線芯。
บิดเส้นลวดแกนเพื่อเชื่อมต่อ

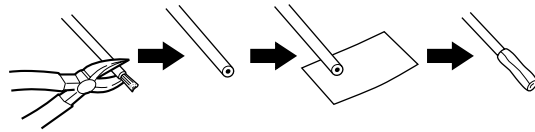Solder the core wires to connect them securely.
將線芯牢固地焊接在一起。
เชื่อมบัดกรีเส้นลวดแกนทั้งหมดเข้าด้วยกัน เพื่อความปลอดภัยในการใช้งาน

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 จะต้องพันหุ้มขั้วสายตะกั่วที่ไม่ใช้แล้วด้วยเทปพันสายไฟ

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 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.
- 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.)**

你可以連接放大器以提昇你的汽車音響系統功能。
- 將遙控線（藍色帶有白色條紋）和其他裝置上的遙控線連接起來，以便可以通過本機進行遙控。
- 將本機的輸出終端和放大器輸入終端連接起來。
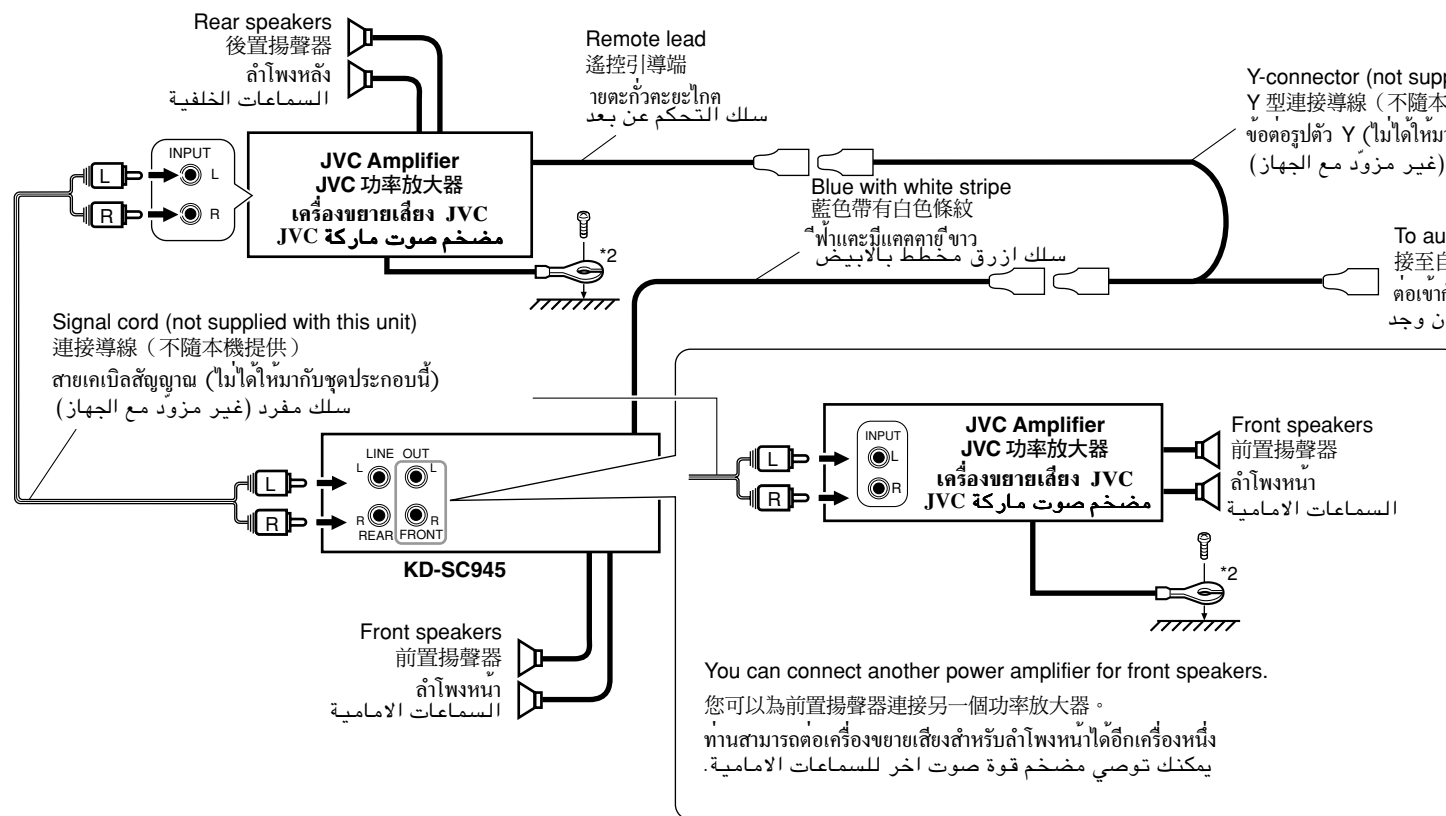- 將揚聲器和本機斷開，再接上放大器。將本機的揚聲器接線放置不用。（按照上面所示的方式，用絕緣膠把不用的線端包起來。）

Amplifier / 功率放大器 / เครื่องขยาย / مضخم الصوت

Rear speakers / 後置揚聲器 / ลำโพงหลัง / السماعات الخلفية

JVC Amplifier / JVC 功率放大器 / เครื่องขยายเสียง JVC / مضخم صوت ماركة JVC

Remote lead / 遙控引導端 / ยายตะกั่วคะยะไกล / سلك التحكم عن بعد

Y-connector (not supplied with this unit)
Y 型連接導線（不隨本機提供）
ขดต่อรูปตัว Y (ไม่ได้ให้มากับชุดประกอบนี้)
موصّل Y (غير مزوّد مع الجهاز)

Blue with white stripe
藍色帶有白色條紋
ฟ้าและมีแถคตาย้ขาว
سلك ازرق مخطط بالابيض

To automatic antenna if any
接至自動升降天線，若有裝設
ต่อเข้ากับเสาอากาศอัตโนมัติ ถ้ามี
الى الهوائي الاوتوماتيكي ان وجد

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

KD-SC945

JVC Amplifier / JVC 功率放大器 / เครื่องขยายเสียง JVC / مضخم صوت ماركة JVC

Front speakers
前置揚聲器
ลำโพงหน้า
السماعات الامامية

Front speakers
前置揚聲器
ลำโพงหน้า
السماعات الامامية

You can connect another power amplifier for front speakers.
您可以為前置揚聲器連接另一個功率放大器。
ท่านสามารถต่อเครื่องขยายเสียงสำหรับลำโพงหน้าได้อีกเครื่องหนึ่ง
يمكنك توصيل مضخم قوة صوت اخر للسماعات الامامية.

*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 the 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 — ตรงส่วนที่ไม่มีสีเคลือบ (หากมีสีเคลือบอยู่ ให้หยุดสีออกก่อนก่อนต่อลวดสายดิน) หากไม่ปฏิบัติตามคำแนะนำนี้ เครื่องอาจชำรุดหรือเสียหายได้

*2 : اوصل السلك الارضي بشكل محكم مع هيكل او جسم السيارة المعدني ـ مع الموضع غير المطلي بالدهان (اذا كان الموضع مطلي بالدهان، ازل الدهان قبل توصيل السلك). في حالة توصيل السلك مع الهيكل دون ازالة الدهان يمكن ان يسبب ذلك ضرر لهذا الجهاز.

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？
  * 檢查揚聲器的左（L）、右（R）端子的負極（–）是否共同接地？

- **ฟิวส์ขวด**
  * มีการเชื่อมสายตะกั่วสีดำและสีเดยอย่างถูกต้องหรือไม่
- **ไม่สามารถเปิดเครื่องได้**
  * มีการเชื่อมสายตะกั่วสีเหลืองหรือไม่
- **ไม่มีเสียงออกจากลำโพง**
  * สายตะกั่วส่วนที่ออกทางลำโพงเกิดไฟฟ้าลัดวงจรหรือไม่
- **เสียงเพี้ยน**
  * สายตะกั่วส่วนที่ออกทางขั้วลบต่อลงดินหรือไม่
  * สายขั้วลบ ของลำโพงด้านซ้ายและขวาต่อลงดินตามปกติหรือไม่
- **ชุดคอมพูรอบพื้น**
  * สายตะกั่วที่ออกทางลำโพงต่อลงดินหรือไม่
  * สายขั้วลบ ของลำโพงด้านซ้ายและขวาต่อลงดินตามปกติหรือไม่

4