KENWOOD

KRC-21SA
KRC-21SG

CASSETTE RECEIVER
INSTRUCTION MANUAL

RADIOODTWARZACZ
PODRĘCZNIK OBSŁUGI

КАССЕТНЫЙ РАДИОПРИЕМНИК
ИНСТРУКСИЯ ПО ЭКСПЛУАТАЦИИ

KENWOOD CORPORATION

РСТ

CH01

Contents

Safety precautions

⚠WARNING

To prevent injury and/or fire, take the following precautions:

• Insert the unit all the way until it is fully locked in place. Otherwise it may fly out of place during collisions and other jolts.

• When extending the ignition, battery, or ground wires, make sure to use automotive-grade wires or other wires with a 0.75mm^2 (AWG18) or more to prevent wire deterioration and damage to the wire coating.

• To prevent short circuits, never put or leave any metallic objects (e.g., coins or metal tools) inside the unit.

• If the unit starts to emit smoke or strange smells, turn off the power immediately and consult your Kenwood dealer.

• Make sure not to get your fingers caught between the faceplate and the unit.

• Be careful not to drop the unit or subject it to strong shock.
The unit may break or crack because it contains glass parts.

• Do not touch the liquid crystal fluid if the LCD is damaged or broken due to shock. The liquid crystal fluid may be dangerous to your health or even fatal.
If the liquid crystal fluid from the LCD contacts your body or clothing, wash it off with soap immediately.
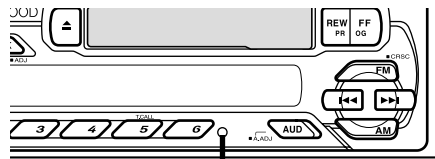
⚠CAUTION

To prevent damage to the machine, take the following precautions:

• Make sure to ground the unit to a negative 12V DC power supply.

• Do not open the top or bottom covers of the unit.

• Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.

• Do not set the removed faceplate or the faceplate case in areas exposed to direct sunlight, excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.

• To prevent deterioration, do not touch the terminals of the unit or faceplate with your fingers.

• Do not subject the faceplate to excessive shock, as it is a piece of precision equipment.

• When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause your unit to malfunction.

• To prevent short circuits when replacing a fuse, first disconnect the wiring harness.

• Do not place any object between the faceplate and the unit.

• During installation, do not use any screws except for the ones provided. The use of improper screws might result in damage to the main unit.

Safety precautions

NOTE

- If you experience problems during installation, consult your Kenwood dealer.
- If the unit does not seem to be working right, try pressing the reset button first. If that does not solve the problem, consult your Kenwood dealer.

Reset button

- Characters in the LCD may become difficult to read in temperatures below 41 ˚F (5 ˚C).
- The illustrations of the display and the panel appearing in this manual are examples used to explain more clearly how the controls are used. Therefore, what appears on the display in the illustrations may differ from what appears on the display on the actual equipment, and some of the illustrations on the display may represent something impossible in actual operation.

Cleaning the Faceplate Terminals

If the terminals on the unit or faceplate get dirty, wipe them with a dry, soft cloth.

Cleaning the Unit

If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth. If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe neutral detergent off.

⚠ Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the faceplate with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erases characters.

About Cassette tape

Cleaning the tape head

When there's noise or the sound quality is bad during tape play the tape head maybe dirty, clean the tape head.

About Cassette tape

- If the tape is slack tighten it.
- If the cassette tape label is peeling off glue it on again.
- Don't use deformed cassette tape.
- Don't place cassette tape on the dashboard etc. where the temperature is high.
- Don't use cassette tape that's 100 minutes long or longer.

General features

Release button
SRC/ PWR OFF
CLK
|◄◄
FM
►►|

ATT/ LOUD
#1 - 5
AUD/ A.ADJ
AM

Power

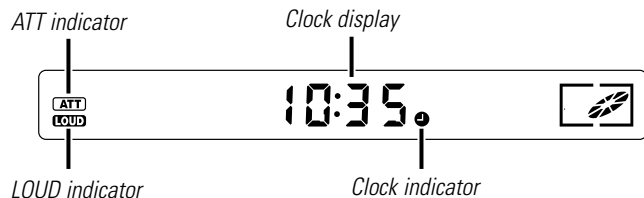### Turning ON the Power
Press the [SRC] button.

Turning OFF the Power
Press the [PWR OFF] button for at least 1 second.

Selecting the Source

Press the [SRC] button.

Source required	Display
Tuner	"TUnE"
Tape	"TAPE"
Standby (Illumination only mode)	"OFF"

ATT indicator

Clock display

LOUD indicator

Clock indicator

— 5 —

General features

Volume

Increasing Volume
Press the [∧] button.

Decreasing Volume
Press the [∨] button.

Attenuator

Turning the volume down quickly.

Press the [ATT] button.
Each time the button is pressed the Attenuator turns ON or OFF.
When it's ON, the "ATT" indicator blinks.

Loudness

Compensating for low and high tones during low volume.

Press the [LOUD] button for at least 1 second.
Each time the button is pressed for at least 1 second the
Loudness turns ON or OFF.
When it's ON, "LOUD" indicator is ON.

dB (Sound Coordinate)

You can recall the best sound setting preset for different types of
the music.

1 Select the source to set
Press the [SRC] button.

2 Enter Control mode
Press the [AUD] button.

3 Select the Sound type
Press the [#1] — [#5] button.

Press button	Sound setting	Display
[#1]	Flat	"DB-1"
[#2]	Rock	"DB-2"
[#3]	Pops	"DB-3"
[#4]	Jazz	"DB-4"
[#5]	Easy	"DB-5"

When the dB(Sound Coordinate) setting is changed, the Bass and
Treble set in audio control replace the dB(Sound Coordinate) values.

4 Exit Control mode
Press the [AUD] button.

Audio Control

1 Select the source for adjustment
Press the [SRC] button.

2 Enter Audio Control mode
Press the [A.ADJ] button for at least 1 second.

3 Select the Audio item for adjustment
Press the [FM] or [AM] button.
Each time the button is pressed the items that can be adjusted
switch as shown below.

4 Adjust the Audio item
Press the [◄◄] or [►►] button.

Adjustment Item	Display	Range
Bass level	"BAS"	–4 — 4
Treble level	"TRE"	–4 — 4
Balance	"BL"	Left 15 — Right 15
Fader	"FD"	Rear 15 — Front 15

5 Exit Audio Control mode
Press the [A.ADJ] button.

Switching Clock Display

Switching the displayed information.

Press the [CLK] button.
Each time the button is pressed it switches between clock display and current source.
During clock display the clock indicator is ON.

Adjusting Clock

1 Select the clock display
Press the [CLK] button.

2 Enter clock adjustment mode
Press the [CLK] button for at least 2 seconds.
The clock display blinks.

3 Adjust the hours
Press the [FM] or [AM] button.

Adjust the minutes
Press the [◄◄] or [►►|] button.

4 Exit clock adjustment mode
Press the [CLK] button.

Theft Deterrent Faceplate

The faceplate of the unit can be detached and taken with you, helping to deter theft.

Removing the Faceplate
Press the Release button.
The faceplate is unlocked, allowing you to detach it.

⚠ • The faceplate is a precision piece of equipment and can be damaged by shocks or jolts. For that reason, keep the faceplate in its special storage case while detached.
• Do not expose the faceplate or its storage case to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.

Reattaching the Faceplate

1 Align the projections on the unit with the grooves on the faceplate.

Projections

Grooves

2 Push the faceplate in until it clicks.
The faceplate is locked in place, allowing you to use the unit.

English

AUTO/
AME

SRC

FM/
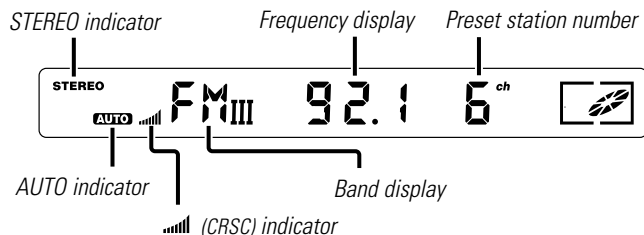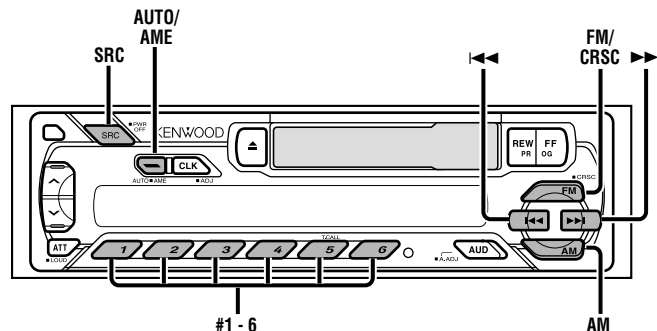CRSC ►►

I◄◄

#1 - 6

AM

STEREO indicator

Frequency display

Preset station number

STEREO

AUTO

FM**III** 92.1 6ᶜʰ

AUTO indicator

Band display

▂▄▆█ (CRSC) indicator

Tuning Mode

Choose the tuning mode.

Press the [AUTO] button.
Each time the button is pressed the Tuning mode switches as shown below.

Tuning mode	Display	Operation
Auto seek	"AUTO" indicator	Automatic search for a station.
Manual	—	Normal manual tuning control.

Tuning

Selecting the station.

1 Select tuner source
Press the [SRC] button.
Select the "TUnE" display.

2 Select the band
Press the [FM] or [AM] button.
Each time the [FM] button is pressed it switches between the FM1, FM2, and FM3 bands.

3 Tune up or down band
Press the [I◄◄] or [►►I] button.

During reception of stereo stations the "STEREO" indicator is ON.

Station Preset Memory

Putting the station in the memory.

1 Select the band
Press the [FM] or [AM] button.

2 Select the frequency to put in the memory
Press the [◄◄] or [►►|] button.

3 Put the frequency in the memory
Press the [#1] — [#6] button for at least 2 seconds.
The preset number display blinks 1 time.
On each band, 1 station can be put in the memory on each [#1] — [#6] button.

Auto Memory Entry

Putting stations with good reception in the memory automatically.

1 Select the band for Auto Memory Entry
Press the [FM] or [AM] button.

2 Open Auto Memory Entry
Press the [AME] button for at least 2 seconds.
When 6 stations that can be received are put in the memory Auto Memory Entry closes.

Preset Tuning

Calling up the stations in the memory.

1 Select the band
Press the [FM] or [AM] button.

2 Call up the station
Press the [#1] — [#6] button.

CRSC (Clean Reception System Circuit)

Temporarily have reception switched from stereo to mono to reduce multi-path noise when listening to the FM station.

Press the [CRSC] button for at least 1 second.
Each time the button is pressed CRSC turns ON or OFF.
When it's ON, the " ▄▊ll "(CRSC) indicator is ON.

Cassette player features

SRC   ▲   REW FF

T.CALL

T.CALL indicator   Tape indicator

T.CALL   TAPE

Playing Cassette Tapes

When the Cassette Tape is inserted
Press the [SRC] button.
Select the "TAPE" display.

When you want to listen to the reverse side
Press the [REW] and [FF] button at the same time.

Eject the Cassette Tape
Press the [▲] button.

Fast Forwarding and Rewinding

Fast Forwarding
Press the [FF] button.
If it's stopped press [REW] button.

Rewinding
Press the [REW] button.
If it's stopped press the [FF] button.

Tuner Call

Switching to the radio automatically during Fast Forwarding and Rewinding.

Press the [T.CALL] button.
Each time the button is pressed the Tuner Call turns ON or OFF.
When it's ON, the "T.CALL" indicator is ON.

When you turn ON the Tuner Call function, the motorized antenna will extend automatically.

Accessories

External view	Number of items
①	1
②	2
③	1

⚠ The use of any accessories except for those provided might result in damage to the unit. Make sure only to use the accessories shipped with the unit, as shown above.

Installation Procedure

1. To prevent short circuits, remove the key from the ignition and disconnect the ⊖ terminal of the battery.
2. Make the proper input and output wire connections for each unit.
3. Connect the wire on the wiring harness.
4. Take Connector B on the wiring harness and connect it to the speaker connector in your vehicle.
5. Take Connector A on the wiring harness and connect it to the external power connector on your vehicle.
6. Connect the wiring harness connector to the unit.
7. Install the unit in your car.
8. Reconnect the ⊖ terminal of the battery.
9. Press the reset button.

⚠CAUTION

- If your car is not prepared for this special connection-system, consult your Kenwood dealer.
- Only use antenna conversion adapters (ISO-JASO) when the antenna cord has an ISO plug.
- Make sure that all wire connections are securely made by inserting jacks until they lock completely.
- If your vehicle's ignition does not have an ACC position, or if the ignition wire is connected to a power source with constant voltage such as a battery wire, the power will not be linked with the ignition (i.e., it will not turn on and off along with the ignition). If you want to link the unit's power with the ignition, connect the ignition wire to a power source that can be turned on and off with the ignition key.
- If the fuse blows, first make sure that the wires have not caused a short circuit, then replace the old fuse with one with the same rating.
- Insulate unconnected wires with vinyl tape or other similar material. To prevent short circuits, also do not remove the caps on the ends of the unconnected wires or the terminals.
- Connect the speaker wires correctly to the terminals to which they correspond. The unit may receive damage or fail to work if you share the ⊖ wires and/or ground them to any metal part in the car.
- After the unit is installed, check whether the brake lamps, indicators, wipers, etc. on the car are working properly.
- If the console has a lid, make sure to install the unit so that the faceplate does not hit the lid when closing and opening.
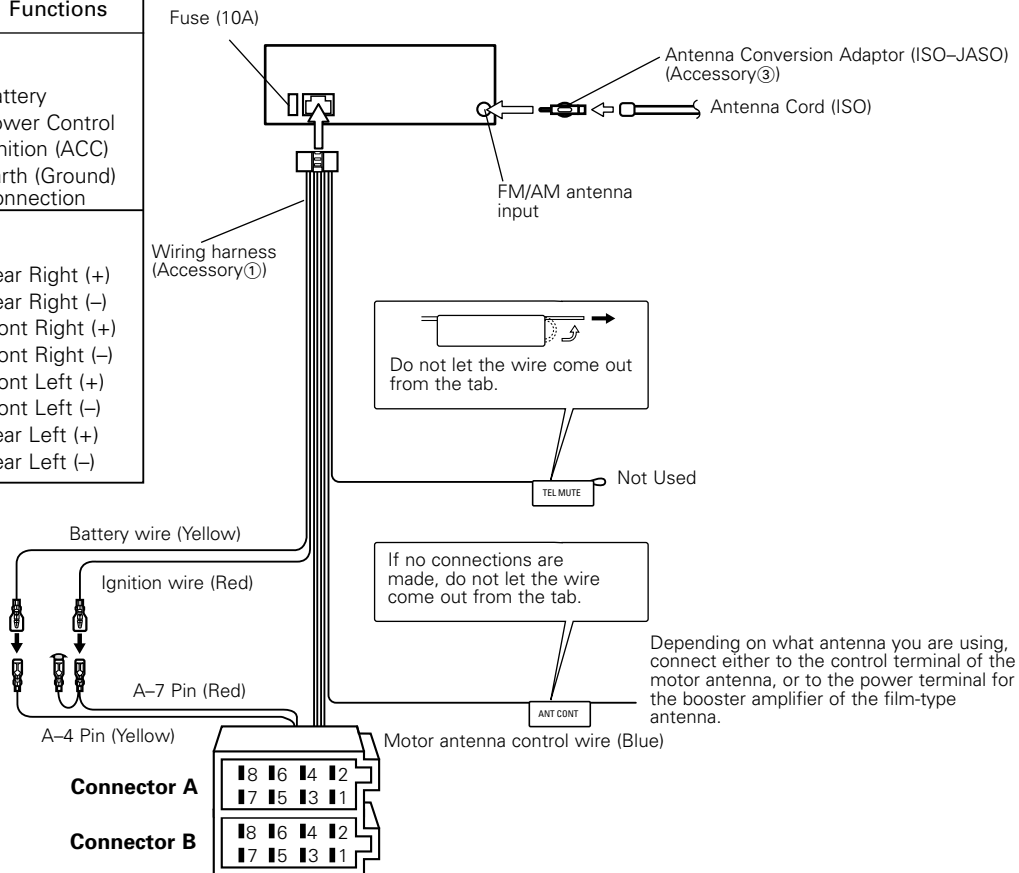
Connecting Wires to Terminals

Connector Function Guide

Pin Numbers for ISO Connectors	Cable Color	Functions
External Power Connector		
A–4	Yellow	Battery
A–5	Blue/White	Power Control
A–7	Red	Ignition (ACC)
A–8	Black	Earth (Ground) Connection
Speaker Connector		
B–1	Purple	Rear Right (+)
B–2	Purple/Black	Rear Right (–)
B–3	Gray	Front Right (+)
B–4	Gray/Black	Front Right (–)
B–5	White	Front Left (+)
B–6	White/Black	Front Left (–)
B–7	Green	Rear Left (+)
B–8	Green/Black	Rear Left (–)

Fuse (10A)

Antenna Conversion Adaptor (ISO–JASO) (Accessory③)

Antenna Cord (ISO)

FM/AM antenna input

Wiring harness (Accessory①)

Do not let the wire come out from the tab.

Not Used

TEL MUTE

If no connections are made, do not let the wire come out from the tab.

Depending on what antenna you are using, connect either to the control terminal of the motor antenna, or to the power terminal for the booster amplifier of the film-type antenna.

ANT CONT

Battery wire (Yellow)

Ignition wire (Red)

A–7 Pin (Red)

A–4 Pin (Yellow)

Motor antenna control wire (Blue)

Connector A

| 8 | 6 | 4 | 2 |
| 7 | 5 | 3 | 1 |

Connector B

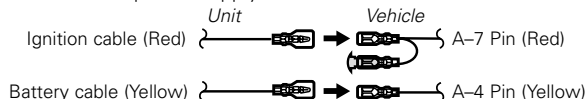| 8 | 6 | 4 | 2 |
| 7 | 5 | 3 | 1 |

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Connecting Wires to Terminals

⚠WARNING Connecting the ISO Connector (see p.12)

The pin arrangement for the ISO connectors depends on the type of vehicle you drive. Make sure to make the proper connections to prevent damage to the unit.
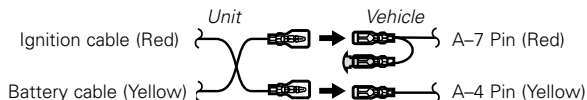
The default connection for the wiring harness is described in **1** below. If the ISO connector pins are set as described in **2** or **3**, make the connection as illustrated.

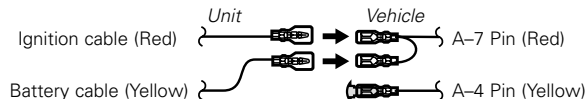Please be sure to reconnect the cable as shown **2** below to install this unit to the Volkswagen vehicles.

1 (Default setting) The A-7 pin (red) of the vehicle's ISO connector is linked with the ignition, and the A-4 pin (yellow) is connected to the constant power supply.

Unit   *Vehicle*

Ignition cable (Red) ➞ A–7 Pin (Red)

Battery cable (Yellow) ➞ A–4 Pin (Yellow)

2 The A-7 pin (red) of the vehicle's ISO connector is connected to the constant power supply, and the A-4 pin (yellow) is linked to the ignition.

Unit   *Vehicle*

Ignition cable (Red) ➞ A–7 Pin (Red)

Battery cable (Yellow) ➞ A–4 Pin (Yellow)

3 The A-4 pin (yellow) of the vehicle's ISO connector is not connected to anything, while the A-7 pin (red) is connected to the constant power supply (or both the A-7 (red) and A-4 (yellow) pins are connected to the constant power supply).
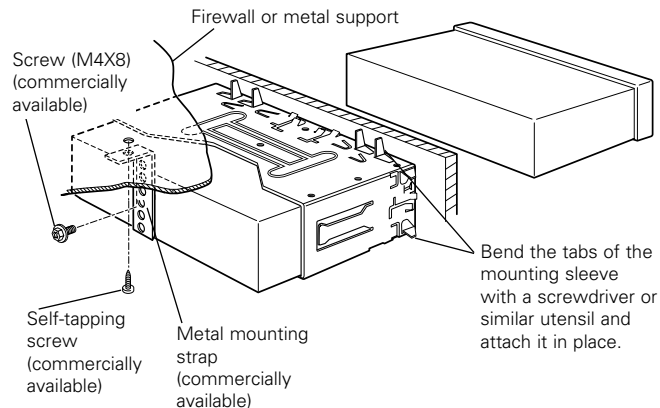
Unit   *Vehicle*

Ignition cable (Red) ➞ A–7 Pin (Red)

Battery cable (Yellow) ➞ A–4 Pin (Yellow)

When the connection is made as in **3** above, the unit's power will not be linked to the ignition key. For that reason, always make sure to turn off the unit's power when the ignition is turned off.

To link the unit's power to the ignition, connect the ignition cable (ACC...red) to a power source that can be turned on and off with the ignition key.

Installation

■ *Installation*

Firewall or metal support

Screw (M4X8) (commercially available)

Self-tapping screw (commercially available)

Metal mounting strap (commercially available)

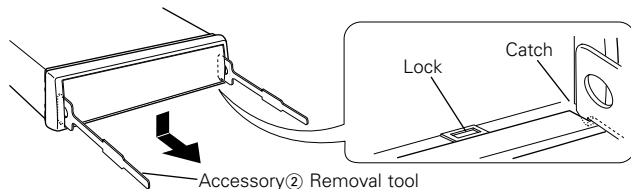Bend the tabs of the mounting sleeve with a screwdriver or similar utensil and attach it in place.

Make sure that the unit is installed securely in place. If the unit is unstable, it may malfunction (eg, the sound may skip).
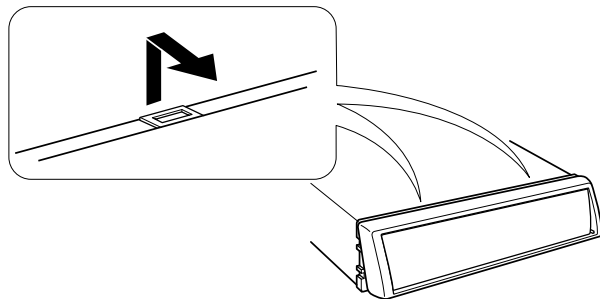
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Installation

■ *Removing the hard rubber frame*

1 Engage the catch pins on the removal tool and remove the two locks on the lower level.
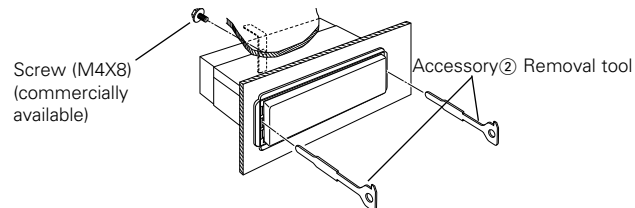Lower the frame and pull it forward as shown in the figure.

Catch
Lock
Accessory② Removal tool

2 When the lower level is removed, remove the upper two locations.

The frame can be removed from the top side in the same manner.

■ *Removing the Unit*

1 Refer to the section "Removing the hard rubber frame" and then remove the hard rubber frame.

2 Remove the screw (M4×8) on the back panel.

3 Insert the two removal tools deeply into the slots on each side, as shown.

Screw (M4X8)
(commercially available)
Accessory② Removal tool

4 Lower the removal tool toward the bottom, and pull out the unit halfway while pressing towards the inside.

⚠ Be careful to avoid injury from the catch pins on the removal tool.

5 Pull the unit all the way out with your hands, being careful not to drop it.

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Troubleshooting Guide

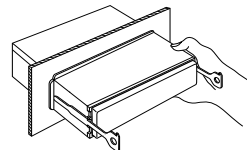**What might seem to be a malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.**

General

? The power does not turn ON.
  ✔ The fuse has blown.
    ☞ After checking for short circuits in the wires, replace the fuse with one with the same rating.

  ✔ No ACC position on vehicle ignition.
    ☞ Connect the same cable to the ignition as the battery cable.

? Nothing happens when the buttons are pressed.
  ✔ The computer chip in the unit is not functioning normally.
    ☞ Press the reset button on the unit (page 4).

? There's a source you can't switch.
  ✔ There's no tape inserted.
    ☞ Set the media you want to listen to. If there's no media in this unit, you can't switch to each source.

? The faceplate does not open or close.
  ✔ The faceplate is incorrectly attached.
    ☞ Reattach the faceplate correctly, See the section on <Removing the Faceplate>(page 7).

? The memory is erased when the ignition is turned OFF.
  ✔ The battery wire has not been connected to the proper terminal.
    ☞ Connect the wire correctly, referring to the section on <Connecting Wires to Terminals>.

  ✔ The ignition and battery wire are incorrectly connected.
    ☞ Connect the wire correctly, referring to the section on <Connecting Wires to Terminals>.

? Even if Loudness is turned ON, high-pitched tone isn't compensated for.
  ✔ Tuner source is selected.
    ☞ High-pitched tone isn't compensated for when in Tuner source.

? No sound can be heard, or the volume is low.
  ✔ The fader or balance settings are set all the way to one side.
    ☞ Center the fader and balance settings.

  ✔ The input/output wires or wiring harness are connected incorrectly.
    ☞ Reconnect the input/output wires or the wiring harness correctly. See the section on <Connecting Wires to Terminals>.

  ✔ The cassette tape is bad.
    ☞ Try playing another cassette tape. If works fine, the first tape was bad.

? The sound quality is poor or distorted.
  ✔ One of the speaker wires is being pinched by a screw in the car.
    ☞ Check the speaker wiring.

  ✔ The tape head is dirty.
    ☞ Clean the tape head.

  ✔ The speakers are not wired correctly.
    ☞ Reconnect the speaker wires so that each output terminal is connected to a different speaker.

Tuner source

? Radio reception is poor.
  ✔ The car antenna is not extended.
    ☞ Pull the antenna out all the way.

  ✔ The antenna control wire is not connected.
    ☞ Connect the wire correctly, referring to the section on <Connecting Wires to Terminals>.

The messages shown below display your systems condition.

E-77: The unit is malfunctioning for some reason.
  ⇨ Press the reset button on the unit. If the "E-77" code does not disappear, consult your nearest service center.

◄ ► (Blink): The tape player section is not operating properly.
  ⇨ Reinsert the Tape. If the tape cannot be ejected or the display continues to flash even when the tape has been properly reinserted, please switch off the power and consult your nearest service center.

Specifications

Specifications subject to change without notice.

FM tuner section

Frequency range (50 kHz Space) ....87.5 MHz – 108.0 MHz
Usable sensitivity (S/N = 30dB) ....9.3dBf (0,8 µV/75 Ω)
Quieting Sensitivity (S/N = 50dB) ....15.2dBf (1.6 µV/75 Ω)
Frequency response (±3.0 dB) ....30 Hz – 15 kHz
Signal to Noise ratio (MONO) ....70 dB
Selectivity (±400 kHz)... ≥ 80 dB
Stereo separation (1 kHz) ....40 dB

AM tuner section

Frequency range (9 kHz Space).....................531 kHz – 1611 kHz
Usable sensitivity (S/N = 20dB) ....28 dBµ (25 µV)

Cassette player section

Tape Speed..4.76 cm/sec.
Wow & Flutter (WRMS) ....0.12 %
Frequency response (±3.0 dB).................30 Hz – 14 kHz (120 µs)
Separation ....40 dB (1 kHz)
Signal to Noise ratio 52dB

Audio section

Maximum output power...40 W x 4
Output power (DIN 45324, +B=14.4V)..........................26 W x 4
Tone action
    Bass : ....100 Hz ±10 dB
    Treble : ....10 kHz ±10 dB

General

Operating voltage (11 – 16V allowable) ....14.4 V
Current consumption..10 A
Installation Size (W x H x D) ....182 x 53 x 158 mm
Weight ....1.3 kg