KENWOOD

KRC-204 KRC-S15 KRC-104

CASSETTE RECEIVER

INSTRUCTION MANUAL

RADIO-CASSETTE

MODE D'EMPLOI

RADIO CASETE

MANUAL DE INSTRUCCIONES

KENWOOD CORPORATION

Take the time to read through this instruction manual. Familiarity with installation and operation procedures will help you obtain the best performance from your new cassette receiver.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on the product.

Model KRC-205/S15/104 Serial number

Warning 3
Safety precautions4
Operations
All mode
Tuner mode
Tape mode
nstallation
Connections
Accessories
Installation
Installing in Japanese-made cars
Removing the hard rubber frame
Removing the unit :
Screwing the Faceplate on the Unit
Troubleshooting guide14
Specification 15

A Warning





Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion — and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- · Start your volume control at a low setting.
- · Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

· Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decible

<u>Level Example</u>

- 30 Quiet library, soft whispers
- 40 Living room, refrigerator, bedroom away from traffic
- 50 Light traffic, normal conversation, quiet office
- Air conditioner at 20 feet, sewing machine
- 70 Vacuum cleaner, hair dryer, noisy restaurant
- 80 Average city traffic, garbage disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

- 90 Subway, motorcycle, truck traffic, lawn mower
- Garbage truck, chain saw, pneumatic drill
- Rock band concert in front of speakers, thunderclap
- 140 Gunshot blast, jet plane
- 180 Rocket launching pad

Information courtesy of the Deafness Research Foundation.

Safety precautions

AWARNING

To prevent injury or fire, take the following precautions:

- Insert the unit all the way in until it is fully locked in place. Otherwise it may fall out of place when jolted.
- When extending the ignition, battery, or ground wires, make sure to use automotive-grade wires or other wires with a 0.75mm² (AWG18) or more to prevent wire deterioration and damage to the wire coating.
- To prevent a short circuit, never put or leave any metallic objects (such as 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.
- 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.

ACAUTION

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.

- 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 a short circuit when replacing a fuse, first disconnect the wiring harness.
- Do not use your own screws. Use only the screws provided. If you use the wrong screws, you could damage the unit.

For KRC-204

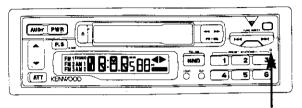
- Do not set the removed faceplate or the faceplate case in areas exposed to direct sunlight, excessive heat, or humidity. Also avoid places with too much dust or the possibility of water splashing.
- Do not subject the faceplate to excessive shock, as it is a piece of precision equipment.
- To prevent deterioration, do not touch the terminals of the unit or faceplate with your fingers.

FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

NOTE

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



RESET button

Cleaning the Unit

If the front panel gets dirty, turn off the power and wipe the panel with a dry silicon cloth or soft cloth.

ACAUTION

Do not wipe the panel with a hard cloth or a cloth dampened by volatile solvents such as paint thinner and alcohol. They can scratch the surface of the panel and/or cause the indicator letters to peel off.

Cleaning the Faceplate Terminals (For KRC-204)

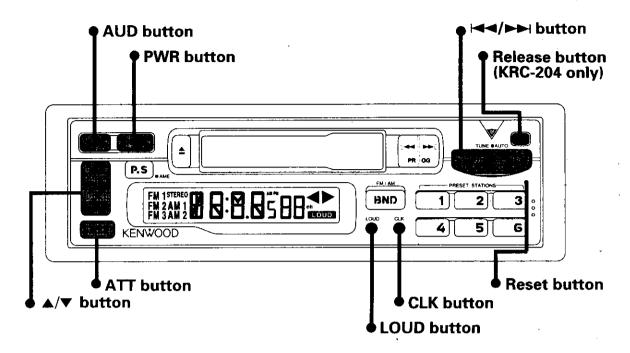
If the terminals on the unit or faceplate get dirty, wipe them with a dry, soft cloth.

Cleaning the Tape Head

After you have listened to many cassettes over a long period of time, magnetic powder from the tapes and dust accumulates on the tape head, causing noise and a deterioration in sound quality. Clean the tape head using a cleaning tape or cleaning kit designed for use in car audio systems.

Handling Cassette Tapes

- Do not play a cassette whose tape has gone slack. In such a case, wind it tight using a pencil or the like in one of the spools. Playing slack cassette tapes can result in the tape tangling around the capstan and/or pinch rollers, causing trouble.
- Do not play a deformed cassette or one whose label is starting to come off, as it can cause the unit to malfunction.
- Do not leave tapes in hot places, such as on dashboards and other spots exposed to direct sunlight, or near heater outlets. They can deform the cassette.
- Avoid using extremely long cassette tapes, such as 100-minute-long tapes.
 Such tapes are very thin, and can tangle easily around the pinch rollers or other parts inside the unit, causing unit failure.
- Remove a cassette tape from the unit when not listening to it for a while. If you leave a tape in the unit too long, it may stick to the tape head and cause unit malfunction.



- Power ON/OFF Switching power on/off Power is switched on and off each time the PWR button is pressed.
- Volume Adjusting the volume The volume level will go up each time the ▲ button is pressed.
 The volume level will go down each time the ▼ button is pressed.
- Audio control Adjusting each source of audio -

1. Press the AUD button to enter the audio adjustment mode.

- 2. Each time you press the AUD button, the controllable audio item changes in order of: BAS (Bass) ⇒TRE (Treble) ⇒BAL (Left/right balance) ⇒FA (Fader, front/rear balance) ⇒off (volume control).
- 3. Pressing ▲ or ▼ button changes the value of each setting within the range shown below.

NOTE

When no button has been pressed for about 5 seconds, the audio adjustment mode terminates automatically and the \triangle/∇ buttons can be used exclusively for volume control.

Attenuator – *Turning down the volume quickly* – Attenuator is switched on and off each time the ATT button is pressed.

When it is switched on, the volume display starts to blink and the volume drops in an instant.



Loudness – *Modulating the sound for effect when the volume is low* – Loudness is switched on and off each time the LOUD button is pressed.

While this function is on, the LOUD indicator will light and highs and lows will be emphasized.



Switching the display - Selecting the displayed information - Each time you press the CLK button, the display changes as follows:

Mode	Display
Tuner mode	Reception frequency ← Time
Tape mode	"TAPE" ↔ Time

Clock adjustment - Setting the clock -

1. Bring up the clock display by pressing the CLK button.

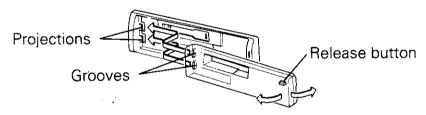
2. Adjust the hour by pressing the ► button while holding down the CLK button and adjust the minute by pressing the ► button while holding down the CLK button.

11:15

System reset
Use the tip of a pen or some other item to press the reset button at such times as a malfunction of the unit or when the battery has been replaced.

Theft deterrent faceplate (KRC-204 only)

- Detaching the faceplate of the unit in order to deter theft -



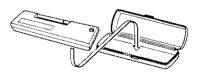
Removing the faceplate

Press the release button.

The faceplate is unlocked, allowing you to detach it.

NOTE

• 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.

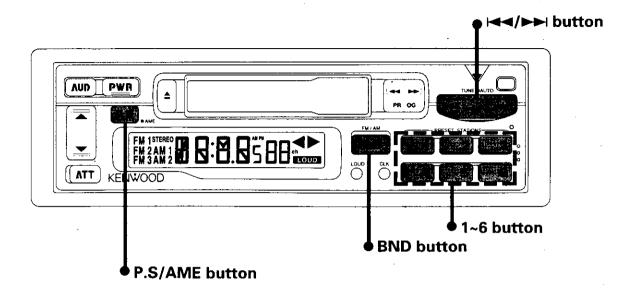


 Do not expose the faceplate or its storage case (Accessory (5)) to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.

Reattaching the faceplate

Align the projections on the unit with the grooves on the faceplate. Push the faceplate in until it clicks.

The faceplate is locked in place, allowing you to use the unit.



Be sure to remove the cassette tape from the unit when you operate the tuner mode.

Band select - Selecting a band to listen to -

Each time the BND button is pressed, the reception band switches from FM1⇒FM3⇒AM1⇒AM2.



Tuning - Selecting a station -

Selecting a station by manual tuning

Each time the ► button is pressed, the unit will tune one step at a time toward lower frequencies.

Each time the ►► button is pressed, the unit will tune one step at a time toward higher frequencies.

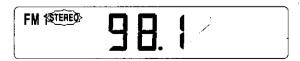
The **STEREO** indicator will light while receiving stereo broadcasts.

Selecting a station by auto tuning

Pressing the \bowtie button for more than 1 seconds will cause the unit to automatically search for and begin receiving the next station toward lower frequencies.

Pressing the >> button for more than 1 seconds will cause the unit to automatically search for and begin receiving the next station toward higher frequencies.

The STEREO indicator will light while receiving stereo broadcasts.



- Tuner memory Setting the current station in memory Storing the frequency of a station
 - 1. Receive the desired station in the desired band.
 - 2. Press and hold one of buttons 1 through 6 for more than 2 seconds. The number of the pressed button is displayed and the station is preset in memory under that number. Up to 6 stations can be preset per band.

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Recalling a preset station Pressing any number button 1 through 6 will cause the station set in that memory location to be received.

Auto memory – Automatic search for stations and their storage in preset memory –

Starting auto memory

Press and hold the AME button for more than 2 seconds. "AME" is displayed and the auto memory operation starts. Up to 6 receivable stations in the current band are searched and preset in memory automatically.

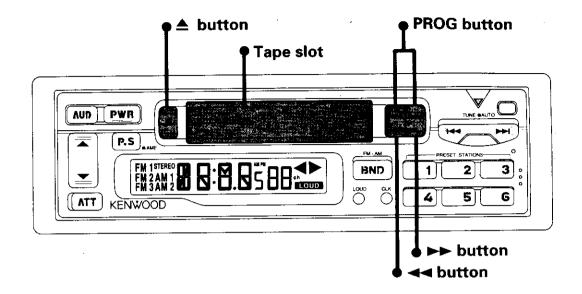


Recalling a preset station Pressing any number button 1 through 6 will cause the station set in that memory location to be received.

- Preset scan Search for a station by receiving all preset stations in order of memory number Starting preset scan
 - 1. Select the band to be scanned.
 - 2. Press the P.S button to start preset scan. All of the stations preset in the current band are received for about 5 seconds per station, and the memory number of the station being received blinks during this.



When the desired station is received Press the P.S button again. Preset scan is canceled and the current station will be received continuously.



Tape play/Reverse play – Playing a cassette tape –
Load a cassette with the tape exposed on the right. The tape play will start.

Load a cassette with the tape exposed on the right. The tape play will start.

Pressing the PROG button during the tape play will switch the side to be playing.



- Eject Ejecting a cassette tape Pressing the ▲ button will cause the cassette tape to be ejected from the tape slot.
- Fast forward

 Press the >> or << but button pointing in the same direction as the tape run indicator to fast forward. When the end of tape is reached during fast forwarding, the tape is reversed and the other side is played automatically.

 Press the PROG button to stop fast forwarding in the middle.
- Rewind

 Press the ►► or ◄◄ button pointing in the opposite direction of the tape run indicator to rewind. When the end of tape is reached during rewinding, the current tape side is played automatically.

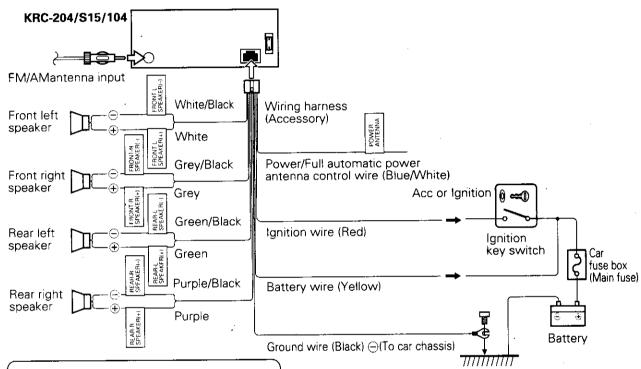
 Press the PROG button to stop rewinding in the middle.

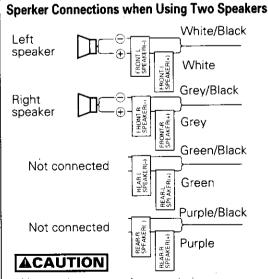
Installation

Connections

First check that the Ignition key is removed, and disconnect the negative terminal of the battery to prevent any accidents due to shorting.

- 1. Check the input/output wires of each unit and connect them.
- 2. Connect the speaker wires of the wiring harness.
- 3. Connect the wiring harness in order of ground wire (black), battery wire (yellow), ignition wire (red).
- 4. Connect the wiring harness connector to the unit.
- 5. After installation is complete, re-connect the negative terminal of the battery.
- 6. Press the reset button.



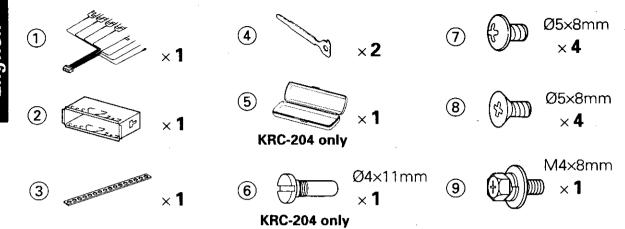


When only two speakers are being connected to the system, connect the connectors either to both the front output terminals or to both the rear output terminals (do not mix front and rear). For example, if you connect the \oplus connector of the speaker to a front output terminal, do not connect the \ominus connector to a rear output terminal.

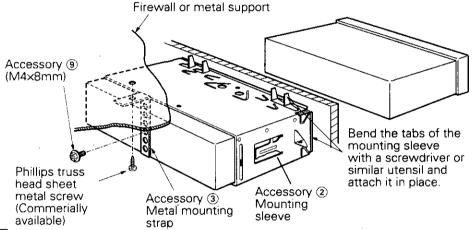
ACAUTION

- If your car's ignition does not have an ACC position, connect the ignition wires to a power source that can be turned on and off with the ignition key. If you connect the ignition wire to a power source with a constant voltage supply, as with battery wires, the battery may die.
- If the fuse blows, first make sure the wires aren't touching to cause a short circuit, then replace the old fuse with one with the same rating.
- Do not let unconnected wires or terminals touch metal on the car or anything else conducting electricity. To prevent a short circuit, 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 be damaged or fail to work if you share the ⊕ wires or ground them to any metal part in the car.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- Insulate unconnected wires with vinyl tape or other similar material.

Accessories



Installation

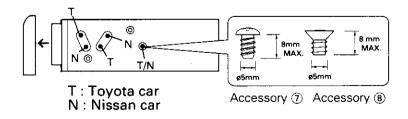


NOTE

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

Installing in Japanese-made cars

- 1. Refer to the section "Removing the hard rubber frame (P.13)" and then remove the hard rubber frame.
- 2. Align the holes in the unit (two locations on each side) with the vehicle mounting bracket and secure the unit with the accessory screws.



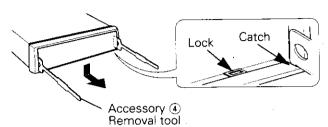
ACAUTION

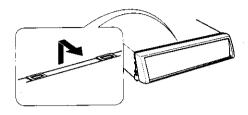
- Do not use your own screws. Use only the screws provided. If you use the wrong screws, you could damage the unit.
- Damage may occur if a screwdriver or similar tool is used with excessive force during the installations.

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



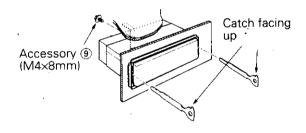


NOTE

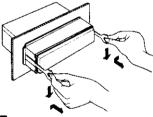
The frame can be removed from the top side in the same manner.

Removing the unit

- 1. Refer to the section "Removing the hard rubber frame" and then remove the hard rubber frame.
- 2. Remove the screw (M4×8mm) on the back panel.
- 3. Insert the two removal tools deeply into the slots on each side, as shown.



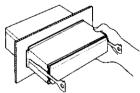
4. Lower the removal tool toward the bottom, and pull out the unit halfway while pressing towards the inside.



ACAUTION

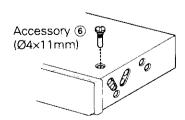
Be careful to avoid injury from the catch pins on the removal tool.

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



Screwing the faceplate on the unit (For KRC-204)

If you want to fasten the faceplate to the main unit so that it does not fall off, insert the provided screw (Ø4×11mm) in the hole shown below.



ACAUTION

Never insert the screw (Ø4×11mm) in any other screw hole than the one specified. If you insert it in another hole, it will contact and may cause damage to the mechanical parts inside the unit.

Troubleshooting guide

Sometimes you may think the system is broken due to a simple misoperation or incorrect wiring. Check the items listed below before requesting repairs.

Symptom ▼	Cause ▼	Remedy ▼
Power will not come on.	The fuse is blown.	Check that the wires have not shorted, and then replace the fuse with one of the specified rating.
	Output-input power wires have been connected incorrectly.	See "Connections (P.11)" and make connections properly.
No sound, or sound level is low.	The attenuator is on.	Turn the attenuator off.
	The volume is turned all the way down.	Increase the volume.
	Fader and balance are set all the way to one side.	Adjust fader and balance.
	Speaker wires are connected incorrectly.	See "Connections (P.11)" and connect correctly.
Operations are not performed even when operation switches are pressed.	The microcomputer is malfunctioning.	Press the reset button.
Tape cannot be load.	Cassette casing is deformed.	Try using another cassette tape.
	Tape is backwards.	Try loading the cassette tape with the tape side facing right.
	A cassette tape is already loaded.	Eject the cassette tape already loaded and try again.
Tuner sensitivity is poor.	The automatic car antenna is not extended.	Extend the antenna further.
	Automatic power antenna control wire is not connected.	See "Connections (P.11)" and connect the antenna control wire.
Sound quality is poor. (sound is distorted.)	Volume is too loud.	Use an appropriate volume level.
	Heads are dirty.	See "Cleaning the tape head (P.5)" and clean the heads.
	The speaker wire is being pinched by screw on the car.	Check all speaker wirings.
	Speakers have been wired incorrectly.	Connect all speaker output terminals to the correct speaker terminals.
Contents of memory are lost when the ignition key is turned off.	Battery wire is not connected to the prescribed location.	See "Connections (P.11)" and connect correctly.

Specifications

Specifications subject to change without notice.

FM Tuner Section	
Frequency Range (200 kHz space)	87.9 MHz ~ 107.9 MHz
Usable Sensitivity (S/N: 30 dB)	13.2dBf (1.3 µV/75 ohms)
Quieting Sensitivity (S/N: 50 dB)	15.2 dBf (1.6 µV/75 ohms)
Frequency Response (±3.0 dB)	30 Hz ~ 15 kHz
Signal to Noise Ratio (MONO)	70 dB
Selectivity (±400 kHz)	
Stereo Separation (1 kHz)	35 dB
AM Tuner Section	
Frequency Range (10 kHz space)	530 kHz ~ 1700 kHz
Usable Sensitivity (S/N : 20 dB)	28 dBμ (25 μV)
Cassette Player Section	
Tape Speed	4.76 cm/sec.
Wow & Flutter (WRMS)	0.12 %
Frequency Response (±3 dB)	30 Hz ~ 14 kHz (120 µs)
Separation (1 kHz)	43 dB
Signal to Noise Ratio	54 dB
Audio Section	
Maximum Output Power	20.14/4
KRC-204/S15	
KRC-104	8 VV X4
Full Bandwidth Power (at less than 1% THD)	10 \\/ \
KRC-204/S15	
KRC-104	Bass: 100 Hz +10 dB
Tone Action	Treble: 10 kHz ±10 dB
	THEBIE. TO KITE IT TO GO
General Valtage	14.4.V./11 16.V.allowable)
Operating Voltage	10 A at Rated Power
Current ConsumptionInstallation Size (W x H x D)	182 × 53 × 154 mm
HIStaliation Size (VV X II X D)	$(7-3/16 \times 2-1/16 \times 6-1/16 \text{ in.})$
Weight	
v voigitt	(3.1 lbs)