

KENWOOD

KGC-6042A

GRAPHIC EQUALIZER
INSTRUCTION MANUAL

EGALISEUR GRAPHIQUE
MODE D'EMPLOI

GRAPHIC EQUALIZER
BEDIENUNGSANLEITUNG

GRAFISCHE TOONREGELING
GEBRUIKSAANWIJZING

EQUALIZZATORE GRAFICO
ISTRUZIONI PER L'USO

ECUALIZADOR GRAFICO
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 electronic graphic equalizer.

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 KGC-6042A Serial number _____

SAFETY PRECAUTIONS

▲WARNING

To prevent fire and avoid personal injury in case of accidents.

- When extending the power supply or ground lead, avoid short circuits by using 0.75mm² (AWG18) or larger automotive grade cable.
- Check to be sure that no metal objects (tools, needles, coins) are left inside the unit.
- If you smell or see smoke, disconnect the unit immediately and consult your KENWOOD dealer. Continued use can cause a fire or permanent damage to the unit.

▲CAUTION

To keep the unit in proper working order

- Be sure it's connected to a 12V DC power supply with a minus ground connection.
- Do not open front panel or top or bottom cover.
- Do not expose this unit to direct sunlight or high heat.
- Keep it clean and dry.
- Be sure it is fastened securely and not exposed to excess vibration.

NOTE

- If you have difficulty in installing this unit in your vehicle, please contact your KENWOOD dealer.

Cleaning

1. Always turn the power OFF before cleaning.
2. Wipe the front panel and other exterior surfaces with a soft dry cloth or a soft cloth lightly moistened with a neutral detergent.

▲CAUTION

- DO NOT use abrasive pads or paint thinner, benzene or other volatile solvents. These may remove the indicator characters.

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FEATURES



- **Equalizer band system (p.5)**

Levels can be changed in two ways.

The 9 + 2 band system allows use of two bands of the parametric equalizer to adjust front speakers and nine bands of the graphic equalizer to adjust the rear speakers.

The 11 band system allows use of two bands of the parametric equalizer and nine bands of the graphic equalizer (for a total of 11 bands) to adjust both front and rear speakers.

- **Parametric equalizer (p.6)**

This function allows you to adjust frequencies you have set. You can set a total of two frequencies: one in the 30 Hz to 800 Hz range and one in the 800 Hz to 16 kHz range. Each designated frequency can be adjusted to within - 12 dB to + 12 dB. This function allows you, for the first time, to adjust for the specific acoustic conditions of your car—its live and dead frequencies.

- **Graphic equalizer (p.8)**

Allows level adjustment of nine frequency bands centered around 40 Hz, 120 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz and 16 kHz. Levels can be adjusted between -12 dB and +12 dB.

- **Sub-woofer system (p.9)**

This system controls the output level and cut-off frequency of your sub-woofers.

- **Fader (p.10)**

Allows you to adjust the balance of front and rear speakers.

- **Selectable illumination (p.12)**

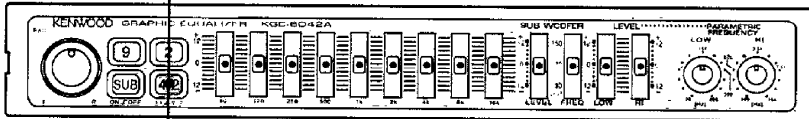
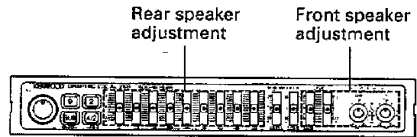
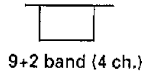
Allows illumination color to be switched between green and orange.

EQUALIZER BAND SYSTEM

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3
E

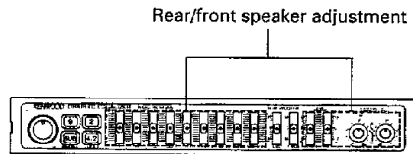
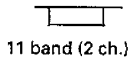
■ To adjust the front and rear speakers separately (4 channel system)

- ▶ Set the 4 ch./2 ch. button to "9 band + 2 band" (4 ch.).
(The front speaker can be adjusted with the parametric equalizer (2 bands) and the rear speaker can be adjusted with the graphic equalizer (9 bands).)



■ To adjust the front and rear speakers together (2 channel system)

- ▶ Set the 4 ch./2 ch. button to "11 band" (2 ch.).
(Both front and rear speakers can be adjusted on a total of 11 bands: 2 bands with the parametric equalizer and 9 bands with the graphic equalizer.)



PARAMETRIC EQUALIZER

TELETYPE

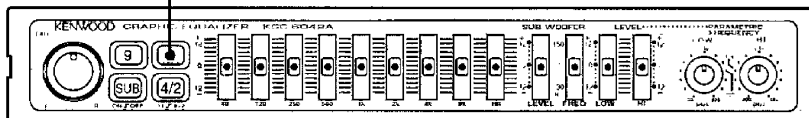
To turn the parametric equalizer ON.

- ▶ Press the Parametric equalizer (2) button.
(The Parametric equalizer level knob will light up, indicating that output sound has been adjusted with the parametric equalizer.)



To turn the parametric equalizer OFF.

- ▶ Press the Parametric equalizer (2) button.
(The Parametric equalizer level knob indicator will go out, indicating that the parametric equalizer has been turned off.)



NOTE

- When both the following conditions apply, the equalizer can only adjust levels within a +8 dB to -4 dB range:
 - The Parametric equalizer (2) button and the Graphic equalizer (9) button are ON.
 - The 4 ch./2 ch. button is set to 11 band (2 ch.).

6 Your new Graphic equalizer

■ Adjusting the high band parametric equalizer (800 Hz to 16 kHz)

1

- ▶ Set the Parametric equalizer frequency knob (HI) to the frequency you want to adjust.

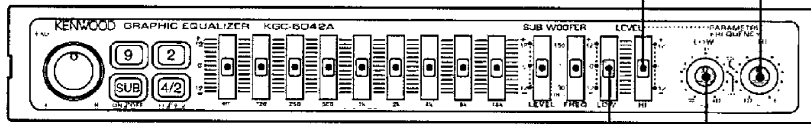
2

To increase level

- ▶ Slide up the Parametric equalizer level knob (HI). (You can increase the level up to +12 dB.)

To lower level

- ▶ Slide down the Parametric equalizer level knob (HI). (You can lower the level down to -12 dB.)



■ Adjusting the low band parametric equalizer (30 Hz to 800 Hz)

1

- ▶ Set the Parametric equalizer frequency knob (LOW) to the frequency you want to adjust.

2

To increase level

- ▶ Slide up the Parametric equalizer level knob (LOW). (You can increase the level up to +12 dB.)

To lower level

- ▶ Slide down the Parametric equalizer level knob (LOW). (You can lower the level down to -12 dB.)

GRAPHIC EQUALIZER

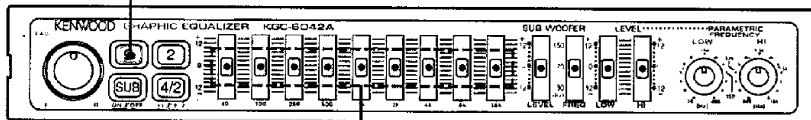
To turn the graphic equalizer ON

- ▶ Press the Graphic equalizer (9) button.
(The Graphic equalizer level knob indicator will light up, indicating that the output sound has been adjusted with the graphic equalizer.)



To turn the graphic equalizer OFF

- ▶ Press the Graphic equalizer (9) button.
(The Graphic equalizer level knob indicator will go out indicating that the graphic equalizer has been turned off.)



Level adjustments

To increase level

- ▶ Slide up the Graphic equalizer level knob for the frequency band you wish to adjust.
(You can increase the level by up to +12 dB.)

To lower level

- ▶ Slide down the Graphic equalizer level knob for the frequency band you wish to adjust.
(You can lower the level by up to -12 dB.)

NOTE

- When both the following conditions apply, the equalizer can only adjust levels within a +8 dB to -4 dB range:
 - The Parametric equalizer (2) button and the Graphic equalizer (9) button are ON.
 - The 4 ch./2 ch. button is set to 11 band (2 ch.).

SUB-WOOFER SYSTEM

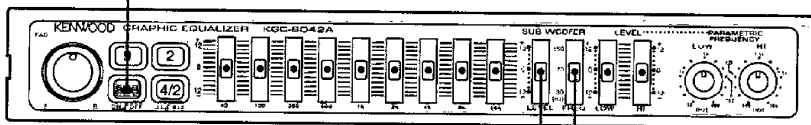
To turn the sub-woofer system ON

► Press the Sub-woofer button.
(The Sub-woofer level knob and the Sub-woofer frequency knob indicators will light up. You will hear sub-woofer output.)



To turn the sub-woofer system OFF

► Press the Sub-woofer button.
(The Sub-woofer level knob and the Sub-woofer frequency knob indicators will go out. Sub-woofer output will cease.)



To change sub-woofer level

To increase the sub-woofer level

► Slide up the Sub-woofer level knob.
(You can increase the sub-woofers' level by up to 10 dB.)

To lower the sub-woofer level

► Slide down the Sub-woofer level knob.
(You can lower the sub-woofers' level infinitely until sub-woofer output is off.)

To change cut-off frequency

To increase the cut-off frequency

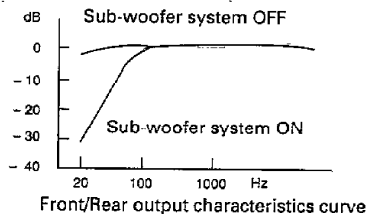
► Slide up the Sub-woofer frequency knob.
(You can increase the cut-off frequency by up to 150 Hz.)

To lower the cut-off frequency

► Slide down the Sub-woofer frequency knob.
(You can lower the cut-off frequency by up to 30 Hz.)

NOTE

- When the sub-woofer system is turned on:
 - Rear speaker output will be cut off at 100 Hz in the "9+2 band" (4 ch.) system.
 - Rear and front speaker output will be cut off at 100 Hz in the "11 band" (2 ch.) system.



FADER

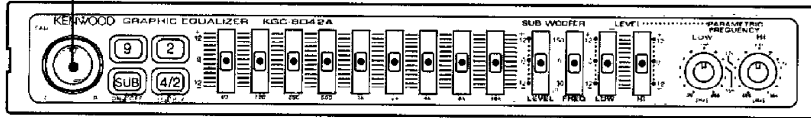
FIG. 5-1

To punch up the front speaker

- ▶ Rotate the fader control knob counterclockwise (to the left).

To punch up the rear speaker

- ▶ Rotate the fader control knob clockwise (to the right).




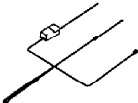





NOTE

- To prevent sub-woofer spillover to front and rear, the fader does not affect sub-woofer output.

ACCESSORIES

Accessories

Part Name	External View	Number of Items
Panel frame		1
Side bracket		2
Bracket		2
Wiring harness		1
Self-tapping screws ($\phi 4 \times 16$)		4
Flat head screw (M4 \times 6)		2
Assembly screw with washer (M4 \times 8)		5

INSTALLATION PROCEDURE

INSTALLATION

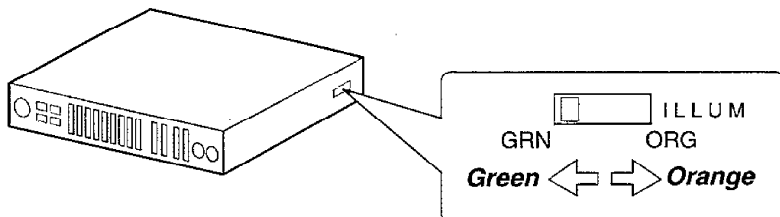
- ① Before starting installation, disconnect the negative (-) terminal of the battery. This will prevent short circuits.
- ② Connect the Input and Output leads (see p.13).
- ③ Connect the Ground lead (Black) to the metal body of the car (see p.13).
- ④ Connect the Power supply lead (Yellow) (see p.13).
- ⑤ Install the unit in the car (see p.14).
- ⑥ Connect the negative (-) terminal of the battery.

▲ CAUTION

- A short circuit may cause a blown fuse. A short circuit is a serious problem that could also cause a fire. Check the wiring carefully and, if any wires are short-circuited, rewire immediately. If no short-circuits are found, replace the fuse with one having the same rating (see indication in fuse box).
- Check that unconnected wires or connectors are in contact with the body of the car. Extraneous noise or current entering the system can cause malfunction or damage.

■ Selectable Illumination

As indicated in the illustration, the Illumination slide switch on the right side of the unit can be used to select either orange or green indicator lights.

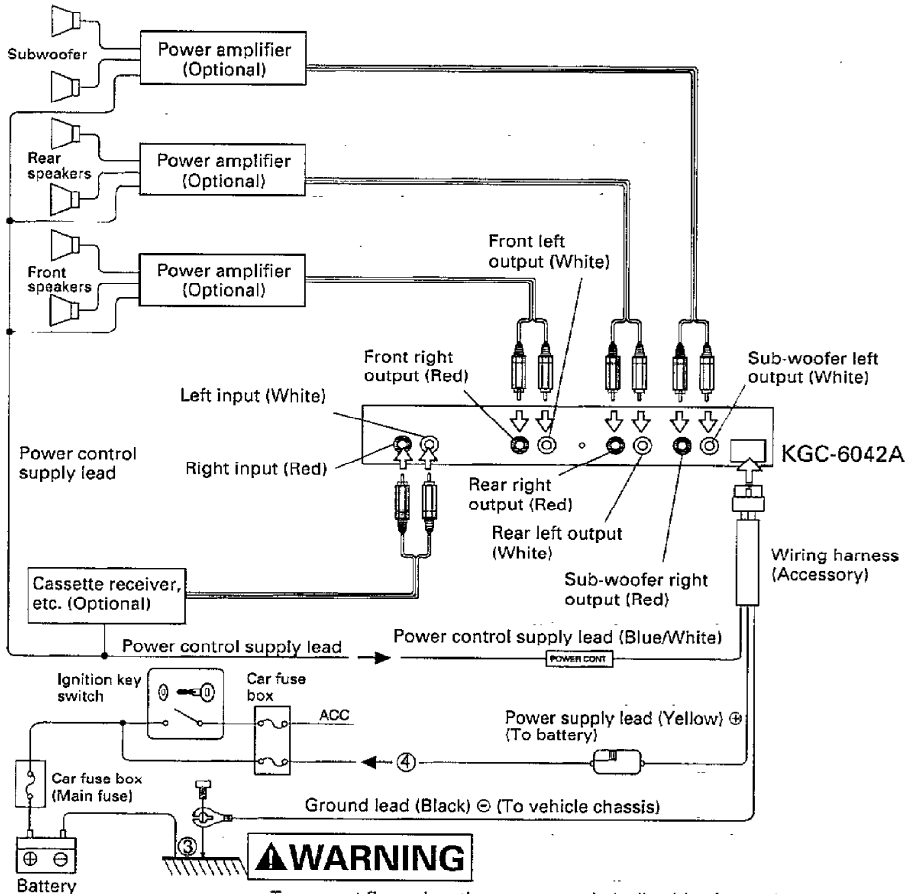


NOTE

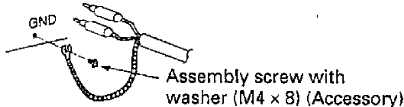
- The color of the front panel knobs cannot be changed.

CONNECTIONS

* Circled numbers indicate the procedures described on page 12.



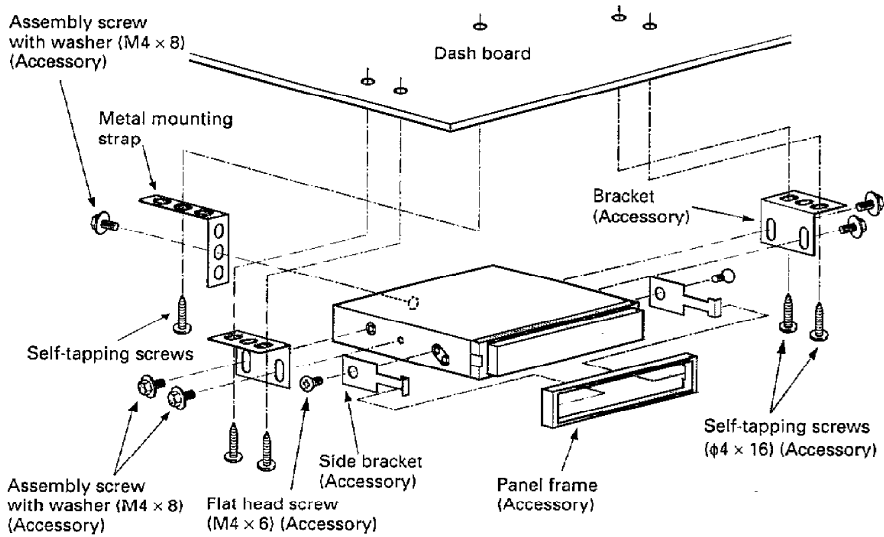
NOTE



- When an optional RCA extension cord is used as a ground wire, attach it to the back of the unit using the Assembly screw with washer (M4 x 8) supplied with it.

INSTALLATION

- Before installation, select a location in which the unit can be operated safely and easily.
- Use only the accessories supplied with the unit.



TROUBLESHOOTING GUIDE

Often, what appears to be a malfunction is due to user error. Before calling for service, please consult the following table.

Symptom	Cause	Remedy
Power cannot be switched ON.	<ol style="list-style-type: none">1. The back up fuse is blown. The fuse on another unit to which the equalizer is connected is blown.2. The equalizer is not connected to the power supply.	<ol style="list-style-type: none">1. After checking for short circuits, replace the blown fuse. Be sure the new fuse has the required capacity.2. Connect the power supply.
Sound is not heard from the front or rear speakers.	The fader is turned fully to front or rear.	Turn the fader control knob to the front/rear balance you prefer.
There is no sound from any speakers.	<ol style="list-style-type: none">1. A speaker, power or preout connection is loose.2. The center unit's prefader control is set to its minimum setting.	<ol style="list-style-type: none">1. Make sure that all connections have been properly made.2. Set the center unit fader to a medium position.
You can't hear low frequencies.	The Sub-woofer system is ON with no sub-woofers installed.	Turn OFF the Sub-woofer system.

SPECIFICATIONS

Specifications subject to change without notice

Equalizer

Equalizer Center Frequencies40 Hz, 120 Hz, 250 Hz, 500 Hz, 1 kHz,
2 kHz, 4 kHz, 8 kHz, 16 kHz
Equalization Range-12 to +12 dB

Sub-Woofers System

Cut-off Frequency30 to 150 Hz (variable)
Output Gain-∞ to +10 dB
Cut-off Slope12 dB/oct.

Parametric Equalizer

Frequencies30 to 800 Hz, 800 Hz to 16 kHz (variable)
Equalization Range-12 to +12 dB

Audio Characteristics

Input Impedance10 k Ω
Output Impedance600 Ω
Signal to Noise Ratio100 dB
T.H.D.0.01%
Frequency Response (-3 dB)20 Hz to 60 kHz
Gain0 dB

General

Operating Voltage14.4 V (11-16 V)
Max. Current Consumption0.2 A
Installed Size178 x 25 x 150 mm
(7 x 1 x 5-7/8 in)
Weight0.8 kg (1.8 lb)

KENWOOD