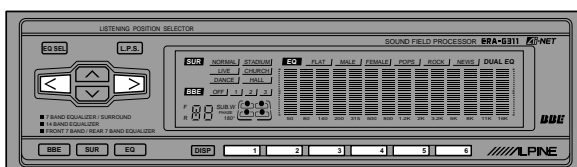# //////ALPINE.®

# ERA-G311

## Sound Field Processor

• OWNER'S MANUAL (page 2- page 35)
Please read this manual to maximize your
enjoyment of the outstanding performance and
feature capabilities of the equipment, then retain
the manual for future reference.

# Precautions

⚠️ **Warning**

This label is intended to alert the user to the presence of important operating instructions.
Failure to heed the instructions will result severe injury or death.

**DO NOT DISASSEMBLE OR ALTER.** Doing so may lead to accident, fire or electric shock.

**KEEP SMALL ARTICLES OUT OF THE REACH OF CHILDREN.** If swallowed, consult a physician immediately.

**USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES.** Failure to do so may result in fire or electric shock.

**HALT USE IMMEDIATELY IF A PROBLEM APPEARS.** When problems occur such as a lack of sound or video, foreign objects inside the unit, smoke coming out, or noxious odors, stop use immediately and contact the dealer where you bought the equipment. Failure to do so may result in an accident or injury.

**DO NOT OPERATE THE EQUIPMENT OR LOOK AT THE SCREEN WHILE DRIVING THE VEHICLE.** Operating the equipment may distract the driver from looking ahead of the vehicle and cause accident. Always stop the vehicle in a safe location before operating this equipment.

**DO NOT RAISE THE VOLUME EXCESSIVELY.** Keep the volume at a level where you can still hear outside noises while driving. Driving while unable to hear outside noises could be the cause of accident.

**DO NOT USE THIS EQUIPMENT FOR PURPOSES OTHER THAN STATED FOR THE VEHICLE.** Failure to do so may result in electric shock or injury.
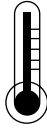
**2**

# Contents

**3**

# Precautions

---

## Temperature
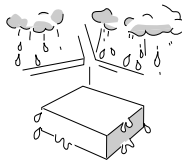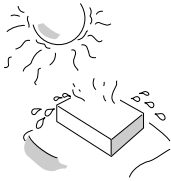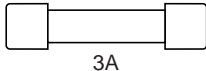
+60°C
−10°C

Be sure the temperature inside the vehicle is between +60°C (+140°F) and −10°C (+14°F) before turning your unit on.

---
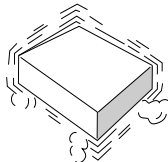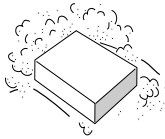
## Installation Location

Make sure the ERA-G311 will not be exposed to:

- Direct sun and heat
- High humidity
- Excessive dust
- Excessive vibrations

---

## Replacing Fuses

3A

Replace the fuse with one with the same amperage (3A).

---

## Maintenance

If you have problems, do not attempt to repair the unit yourself. Return it to your Alpine dealer or the nearest Alpine Service Station for servicing.

---

## Caution

ERA-G311 allows three different modes of system as "1) 7 Band EQ + Surround + LPS + BBE", "2) 14 Band EQ + LPS + BBE" and "3) 7 Band EQ + 7 Band EQ (Dual EQ) + LPS + BBE".
When the mode is changed, all systems should be reset to change the program for DSP. This resetting is made automatically when you push the key of switching mode and cause to clear stored memory of presets.
Not to delete your stored presets, please determine the mode you use and have attention not to switch the mode after making your presets.

---

**4**

# Basic Operation

## Power ON/OFF
The unit is turned OFF/ON from the head unit's Power switch.

## Adjusting Volume/Balance/Fader/Subwoofer
Make each adjustment on the Head Unit.
For PHASE switching, press and hold the Audio Control button on the Head Unit at least **2** seconds.

---

**Note:** Some functions or displays are limited depending on the product used.
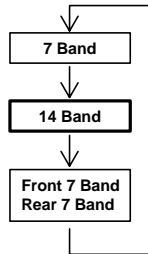If you have any question, consult with the authorized Alpine dealer.

**5**
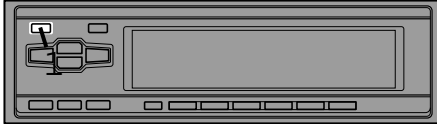
## Band Quantity Switching

**1**

EQ SEL

7 Band
↓
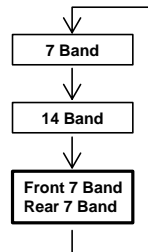14 Band
↓
Front 7 Band
Rear 7 Band

Press and hold the EQ SEL button for at least **4** seconds to switch the equalizer band from 7 to 14 bands.

**Note:** In the 14 band equalizer mode, the surround cannot be used.

## Dual Function

**1**

EQ SEL

7 Band
↓
14 Band
↓
Front 7 Band
Rear 7 Band

Press and hold the EQ SEL button for at least **4** seconds in the 14 band mode to activate the dual mode.
(Front output: 80, 200, 500, 1.2k, 3.2k, 8k, 16 kHz
Rear output: 50, 140, 315, 800, 2k, 5k, 11 kHz)

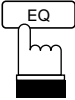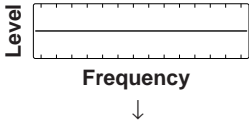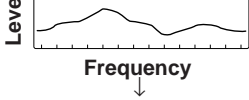**Note:** In the dual equalizer mode, the surround cannot be used.

**6**
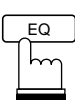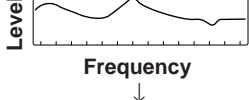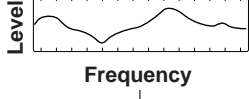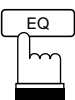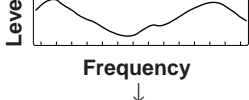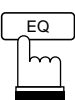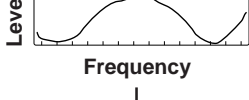
## Equalizer Presets

Six typical equalizer settings are preset at the factory for a variety of musical source material.

**1**

EQ

**Level**

**Frequency**

↓

**Setting 1: FLAT**

Press the EQ (EQUALIZER) button to select the flat frequency response.

**2**

EQ

**Level**

**Frequency**

↓

**Setting 2: MALE (VOCAL)**

Press the EQ button to select the MALE setting.

**3**

EQ

**Level**

**Frequency**

↓

**Setting 3: FEMALE (VOCAL)**

Press the EQ button to select the FEMALE setting.

**4**

EQ

**Level**

**Frequency**

↓

**Setting 4: POPS**

Press the EQ button to select the POPS setting.

**5**

EQ

**Level**

**Frequency**

↓

**Setting 5: ROCK**

Press the EQ button to select the ROCK setting.

**6**

EQ

**Level**

**Frequency**

**Setting 6: NEWS**

Press the EQ button to select the NEWS setting.

**7**

## Adjusting the Equalizer Settings

You can modify the Equalizer settings to create a response curve more appealing to your personal taste.

**1**

EQ

EQ — FLAT

Press the EQ (EQUALIZER) button repeatedly to select the Equalizer setting preset which you wish to adjust. The EQ indicator blinks for 5 seconds.
The example shows FLAT mode.

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

DISP

F
↕
R
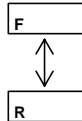
**Dual mode**

While the EQ indicator is blinking, press the DISP button. The EQ mode will toggle between front or rear.

**2**

< >
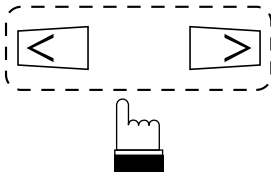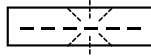
While the EQ indicator is blinking, press the EQ BAND DN ($1$) or UP ($r$) button to select the frequency band to adjust. The BAND indicator of the selected frequency will blink.

**3**
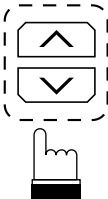
Press the LEVEL DN ($>$) or LEVEL UP ($<$) button while the frequency range is blinking to decrease or increase the level respectively.
Repeat Steps $2$ and $3$ to adjust other frequency ranges.
To adjust other Equalizer settings, repeat Steps $1$ to $3$.

**8**
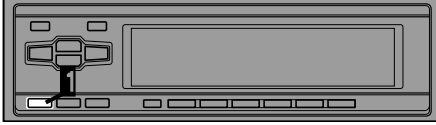
## Selecting BBE Mode

The BBE (Barcus Berry Electronics) processor installed in this unit is designed to correct the phase distortion inherent in most loudspeaker designs. Ensuring the phase integrity of the signal driving the speakers improves the accurate reproduction of the sound. When used in conjunction with the equalizer and sound field effects, optimum sound space enhancement can take place.

**1**

BBE

BBE  1
BBE  2
BBE  3
BBE  OFF
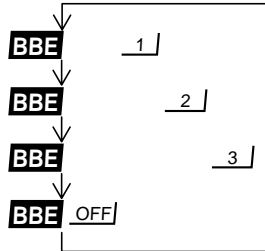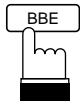
Press the BBE button.
With each press of the button the mode will changed in the sequence: BBE 1, BBE 2, BBE 3, and BBE OFF. The BBE effect is the highest in BBE 1 mode, will be reduced in BBE 2 mode and will have the least effect in BBE 3 mode.

**9**
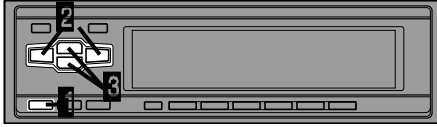
## Creating a Custom BBE Curve

**1**

BBE
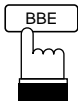
Press the BBE button to select a BBE mode to be adjusted. The BBE indicator will blink for 5 seconds.

**BBE** 1

**2**

**Example:** BBE 1
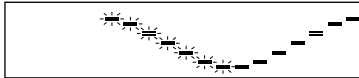
While the BBE indicator is blinking, press the EQ Band up/down ($r$/$l$) buttons to select either the high or low frequency bands to be adjusted.

< >
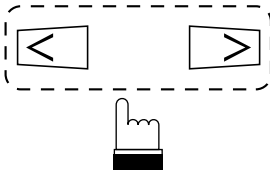
**3**

∧
∨
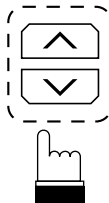
Adjust for desired levels by pressing the level UP/DN (< / >) adjusting buttons while the indicator is blinking.
Adjustments can be made to the other BBE modes by repeating the above procedures for each one you wish to customize.

**10**

### Choosing the Listening Position Selector (L.P.S.)

This feature gives the user the ability to adjust the time delay of the 4 main speakers to provide the ideal sound stage for each listener in the car. The staging can be optimized for the front passenger, driver, front passenger and driver, or front and rear passengers and driver.

**1**

L.P.S.

Press the L.P.S. button repeatedly to select the desired listening position.

The L.P.S. indicator shows the seat position.

All seats
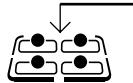
Front seats
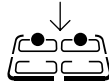
Front left seat
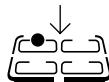
Front right seat

OFF

**11**
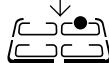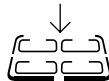
# Equalizer/Surround Operation

## Adjusting L.P.S.

**1**

L.P.S.
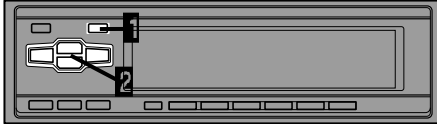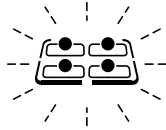
Press the L.P.S. button repeatedly to select the L.P.S. mode you want to adjust.
The L.P.S. indicator will blink for 5 seconds.

**2**
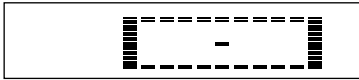
While the L.P.S. indicator is blinking, press the up/down ($<$ , $>$ ) and left/right ($\mathtt{l}$ , $\mathtt{r}$ ) buttons, to fine tune the time correction for the selected position.

**12**
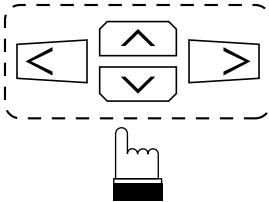
## DSP Surround Presets

The ERA-G311 employs DSP (Digital Signal Processing) to duplicate mathematically various listening environments. Six typical surround settings are provided for a variety of musical source material as follows.

**Note:** If 14-band equalizer is selected, the DSP Surround function can not be used.

**1** SUR
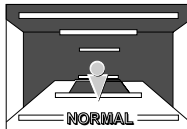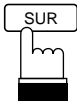
**NORMAL (Flat)**

Press the SUR (SURROUND) button to select the Surround OFF (Flat) mode.

NORMAL

**2** SUR
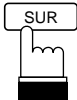
**STADIUM**

Press the SUR button to select the mode which duplicates the acoustics of a large outdoor stadium.

STADIUM

**3** SUR
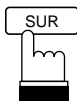
**LIVE**

Press the SUR button to select the mode which duplicates the acoustics of a small, intimate concert hall with few reflections.

LIVE

**4** SUR
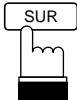
**CHURCH**

Press the SUR button to select the mode which duplicates the acoustics of a large cathedral with high ceilings and many reflections.

CHURCH

**5** SUR
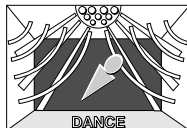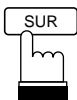
**DANCE**

Press the SUR button to select the mode which duplicates the acoustics of a dance hall with moderate reflections.

DANCE

**6** SUR
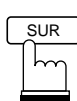
**HALL**

Press the SUR button to select the mode which duplicates the acoustics of a large concert hall with limited reflections.

HALL

**13**

# Equalizer/Surround Operation
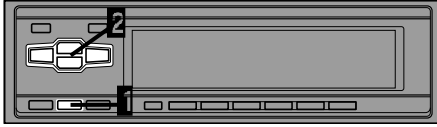
## Adjusting the Surround Settings

You can adjust the Surround settings for your preference.

**1**

SUR    STADIUM
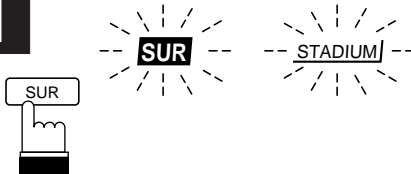
Press the SUR button repeatedly to select the desired surround mode (except NORMAL). The selected surround mode indicator blinks for 5 seconds.

**2**

+4
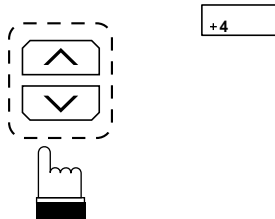
While the surround mode indicator is blinking, press the $>$ or $<$ button to decrease or increase the reverberation level. Adjustments can be made within a range of +4 to –4 steps.
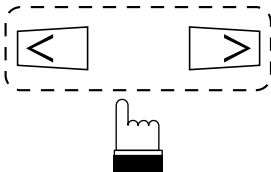
Press the $l$ or $r$ button to adjust the initial reverberation time. Adjustments can be made within a range of +4 to –4 steps.

**14**
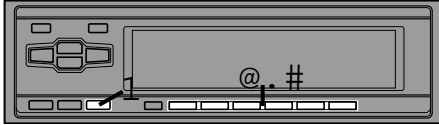
## Memorizing the Equalizer Settings

**1**

EQ
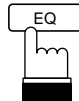
Press the EQ button to select the desired equalizer setting (factory preset or your own) you wish to store in memory.

**2**

- PE --

Press and hold any one of the Memory buttons for at least **2** seconds. The Preset indicators blink for 5 seconds showing the unit is ready for storing.

| 1 | 2 | 3 | 4 | 5 | 6 |

**3**

P1
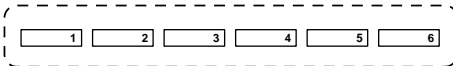
Press the Memory button into which you wish to store the selected equalization setting while the Preset indicators are blinking. Repeat Steps 1 to 3 to store other settings.
The example shows the setting has been stored at the Preset 1.

| 1 | 2 | 3 | 4 | 5 | 6 |
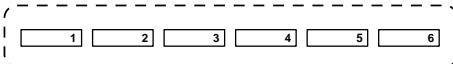
**Notes:**
- **If the band quantity is switched, the memory contents will be cleared.**
- You can store the BBE and Surround settings as well as the Equalizer settings in the Presets.
- To recall the curve memorized, press one of the memory buttons you memorized.

**15**
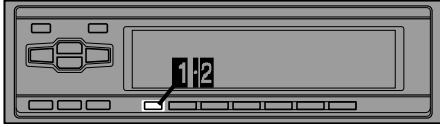
## Switching Display

**1**
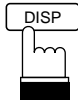
DISP

Press the DISP button to switch the display. Select one of the display patterns you like.

**2**
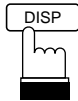
DISP

Press and hold the DISP button for more than **2** seconds. The display will toggle between normal or inverted mode.

**Example**

Normal mode

Reverse mode

**16**

| Pattern | Display | Description |
|---------|---------|-------------|
| 1 | d1 | **EQ Pattern** |
| 2 | d2 | **Spectrum Analizer Pattern** |
| 3 | d3 | **Peak Hold Pattern** |
| 4 | d4 | **Peak Value Increasing  Pattern** |
| 5 | d5 | **"i" Character Pattern** |
| 6 | d6 | **Block Pattern** |
| 7 | d7 | **Mirror Pattern** |
| 8 | d8 | **Spectrum Dual Stack Pattern** |
| 9 |  | **Scan Display** (Repeats endlessly for 5 seconds from Pattern 2 to Pattern 8.) |

**17**

# Remote Control Operation
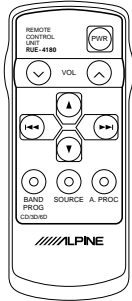


**RUE-4180**
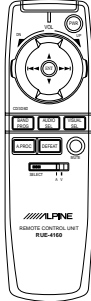
**RUE-4160**

If an Alpine, Ai-Net compatible head unit is connected to the ERA-G311, some or all of the EQs functions can be controlled from the head unit's remote control.

**Notes:**
- The following display examples appear in the Alpine Ai-compatible head unit displays.
- These displays will differ depending upon the Alpine head unit connected.

## Selecting the Factory Preset Equalizer Settings

**1**



A. PROC

A.PROC

**RUE-4180**  **RUE-4160**

Head Unit

EQ

SUR

BBE

Private

LPS

★ T-CORR
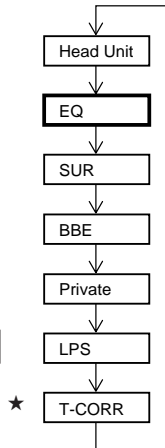
Press the A.PROC button and select the EQ mode. Each press changes the modes as follows:

★: Some functions or displays are limited depending on the Head Unit used.

**2**
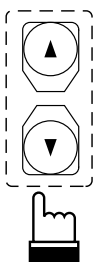


MALE

**RUE-4180**     **RUE-4160**
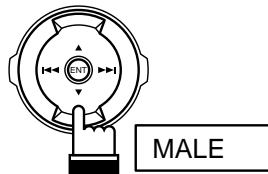
Press the Up ($8$) or Down ($9$) button to select the desired Equalizer mode, "MALE" for example.

**18**

# Remote Control Operation

## Selecting the Factory Preset Surround Modes

**Note:** If 14-band equalizer is selected, the DSP Surround function can not be used.

**1**
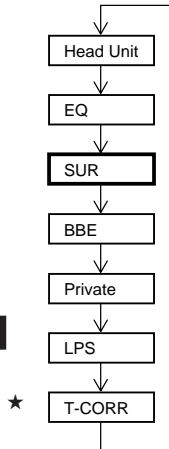
Press the A.PROC button and select the surround mode.

A. PROC

A.PROC

**RUE-4180**     **RUE-4160**

Head Unit

EQ

SUR

BBE

Private

LPS

★  T-CORR

★: Some functions or displays are limited depending on the Head Unit used.

**2**

STADIUM
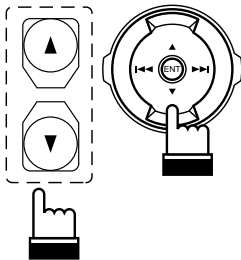
Press the Up ( 8 ) or Down ( 9 ) button to select the desired surround mode.
"STADIUM" for example.

ENT

**RUE-4180**     **RUE-4160**

**19**

## Selecting the BBE Mode

**1**

A. PROC

A.PROC

**RUE-4180**   **RUE-4160**

Head Unit

EQ

SUR

BBE

Private

LPS

★ T-CORR
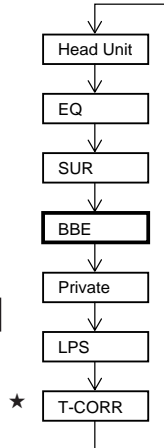
Press the A.PROC (Audio Processor) button to select the BBE mode.

★: Some functions or displays are limited depending on the Head Unit used.

**2**

BBE-1

ENT
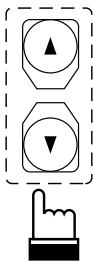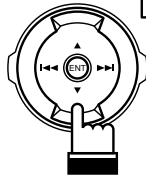
**RUE-4180**   **RUE-4160**

Press the Up (8) or Down (9) button to select the desired BBE mode.

**20**

## Recalling the Stored Equalizer Settings

**1**

Head Unit
EQ
SUR
BBE
Private
LPS
★ T-CORR

**RUE-4180**  **RUE-4160**
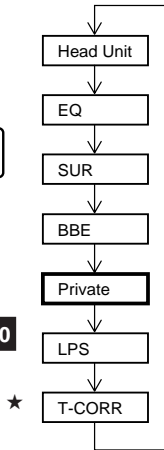
A. PROC

A.PROC

Press the A. PROC button and select the Private mode.

★: Some functions or displays are limited depending on the Head Unit used.

**2**

1 P-MEMO

Press the Up (8) or Down (9) button to select the stored setting from PRESET 1 to PRESET 6.
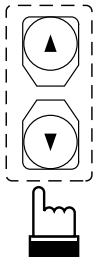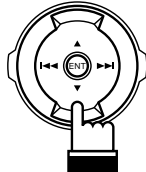
ENT

**RUE-4180**  **RUE-4160**

**21**

# Remote Control Operation

## Choosing the Listening Position Selector (L.P.S.)

**1**

A. PROC

A.PROC

**RUE-4180**   **RUE-4160**

Head Unit

↓

EQ

↓

SUR

↓

BBE

↓

Private

↓

LPS

↓

★   T-CORR
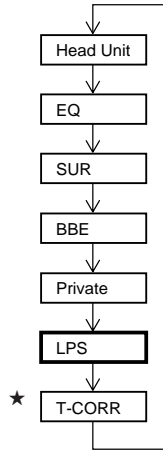
Press the A.PROC button to select the L.P.S. mode.

★: Some functions or displays are limited depending on the Head Unit used.

**2**

LPS  ALL

Press the Up ( 8 ) or Down ( 9 ) button to select the desired listening position.
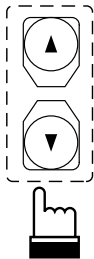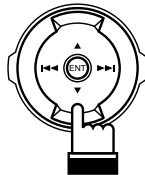
ENT

**RUE-4180**   **RUE-4160**

**22**

# Remote Control Operation

## Turning the Defeat Mode On or Off
## (RUE-4160/RUE-4162 only)

**1**

DEFEAT

Press the DEFEAT button to skip the BBE/Surround circuit and get flat equalizer setting. The display DEFEAT is shown on the Head Unit side.

**2**

DEFEAT

To cancel the DEFEAT mode, press the DEFEAT button a second time.

**23**

# Remote Control Operation

The remote control operations (RUE-4185/RUE-4160/RUE-4162) described in the following sections are applicable to full Ai-NET compatible units only (TDA-7558, etc.).

**Notes:**
- The following display examples appear in the Alpine Ai-compatible head unit displays.
- These displays will differ depending upon the Alpine head unit connected.

## Customizing the Equalizer Settings

**1**

Select the equalizer characteristic to be adjusted. Refer to page 18 "Selecting the Factory Preset Equalizer Settings".

**2**

50   0
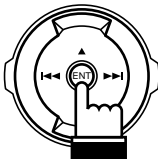
RUE-4160

Press the ENT button to enter the frequency adjustment mode. The first frequency band will be displayed for 5 seconds.

**3**
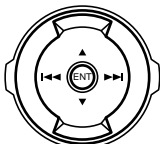
2.0K  0

RUE-4160

While in the frequency adjustment mode, press the c or f button to display the frequency to be adjusted.
Changes to the frequency band selected must be made within 5 seconds, otherwise the unit will return to normal mode.

**4**
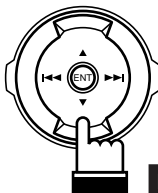
2.0K +6

RUE-4160

While the frequency is still displayed, press the 8 or 9 button to adjust for the desired level. If you want to adjust more, repeat the steps above.

**Note:** In the dual mode, press the BAND/PROG button to switch Front/Rear.

**24**

## Adjusting the Surround Settings

**1**

Select the surround mode to be adjusted. Refer to page 19 "Selecting the Factory Preset Surround Modes".

**2**
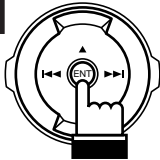
| SR  LEVEL  ±0 |

RUE-4160

Press the ENT button to activate (for 5 seconds) the adjustment mode.

**3**
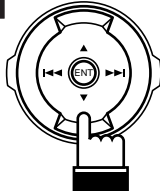
| SR  LEVEL  +3 |

RUE-4160

During the adjustment mode, press the 8 or 9 button to adjust for the desired level.

- - - - - - - - - - - - - - - - - - - - - - - - - - - - -
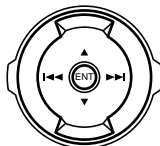
| SR  TIME   −1 |

RUE-4160

Press the c or f  button to adjust the rever-beration time.

**25**

# Remote Control Operation

## Making the BBE by Yourself

**1**

Select the BBE mode you desire to adjust referring to the Page 20 "Selecting the BBE mode".

**2**
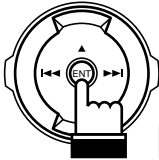
BBE - L  +2

**RUE-4160**

Press the ENT button, and the BBE band will be displayed for 5 seconds.

**3**
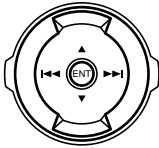
BBE - L  +2

↕

BBE - H  +2

**RUE-4160**

While the BBE band is displayed, press the `c` or `f` button to display the band (L/H) to be adjusted.

**4**
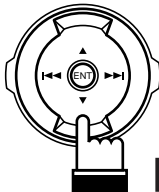
**RUE-4160**

While the band is still displayed, press the Up (`8`) or Down (`9`) button to adjust for the desired level.

**26**

## Storing Custom Equalizer Settings

**1**

Customize the equalizer settings as described on page 24 "Customizing the Equalizer Settings".

**2**

P---٤ MEMORY----

Press and hold the ENT button at least **2** seconds.

RUE-4160

**3**

P--1٤ MEMORY----
↓
P--2٤ MEMORY----
↓
P--3٤ MEMORY----
↓
P--4٤ MEMORY----
↓
P--5٤ MEMORY----
↓
P--6٤ MEMORY----
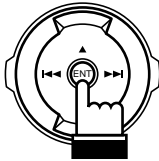
Press the 8 or 9 button to select the curve to be stored from PRESET 1 to PRESET 6.
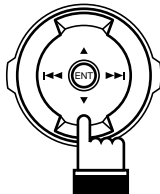
RUE-4160

**4**

P 1٤ MEMORY

Press the ENT button to store the curve. If you want to store more, repeat the steps above.
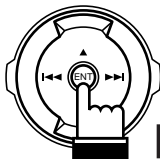
**Note:** Each operation should be made within 5 seconds.

RUE-4160

**27**

## Adjusting L.P.S.

**1**

Select the L.P.S. mode to be adjusted. Refer to page 22 "Choosing the Listening Position Selector (L.P.S.)".

**2**
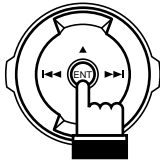
LPS F

RUE-4160

Press the ENT button to activate (for 5 seconds) the L.P.S. adjustment mode.

**3**
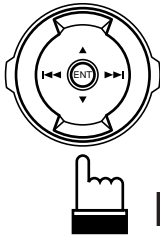
RUE-4160

Press the `8`, `9`, `c` or `f` button to adjust for the desired position.

28

## Adjusting the Time Correction

**Time Correction:**

The distance between the listener and the speakers in a car vary widely due to the special conditions of the mobile environment. This difference in the distances from the speakers to the listener creates a shift in the sounds image and frequency characteristics. This is caused by the time delay between the sound reaching the listener's right versus the left ear.

To correct this, the ERA-G311 is able to delay the audio signal to the speakers closest to the listener. This effectively creates a perception of increased distance for those speakers. The listener can be placed at an equal distance between the left and right speakers for optimum staging.

The adjustment will be made for each speaker in a step of 0.1mS.

**Example 1. Listening Position: Front Left Seat**

Adjust the time correction level of the front left speaker to a high value and the rear right to zero or a low value. (See the Illustration.)

**Example 2. Listening Position: All Seats**

Adjust the time correction level of each speaker to almost the same level. (See the Illustration.)

**Example 2**

Front Right      Rear Right

Front Left       Rear Left

**Example 1**

---

**1**

A.PROC

RUE-4160

Head Unit

EQ

SUR

BBE

Private

LPS
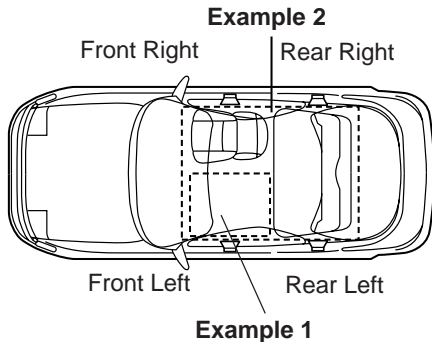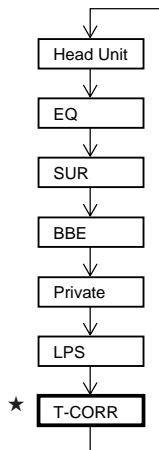
★ T-CORR

Press the A. PROC to activate the mode T-CORR.

★: Some functions or displays are limited depending on the Head Unit used.

**29**

## Adjusting the Time Correction (Continued)

**2**
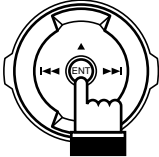
TC  F  L   0.0

**RUE-4160**

Press the ENT button to activate the time correction mode. The time correction value will be displayed for 5 seconds.

**3**

BAND PROG

**RUE-4160**

↓

TC  F  L   0.0

↓

TC  F  R  0.0

↓

TC  R  L  0.0

↓

TC  R  R  0.0

Press the BAND/PROG button to select the channel to be adjusted.

**4**

ENT
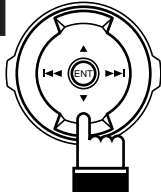
TC  F  R   5.0

**RUE-4160**

Press the 8 or 9 button to adjust the time correction value.
To advance to the next band, repeat the steps 3 and 4 .

**30**

## Storing the Time Correction

**1**

Adjust the time correction value referring to page 29 "Adjusting the Time Correction".

**2**
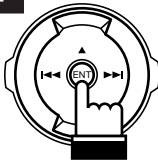
TC̶̶ ̶ MEMORY̶̶̶̶

RUE-4160

Press and hold the ENT button at least **2** seconds.

**3**
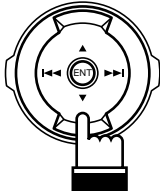
TC̶̶1̶ MEMORY̶̶̶̶
↓
TC̶̶2̶ MEMORY̶̶̶̶
↓
TC̶̶3̶ MEMORY̶̶̶̶
↓
TC̶̶4̶ MEMORY̶̶̶̶
↓
TC̶̶5̶ MEMORY̶̶̶̶
↓
TC̶̶6̶ MEMORY̶̶̶̶

RUE-4160

Press the 8 or 9 button to select the time correction value to be stored from PRESET 1 to PRESET 6.

**4**
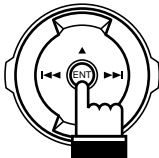
TC 1 MEMORY

RUE-4160

Press the ENT button to store the time correction value.
If you want to store more, repeat the steps above.

**Note:** Each operation should be made within 5 seconds.

**31**

## Recalling the Stored Time Correction

**1**

A.PROC

**RUE-4160**

Head Unit

EQ

SUR

BBE

Private

LPS

★ T-CORR
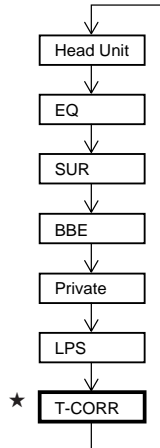
Press the A. PROC button to select the time correction mode.

★: Some functions or displays are limited depending on the Head Unit used.

**2**

TC 1≡ MEMORY

ENT

**RUE-4160**

Press the 8 or 9 button to select the stored time correction from PRESET 1 to PRESET 6.

**32**
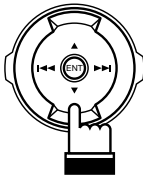
# Remote Control Operation

| Model / Remote Control Operation | | TDA-7638E<br>TDA-7537E<br>TDA-7536E<br>CDA-7939E | CDA-7949E<br>TDA-7558E<br>CVA-1000E | TDA-7664E<br>TDA-7562E<br>TDA-7553E<br>TDA-7551E<br>TDA-7556E/EG<br>TDA-7554E<br>TDA-7552E<br>TDA-7548E<br>TDA-7547E<br>CDA-7846E<br>CDA-7843E<br>3DA-7987E | Remote Control |
|---|---|---|---|---|---|
| Page 18 | Selecting the Factory Preset Equalizer Settings | | | | RUE-4180/RUE-4185<br>RUE-4160/RUE-4162 |
| Page 19 | Selecting the Factory Preset Surround Modes | | | | RUE-4180/RUE-4185<br>RUE-4160/RUE-4162 |
| Page 20 | Selecting the BBE Mode | | | | RUE-4180/RUE-4185<br>RUE-4160/RUE-4162 |
| Page 21 | Recalling the Stored Equalizer Settings | | | | RUE-4180/RUE-4185<br>RUE-4160/RUE-4162 |
| Page 22 | Choosing the Listening Position Selector (L.P.S.) | | | | RUE-4180/RUE-4185<br>RUE-4160/RUE-4162 |
| Page 23 | Turning the Defeat Mode On or Off | | | | RUE-4160/RUE-4162 |
| Page 24 | Customizing the Equalizer Settings — 7 Band Mode | | | | RUE-4185/RUE-4160<br>RUE-4162 |
| | Customizing the Equalizer Settings — 14 Band Mode | | | | RUE-4185/RUE-4160<br>RUE-4162 |
| | Customizing the Equalizer Settings — Dual Mode | | | | RUE-4185/RUE-4160<br>RUE-4162 |
| Page 25 | Adjusting the Surround Settings | | | | RUE-4185/RUE-4160<br>RUE-4162 |
| Page 26 | Making the BBE by Yourself | | | | RUE-4185/RUE-4160<br>RUE-4162 |
| Page 27 | Storing Custom Equalizer Settings | *1 | | | RUE-4185/RUE-4160<br>RUE-4162 |
| Page 28 | Adjusting L.P.S. | | | | RUE-4185/RUE-4160<br>RUE-4162 |
| Page 29 | Adjusting the Time Correction | | | | RUE-4185/RUE-4160<br>RUE-4162 |
| Page 31 | Storing the Time Correction | *1 | | | RUE-4185/RUE-4160<br>RUE-4162 |
| Page 32 | Recalling the Stored Time Correction | | | | RUE-4185/RUE-4160<br>RUE-4162 |

*1: CDA-7939E only

## In Case of Difficulty

If you encounter a problem, please review the items in the following checklist. This guide will help you isolate the problem if the unit is at fault. Otherwise, make sure the rest of your system is properly connected or consult your authorized Alpine dealer.

## Initial Turn-On After Installation

| Symptom | Cause and Solution |
| --- | --- |
| No function or display. | • Car's ignition is off.<br>  – If connected following instructions, the unit will not operate with the car's ignition off.<br><br>• Improper power lead connections.<br>  – Check power lead connections.<br><br>• Blown fuse.<br>  – Check the fuses on the battery leads; replace with the proper value if necessary. |

**34**

# Specifications

Number of Bands ....................................................................................................................... 14

Equalizer Center Frequency Range ..................................................... 50/80/140/200/315/500/800/
1.2k/2k/3.2k/5k/8k/11k/16kHz

Frequency Response (+1, –1 dB) ............................................................................ 20 Hz – 20 kHz

Signal-to-Noise Ratio ......................................................................................................... 100 dBA

Boost/Cut Range ................................................................................................................. ±10 dB

Subwoofer Level Control ................................................................................................. 0 to +15 dB

Input Impedance ........................................................................................................ 10k ohms MIN.

Output Impedance ....................................................................................................... 1k ohm MAX.

Power Requirement ......................................................................... 11 – 16 V DC Negative Ground

Dimensions (W x H x D) ............................................... 178mm (7") x 50mm (2") x 120mm (4-3/4")

Weight ................................................................................................................ 925g (2 lbs. 1 oz)

**Note:** Due to product improvement, specifica-
tions and design are subject to change
without notice.

Free Manuals Download Website

[http://myh66.com](http://myh66.com)

[http://usermanuals.us](http://usermanuals.us)

[http://www.somanuals.com](http://www.somanuals.com)

[http://www.4manuals.cc](http://www.4manuals.cc)

[http://www.manual-lib.com](http://www.manual-lib.com)

[http://www.404manual.com](http://www.404manual.com)

[http://www.luxmanual.com](http://www.luxmanual.com)

[http://aubethermostatmanual.com](http://aubethermostatmanual.com)

Golf course search by state

[http://golfingnear.com](http://golfingnear.com)

Email search by domain

[http://emailbydomain.com](http://emailbydomain.com)

Auto manuals search

[http://auto.somanuals.com](http://auto.somanuals.com)

TV manuals search

[http://tv.somanuals.com](http://tv.somanuals.com)