Powered Subwoofer
S-31W

Operating Instructions
Thank you for buying this PIONEER product. Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

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**IMPORTANT**

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

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**WARNING**

This equipment is not waterproof. To prevent a fire or shock hazard, do not place any container filled with liquid near this equipment (such as a vase or flower pot) or expose it to dripping, splashing, rain or moisture.

**WARNING**

Before plugging in for the first time, read the following section carefully.

The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit will be used meets the required voltage (e.g., 230 V or 120 V) written on the rear panel.

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**VENTILATION CAUTION**

When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 10 cm at top, 10 cm at rear, and 10 cm at each side).

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**WARNING**

Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product, and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered with items (such as newspapers, table-cloths, curtains) or by operating the equipment on thick carpet or a bed.

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**Operating Environment**

Operating environment temperature and humidity: +5 °C to +35 °C (+41 °F to +95 °F); less than 85 %RH (cooling vents not blocked)

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This product is for general household purposes. Any failure due to use for other than household purposes (such as long-term use for business purposes in a restaurant or use in a car or ship) and which requires repair will be charged for even during the warranty period.
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Features
• High Power 160 W (Peak)
• Compact Design and Deep Bass Sound
• Phase Control Technology

Accessory Items
• RCA plug cord (3 m) x 1
• Power cord
• Warranty card
• Operating instructions (this document)

Installation
• The subwoofer cannot be used nearby a CRT-based TV or color monitor. When using this kind of CRT-based TV or color monitor, install the subwoofer away from the display device. Any other device liable to be influenced by magnetism (floppy disk drive, cassette tape recorder, video tape player, etc.) should also be kept at a distance from the subwoofer.
• When moving the subwoofer, avoid touching the bottom surface, since the speaker unit is located there.
• Orient the subwoofer’s front face pointing toward the listening position.
• The subwoofer plays back the bass in monaural, making use of the fact that the human ear is not very sensitive to the direction of low-pitched sound. Because of this, the subwoofer can be installed almost anywhere. If it is installed too far away, however, the sound from the other speakers may become unnatural. The degree of bass effect can be adjusted by moving the unit farther from or closer to the wall.

Installation precautions
• Do not place heavy or large objects on top of the speaker. Doing so could provoke the speaker to fall, causing damages or bodily injury.
• Do not place the speaker on an unstable surface, as doing so may cause the speaker to fall and cause damage or bodily injury.
• Switch off and unplug your AV equipment and consult the instructions when connecting up components. Make sure you use the correct connecting cables.
• Do not sit or stand on the speaker, or let children play on the speaker. Doing so could provoke the speaker to fall, causing damages or bodily injury.
• Install the subwoofer in a well-ventilated location where it will not be exposed to high temperatures and high humidity.
• Do not place the subwoofer near stoves or other heating equipment or at locations exposed to direct sunlight, as these can have an adverse effect on the cabinet and internal components. Also, do not install the unit where there is too much dust or high humidity, as these can cause malfunctioning or breakdowns. (Avoid cooking tables and other locations where the unit would be exposed to heat, steam and soot.)
• Keep the subwoofer away from devices such as cassette decks which are sensitive to magnetic fields.
• Do not place cups, glasses, or other containers with fluids on top of the units, since the units may be damaged if the liquid spills.
• The installation location selected should have a sturdy floor surface. Mounting the subwoofer on a long-pile carpet should be avoided, since the carpet may touch the driver’s diaphragm, causing distorted sound.
• Please install the subwoofer away from the antenna cable of the receiver, as noise can be caused with installation close to the antenna cable. In such a case, use the subwoofer at a position away from the antenna and the antenna cable, or when playback of extra bass is not required, switch off the power for the subwoofer.

Maintenance of external surfaces:
• Clean the surface by wiping with a soft, dry cloth.
• When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
• Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.
Effective Combination of Subwoofer and Satellite Speakers
- When the subwoofer is combined with satellite speakers in a total system, the sound characteristics produced are like those shown in the accompanying graph, depicting the enhancement of the bass frequencies. This is particularly effective for reproducing ground rumbles and other deep sound effects found in movies.

Connections and Use

Panel facilities
Front panel

Rear panel

1 Power Indicator
When the power is turned ON, the indicator changes from flashing to steadily lighted blue. In the standby mode, the indicator lights red.

CAUTION
- The power is still supplied even when the power indicator is off. The power plug (interrupter) must be unplugged in order to completely cut the power supply. When not using this product for long periods of time, such as when traveling, unplug the power cord (interrupter) from the power outlet for safety purposes. Failure to do so could lead to fire.

Important
- The volume knob is factory set at the MIN position.

3 Line Level Input terminal (LINE IN)

4 Auto Standby switch (AUTO STANDBY)
- Turning the Auto Standby function on or off.

Important
- The default setting for AUTO STANDBY switch is ON.

Auto standby function
When there is no (or only very weak) input signal for a period of about ten minutes, the power mode automatically changes to standby (power indicator lights red). The power automatically turns on when a signal is input. The auto standby function is deactivated when AUTO STANDBY switch is set to OFF.

Important
- There may be cases where a connected component outputs noise or some other non-audio signal which causes the subwoofer to automatically power on when in Auto Standby mode. If this happens, switch off the Auto Standby mode and switch the subwoofer on/off manually.

5 Power switch (POWER)
- Switches the subwoofer between ON and OFF.

6 AC IN
- Connect the power cord to a AC socket.
Connection
Before making or changing the connections, switch off the power and disconnect the power cord from the AC outlet.

Line level connection

Connect the subwoofer’s **LINE IN** terminal to the receiver’s **SUBWOOFER PREOUT** terminal using the included RCA plug cord.

- **Important**
  - When connected to the **PREOUT** terminal for surround center channel on the receiver, the bass is heard only on the center channel, so it will be insufficient.

Connecting the power cord

Connect the power cord for the this unit to the unit’s power connector (AC IN), and the other ends to an AC power supply. When turning on the power, turn on the power to the receiver first, then the power to this unit.

- **POWER-CORD CAUTION**
  - Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock.

- **WARNING:**
  - Do not climb or sit on this unit. Be especially careful when children are around. The unit may be damaged, or may fall over causing injury.

Operation
For details regarding operating part functions, refer to Panel facilities on page 4.

1 Turn the POWER switch (5) ON.
   - If the unit’s power cord is connected to a switched AC outlet on the receiver and the switch is left ON, the unit can be turned ON/OFF together with the receiver.
   - If the unit’s power cord cannot be connected to the receiver, turn the power to the receiver ON before turning the power to the unit ON. When turning the power OFF, turn the power to the unit OFF before turning the power to the receiver OFF.
   - Set the cross-over frequency to match that of the speakers actually used.

2 Operate the receiver and adjust the volume of the other speakers.

3 Adjust the volume of the bass with the volume knob (2).
   - Turn the knob slowly from the MIN position.

4 Turn the POWER switch (5) OFF.
   - The power indicator disappears.

   - **CAUTION**
     - Do not use the speaker to output distorted sound for long periods of time. This can result in damages to the speaker and poses a potential fire hazard.
Troubleshooting

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No power is being supplied (Indicator does not light up when POWER switch is turned on)</td>
<td>• Power supply plug is not correctly inserted.</td>
<td>• Insert plug securely.</td>
</tr>
<tr>
<td>No sound (Indicator is lit blue)</td>
<td>• Connection of accessory RCA plug cord is wrong or disconnected.</td>
<td>• Check again and connect correctly.</td>
</tr>
<tr>
<td></td>
<td>• Volume knob is set to MIN.</td>
<td>• Turn clockwise slowly.</td>
</tr>
<tr>
<td></td>
<td>• Input level is too low.</td>
<td>• Raise the receiver’s output level.</td>
</tr>
<tr>
<td>Sound is distorted.</td>
<td>• Level is too high.</td>
<td>• Turn the volume knob counter-clockwise to lower the level.</td>
</tr>
<tr>
<td></td>
<td>• Input level is too high.</td>
<td>• Turn the receiver’s output level (volume, bass control, bass boost) counter-clockwise to lower the level.</td>
</tr>
<tr>
<td>Howling noise occurs.</td>
<td>• No power supplied to the receiver.</td>
<td>• Connect an receiver and supply power.</td>
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<tr>
<td></td>
<td>• Subwoofer level is set too high.</td>
<td>• Place the subwoofer a good distance from speakers. Turn the volume knob counter-clockwise to lower the volume.</td>
</tr>
<tr>
<td>Much noise when listening to AM or FM broadcasts.</td>
<td>• The AM loop antenna or the FM indoor antenna is close to this unit.</td>
<td>• Increase the distance between the AM or FM antenna (for indoor use) and this unit.</td>
</tr>
<tr>
<td>No sound is produced (power indicator lights red.)</td>
<td>• Unit has entered standby mode.</td>
<td>• Turn the Auto Standby function OFF.</td>
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<tr>
<td></td>
<td></td>
<td>– When the Auto Standby function is turned ON, if no signal (or only a very weak signal) is input for a period of about ten minutes, the power mode will automatically change to standby.</td>
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<tr>
<td></td>
<td></td>
<td>– Note that when listening with the volume set to a very low level, the Auto Standby function may operate, switching the unit to the standby mode.</td>
</tr>
<tr>
<td>Initial sounds of a track can’t be heard.</td>
<td>• The audio signal was input when the unit was in the standby mode.</td>
<td></td>
</tr>
</tbody>
</table>
Specifications

Power Amplifier Power Output (Peak) ................................................................. 160 W
Power Amplifier Power Output (RMS) ............................................................... 100 W (100 Hz, 4 Ω, THD 10 %)
Power Amplifier Power Output (FTC) ............................................................... 80 W (35 Hz to 500 Hz, 4 Ω, THD 1 %)
Input (sensitivity at 100 Hz) LINE LEVEL (RCA jack) .................................... 300 mV
Cabinet ................................................................................................................. Bass-reflex, floor type
Speaker .................................................................................................................. 20 cm cone type
Speaker Frequency range ................................................................................. 28 Hz to 1000 Hz
Power Requirements .......................................................................................... AC 110 V to 240 V, 50 Hz/60 Hz
Power Consumption ............................................................................................. 25 W
Power consumption in standby ......................................................................... 0.5 W or less
Outline Dimension ............................................................................................. 344 mm (W) x 362 mm (H) x 356 mm (D)
Weight (without package) ...................................................................................... 10 kg

Important

• Specifications and design subject to possible modification without notice, due to improvements.