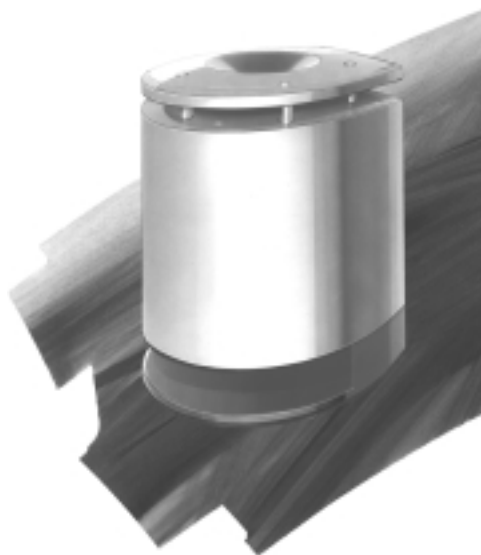


# ECLIPSE *TD*

**SUB WOOFER**

**316  
SW**

## **Owner's Manual**



Thank you for purchasing the 316SW SUB WOOFER.

Please read this Owner's Manual before use.

Be particularly sure to read the Safety Instructions section.

Keep this Owner's Manual together with the Warranty in a safe place for later reference.

# Foreword

## Contents

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## Accessories

SUB WOOFER x 1

Power cable x 1

Owner's Manual x 1

Warranty x 1

**WARNING :** To avoid the danger of suffocation, keep plastic bags out of the reach of children.

\* This product is a sub woofer system which has been designed using time domain theory in order to play back high speed and tight low-pitched sounds.

### 《What is time domain theory?》

Time domain recreates the changes that occur in sound waves over time from the moment of output until their disappearance. Its purpose is to reproduce those sound waves that are as close as possible to the original recorded sound.

Time domain audio systems allow sound orientation and the nuances that are added by recorded performers to be faithfully reproduced.

# Important Safety Instructions



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

## WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

## • Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you 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.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## ATTENTION

POUR EVITER LES CHOC ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

## CAUTION ( for customers who concerned )

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT FULLY INSERT.

### 1. Read instructions

All safety and operating instructions should be read before operating unit.

### 2. Follow instructions

All operating and other instructions should be followed.

### 3. Retain instructions

The safety and operating instructions should be retained for future reference.

### 4. Warnings

All warnings on the unit and in the operating instructions should be adhered to.

### 5. Power supply

Power supply **should be operated only from the power source indicated on the marking label**. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

### 6. General care of unit

Do not open or modify the unit as fire or electric shock may result. Do not place flower vases, potted plants, cups, cosmetics, drugs, containers holding liquids, or small metal objects on or near the unit. Do not place any objects on the unit and do not insert or drop metal, combustible objects or liquids into the unit as such actions can cause fire or electric shock. If liquid or foreign objects enter the unit, disconnect immediately since continued use may result in fire or electric shock. Do not place the unit on tuners, audio decks or other electric equipment. Do not use the unit as a step or seat. The unit may tip over and cause damage or injury. Consult a company customer service facility for interior inspection, adjustment or repair.

**7. Where not to use unit**

Do not use the unit in bathrooms, areas exposed to rain or snow, on the shore, near water or in humid conditions. Do not place the unit in unstable locations, in kitchens, near humidifiers, or in any location with likely exposure to smoke or steam. Do not place the unit in direct sunlight, near heating equipment or close to open flames. Fire, accident or malfunction may result. Do not place the unit in locations exposed to cold air or direct draft. Condensation, leakage current or thermal damage may result. Do not use the unit in dusty or dirty locations. Decreased heat ventilation can cause thermal damage

**8. Unit heat**

The bottom and sides of the unit can heat up during use and should not be touched. Burns may result. Only connect or disconnect speaker cables after the power supply has cooled down.

**9. Moving the unit**

When moving the unit, shut off power to all connected equipment, and disconnect power cords, connectoins cables, speaker cables and other wires. Moving the unit while cable are connected can cause damage to cables, fire or electric shock. The unit is heavy and care should be taken when unpacking, moving or lifting.

Manufacturing also creates sharp areas on the unit; use thorough care in handling.

**10. Power cord**

Only use the power cord supplied and do not bend, twist, modify it for repair, or pin it under the unit. Heavy objects, heat or tension may also damage the power cord and cause fire or electric shock. When disconnecting the power cord from an outlet, do not pull the cord. Pulling on the cord can damage it and cause fire or electric shock. Do not touch the power cord with wet hands. Do not place the power cord near heating equipment and do not use the unit. If the plug fits loosely in an electric outlet or the plug or cord is hot. If the cord is damaged replace it as continued use may result in fire or electric shock.

**11. Unit plug**

Insert the plug into an outlet all the way to its

base. Incomplete insertion can cause heat production, and dust build-up can cause fire. Contact with the prongs of the plug can also cause electric shock. Do not connect the unit to an outlet where the connection is loose even when the plug is inserted all the way to its base. Do not use the unit if the plug is hot. Heat production can cause fire.

If dust or metal accumulates on or near the prongs of the plug, wipe the plug with a dry cloth after disconnection. Continued use may cause fire or electric shock.

**12. Danger signs**

If you notice a strange noise, smoke, unusual odour or other abnormal condition, shut off the unit, disconnect the power cord from the outlet and have the unit inspected. Continued use may result in fire or electric shock.

**13. Electric storms**

During electrical storms disconnect the unit and avoid contact with the antenna and power cord. Lightning can cause fire, electric shock and malfunction.

**14. Internal temperature rise**

To avoid internal temperature rise when installing the unit, leave space between the unit and walls or other equipments. When installed in a rack or similar fixture, leave a 10cm (4") or larger gap on top and at sides since internal temperature rise can result in fire. The unit is provided with ventilation holes to prevent internal temperature rise. Blockage of these holes decreases ventilation and can result in fire. Note the following:

- \* Do not place the unit in a poorly ventilated area
- \* Do not place the unit on carpeting or on bedding
- \* Do not obstruct the ventilation holes
- \* Do not tilt the unit or turn upside down

**15. Extended non-use**

If the unit is likely to be unused for an extended period, shut off power and disconnect from power supply.

**16. Volume Adjustment**

If abnormal noise is produced during play at high volume, reduce the volume level. Distorted sound can cause overheating of speakers and amplifier. Before switching

power supply on, set the amplifier volume to minimum. Sudden, loud noise can cause damage to hearing.

#### **17. Connecting TV/other audio equipment**

When connecting a TV or other audio equipment, always shut off power, read the operating manual for each device and follow the instructions for connection. Use only designated cables.

Use of non-designated cables or extension cables can cause heat production, burns, and fire.

#### **18. Antenna**

An outdoor antenna should be located away from power lines.

#### **19. Maintenance.**

Before undertaking maintenance disconnect from power supply. Have the interior of the unit cleaned approximately once a year by qualified personnel. Accumulated dust inside and long intervals without cleaning can cause fire or malfunction. Before cleaning this product make sure that the power is turned off and the power cord is disconnected from the wall outlet. Clean with a soft cloth. If the product is particularly dirty, moisten the cloth and wring out before use. Complete by wiping with a soft, dry cloth. Do not use liquid solvents such as alcohol or thinner to clean this product, as such chemicals can damage the cabinets.

#### **20. Servicing**

The unit should be serviced by qualified personnel when:

- \* The power-supply cord or plug has been damaged, or
- \* Objects or liquid have entered the unit, or
- \* The unit has been exposed to rain; or
- \* The unit is malfunctioning, or
- \* The unit has been dropped or the cabinet has been damaged.

#### **21. Children**

Use particular care in households where children are present.

#### **22. Temporary Fault**

If this product receives a strong external shock (such as from an impact, static electricity or a power surge due to lightning), or if this product is used incorrectly, it may stop working properly.

In such cases, press the power button to

turn the power off and then back on again, and check if this product is working normally.

# Notes on Use

## **Volume Setting**

Before switching ON minimise the volume.

Sudden, large output can damage the speakers.

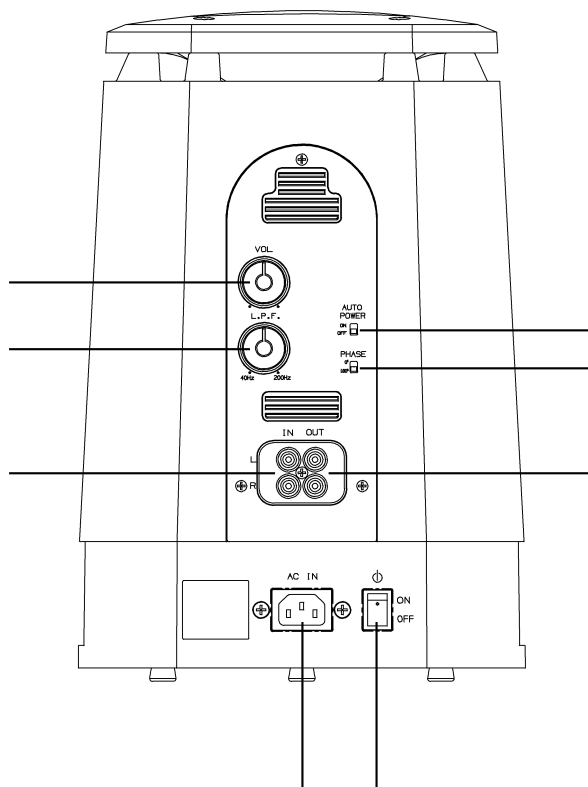
## **Volume Etiquette**

To avoid disturbance in your neighbourhood, enjoy your unit at an appropriate volume.

Remember that at night, even low volume carries into surrounding areas.

Help to maintain a pleasant living environment.

# Part Names and Functions



## Volume adjustment knob

This knob is used to adjust the volume.

## L.P.F. adjustment knob

This knob is used to adjust (cut) high-range frequencies.

The adjustment range is 40--200 Hz.

This knob position is 120Hz in the center.

## Automatic power switch

This switch turns the automatic power function on and off.

When the automatic power switch is ON, the

automatic power function operates and the unit switches to standby mode if no input signal is received during a 5-minute period. (The power indicator will change from blue to red.)

When an input signal is received once more, the power will turn back on automatically.

(The power indicator will change from red to blue.)

If this unit is used for signals at extremely low volumes, set this switch to OFF to prevent incorrect operation.

### **Phase select switch**

This switch is used to select the speaker phase.

The ambience of the sound being listened to may change when the position of this switch is changed.

The effects will change depending on the main speaker combination being used and on the setting-up environment, so listen to the sound being played back and select the switch setting that provides the most natural playback.

When you change a switch, please make volume small for noise prevention.

### **Power switch**

This switch turns the power on and off.

### **LINE IN terminal**

This terminal is used to input signals that are output from the LINE OUT terminal of a sub-woofer (super woofer) of an AV amplifier or directly from an amplifier.

### **LINE OUT terminal**

This terminal outputs the signals that are input to the terminal in 6. above.

It can be used when another unit or 508PA connected to this unit. (The volume adjustment knob of this unit will not work for both units.)

### **Power input terminal**

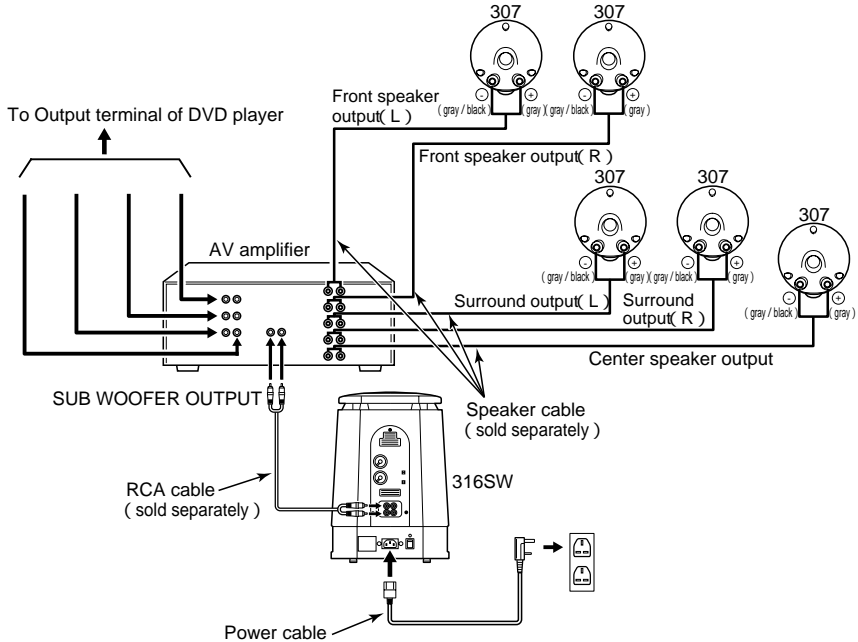
This terminal is used to connect the unit via the attachment power cord to a 230 V household electrical outlet.



# Connection examples

## [ 5.1ch system example ]

### Player+AV amplifier+307+316SW



Please purchase an optional cable in a nearby store.

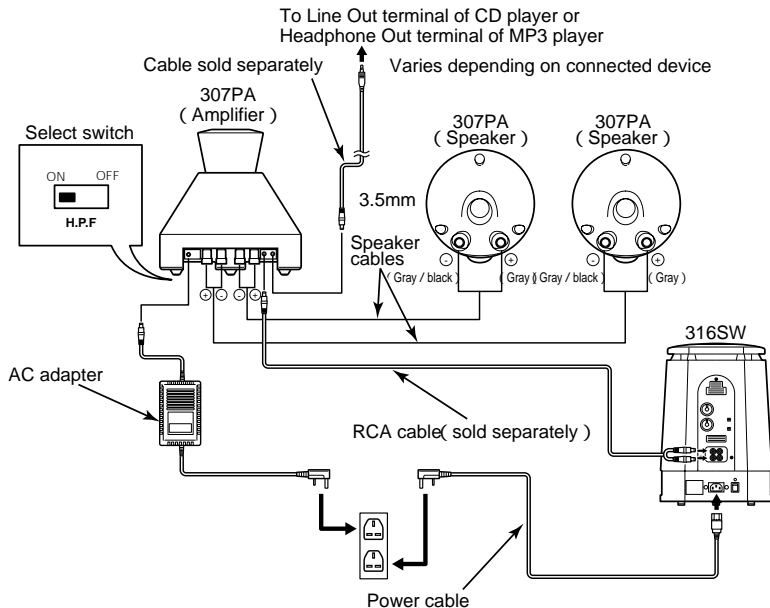
When the sub woofer output of an AV amplifier has only 1ch, please connect one of the terminals to the line in terminal.

Or please connect with both of line in terminals using a branch cable (option).

Please decrease the speaker volume level for connecting a DVD player, an AV amplifier, etc.

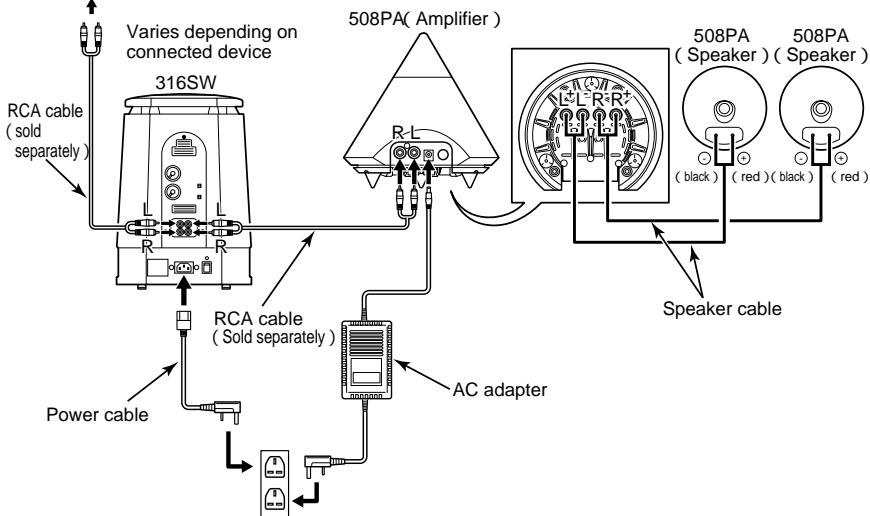
[ 2.1ch system example ]

Player+307PA+316SW



Player+508PA+316SW

To Line Out terminal of CD player or Headphone Out terminal of MP3 player



Please purchase an optional cable in a nearby store.

# Specifications

## Specifications

Specifications and appearance are subject to change without prior notification.

Rated output:	30W+30W (at 6Ω load, T.H.D : 0.2%)
Max. output:	40W+40W ( at 6Ω load)
Total high harmonic distortion:	0.05% (at 15W output, 100Hz)
Frequency characteristics:	40Hz -- 200Hz
Input sensitivity:	40mVrms (at 25W output)
Signal-to-noise ratio:	80dB
Input impedance:	47kΩ
Applicable load impedance:	6Ω
Dimensions:	236mm(W)x301mm(D)x354mm(H) [ 9 <sup>5</sup> / <sub>16</sub> "(W)x11 <sup>7</sup> / <sub>8</sub> "(D)x13 <sup>15</sup> / <sub>16</sub> "(H) ]
Weight:	Approx. 19kg [ 41 <sup>7</sup> / <sub>8</sub> lbs ]
Input voltage:	230V - 240V(50Hz)
Diameter:	16cm [ 6 <sup>5</sup> / <sub>16</sub> " ]
Type:	Bass ref/box
Input resistance:	Rated 30W/Maximum 60W (with box)
Impedance:	6Ωx2

**MEMO**