

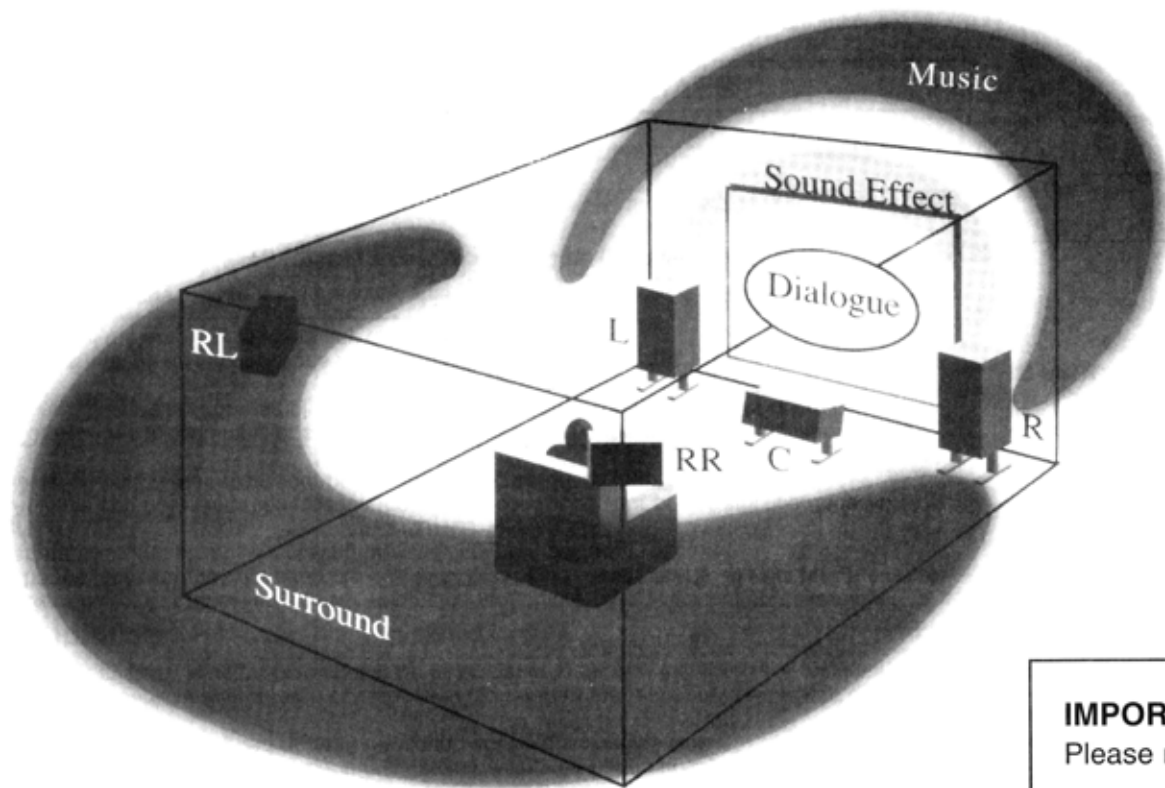


# YAMAHA

## Natural Sound Home Theater Entertainment Speakers

NS-AP16

Thank you for selecting a YAMAHA Speaker System.



### The Yamaha Commitment:

Audio and visual media, when skillfully integrated, have an enormous potential to excite us, to touch our innermost feelings, and to broadly stimulate our imaginations. Yamaha's unvarying commitment is to create Home Theater components that make the entertainment experience more dynamic and meaningful, to not only give you pleasure, but to expand and enrich your life.

Out of the hundreds of loudspeaker manufacturers, Yamaha is the only one that also makes musical instruments. Yamaha audio components and speakers can be found in the homes and recording studios of audiophiles and industry professionals alike. No other company is as intimately involved with the production and reproduction of fine music.

### Owner's Manual

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### IMPORTANT:

Please record the serial numbers of your units in the space below.

Model: \_\_\_\_\_

Serial No. \_\_\_\_\_

The serial number is located on the rear of the unit.

Retain this Owner's Manual in a safe place for future reference.

## CAUTIONS: READ THIS BEFORE OPERATING YOUR UNIT

- In order to maintain the speaker cabinet's finish, prevent it from coming into contact with water vapor, alcohol, benzene, insecticide, etc. To clean, wipe with a dry, soft cloth.
- To prevent the enclosure from warping or discoloring, do not place the speaker in places where it will be exposed to direct sunlight or excessive humidity.
- Do not place the speakers where they are liable to be knocked over or struck by falling objects. Stable placement will also ensure better sound performance.
- Never touch the speakers under the grille cloth with your hands or expose them to excessive shocks. If they are dented or bent, the sound will be distorted as well.
- When an amplifier with a rated output power higher than the recommended power of the speaker system is used, care should be taken never to exceed the speaker's maximum input.
- Lower the power amplifier/receiver volume control before changing input sources. Never change input sources (for example, FM to CD) at high listening levels. Always turn the receiver/amplifier unit off when installing or removing input cables.
- Anytime you note distortion, reduce the volume control on your power amplifier/receiver to a lower setting. Never allow your power amplifier to be driven into "clipping."
- Connections to the amplifier speaker terminals depend on the particular amplifier you are using. Please check the amplifier's owner's manual before making speaker connections.
- Before making any connections to the speaker system or amplifier, make sure to turn off the power of the amplifier to avoid any damage.
- These speakers feature a magnetically shielded design, but there is still a chance that placing them too close to a TV set might impair the picture colors. Should this happen, place the speaker away from the TV set.

## TYPE OF AMPLIFIER / RECEIVER

These Natural Sound Home Theater Entertainment Speakers are designed to compliment any of Yamaha's receivers or amplifiers.

To assure low distortion on program peaks, the amplifier or receiver should be capable of delivering at least 10 watts (continuous sine-wave power) per channel. These speakers can be used safely with amplifiers rated at up to the maximum wattage shown in the specifications table.

Amplifiers rated at higher than the recommended maximum power per channel may be used with care. Program material is not a continuous sine-wave input, and even with a 100 watt amplifier, average levels will remain somewhere between 1/10-watt and 10 watts. If you do use a large amplifier, be careful never to change input sources before reducing the volume level to prevent transients from damaging your speaker.

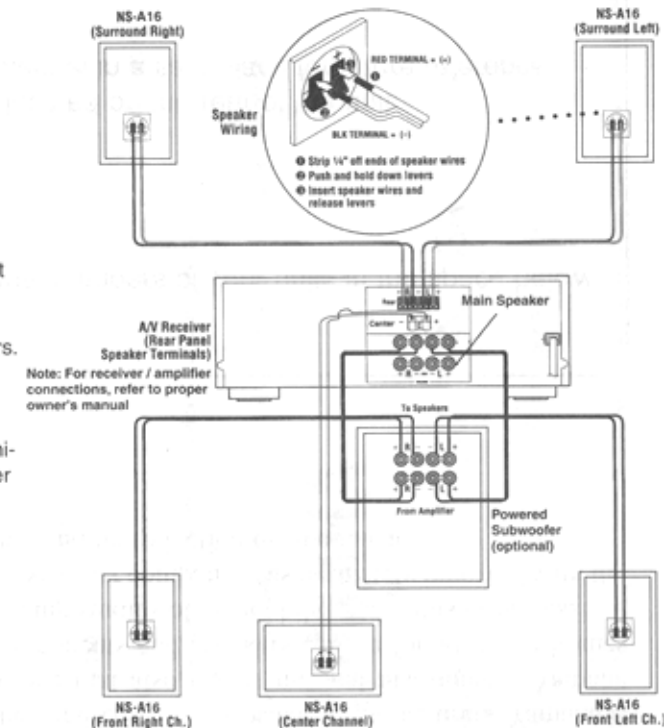
## CONNECTIONS TO THE AMPLIFIER

- Before making connections, make sure that the receiver/amplifier is switched off.

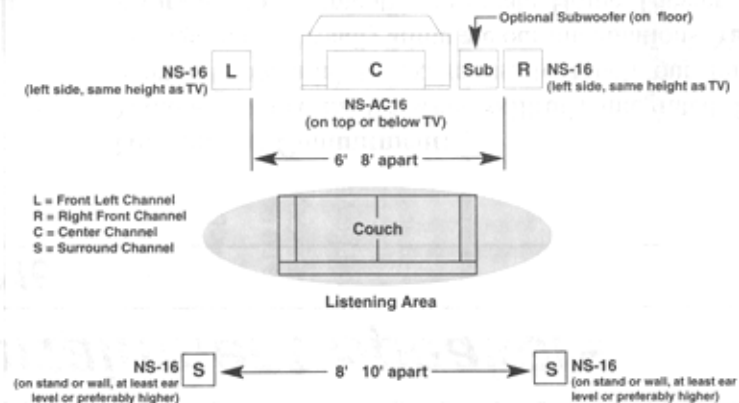
### ■ CONNECTIONS

- Using speaker cable, connect the output terminals of the receiver/amplifier and the input terminal of the speakers.
- Connect the (+) terminals on both receiver/amplifier and speaker. Connect the (-) terminals on both receiver/amplifier and speaker.
- Reversing polarity (+/-) will result in unnatural sound reproduction.

### ■ PROCEDURE



## SPEAKER PLACEMENT



# SPECIFICATIONS: NATURAL SOUND HOME THEATER ENTERTAINMENT SPEAKERS

Model	<i>NS-A16</i>	<i>NS-AC16</i>
<b>Type</b>	2-Way Acoustic Suspension Magnetically Shielded	2-Way Acoustic Suspension Magnetically Shielded
<b>Woofers</b>	5" Paper Cone, A/V Shielded	5" Paper Cone, A/V Shielded
<b>Tweeter</b>	2" Paper Cone	2" Paper Cone
<b>Frequency Response</b>	100 Hz to 20 kHz ( $\pm 3.5$ dB)	100 Hz to 20 kHz ( $\pm 3.5$ dB)
<b>Crossover Frequency</b>	5kHz, (12 dB/Octave)	5kHz, (12 dB/Octave)
<b>Recommended Amplifier Power</b>	Minimum 10 Watts Maximum 80 Watts	Minimum 10 Watts Maximum 80 Watts
<b>Sensitivity</b>	89 dB/W/M	89 dB/W/M
<b>Nominal Impedance</b>	8 Ohms	8 Ohms
<b>Net Weight</b>	4 lbs. 2 oz.	4 lbs. 2 oz.
<b>Accessories</b>	<b>100 FEET OF BULK SPEAKER CABLE</b>	

*Specifications subject to change without notice due to product improvements.*

YAMAHA products are designed and manufactured to provide a high level of trouble-free performance. YAMAHA Electronics Corporation, USA, is proud of the experienced craftsmanship that goes into each and every YAMAHA product. YAMAHA sells its products through a network of high quality, specially authorized dealers and is pleased to offer the following Limited Warranty, which applies only to products purchased from our authorized dealers. YAMAHA products are backed by a nationwide network of high quality YAMAHA authorized Service Centers, providing prompt, courteous, and professional service. We suggest that you read the Limited Warranty thoroughly, and invite you to contact your authorized YAMAHA dealer or the YAMAHA Electronics Corporation, USA, Service Department if you have any questions.



# YAMAHA

## LIMITED WARRANTY

### NATURAL SOUND HOME THEATER ENTERTAINMENT SPEAKER SYSTEMS

#### Duration of Warranty:

Beginning from the date of first consumer purchase, these Natural Sound Home Theater Entertainment Speaker Systems are covered by this warranty for the period of (2) years.

#### What is Covered and What is Not Covered?

This warranty covers all defects in materials or workmanship in this product, but DOES NOT COVER the following:

- (1) Damage, deterioration or malfunction resulting from:
  - a. Accident, negligence, misuse, abuse, improper installation or operation or failure to follow instructions contained in your Owner's manual.
  - b. Any shipment of the product. (Claims must be presented to the carrier).
  - c. Repair or attempted repair by anyone other than Yamaha or an authorized *Preferred Customer* Service Center.
- (2) Any unit which has been altered or on which the serial number has been defaced, modified or removed.
- (3) Normal wear and any periodic maintenance.
- (4) Any unit which has not been purchased from an authorized YAMAHA dealer in the U.S.A. If you are uncertain as to whether a dealer has been authorized by YAMAHA, please contact YAMAHA's Service Department.
- (5) Any unit used for industrial or commercial purposes.

#### Who may enforce the warranty:

This warranty is enforceable only by the original purchaser.

#### What we will pay for and what you must pay for:

YAMAHA will repair or replace units covered by this warranty, without charge to the consumer for labor or materials. YOU ARE RESPONSIBLE FOR ANY INSTALLATION OR REMOVAL CHARGES AND FOR ANY INITIAL SHIPPING CHARGES, if the components must be shipped for warranty service. However, we will pay the return shipping charges to any destination within the U.S.A. if the repairs are covered by the warranty.

#### How you can get Warranty Service:

- (1) If your Loudspeaker requires service, return it to an authorized Yamaha *Preferred Customer* Service Center. If this is not practical, contact the Yamaha Electronics Service Department at the address shown below.
- (2) Loudspeakers shipped for service should be packed securely and must be accompanied by a detailed explanation of the problem(s) requiring service, as well as your sales receipt, as proof of warranty coverage.
- (3) Warranty registration is not required for warranty coverage.

**Limitation of Implied Warranties:**  
ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.

**Exclusion of Damages**  
YAMAHA'S LIABILITY, FOR ANY DEFECTIVE PRODUCT IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT. AT OUR OPTION, YAMAHA SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE OR DAMAGES OF ANY OTHER KIND OR CHARACTER BECAUSE OF PRODUCT DEFECTS.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

For the nearest authorized YAMAHA *Preferred Customer* Service Center please call:  
1-800-4YAMAHA

Should you have any questions about service received or if you need assistance in locating an authorized Yamaha Dealer, please contact:



YAMAHA ELECTRONICS CORPORATION, USA

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WWW.YAMAHALTD.COM

YAMAHA products are backed by a nationwide network of high quality YAMAHA authorized Service Centers, providing prompt, courteous and professional service.