

# NS-AW2W (WHITE)

### Indoor/Outdoor Natural Sound Satellite Speaker System

Thank you for selecting the YAMAHA model NS-AW2W Satellite 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 A/V 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.

#### **KEY FEATURES OF THE NS-AW2W SPEAKER ARE:**

- · Magnetic shielding.
- · Designed to give natural sound performance.
- 2 way acoustic suspension design.
- · Ideal for outdoor use.
- · Utilized as a main speaker or surround / effect speaker.
- · Can be used on a shelf, stand or wall mounted.
- Gold plated 5 way binding posts.
- UV stable polypropylene cabinet w/ aluminum metal grille.

#### **Owner's Manual**

#### CONTENTS

Consumer Precautions	2
Connections To The Amplifier Or Receiver	2
Setting Up The Speakers Indoors / Outdoors	3
Mounting The Speakers	3
Using The Mounting Brackets Included	
Using with YAMAHA ACTIVE SERVO PROCESSING SUBWOOFERS	3
Specifications	
Warranty	4

#### **IMPORTANT:**

Please record the serial number of your unit in the space below.

Model: NS-AW2W

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. Thank you for purchasing the Yamaha Indoor/Outdoor Natural Sound Satellite speakers.

#### **CONSUMER PRECAUTIONS**

Read these precautions carefully before operating your NS-AW2W speakers.

- When installing these speakers outdoors, try to minimize their exposure to rain and snow by mounting the speaker in corners or under eaves.
- Since these speakers are designed to be wall mounted, it is essential that
  they are firmly secured. Be sure to consult a reliable source about the best type
  of hanger for your particular wall's construction. Secure installation is the
  purchaser's responsibility.
- Do not attach them to thin plywood or soft wall surface materials as the screws may tear free, causing the speakers to fall and be damaged, or result in personal injury.
- Do not fasten the speakers to walls with nails, adhesives, or other unsafe hardware. Long-term use and vibrations may cause them to pull free.
- 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.
- Placing the speakers on the same stand or shelf as the turntable can result in feedback.
- This speaker features a magnetically shielded design, but there is still a chance that placing it too close to a TV set might impair picture color. Should this happen, move the speaker away from the TV set.
- Never touch the woofer or tweeter units with your hands or expose them to excessive physical shock. If they are dented or bent, the sound will be distorted.
- 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 tum 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".
- Do not attempt to clean the speakers with chemical solvents as this might damage the finish. To clean, wipe with a dry, soft cloth.

#### CONNECTIONS TO THE AMPLIFIER OR RECEIVER

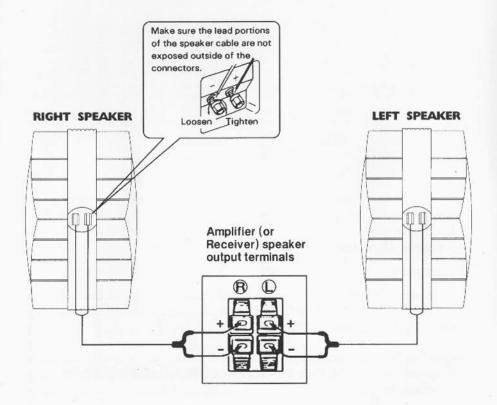
- Check to make sure that the power has been turned off before making connections.
- Connect the (+) terminals on both amplifier and speaker. Connect the (-) terminals on both amplifier and speaker.
- Reversing polarity (+/-) will result in unnatural sound reproduction.

#### **PROCEDURE**

- 1. Loosen the speaker terminals by turning the knobs counterclockwise.
- 2. Insert the lead portions of the speaker cable into the terminal holes.
- 3. Tighten the speaker terminals by turning the knobs clockwise.
- 4. Lightly pull the speaker cable to make sure connections are secure.

**Noted:** Use 16 gauge speaker wire for distances greater than 25 feet. 18 gauge speaker wire is acceptable for distances less than 25 feet.

If you are not certain what type of speaker wire to use, please consult your dealer.

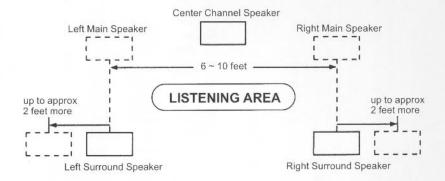


#### **SETTING UP THE SPEAKERS**

#### INDOOR PLACEMENT

This speaker is designed to be used as a main, center, surround or effects speaker:

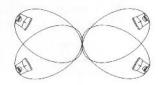
- Main speaker placement should be separated by a distance of 6-10ft. If they are placed too close together, there will be a reduction in the stereo effect. Conversely, If placed too far apart, the so called "middle-omission" effect will occur and the vocal center fill will be lost. Height of the speaker should be at least at ear level.
- Center channel speaker should be placed centered above or below the TV.
- Surround speakers should ideally be placed behind the listening area. At least as far apart as the main speakers and up to 2 additional feet apart per side. The height of the speaker should be at a minimum of ear level or preferably somewhat higher.



#### **OUTDOOR PLACEMENT**

Your speaker system has water-resistant enclosures that protect the speakers from the elements when mounted outdoors. These speakers are designed with a wide dispersion pattern which means you will get good sound quality over a large listening area. (100 ft² to approximately 400 ft²). Please note: If the listening area is too large, and the speakers are positioned too far apart, "middle-omission" effect (lack of sound in an area between the speakers) will occur and / or "hot spots" (loud sound near the speaker) will develop.

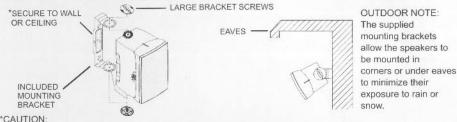
Try to place the speakers between 6'~10' apart for good stereo listening. It is suggested for larger areas (over 400 ft² to about 600 ft²) two pairs of speakers should be used, see below.



NOTE: 1 pair of speakers should be used for every 200-400 ft<sup>2</sup>

#### MOUNTING THE SPEAKERS

The speakers can be placed on a bookshelf, wall/ceiling mounted with optional speaker brackets using 1/4x20 screws to fasten the optional bracket into the threaded inserted inserts located on the back of the speakers, or mounted using the supplied mounting brackets. (see below)



Be sure to consult a reliable source about the best type of fasteners for your particular wall / ceiling construction. Secure installation is the purchaser's responsibility.

#### **USING THE MOUNTING BRACKETS INCLUDED**

- Use the bracket as a template mark the locations of the key hole slots on the mounting area.
- Next, using appropriate hardware (not included) securely fasten the bracket to the wall/ceiling.
- 3. Position the speaker in the bracket and secure the speaker by using the two large bracket screws included. (see above)

## USING WITH YAMAHA ACTIVE SERVO PROCESSING SUBWOOFERS – TRI-SOUND SYSTEM

Yamaha offers powered subwoofers for making a three-piece satellite-subwoofer system.

These subwoofers have built-in amplifiers, and they have individual adjustments for volume and high frequency cut.

By combining a subwoofer with these satellite speakers you can enjoy a more dynamic sound.

Please refer to your subwoofer owner's manual for proper connection method.

#### **SPECIFICATIONS**

Model	NS-AW2W
Type	2 Way Acoustic Suspension
Speaker Woofer	61/2" High Compliance Glass Fiber Cloth
Tweeter	1" Pure Titanium dome
Frequency Response	80Hz to 20kHz (-10dB)
Impedance	8 Ohms
Nominal Input	60 watts
Maximum input	170 watts
Sensitivity (dB/2.83V,1m)	87 dB
Crossover Frequency	2500 Hz
Dimension (H x W x D)	10 %"x 7 %"x 7 %"
	7 Lb (4 oz)
Finish	
Magnetic Shielding	

<sup>\*</sup>Specification 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.



# LIMITED WARRANTY INDOOR / OUTDOOR NATURAL SOUND SATELLITE SPEAKER SYSTEM

#### **Duration of Warranty:**

This Speaker System is covered by this warranty for a period of two (2) years beginning from the date of first consumer purchase.

#### 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 Yamaha 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) YAMAHA Speaker Systems requiring service must be delivered to any authorized YAMAHA Service Center for Home Audio Products within the fifty states of the U.S.A., the District of Columbia or Puerto Rico. Warranty service is not available at any other location outside the U.S.A.
- (2) Units shipped for service should be packed securely and must be accompanied by a detailed explanation of the problem(s) requiring service and Bill of Sale as proof of Warranaty 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 DAMAGES 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:

#### 1-800-4-YAMAHA

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



#### YAMAHA ELECTRONICS CORPORATION, USA

6660 ORANGETHORPE AVE., BUENA PARK, CA 90620 • MAIL ADDRESS: P.O. BOX 6660, BUENA PARK, CA 90622 YAMAHA Website Address-http://www.yamaha.com Phone:(714)522-9105

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

P/N 430010 Printed in Taiwan