



NS-AP1500

HOME CINEMA SPEAKER PACKAGE

COMPONENTS OF THE PACKAGE

The speaker package "NS-AP1500" is designed for use in multi-channel Audio systems, such as a home theater system. The package includes a center speaker (NS-AP1500C), and five rear speakers (NS-AP1500S).

CONTENTS

Consumer Precautions	1
Connections to an Amplifier or Receiver	1
Using with Yamaha Active Servo Processing Subwoofers	1
Setting up the Speakers	2
Speaker Placement	2
Specifications	2



YAMAHA ELECTRONICS CORPORATION, USA
 6660 ORANGETHORPE AVE.
 BUENA PARK, CA 90620
<http://www.yamaha.com/yec>
 Phone: 1-800-492-6242

CONSUMER PRECAUTIONS

Read these precautions carefully before operating your NS-AP1500 speakers.

- Since these speakers can 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 a turntable can result in feedback.
- This speaker features 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 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".
- Do not attempt to clean the speakers with chemical solvents as this might damage the finish. To clean wipe with a dry, soft cloth.
- To prevent the enclosure from warping or discoloring, do not place the speakers where they will be exposed to direct sunlight or excessive humidity.
- **YAMAHA shall not be liable for any accident, caused by improper placement or installation of speakers.**

USING WITH YAMAHA ACTIVE SERVO PROCESSING SUBWOOFERS

This YAMAHA speaker is designed to give excellent balanced sound performance on all channels of a Dolby DIGITAL™ or DTS™ surround system. Since surround systems often contain a lot of very low frequency sounds, we suggest using these speakers in conjunction with one or more powered subwoofers to get the maximum performance from your sound system.

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

CONNECTIONS TO THE AMPLIFIER OR RECEIVER

To assure low distortion on program peaks, your amplifier or receiver should be capable of delivering at least 10 watts RMS (continuous sine-wave power) per channel. This speaker can be used safely with amplifiers rated at up to 30 watts RMS per channel.

Amplifiers rated at higher than 30 watts RMS (continuous sine-wave power) per channel must be used with care.

CONNECTIONS

- Check to make sure that the power has been turned off before making connections.
- Connect the (+) terminal of the amplifier to the (+) terminal of the Speaker.
- Connect the (-) terminal of the amplifier to the (-) terminal of the Speaker.
- Reversing polarity (+/-) will result in unnatural sound reproduction.

PROCEDURE

For connections, keep the speaker cords as short as possible. Do not bundle or roll up the excess part of the cords. If the connections are faulty, no sound will be heard from the speaker. Make sure that the + and - polarity markings of the speaker cords are observed and set correctly. If these cords are reversed, the sound will be unnatural and lack bass.

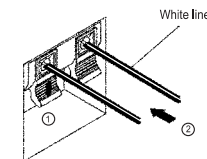
Main/center/rear speakers

One side of the provided speaker cord has a white line and the other side has no line.

Connect the (+) terminals on both the speaker and the amplifier using the side with a white line.

Connect the (-) terminals on both components using the side with no line.

Red: positive(+)
Black: negative(-)

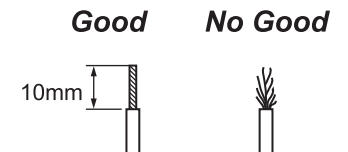


How to Connect:

① Press and hold the terminal's tab, as shown the figure.

② Insert the bare wire end properly in to the terminal hole.

[Remove approx. 10mm(3/8") insulation from the speaker cord.]



③ Release your finger from the tab to allow it to lock securely on the cord's wire end.

④ Test the firmness of the connection by pulling lightly on the cord at the terminal.

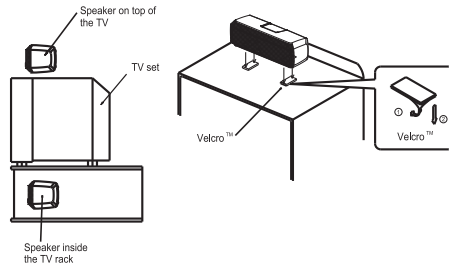
Notes

Do not let the bare speaker wires touch each other as this could damage the speaker and / or amplifier.

SETTING UP THE SPEAKERS

Mounting the center speaker

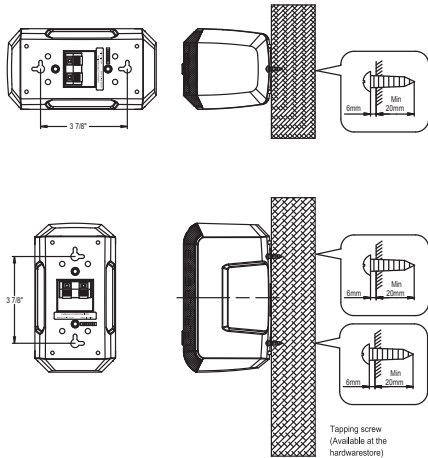
Place the center speaker on top of the TV, on the floor under the TV or inside the TV rack so that it is stable. When placing the speaker on top of the TV, inside of the Rack or on top of the TV Stand horizontally or vertically, put the provided Velcro strips at two points on both the bottom of the speaker and top of the TV, to prevent the speaker from falling.



Notes

- Do not place the speaker on top of the TV. If the area is smaller than the bottom area of the speaker, the speaker may fall and cause personal injury.
- Though this speaker is magnetically shielded, there may be some influence on a TV picture depending on the type of TV or the placement of the speaker. In such a case, move the speaker away from the TV so that there is no influence on the picture.

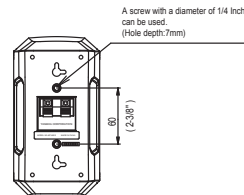
Mounting the rear speaker



Fasten screws into a film wall or wall support as shown in the figure, and hang the holes of the mounting bracket on the protruding screws.

- ★ Make sure that the screws are securely caught by the narrow sections of the "key hole" opening. Main and rear speakers can be mounted horizontally or vertically.

You can also use the screw holes on the rear of the speaker for installing the speakers on commercially available speaker brackets.



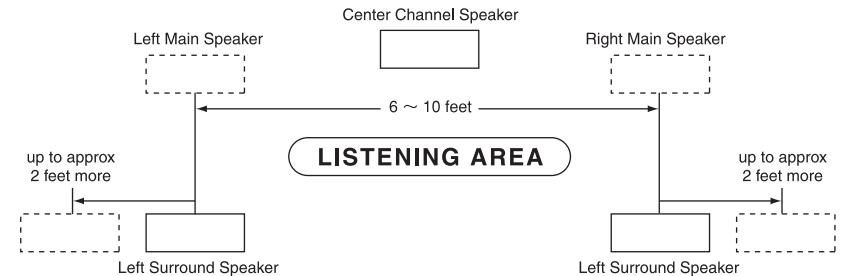
WARNING

- Each speaker weight 4.41 lbs (2.0 kg). Do not mount them on thin plywood or a wall with soft surface material. If mounted, the screw may come out of the flimsy surface and the speakers may fall. This can damage the speakers or causes personal injury.
- Do not install the speakers to a wall with nails, adhesives, or any other unstable hardware.
- To avoid accidents resulting from tripping over loose speaker cords, fix them to the wall.
- Secure installation is the purchaser's responsibility.**
- When using speaker bracket to mount the speakers on a wall or ceiling, it is strongly recommended that safety wire, which may be included the bracket, be used between the speaker and the bracket to prevent the speaker from falling.

SPEAKER PLACEMENT

These speakers are designed to be used as a main, center, surround or effects speakers;

- Main speakers** placement should be separated by a distance of 6-10ft. If 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 these speaker should be at, or near ear level.
- Center channel speakers** 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.



SPECIFICATIONS

Model	NS-AP1500
Center Speaker	NS-AP1500C
Type	1-way Acoustic Suspension
Speaker	Dual 2 1/2" Pulp cone and Cloth surround
Frequency Range	100Hz - 20kHz (-10dB)
Impedance	6 ohms
Nominal Input	30w
Maximum Input	100w
Sensitivity(dB/2.83, 1m)	83dB
Dimension(HxWxD)	3-5/8"x 11-13/16"x4(92x300x102mm)
Weight	2.64lbs(1.2kg)
Magnetic Shielding	Yes
Satellite Speaker	NS-AP1500S
Type	1-way Acoustic Suspension
Speaker	2 1/2" Pulp cone and Cloth surround
Frequency Range	100Hz - 20kHz (-10dB)
Impedance	6 ohms
Nominal Input	30w
Maximum Input	100w
Sensitivity (dB/2.83, 1m)	79dB
Dimension (HxWxD)	6-11/16"x 3-5/8"x4(170x92x102mm)
Weight	1.54lbs(0.7kg)
Magnetic Shielding	Yes
Accessories	100' Bulk Speaker Wire 3/8"x3/32" Rubber foot 16pcs 1-17/32"x2" Velcro™ 2pcs

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