

YAMAHA NATURAL SOUND SPEAKER SYSTEM

CENTER NS-625·645

OWNER'S MANUAL

Before using your new Natural Sound speakers, please read this owner's manual carefully, to avoid any errors which could result in irreparable damage.

Location

Select a location at least several inches away from the floor, - a stable base or shelf is best. If the units are placed near adjacent room surfaces, such as on a wall near the floor or ceiling, bass response will be augmented. If the speaker is near a wall which has sharp resonance, better performance will result when the wall has a curtain, etc.

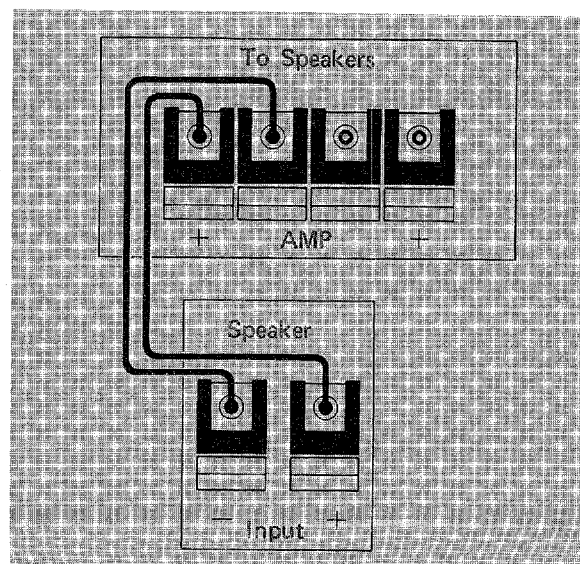
Surfaces such as glass should be avoided. The cabinet can be placed either upright or horizontal, but remember that the best effect is achieved when both speakers are level with the listener's ears.

If the speaker(S) are on the same shelf or base as a record player, etc., howling may occur. In this case, a different location must be found. Do not expose the speakers to direct sunlight or excessive heat.

Connection

Connect each Input terminal on the rear of the speaker cabinet with the appropriate speaker terminal of the amplifier. Use a good quality vinyl-covered lamp cord.

Connect the left speaker to the left (L) amplifier terminals, and the right speaker to the (R) terminals. Use different colored or differently marked connector cords for (+) and (-) terminals, to make sure they are connected the same way for both left and right speakers. Otherwise an out-of-phase signal will be produced, seriously affecting stereo performance and bass response. To help in connecting with proper plus-minus polarity the NS speaker terminals are color coded (red for +, black for -). They are also convenient push-button types - simply press the lever, insert the end of the cord (with the vinyl cover stripped away) into the hole and then release the lever.



Selecting an Amplifier

If you are building a stereo system and want to make sure the amplifier and speakers are well suited to each other, keep the following points in mind.

These speakers have excellent power-handling characteristics (maximum input, NS-645: 50W, NS-625: 40W). To make the most of the outstanding performance characteristics, they should be used with an amplifier with at least 20W output power.

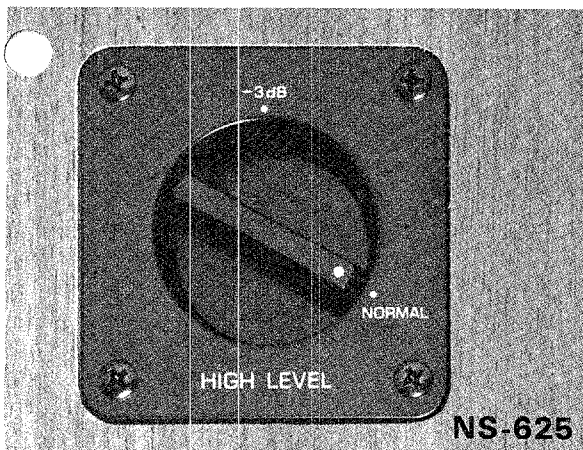
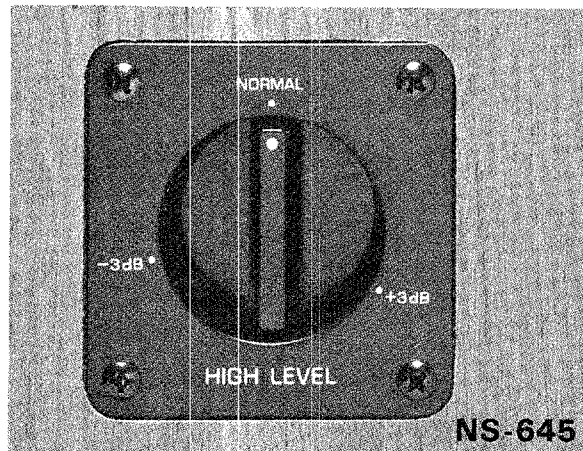
Nominal impedance of the NS-625 and NS-645 is 4Ω. If you are using a transistor amplifier, the speakers can be connected directly without worrying about the impedance. If you are using a tube-type amplifier, however, you must make sure that you connect to only special 4Ω terminals; 8Ω terminals must not be used.

Level Controls

Remove the front grille to expose the level control (in the upper right hand corner). This control should be set according to room acoustic conditions, the type of cartridge used, and amplifier performance characteristics.

Settings: NS-625: +3dB~Normal~-3dB

NS-645: Normal~-3dB



SPECIFICATIONS (DIN Standard)

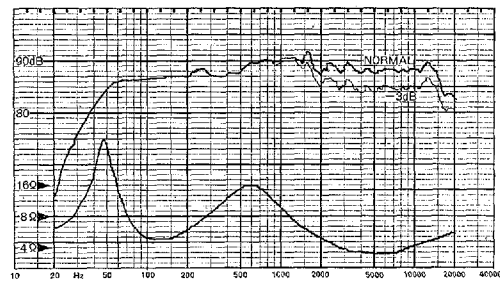
| | NS-645 | NS-625 |
|---|---------------------------------------|-------------------------------------|
| Frequency response | 40-20,000Hz | 45-20,000Hz |
| Power handling capacity | 50W | 40W |
| Nominal Impedance | 4Ω | 4Ω |
| Woofers | 250mmφ cone (JA-2502) | 200mmφ cone (JA-2056) |
| Tweeter | 45mmφ soft dome (JA-0510) | 45mmφ soft dome (JA-0510) |
| Crossover frequency | 2,000Hz | 2,000Hz |
| Fundamental resonance frequency (f_0) | 45Hz | 50Hz |
| Operating power* | 6.3W | 10W |
| Dimensions (H×W×D) | 540mm×300mm×259mm (21½"×11¾"×10¼") | 500mm×280mm×249mm (19¾"×11"×9¾") |
| Weight | 14.6kg (32.1 lbs.) [±] | 11.6kg (25.5 lbs.) |

*Input electrical power required to obtain 96dB sound pressure level at 1 meter according to DIN 45500.

Specifications subject to change without notice.

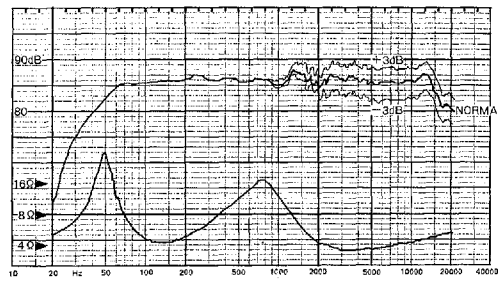
NS-645

FREQUENCY RESPONSE WITH LEVEL CONTROL SET TO: NORMAL -3dB
INPUT: 1W DISTANCE: 1m
IMPEDANCE CHARACTERISTIC



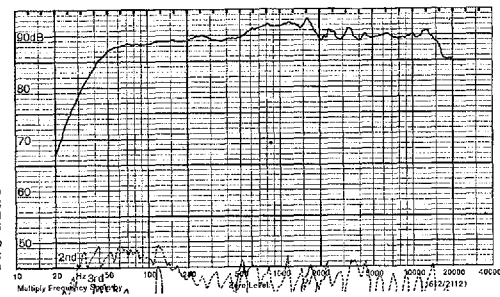
NS-625

FREQUENCY RESPONSE WITH LEVEL CONTROL SET TO: NORMAL -3dB
INPUT: 1W DISTANCE: 1m
IMPEDANCE CHARACTERISTIC



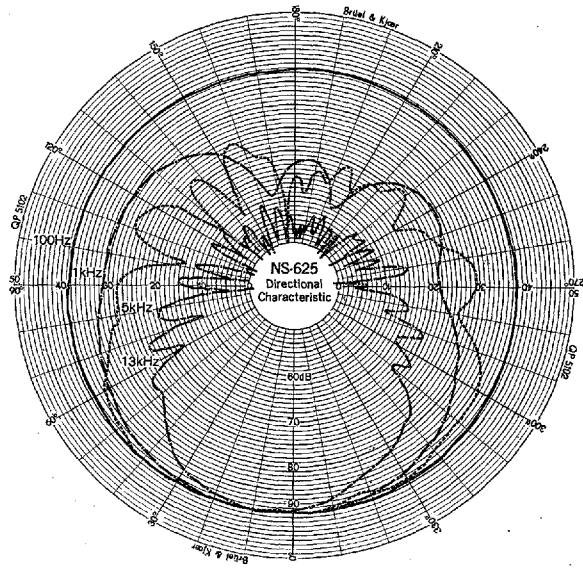
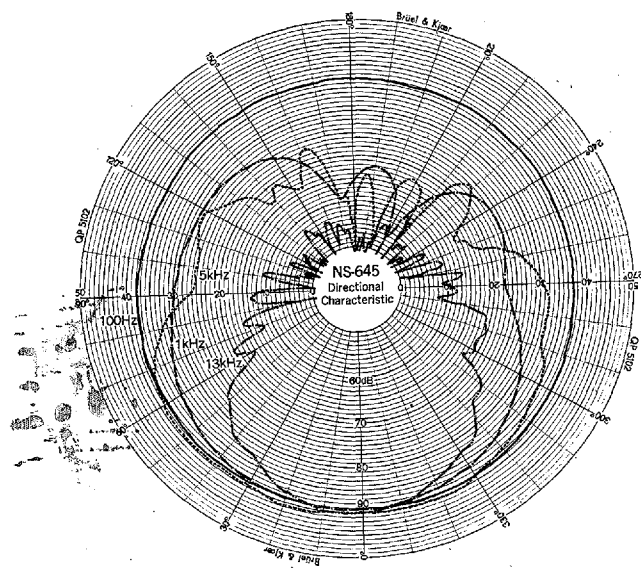
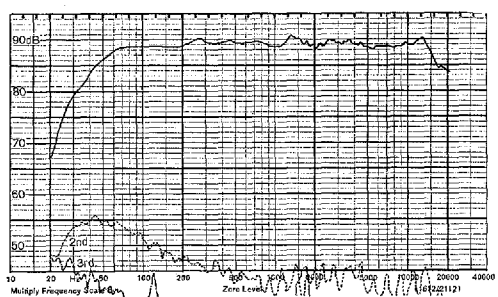
NS-645

2ND & 3RD HARMONIC DISTORTION CHARACTERISTICS
OUTPUT SOUND PRESSURE LEVEL: 90dB/m



NS-625

2ND & 3RD HARMONIC DISTORTION CHARACTERISTICS
OUTPUT SOUND PRESSURE LEVEL: 90dB/m



SINCE 1887



YAMAHA

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SOM-2

3710 NS-625,645 H.S. Printed in Japan