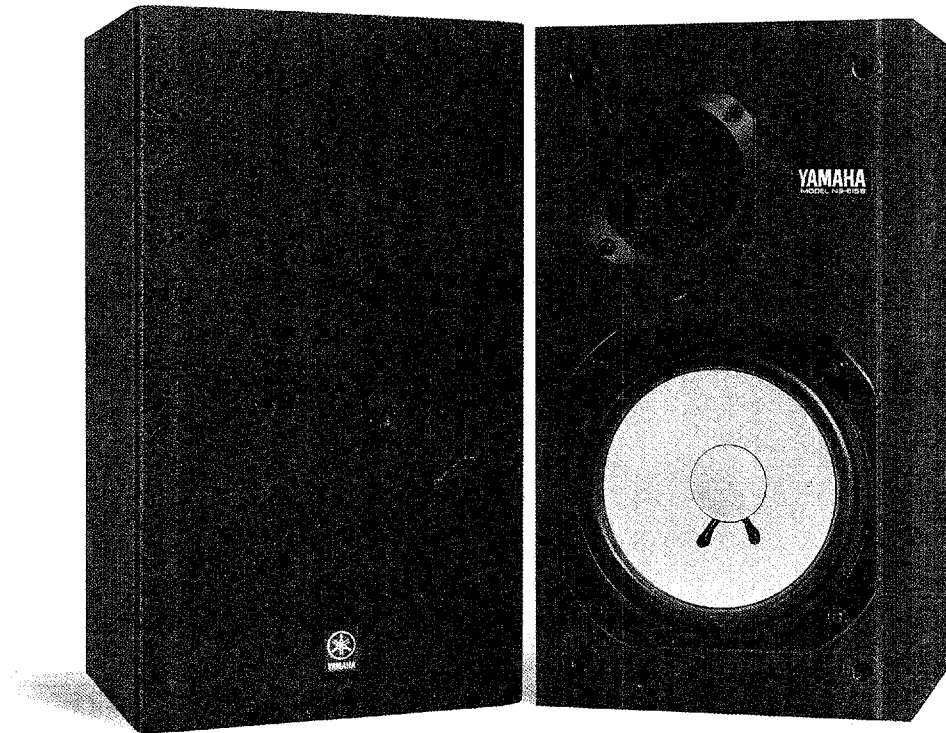


YAMAHA

**18cm 2-way
2-SPEAKERS SYSTEM**

NS-615B

OWNER'S MANUAL



CENTER

SPECIAL FEATURES

The NS-615B has been designed in accordance with Yamaha Audio's policy of accurately and naturally reproducing not just "sound," but "music." Its directivity characteristics are especially superior, and at 96 dB/1 m output the distortion rate is very low — less than 1% over 100 Hz. A woofer with a large diameter voice coil, a tweeter with unique tangential edge support and an enclosure benefitting from Yamaha's generations of woodworking experience all add up to a compact, high performance, high power handling capacity unit.

Enjoy the natural sound of all types of music to your heart's content with the stylishly compact NS-615B.

PRECAUTIONS

The NS-615B grille is removable.

To remove the grille, first grasp it at the bottom on both sides and gently pull it away from the cabinet. Once it is loose, continue by removing the upper part.

During removal, be careful not to damage the attachment parts.

The output terminals on your amplifier can take several different shapes. Be sure to check the amplifier owner's manual for proper connection procedures.

The higher the amplifier's maximum output power capacity, the more it is capable of providing low-distortion music response. However, if your amplifier is capable of producing power in excess of the NS-615B maximum input capacity it is important that this maximum capacity should not be exceeded. In general, when an amplifier volume control is set at its mid-point the amplifier is producing approximately 70% of its maximum output capacity.

CONNECTING TO YOUR AMPLIFIER

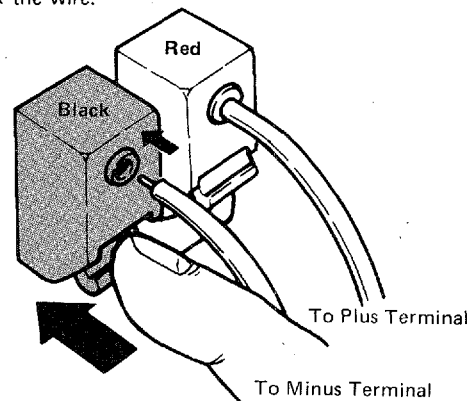
Connect the speaker output terminals on the amplifier to the terminals on the rear of the NS-615B using the connector cords provided. At this time be sure the amplifier power is switched off.

The connection terminals on the rear of the NS-615B are push-spring types, as shown in the illustration.

Connect the left speaker to the amplifier left-channel output terminals, the right to the right. In each case be sure to observe the proper plus-minus polarity. If the polarity is different for the speakers, stereo response and tonal clarity will be affected. The side of the cord with the silver line is plus (+), the other side minus (—).

* The NS-615B impedance is 8 ohms. When connecting to a transistor amplifier, it is not necessary to worry about terminal impedance; simply connect to the output terminals on the amplifier. If you are using a tube-type amplifier, however, be sure that only 8 ohm terminals are used.

Connect the red terminal to plus terminal of the amplifier, also the black terminal to minus terminal. Push the lever on the bottom of the terminal, and insert the stripped end of the wire into the hole while holding the lever down. Then release the lever to fix the wire.



SPEAKER LOCATION

Your speaker performance depends to a great extent upon the conditions of your listening room. To derive maximum listening pleasure from your NS-615B system, be sure to follow the points below.

1

By placing the speaker so that the tweeter is at the height at which you normally listen (for example, on a solid shelf or bookcase), you can obtain a natural concert hall feeling.

Placing the speakers directly on the floor or on the carpet will impair the bass response, therefore they should be placed on heavy, solid stands.

2

Ideally, left and right speakers should be separated by a distance of 1.5 — 2 meters. 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 sound will become skimpy.

3

The wall behind the speakers should have a live (reflecting) surface (a polished surface is best), while the wall behind the listener should have a sound-absorbing surface. This is the optimum condition for best sound reproduction.

If the wall behind the listener is made of concrete or has a glass window, thick curtains should be hung to absorb the sound. This will allow you to listen to natural sound without reverberation or other unnecessary distortion.

4

Experiment with different locations to make sure that the balance of walls, carpet, etc. provides optimum bass, midrange and treble response while listening.

5

Be careful where you place your turntable. If it is on the same support as the speakers, or directly in front of them, howling can occur.

6

Avoid locations where the speaker cabinet is exposed to direct sunlight or high temperatures.

PRECAUTIONS DURING USE

The NS-615B rated input is 25W, maximum input capacity is 50W. The following precautions should be observed with regard to input power.

1. Rated Input

This value is the maximum average input possible for long listening with optimum, fatigue-free music response.

2. Maximum Input Capacity

The input can rise to this value for short periods. In any program source there are peak values which can rise to dynamic levels as high as ten times that of the average level of the source material. However, these peaks should not exceed a level of two times the rated input. Dynamic passages should be regulated using level meters to be sure this maximum is not exceeded.

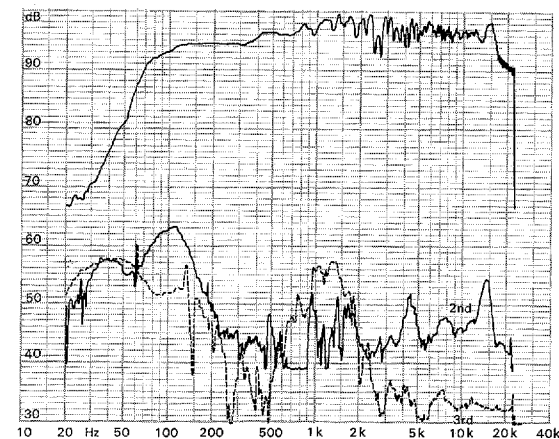
3. Operation Precautions

Be very careful not to exceed the RATED input in any of the following cases:

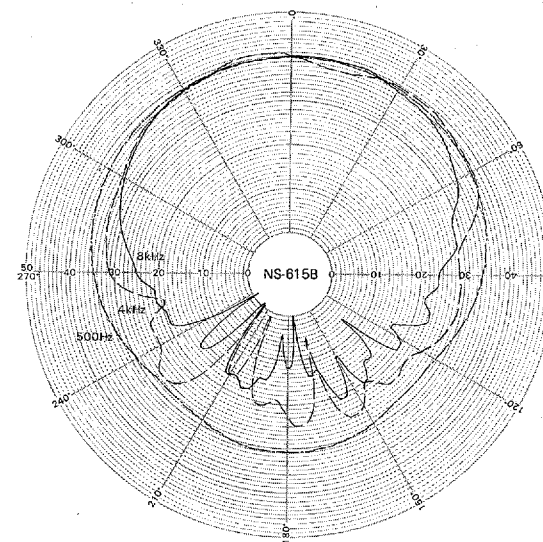
When the tone controls on your preamp or pre/main amplifier are set to maximum (bass or treble). When a special signal (created by fast winding or rewinding magnetic tape, by the shock noise when the turntable needle is bumped, or when the power is switched on, or by signals or sine waves from a signal generator) is fed through the speakers.

CHARACTERISTICS

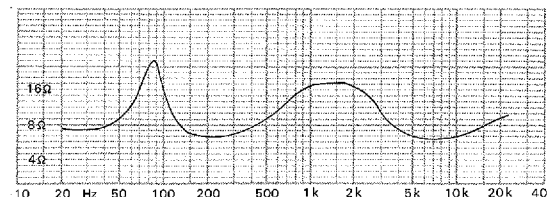
Frequency Response and Harmonic Distortion Characteristics (Input 6V, Measured at 1m)



Directional characteristics (Horizontal Plane)



Impedance Characteristic



SPECIFICATIONS

Type	2-way acoustic suspension
Woofers	JA-1801 180mm ϕ cone type
Tweeter	JA-0518 38mm ϕ soft dome type
Crossover frequency	2 kHz (12 dB/Oct)
Fundamental resonance frequency	85 Hz
Impedance	8 Ω

Output sound pressure level	96 dB at 1m 4 Watt Input
Rated input capacity	25W
Maximum input capacity	50W
Frequency response	60 Hz – 20,000 Hz (+4 ~ -8dB)
Dimensions (HxWxD)	382 x 215 x 199 mm (15" x 8-1/2" x 7-13/16")
Weight	6.0 kg (13 lbs 4 oz)

Specifications subject to change without notice.

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