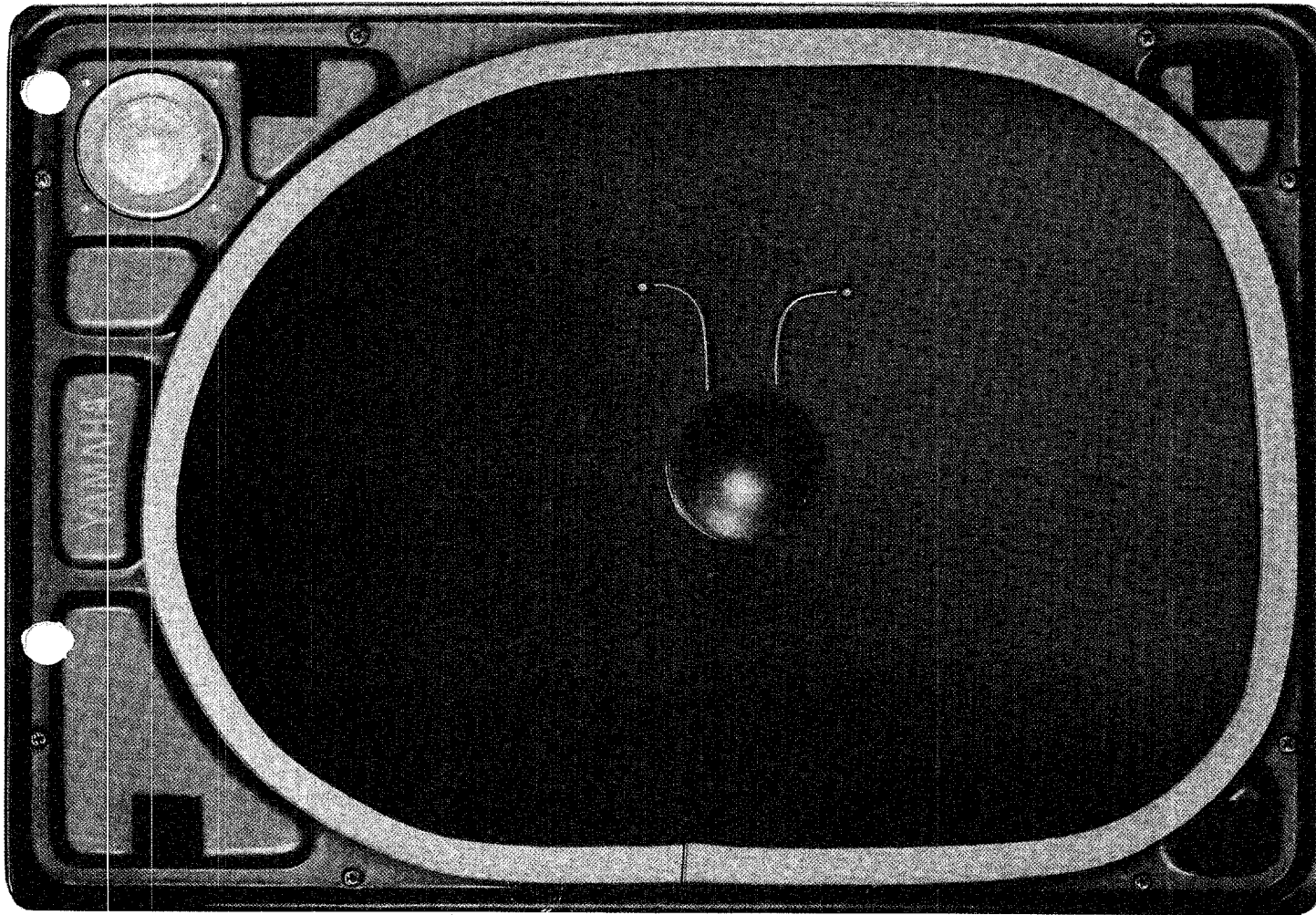


# NATURAL SOUND SPEAKER SYSTEMS



## Models

**NS-10 NS-15**  
**NS-18 NS-20**  
**NS-20A**  
**NS-20E**  
**NS-30**  
**NS-30A**

SINCE 1887

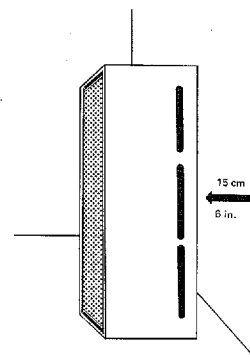


# YAMAHA

You now possess a speaker system which is without a doubt the world's most revolutionary advancement in sound projection in decades. Yamaha Natural Sound speakers function on a concept of producing, instead of reproducing, sounds. The result is natural sound fidelity that does exactly what a speaker is supposed to do: precisely reflect what the amplifier produces, without adding anything of its own. You will find your new speaker more durable than you expected, able to handle extreme frequencies at volumes much greater than other speakers of the same size. This is because of its specially produced diaphragm material. Be sure to select a suitable location to take advantage of its open back characteristic: the sound is broadcast freely in all directions. With proper care your NS speaker should afford years of thrilling performance. Please read these instructions carefully to make sure you derive the full benefit from its exciting capabilities.

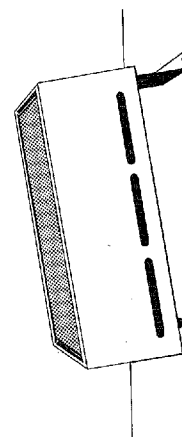
### Speaker Location

Your Yamaha Natural Sound speaker is of a special open back construction, and so it should not be placed flush against a wall. Allow a space of at least 15 cm (6"). Avoid location near parts of the room susceptible to vibration, such as glass doors, windows. The vibrant, powerful sound projection of your Natural Sound speaker can cause other objects in the room to vibrate, so take the necessary precautions, especially when first listening to the speaker system.



### Mounting on a Wall

See your Yamaha dealer for optional mounting metals.



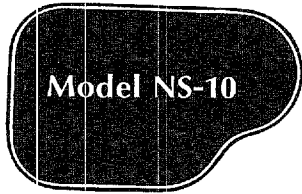
### Speaker Connection

When connecting the speaker cords, be careful to connect the left and right speakers to the proper terminals.

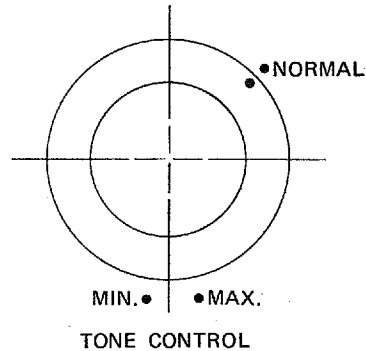
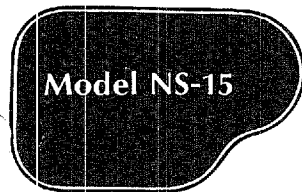
- \* Especially when connecting two speakers, be careful to observe the same polarity. The red lead is positive (+) and the black minus (-).
- \* The impedance of all NS speaker systems is 8Ω.

### Tone Control

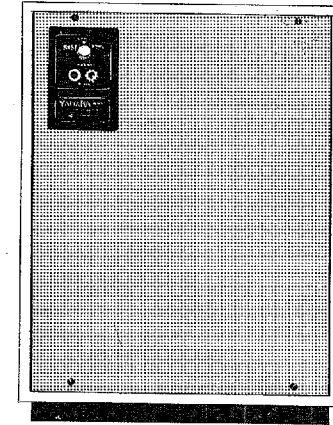
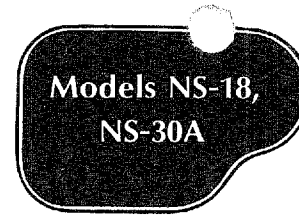
Although the NORMAL or FLAT position affords excellent tonal balance, set the tone control according to the room size and conditions, as well as your personal listening preferences. Tone adjustment is carried out in different ways according to the speaker model, as described below.



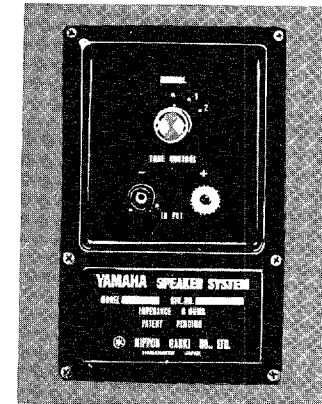
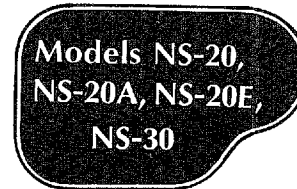
No tone control.



A volume attenuator affords continuous adjustment of tweeter level. While the NORMAL position affords excellent tonal balance, turn to the right to accentuate high tones, left for low.



Rotary switch type tone control incorporated. Under ordinary circumstances, set at FLAT. To emphasize high tones, set at CLEAR. For softer, lower response, set at SOFT.



Rotary switch type tone control incorporated. Under ordinary circumstances, set at NORMAL. If the high frequency response is too strong, reduce it by setting the switch to "1" or (for greater damping) "2."

## SPECIFICATIONS

	NS-10	NS-15	NS-18	NS-20	NS-30	NS-20A	NS-30A
<b>Impedance:</b>	8	8	8	8	8	8	8
<b>Maximum Continuous Input:</b>	10W	15W	18W	20W	30W	20W	30W
<b>Speaker Complement:</b>	Natural Sound woofer (JA-3502) 32 × 45cm (12½ × 18") with Tweeter 5cm (2")	Natural Sound woofer (JA-3501) 38 × 51cm (15 × 20") with Tweeter 5cm (2")	Natural Sound woofer (JA-5004) 46 × 58cm (18 × 23") Tweeter (JA-0506B) 6cm (2½")	Natural Sound woofer (JA-5002) 50 × 68cm (20 × 27") Squawker (JA-2053) 20cm (8") Tweeter (JA-0505) 5cm (2")	Natural Sound woofer (JA-6002) 63 × 89cm (25 × 35") Squawker (JA-3053) 30cm (12") Tweeter (JA-0506B) 5cm (2")	Natural Sound woofer (JA-5002) 50 × 68cm (20 × 27") Squawker (JA-2053) 20cm (8") Tweeter (JA-0505) 5cm (2")	Natural Sound woofer (JA-6002) 63 × 89cm (25 × 35") Squawker (JA-3053) 30cm (12") Tweeter (JA-0506B) 5cm (2")
<b>Cabinet:</b>	Open back; removable grille; American walnut, oil finish	Open back; removable grille; American walnut, oil finish	Open back; American walnut, oil finish	Open back; removable grille; American walnut, oil finish	Open back; removable grille; American walnut, oil finish	Open back; Satin American walnut	Open back; Satin American walnut
<b>Tone control:</b>	None	Continuously variable	3-position	3-position	3-position	3-position	3-position
<b>Dimensions:</b>							
<b>Height</b>	51cm 20"	59cm 23½"	72cm 28¼"	86cm 34"	103cm 41"	66cm 26"	74cm 29"
<b>Width</b>	36cm 14"	42cm 16½"	54cm 21¼"	62cm 24½"	74cm 30"	85cm 33"	100cm 39"
<b>Depth</b>	18cm 7"	19cm 7½"	25cm 10"	31cm 12¼"	31cm 12½"	36cm 14"	36cm 14"
<b>Weight:</b>	7kg (15½ lbs.)	10kg (22 lbs.)	18kg (40 lbs.)	23kg (51 lbs.)	35kg (77 lbs.)	28kg (62 lbs.)	36kg (79 lbs.)



# YAMAHA

Nippon Gakki Co., Ltd. P.O. Box 1, Hamamatsu, Japan

AS-3

7044 @2 Printed in Japan