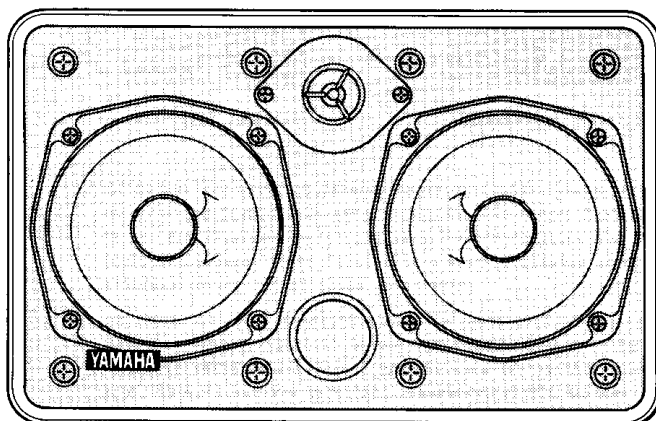
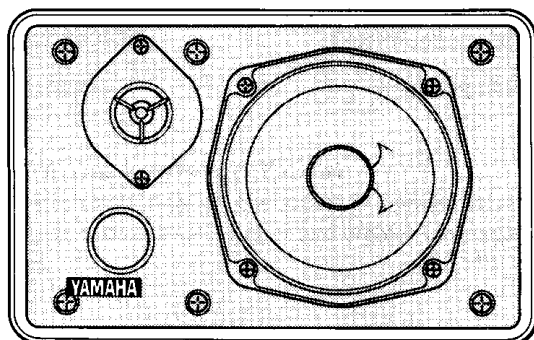


YAMAHA

SPEAKER SYSTEM
ENCEINTES ACOUSTIQUES
LAUTSPRECHERSYSTEM

S12/S22

OPERATION MANUAL
MANUEL D'INSTRUCTIONS
BEDIENUNGSANLEITUNG



INTRODUCTION

Thank you for choosing the Yamaha S12/S22 speaker system. The S12/S22 is a compact two-way bass-reflex speaker system equipped with a 12 cm woofer and a 2.5 cm tweeter. From powerful bass to delicate high-frequency sounds, the system provides well-balanced high quality sound reproduction over the entire frequency range.

To obtain maximum performance from your Yamaha speaker system we recommend that you read this operation manual thoroughly.

PRECAUTIONS

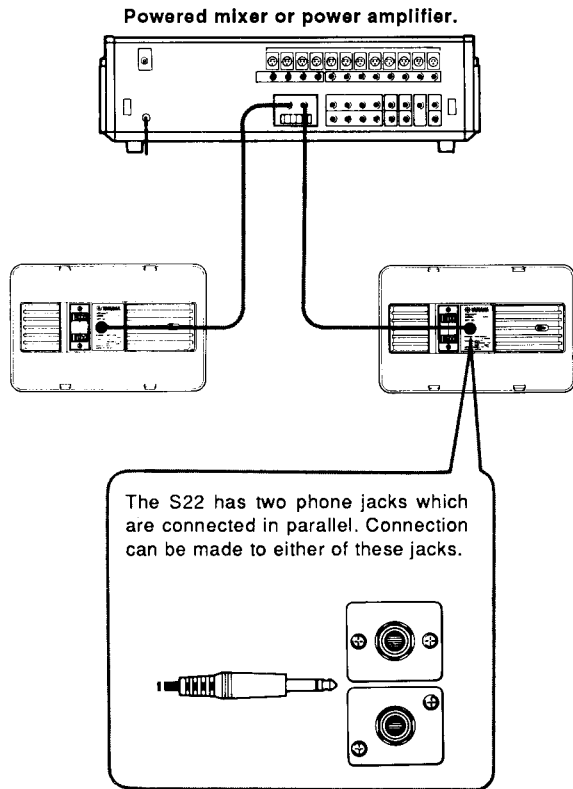
- * Be sure to turn amplifier power OFF before attempting to connect the speakers.
- * To avoid distortion and possible damage to the speaker units, never drive the speakers with more than their maximum rated power.
- * When connecting speakers in parallel, be sure that the total load impedance is not too low for the amplifier you are using.
- * When two or more speakers are driven by separate power amplifier channels, be sure that all speakers are connected in phase to avoid a loss in output level and sound quality.
- * The speakers used in this systems are magnetically shielded, allowing them to be used in close proximity to TVs and other equipment which is susceptible to magnetic fields. If, however, adverse effects are noticed in equipment operated near the speakers, move the speakers away from the affected equipment.

CONNECTION

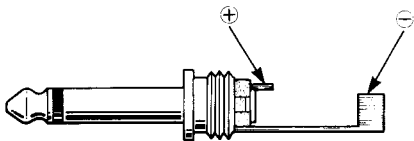
Both standard 1/4" phone jack connectors and push-button type terminals are provided for compatibility with most systems. The phone jack and push-button connectors are internally connected in parallel.

1. Connection to the Phone Jacks

The phone jack connectors will normally be used with equipment having phone jack speaker output connectors—e.g. some powered mixing consoles and musical instrument amplifiers.

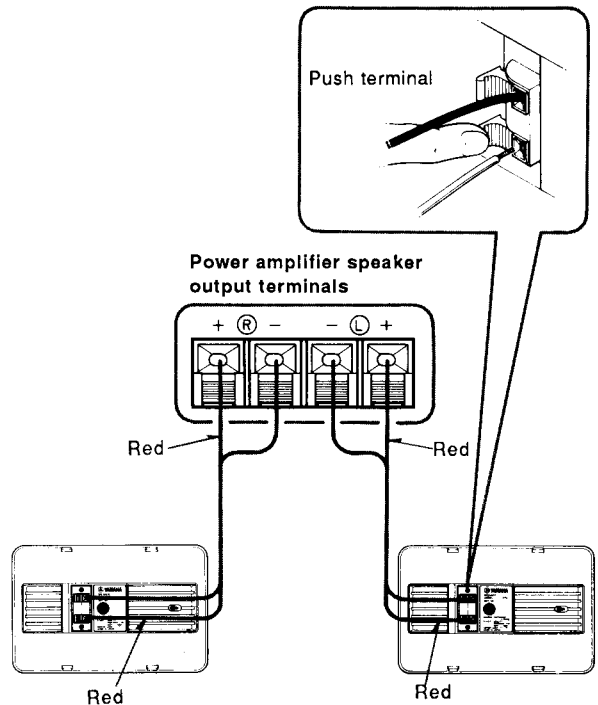


* Phone jack cables should be wired as shown in the illustration, using non-shielded cable.



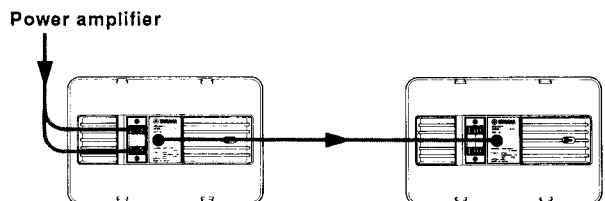
2. Connection to the Push-button Type Terminals

The push-button terminals are most convenient for connection to conventional "zip-cord" type speaker cable. The cable used should be polarity-coded: on some speaker cables one side is black (-) and one red (+). This makes it simple to maintain proper polarity at both ends of the cable. If the polarity of the speakers is reversed when two or more speakers are used, the reproduced sound quality and level will suffer.



3. Connecting Speakers in Parallel

Speaker systems may be connected in parallel to provide higher overall sound output and greater coverage if required.



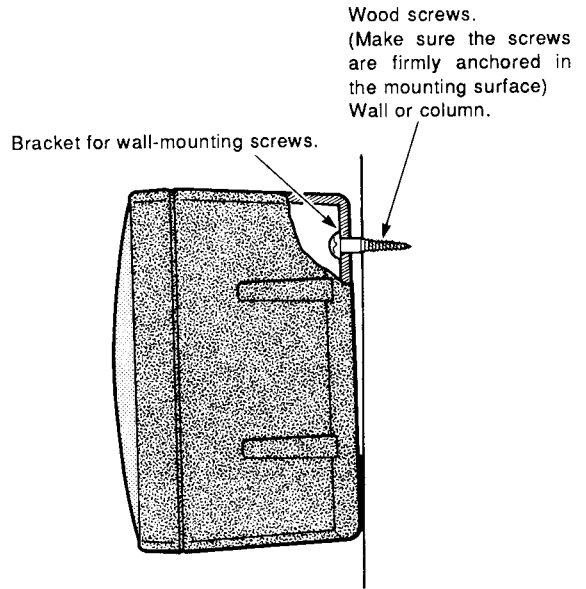
* Since the S22 has dual parallel-connected phone jacks in addition to the push-button type terminals. The output from the power amplifier can be fed to one of the phone jacks and the other phone jack "daisy-chained" to a second speaker using a standard phone non shielded jack cable.

* No more than two speakers should be paralleled on any one amplifier output, however, to prevent overloading the power amplifier. When two S12/S22 speakers are connected in parallel, be sure that the total load impedance is not too low for the amplifier you are using.

INSTALLATION

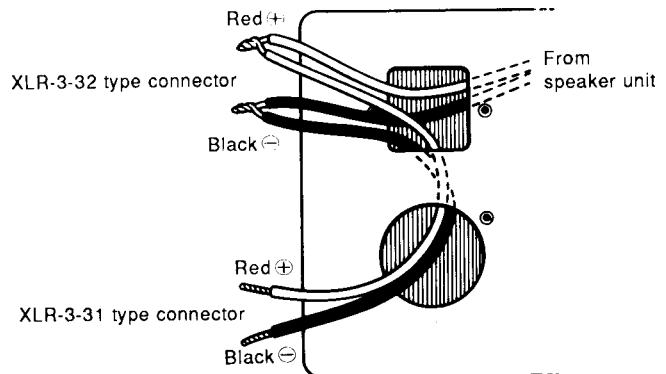
These speakers can be mounted in a variety of ways for optimum performance in different applications. They can be mounted horizontally or vertically, and the use of an optional bracket allows them to be mounted on a microphone stand or suspended from the ceiling.

- The S12 can be wall-mounted using the wall-mount screws attached to the back of the unit. Attach securely to the wall or column using wood screws, as shown in the illustration.
- The S12 speaker weighs approximately 2.3 kg (5 lbs 1 oz). Make sure that the surface to which the speakers will be mounted can support the weight, and will provide firm anchoring for the screws used.
- Do not use ordinary nails to mount the speakers. The vibration of the speaker will cause nails to loosen and come out.



INSTALLATION OF XLR TYPE CONNECTORS

The S22 phone jacks can be easily replaced with XLR type connectors if necessary. Simply remove the phone jacks by unscrewing the two screws which hold them in place.



SPECIFICATIONS

S12

Speaker Unit	JA1271 (12cm Cone) x 1 JA0261 (2.5cm Tw) x 1
Enclosure	2 Way bass reflex
Frequency Range	65 Hz—20 kHz
Nominal Impedance	8 ohms
Sensitivity	87 dB (1watt, 1m)
Power Capacity	40 watts (Noise) 80 watts (PGM) 160 watts (Max)
Crossover Freq.	7 kHz
Connectors	Push terminal x 1 1/4" Phone jack x 1
Dimensions(WxHxD)	240 x 155 x 157.5 mm (9-7/16" x 6-1/8" x 6-3/16")
Weight	2.3 kg (5 lbs 1 oz)

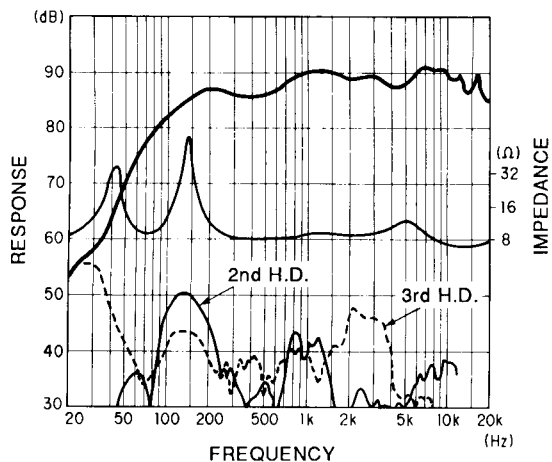
S22

Speaker Unit	JA1272 (12cm Cone) x 2 JA0261 (2.5cm Tw) x 1
Enclosure	2 Way bass reflex
Frequency Range	65 Hz—20 kHz
Nominal Impedance	8 ohms
Sensitivity	90 dB (1watt, 1m)
Power Capacity	80 watts (Noise) 160 watts (PGM) 320 watts (Max)
Crossover Freq.	10 kHz
Connectors	Push terminal x 1 1/4" Phone jack x 2
Dimensions(WxHxD)	296 x 191 x 190.5 mm (11-5/8" x 7-1/2" x 7-1/2")
Weight	4.2 kg (9 lbs 4 oz)

* Design and specifications are subject to change without notice.

PERFORMANCE GRAPHS

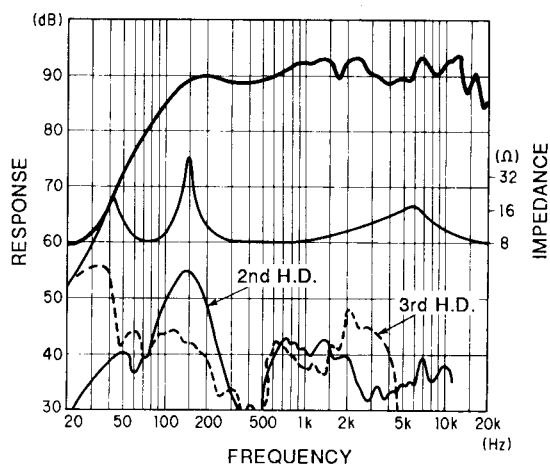
S12



Measurement Conditions:

Input 1W (with 1 watt)
Distance 1m (at 1 meter)
2nd, 3rd H.D. are 20 dB up.

S22

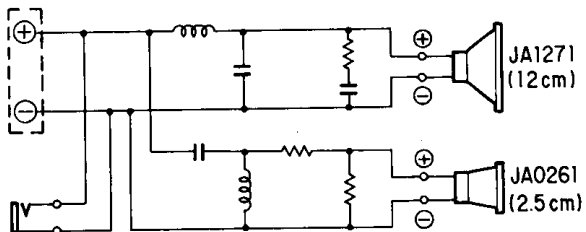


Measurement Conditions:

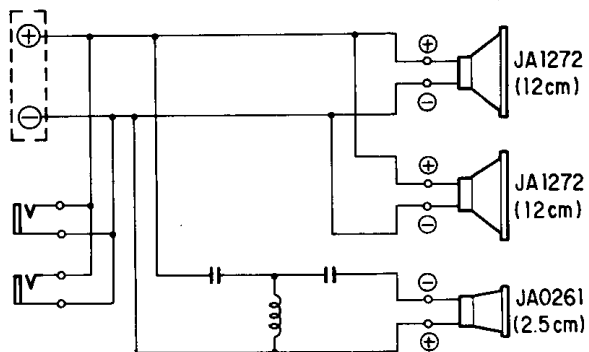
Input 1W (with 1 watt)
Distance 1m (at 1 meter)
2nd, 3rd H.D. are 20 dB up.

SCHEMATIC DIAGRAM

S12

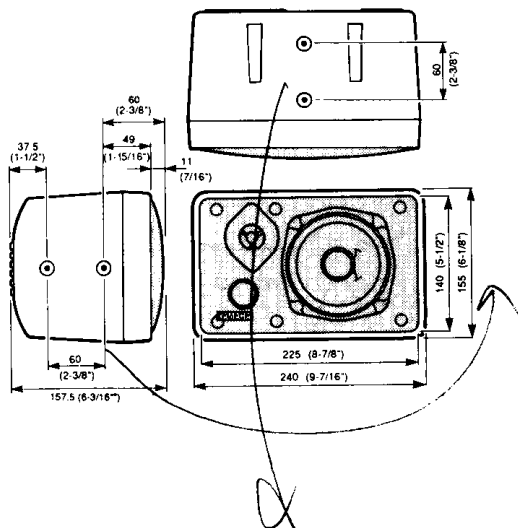


S22

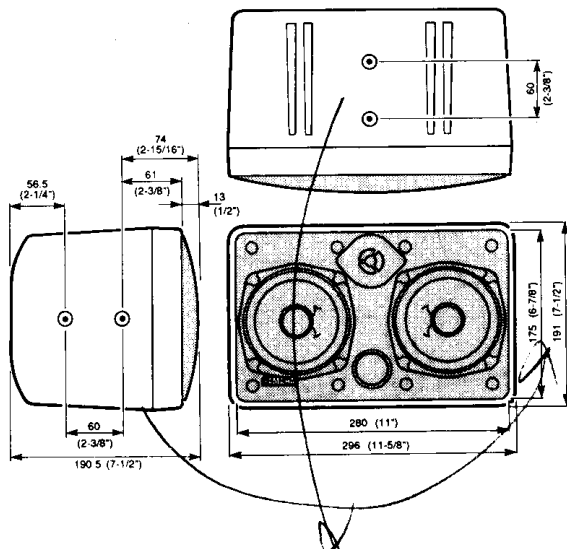


DIMENSIONS

S12



S22



Units: mm (Inch)

YAMAHA

SERVICE

This product is supported by YAMAHA's worldwide network of factory trained and qualified dealer service personnel. In the event of a problem, contact your nearest YAMAHA dealer.

ENTRETIEN

L'entretien de cet appareil est assuré par le réseau mondial YAMAHA de personnel d'entretien qualifié et formé en usine des concessionnaires. En cas de problème, prendre contact avec le concessionnaire YAMAHA le plus proche.

KUNDENDIENST

Für dieses Gerät steht das weltweite YAMAHA Kundendienstnetz mit qualifiziertem, werksgeschultem Personal zur Verfügung. Bei Störungen und Problemen wenden Sie sich bitte an Ihren YAMAHA-Händler.