Instructions

Speaker System
WS-A35

Panasonic

Before attempting to connect or operate this product, please read these instructions completely.

GENERAL

- This speaker system is a 2-way bass-reflex type speaker system incorporating a 16cm (6") woofer and a Cross-sectional Constant Directivity Spherical Waveguide tweeter.
- The tweeter and woofer are each equipped with an auto-reset type thermal protector to protect them against excessive input levels.
- It is designed to accept a continuous program input of 140W.
  The compact design assures full portability and easy installation.
- This highly efficient system produces a sound pressure level of 90dB (1m/1W).
- The enclosure is a resin molded type and can be set in any desired position.
  The recessed and close-contour design prevent impact damage in transit, while the rigid, weather and temperature resistant cabinet insures long-term reliability.
  The enclosure features a stacking structure for stability when stacking speakers.
  The front of the enclosure is covered with a punched metal grille to protect the woofer and tweeter.

CAUTIONS FOR INSTALLATION

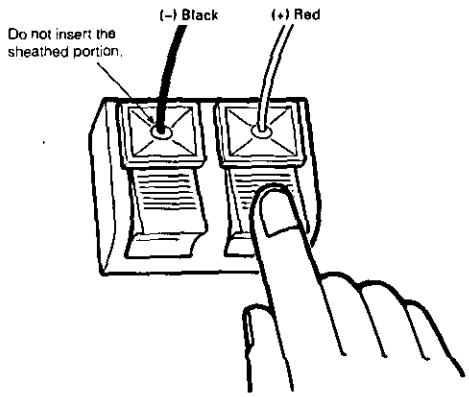
- When installing the speaker on a ceiling, it should be secured firmly using the optional Ceiling Mounting Bracket. (model no. W2-SA17)
- The speaker can be mounted vertically or horizontally. Select a suitable mounting position according to the place of installation.
- If the speaker is operated at high output levels, the floor, wall or ceiling may vibrate, which will impair the sound quality. Special care should be taken to prevent resonance and vibrations.

CAUTIONS FOR CONNECTION

- Before connecting the speaker, be sure to turn off the amplifier power switch.
- The input impedance of this speaker is 8 ohms.
  Check to make sure that the amplifier to be connected is designed to be used with a 4 to 8 ohms impedance rating.
- The connecting cable used for the speaker and amplifier should be as large as possible in diameter to minimize the DC resistance.
- When two or more speakers are to be used in the same room, be sure to match the polarity. The plus and minus push-terminal of each speaker are marked red and black, respectively.
- Up to two speakers may be connected in parallel, provided that the power amplifire is rated to drive a 4 ohm load.

CONNECTION OF SPEAKER CABLES

Depress the push-terminal and insert the speaker cable from the amplifier into the terminal hole. The plus side is marked red and the minus side marked black.



Notes :

- The cable which fits in the hole of the push-terminal, should have a diameter not larger than 7/64" (2.6 mm). To ensure proper fit to the terminal, a cable diameter of less than 5/64" (2 mm) is recommended.
- The sheath of the speaker cable should not be inserted into the terminal hole.
- When the speaker cable is of a stranded type, the core conductor should be twisted before inserting it into the terminal hole.

PROTECTION CIRCUIT

- The speaker has a protection circuit. When an excessive input is applied to the speaker, the protection circuit is activated to attenuate the input level.
- When the protection circuit is activated, the sound pressure level of the woofer is sharply reduced and tweeter is cut off. In this case, turn down the volume control of the amplifier and wait until the protection circuit of the amplifier and wait until the protection circuit is automatically reset(about 2 to 20 seconds).
- If, during operation of the protection circuit, the amplifier volume level is not reduced or it is increased after the sound has become low, the protection circuit will operate repeatedly, which may damage the speaker.

POWER HANDLING CAPACITY

The maximum input to the speaker is 140W (continuous program). Care should be taken not to apply excessive input or abnormal signals to the speaker.

- When using a high output amplifier, be careful of setting the amplifier volume control to avoid excessive input.
- Even when an amplifier with maximum output of less than 140W is used, if the input signal is too large or the volume control is set to too high position, the amplifier output may be distorted, possibly damaging the speakers. Special care should be directed to the amplifier input and output levels.
- When bass and treble levels are increased by the tone control, loudness
  control or equalizer of the amplifier, a large power may be applied to the speaker.
  So all controls should be set with care.
- When the following special signals are applied to the speaker system, a large current flows into the speaker which may result in damage to the voice coil even when such signals are below the maximum input level. In this case, be sure to turn down the volume control of the amplifier.

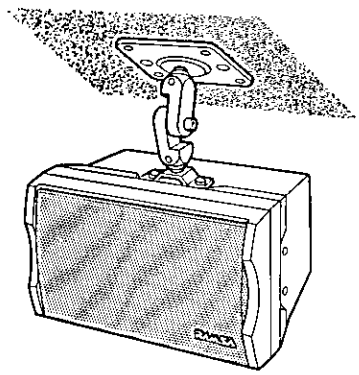
1. Inter-station noise in FM broadcast.
2. High frequency noise during fast-forward or rewind operation of a tape deck.
3. Feedback from microphones or electronic musical instruments.
4. Shock noise caused when the power switch of the amplifier or condenser microphone is turned on or off, or at connection and disconnection of the input/output terminals.
5. Continuous high of low frequency signal developed from an oscillator or electronic musical instrument (music synthesizer).

INSTALLATION

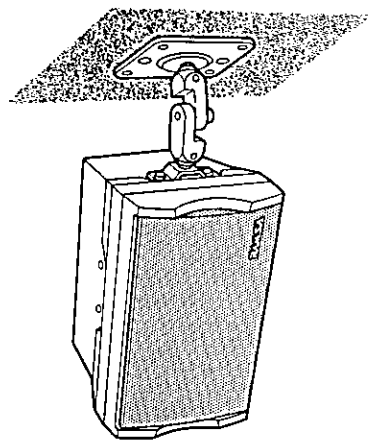
CAUTIONS

- For safest mounting and to avoid damage to the mounting treads, use Mounting Bracket W2-SA17 to mount onto the ceiling.
- Do not mount more than one speaker into one optional Ceiling Mounting Bracket.

<Horizontal Installation>



<Vertical Installation>



SPECIFICATIONS

Type :	2-way, bass reflex type
Input Impedance :	8 ohms
Power Handling Capacity :	140W (continuous program input)
	70W (RMS)
Sound Pressure Level :	90 dB (1W/1m)
Frequency Response :	80 to 20,000 Hz
Crossover Frequency :	3,000 Hz
Speaker :	Woofer : 16 cm (8") cone speaker
	Tweeter : Cross-sectional Constant Directivity Spherical Waveguide
Dispersion :	90 (horizontal) x 90 (Vertical)
Dimensions :	15-3/16" x 9-1/16" x 8-5/8"
	385 (W) x 230 (H) x 220 (D) mm
Weight :	12.3lbs. (5.6kg)

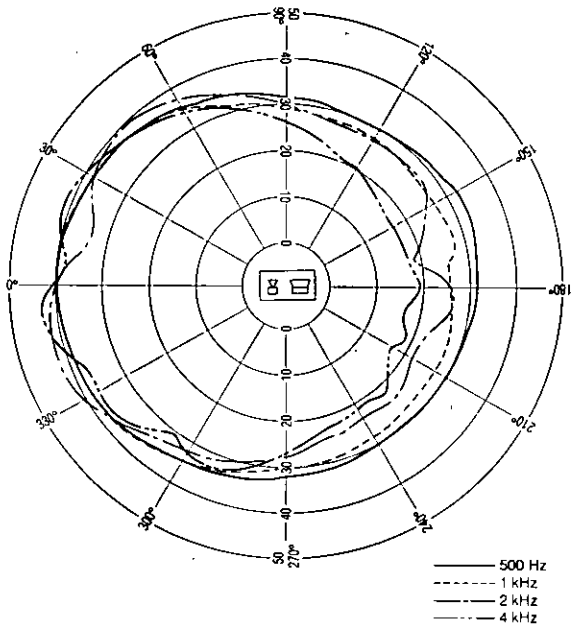
Dimensions and weight indicated are approximate.
Specifications are subject to change with out notice.

True effective power measured by the test method prescribed by AMERICAN NATIONAL STANDARD EIA (Electronic Industries Association) RS-426-A (1980).

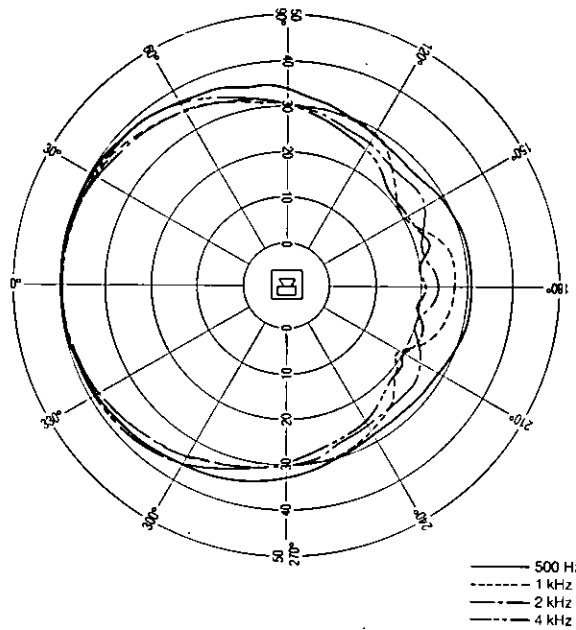
In this test, a noise signal with an increased high frequency power component was used as a test signal to match the latest program sources.

DIRECTIVITY

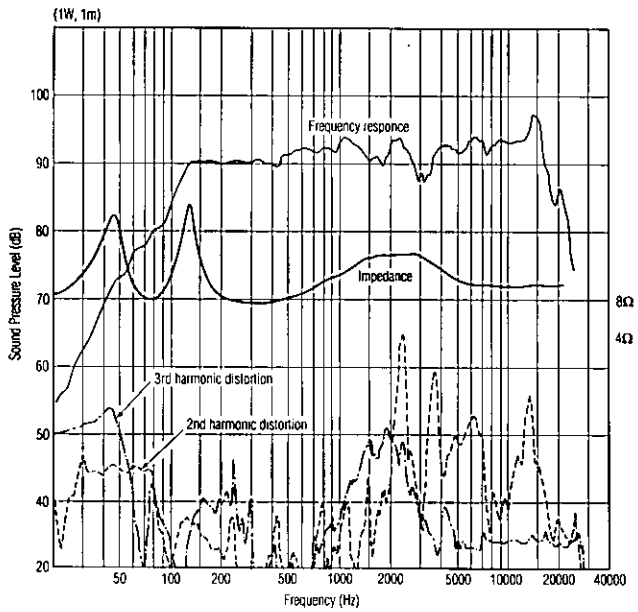
<HORIZONTAL>



<VERTICAL>



TYPICAL RESPONSE



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