

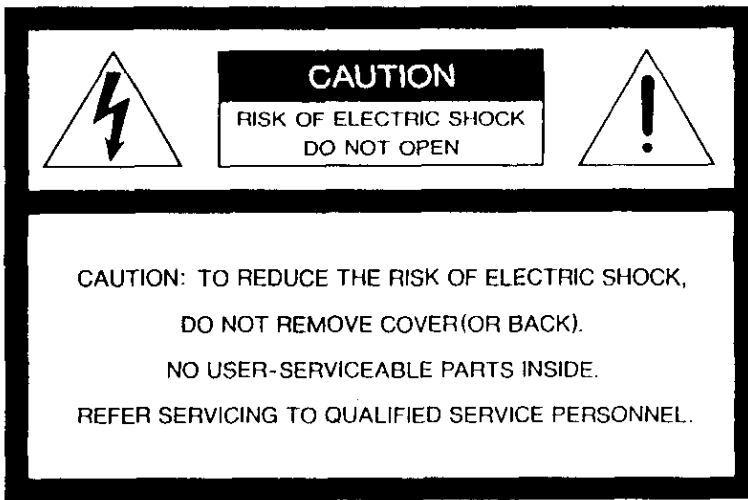
Owner's Manual

SPA12

POWERED SPEAKER SYSTEM



Fostex[®]



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

"WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

SAFETY INSTRUCTIONS

1. **Read Instructions** – All the safety and operating instructions should be read before the appliance is operated.
 2. **Retain Instructions** – The safety and operating instructions should be retained for future reference.
 3. **Heed Warnings** – All warnings on the appliance and in the operating instructions should be adhered to.
 4. **Follow Instructions** – All operating and use instructions should be followed.
 5. **Water and Moisture** – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
 6. **Carts and Stands** – The appliance should be used only with a cart or stand that is recommended by the manufacturer.
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- An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
7. **Wall or Ceiling Mounting** – The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
 8. **Ventilation** – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
 9. **Heat** – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
 10. **Power Sources** – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
 11. **Grounding or Polarization** – The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
 12. **Power Cord Protection** – Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
 13. **Cleaning** – The appliance should be cleaned only as recommended by the manufacturer.
 14. **Nonuse Periods** – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
 15. **Object and Liquid Entry** – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
 16. **Damage Requiring Service** – The appliance should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
 17. **Servicing** – The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

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1. INTRODUCTION

Thank you for purchasing the Fostex SPA12 Powered Speaker System. The SPA12 is a portable powered speaker system containing two 110mm heavy duty speakers and a high performance power amplifier. Three inputs, two for microphones and one for line level signal, are provided in the SPA12. Additionally, this system contains an automatic equalizer function to assure excellent sound quality as well as an automatic limiter function to protect the speakers. The SPA12 Powered Speaker System can serve a variety of applications including small scale public address and multimedia presentation systems.

Please read this manual carefully and keep it handy for future reference.

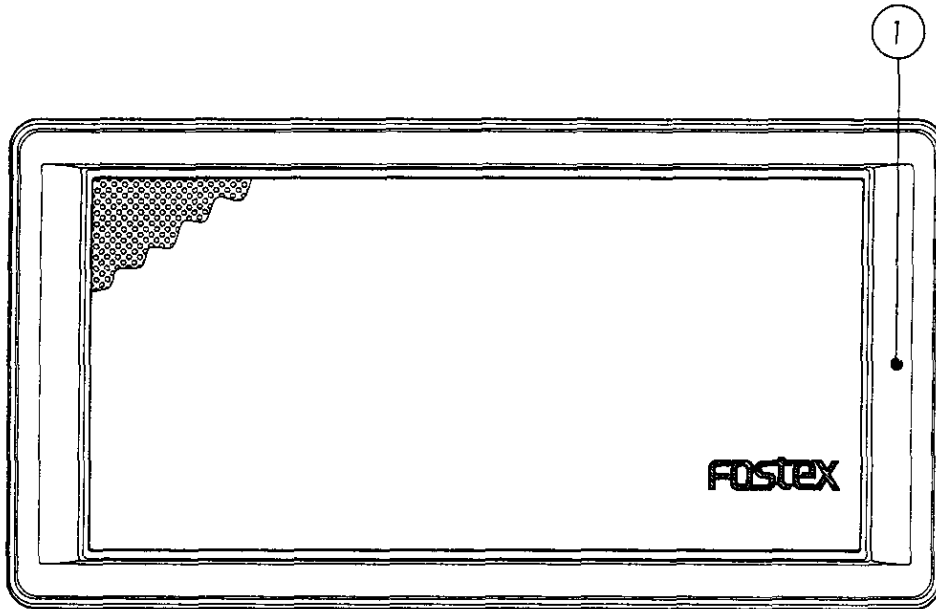
2. OPERATING PRECAUTIONS

- As this system uses precision components, do not drop or throw the SPA12, as this could result in either personal injury or damage to the enclosure and its internal amplifier.
- When installing on a wall or ceiling, avoid locations where the unit may be exposed to moisture or high temperatures. This speaker is designed for indoor application.
- Before making connections to the SPA12, always turn the power off. After making connections, power on the external equipment first and the SPA12 system last. This will avoid damage to all of the components.
- Do not connect power amplifier outputs to the inputs of this system as it could damage the internal amplifier and speaker components.
- Should the enclosure become soiled, wipe it with a dry or moistened cloth. Use a diluted neutral detergent - never organic solvents such as lacquer thinner or benzene.

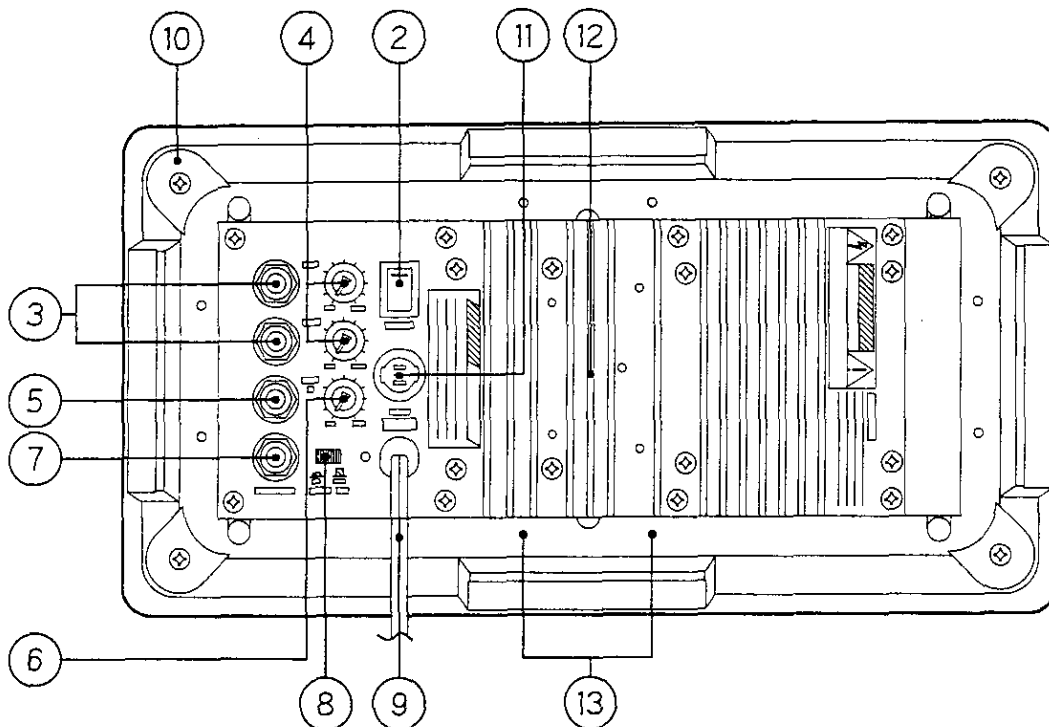
Failure to observe these precautions could result in shock, cosmetic disfiguration, or system breakdown.

3. PANEL CONTROLS AND TERMINALS

3-1. FRONT PANEL



3-2. REAR PANEL



3-3. PANEL DESCRIPTION

[1] LED INDICATOR

This LED indicates by different colors the power ON/OFF status, automatic equalizer ON/OFF status, and various conditions of the limiter function as indicated in the following chart.

| LED Color | Condition |
|-----------|---|
| Orange | AUTO EQ switch is OFF. |
| Green | AUTO EQ switch is ON. |
| Red | Limiter is operating regardless of the status of the AUTO EQ ON/OFF switch. |

< Note >

The LED is lit at Power On, showing either orange or green, indicating the status of the AUTO EQ ON/OFF switch.

[2] POWER SWITCH

[3] MIC INPUT JACKS 1,2 [MIC 1,2]

Mic level input is connected here. (Input level: -50dBu); Phone jack (female).

[4] MIC LEVEL CONTROL [MIC 1,2]

This controls the level of mic input jacks 1 and 2 and their levels at the output jack and amplifier.

[5] LINE INPUT JACK [LINE IN]

Line level input is connected here. (Input level: -20dBu); Phone jack (female).

[6] LINE LEVEL CONTROL [LINE IN]

This controls the level of signal input to the line input jack and its output level at the line out jack.

[7] LINE OUTPUT JACK [LINE OUT]

Use this signal as an input to feed another SPA12. The output level is controlled by the MIC and LINE level controls. No signal is output when the input knobs - MIN. (Output level: -10dBu); phone jack (female).

[8] AUTOMATIC EQUALIZER SWITCH [AUTO EQ ON(—)/OFF(⊣)]

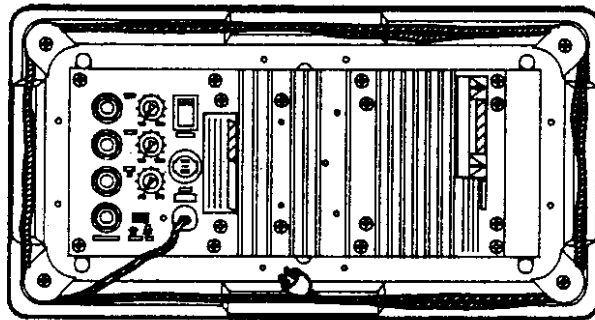
This switches ON/OFF the automatic equalizer function(Refer to page 5 for details). The ON/OFF status is indicated by the front panel LED color.

[9] POWER CABLE

The cable can be conveniently stored in the cable guide when the system is not in use for extended periods or during transportation of the SPA12.

[10] POWER CABLE GUIDE

The power cable is wound and stored using this guide.

**[11] FUSE HOLDER**

This contains the power supply fuse. Always replace this fuse with one of the same type as necessary. By certain to unplug the power cord when replacing the fuse. Should the fuse continue to fail, contact you authorized Fostex dealer or service facility.

[12] HEAT SINK

This dissipates heat generated by the power amplifier. Use caution when handling the speaker after extended periods as this will be hot. Never get this wet and be certain to install the speaker in an area with good ventilation.

[13] MOUNTING POINTS

These screw holes are for mounting the FOSTEX P67 Joint Adaptor to the enclosure for the purpose of attaching various accessories to this speaker system. Four mounting place are provided to enable the SPA12 to be mounted in either a vertical or horizontal position. Please refer to page 6 for details.

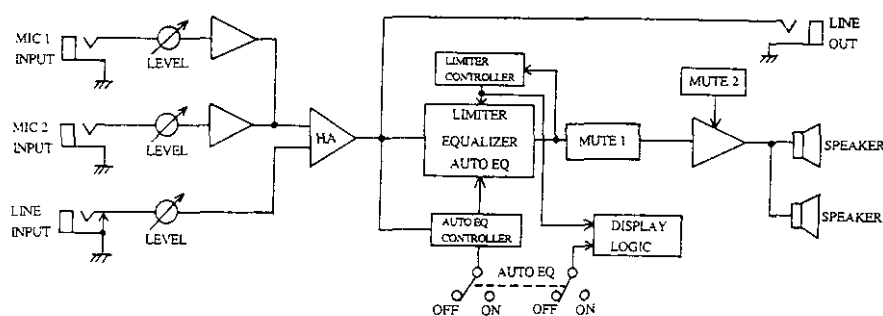
4. FUNCTIONS

4 - 1. MIXER FUNCTION

The SPA12 has a mixer capable of supporting three inputs-two microphone inputs (-50dBu) and one line level input (-20dBu). Each of these inputs are controlled by individual level control knobs. Line level output is also provided (-10dBu) and can be used to interconnect several SPA12s or to feed a recorder.

< Note >

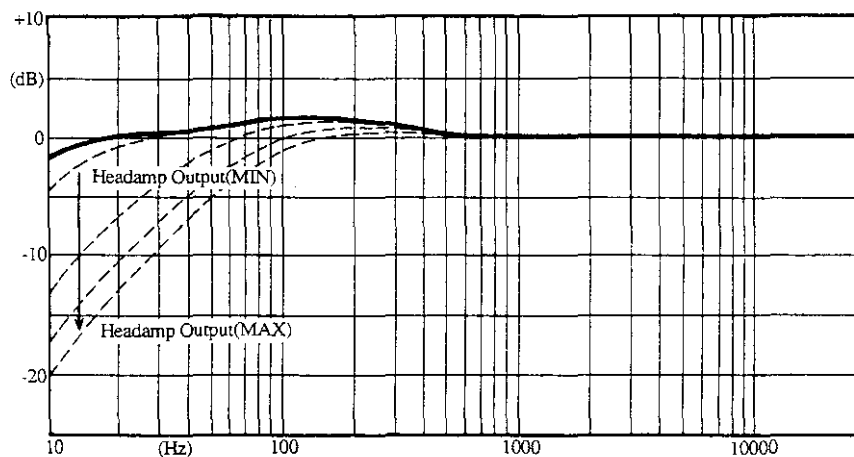
Output level is set by the mic and line level control knobs.



< Fig. 1 >

4 - 2. AUTOMATIC EQUALIZER FUNCTION

The AUTOMATIC EQUALIZER FUNCTION boosts the low frequency range and is level dependent. This function is most noticeable at low volume levels and decreases as the main volume increases. With this function enabled, music will exhibit more bottom end and optimum quality will be achieved at all levels. With this function disabled, dialog will sound very natural as the low frequency range is unaffected. In short, experimentation with this function will enable you to determine which types of program material sound best at each setting.



< Fig. 2 >

4 - 3. LIMITER FUNCTION

This limiter is designed to operate automatically and protects the speaker when excess power is applied for extended periods. Additionally, the SPA 12 contains a mute function that reduces " power supply click noise" - typically heard when powering the system ON or OFF.

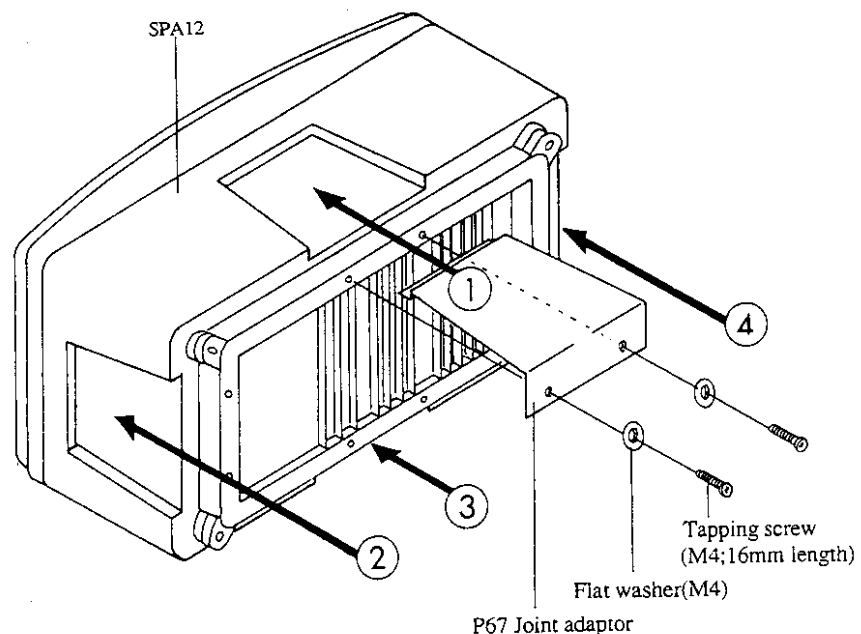
5. MOUNTING THE P67 JOINT ADAPTOR

One "P67 Joint Adaptor" is included with each SPA12. This adaptor is necessary when mounting the speaker with the separately sold accessories. Four mounting places are provided on the SPA12.

Secure the adaptor to points 1-4 as shown in Figure 3 when mounting the SPA12 in either a vertical or horizontal position. Use the two tapping screws (M4; 16mm length) and the corresponding washers to secure the adaptor. After installing the adaptor to the SPA12, consult Figure 4 for the mounting hole dimensions prior to mounting the system to another surface.

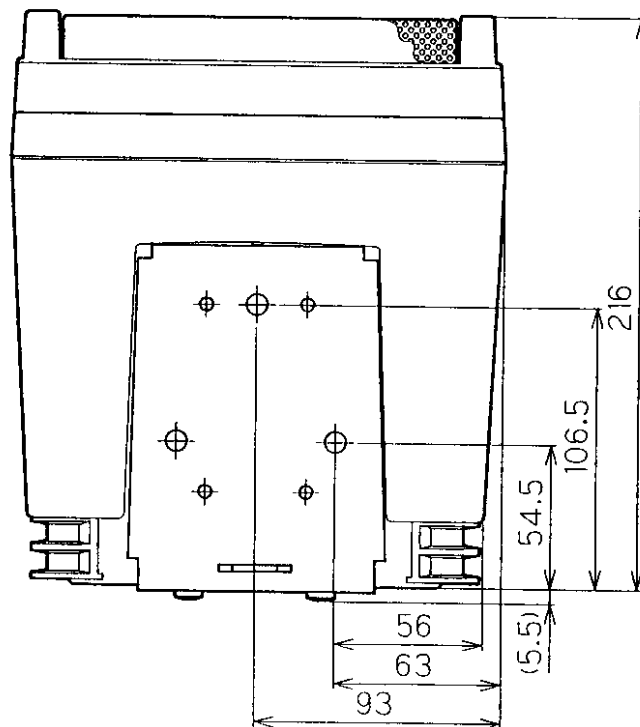
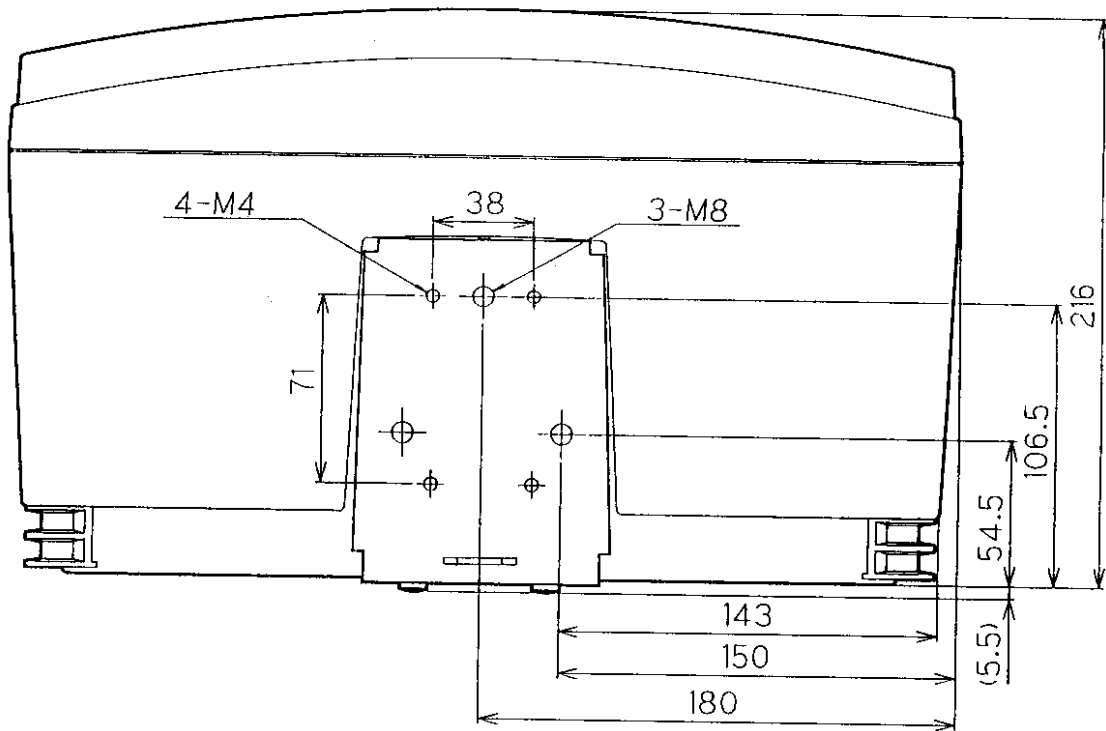
< Note >

When not in use, place the adaptor and screws in a secure location so as not to lose them.



< Fig. 3 >

6. MOUNTING HOLE DIMENSIONS



< Fig. 4 >

7. SPECIFICATIONS

7-1. SPECIFICATIONS

(Acoustic Section)

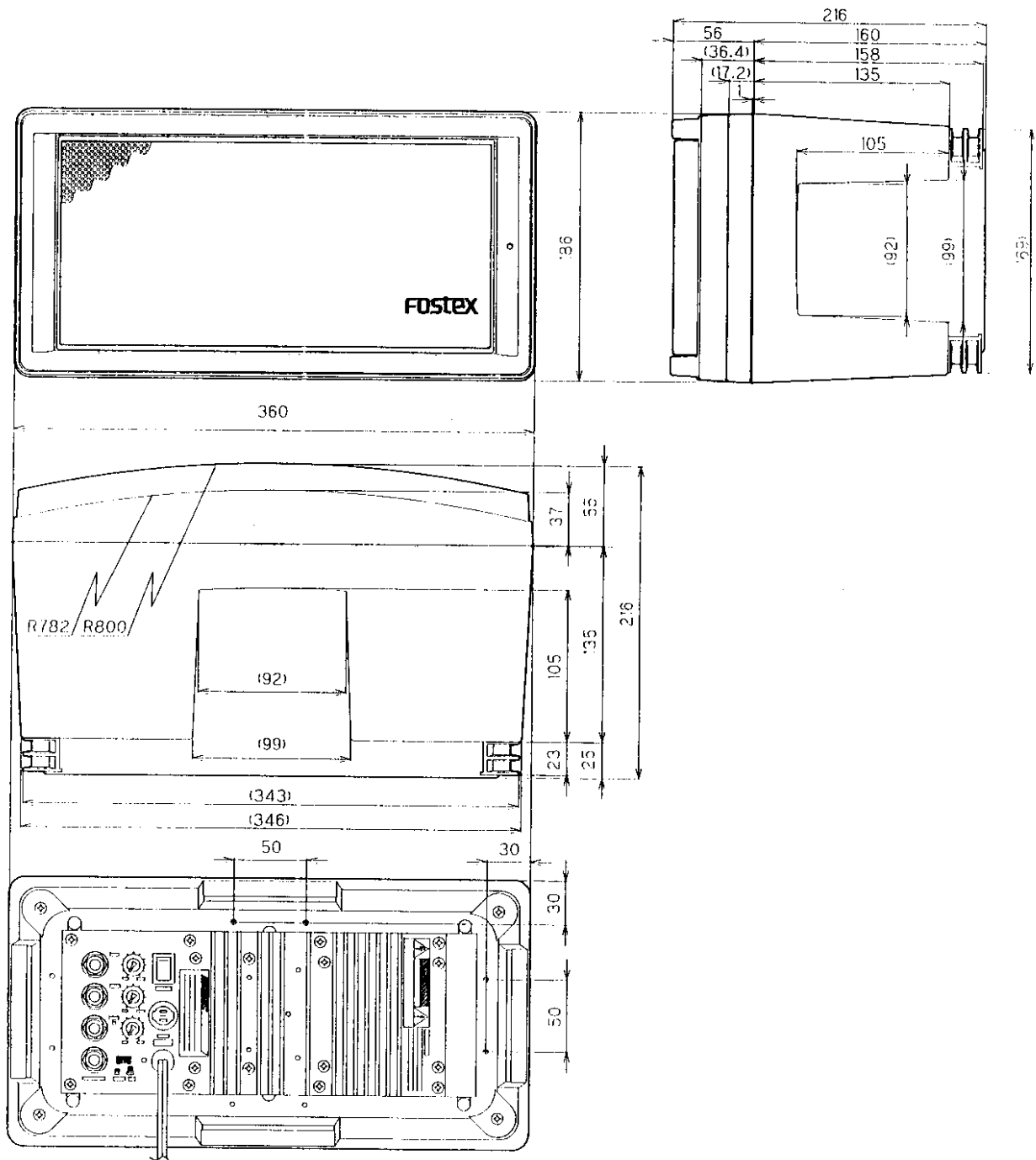
| | |
|------------------------------|----------------------------|
| Enclosure Type | : Bass reflex |
| Internal Speaker | : 110mm Fullrange unit x 2 |
| Maximum Sound Pressure Level | : 112dB |
| Reproduce Frequency Range | : 70 ~ 18,000Hz |

(Amplifier Section)

| | | |
|-------------------|-------------|-----------------------|
| | | * 0 dBu = 0.775Vrms |
| Rated Output | | : 100W |
| T.H.D. | | : 0.05%(at 1kHz, 60W) |
| S/N | Mic input | : 75dB weighted |
| | Line input | : 85dB weighted |
| Input Impedance: | Mic input | : 1.3k Ω |
| | Line input | : 10k Ω |
| Input Level | Mic input | : -50dBu |
| | Line input | : -20dBu |
| Output Level | Line output | : -10dBu |
| Power Requirement | | : 120VAC 60Hz 130W |
| | | : 230V \sim 50Hz |
| | | : 240V \sim 50Hz |
| Dimensions | | : Refer to Fig. 5 |
| Weight | | : Approx. 7kg |

| | |
|----------------------|------------------------------------|
| Supplied Accessories | P67 Joint Adaptor x 1 |
| | Tapping screw(M4; 16mm length) x 2 |
| | Screw (M8; 20mm length) x 3 |
| | Screw (M4; 14mm length) x 4 |
| | Flat washer for M4 x 6 |
| | Flat washer for M8 x 3 |

7-2. DIMENSIONAL DRAWINGS



< Fig. 5 >

Fostex[®]

FOSTEX CORPORATION

3-2-35 Musashino, Akishima-shi, Tokyo, Japan 196

FOSTEX CORPORATION OF AMERICA

15431, Blackburn Ave., Norwalk, CA 90650, U.S.A.

FOSTEX (UK) LTD.

Unit 1 Jackson Way Great Western Industrial Park Southall Middx UB2 4SA U.K.
