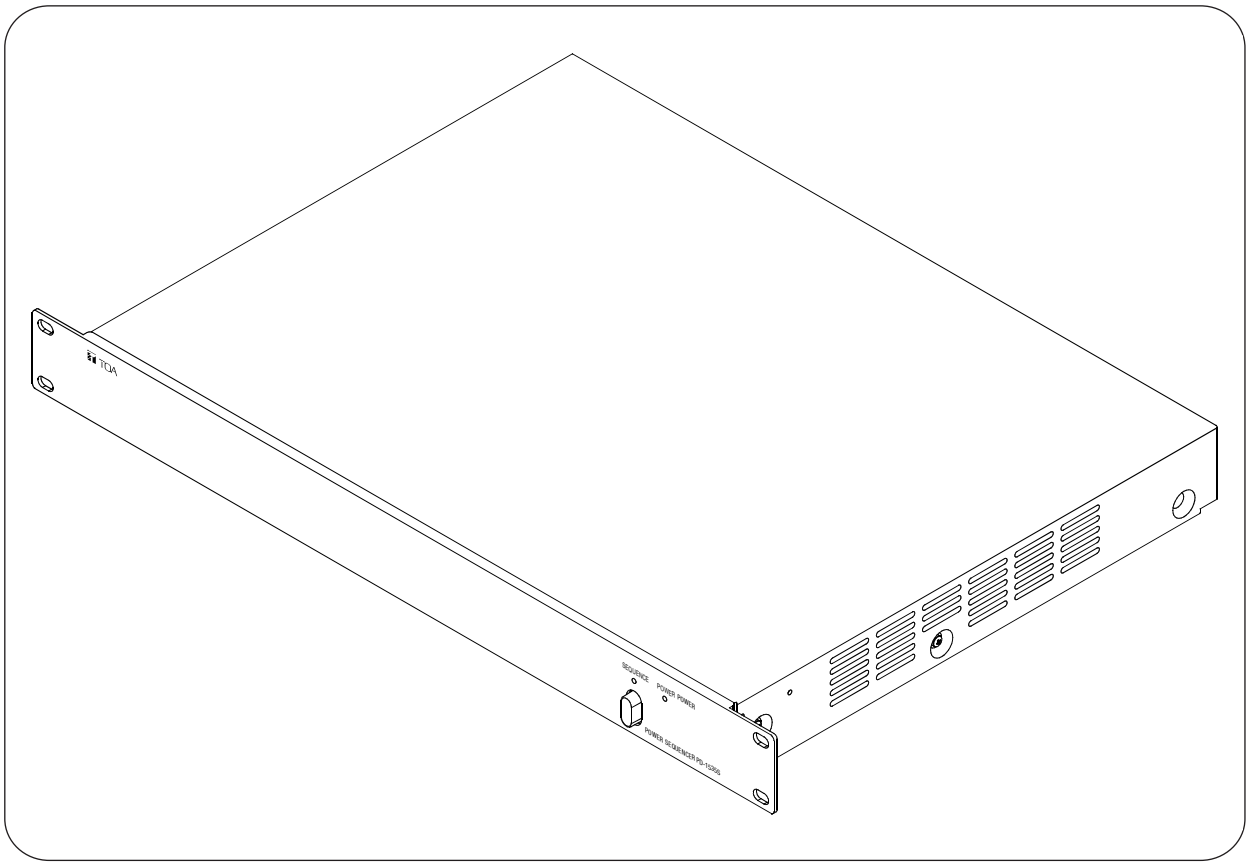
TOA

INSTRUCTION MANUAL

POWER SEQUENCER PD-1535S-AS 1



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Thank you for purchasing TOA's Power Sequencer.
Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

TOA Corporation

1. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

Safety Symbol and Message Conventions

Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety hazards.

⚠**WARNING**	Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.
⚠**CAUTION**	Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

⚠WARNING

When installing the unit

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, as doing so may result in fire or electric shock.
- The terminals marked with the symbol ϟ are hazardous live. The external wiring to these terminal requires installation by an instructed person.

All units

- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and /or property damage.
- Install the unit only in a location that can structurally support the weight of the unit and the mounting bracket. Doing otherwise may result in the unit falling down and causing personal injury and/or property damage.
- Owing to the unit's size and weight, be sure that at least two persons are available to install the unit. Failure to do so could result in personal injury.
- Tighten each nut and bolt securely. Ensure that the bracket has no loose joints after installation to prevent accidents that could result in personal injury.

When the unit is in use

- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to qualified service personnel.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.
- Do not touch a plug during thunder and lightning, as this may result in electric shock.
- Class I construction shall be connected to a main socket outlet with a protective earthing connection.

⚠WARNING

When installing the unit

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
  - · If you detect smoke or a strange smell coming from the unit.
  - · If water or any metallic object gets into the unit
  - · If the unit falls, or the unit case breaks
  - · If the power supply cord is damaged (exposure of the core, disconnection, etc.).

⚠CAUTION

When Installing the Unit

- Never plug in nor remove the power supply plug with wet hands, as doing so may cause electric shock.
- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.
- When installing the equipment, please hold a space around the power plug for easy acces.
- The power plug is used as disconnection device and must be easily accessible. Make sure that power cord is not stepped on or compressed, particularly near the power plug, power socket and at the point where it exits the device.
- When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.
- Do not block the ventilation slots in the unit's cover. Doing so may cause heat to build up inside the unit and result in fire. Also, periodically clean the ventilation slots of dust.
- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.
- When unpacking or moving the unit, be sure to handle it with two or more persons. Falling or dropping the unit may cause personal injury and/or property damage.

When the Unit is in Use

- Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.

2. GENERAL DESCRIPTION

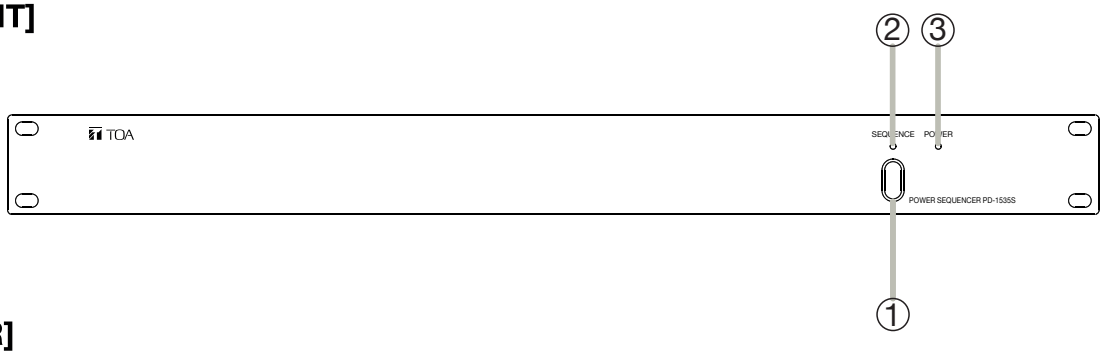
Power Sequencer is AC power distribution, to prevent AC power breaker tripped, protect the equipment from high power surge and protect the speakers from damage cause by popping sound.

3. FEATURES

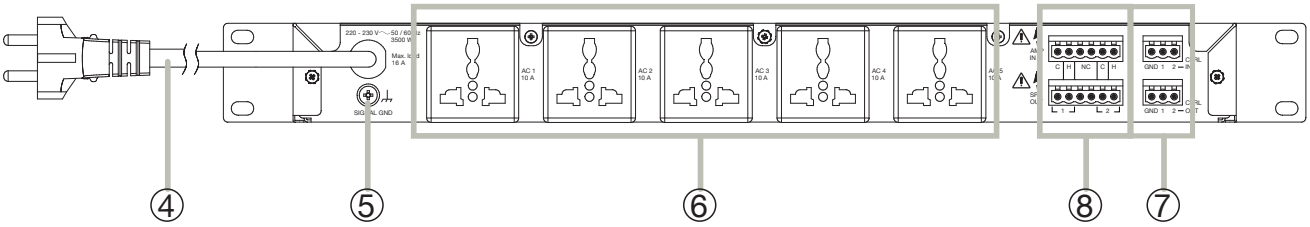
- Sequencially Power output ON and OFF (delay time 1 sec).
- Dry contact to control sequence remotely.
- Connected unit up to 4 unit.
- LED indicated unit power.
- Fuse protected for AC output.
- External earth connection.
- Up to 16 A in total.
- Up to 5 socket.
- Have speaker zone.

4. NOMENCLATURE AND FUNCTIONS

[FRONT]



[REAR]



Note.
NC : not connected

1. SEQUENCE Switch

Press to turn ON the sequence, press again to turn OFF the sequence.

2. SEQUENCE Indicator

Blink light green when the sequence progresses.
Light green when the sequence ON.

3. POWER Indicator

Light green when the power ON.

4. AC Power Cord

Connect to an AC power source.

5. Functional Ground Terminal

Noise may be generated when external equipment is connected to the unit. In this case, connect this terminal to the functional ground terminal of the external equipment, and the noise may be reduce.

Note

This ground is not for protective ground.

6. AC Outlet

AC line output.

7. Control IN and OUT

There are 2 Control IN (CTRL IN) and 2 Control OUT (CTRL OUT).
These control have function for cascade mode.
CTRL IN 1 also have function same as sequence switch.

8. Speaker Zone Terminal

Terminal for zone 1 and zone 2.

EXPLANATION OF SYMBOLS

Rear Panel

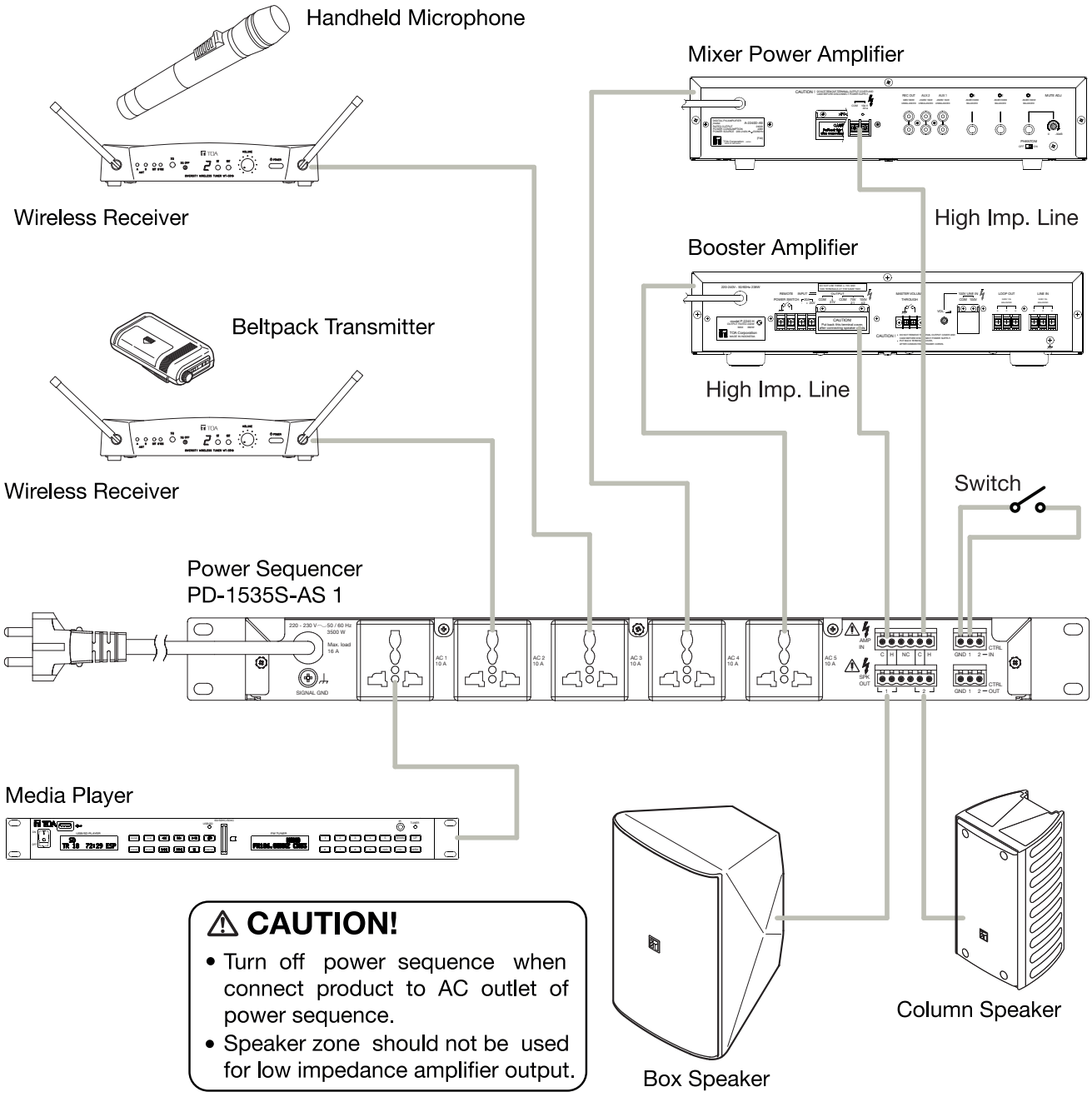
Do not touch the parts indicated with this symbol. These can provide a dangerous voltage that can result in death or serious personal injury when touching them.

Warning : This terminal/these terminals may provide a dangerous voltage.
Do not touch, otherwise it may cause a serious personal injury or death!

This symbol stands for a functional earth terminal.

5. CONNECTION

5.1. Single mode



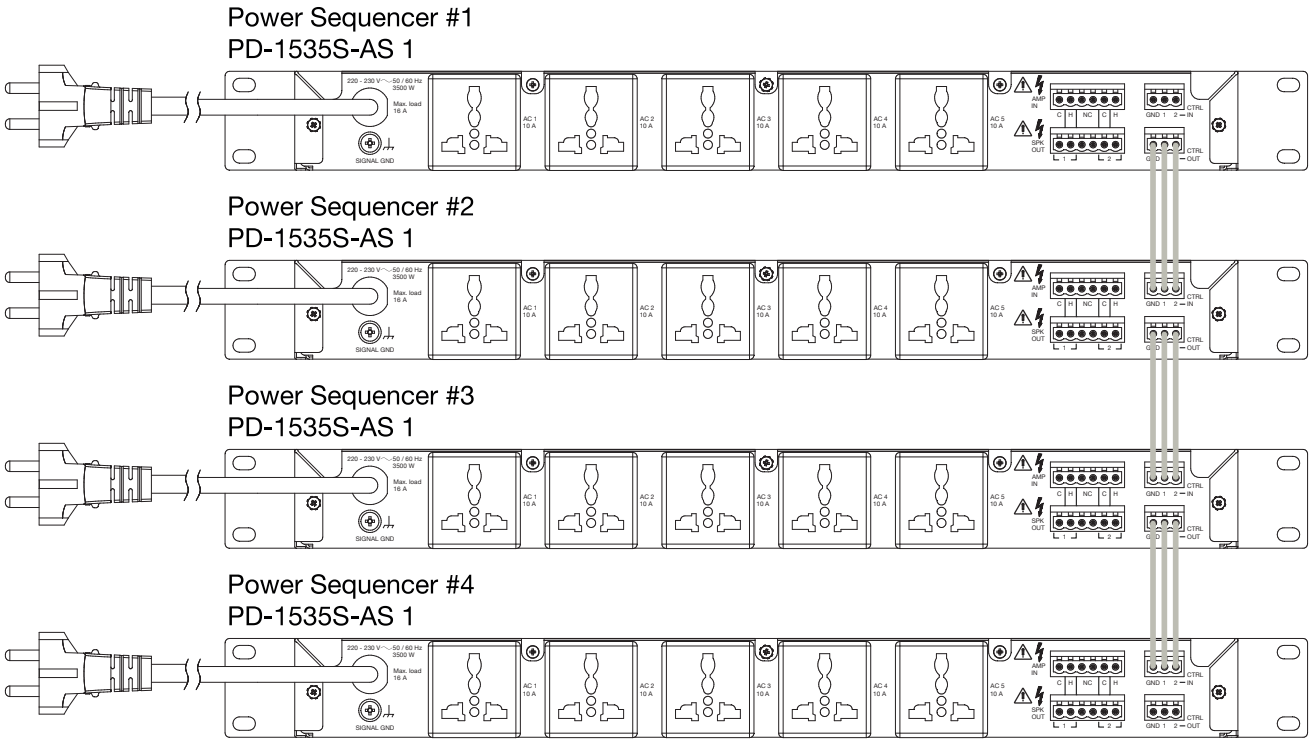
⚠ CAUTION!

- Turn off power sequence when connect product to AC outlet of power sequence.
- Speaker zone should not be used for low impedance amplifier output.

Note.

- Signal source (MP3 player, mixer) its better to be connected before amplifier at the AC outlet, to prevent the popping sound.
- 2 Ways to turn ON the sequence of output power sequencer :
  1. Push Sequence Switch at front panel
  2. Remote Sequence Control (terminal CTRL IN 1 contacted to terminal GND)
     If use remote sequence control, make sure the sequence switch at front panel is off.
- When sequence ON, (AC line out ON) 1, 2, 3, 4, 5, (speaker zone ON) 1, 2.
- When sequence OFF, (speaker zone OFF) 2, 1, (AC line out OFF) 5, 4, 3, 2, 1.
- Sequence OFF when both Sequence Switch OFF and Remote Sequence Control OFF.

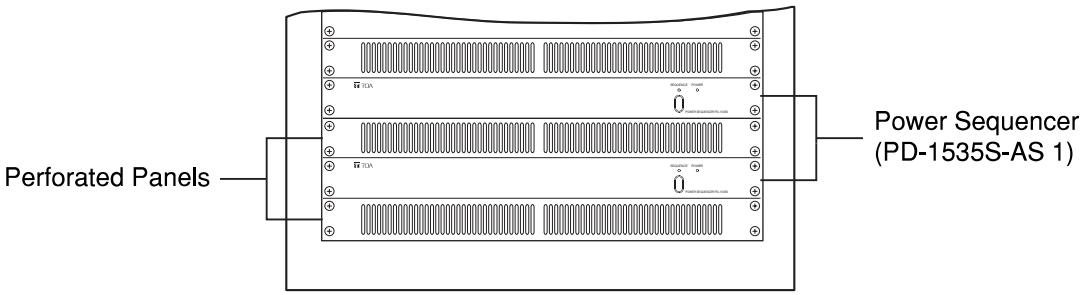
5.2. Cascade mode



Note.

- Power sequencer can be cascade up to 4 unit, first unit is at top side.
- Sequence ON and OFF cascade system are controlled by the first unit, and for others unit, 2, 3, and 4, Sequence Switch should be OFF.
- Do not to turn ON unit 2, 3, and 4 first, otherwise unit 1 can not be turn ON.
- Turn ON sequence the first unit to make the cascade system ON, Starting from AC line out 1 at first unit ON, continue up to speaker zone 2 ON, then the same happens to units 2, 3, and 4 respectively.
- Turn OFF sequence the first unit to make the cascade system OFF, Starting from speaker zone 2 at unit 4 OFF, continue until line out AC 1 is OFF, then the same happens to units 3, 2, and 1 respectively.

6. INSTALLATION PRECAUTIONS

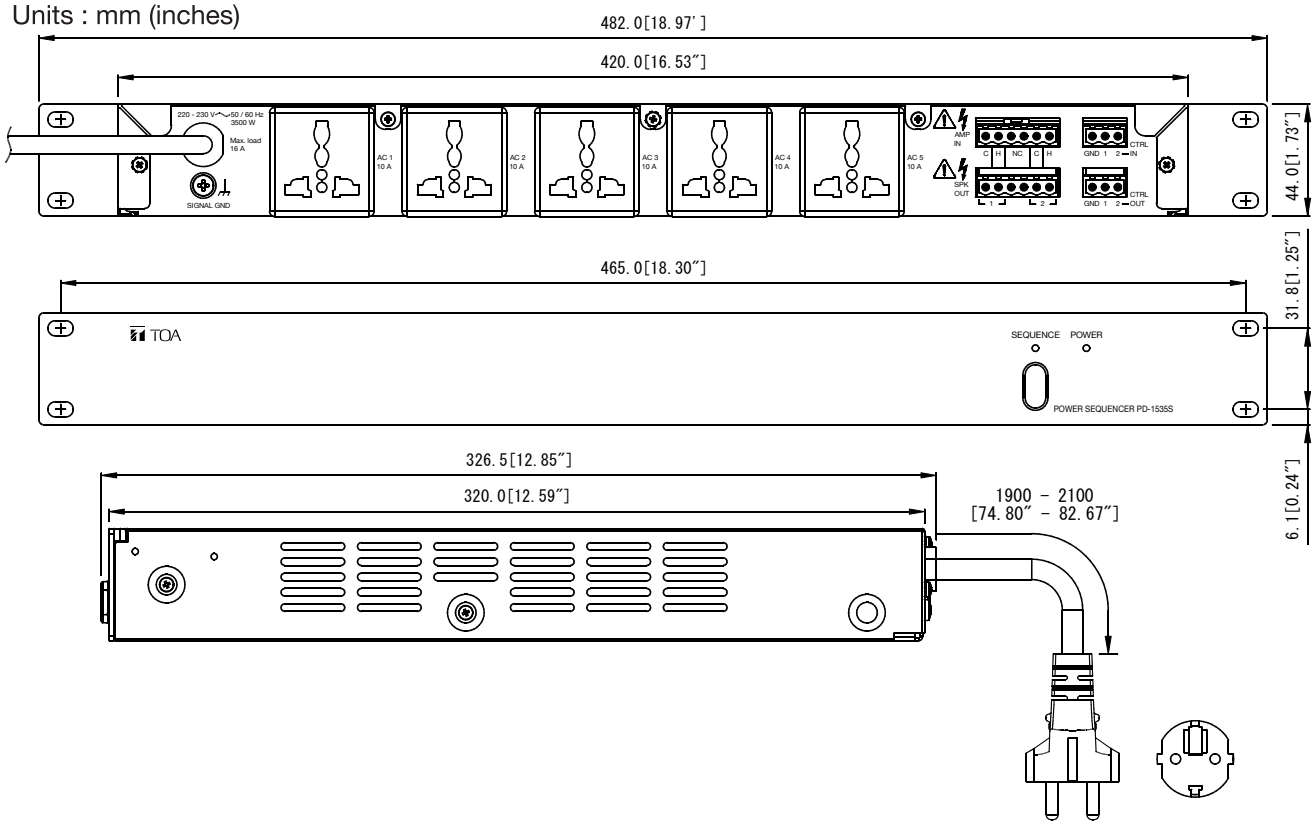


- When installing the PD-1535S-AS 1 on the equipment rack, and to avoid contacting the AC Cord Plug (especially “UK” and “L” type AC Cord) attached to the power sequencer with other units mounted on the rack, install the perforated panels *1U size or more above and below the panel, as shown above.
- Ensure that the rear of the components is sufficiently distant from the rear wall to facilitate maintenance service.
- Each component is designed with robust construction. However, be sure to use reinforcement brackets when mounting if extra strength is required.
- No rack mounting screws are supplied with the system. Use the appropriate screws for the racks used.

*1U = 44.5 mm (Standar Size)

7. DIMENSIONAL DIAGRAM

Units : mm (inches)



8. SPECIFICATION

Power Source	AC 220-230 V, 50/60 Hz, Max. 3500 W Max. load : 16 A
Speaker Input	2 Channels : 100 V from amplifier, Max. load 500 W each channel
Speaker Output	2 Channels : to speaker lines, Max. load 500 W each channel
AC Outlet	5 AC outlets, Universal type (3 pins plug), 10 A
Indicator	Power indicator light green Sequence indicator light green
Control	2 Input, 2 Output No-voltage make contact input, open voltage : 5 V DC, Short-circuit current : Under 5 mA, Removable terminal block (6 pins)
Cascade	Max. 4 units
Step Timing	1 Second per AC outlet (factory preset)
Operation Temperature	0 ℃ to +40 ℃
Operation Humidity	Under 90% RH (no condensation)
Finish	Front Panel : Aluminum Hair Line, Painting Black Case : Steel Plate, Painting Black
Dimensions	482 (w) x 44 (h) x 326.5 (d) mm (18.97” x 1.73” x 12.85”)
Weight	3.5 kg
Accessories	Removable terminal plug (6 pins) ...2 Removable terminal plug (3 pins) ...2

Notes :

- The design and specifications are subject to change without notice for improvement.