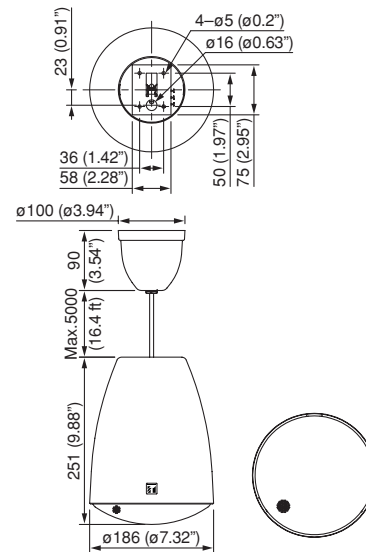


# PE 154EN Pendant Speaker 15W EN/ISO



## APPEARANCE AND DIMENSIONAL DIAGRAM



## DESCRIPTION

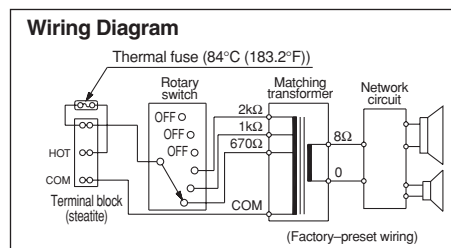
The PE-154EN is a 2-way speaker with an HIPS resin bass-reflex enclosure featuring a 12 cm (5") cone speaker and a balanced dome tweeter. Intended for ceiling suspension installation, it has an outstandingly stylish design that is inspired by the finest lighting fixtures, allowing it to harmoniously blend in with lighting equipment. It is ideally suited for such applications as BGM and announcements at high-ceiling venues such as airports, factories and shopping malls. The speaker is easy to repaint, extending the range of design needs it can meet. A directly attached sturdy suspension cable is extendable up to 5 meters.

The PE-154EN is driven on a high-impedance (100 V or 70 V) line. Input impedance is adjustable with a rotary switch on the upper side of the speaker. EN 54-24\* and ISO 7240-24 certified, it is authorized for use in conjunction with fire detection systems.

\*EN 54-24: Loudspeaker for voice alarm systems for fire detection and fire alarm systems.

## FEATURES

- Stylish and outstanding design inspired by the finest lighting fixtures
- Sturdy cable extendable up to 5 meters
- Repaintable
- Input impedance easily changeable
- Certified to EN 54-24 and ISO 7240-24 (Certificate No.: 0359-CPD-0105)
- Ideally suited for voice alarm system applications

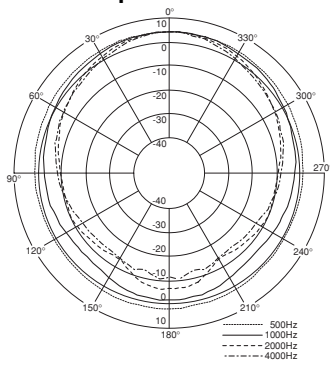


## SPECIFICATIONS

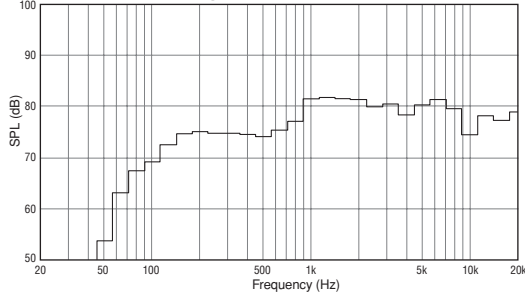
|                                      |  |
|--------------------------------------|--|
| <b>Rated Noise Power:</b>            | 15 W (100 V line), 7.5 W (70 V line)   |
| <b>Rated Impedance:</b>              | 100 V line: 670 $\Omega$ (15 W), 1k $\Omega$ (10W), 2k $\Omega$ (5 W)<br>70 V line: 670 $\Omega$ (7.5 W), 1k $\Omega$ (5 W), 2k $\Omega$ (2.5 W)   |
| <b>Sensitivity:</b>                  | 91 dB (1 W, 1 m) (500 – 5,000 Hz, pink noise)<br>87 dB (1 W, 1 m) (100 – 10,000 Hz, pink noise)<br>75d B (1 W, 4 m) (100 – 10,000 Hz, pink noise)  |
| <b>Maximum Sound Pressure Level:</b> | 99 dB (15 W, 1 m) (100 – 10,000 Hz, pink noise)<br>87 dB (15 W, 4 m) (100 – 10,000 Hz, pink noise)   |
| <b>Frequency Response:</b>           | 70 – 20,000 Hz   |
| <b>Coverage Angle:</b>               | Horizontal and Vertical: 360° (500 Hz),<br>170° (1,000 Hz), 90° (2,000 Hz), 70° (4,000 Hz)   |
| <b>Environmental Type:</b>           | A (indoor applications)  |
| <b>Speaker Component:</b>            | Low frequency: 12 cm (5") cone-type<br>High frequency: 2.5 cm (1") balanced dome tweeter   |
| <b>Operating Temperature:</b>        | -10° C to +50° C (14° F to 122° F)   |
| <b>Speaker Mounting -Method:</b>     | Ceiling suspension   |
| <b>Speaker Cable:</b>                | 2-core cabtyre cord 5m (16.40 ft)  |
| <b>Applicable Cable Size:</b>        | Conductor: Solid wire or 7-core wire<br>No bridge connection:<br>0.8 – 10 mm <sup>2</sup> (AWG 18 – AWG 7) for solid wire<br>0.8 – 8 mm <sup>2</sup> (AWG 18 – AWG 8) for 7-core wire<br>Bridge connection:<br>0.8 – 2.5 mm <sup>2</sup> (AWG 18 – AWG 13) for solid wire<br>0.8 – 1.5 mm <sup>2</sup> (AWG 18 – AWG 15) for 7-core wire |
| <b>Cable Connection:</b>             | Screw terminal (steatite), can be bridge-connected   |
| <b>Finish:</b>                       | Enclosure: HIPS resin, off-white (RAL 9010 or equivalent colour)<br>Grille: Surface-treated steel plate net, off-white (RAL 9010 or equivalent colour), paint  |
| <b>Dimensions:</b>                   | $\phi 186 \times 251$ (H) mm ( $\phi 7.32" \times 9.88"$ ) (speaker only)  |
| <b>Weight:</b>                       | 2.1 kg (4.63 lb) (speaker only)  |
| <b>Accessory:</b>                    | Ceiling bracket $\times 1$ , Mounting hanger $\times 1$ ,<br>Ceiling cover $\times 1$ , Ceiling bracket mounting screw (tapping screw 4 $\times$ 16) $\times 4$  |

# CHARACTERISTIC DIAGRAMS based on EN 54-24 measurement conditions (Pink noise, 1 W, 4 m)

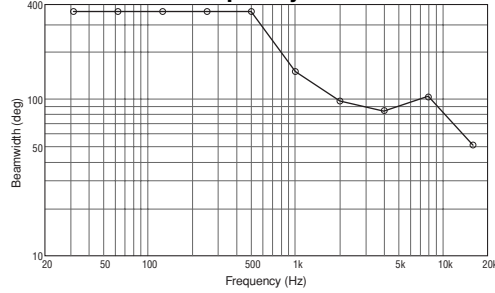
## Polar Response



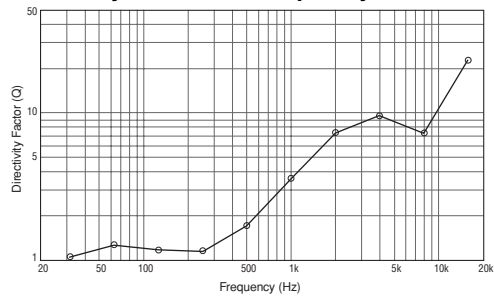
## SPL vs. Frequency



## Beamwidth vs. Frequency



## Directivity Factor vs. Frequency



## ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The speaker shall combine a bass-reflex 12 cm (5") cone type, plus balanced dome tweeter, suitable for ceiling suspension mounting. It is also designed for use in voice evacuation systems. Input impedance shall be easily adjustable with rotary switch on the upper side of the speaker.

The speaker shall include a transformer having multiple taps (5 W, 10 W, 15 W at 100 V and 2.5 W, 5 W, 7.5 W at 70 V) adjustable. The output sound pressure level at a distance of 1m with a 1 W input level applied shall be 91 dB SPL. The speaker shall have a frequency response of 70 – 20,000 Hz. The speaker shall have an ingress protection for indoor applications: IEC 60529 / EN 60529

drip-proof rating of IP21C. A fire-resistant steatite screw terminal block allows secure cable connections and bridge wiring. Thermal fuse with a blowing temperature of 84° C.

The speaker enclosure shall be constructed of HIPS resin. The grille shall be constructed of surface-treated steel plate net. The speaker shall be available in off-white colour. The unit shall have dimensions of  $\varnothing 186 \times 251$  (H) mm ( $\varnothing 7.32" \times 9.88"$ ), and a weight of 2.1 kg (4.63 lb).

The speaker shall be certified according to EN 54-24 with CPD Number 0359-CPD-0105, certified according to ISO 7240-24.

The speaker shall be a TOA model PE-154EN.