Certified
EN 54-24: 2008

# ITEC NEODYMLINE A/B-WP/54-24
# UNIDIRECTIONAL REDUNDANT HIGHPOWER SPEAKER-ARRAY

Tested acc. to EN 54-24
Type: B CE
Manufactured by
ITEC Tontechnik und
Industrieelektronik GesmbH
8200 Laßnitzthal 300
Austria / Europe

TÜV NORD
TÜV NORD CERT GmbH
DIN EN ISO 9001

**DOC. 001/2015_NEODYMLINE A/B-WP/54-24**
**1293-CPR-0503**

ITEC®
itec-audio.com

# ITEC NEODYMLINE A/B-WP/54-24

Mod.1) 0° Mod.2) -5°

| | |
|---|---|
| Enviromental Type: | B |
| Termination | inside terminal post |
| Rated Noise Voltage: | 100 V |
| Rated Noise Power | 2x50W transformer |
| Power Setting: | 50/25/12,5/6,25 |
| Driver 3“ cone: | 8 |
| Weight | 5,9 kg |
| Dimensions (W x H x L): | 100 x 967 x 100 mm |
| IP-rating | 33 |
| Material/Color | welded aluminium / powder coated RAL 9010, RAL 9011 or customized |
| Sensitivity for the stated reference axis: | (Pink noise total 1W/4m) 81 dB/channel |
| Maximum sound pressure level: | (Pink noise total 50W/4m) 97,12 dB/channel |

- **dual channel high-power column loudspeaker system loaded with 2x4 3“ neodymium transducers**
- **2 channel fullrange system**
- **Highest sound pressures even at very small dimensions**
- **Perfect sound in acoustically challenging areas**
- **Perfect speech intelligibility in reverberant rooms**

The ITEC NEODYMLINE A/B-WP/54-24 is a 2-cannel (A/B) high-power passive column loudspeaker system with best performance in respect of speech intelligibility and music reproduction in difficult conditions.
Due to the placement of the 2x4x3“ nodymium transducers, the vertical pattern is perfect even for reverberant rooms - less reflections onto ceilings. Developed for areas of public life, where security is the highest bid certified quality assurance ensuring consistent performance at continuous operation for decades. The optical integration of the NeodymLine - Series is very simply, because of the slim and elegant design. The build in 50 VA tranformers provides high quality audio performance.

Fields of application: airports, railway stations, malls, industrial buildings, architetural buildings (glass), house of worship, conference rooms, historical building, etc.

| **Acoustical measurement enviroment:** | free field |
|---|---|

**Frequency response for each stated reference axis:**
**(Sensitivity 100Hz-10kHz 1/3 Oct. Pink noise total 1W/4 Meters)**

| Mod.1) 0° channel A | | | | | |
|---|---|---|---|---|---|
| **frequency** | **dB** | **frequency** | **dB** | **frequency** | **dB** |
| 100 Hz | 39,58 | 125 Hz | 40,82 | 160 Hz | 48,39 |
| 200 Hz | 53,08 | 250 Hz | 60,98 | 315 Hz | 60,48 |
| 400 Hz | 60,38 | 500 Hz | 64,95 | 630 Hz | 67,46 |
| 800 Hz | 70,21 | 1000 Hz | 70,02 | 1250 Hz | 70,33 |
| 1600 Hz | 70,10 | 2000 Hz | 70,10 | 2500 Hz | 69,17 |
| 3150 Hz | 66,81 | 4000 Hz | 69,29 | 5000 Hz | 71,87 |
| 6300 Hz | 67,66 | 8000 Hz | 73,55 | 10000 Hz | 73,60 |

| Mod.1) 0° channel B | | | | | |
|---|---|---|---|---|---|
| **frequency** | **dB** | **frequency** | **dB** | **frequency** | **dB** |
| 100 Hz | 36,02 | 125 Hz | 40,45 | 160 Hz | 45,52 |
| 200 Hz | 52,14 | 250 Hz | 58,85 | 315 Hz | 60,36 |
| 400 Hz | 61,22 | 500 Hz | 65,64 | 630 Hz | 66,60 |
| 800 Hz | 69,37 | 1000 Hz | 71,86 | 1250 Hz | 70,18 |
| 1600 Hz | 69,15 | 2000 Hz | 70,49 | 2500 Hz | 69,11 |
| 3150 Hz | 66,82 | 4000 Hz | 69,17 | 5000 Hz | 72,00 |
| 6300 Hz | 67,78 | 8000 Hz | 73,39 | 10000 Hz | 73,75 |

**Frequency response for each stated reference axis:**
**(Sensitivity 100Hz-10kHz 1/3 Oct. Pink noise total 1W/4 Meters)**

| Mod.2) -5° channel A | | | | | |
|---|---|---|---|---|---|
| frequency | dB | frequency | dB | frequency | dB |
| 100 Hz | 39,68 | 125 Hz | 40,88 | 160 Hz | 48,15 |
| 200 Hz | 52,80 | 250 Hz | 61,48 | 315 Hz | 60,14 |
| 400 Hz | 60,28 | 500 Hz | 64,56 | 630 Hz | 67,02 |
| 800 Hz | 69,91 | 1000 Hz | 69,85 | 1250 Hz | 69,79 |
| 1600 Hz | 69,66 | 2000 Hz | 69,98 | 2500 Hz | 68,90 |
| 3150 Hz | 65,94 | 4000 Hz | 68,46 | 5000 Hz | 71,26 |
| 6300 Hz | 67,12 | 8000 Hz | 72,55 | 10000 Hz | 72,65 |

| Mod.2) -5° channel B | | | | | |
|---|---|---|---|---|---|
| frequency | dB | frequency | dB | frequency | dB |
| 100 Hz | 34,62 | 125 Hz | 39,38 | 160 Hz | 45,48 |
| 200 Hz | 51,61 | 250 Hz | 57,32 | 315 Hz | 59,46 |
| 400 Hz | 61,27 | 500 Hz | 65,68 | 630 Hz | 66,62 |
| 800 Hz | 68,94 | 1000 Hz | 71,80 | 1250 Hz | 70,36 |
| 1600 Hz | 69,22 | 2000 Hz | 69,56 | 2500 Hz | 68,73 |
| 3150 Hz | 66,27 | 4000 Hz | 69,40 | 5000 Hz | 71,51 |
| 6300 Hz | 67,19 | 8000 Hz | 71,54 | 10000 Hz | 72,74 |

**Horizontal / Vertical coverage angles: Mod.1) 0°**

| frequency | horizontal | | vertical | |
|---|---|---|---|---|
| | channel A | channel B | channel A | channel B |
| 500 Hz | 360 | 360 | 137 | 128 |
| 1 kHz | 326 | 323 | 162 | 172 |
| 2 kHz | 155 | 178 | 34 | 34 |
| 4 kHz | 206 | 206 | 17 | 16 |

**Horizontal / Vertical coverage angles: Mod.2) -5°**

| frequency | horizontal | | vertical | |
|---|---|---|---|---|
| | channel A | channel B | channel A | channel B |
| 500 Hz | 360 | 360 | 137 | 140 |
| 1 kHz | 326 | 192 | 162 | 137 |
| 2 kHz | 155 | 162 | 34 | 33 |
| 4 kHz | 206 | 200 | 17 | 18 |

**Rated impedance per channel:**

| power | impedance |
|---|---|
| 50 W | 194 Ω |
| 25 W | 361 Ω |
| 12,5 W | 699 Ω |
| 6,25 W | 1377 Ω |

**Active EQ is required:**

| frequency | dB |
|---|---|
| 1600 | -4 |
| 2000 | -2 |

## Mounting accessories

**Mounting bracket standard (short)**
Dimensions: 9 x 6.5 cm

**Mounting bracket long (optional)**
Allows greater tilt of the sound column; Dimensions: 18.5 x 13.5 cm

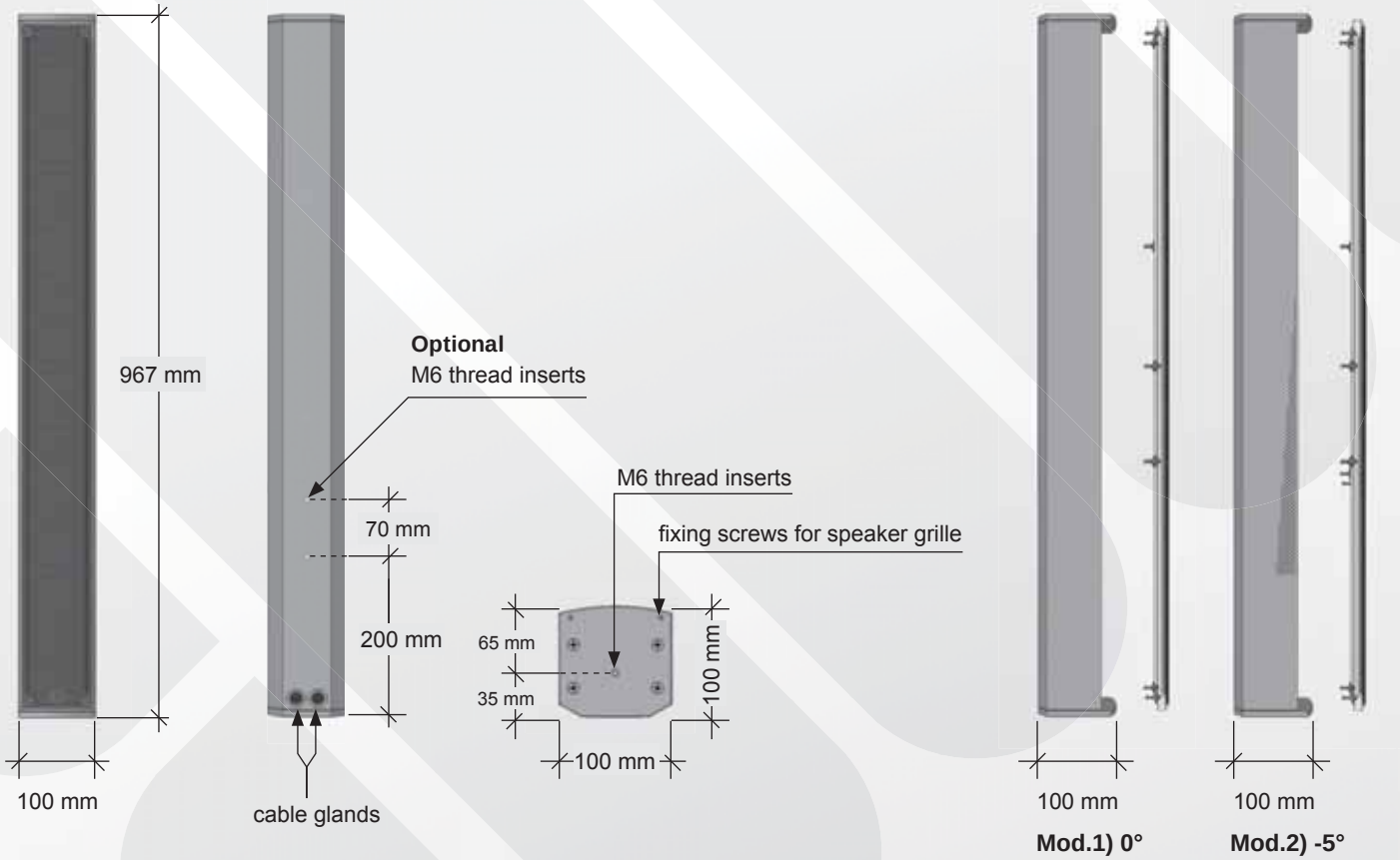
**Swing & tilt mounting (optional)**
black/white

**Wall mount bracket (optional)**

## Terminal

**Terminal (standard)**
Connection terminal covered by metal plate (Ceramic Terminal + thermal fuse) incl. cable entry clamp with stress relief

**Ceramic terminal (optional)**




**Installation, Operation, Maintenance**

To avoid injury or damage, always make sure to mount the speakers securely.
Make sure that all amplifiers are switched of and all controls are turned down before connecting the speaker systems.
Please pay attention on the connection to the transformer board and make sure that the polarity of the speakers is correct (also at the amplifier).
After connecting all systems cross-check the wiring with a phase checker. Make sure that the rated sum power of the speakers do not exceed the output power of the 100 V amplifier!
Do not open the loudspeaker during operation.

Fix the rigid or swing and tilt bracket onto wanted position.
Unscrew the 4 fixing screws of the speaker grille, on the top and bottom lid and remove the grille.
Remove the metal plate, which is covering the connection terminal (2 screws).
Lead cable trough the cable gland and connect to terminal (50/25/12,5/6,25 W).
Fasten the connection terminal cover and fix the speaker with two M6 scews into the thread inserts. Screw in the 4 fixing scews for the speaker grille. For optimum performance, always use the correct voltage, power and operate within the frequency limits as specified.

Subject to technical changes