

# Dynamic SoundField

## Technical Data

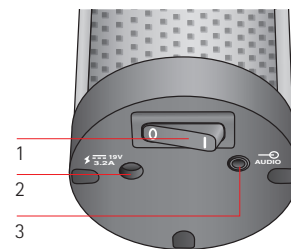
The Dynamic SoundField consists of the DigiMaster 5000 loudspeaker unit and the inspiro transmitter with the EasyBoom microphone.



### Features

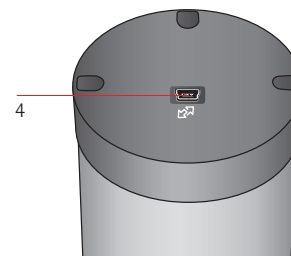
- Installation-free
- Only one loudspeaker per classroom
- Unlimited number of Dynamic SoundField systems per school building
- Exclusive built-in FM compatibility for children using hearing instruments
- Automated dynamic behaviour for optimal signal-to-noise ratios (SNRs)
- Unique 'line-source' loudspeaker unit for crystal clear sound
- 12 high-quality loudspeakers per loudspeaker unit
- Premium loudspeaker design
- Automatic frequency hopping for interference-free sound
- Floor-stand or wall-mountable use
- mini-USB for downloading new features
- MultiTalker Network with inspiro and DynaMic for up to 10 speakers
- Durable EasyBoom microphone

### DigiMaster 5000 Controls



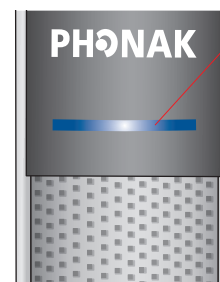
#### Loudspeaker base

- 1 On/Off switch
- 2 Power socket
- 3 3.5 mm audio input



#### Loudspeaker top

- 4 mini-USB



#### Status indicator

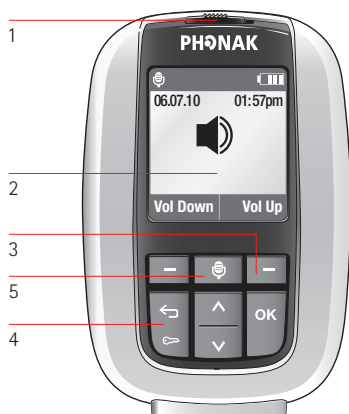


DigiMaster 5000

inspiro

# Dynamic SoundField

## inspiro Controls



- inspiro**
- 1 On/Off slider
  - 2 Color LCD
  - 3 Soft keys
  - 4 Keypad lock key
  - 5 Microphone mute key

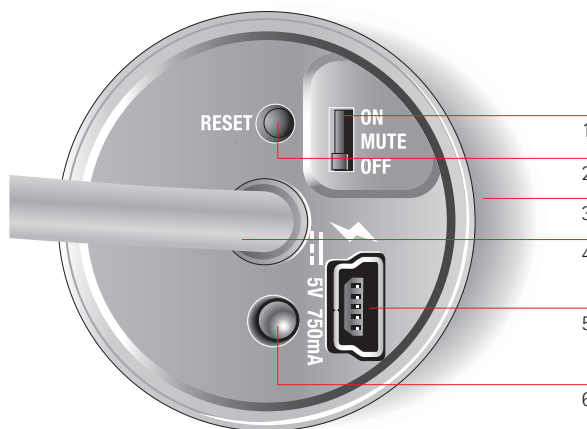


- 6 3.5 mm audio input
- 7 mini-USB for charging



- 8 Button to attach the belt clip and the neck-loop
- 9 Cable wrapper

## DynaMic Controls



- DynaMic**
- 1 On/Mute/Off slider
  - 2 RESET Button  
Use a pen to press the button
  - 3 Built-in vibration alarm
  - 4 FM antenna  
Emits FM to FM receivers
  - 5 mini-USB interface  
For charging
  - 6 The LED indicates the following:
    - battery status
    - charging
    - error status

# Dynamic SoundField

DigiMaster 5000

## General data

Height:	895 mm (35 inches)
Diameter:	72 mm (2.8 inches)
Weight (without floor stand):	2070 g
Operating temperature range:	0°C to +45°C
Humidity:	20 % to 85 %
Transmission technology:	2.4 GHz with automatic frequency hopping
Frequency planning:	not necessary
Number of Dynamic SoundField systems per school building:	unlimited
Operating range:	typically >10 meters (>33 feet)

## Audio characteristics

Audio bandwidth for speech:	200 Hz–7.5 kHz
Signal-to-noise ratio with EasyBoom:	> 55 dB
Audio bandwidth for auxiliary audio input:	200 Hz–15 kHz
Signal-to-noise ratio of external audio:	> 70 dB
Volume control for voice:	+/- 8 dB
Volume control for auxiliary audio input:	+/- 10 dB
Power output:	up to 40 W
Loudspeaker impedance:	4 Ω
Vertical aperture angle of the main lobe @500Hz:	+/-25°
Vertical aperture angle of the main lobe @2kHz:	+/-7°
Auxiliary input socket:	3.5 mm jack
Auxiliary input impedance:	> 10 kΩ

## Dynamic characteristics

Target gain for noise level < 54 dB SPL:	+6 dB compared to the voice level
Start of dynamic adaptation:	noise level > 54 dB SPL
SNR with 45 dB SPL noise level in classroom:	> 20 dB*
SNR with 55 dB SPL noise level in classroom:	> 12 dB*
SNR with 65 dB SPL noise level in classroom:	> 10 dB*
Typical average output level (Volume control 0 dB, speech level of 65 dB SPL@1 m):	Noise level < 54 dB SPL: 71 dB SPL@1 m, 66 dB SPL in the reverberant field Noise level = 60 dB SPL: 75 dB SPL@1 m, 70 dB SPL in the reverberant field Noise level = 66 dB SPL: 81 dB SPL@1 m, 76 dB SPL in the reverberant field Noise level > 66 dB SPL: 81 dB SPL@1 m, 76 dB SPL in the reverberant field
Maximum average output level with EasyBoom:	89 dB SPL@1 m (Volume control +8 dB, noise level of 60 dB SPL, speech level of 75 dB SPL@1 m)
Maximum peak output level with EasyBoom:	96 dB SPL@1 m (Volume control +8 dB, noise level >60 dB SPL, speech level of 75 dB SPL@1 m)
Maximum peak output level over auxiliary audio input:	100 dB SPL

## Power supply

Voltage input:	100–240 V
Voltage output:	19VDC/65 W
Power consumption in standby mode:	< 1 W
Power consumption in Off mode:	< 0.5 W
Plug:	5.5 x 2.5 x 11.5 mm, polarity+ center

## Floor stand

Height:	1035 mm (41 inches)
Diameter of the foot print:	750 mm (29 inches)
Weight:	2165 g

\* Speech level of 65 dB SPL@1 m, SNR measured at a distance of 4 m from the voice and loudspeaker sources

# Dynamic SoundField

inspiro

## General data

Type:	Dynamic SoundField and Dynamic FM transmitter
Length:	83 mm
Width:	56 mm
Height:	21 mm
Weight:	69 g
Operating temperature range:	-10°C to +60°C
Humidity:	20% to 75%
Transmission technology:	2.4 GHz including automatic frequency hopping
Operating range:	Sufficient for classroom sizes > 10 meters (33 feet)

## Power supply

Type:	Dedicated inspiro charger
Connector:	mini-USB

## Battery

Type:	Lithium polymer
Dimensions:	Length: 50 mm Width: 25.5 mm Height: 5.8 mm
Voltage:	3.7V
Capacity:	750 mAh
Operating time (normal mode):	9 hours
Charging temperature range:	0°C to +45°C
Charging time with charger:	100% in 2 hours 80% in 1 hour

If inspiro is emitting to the DigiMaster 5000 and to Phonak FM receivers in parallel, its power consumption is slightly higher, reducing the operating time to 7–8 hours.

# Dynamic SoundField

DigiMaster 5000 + inspiro

## Standards

Electrical safety:	IEC/EN 60950-1
RF standards:	for 2.4 GHz: EN 300 328 for FM: EN 300 422
EMC:	EN 301 489-1, -9, -17, EN55013, EN55020
Product power consumption complies with Ecodesign Directive 2005/32/EC:	EC No 1275/2008, EN 62301 Power supply efficiency level V

## Accessories

### DigiMaster 5000

Power adapter with power cables for Europe, USA, AUS and UK  
Wall mount Kit  
Tool set for the installation  
Audio cable 1 m/3 feet  
Audio cable 3 m/10 feet  
Scart adapter for audio cable  
Cinch adapter for audio cable

### inspiro

Additional inspiro transmitters for the MultiTalker Network  
Additional DynaMic passaround microphones for the MultiTalker network  
inspiro single charger  
inspiro twin charger  
Replacement battery for inspiro 3.7V/750mAh  
Replacement clip for inspiro  
Replacement neck loop for inspiro

### EasyBoom

EasyBoom microphone for the inspiro  
EasyBoom adapter cable for inspiro  
Replacement foam for EasyBoom

### DynaMic

Desk stand  
Clamp for 3/8" and 5/8" (K&M)  
Replacement microphone head  
Colour rings