

Dynamic SoundField

DigiMaster 5000 loudspeaker

Technical Data

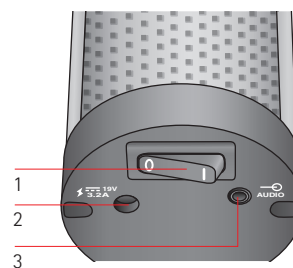
A Dynamic SoundField system consists of one or more DigiMaster units and the inspiro transmitter with the EasyBoom or iLapel microphone.



Dynamic SoundField system features

- Installation-free
- Automated dynamic behaviour for optimal signal-to-noise ratios (SNRs)
- Automatic frequency hopping for interference-free sound
- MultiTalker Network with inspiro and DynaMic for up to 10 speakers
- iLapel or EasyBoom microphone

DigiMaster Controls

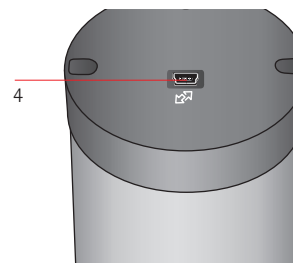


Loudspeaker base

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

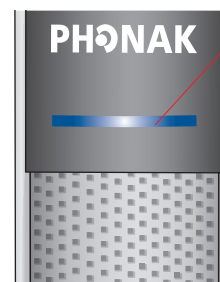
DigiMaster 5000 features

- One loudspeaker per classroom
- Unique "line-source" loudspeaker unit for crystal clear sound
- 12 high-quality loudspeakers per loudspeaker unit
- Premium loudspeaker design
- Floor-stand or wall-mounting use
- mini-USB for downloading new features



Loudspeaker top

- 4 mini-USB



Status indicator



DigiMaster

inspiro

Dynamic SoundField

DigiMaster 5000

General data

Height:	885 mm (35 inches)
Diameter:	72 mm (2.8 inches)
Weight (without floor stand):	2070 g (4.5 lbs)
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
Number of DigiMaster 5000 per classroom:	1
Room size:	up to 100 m ² (1076 ft ²)

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

Standards

EMC:	EN 55013, EN 55020
Product power consumption complies with Ecodesign Directive 2005/32/EC:	EC No 1275/2008, EN 62301

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

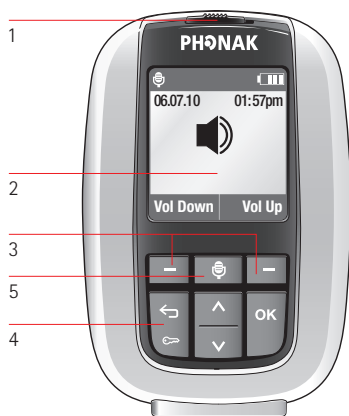
Tube height:	1035 mm (41 inches)
Diameter of the foot print:	750 mm (29 inches)
Weight:	2165 g
Height overall on floor stand:	1720 mm (68 inches)

* Characteristics with EasyBoom

** 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 Controls



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

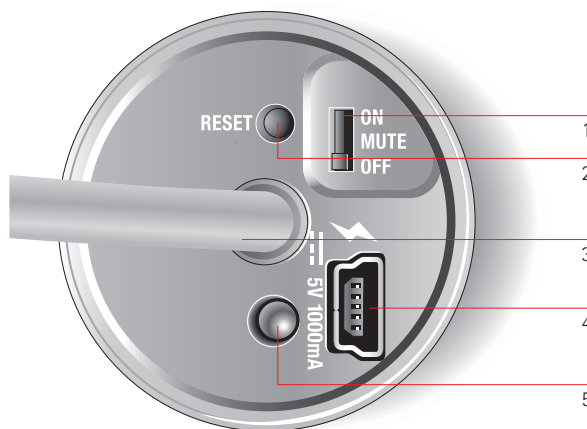


- 6 3.5 mm audio input
- 7 mini-USB for charging



- 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 Antenna
 - 4 mini-USB interface for charging
 - 5 The LED indicates the following:
 - battery status
 - charging
 - error status

DynaMic is the pass around microphone. It is designed to work exclusively alongside inspiro in the MultiTalker Network.

iLapel microphone



EasyBoom microphone



Dynamic SoundField

inspiro

General data

Type:	Dynamic SoundField transmitter*
Length:	83 mm
Width:	56 mm
Height:	24 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
Power emission (2.4 GHz):	100mW / 20 dBm

Power supply

Type:	Dedicated inspiro charger
Connector:	mini-USB

Battery

Type:	Lithium polymer
Dimensions:	Length: 52 mm Width: 25.8 mm Height: 9.5 mm
Voltage:	3.7V
Capacity:	1000 mAh
Operating time (normal mode):	12 hours
Charging temperature range:	0°C to +45°C
Charging time with charger:	100% in 2 hours 80% in 1 hour

MultiTalker Network

Digital network for up to 10 inspiro transmitters	
Frequency:	2.4 GHz
Operating range between inspiro transmitters:	at least 20 m

* Cannot emit to FM receivers.

Dynamic SoundField

DigiMaster + inspiro

Standards

Electrical safety:	IEC/EN 60950-1
RF standards:	for 2.4 GHz: EN 300 328 EMC: EN 301 489-1,-9,-17
SAR (2.4 GHz):	EN 62209-2 SAR _{1g} = 0.10 W/kg SAR _{10g} = 0.05 W/kg

Accessories

DigiMaster

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/1000mAh
Replacement clip for inspiro
Replacement neck loop for inspiro

EasyBoom

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

iLapel

iLapel microphone for the inspiro

DynaMic

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