



NEW
the dBAir
Sound Level Meter
WITH WiFi

the new benchmark
in sound measurement

WIRELESS CONNECTIVITY ■ CLOUD SOFTWARE

- DESIGNED FROM THE GROUND UP
- A UNIQUE CASTLE INNOVATION
- DESIGNED BY INDUSTRY EXPERTS
- WIRELESS OPERATION!



www.castlegroup.co.uk



dBair

there's a revolution in the air

The New Castle Sound Meter With Cloud Technology

dBair is the latest innovation from Castle Group bringing the power of wireless technology to sound measurement.

Quite simply, you take your measurement using one button on the instrument, then you go back to your office and by the time you get there, your results will already be at your fingertips. Alternatively, plug the meter in and simply copy a csv file to your computer.

- No Wires, No Software, No Waiting
- Audio Recording
- Instant Hearing Protection Selection
- Octave and 1/3 Octave Capability
- Instant CSV file from dBair
- Multi Language



dBair systems have all the accessories you need for the job.



Protect your investment

- ATTACHÉ KIT CASE
- WEATHERPROOF CASE
- IMPACT RESISTANT RUBBER CASE



find out more
www.dbairsoundmeter.com



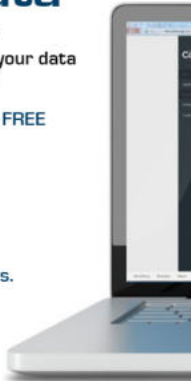
Secure, instant & available data

dBair works hand in hand with TheCastleCloud.com ensuring your data is always available and secure

- Starter Account Completely FREE
- Powerful Database System
- Numerous 'Calculators'
- Customised Reporting
- PRO accounts available for increased storage & features.

The database system on which the castle cloud is based allows you to analyse and interpret data based on which employees it affects, where it was taken, which tasks were assessed and who assessed them.

Once you have completed your assessment, you can copy and paste the data or you can create reports, which can be automatically emailed to your computer.



CASTLE CLOUD FEATURES

ANY DEVICE, ANYWHERE.

PC, Mac, Tablet or phone, you can access your account and data from any device, anywhere in the world!

CABLES? NOT HERE

At the push of a button the dBair wirelessly, quickly and securely sends all of your data to your account in The Castle Cloud.

SECURE BACKUP

Not only do we regularly back-up all your data onto secure servers, you can also download your own data at any time onto your device.

INSTANT DATA - NO SOFTWARE NEEDED

As soon as you log into your Castle Cloud account, your data will be waiting for you primed for analysis and report creating. Alternatively, use a USB cable to copy a csv file straight off the meter!

www.thecastlecloud.com

Call us on: +44 (0)1723 584250



Another innovation from...



dBAir systems for **SAFETY** in **INDUSTRY**

For Noise at Work assessments look no further than the dBAir Safety – Sound Innovation in Noise at Work Compliance from a company with nearly half a century's experience in dealing with occupational noise

Let the dBAir do the work, you do the safety.



WHY CLASS 1 OR CLASS 2?

Noise at Work assessments only require a sound meter to be Class 2 as a minimum, however the price difference between this and Class 1 is now smaller than it's ever been.

A Class 1 sound meter carries more weight in a court of law, and could be the difference between successful defence of a civil claim, or not!

1/1 OCTAVE BAND ANALYSIS

Although Hearing Protection Assessments can be carried out using SNR and HML, the addition of 1/1 Octave Band Analysis provides the user with the most accurate method possible ensuring staff are properly protected.

APPLICATIONS

- Noise at Work Assessments
- Exposure Assessments
- Factory Noise Mapping
- Octave Band Hearing Protection Assessments
- Noise Control Effectiveness
- SNR & HML Hearing Protection Assessments
- Litigation Defence

find out more

www.dbairsoundmeter.com

Castle's Unique Hearing Protection Database

dBAir works with our own database to choose the correct hearing protection from over 500 models.

- dBAir selects suitable protection
- Over 500 models to choose from
- On-screen assessment
- SNR, HML or Octave Band methods
- Exclusive to Castle



**dBAir Works
Anywhere In
Any Weather**

dBAir systems for **ENVIRONMENT**

Specifically designed to help you with assessments to BS 4142 noise survey reports, local authority complaint measurements much more, these dBAir Environment Assessment Systems are the result of nearly 50 years of knowledge and experience with noise in the environment.



HANDHELD ENVIRONMENTAL dBAir SYSTEMS

The dBAir Environment is available as a handheld system, perfect for a wide range of noise checking, including Boundary Noise and BS 4142.

OUTDOOR dBAir SYSTEMS

For extended periods outdoors, Long Term dBAir Systems come housed in an extremely rugged and weatherproof case, self powered for over a week on the standard battery. For even longer noise monitoring add Castle's 40 Day Weatherproof Power Source.

1/3 OCTAVE BAND ANALYSIS

Adding Octave Bands enables your dBAir System to carry out Tonal Noise Assessments to 1/3 Octaves.

APPLICATIONS

- Tonal Noise Assessments to 1/3 Octave
- BS 4142 Assessments
- Construction Noise
- Boundary Noise Monitoring
- Compliance Testing
- Handheld Environmental Measurements
- Short Term Assessments
- Long Term Assessments

dBair systems for **SAFETY & ENVIRONMENT**

dBair is multi-purpose for demanding jobs

For compliant measurements to IEC 61672-1:2013, for accurate Noise at Work assessments, and a whole host of Environmental Assessments including BS 4142:2014, Boundary Noise, Railway Noise, Construction Noise etc., these multi-purpose dBair Safety and Environment systems are an extremely popular choice with Safety Professionals and Environmental Health Officers alike.



OUTDOOR dBair SYSTEMS WITH A TRIPOD

Coming housed in rugged Weatherproof Casing, an additional battery, Weatherproof Microphone Housing and a Heavy Duty Tripod, the dBair Safety and Environment Systems combine all of the features to cover both applications. Perfect for unattended environmental measurements outdoor, then lift out the meter for hand-held measurement tasks."

HANDHELD dBair SYSTEMS

Presented safely in their unique attaché carry case with an Acoustic Calibrator and TheCastleCloud.com software licence, all of the dBair Systems are ready to use out of the box. Ideal for attended measurements both indoor or out.

APPLICATIONS

- Noise Control Effectiveness
- BS 4142 Assessments
- Tonal Noise Assessments to 1/3 Octave
- Construction Noise
- Compliance Testing
- Attended & Unattended Boundary Noise Monitoring
- Handheld Environmental Measurements

find out more

www.dbairsoundmeter.com



dBair systems for **YOUR APPLICATION**

The versatile design means dBair works for multiple applications

For specific applications such as Construction Assessments, Boundary Noise Measurements & for configurable products for Consultants, these dBair Systems have been created to match the task precisely



Construction Assessment System

dBair Safety & Environmental System
1/1 & 1/3 Octaves - Class 1

Construction noise is a special application because it covers a range of tasks from Planning Conditions to BS 5228 Assessments and from Complaints and Occupational Noise Measurements.

That is why we have a dBair system dedicated to the job

Railway Assessment System

dBair Safety & Environmental System
1/1 & 1/3 Octaves - Class 1

With the ever increasing development of land near to railway lines, noise complaints are becoming ever more prevalent and it is local authorities and consultants who are being asked to carry out more assessments for this application.

This dBair system also suits other environmental noise monitoring applications, especially where mechanical noise is the cause of complaints in residential areas

Call us on:

+44 (0)1723 584250



Who Are Castle?

Castle Group Ltd is a multi faceted company specialising in equipment and knowledge within the health, safety and environmental sectors.

At Castle we are all about tackling issues in a way most appropriate to you. If you want to purchase or rent some equipment and learn to manage a job yourself, then great; if, however, you just want us to come and do it all for you – equally great and there's any measure in-between.

- Instruments
- Rental
- Software
- Training
- Calibration
- Consultancy
- Online knowledge



our websites...



www.castlegroup.co.uk

Our principle website and the hub for all our websites and services as well as information about us and our company.



www.castleshop.co.uk

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dBair Technical Information

dBair Models

dBair Safety Class 1 (GA141S)
dBair Safety Class 2 (GA241S)
dBair Safety Octave 1 (1/1) Class 1 (GA141SO)
dBair Safety Octave 1 (1/1) Class 2 (GA241SO)
dBair Environment Class 1 (GA141E)
dBair Environment Octave 1 (1/1) Class 1 (GA141EO)
dBair Safety & Environment Class 1 (GA141SE)
dBair Safety & Env. Octave 1 (1/1, 1/3) Class 1 (GA141SEO)

dBair Systems

dBair Safety Managers System
dBair Safety Managers Octave System
dBair Environment Assessment System
dBair Safety & Environment Assessment System
dBair Safety & Env. Assessment Octave System

Applicable Standards

EC 81/672:1 2013
EC 61260:1 2014 (Where Octave Bands Fitted)
EC 61252:1993 amendment 1 2000 (Where Exposure Fitted)

Microphone

Class 1:
1/4" Pre-Polarised - Free Field (EC) Pressure (ANSI)
Sensitivity (50mV/Pa)

Class 2:
1/4" Pre-Polarised - Free Field (EC) Pressure (ANSI)
Sensitivity (25mV/Pa)

Noise Floor (Typical)

Class 1:
A Weighting < 16 dB
C Weighting < 15 dB
Z Weighting < 25 dB

Class 2:
A Weighting < 18 dB
C Weighting < 16 dB
Z Weighting < 26 dB

Measurement Ranges:

Class 1:
25 - 115 dB (LOW)
50 - 140 dB (HIGH)

Class 2:
25 - 115 dB (LOW)
50 - 140 dB (HIGH)

Frequency Weightings

Measurement 1: A, C or Z
Measurement 2: A, C or Z

Frequency Range

1 Hz - 20 kHz (electrical characteristics)
Class 1: 10 Hz - 20 kHz (including microphone)
Class 2: 20 Hz - 8 kHz (including microphone)

Time Weighting

Measurement 1: Slow, Fast, Impulse
Measurement 2: Slow, Fast, Impulse

Octave Band Analysis

Where fitted 1/1 or 1/3 octave band analysis on measurement 1 only.

Display

2.4" Full Colour TFT 240x320 pixels

Dual Measurements

Simultaneous dual measurement with independent time and frequency weightings.

MEASUREMENT PARAMETERS

dBair Safety:
L_{eq}, L_{eq}, L_{max}, L_{min}, Peak, L_{ex}, Exposure Points,
Dose, Hearing Protector Calculator

dBair Safety Octave:
L_{eq}, L_{eq}, L_{max}, L_{min}, Peak, L_{ex}, Exposure Points,
Dose, Hearing Protector Calculator
1/1 or 1/3 Octaves
L_{eq}, L_{eq}, L_{max}, L_{min}, Peak

dBair Environment:
L_{eq}, L_{eq}, L_{max}, L_{min}, Peak, L_{ex}, L_{ms}, L_{day},
Levening, Night, L_{dn}, L_{den}, NA, 10 user-definable L_n
values (pre-set to L1, L5, L10, L20, L25, L50, L75,
L90, L95, L90) plus LAF* for Noise act assessment.
1/1 or 1/3 Octaves
L_{eq}, L_{eq}, L_{max}, L_{min}, L_n, Peak

dBair Environment Octave:
L_{eq}, L_{eq}, L_{max}, L_{min}, Peak, L_{ex}, L_{ms}, L_{day},
Levening, Night, L_{dn}, L_{den}, NA, 10 user-definable L_n
values (pre-set to L1, L5, L10, L20, L25, L50, L75,
L90, L95, L90) plus LAF* for Noise act assessment.
1/1 or 1/3 Octaves
L_{eq}, L_{eq}, L_{max}, L_{min}, L_n, Peak

dBair Safety & Environment:

L_{eq}, L_{eq}, L_{max}, L_{min}, Peak, L_{ex}, Exposure Points,
Dose, Hearing Protector Calculator, L_{ms}, L_{ms}, L_{day},
Levening, Night, L_{dn}, L_{den}, NA, 10 user-definable L_n
values (pre-set to L1, L5, L10, L20, L25, L50, L75,
L90, L95, L90) plus LAF* for Noise act assessment.
1/1 or 1/3 Octaves
L_{eq}, L_{eq}, L_{max}, L_{min}, L_n, Peak

dBair Safety & Environment Octave:

L_{eq}, L_{eq}, L_{max}, L_{min}, Peak, L_{ex}, Exposure Points,
Dose, Hearing Protector Calculator, L_{ms}, L_{ms}, L_{day},
Levening, Night, L_{dn}, L_{den}, NA, 10 user-definable L_n
values (pre-set to L1, L5, L10, L20, L25, L50, L75,
L90, L95, L90) plus LAF* for Noise act assessment.
1/1 or 1/3 Octaves
L_{eq}, L_{eq}, L_{max}, L_{min}, L_n, Peak

Languages

English UK, English US, Chinese, French, German, Italian,
Portuguese Brazilian, Russian, Spanish, Dutch, Greek

Time History

Short Interval: 10ms to 60m
Long Interval: 1s to 24h
Smart Timer, Duration Timer or Interval Timer

Memory - 18GB, 32GB or 64GB

Input / Output Connection

Micro USB Type B

Power

Batteries: 4 x AA (1.5V)
Life: Up to 8 Hours continuous
operation (screen settings dependent)
USB Socket

Size and Weight

Dimensions:
Including Pre-Amplifier:
210mm (H) x 70mm (W) x 30mm (D)
Excluding Pre-Amplifier:
145mm (H) x 70mm (W) x 30mm (D)
Weight:
Model: 305g System: 1500g

Available Accessories

GAS07 Dual Level Calibrator
KAD17 Kit Case for dBair & Accessories (included)
KAD22 Weatherproof Enclosure
ZL141-001 Standard Microphone Extension Cable
ZL1108-01 USB to Micro USB Cable 1m
PS06 USB Wall Plug

find out more www.dbairsoundmeter.com

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Your Local Distributor