



Bilsom Technology

**GENERAL DATA**

**Division :** Head Protection  
**Family :** Hearing Protection  
**Range :** Earmuffs  
**Line :** Noise Blocking Earmuffs  
**Brand formerly known as :** BILSOM

**Business Countries**

United Kingdom  
 Middle East  
 EMEA

**Activity Domains :**

Administration • Agriculture • Army - Defence •  
 Automotive and Part Manufacturer • Aviation • Building  
 and Construction • Catering • Chemical Industries •  
 Energy or Electricity • Fire Protection brigades • Fishing  
 • Food Industries • Foundry • Glass Industries • Green  
 Spaces • Homeland defense • Industrial Cleaning • Iron  
 and steel industry • Logistics • Maintenance • Medical  
 and Pharmaceutical • Metal steel • Mining and Quarrying  
 • Offshore • Paper Industries • Petro-chemical •  
 Printing Industries • Services • Telecoms • Textile  
 Industries • Transportation • Utilities • Water treatment  
 • Welding • Wood Industries • Laboratory • Ship  
 Building • Industry



**Product Use :**  
 Noise Blocking Earmuff

**PRODUCT ADVANTAGES**

**Feature :**

**AIR FLOW CONTROL TECHNOLOGY**

Bilsom's patented Air Flow Control™ technology delivers optimal attenuation across all frequencies, without increasing earmuff size or weight. A patented baseplate chamber and high-tech non-woven layer manage the flow of air inside the earmuff to control how sound reaches the ear. The result is better, more consistent overall attenuation for virtually all industrial noise environments.

**STEEL WIRE CONSTRUCTION**

Robust steel headband withstands demanding use, especially in tough environments.

**SNAP-IN EAR CUSHIONS**

Snap-in ear cushions make replacement quick and easy.

**PADDED FOAM HEADBAND**

delivers long-wearing comfort with minimal pressure on the head.

**Benefit :**

When you're in a tough industrial environment and need to block noise, Bilsom's Leightning series' steel wire construction provides high performance and robust durability. Leightning stands up to daily use and abuse without compromising comfort. Bilsom has optimized the Leightning series to deliver the highest level of comfort available, featuring an exclusive padded foam headband and super soft ear cushions that eliminate that "squeezing pressure" on the head.

## TECHNICAL DESCRIPTION

SNR (dB) : 34

H (dB) : 33

M (dB) : 32

L (dB) : 27

**Attenuation Data :**

Frequency (Hz) Frequenz (Hz) Fréquence (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB) Mittlere Dämmung (dB) Atténuation moyenne (dB)	23.6	24.6	27.8	32.6	37.4	35.2	38.8	35.8
Standard Deviation (dB) Standardabweichung (dB) Déviation standard (dB)	6.4	3.6	2.0	2.0	3.3	3.2	3.1	3.3
Assumed Protection (dB) Angenommener (dB) Protection supposée (dB)	17.2	21.0	25.8	30.6	34.1	32.0	35.7	32.5

**Earmuff Construction :**

Metal

**Other Material :**

Steel wire, PUR-E, PVC, Textile, PC/ABT, ABS, PP

**Dielectric :** No

**Color :**

Black

**Batteries Needed :**

None

**Weight (grs) :**

302

**Design Patents :**

Air Flow Control™

**Headband Style :**

Over-Head

**Sound Amplification :** No

**AM/FM Radio :** No

**Automatic Shut-Off Function :** No

**Audio Input Jack :** No

**Hi-Visibility :** No

## ADDITIONAL INFORMATION

**Accessories :**

Hygiene Kit - Packed in a plastic bag, including two ear cushions and two foam pads. Ref. # 1012000 for L3, L3H, L3N

Beltclip - For carrying purpose. Old Ref. # 1000252 New Ref. # 1016730

Cool II Pads - Sweat absorbing pads. Ref. # 1000365 5-pair, Ref. # 1000364 100-pair

Optisorb - cotton sleeve slides over earcup. Ref. # 3302101

Polar Hood - Ref. # 1016870 Lg/XLg; Ref. # 1016871 Sm/Med

**Life Cycle :**

Cushions should be replaced periodically to retain maximum attenuation. Use the following as a guideline for replacement of ear cushions and insert foam. General use and wear - Ear cushions and foam inserts should be replaced at least every 6 months. Heavy use or wear in humid/extreme climates - Ear cushions and foam inserts should be replaced at least every 3 months. Cracking or leakage is visible - replace ear cushions and foam inserts immediately.

**Storage Information :**

When not in use, the earmuffs should be stored in a clean dry container or locker. Do not use solvents or petroleum-based products. Do not immerse the earmuffs in water.

**Care Instruction :**

Earmuffs are an important safety product and should be inspected regularly. Its use, care and maintenance are critical to its effective performance. Earmuffs and in particular ear cushions may deteriorate with use and should be examined at frequent intervals for cracking and leakage. If the ear cushions become hard, damaged or deteriorated, they should be replaced promptly using recommended Hygiene Kits. Earmuffs should be maintained by regular cleaning. Use a mild disinfectant solution. A gentle wipe is all that is required.

**User manual number :**

90010506

**EAN Code :**

7312550109243

**CERTIFICATION AND CONFORMITY****European Directives :**

89/686/EEC

**EC Category PPE\* : Category II****Standards :**

EN-352-1:2002

**Quality Assurance :**

ISO 9001 / 2000

**EC Certification Number :**

EC1294

**EC Attestation Number :**

041108

**Laboratory :**

INSPEC

\*PPE : Personal Protective Equipment

## EC CONFORMITY DECLARATION

**The manufacturer or its legal representative supplier settled in the European Community:**

Howard Leight by Sperian

**Declares that the next Personal Protective Equipment described here after is in conformity with the provisions of Council Directive 89/686/CEE:**

Designation: Leightning L3s Headband Earmuff

Reference: 1010924

Standard(s): EN-352-1:2002

**This PPE is the object of the above EC attestation type:**

041108

**Delivered by:**

INSPEC

56 Leslie Hough Way

Salford

M6 6AJ Greater Manchester

United Kingdom

**Made at Sweden, on the 01/04/2005**

**By:**

**Division:** Head Protection



## EC TYPE-EXAMINATION CERTIFICATE: 1294

**Product description: -**

Hearing Protection - Ear-Muffs

**Product identification: -**

Howard Leight Lightning L3s  
Howard Leight Lightning L3s HI-VISIBILITY  
Howard Leight Worksafe No Noise 3

**Manufacturer: -**

Sperian Hearing Protection LLC  
7828 Waterville Road  
San Diego  
CA 92154  
USA

When assessed and examined against harmonised standard EN352-1:2002 are found to be in conformity with Council Directive 89/686/EEC and associated amendments, relating to personal protective equipment.

**Authorised EU Representative: -**

Sperian Protection Europe  
Immeuble Edison - ZI Paris Nord II  
33 Rue des Vanesses, BP55288  
95958 Roissy CDG Cedex  
France

Signed .....



Date: 4th January 2005

K J Warren, Manager, Certification Services

For and on behalf of INSPEC International Ltd.  
56 Leslie Hough Way, Salford, Gt Manchester M6 6AJ  
England (Notified Body No: 0194)

certificate invalid  
if not embossed

For terms and conditions of issue, see page 2

## Terms and Conditions

### Reference Documents: -

- |      |                          |   |  |
|------|--------------------------|---|--|
| i)   | Test Reports             | - | INSPEC 04.11.08                                    |
| ii)  | Technical File           | - | TF/1294  |
| iii) | Test and Inspection Plan | - | CE Product Certification, Test and Inspection Plan |

### Conditions attached to the issue of this certificate:

- i) Marking and instructions have been assessed in the English language only. It is the Manufacturers/Authorised Representatives responsibility to obtain and supply language versions acceptable to the country where the product is to be sold.
- ii) Any changes to the product, technical file or quality manual/quality plan shall be immediately notified to INSPEC.
- iii) The Manufacturer/Authorised Representative shall comply at all times with INSPEC's Regulations governing CE Product Certification.
- iv) This Certificate remains the property of INSPEC and may be withdrawn if any of the conditions attached to its issue are not complied with.



# CERTIFICATION INDEX

<b>Item</b>	<b>Status</b>	<b>Issued</b>	<b>Amendment</b>
Page 1 of 2	Withdrawn	04/01/05	1 <sup>st</sup> issued
Page 2 of 2	Withdrawn	04/01/05	1 <sup>st</sup> issued
Schedule ONE	Withdrawn	04/01/05	1 <sup>st</sup> issued
Certificate, pages 1 – 4	Withdrawn	29/09/06	Add Worksafe No Noise 3
Certificate, pages 1 – 4	Valid	21/10/08	Name change to Howard Leight by Sperian



# CERTIFICATION SCHEDULE

Model: Howard Leight Leightning L3s,  
Howard Leight Leightning L3s HI-VISIBILITY  
Howard Leight Worksafe No Noise 3

Description: Over-the-head ear-muff

Size Range: S / M / L

## Attenuation Data

Freq. (Hz)	63	125	250	500	1000	2000	4000	8000
Mean att. (dB)	23.6	24.6	27.38	32.6	37.4	35.2	38.8	35.8
Std. Dev. (dB)	6.4	3.6	2.0	2.0	3.3	3.2	3.1	3.3
APV (dB)	17.2	21.0	25.8	30.6	34.1	32.0	35.7	32.5
	H = 33dB		M = 32dB		L = 27dB		SNR = 34dB	

