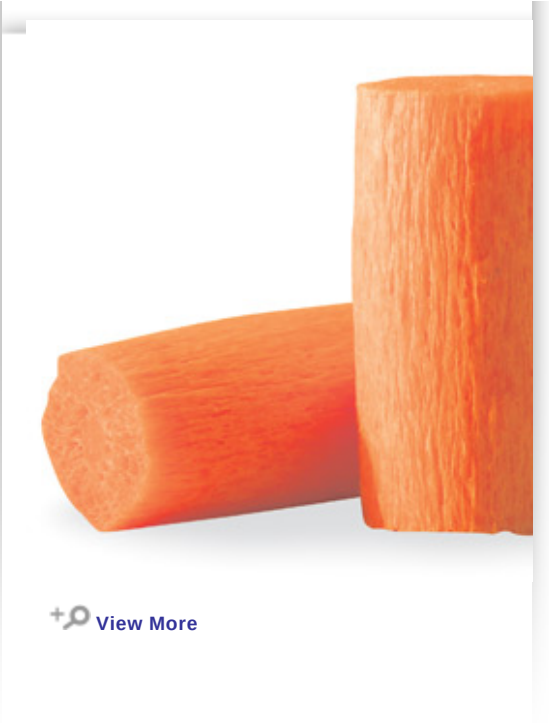

View More

Product Family

Matrix Single-Use Earplugs

No-roll design, enhanced communication

Learn more about our products at howardleight.com >

Learn more about hearing conservation at hearforever.org >

HOWARD LEIGHT by Honeywell

Product Numbers & Ordering Information

	Product Numbers	Details
	MTX-30-BU	**Matrix Blue - corded** NRR 23 Canada Class A(L)
	MTX-1-BU	**Matrix Blue - uncorded** NRR 23 Canada Class A(L)
	MTX-BU-LS4	**Matrix Blue - uncorded bulk refill for Leight Source 400** NRR 23 Canada Class A(L)

	MTX-1-BU-D	**Matrix Blue - uncorded bulk refill for Leight Source 500** NRR 23 Canada Class A(L)
	MTX-30-GR	**Matrix Green - corded** NRR 27 Canada Class A(L)
	MTX-1-GR	**Matrix Green - uncorded** NRR 27 Canada Class A(L)
	MTX-GR-LS4	**Matrix Green - uncorded bulk refill for Leight Source 400** NRR 27 Canada Class A(L)
	MTX-1-GR-D	**Matrix Green - uncorded bulk refill for Leight Source 500** NRR 27 Canada Class A(L)
	MTX-30-OR	**Matrix Orange - corded** NRR 29 Canada Class A(L)
	MTX-1-OR	**Matrix Orange - uncorded** NRR 29 Canada Class A(L)
	MTX-OR-LS4	**Matrix Orange - uncorded bulk refill for Leight Source 400** NRR 29 Canada Class A(L)
	MTX-1-OR-D	**Matrix Orange - uncorded bulk refill for Leight Source 500** NRR 29 Canada Class A(L)

Overview

Key Features

- Patented no-roll design makes insertion fast and easy
- Smooth outer skin and reduced diameter provide long-term comfort
- Delivers instant protection upon proper insertion – no need to wait for foam to expand
- Uniform attenuation profile blocks out noise while voice frequencies can be heard more naturally
- Three attenuation levels for targeted attenuation
- Bulk refills for Leight Source 400 and Leight Source 500 Earplug Dispensers save time, waste and space

Hazards

- Noise

Regulations

- 29 CFR 1910.95 - OSHA Occupational Noise Exposure (US)
- ANSI S3.19-1974 - Attenuation Test Protocol (US)
- Part II, (R.S.C. 1985, c. L-2) - Canada Labour Code
- Z94.2-1994 - Attenuation Test Protocol (CAN)
- 2003/10/EC - EU Hearing Directive
- 89/686/EEC - EU Directive/PPE
- Category II - EC Category/PPE
- NOHSC: 1007 (2000) - National Standard for Occupational Noise (AUS/NZ)
- NR 15 - Security and Health of Work, Annexes 1 and 2, n°3.214/1978 - Occupational Noise Regulations (BR)
- ANSI S12.6/1997 - Method B - Attenuation Test Protocol (BR)
- 9001:2008 - ISO

Historical Brand

Howard Leight

Specifications

Color	Orange [high], Green [medium], Blue [low]
Shape	Cylinder
Material	TPE Foam
Packaging	• Polybag • Bulk Refill for Leight Source 400 or Leight Source 500 Dispenser
Cord Options	• Uncorded • Polycord

Certifications

Instruction Manual - Matrix (global)
http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/Secured/Hearin

MATRIX Orange, Green, Blue 1 2 3 YES OUI JA SI4 NO NON NEIN NO 8 FITTING INSTRUCTIONS 1. Reach over head with free hand, pull ear up and back and INSERT earplug, WITHOUT ROLLING it, well inside ear canal. 2. Earplugs should be inserted as shown in these drawings. Stop pushing earplug when finger touches the ear. 3. PRO

Literature & Documents

Earplug Instruction Poster - EN
http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/Hearing_Protec

Earplug Instruction Poster - ES
http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/Hearing_Protec

Earplug Instruction Poster - FR
http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/Hearing_Protec

Training & Proper Use

1. Reach over your head with a free hand, pull your ear up and back, and insert the earplug well inside your ear canal.
2. Stop pushing earplug when your finger touches your ear.
3. If properly fitted, the end of the earplugs should not be visible to someone looking at you from the front.
4. Proper Fit – If either or both earplugs do not seem to be fitted properly, remove the earplug and reinsert.
5. Removal – Gently twist earplug while slowly pulling in an outward motion for removal.
6. Acoustical Check – In a noisy environment, with earplugs inserted, cup your hands over your ears and release. Earplugs should block enough noise so that covering your ears with your hands should not result in a significant noise difference.

Promotions

CARE + MAINTENANCE

- INSPECT – Inspect prior to fitting, examine your earplugs for dirt, damage or extreme hardness—discard immediately if compromised.
- DISCARD – For proper hygiene, discard Single-Use earplugs after use.
- HYGIENE – To maintain hygiene standards, Single-Use earplugs should be discarded at the end of every shift.

RELATED PRODUCTS

The University of Salford Salford Greater Manchester M5 4WT UK www.salford.ac.uk
Telephone 0161 295 3223 Facsimile 0161 295 5575

UKAS TESTING 1262

TEST REPORT

SOUND ATTENUATION

OF HEARING PROTECTORS

BS EN 24869-1 : 1993

ISO 4869-1 : 1990

CLIENT:	INSPEC International Limited 56 Leslie Hough Way Salford Greater Manchester M6 6AJ
YOUR ORDER NO:	2/030916-1
TYPE OF HEARING PROTECTOR:	Ear-plug
MODEL:	Howard Leight Matrix - Green
MANUFACTURER:	Howard Leight / Bacou-Dalloz
DATE RECEIVED:	19 September 2003
DATE(s) OF TESTS:	19, 24, 25, 26, 30 September 2003

Signed: .....
A.Nelson
Test Engineer

Approved: .....
D.J. M°Caul
Laboratory Manager

THE QUEEN'S ANNIVERSARY PRIZES
FOR HIGHER AND FURTHER EDUCATION
2000

INTRODUCTION:

BS EN 24869-1 : ISO 4869-1 specifies a subjective method for measuring the attenuation of hearing protectors at the threshold of hearing. This method, including details of the test signals, site, equipment, subjects and procedure, was applied to the samples tested and the results are presented, as required by the Standard, on the following pages of this Report.

For complete details of the method, please refer to BS EN 24869-1 : ISO 4869-1.

TEST SIGNALS, SITE AND EQUIPMENT:

The facilities used for this test are located within the School of Computing, Science & Engineering at the University of Salford.

TEST SUBJECTS:

The 16 test subjects comprised both males and females and covered a wide age range. All subjects were audiometrically screened in accordance with Clause 4.4.1 of BS EN 24869-1 prior to the test. They also satisfied the requirements of Clauses 4.4.2 and 4.4.3.

FITTING:

Manufacturer's instructions were provided and were followed during the fitting of the hearing protectors. Guidance was also available from the test operator.

TEST PROCEDURE:

35 pairs of ear-plug were supplied by the Laboratory for testing. Each subject randomly selected one pair for practice fitting and another for testing. Each test subject's protected threshold was assessed once.

The procedures specified in Clause 4.5 were followed.

OBSERVATIONS :

Test subject ES commented that low frequency test signals were clearer in left ear.
Test subjects ES & MA reported that the ear-plugs were uncomfortable to fit.

RESULTS:

See the attached sheet for the attenuation data for each individual subject.
The results here presented relate only to the items tested and described in this report.

Model — Howard Leight Matrix - Green

Attenuation results (values in dB) — See below

Test Reference No. — HP/03/09/03

		Frequency (Hz)							
Subject	Sample	63	125	250	500	1000	2000	4000	8000
ES	01B	26	29	34	40	34	38	34	52
LC	02B	18	28	26	31	36	38	44	40
AO	03B	16	20	26	30	32	32	38	51
RF	04B	12	14	18	22	26	38	34	48
GP	05B	10	14	16	22	26	32	27	32
JB	06B	16	20	28	30	30	38	42	42
PD	07B	18	26	28	32	30	32	42	42
JW	08B	20	22	26	28	28	34	38	44
CN	09B	12	19	20	20	26	34	38	47
DW	11B	24	20	22	26	26	34	39	34
DM	12B	26	26	30	30	26	38	35	41
CW	13B	10	16	16	20	22	26	36	34
MA	14B	16	16	24	24	22	30	32	32
AN	15B	24	30	40	40	36	36	40	38
RH	16B	14	16	18	20	20	30	34	42
JU	17B	16	16	20	22	24	32	38	34
Mean Attenuation		17.4	20.8	24.5	27.3	27.8	33.9	36.9	40.8
Standard Deviation		5.4	5.5	6.7	6.5	4.9	3.6	4.3	6.5
Assumed Protection *SSV2*		12.0	15.3	17.8	20.8	22.9	30.3	32.6	34.3

Assumed Protection Value rounded to one decimal place.

The University of Salford Salford Greater Manchester M5 4WT UK www.salford.ac.uk
Telephone 0161 295 3223 Facsimile 0161 295 5575

UKAS TESTING 1262

TEST REPORT

SOUND ATTENUATION

OF HEARING PROTECTORS

BS EN 24869-1 : 1993

ISO 4869-1 : 1990

CLIENT:	INSPEC International Limited 56 Leslie Hough Way Salford Greater Manchester M6 6AJ
YOUR ORDER NO:	2/030916-1
TYPE OF HEARING PROTECTOR:	Ear-plug
MODEL:	Howard Leight Matrix - Orange
MANUFACTURER:	Howard Leight / Bacou-Dalloz
DATE RECEIVED:	19 September 2003
DATE(s) OF TESTS:	19, 24, 25 September 2003

Signed: ..... A.Nelson
Test Engineer

Approved: ..... D.J. M°Caul
Laboratory Manager

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INTRODUCTION:

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FITTING:

Manufacturer's instructions were provided and were followed during the fitting of the hearing protectors. Guidance was also available from the test operator.

TEST PROCEDURE:

35 pairs of ear-plug were supplied by the Laboratory for testing. Each subject randomly selected one pair for practice fitting and another for testing. Each test subject's protected threshold was assessed once.

The procedures specified in Clause 4.5 were followed.

OBSERVATIONS :

Test subject DM required tools to remove the left ear-plug.
Test subject GP commented that the test signals appeared louder in the left ear.
Test subjects ES & MA reported that the ear-plugs were uncomfortable to fit.
3 test subjects were rejected from the panel as a satisfactory fit could not be achieved.

RESULTS:

See the attached sheet for the attenuation data for each individual subject.
The results here presented relate only to the items tested and described in this report.

Model — Howard Leight Matrix - Orange

Attenuation results (values in dB) — See below

Test Reference No. — HP/03/09/01

		Frequency (Hz)							
Subject	Sample	63	125	250	500	1000	2000	4000	8000
DM	01C	20	28	30	32	28	42	40	42
JU	02C	18	19	24	26	28	34	38	34
LC	03C	22	22	28	32	30	36	40	35
AO	04C	18	24	30	34	36	32	40	50
RF	05C	18	18	26	30	30	40	38	40
GP	06C	10	16	20	26	30	32	32	38
PD	07C	20	26	32	34	30	34	36	44
JB	08C	14	19	26	28	32	38	38	42
JW	09C	18	26	26	30	26	30	34	38
RH	10C	9	18	14	18	20	30	32	40
DW	11C	23	18	22	24	26	34	39	40
AN	12C	26	30	34	34	42	34	40	38
ES	13C	24	24	34	35	34	40	38	40
CN	14C	18	26	28	32	32	38	38	44
CW	15C	10	14	20	20	22	30	36	36
MA	16C	14	20	24	24	26	35	36	36
Mean Attenuation		17.6	21.8	26.1	28.7	29.5	34.9	37.2	39.8
Standard Deviation		5.1	4.7	5.4	5.2	5.3	3.8	2.7	4.0
Assumed Protection *SSV2*		12.5	17.1	20.7	23.5	24.2	31.1	34.5	35.8

Assumed Protection Value rounded to one decimal place.