SAVOX

A019615#B 5.5.2025

# HS750Ex

## Over the Head Headset with ambient sound control

# HS750Ex

## Helmet Attachment Headset with ambient sound control

### KEY FEATURES

- ATEX & IECEx certificated hearing protection headset with Nexus jack connection
- Helmet attachment and headband variants
- Ambient sound control (powered by 2 x AA batteries, see battery details below)
- Communication power from two-way radio battery
- Offers reliable communication in demanding noisy environments
- High noise attenuation
- Noise-cancelling dynamic boom microphone with a 2-pin connector jack
- Compatible with a wide range of safety helmets
- Compatible with AD700Ex PTT-Adapter and NS750Ex RSM
- IP65 rated
- Made in Finland

### BATTERY DETAILS

- AA battery operating time 900 hours
- Warning! Do not open in potentially explosive atmosphere. ONLY use following batteries that are mentioned in the product ATEX certificate.
  - Panasonic Evolta, LR6, AA, 1,5 V
  - Duracell Plus, MN1500, LR6, AA, 1,5 V
  - Energizer Alkaline Power, MN1500, LR6, AA, 1,5 V

| Product name | Product code |
|---|---|
| HS750Ex<br>Over the Head Headset with ambient sound control | PMLN8631A |
| HS750Ex<br>Helmet Attachment Headset with ambient sound control | PMLN8632A |

**Savox Communications Oy Ab (Ltd)**
Keilaranta 15 B
02150 Espoo, Finland

SAVOX



## TECHNICAL INFORMATION

| | |
|---|---|
| **Operating temperature** | -30°C to +40°C |
| **Recommended storage temperature** | -20°C to +40°C |
| **Recommended product lifetime** | 5 years (NOTE: Do not modify or alter this product) |
| **Two-way radio cable** | 0,4-1,2m cable, coiled, TPU, Savox QR4 |

## MICROPHONE

| | |
|---|---|
| **Type** | Noise-cancelling dynamic microphone |
| **Mic impedance** | 150Ω ± 30% at 1KHz |
| **Sensitivity** | -71dBV ±3dB @ 1Pa 1KHz MRP 6mm |

## SPEAKER

| | |
|---|---|
| **Type** | 23 mm diameter, 300 Ohms +/- 15% |
| **Sensitivity** | 91 ± 3dB dBA @ 1kHz / 0.707Vrms |
| **Bandwidth** | 300 - 4500 Hz |
| **Ambient sound speakers** | 30 mm diameter, 60 Ohms +/- 15%<br>Limited to 78dB SPL +/- 3dB by ALC |

## MECHANICAL

| | **PMLN8631A** | **PMLN8632A** |
|---|---|---|
| **Weight** | 524g (without batteries) | 522g (without batteries) |
| **Materials** | Headband: Spring steel, cover material leather with soft foam filling<br>Cups: ABS<br>Battery lid: PC<br>Cushions: Soft foam and PVC film | Helmet attachment: Plastic and stainless steel<br>Cups: ABS<br>Battery lid: PC<br>Cushions: Soft foam and PVC film |

## COMPLIANCE AND APPROVALS

| **The product fulfills the requirements of the following Regulations and Directives:** | |
|---|---|
| **Regulation on Personal Protective Equipment** | 2016/425/EU |
| **Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment** | 2011/65/EU + (EU) 2015/863 |
| **Electromagnetic compatibility (EMC) Directive** | 2014/30/EU |
| **ATEX Directive** | 2014/34/EU |

| **CE marking is based on the fulfilling of the requirements of the following Harmonized Standards:** | |
|---|---|
| **PPE** | EN 352-1:2020<br>EN 352-3:2020<br>EN 352-4:2020<br>EN 352-6:2020<br>ANSI S3.19-1974<br>AS/NZS 1270:2002 |
| **IP Rating** | EN 60529<br>IP65 |
| **RoHS** | 63000:2018 |
| **EMC** | EN 301 489-1 v.2.2.3<br>EN 301 489-5 v.2.2.1<br>EN 55032<br>EN 55035 |
| **ATEX / IECEx** | EN 60079-0:2018 / IEC 60079-0:2017<br>IEC 60079-11:2023<br>Ex ib IIC T4 Gb — II 2 G<br>Ex ib IIIC T130°C Db — II 2 D<br>Ex ib I Mb — I M2<br>Ambient temperature range — -30°C to +40°C |

**Savox Communications Oy Ab (Ltd)**
Keilaranta 15 B
02150 Espoo, Finland

SAVOX

A019615#B 5.5.2025

## TESTED IN ACCORDANCE WITH EN 352-1:2020

| PMLN8631A Over the Head Headset with ambient sound control | | | | | | | | | | | mass: 525,8 g | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Frequency, Hz** | | | | **63** | **125** | **250** | **500** | **1000** | **2000** | **4000** | **8000** | **Headband force, N** | | |
| **Mean Attenuation, dB (M)** | | | | 19,7 | 20,8 | 24,1 | 29,6 | 34,3 | 35,9 | 40,4 | 38,8 | **S** | **M** | **L** |
| **Standard Deviation, dB (SD)** | | | | 3,7 | 3,7 | 3,5 | 2,5 | 2,8 | 2,6 | 3,5 | 4,1 | 9,3 | 9,9 | 10,4 |
| **M - SD** | | | | 15,9 | 17,1 | 20,6 | 27,1 | 31,5 | 33,3 | 36,9 | 34,7 | **Signal to noise ratio, dB** | | |
| **H84, dB** | 35 | **$H_m$** | 36,8 | **M84, dB** | 30 | **$M_m$** | 31,5 | **L84, dB** | 23 | **$L_m$** | 26,1 | **SNR** | **$SNR_m$** | **$SNR_s$** |
| | | **$H_s$** | 2,0 | | | **$M_s$** | 1,6 | | | **$L_s$** | 2,8 | 32 | 33,9 | 1,6 |

## TESTED IN ACCORDANCE WITH EN 352-3:2020

| PMLN8632A Helmet Attachment Headset with ambient sound control | | | | | | | | | | | mass: 516,4 g | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Frequency, Hz** | | | | **63** | **125** | **250** | **500** | **1000** | **2000** | **4000** | **8000** | **Headband force, N** | | |
| **Mean Attenuation, dB (M)** | | | | 21,3 | 20,4 | 24,2 | 27,7 | 33,7 | 32,8 | 39,1 | 35,1 | **S** | **M** | **L** |
| **Standard Deviation, dB (SD)** | | | | 3,5 | 3,8 | 3,8 | 3,6 | 4,0 | 2,4 | 4,6 | 4,7 | 7,6 | 9,6 | 10,3 |
| **M - SD** | | | | 17,8 | 16,6 | 20,4 | 24,0 | 29,6 | 30,4 | 34,6 | 30,4 | **Signal to noise ratio, dB** | | |
| **H84, dB** | 32 | **$H_m$** | 34,2 | **M84, dB** | 28 | **$M_m$** | 30,7 | **L84, dB** | 23 | **$L_m$** | 25,8 | **SNR** | **$SNR_m$** | **$SNR_s$** |
| | | **$H_s$** | 2,5 | | | **$M_s$** | 3,2 | | | **$L_s$** | 3,2 | 30 | 32,7 | 2,9 |

These earmuffs attached to headphones protection and/or face protection devices shall be fitted to, and used only with following carriers:

3M G3000: Sizes S, M, L

## TESTED IN ACCORDANCE WITH ANSI S3.19-1974

| PMLN8631A Over the Head Headset with ambient sound control | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Frequency, Hz** | **125** | **250** | **500** | **1000** | **2000** | **3150** | **4000** | **6300** | **8000** | **Headband force, Lbs** | **NRR, dB** | **CSA Class** |
| **Mean Attenuation, dB (M)** | 22,9 | 25,7 | 32,3 | 34,7 | 35,1 | 36,0 | 39,9 | 40,5 | 38,8 | 2,1 | 25 | AL |
| **Standard Deviation, dB (SD)** | 4,4 | 3,4 | 3,3 | 3,6 | 2,8 | 4,5 | 4,1 | 4,5 | 4,3 | | | |
| **M - SD** | 18,5 | 22,3 | 29,0 | 31,1 | 32,3 | 31,5 | 35,8 | 36,0 | 34,5 | | | |

| PMLN8632A Helmet Attachment Headset with ambient sound control | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Frequency, Hz** | **125** | **250** | **500** | **1000** | **2000** | **3150** | **4000** | **6300** | **8000** | **Headband force, Lbs** | **NRR, dB** | **CSA Class** |
| **Mean Attenuation, dB (M)** | 23,3 | 24,2 | 28,9 | 33,7 | 33,0 | 35,5 | 39,2 | 39,3 | 38,2 | 2,0 | 24 | AL |
| **Standard Deviation, dB (SD)** | 3,4 | 2,9 | 3,5 | 3,5 | 3,3 | 4,4 | 3,8 | 4,9 | 4,7 | | | |
| **M - SD** | 19,9 | 21,3 | 25,4 | 30,2 | 29,7 | 31,1 | 35,4 | 34,4 | 33,5 | | | |

**Savox Communications Oy Ab (Ltd)**
Keilaranta 15 B
02150 Espoo, Finland

## TESTED IN ACCORDANCE WITH EN 352-4:2020

| Level dependent criterion levels | | |
|---|---|---|
| **L-Criterion** | **M-Criterion** | **H-Criterion** |
| NA | 110.0 dBA | 110.0 dBA |

## TESTED IN ACCORDANCE WITH EN352-6:2020 + A1:2024

| Electronic audio transmission | | | | | | | |
|---|---|---|---|---|---|---|---|
| **The A-weighted equivalent diffuse field related SPL for left ears as a function of input signal level:** | | | | | | | |
| **Input Signal Level (dBV)** | -30 | -25 | -20 | -15 | -10 | -5 | 0 |
| **Mean Attenuation (dBA)** | 58,1 | 62,8 | 67,6 | 72,6 | 77,5 | 82,5 | 87,4 |
| **Standard Deviation** | 0,9 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 |
| **The A-weighted equivalent diffuse field related SPL for right ears as a function of input signal level:** | | | | | | | |
| **Input Signal Level (dBV)** | -30 | -25 | -20 | -15 | -10 | -5 | 0 |
| **Mean Attenuation (dBA)** | 58,2 | 62,9 | 67,8 | 72,7 | 77,7 | 82,6 | 87,4 |
| **Standard Deviation** | 1,0 | 0,9 | 0,9 | 0,9 | 0,9 | 0,9 | 0,9 |
| **Allowable exposure duration:** | | | | | | | |
| **Criterion (82dBA)** | **dBV** | | -6,3 | | **Time (h)** | | 8 |
| **Maximum Input Signal** | | | 0,0 | | | | 1,9 |