

Technical Data

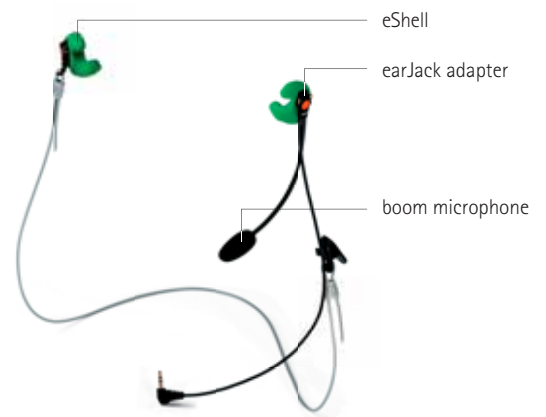
Modular hearing protection with communication

Serenity SPC by Phonak is a custom-made modular hearing protection system, featuring an integrated headset for communication via cordless/mobile phone, radio and intercom. This modular solution allows different interchangeable acoustic filters and/or headsets to be inserted into a user's ear shells, for example to change the attenuation level or to use another Serenity device. Serenity SPC is lightweight, ergonomic and highly comfortable to wear.

Serenity SPC

Main features :

- Custom-molded nylon ear shells (eShells)
 - Outstanding comfort
 - Skin friendly (no sweating, no irritation)
 - Feather light
 - Highly robust
 - Cost-effective to replace
- EarJack adapters (compatible with all eShells) contain the system's acoustic filters and headset
- Several noise attenuation filters available
- Protection level verifiable with SafetyMeter fit testing
- Compatible with helmets, masks, glasses and other headgear
- Communication headset integrated in the earJack (can be mounted on left or right eShell)
 - Uninterrupted hearing protection during calls
 - Excellent speech comprehension in noisy environments
 - Clear speech transmission - even in noise
 - Foam microphone sleeve, reduces wind noise and protects against dirt and water
- Two noise-cancelling boom microphones available:
 - Standard boom (short arm). Suits active users.
 - Close-talk boom (long arm). Must be placed in front of the mouth. Suits very high-noise environments.



Serenity SPC

General Features

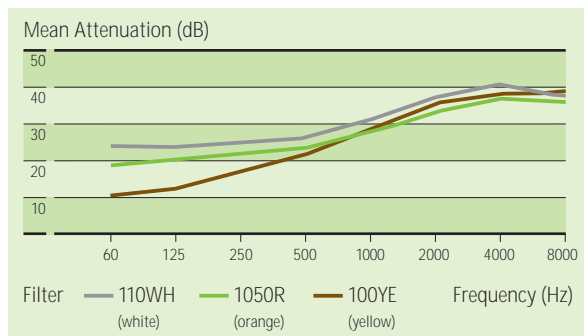
- Weight** Serenity SPC: 22g
- Marking** Unique user ID on each eShell
- Accessories** Silicone cord with safety breaks
Attachment clip
Metal detection (optional)
Carrying case
Adapters for cordless or mobile phones
PTT adapters for radios



Standard boom microphone (short-arm) Close-talk boom microphone (long-arm)

Hearing Protection Specifications

Serenity SPC complies with the EU directive 89/686/EEC and is tested and certified according to EN 352-2:2002.



Attenuation values (dB)

| Filter | SNR | L | M | H |
|--------|-----|----|----|----|
| 110WH | 28 | 20 | 24 | 31 |
| 1050R | 24 | 17 | 20 | 26 |
| 100YE | 25 | 16 | 22 | 30 |

Key: SNR Single Number Rating attenuation value
L Low-frequency attenuation value
M Medium-frequency attenuation value
H High-frequency attenuation value

Technical Specifications

Standard boom microphone (short arm)

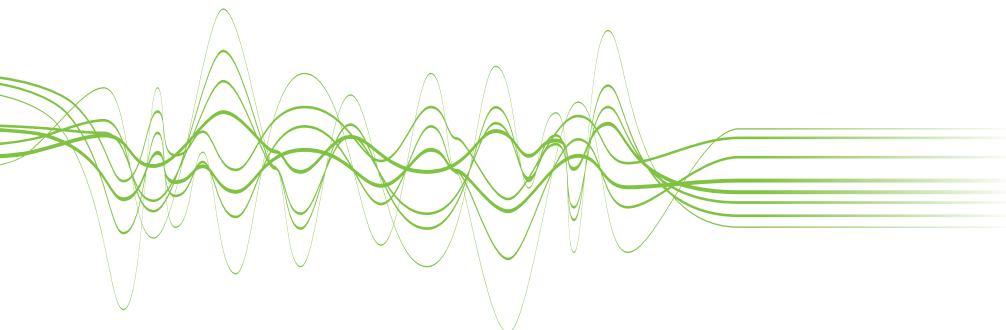
| | |
|------------------------|--------------------------------|
| Microphone sensitivity | -44 (±4) dB re. 1V/Pa at 1 kHz |
| Microphone supply | 2.0V ... 6.0V |
| Microphone type | Electret, noise canceling |

Close-talk boom microphone (long arm)

| | |
|------------------------|---|
| Microphone sensitivity | -38 (+/- 4) dB re. 1V/Pa at 1kHz near field (6mm) |
| Microphone supply | 1.3V ... 10V |
| Microphone type | Electret, noise canceling, close talk |

Common specifications

| | |
|-------------------------------------|------------------------|
| Ear speaker sensitivity | 94 dBA @ 150 mVRMS |
| Ear speaker impedance | 50 Ω DC, 100 Ω @ 1 kHz |
| Maximum volume at ear speaker | 100 dB(SPL) |
| Cable pull force | 50 N |
| Operational temperature range | -20°C - +60°C |
| Electromagnetic compatibility (EMC) | EN 55022, EN 55024 |

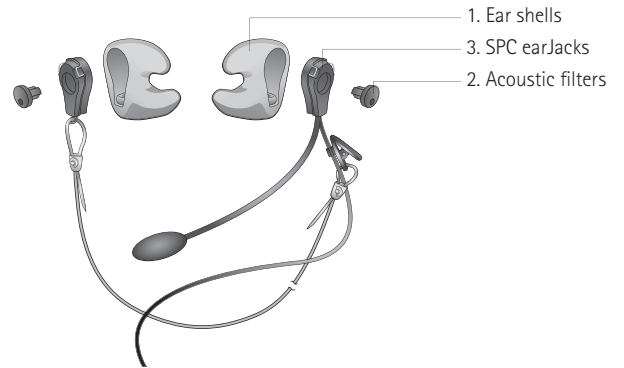


Serenity SPC configurable


Serenity SPC configurable includes 3 main parts each available in several versions:

1. Ear shells
2. Acoustic filters
3. SPC earJacks





A list of available variants for each part is shown below. Please specify the exact configuration required when ordering.

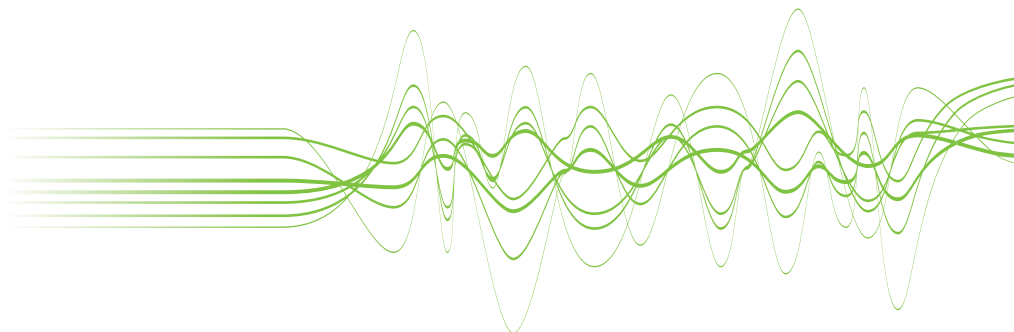


1. Ear shells

| Configurable items | Description | Application |
|---|---|--|
| Custom ear shells (eShells)  | <ul style="list-style-type: none"> ▪ Individually molded ▪ Green or beige color ▪ Left and right | <ul style="list-style-type: none"> ▪ Highly comfortable fit ▪ Perfect to wear for long hours |
| No ear shells | Use the configuration «no ear shells» to order SPC earjacks as spare parts! | |

2. Acoustic filters

| Configurable items | Description | Application |
|---|-------------------------|--|
| White filter  | Acoustic filter (110WH) | Provides a noise attenuation rated as SNR=28dB |
| Anthracite filter  | Acoustic filter (110WH) | Provides a noise attenuation rated as SNR=28dB |
| Orange filter  | Acoustic filter (105OR) | Provides a noise attenuation rated as SNR=24dB |
| Yellow filter  | Acoustic filter (100YE) | Provides a noise attenuation rated as SNR=25dB |



Serenity SPC configurable

3. SPC earJacks

All SPC earJacks include an 'earJack adapter SP', an 'earJack headset' and a silicone cord with safety breaks. Filters separate.

| Configurable items | Description | Application | Connectivity |
|---|---|--|---|
| SPC earJacks, incl. headset LIM boom Binder 620  | <ul style="list-style-type: none"> Standard boom Cable 120cm Binder 620 connector  | <ul style="list-style-type: none"> Communicate in noise levels up to 90-95 dB SPL Connect to different types of radios through a standard 2" PTT See separate lists of 2" PTTs and radio compatibility. |  |
| SPC earJacks, incl. headset LIM boom 35M1 | <ul style="list-style-type: none"> Standard boom Cable 120cm Jack 3.5mm/4 poles  | <ul style="list-style-type: none"> Communicate in noise levels up to 90-95 dB SPL Connect to several models of smart phones (e.g. iPhones, iPads etc.) |  |
| SPC earJacks, incl. headset LIM boom 2.5mm | <ul style="list-style-type: none"> Standard boom Cable 120cm Jack 2.5mm/3 poles  | <ul style="list-style-type: none"> Communicate in noise levels up to 90-95 dB SPL Connect to different wireless phones or mobile phones, either directly or through adapters Separate list of adapters and phone compatibility on demand. |  |
| SPC earJacks, incl. headset LIM boom Condor | <ul style="list-style-type: none"> Standard boom Cable 120cm Fischer connector  | <ul style="list-style-type: none"> Communicate in noise levels up to 90-95 dB SPL Connect to all Condor transceivers |  |
| SPC earJacks, incl. headset LIM boom MicMute Condor | <ul style="list-style-type: none"> Standard boom MicMute switch Cable 120cm Fischer connector  | <ul style="list-style-type: none"> Communicate in noise levels up to 90-95 dB SPL Select between microphone always active or muted (press-to-talk) Connect to all Condor transceivers |  |
| SPC earJacks, incl. headset LIM CloseTalk Binder 620  | <ul style="list-style-type: none"> Close-talk boom Cable 120cm Binder 620 connector  | <ul style="list-style-type: none"> Communicate in extremely noisy environments (up to 100-105 dB SPL) Connect to different types of radios through a standard 2" PTT See separate lists of 2" PTTs and radio compatibility |  |

