

3M Occupational Health & Environmental Safety Division
3M™ Peltor™ WS™ Lite-Com™

PELTOR™

The Sound Solution



Peltor WS Lite-Com headset



Built-in communication radio and Bluetooth®

The 3M™ Peltor™ WS Lite-Com™ headset is a hearing protector with a built-in communication radio and a Bluetooth link for wireless connection to a mobile phone. You don't have to miss incoming phone calls or interrupt what you're doing to talk on the phone in a noisy environment.

The WS Lite-Com also lets you stream music stored in the phone, web radio or your favourite hits from Spotify.com.



Hands-free communication radio

The WS Lite-Com has a built-in communication radio in the headset, with eight channels in the PMR 446 MHz frequency range, which is licence-free in Europe. The maximum range of the communication radio in the WS Lite-Com is about 3 km outdoors, with a maximum output of 200 mW.

The communication radio can be fully hands-free if you activate the voice-operated transmission (VOX) function, which switches transmission on as soon as you start to talk and switches it off again when you stop talking. This frees up your hands to continue working. The headset also has a traditional Push To Talk (PTT) button to activate transmission.

Wireless phone calls via Bluetooth

The built-in Bluetooth link allows you to connect your WS Lite-Com wirelessly to a mobile phone and manage all calls wirelessly, leaving the phone securely in your pocket. The ring tone for incoming calls is clearly audible in the headset; just press the Bluetooth button on the left shell to accept or reject the call. Advanced DSP algorithms in the WS Lite-Com electronically filter out surrounding noise, making it possible to talk on the phone even in noisy environments. The recipient has no trouble at all hearing you instead of the noise around you.

If a call comes in on the com radio while you are talking on the phone via Bluetooth, both signals are handled simultaneously. You hear the com radio call in the right earphone and the phone call in the left.

Listening to music on your mobile phone

The Bluetooth connection to your mobile phone lets you wirelessly play music and more on your WS Lite-Com. You can listen to your own favourites stored on the phone, or connect the phone to the Internet and stream web radio, podcasts or music from Spotify.com etc. If you receive a call on the com radio while you are listening to music, the music is automatically turned down.

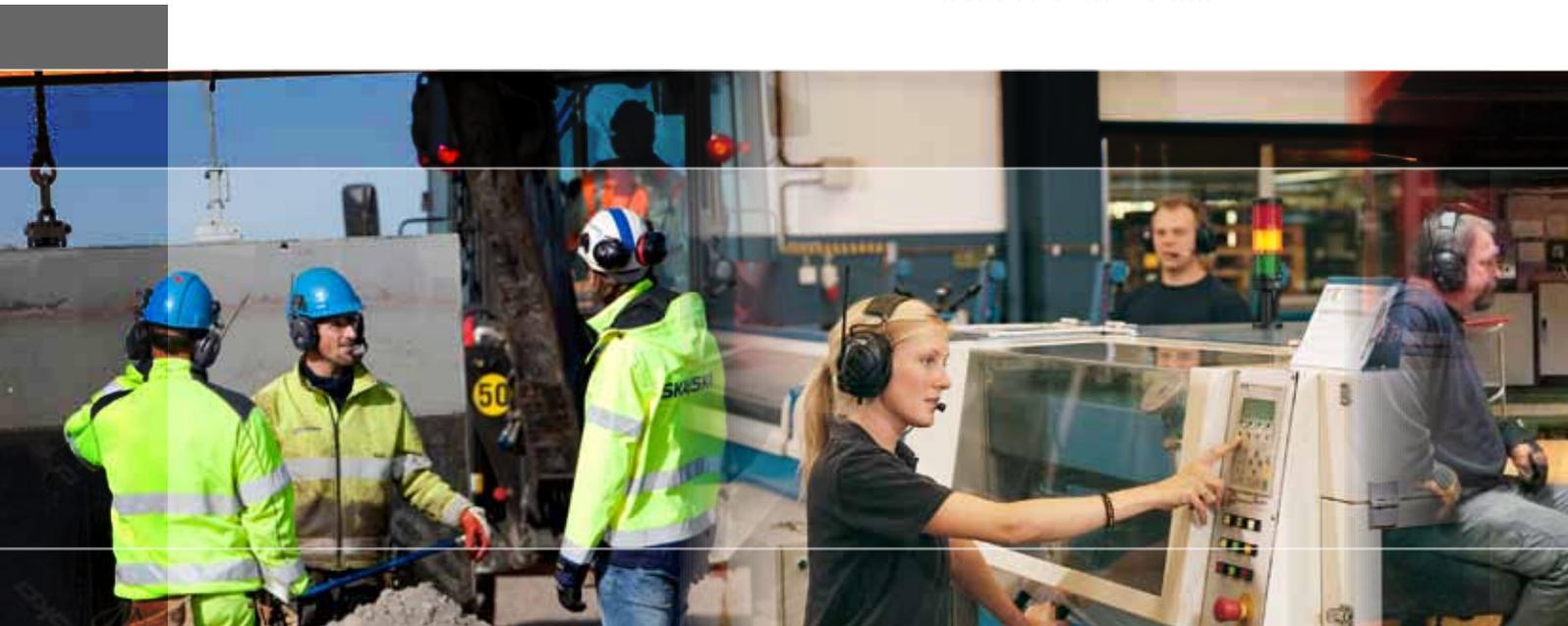
The WS Lite-Com can also be connected to other Bluetooth-enabled units, such as an MP3 player, communication radio or DECT.

Surround sound protects your hearing

Stereo microphones on the headset allow you to hear surrounding noises and talk to people around you without removing the headset and putting your hearing at risk. The surround sound feature attenuates impulse noises to a maximum of 82 dB and enhances weak sounds so that you can hear them even better than you would without the headset.



▲ The WS Lite-Com with Bluetooth lets you take wireless phone calls and listen to music in the headset.





Features in the Peltor WS Lite-Com

- Communication radio with eight channels in the PMR 446 MHz frequency range.
- With 38 sub channels to the PMR channels, multiple users can communicate without hearing other groups on the same channel.
- Wireless Bluetooth connection to your mobile phone allows you to manage phone calls directly in the headset.
- Telephone calls can be managed simultaneously with a call on the communication radio.
- Bluetooth range up to 10 m (Class 2).
- Supports Bluetooth stereo streaming with the A2DP profile.
- Noise-cancelling speech microphone.
- Built-in functions for active noise regulation, so that you can hear ambient sounds such as warning signals, machine noises, conversation, etc.
- Sudden impulse noises at harmful volumes are instantly attenuated.
- An electronic voice in the receiver confirms settings for the unit.
- The WS Lite-Com switches off automatically when it has not been used for two hours, to preserve the battery.
- Rechargeable batteries or two AA standard batteries.

▼ The WS Lite-Com increases efficiency in many industries, such as construction and installation, industry, sawmills, roadwork and forestry.



Models

MT53H7A4410WS5	WS Lite-Com with headband
MT53H7B4410WS5	WS Lite-Com with neck band
MT53H7P3E4410WS5	WS Lite-Com for mounting on a helmet

Included with the purchase of the headset:
WS Lite-Com headset, rechargeable batteries, battery charger,
alkaline batteries and hygiene kit

Accessories

HY79	Hygiene kit
HYM1000	Microphone protection tape
M995	Wind shield for speech microphones
M60/2	Wind shield for ambient-noise microphones
HY100A	Single-use hygiene rings
ACK051	Rechargeable NiMH battery
FR05	Battery charger for ACK051 (incl. EU and UK contacts)
FL5602	External PTT
1180 SV	Battery cover
FL6BT	3.5 mm connector cord

Testing and approvals

The WS Lite-Com headset has been tested and approved according to European directive 89/686/EEC (safety equipment) and 1999/5/EC (R&TTE directive) and therefore meets the requirements for CE labelling. It also meets the requirements for directive 2004/40/EC on worker protection against harmful exposure to electromagnetic fields.

The Bluetooth® name and logotype are the property of Bluetooth SIG Inc., and all use occurs under licence.

Technical data

Batteries: Peltor ACK051 or 2 x AA batteries
Weight: Approx. 465 g (including ACK051)
Temperature range: Usage: -20°C to +55°C, storage: -40°C to +55°C

Bluetooth®

Frequency: 2.4 GHz
Bluetooth version: V2.1+EDR
Profiles: HS/HF and A2DP
Maximum output: 2.5 mW

Radio

Frequency band: 446 MHz
Channels: 8 (PMR 446)
Modulation: FM (8K00F3E)
Tone-selective squelch: 38 CTCSS tones
Output: 25/200 mW
Antenna: Integrated

Attenuation data

MT53H7A4410WS5 (headband)

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	14.7	23.4	30.7	34.6	34.5	36.9	37.3
St. dev. (dB)	3.9	4.6	3.2	3.4	3.1	2.7	4.2
APValue (84%)	10.8	18.8	27.4	31.2	31.4	34.2	33.1

SNR=30 dB H=33 dB M=27 dB L=19 dB

MT53H7B4410WS5 (neckband)

Frekvens (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	15.5	23.3	31.2	35.6	35.0	36.5	40.9
St. dev. (dB)	2.6	2.3	2.0	3.2	3.4	3.4	3.3
APValue (84%)	13.0	21.0	29.2	32.4	31.6	33.2	37.6

SNR=31 dB H=33 dB M=29 dB L=21 dB

MT53H7P3E4410WS5 (helmet attachment)

Frekvens (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	16.2	22.9	31.7	35.6	34.5	37.7	40.0
St. dev. (dB)	3.2	2.2	2.0	2.9	3.0	3.9	3.3
APValue (84%)	13.0	20.7	29.7	32.7	31.5	33.8	36.8

SNR=31 dB H=33 dB M=29 dB L=21 dB



3M Occupational Health & Environmental Safety Division

3M Svenska AB, Box 2341

SE-331 02 Värnamo

Sweden

Phone: +46 (0) 370 65 65 65

Fax: +46 (0) 370 65 65 99

Email: peltorcommunications@mmm.com

Internet: www.3M.com/Peltorcomms

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