## **Health & Safety**

## Protect your hearing

Paul Mac of the Audio Production Network introduces a new widget for people whose job involves listening through earphones, which could prevent them from suffering hearing loss

Il employers and employees should take steps to comply with safety at work regulations, not only because they have to, but because they should. Long term hearing health is important. So Sennheiser has launched LimitEar HDM (Hearing Dose Management) technology for their HD 25  $70\Omega$  range with new headphones or as a retrofit cable. The product itself is a small, light, active in-line 'widget' currently implemented for Sennheiser's HD25 headphones. It must be charged periodically via a micro USB socket, though the specs say the unit's battery is good for at least seven days at a time.

The 'Hearing Dose Management' phrase sets the process apart from the basic fixed-threshold clamp of other 'level-limited' headphones. HDM Pro knows what you've been listening to in a rolling 24-hour period and actively manages your on-going exposure, according to the boundaries of Noise At Work Regulations 2005. This allows higher but safe levels when required. In addition, extreme levels (>118dBA) are 'clipped' and high levels (above 100dBA) are subject to 'Rapid Overload Response'.

If you're editing dialogue, for example, and you need a shot of higher level for some contrast and focus, HDM will allow you to turn it up. If you leave the volume up for a while, HDM will start to attenuate the signal as your 'accumulated' level becomes risky. If your hand slips on the fader and you attempt to get your ear drums to meet in the middle, HDM will step in and save your career. With

basic level limiting, when you turn it up just a little you can hit a brick wall and the dialogue quality is compromised - which isn't too useful for that 'intelligibility' edit.

The user interface is restricted to two LEDs, one red and one green, with combinations of flashes communicating the current state of the unit. There's a detailed table of LED language in the manual, but it will probably be enough to know that the HDM process is active and whether the battery needs charging.

If the HDM process had an adverse effect on the basic quality of audio then that would rule it out for broadcast. I never found this to be the case. For reassurance during critical dynamic judgements all that is required is awareness, and purposeful management of source level.

Safety at work is important. Hearing health is critical. There should be a queue for the HDM Pro HD25. www.audiopronet.com

Don't leave it until it's too late: protect your hearing with the HDM Pro

