Reversing Alarms

Noise Fact Sheets

Most people would be familiar with the 'beep-beep' sound of reversing alarms. This sound is emitted by tonal alarms which have been commonly installed on large equipment for many years.

These traditional reversing alarms are necessarily loud, and the single frequency sound is not easily reduced with distance. This means the noise can be heard at considerable distances from the source where safety is not at risk and can be very annoying for receivers of this sound. In addition, where multiple vehicles are in operation it can be difficult to distinguish the source of the tonal alarm and which vehicle may be reversing.

New technology is available that is an improvement on the traditional tonal alarm. It is less intrusive to surrounding properties whilst still maintaining a safe work environment. In fact, it may provide a safer environment as it is easier to perceive the direction that a broadband alarm is coming from due to the nature of its noise. Purchase and installation costs are not unreasonable, and it is a relatively simple process to replace the old-style alarm.

Broadband Alarms

Broadband reversing alarms generate noise across a range of frequencies. It creates a 'ssh-ssh' type of sound and are sometimes referred to as 'croakers' or 'quackers'. They generally produce a beam of noise and so are more directional i.e. louder behind the vehicle when compared to other directions. The sound quickly blends in with background noise outside the hazard zone minimising the disturbance on surrounding properties.

Smart (Self Adjusting) Alarms

Smart alarms are self-adjusting. They constantly measure the ambient noise and adjust their noise level. They typically operate at 5dB above background levels. This means if the background noise is low then the alarm noise level will also be low. As the background noise increase the alarm noise also increases thereby maintaining safety at the workplace.

Combination Alarms

There are a number of alarm models which feature both the broadband function and are also self-adjusting. This provides the best of both new types of alarms.

Alternative to Alarms

There are several alternatives to alarms that maintain a safe work environment and comply with OH&S legislation. Reversing alarms alert pedestrians when a vehicle is moving. However, reverse sensors and cameras alert the vehicle operator when there is an obstacle behind. They can be installed on larger vehicles either as an alternative to an alarm or as an additional safety feature. In addition, the use of spotters (third party observers) and flashing lights may also be considered.

Installation and Operation

It is recommended that all alarms regardless of the type be installed and operated as per the manufacturer's instruction. Installation should be undertaken by a qualified Auto Electrician. The location is often critical to the alarms performance and in general should be located at the rear of the vehicle free from any obstruction. The Department of Environment Regulation recently tested several broadband type alarms and found when installed correctly all complied with the requirements of ISO 9533:2010.

Where to Source Alternative Alarms

The following is a list of known suppliers of these different types of alarms. The City does not support or endorse any of these companies and this information is provided solely for the purpose of enabling further investigation by a potential purchaser. This list is not comprehensive and there may be other suppliers not listed.

Alanco Australia
9358 7000
83-85 Welshpool Road,
Welshpool WA 6106
www.alanco.com.au

Australian Warning Systems
(03) 9796 5880
www.warningsystems.com.au

Elecspess
(07) 3265 1788
www.elecs ess.com.au

Narva
(03) 9730 6000
www.narva.com.au

PJL Diesel Electric
9258 7555
1 Granite Place, Welshpool
WA 6106
www.pjldiesel.com.au

QLED
(07) 5453 4393 www.qled.com.au

Rearsense Warning Systems
(02) 9525 9777 www.rearsense.co.nz

For further information regarding noise, please contact the City of Kalamunda's Health Services on 9257 9999 or email enquiries@kalamunda.wa.gov.au