Rostrata Primary School P&C Association Inc. – Noise Level Guidelines

School Disco Sound Levels – Keep Them Down

Excessive noise can have a permanent damaging effect on hearing, particularly of children. Following requests from a number of concerned parents, this advice is provided to assist P&C members in avoiding potentially damaging noise levels at school discos.

The louder the sound and the longer the time of exposure (the noise dose), the greater the damage to the delicate hearing nerves. As the noise dose, and hence the potential for damage to hearing, increases logarithmically, a small increase in noise levels will lead to a rapid reduction in safe exposure time.

Disc jockeys should be instructed to keep noise levels within acceptable limits and request that the noise level be reduced where it is considered to be excessive. If in doubt turn it down!

The noise level can be checked using a simple noise level meter, which is available in the P&C cupboard in the front office.

The information in the following section details the maximum acceptable volume levels for given periods of time, as well as how to set up speakers for an event and the details of measuring volume levels.

Guidelines for Managing Noise Levels at School Disco

Noise does not need to be unpleasant or annoying to cause damage to hearing. In many cases the brain interprets excessively loud noise (e.g. music at a school disco) as a pleasant sensation. An excessive loud noise is indicated when a person must use a raised voice or shout in order to be able to speak to another person an arm's length away.

Legislation requires that persons with unprotected ears not be exposed to a daily noise dose exceeding the equivalent of an average 8 hours exposure to 85 decibels.

As noise, levels double with each increase of 3 decibels, the exposure time to the noise level must be halved to maintain the same maximum noise dose. For example, 85 decibels over 8 hours provides the same noise dose as 88 decibels over 4 hours or 91 decibels over 2 hours etc.

The following table provides guidance on the maximum time exposures for a range of noise levels. To ensure the maximum noise dose is not exceeded the noise levels should be adjusted according to the expected duration of the exposure. Alternatively, the exposure time should be limited.

For example, if a disco is scheduled for 2 hours duration, the noise output of the sound equipment should be adjusted to approximately 91 decibels or lower. Alternately, if the desired noise level is approximately 94 decibels, the exposure time should be reduced to 1 hour.

The Rostrata Primary School P&C should use this information as a guide to assist in making a judgement as to the desired noise level and/or duration of school discos in order to keep the noise levels within safe limits.

Noise Level (Decibels)	Maximum Exposure Time
85	8 hrs
88	4 hrs
91	2 hrs
94	1 hr
97	30 minutes
100	15 minutes

Where noise levels are checked using a sound level mater these should be measured at a distance of 2 metres from the speakers, with the sound level meter set to the "C" weighting. (The "A" weighting approximates the human ear response at low levels, while the "C" weighting approximates the human ear response at higher levels).

A clear area of 2 metres in front of the speakers should be maintained during school discos.