



The main advantages with the [dBA](#) - the A weighting in noise measurements - are:

- it is adapted to the response of the human ear to sound
- it is possible to measure easily with low cost instruments

Acceptable [Equivalent Sound Level -  \$L\_{eq}\$](#)  - for different location can be taken from the table below:

| Location                 | Effects  | $L_{eq}$ (dBA) | Time (hours) | Time of day   |
|--------------------------|--|----------------|--------------|---------------|
| Bedroom                  | sleep disturbance, annoyance                   | > 30           | 8            | night         |
| Living area              | annoyance, speech interference                 | > 50           | 16           | day           |
| Outdoor living area      | moderate annoyance                             | > 50           | 16           | day           |
| Outdoor living area      | serious annoyance                              | > 55           | 16           | day           |
| Outdoor living area      | sleep disturbance, with open windows           | > 45           | 8            | night         |
| School classroom         | speech interference, communication disturbance | > 35           | 8            | day           |
| Hospitals: patient rooms | sleep disturbance, communication interference  | > 30-35        | 8            | day and night |