

# Sound Sign

Noise Activated Warning Sign



Industry



Music & Entertainment



Offices & Call Centres



Healthcare & Hospitals



# Sound Sign

## Key Features

- > Noise activated warning sign for a wide range of applications
- > Innovative design with low power requirements, simple installation and configuration
- > Data Logging option allows noise levels to be recorded and downloaded to a PC
- > Clear display with industry standard information using high intensity white LED's
- > Trigger levels from 40dB(A) to 114dB(A)
- > Master Units can control up to 3 Remote Display Units
- > Custom display options and sign information available

## Introduction

The Sound Sign is a highly visible noise activated warning sign that has been designed for use in environments where there is a need to clearly warn or indicate when a preset noise level is reached.

This noise limit can be quickly and easily set by the user to any level between 40dB(A) and 114dB(A) which will cover almost any situation where noise level warning is needed.

In addition to the traditional Noise at Work style sign, the Sound Sign is also available with a range of other graphics and text which allows it to be used in environments where the noise levels may not reach those where hearing protection is required, but where there is still a need to warn or indicate excessive sound levels.

Examples of these include schools, libraries, hospitals, music and entertainment venues.

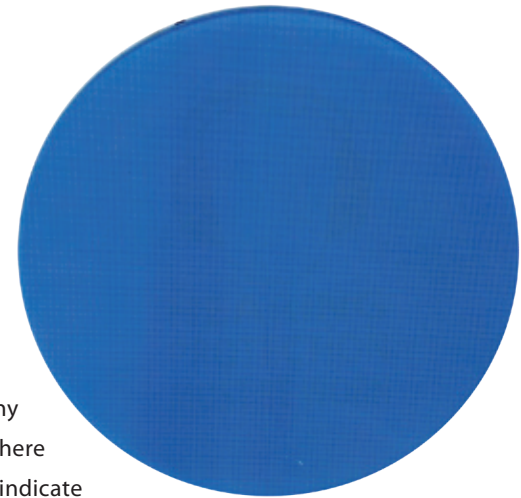
When the sound level is exceeded, the Sound Sign will illuminate and the warning information can be clearly seen.

When the Sound Sign is not activated, the graphics and text of the warning are not visible, reducing any confusion that may occur with traditional noise warning signs.

If there is a need to ensure that the warnings can be seen over a large area, Remote Display Units can be quickly and simply connected to a Master Unit and these will mirror the action and information of the controlling Sound Sign.

Up to 3 Remote Display Units can be powered directly from a Master Unit with no additional power needed and each is supplied with a 10m inter-connecting cable.

A Master Unit can be enhanced by adding the CR:203 USB Data Logger. This simply plugs into a socket on the top of the Master Unit and will log and store the noise levels from the unit over a period of time.



## Applications

There are many applications where there is a need to clearly indicate where noise levels are exceeding a threshold.

For example, the "Hearing Protection Must Be Worn" version can be used to reinforce the need to wear PPE when noise levels reach a set level. A noise survey may have indicated that the levels will exceed 85dB(A) when certain processes occur but this may happen at random intervals throughout the day.

The wearing of hearing protection is not required at all times and so the use of the Sound Sign will inform employees when PPE is required and when it can be removed.

A Remote Display Unit can also be placed outside of the work area to inform anyone entering that PPE must be worn when they enter the noise sensitive area.

A different application is to use a Sound Sign to trigger at a much lower level, 50dB(A) for example, to ensure that the noise levels in a hospital ward stay within acceptable levels. There is no need to use hearing protection but the use of a clear warning sign can be very effective in controlling and managing noise levels.

The Sound Sign can be used to help manage and control noise levels in many different locations and application. By using the Remote Display Units and the Data Logging options, the Sound Sign can help you to provide effective signage and information.

## Installation & Use

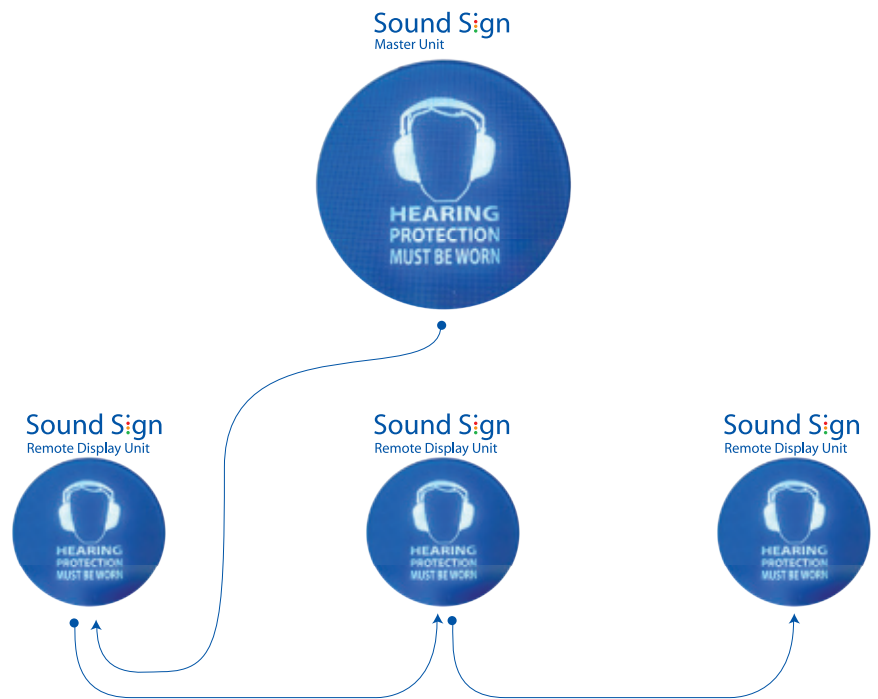
Installation of a Sound Sign is very simple. Select the required trigger level and connect the 12v power supply to the unit.

When the noise level measured by the microphone reaches this level, the sign will illuminate and show the warning.

The unit can also be set to keep the warning illuminated for up to 30 seconds after the level has fallen back below the trigger level.

This removes the sudden on-off indication that traditional noise warning signs often produce and which can cause confusion as to when PPE should be worn. The Sound Sign avoids these problems.

The sound level chosen for the trigger point can be set using either the simple level selection on the back of the unit or by using a calibrated Sound Level Meter to provide a reference measurement.



## Remote Display Units

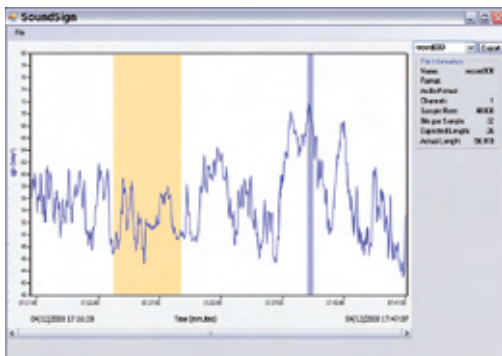
The Sound Sign is also available as a Remote Display Unit which is controlled by a Master Sound Sign.

The Remote Display Units are connected by a simple cable to the Master and up to three can be daisy-chained together so that a wide area can be covered.

The Remote Display Units will duplicate the Master Unit warning using the same configuration of trigger level, time weighting and illumination options.

## Record & Store with the USB Data Logger

The CR:201 Sound Sign Master Unit can be upgraded quickly and easily by adding the CR:203 USB Data Logger.



This unit simply plugs into the Sound Sign and can record noise levels for long periods of time.

The Data Logger can be programmed to start recording at a specific time and date and run, for example, over an 8 hour shift. The Data Logger can be plugged directly into a PC and the software supplied will display a graph of the recorded noise levels, allow the information to be printed, exported and annotated for reference.

## Options & Accessories

A range of options and accessories are available for the Sound Sign to allow the units to be used in a number of different applications.

These include microphone extension cables which allow the microphone to be removed from the body of the Sound Sign and to be located at the most appropriate position.

Cables from 2m to 10m are available as standard and other lengths can be provided on request.

## Service & Maintenance

The Sound Sign uses a low voltage transformer to provide the 12v needed for operation. This removes the need for mains power and reduces the initial installation costs.



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## Specifications

Application	Noise activated warning sign
Trigger Level	40dB(A) to 114 dB(A) in 1dB Steps
Microphone	MK:112
Frequency Weighting	'A'Weighting to IEC 61672-1:2002
Time Weighting	Slow to IEC 61672-1:2002
Visual Indication	High intensity white LED with four standard designs User selectable brightness levels
Display delay time	None or 30 seconds
External Power	2.1mm Power Jack, 12v DC via CU:200 Mains Power Supply
Output	Control for Remote Display Units via standard 2.1mm Power Connector Up to three Remote Display Units can be powered from a Master Unit
Dimensions	300mm diameter, 50mm depth
Mounting	2 x Keyhole mounting slots
Data Logging	CR:203 USB Data Logger with 32,000 Samples of LAS (Slow 'A'Weighted Sound Level) User Selectable 1 second (9 hours), 10 seconds (3.7 days), 1 minute (22 days) sampling

## Supplied Accessories

CR:201 Sound Sign Master Unit:

- CU:200 Mains Power Supply
- ZL:206 5m Power Extension Cable

CR:202 Remote Display Unit

- ZL:207 10m Inter-connection cable to Master Unit

CR:203 Data Logging - Software CD

## Optional Accessories

ZL:207	10m Inter-Connection Cable for Sound Sign Units
ZL:202	2m Microphone Extension Cable for Sound Sign Master Unit for use with MV:200C & MK:215
ZL:205	5m Microphone Extension Cable for Sound Sign Master Unit for use with MV:200C & MK:215
ZL:210	10m Microphone Extension Cable for Sound Sign Master Unit for use with MV:200C & MK:215
CU:200	Mains Power Supply for Sound Sign (Required if more than 1 Remote Unit is used with a Master Unit)
MV:200C	Preamplifier
MK:215	Microphone Capsule

## Ordering Information

The CR:201 Master Unit and CR:202 Remote Unit are available with a selection of standard designs which are listed below.

Custom design options are available. Please contact Cirrus Research for details of these custom design options.

### CR:201 Sound Sign Master Unit with microphone & mains power supply

CR:201/1 Sound Sign Master Unit with "Hearing Protection Must Be Worn"

CR:201/2 Sound Sign Master Unit with "Warning High Noise Levels"

CR:201/3 Sound Sign Master Unit with "Caution High Sound Levels"

CR:201/4 Sound Sign Master Unit with "SHH! Quiet Zone"

### CR:202 Sound Sign Remote Display Unit with 10m inter-connection cable to Sound Sign Master Unit

CR:202/1 Sound Sign Remote Unit with "Hearing Protection Must Be Worn"

CR:202/2 Sound Sign Remote Unit with "Warning High Noise Levels"

CR:202/3 Sound Sign Remote Unit with "Caution High Sound Levels"

CR:202/4 Sound Sign Remote Unit with "SHH! Quiet Zone"

### CR:203 USB Data Logging Plug-in for Sound Sign Master Unit with PC software

Version 1



Version 2



Version 3



Version 4



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