

# NGARA

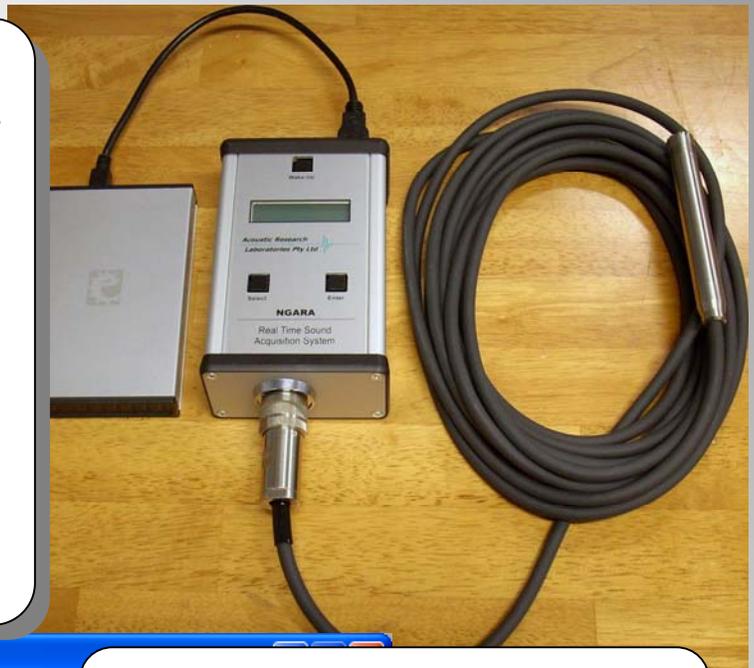
Real Time Sound Acquisition System

## Features

The NGARA Sound Acquisition System offers full measurement flexibility, simultaneously producing the following acoustic measurements—

- Fast SPL-A
- Fast SPL-C
- $L_{eq-A}$
- $L_{eq-C}$

In addition to the above measurements the Ngara platform is also capable of storing raw audio data (wav files) to hard disk, capable of post processing the majority of your acoustic needs. All of this in a low power 12 volt environment.



## Control and Configuration

Simple control and configuration of the logger can be accomplished through the on-board Liquid Crystal display (LCD) and push-button interface.

More advanced control functions are also made available through the remote host software. This may include:

- Network settings
- Alarm functions
- Triggering events

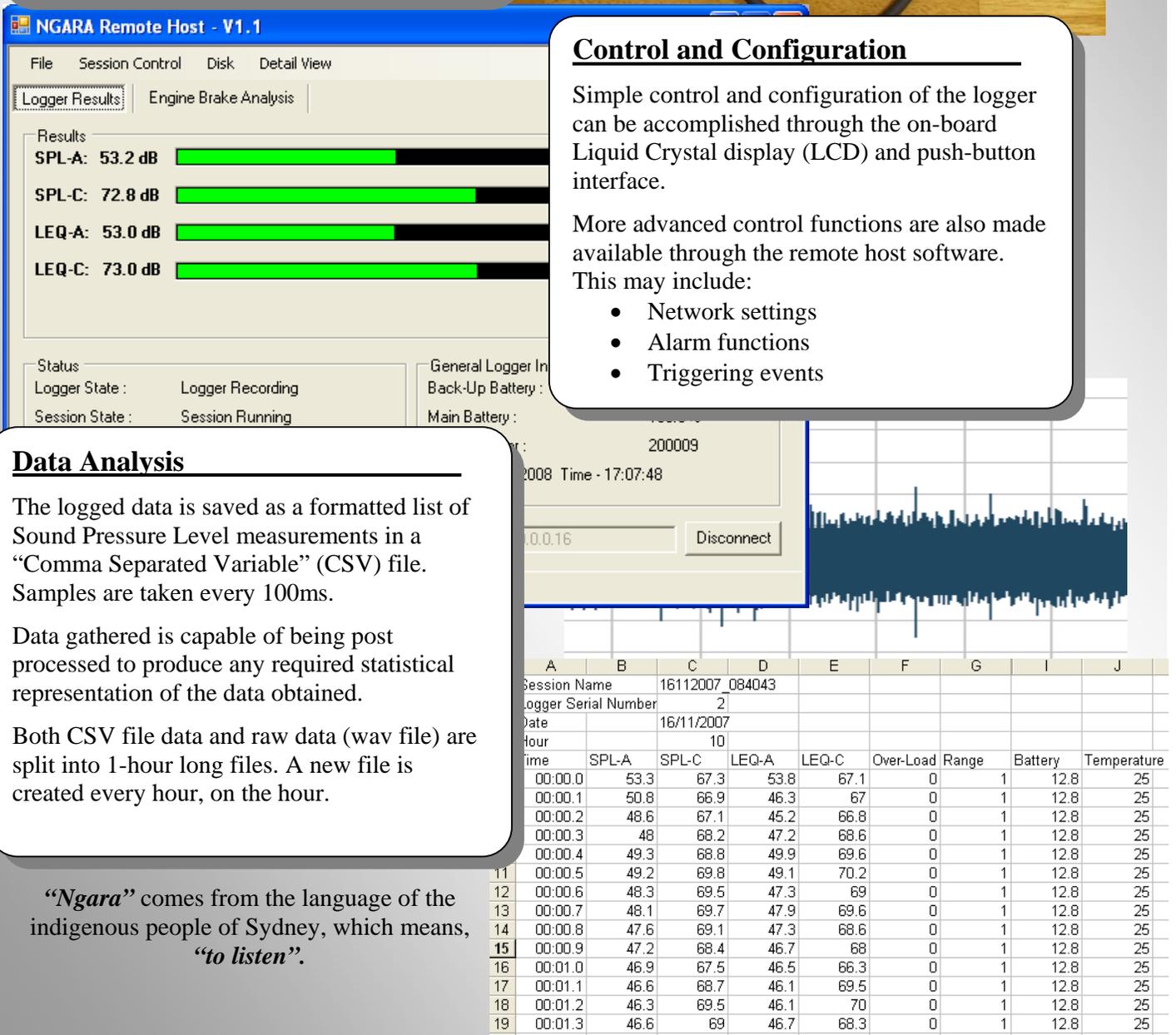
## Data Analysis

The logged data is saved as a formatted list of Sound Pressure Level measurements in a “Comma Separated Variable” (CSV) file. Samples are taken every 100ms.

Data gathered is capable of being post processed to produce any required statistical representation of the data obtained.

Both CSV file data and raw data (wav file) are split into 1-hour long files. A new file is created every hour, on the hour.

“Ngara” comes from the language of the indigenous people of Sydney, which means, “to listen”.



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*Real Time Sound Acquisition System*

## Available Interfaces

Two USB ports used to interface data storage devices (USB Hard Disk Drive/Flash Stick)

One Ethernet port allowing communications with the logger for control and configuration via the Ngara host software

Optional external push-button input to trigger recording of raw data (wav file)

## Modes of Operation

The logger can be set-up to log data in different modes:

- *Recording Mode*
  - Raw data (wav file) and CSV files are produced
- *Non-Recording Mode*
  - CSV files produced only
- *Triggering Mode*
  - CSV files produced with raw data (wav file) collected after a preset trigger event

## Triggering Events

The logger may initiate the recording of raw data (wav file) on triggered events.

These events may include:

- A predetermined SPL level (A or C)
- A predetermined  $L_{eq}$  level (A or C)
- A predetermined statistical percentile reaching a specified level (SPL or  $L_{eq}$ )

It is possible to configure the amount of data to record before the event occurred (up to 9 minutes), as well as the amount of data to record after the event (up to 9 minutes or continuous)

## Alarm Function

The logger can be set to wake up automatically, and either start a new logging session or power on its network interface.

Alarms may be set daily or weekly, and can be reoccurring or single shot.

## Specifications

Instrument Type	Type 1
Microphone Type	½" Condenser
Microphone Noise Floor	20dBA (Typically)
Electronic Noise Floor	20dBA (Typically)
Frequency Response	A and C
Time Response	5ms, 125ms
WAV File Specifications	48kHz
Measurement Range	20-120dB
Measured Data	SPL-A & SPL-C $L_{eq-A}$ & $L_{eq-C}$ Temperature & Battery Voltage
Environmental	-10°C to +50°C
PC Interface	Ethernet

*Acoustic Research Laboratories reserves the right to change specifications and accessories without notice*

## *Acoustic Research Laboratories*

Proprietary Limited A.B.N. 47 050 100 804  
Noise and Vibration Monitoring Instrumentation for Industry and the Environment

Level 7, Building 2, 423 Pennant Hills Rd  
Pennant Hills NSW 2120 AUSTRALIA

Tel: +61 2 9484 0800

Fax: +61 2 9484 0884

[www.acousticresearch.com.au](http://www.acousticresearch.com.au)

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