

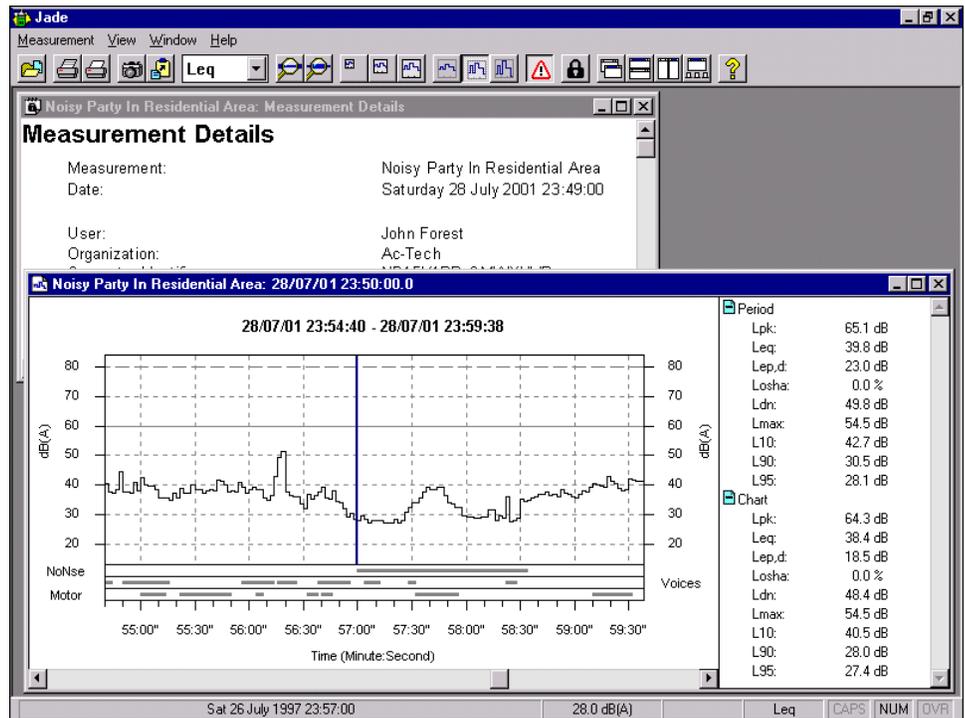


# Jade 2

## Noise Data Acquisition Software

Jade 2 is the cost-effective solution to capturing and analyzing noise data. Simply attach a sound level meter to a computer using a standard PC sound card and you instantly have a noise capture system. Use Jade to record sound levels, mark noise events and note observations, and then view the resulting data. Zoom in and out of the charts to view the data at different levels of detail, edit your observations, and print your charts and notes. Finally, include both charts and notes in a report using your preferred word processor or even export the data to a spreadsheet application.

- ◆ Works with any sound level meter with a conditioned AC output.
- ◆ Record noise events as they happen – even more than one event simultaneously.
- ◆ Running statistics are calculated during data capture and displayed on the screen.
- ◆ Perform either a preview ("quick look see") data capture or a prolonged full data capture.
- ◆ Complete control over when and for how long data capture occurs from a few seconds to a whole month – or even longer!

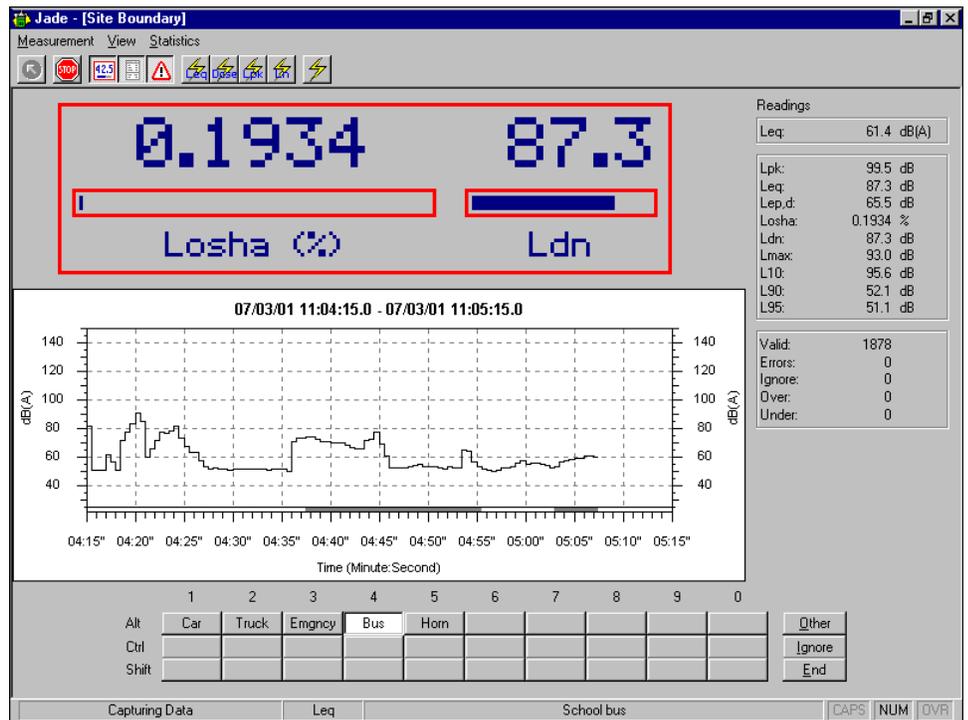


- ◆ Raw data is sampled at up to 44100 times a second using a standard PC sound card from which Lp, Leq and Lpk values are generated. These are saved in a measurement file for future analysis at up to 50 times per second.
- ◆ See the data during data capture in both chart form and as a large numerical display.
- ◆ View the data held in Jade measurement files in chart form with the corresponding statistics.
- ◆ Use the integrated word processor facility to edit notes and prepare reports.
- ◆ Open more than one chart or note at the same time – even from different measurements.
- ◆ A choice of chart trace types both during data capture and when viewing the resulting data.
- ◆ A wide range of statistics are provided as standard, including Lmax, Leq, Losha, Lavg, Lep,d, Ldn, Lden (CNEL), L90 and many more.
- ◆ Choose up to 8 statistics for data capture and 15 statistics when viewing data in chart form.
- ◆ Export chart images, data and notes to word processing and spreadsheet applications.
- ◆ Dates, times and other international settings are taken from the operating system settings.

## Statistics

Jade displays both running statistics during data capture (which are continuously updated) and the final statistics when viewing the resulting data. Furthermore, when viewing the resulting data you have two sets of statistics to hand: those for the visible chart and those for the entire measurement period. Jade provides a wide range of statistics, including Lmax, Leq, Losha, Lavg, Lep,d, Ldn, Lden (CNEL), L10, L90 and many more. You can even choose fractional Ln values if you wish, such as L99.8.

The full statistics can be either printed on charts or exported to a text file for inclusion in reports.



## Data Capture

Use Jade's data capture facility to perform either a preview (quick test) capture or a full data capture session, during which data is automatically saved to a file for future analysis. You can also record noise events as they happen – and even note any additional observations.

To help you watch progress during data capture, Jade displays the data in chart form as it is received from the sound card and processed. You can choose the type of chart trace with which to view the data. For example, you can choose an Ln or Leq trace, or just a simple sound pressure level or Lpk trace.

And at the bottom of the chart Jade shows the actual time on the chart axis, so you can relate the data to the correct time.

## Calibration

Jade has a highly automated calibration facility to make calibrating the system quick and easy. For example, Jade selects the most suitable meter range for calibration based on your choice of meter and calibrator.

For further peace of mind, you can choose to validate the accuracy of the meter after a full data capture session. Jade provides you with a summary of how reliable the readings were at the end of data capture – a useful feature for particularly long data capture sessions.

## Data Sampling Rates

Jade samples the raw data received by the PC sound card at up to 44100 times a second. This is then synthesized into Lp (sound pressure levels), Lpk values and Leqs for storing in the measurement file. Generating all three types of data means that meaningful statistics can be generated. Data is typically stored in the file at a rate of five times a second, but you can store data at a rate of up to 50 times a second.

## Recording Noise Events

Recording noise events as they happen during a full data capture session is easy with Jade's customizable event labels (codes) – including a special "Ignore Data" label. Just use a single mouse click on the event bar at the bottom of the window – or an easy short-cut keyboard combination – to attach an event label to the data, and the event is recorded. You can even record more than one event at the same time.

And if you are not around to record the events yourself, you can always ask Jade to use the "Auto-Threshold" event during data capture to mark any decibel values over a user-definable level.

The use of event labels is further enhanced by assigning priority codes to the event labels. These prioritize the event labels so that certain noise events are more visible than others – influencing the statistics and the chart display.

## Large Size Numeric Display

During data capture, in addition to viewing the data in chart form, you can also view the current level in a large size numeric display. This is ideal for those who prefer a large meter-like display, and is also of use in classroom and other demonstration situations.

## Measurement profiles

Jade allows you to set up measurement profiles to specify when data capture should occur and for how long. For example, you can set up a profile to capture data at certain times during the day – particularly useful for unattended surveys or for intermittent sampling sessions.

## Library Files

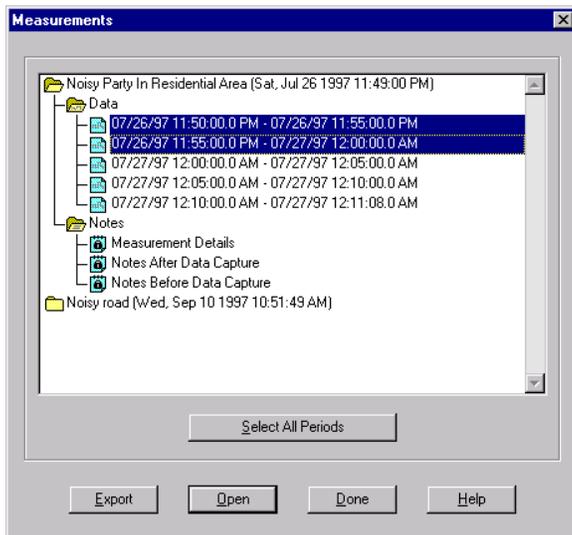
Jade stores information about meters, calibrators, profiles and events in special library files. This means, for example, that Jade does not restrict you to using just one sound level meter. Instead, Jade stores the details of all your meters so you can choose one from the library before a data capture session.

## Hardware

Jade does not require any special hardware other than a standard PC sound card and a special data cable to connect the sound level meter to the sound card.

## Jade Measurement Files

All the information about a data capture session, including the actual data, meter calibration details (if any), notes both before and after data capture, noise events, and so on, are stored in a file for future use.

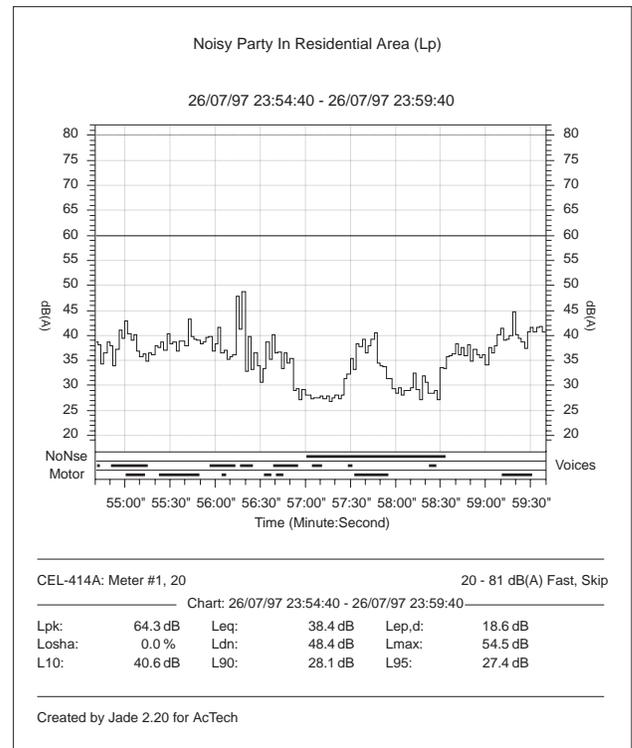


You then use Jade's chart viewing and note editing facilities to view the data and the associated notes in order to analyze the data and prepare reports.

When you are ready to view the results, simply open a measurement and select one or more time periods to view the data in chart form. Alternatively, view your observations before or after data capture, or open the system generated note to view details of the measurement session.

## Charts

The charts used by Jade's viewing facility are similar to those displayed during data capture, but with one important extra feature: the ability to zoom in and out of the chart and view the data at different levels of detail. For example, you can see all the data in a top level chart or zoom in on a small portion of the chart to see the data in detail.



A further enhancement over Jade's charts is that the noise events are shown individually at the foot of the chart. You can therefore match the events to the corresponding data.

Of course, just viewing the data is not always enough. Jade also allows you to print charts on your printer using a selection of print options. For example, you can print just the visible chart or the whole measurement period as a series of charts.

For total flexibility you can also copy the chart image to the Windows clipboard or even create a “snapshot” file of the chart in Windows Metafile Format for inclusion in a word processed report. And the data itself can be exported for inclusion in a spreadsheet.

## Notes

Jade allows you to open documentary notes in the measurement file for editing and printing using the built-in word processor facility, for example to produce a written report. Jade also automatically generates notes that record the details of data capture, including the sound level meter and calibrator used. You can the export and clipboard facilities to place text in alternative word processors.

## Documentation

Jade 2 is provided with full documentation and on-line help. The *Getting Started* guide contains a tutorial that teaches you how to use Jade 2. This is supplemented by an in-depth *User Guide* and an *Advanced Topics* guide. All the manuals are provided in Adobe Acrobat format so that they are always to hand.

## Viewing-Only Version

Jade 2 is also available as a viewing-only version. This lower cost version of Jade is identical to the full version, except that it does not allow data capture. This is ideal if you want to capture data on one computer (for example, a portable) but would like to view the data on another computer.

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## System Requirements

### Computer hardware and software

- ◆ Microsoft Windows 95/98, Microsoft Windows NT 4 or later.
- ◆ Sound Card with 16-bit stereo recording capability and volume control.

### Acoustic hardware

- ◆ A sound level meter with a conditioned AC output (that is, the AC signal is drawn after the frequency weighting has been applied).
- ◆ Single or dual level acoustical calibrator.
- ◆ A cable to connect the sound level meter to the PC’s sound card. A simple audio cable can be used if the meter produces 0.7V RMS full scale or less. Above this level, a cable with suitable attenuation must be used to avoid damaging the sound card. Please contact your supplier for help with obtaining a cable for your meter.

### For more information contact:

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