

AMBIDESK Public Display System for Air Quality Information

- Fully automatic data collection and validation
- Fully automatic update of remote public display
- Data collection from multiple sites
- Simple to configure through software
- Uses accurate, calibrated real time data
- Automatically interprets data into configurable air quality messages
- Interlocks to prevent false alarms
- Choice of large screen or LED display options
- User defined messages

The **AMBIDESK** Public Display facility is designed to automatically update a remote display, with real time air quality messages. The system comprises:

- An Air Quality Monitoring (AQM) site, connected to a phone line via a modem. This will typically be an **AMBIRAK**, but **AMBIDESK** can collect data from other loggers: the Odessa logger and TEOM particulate monitor are already supported. New loggers can be added with additional software drivers.
- A master station PC running **AMBIDESK**. This collects data from the AQM site, generates the text message of air quality and then updates the Public Display. All tasks are automatically scheduled using **AMBIDESK's** own software scheduler. This PC will typically be located in an office.
- A public display, which may either be a PC, typically with a very large monitor, or a LED display. Signal Ambitech have standardised upon Datalite LED displays. The communications protocol between the master station and the public display employs the standard Datalite protocol, and where a PC is used for a public display it runs Signal's own software which interprets the Datalite protocol.

Operation

The **AMBIDESK** Scheduler is set up for hourly data collection from the AQM site, using **AMBIDESK's** native Dialler utility. The Public Display Update program can use data from either the one minute raw data log (RDL, scaled using the calibration file, CFL), or the processed data log (PDL, which may already be scaled and averaged at the **AMBIRAK**). The update program also runs from the scheduler, and scales and averages the data as required.

Where data is available, then for each pollutant, the actual level, in ppb is compared to user configurable limits to generate an appropriate message.

For example, if the limits for NO₂ are set to:
Then if the measured value were 54 ppb, then the

	Very Good	Good	Poor	Very Poor
NO ₂	< 50 ppb	50-89 ppb	90-179 ppb	>= 180 ppb

message might be:

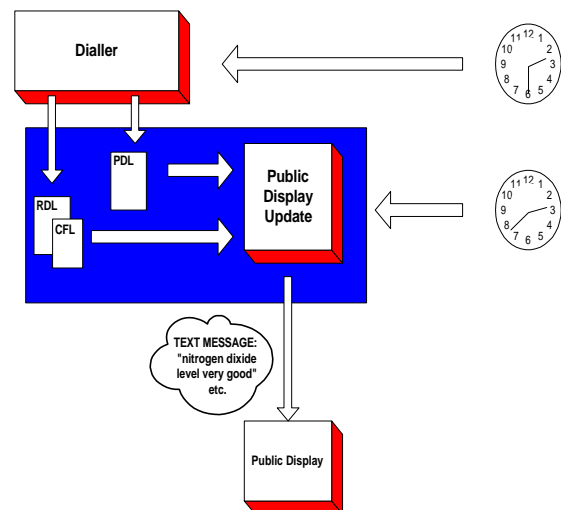
"Nitrogen dioxide quality is good"

The actual text message, as well as the banding limits are user configurable.

If all of the pollutants are in the same band, then a general message is generated, such as:

"Air Quality is good"

This information is then transmitted to the remote display using the Datalite protocol.



System Requirements

Master station PC:

- 486 processor minimum; Pentium or higher preferred
- Microsoft Windows 3.1x, Windows 95 or Windows NT
- 8 MB RAM (Win 3.1x or 95); 24 MB RAM (Windows NT)

Option 1: PC Display

Option 2: LED display

- 486 processor minimum, Pentium preferred
- Microsoft Windows 3.1x, Windows 95 or NT
- 8 MB RAM (Win 3.1x or 95); 24 MB RAM (Windows NT)
- Hayes compatible modem with phone connection
- Datalite LED display using serial protocol 2.9
- Hayes compatible modem, with phone connection