Production Board

User Manual

Title Page

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1. Introduction

1.1. *Scope*

The scope of this document covers the Production Display Board.

1.2. *Purpose*

The purpose of the document is to provide the relevant information to enable the user to operate and maintain the Display Board correctly.

1.3. *System*

The system consists of a 3 Production Display Boards connected to an existing local PC via an RS232/RS485 connection.

Each Board is consists of a 2 inch 40 character Dataline, a Databoard section and a 4" 40 character Dataline at the bottom. The Databoard section shows the *TARGET v ACTUAL* accident related information on the 7 lines of 50 characters, while general messages and information may be displayed on the 40 character Datalines.

ProdnSDS, a windows based software package is used to edit and send data to the Board.

Warning
Only trained and authorised personnel should do tests and maintenance on this Display Board System.

2. Installation

2.1. Unpacking

Carefully remove the items from their package and store the packaging safely. After unpacking, inspect the contents for any damage that may have occurred during shipment. In the event of damage, refer to the *Return of Equipment* procedure section of this manual.

2.2. Hardware

The Display Board should be located in a position where there is unrestricted viewing of the front face of the Board. Also avoid locations where the Board is subject to bright lights or direct sunlight. Mount the Board securely and connect the cables as shown in the Figure below.
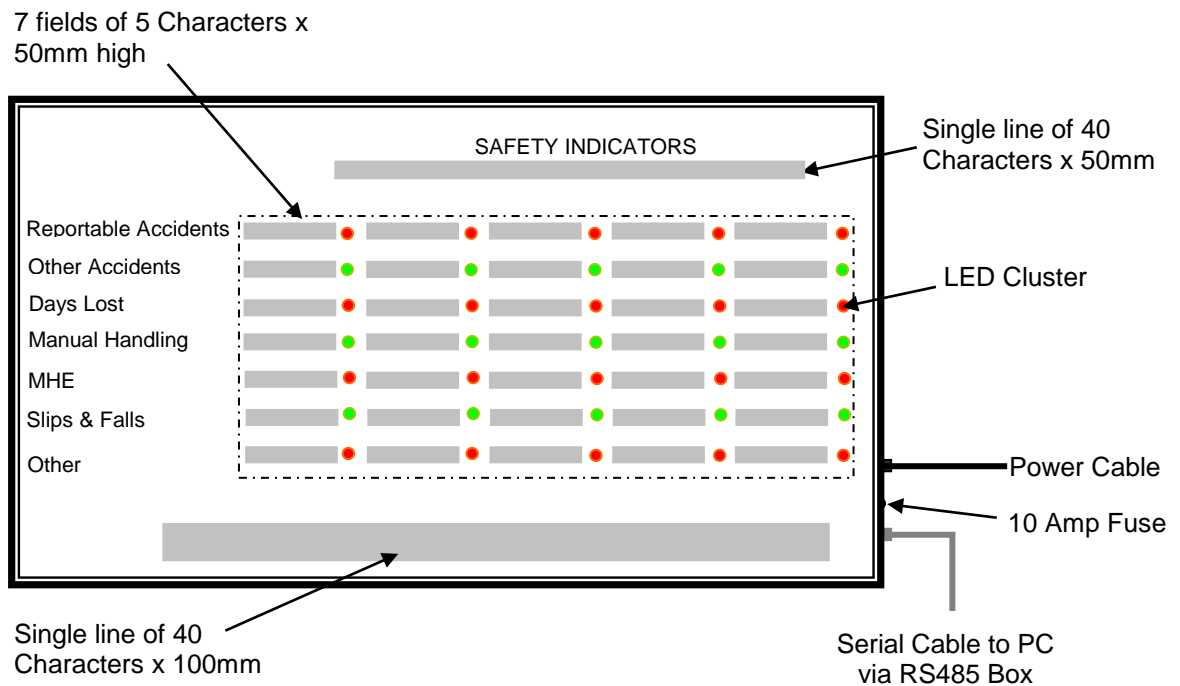
Figure 1 – System Configuration.

2.3. Software

The *ProdnSDS* software package is supplied in floppy disk format. Using MS Dos, type 'A:\install' at the prompt command. To install the *ProdnSDS* software from the floppy disk using Windows 95, do the following:

1. Insert the disk in the floppy drive

2. Click the *Start* button and click on *Run*

3. Type 'A:\install' and click *OK.*

Add *ProdnSDS* to the Start menu by creating a short-cut as described in your Windows 95 User Manual.

3. Operating Instructions

Use the *ProdnSDS* software to control the information for the Display Board. The program 'ProdnSDS.exe' is located in the *ProdnSDS* folder of your '*C'* drive if you have not already created a short-cut. Double-click on the *ProdnSDS* icon to run the program.

3.1. Sending information to the Display

The information shown on the Databoard section of the Production Board is entered manually using the *ProdnSDS* software package supplied with the Board. At any time, each field may be edited individually and the values sent to the Board by clicking on the *Send* button.

To send values to the Databoard section, do the following steps:

1. Run the *ProdnSDS* software

2. Enter the numeric values in each line

3. Select the Board you wish to send the data

4. Click the *Send* button.
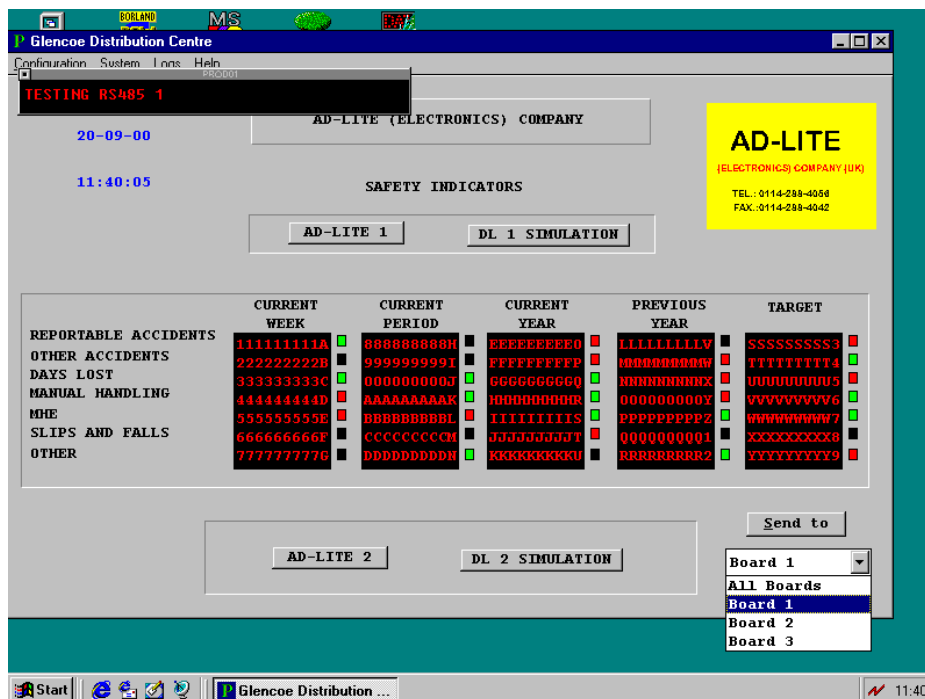
Figure 2 - ProdnSDS Software Interface.

Depending on the values, click on the black buttons to turn the LED clusters to red, green or off.

To send text to the top or bottom section of the Display, click on the *'AD-LITE 1'* (top line) or *'AD-LITE 2'* button on the interface. All the functions and features for this interface are described in the SDS User Manual. Click on the *'SIMULATION'* button to view the text message currently being displayed.

Figure 3 - Message Editor.

3.2.   Addresses of Displays

To address of the Displays are as follows:

Board 1:   Top Dataline - Address 01

Databoard Section - Address21

Bottom Dataline - Address 02

Board 2:   Top Dataline - Address 03

Databoard Section - Address22

Bottom Dataline - Address 04

Board 3:   Top Dataline - Address 05

Databoard Section - Address23

Bottom Dataline - Address 06

4.   Maintenance

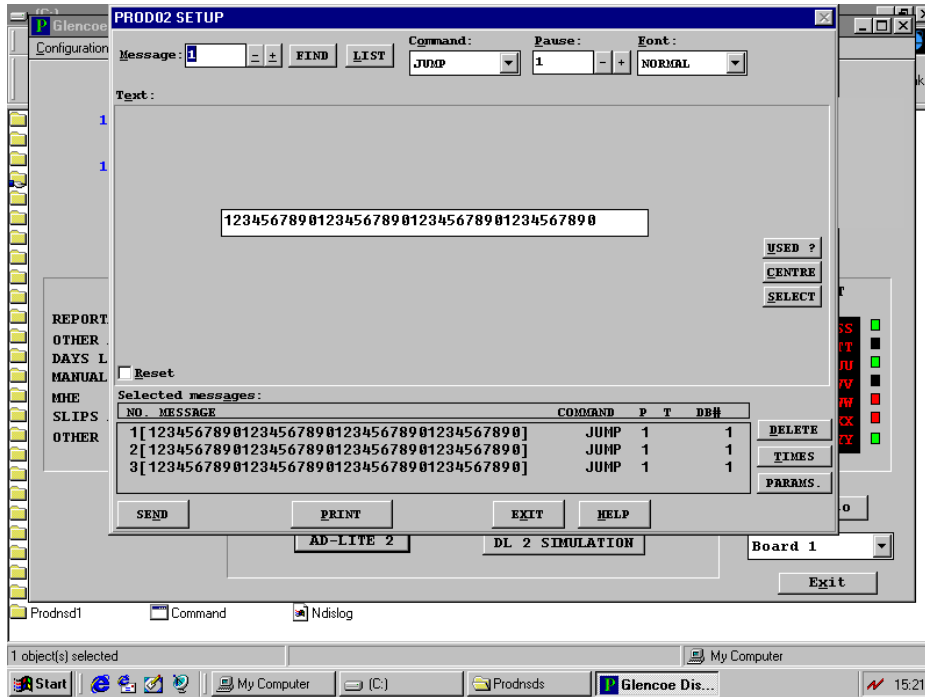*Warning: Disconnect the power supply before you remove any display panels. Make sure work area is clean and clear of tools and miscellaneous items of equipment after maintenance.*

4.1.   Maintenance Instructions

4.1.1. Cleaning the Display

Routine cleaning of the Display Board is at the discretion of the operator and subject to local conditions. Use damp non-abrasive materials such as a sponge, or lint-free cloth and a soft detergent (washing-up liquid) to clean the Display. Remove difficult stains or marks with a suitable solvent. **DO NOT USE** sharp or metal objects.

4.1.2. Preventative Maintenance

Inspect the Display for defects before each operation. Do a visual check for the following:

- Damaged or dirty Lens
- Defective LEDs
- Loose Cables

4.1.3. Corrective Maintenance

Replacing a defective LED Block:

1. Power down the Dispay
2. Remove the side bracket and Lens of the Display
3. Remove the defective LED Block
4. Install the new LED Block
5. Slide in the Lens and attach the side bracket.

Replacing a defective Logic Board:

1. Remove the side bracket and Lens of the Display
2. Loosen the attaching screws on the Display Panel (if required)
3. Disconnect wiring and remove the Display Panel (if required)
4. Remove the Logic Board by unscrewing the attaching nuts
5. Replace the Logic Board and connect all wiring
6. Slide in the Lens and attach the side bracket.

Replacing a defective Fuse:

1. Use a flat-head screwdriver to open the Fuse holder on the Display
2. Replace the Fuse
3. Close the Fuse Holder.

Clean the Display with a damp cloth and make sure the unit is watertight after all maintenance.

4.1.4. Special Measures following a Stoppage

If the Display is out of service for a long period of time, carefully remove the Display and store it in a cool dry place.

4.2. Handling Equipment

- One working platform
- Standard tool kit

4.3. Special Tools

There are no special tools required.

4.4. Spare Parts

For spare parts, contact your nearest Data Display Customer Service Department.

Make sure to quote the Data Display No. in the Product Specifications section of this Manual and the Serial No of the display.

Part Number	Description	Total per Display
DL210 R	Display Panel	25
DL210 G	Display Panel	14
DL405 R	Display Panel	8
CLUSTER	LED Cluster	35
AUTOLOGIC2000	Logic Board, 2000	3
CLXi32	Driver Board	2
D00-2216	PSU, 12 Volt	2
D00-2217	PSU, 5 Volt	5
D00-453202	Fan	8
D00-1670	Filter	1
D00-3324	Fuse, 10 Amp	1

Table 1 - Replaceable Parts for Display Board.

4.5. Return of Equipment

Follow the procedures listed below when returning a Display:

1. Disconnect all cables and carefully remove the Display from the mounting

2. Pack the Display in the original packing.

3. If the original container is not available, pack the Display in a wooden carton. Use cardboard and polystyrene wedges to protect and cushion the Display.

4. Mark carton(s) "THIS SIDE UP" , "THIS SIDE DOWN" and "FRAGILE" where appropriate.

5. Make sure to include with the Display the following information:

> NAME
>
> ADDRESS
>
> TELEPHONE NUMBER
>
> SERIAL NUMBER OF DISPLAY
>
> DESCRIPTION OF THE PROBLEM
>
> (A short description is sufficient)

Contact your nearest Data Display Customer Service Department and a suitable collection date and time will be arranged.

5.   Product Specifications

CHARACTERISTIC	VALUE
Display Features	
Display Type	Production Board DB075005
Data Display Ref. No.	J02163001
LED Diameter	5mm
LED Colour	Standard-Bright Red and Green
Communication	
Software	ProdnSDS
Protocol	DB Win & D2.0
Baud Rate	9600
Addressing	Dip Switch
Data Format	8 bit, 1 stop bit, no parity
Character Set	Extended ASCII set
Electrical	
Fuse Value	10 Amp
Main Power Supply	220 Volts
Housing	
Dimensions (LxHxD)	3785mm x 1581mm x 75mm
Housing Material	Aluminium
Housing Colour	Black
Lens Colour	Grey
Environmental Conditions	
Temperature Range	-5°C to 65°C
Humidity Range	5% to 80% without condensation

Table 2 - Product Specifications.