TAKT TIME Production Board User Manual

Title Page

© 2006 Data Display Ltd

No part of this document may be reproduced by any process without the prior written permission from Data Display

The information in this document is provided for reference only. While every effort has been made to make sure it is accurate and complete, Data Display Ltd does not accept any liability arising out of the application or use of the information or products described herein. Moreover, Data Display Ltd reserves the right to alter specifications or procedures without notice.

This document may contain or refer to information or products protected by copyright or patents and does not convey any license under the patent rights of Data Display Ltd nor the rights of others.

All products referred herein are trademarks of their respective owners.

Publication details:

Title: Takt Time Production Board User Manual

Issue: 1

Issue Date: 12-Dec-06

Part Number: DDJ11893001

Produced by:

Product Support Department Data Display Ltd Deerpark Industrial Estate Ennistymon, Co. Clare Ireland

Printed in Ireland

TABLE OF CONTENTS

TITLE PAGE1				
TAR	BLE OF CONTENTS	2		
IAD	DLE OF CONTENTS			
1	INSTALLATION INSTRUCTIONS	3		
1.	.1 Unpacking	2		
1.				
1				
2	OPERATING INSTRUCTIONS	4		
2.	.1 General	4		
2.				
2.				
2.4	.4 SETTING THE SHIFT TAKT TIME (LEVEL)	6		
2.:				
SE	ENDING MESSAGES TO THE DATALINE	7		
•	MAINTENANCE	0		
3				
3.	.1 MAINTENANCE INSTRUCTIONS	8		
	3.1.1 Cleaning the Display	8		
	3.1.2 Preventative Maintenance			
	3.1.3 Corrective Maintenance			
	3.1.4 Special Measures following a Stoppage			
3.2				
3				
3.4				
3	.5 RETURN OF EQUIPMENT	9		
1	PRODUCT SPECIFICATIONS	10		

Warning

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

1 Installation Instructions

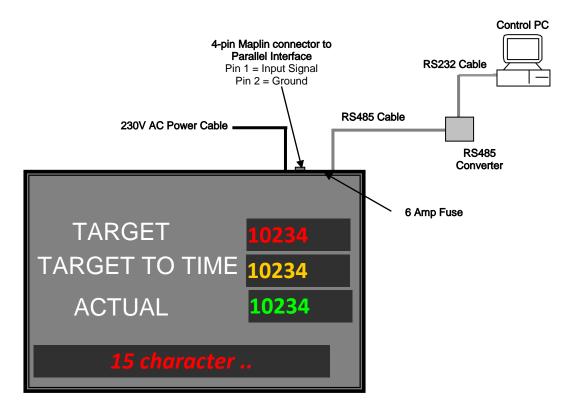
1.1 Unpacking

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.

1.2 Hardware

The Counter Display should be located in a position where there is unrestricted viewing of the front face of the Display. Also avoid locations where the Display is subject to bright lights or direct sunlight.

Mount the Display securely and connect the cables as shown in Figure 1.



The 4-pin Maplin connector on the top of the Display is wired for Volt-free input. Make contact with Pin 1 and Pin 2 (Ground) to increment the ACTUAL value by 1.

Pin	Function
Pin 1 to GND	Increments ACTUAL

Figure 1 - System Configuration.

1.3 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 95/98, do the following:

- 1. Insert the disk in the floppy drive
- 2. Click the Start button, Select Settings and click on Control Panel
- 3. Double-click the *Add/Remove Programs* icon and follow the instructions displayed the on screen.

Add *ProdnSDS* to the Start menu or Desktop by creating a shortcut as described in your Windows User Manual.

2 Operating Instructions

2.1 General

The function of the Counter Display is to show the Target/Actual efficiencies of the production line depending on the TAKT Level settings. The 'TARGET TO TIME' and 'ACTUAL' values may be entered manually or incremented using the Volt-free Parallel Interface installed in the Display. The TARGET value is entered manually on the PC. To achieve an accurate read out, a schedule file is necessary to provide the software with a detailed listing of the Shift Start and Stop times etc. The current schedule file in use is shown on top of the User Interface.

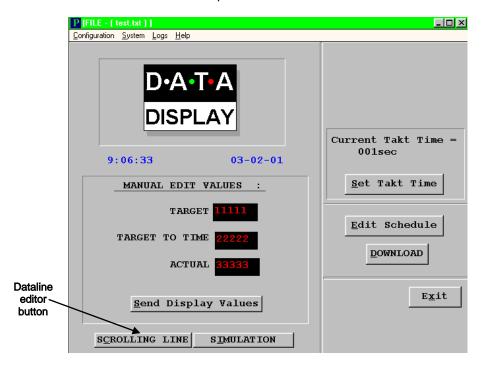


Figure 2 - Production Board Display User Interface.

To send values to the Display manually, enter the *TARGET, TARGET TO TIME* and *ACTUAL* values and click on the *'Send Display Values'* button.

2.2 Editing the Schedule Files

The Schedule file contains the Start, Stop and Reset time parameters for each day. This file is in text format and must have the file extension .txt, e.g. 'test.txt'. Up to 25 time parameters may be added for each file. These may include Shift Start and Stop Times, Breaks etc.

To edit the schedule file, do the following steps:

- 1. Click on the 'Edit Schedule' button on the User Interface
- 2. On the Driver File Setup Box, enter the name of the new text file and click on the 'ADD' button, e.g.test.txt
- 3. If the text file already exists, select it from the dropdown file list and click on the 'EDIT' button
- 4. Make the changes to the files Start, Stop and Reset times in 12a34 or 12p34 format (Fig.4)
- 5. Choose the Day of the Week for the file and click the OK button.

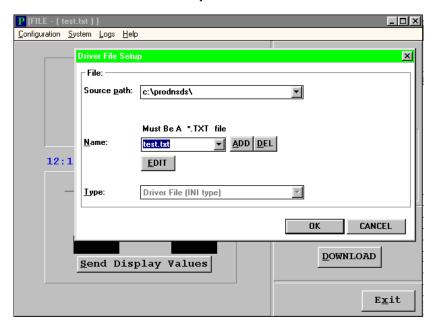


Figure 3 - Driver File Setup Box.

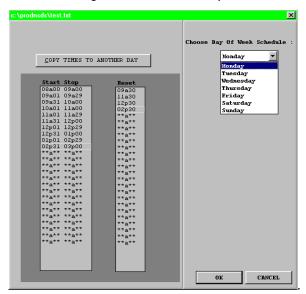


Figure 4 - Schedule File Details.

The Display may be reset to zero up to 25 times during the Shift(s). **Note:** If a time parameter is not used, enter **a** or **p** in the time parameter.

2.3 Copying similar file details

Where the shift patterns are similar, click on the 'COPY TIMES TO ANOTHER DAY' button to copy a selected file from one day to another.

To copy times, do the following steps:

- 1. Click on the 'COPY TIMES TO ANOTHER DAY' button
- 2. Select the day from the drop down list
- 3. Click on the 'OK' button.



Figure 5 -Copying schedule times to another day.

2.4 Setting the Shift TAKT Time (Level)

The TAKT Time value is set to provide a moving target to which the current production level may be monitored. This is a seconds value and is set at the operators' discretion. The Display increments by 1 for that time period. The AMBER and RED LEVELS are not applicable for this Display.

To set the TAKT Time value, do the following steps:

- 1. Click on the 'Set TAKT Time' button on the User Interface
- 2. Enter the TAKT value, e.g. 010 will increment the Display by 1 every ten seconds
- 3. Click on the 'OK' button.

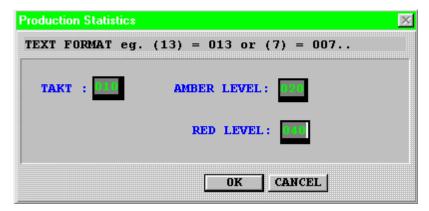


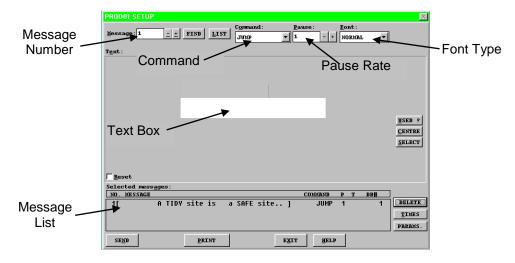
Figure 6 - Setting TAKT Time.

2.5 Downloading to the Display

After creating or editing the schedule files, click the 'DOWNLOAD' button to send the file details to the Display. Clicking the 'DOWNLOAD' button also sends the current Time and Date to the Display. Make sure the PC is set to the correct time.

Sending Messages to the DATALINE

To send text to the 20 character Databoard section of the Display, click on the *Scrolling Line* button to open the Message Editor Interface. Enter your text message in the text box and click on the *'SELECT'* button. The message is now added to the message list at the bottom.



Click on the 'SEND' button twice to send the new text message to the Display To edit a text message, click the message number (+/-) to show the message in the text box. Make the changes to the text message and click on the 'SEND' button. The changes to the message are shown in the message list. Click on the 'SEND' button again to send the new changes to the Display.

Various Commands, Pause Rates and Font Types can be selected from the drop down lists to give your message more effect.

When messages are sent to the Display, click on the 'Simulation' button to view the text message currently being shown on the Display.

For more features and functions, refer to the SDS User Manual.

3 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.

3.1 Maintenance Instructions

3.1.1 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 to clean the Display. Remove difficult stains or marks with a suitable solvent. DO NOT USE sharp or metal objects.

3.1.2 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**

3.1.3 Corrective Maintenance

Replacing a defective LED Display Board:

- 1. Remove the side bracket and Lens of the Display.
- 2. Loosen the attaching screws on the Display Board.
- 3. Disconnect wiring and remove the Display Board.
- 4. Connect the connectors and attach the new Display Board.
- 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 relevant Display Boards.
- Disconnect wiring and remove the Display Board.
 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. Open the Fuse holder on the Display with a flat-head screwdriver
- 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.

3.1.4 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.

3.2 Handling Equipment

- One working platform
- Standard tool kit

3.3 Special Tools

There are no special tools required.

3.4 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.

3.5 Return of Equipment

Follow the procedures listed below when returning a Display:

- 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 protective 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.

4 Product Specifications

CHARACTERISTIC	VALUE			
Display Features				
Data Display Ref. No	DDJ11893001			
Model	DB-043010-SMTR/G/A			
Display Type	TAKT Time Counter Production Board			
No. of Lines per Board	4			
Characters per Line	5 on top three lines			
	15 on scrolling dataline			
Character Size	10cm			
Display Board Type	DL405			
Communication				
EPROM				
Protocol	DB Win			
_ Baud Rate				
Data Format	8 bit, 1 stop bit, no parity			
Electrical				
Fuse Value	10 Amp			
Main Power Supply	230 Volts			
Power Consumption	150 Watts			
Housing				
Dimensions (LxHxD)	1421mm x 870mm 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 1 - Product Specifications.