

RIDE ERROR & STATUS MESSAGE DISPLAY

The Message Display is a Personal Computer (PC) based software program designed to aid in troubleshooting and maintaining the electrical ride control system and the peripheral equipment. The program operates in the Microsoft Windows 95/98 or NT environment. The program displays the current ride error and ride status message, logs the errors with a time and date stamp to a text file, and displays specific errors upon operator request.

SYSTEM REQUIREMENTS

The following are the requirements for a PC running the Message Display program:

- \$ Microsoft Windows 95/98 or Windows NT4.0
- \$ A 32bit personal computer with a 266Mhz processor or higher
- \$ A minimum of 32MB of memory
- \$ Hard disk drive with 5 megabytes available
- \$ 3 2" Floppy disk drive
- \$ CD Drive
- \$ A display adapter supported by Windows
- \$ A mouse supported by Windows
- \$ Serial port COM1 or COM2
- \$ Parallel port (LPT1) for an optional printer

MESSAGE DISPLAY DESCRIPTION

The Display program resides in the startup menu on the PC and starts automatically when the PC is booted. The program should be left running at all times while the ride is in operation. When the program starts, it first establishes communication through COM1 or COM2 with the PLC Channel 0 port.

If no ride error is present, the program will display the PLC Status Code screen. This screen shows the status number, the status description, and the action to take for this status and the preferred way to restart the ride if required.

If an error is present, the program will display the PLC Error Code screen. This screen shows the error number, the error description, and the action to take for this error and the preferred way to restart the ride if required.

PLC Status Code: 0

STATUS: NO STATUS MESSAGE

ACTION:

RESTART:

Display Error Log Display Specific Error

RUN TIME: 0

PLC Error Code: 32 OFF LINE ERROR LOOKUP

PLC Status Code: 0

ERROR: CONTROL POWER HAS BEEN TURNED OFF OR PLC'S KEY-SWITCH WAS SWITCHED TO PROGRAM OR RUN MODE.

ACTION: NONE. IF PROGRAM IN PLC HAS BEEN CHANGED, USE BLOCK MOVE FUNCTION TO "MATCH" PLC INFORMATION WITH ACTUAL TRAIN POSITION AND MOVE ONE TRAIN AROUND IN MANUAL MODE!

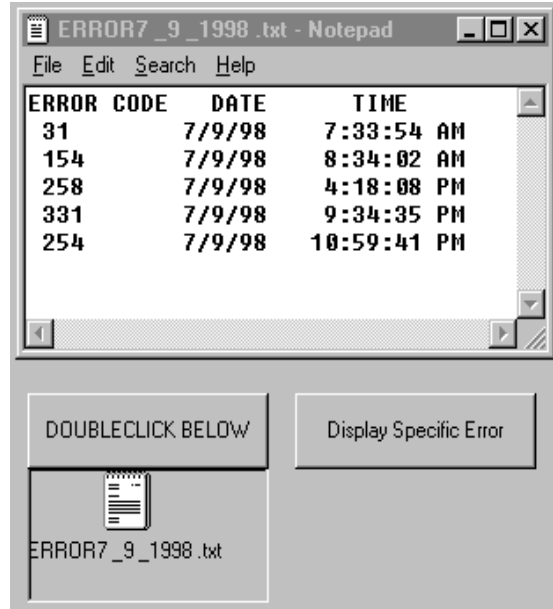
RESTART: TURN CONTROL POWER ON. ACKNOWLEDGE LAMP TEST. GO TO MANUAL MODE AND RESET ERRORS. RESTART IS THE SAME AS A NORMAL START-UP.

Display Error Log Return to Error Display

RUN TIME: 0

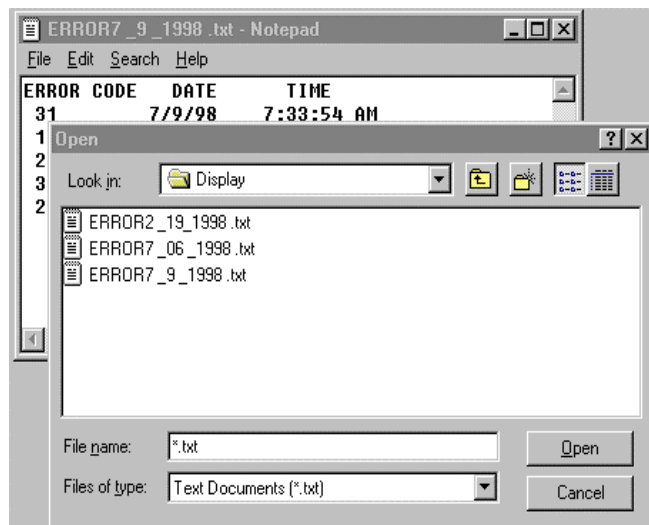
The train runtime, from the lift exit to the brake area, is for information purposes only and is shown on both, the Status and Error screens.

When the button labeled <Display Specific Error> is clicked on a small window opens directly below the button. This window accepts any valid number entry, which causes the program to display the associated text message in OFF LINE mode. The purpose of this button is to save time, quickly accessing a specific text message manually. Clicking on the same button, now labeled <Return to Error Display>, or waiting for the timeout to occur, approximately 10 minutes, returns the display to ON LINE mode.



When the program displays a specific error, the text >OFF LINE ERROR LOOKUP= at the top of the screen is displayed in red.

When the button labeled >Display Error Log= is clicked on a small window opens directly below the button. This window shows the text file that contains all the errors that occurred that day. The window can be double-clicked on and a Notebook text file opens that shows the error code number, the date, and the time that the error occurred. These files are treated like ordinary text files, comments can be added to it, and then be saved with the same file name. This allows maintenance personnel to keep records of what caused the problem, who corrected it, downtime, etc.



All error log text files have this format:
 ERRORXX_YY_ZZZZ.txt where:
 XX is the month
 YY is the day
 ZZZZ is the year.

Files are saved daily by the program in the same directory and the program creates a new file for every day the ride is operated. Files from previous days, weeks or month can be opened and looked at or printed at any time. This allows maintenance personnel to track errors on a daily, weekly, monthly or annual basis.