_____

I put a lot of time into producing these files which is why you are met with this page when you open the file.

In order to generate this file, I need to scan the pages, split the double pages and remove any edge marks such as punch holes, clean up the pages, set the relevant pages to be all the same size and alignment. I then run Omnipage (OCR) to generate the searchable text and then generate the pdf file.

Hopefully after all that, I end up with a presentable file. If you find missing pages, pages in the wrong order, anything else wrong with the file or simply want to make a comment, please drop me a line (see above).

It is my hope that you find the file of use to you personally – I know that I would have liked to have found some of these files years ago – they would have saved me a lot of time !

Colin Hinson
In the village of Blunham, Bedfordshire.

**OPERATING INSTRUCTIONS
REMOTE CONTROL AND DIAGNOSTIC
TEST SOFTWARE FOR
SLS/MCU EQUIPMENT**

VERSION 1.5

DELTA ELECTRONICS
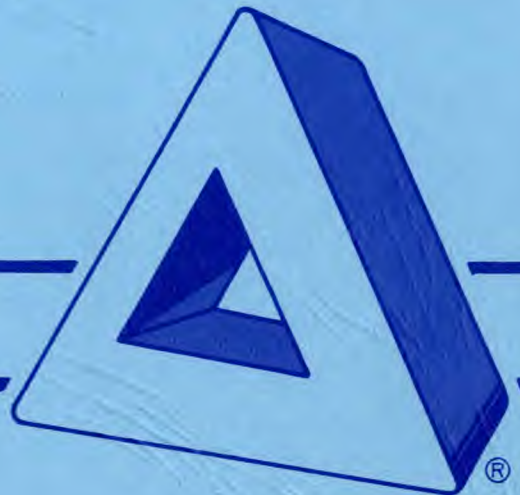
OPERATING INSTRUCTIONS
REMOTE CONTROL AND DIAGNOSTIC
TEST SOFTWARE FOR
SLS/MCU EQUIPMENT

VERSION 1.5

The operating instructions are applicable to
the remote control and diagnostic test software,
Delta part number 993-0475-015.
This program is licensed for use with
the Model SLS-4M (20 X 10) Strip Line Switch,
Serial Number 315,
the Model SLS-4M (8 X 9) Strip Line Switch,
Serial Number 372,
and the Model MCU-8B Matrix Control Unit
Serial Number 285

Copyright 1998

Delta Electronics, Inc.
5730 General Washington Drive
Alexandria, Virginia 22312

This program provides remote control and diagnostic test of the Model SLS-4M (20 X 10) Strip Line Switch, serial number 315, the Model SLS-4M (8 X 9) Strip Line Switch, serial number 372, and the MCU-8B Matrix Control Units, serial numbers 285-L and 285-R.

This program is licensed for use with the above identified equipment only. This program is licensed to:

Ministry of Defence (Procurement Executive)
Directorate of Strategic Communications & Surveillance Systems
Cedar 3c, Abbey Wood #132, P. O. Box 702
Bristol BS12 7DU
England

Serial Number: 0150-001-R05

OPERATING INSTRUCTIONS
REMOTE CONTROL AND DIAGNOSTIC
TEST SOFTWARE FOR
SLS/MCU EQUIPMENT

1.0   INTRODUCTION

This program provides remote control, status display and diagnostic test for SLS/MCU equipment. The program controls the operation of the Model SLS-4M (8 X 9) Strip Line Switch, Serial Number 372, and the Model SLS-4M (20 X 10) Strip Line Switch, Serial Number 315.

The program operates on an IBM or compatible personal computer with a 286 or higher processor. Minimum requirements for the computer are MS-DOS 3.3 or higher, 640 KB RAM, hard disk, VGA graphics, and Microsoft compatible mouse driver.

2.0   SYSTEM CONFIGURATION

This program provides remote control, status display and diagnostic test of a dual transmit matrix system. As shown in Figure 1, System Configuration Diagram, the dual transmit matrix system comprises the Model SLS-4M (8 X 9) Strip Line Switch, Serial Number 372, the Model SLS-4M (20 X 10) Strip Line Switch, Serial Number 315, and the Model MCU-8B Matrix Control Units, Serial Number 285-L and 285-R. As shown in Figures 2 and 3, Matrix Configuration Diagrams, the Column 7 and 8 trunk outputs of the Model SLS-4M (8 X 9) Strip Line Switch are assigned to connect to the Rows J and K trunk inputs of the Model SLS-4M (20 X 10) Strip Line Switch. This trunking arrangement effectively creates a 26 output by 15 input transmit matrix. Transmitters 1 through 7 and transmitter 15 can access Antennas 1 through 6 directly and Antennas 7 through 26 via the trunk lines. Transmitters 8 through 14 can access Antennas 7 through 26 directly but cannot access Antennas 1 through 6. The remote control and diagnostic test software presents the dual matrix system as a single transmit matrix with the switching limitations noted above for all remote control, status display and diagnostic test routines.

To support asynchronous communications with the MCU-8 and a serial interface mouse, the computer must be equipped with a minimum of two communication ports and each port must be assigned a unique interrupt. The remote control program supports the following standard or default assignments. Verify these assignments before installing the program.

Peripheral	Communication Port	Interrupt
MCU-8	COM1	IRQ 4
Mouse	COM2	IRQ 3

If the MCU-8 is assigned to communication port COM2, access the Communication Program dialog box under the Equipment menu and select COM2. Save the new parameters, exit the program, and then restart the program to ensure that the asynchronous communication parameters are properly initialized.

IBM is a registered trademark of International Business Machine Corporation. MS-DOS and Microsoft are registered trademarks of Microsoft Corporation.
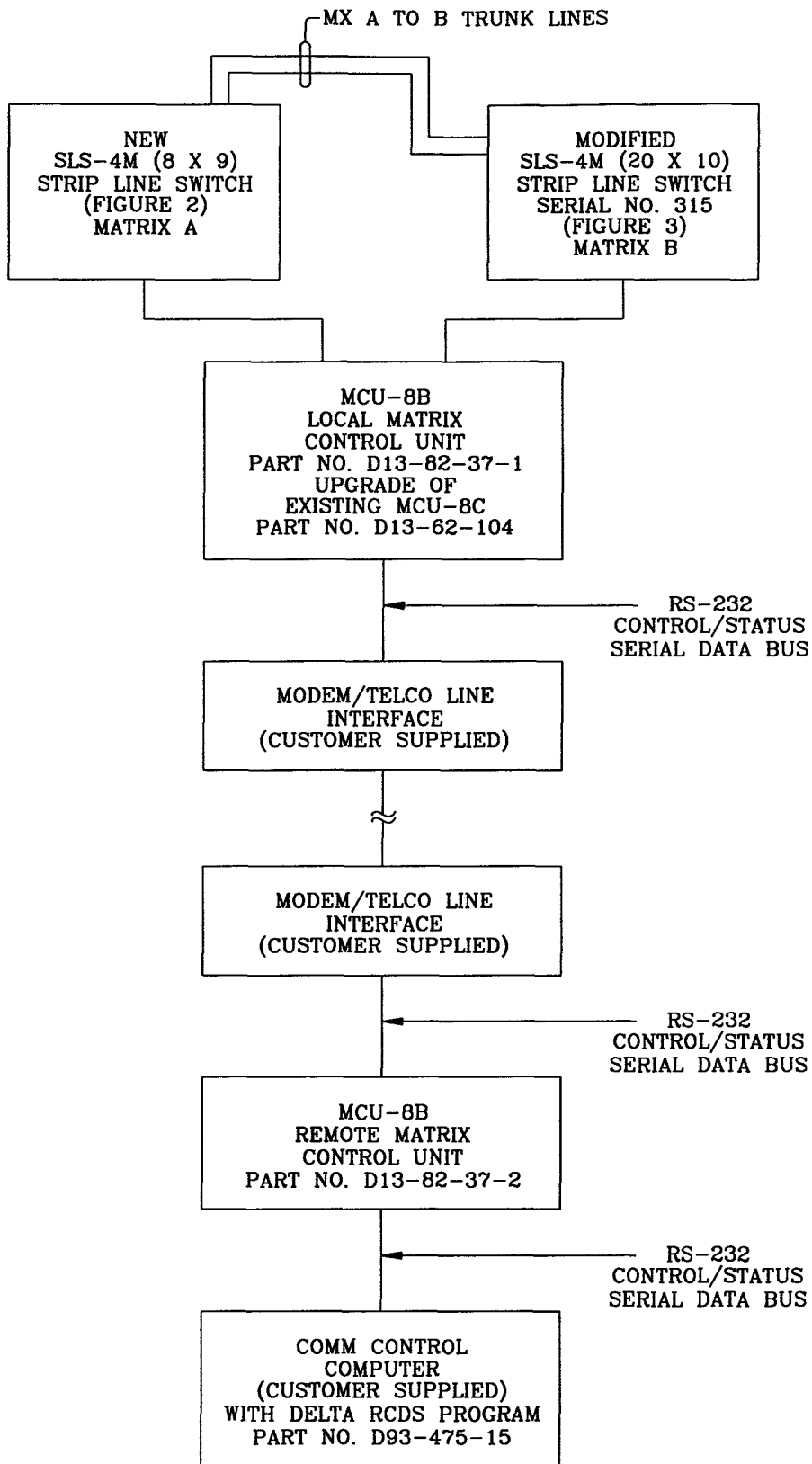
MX A TO B TRUNK LINES

```
┌─────────────────────┐                    ┌─────────────────────┐
│        NEW          │                    │      MODIFIED       │
│  SLS-4M (8 X 9)     │                    │  SLS-4M (20 X 10)   │
│  STRIP LINE SWITCH  │                    │  STRIP LINE SWITCH  │
│    (FIGURE 2)       │                    │   SERIAL NO. 315    │
│     MATRIX A        │                    │     (FIGURE 3)      │
│                     │                    │     MATRIX B        │
└─────────────────────┘                    └─────────────────────┘
```

```
            ┌──────────────────────────────┐
            │          MCU-8B              │
            │       LOCAL MATRIX           │
            │       CONTROL UNIT           │
            │  PART NO. D13-82-37-1        │
            │       UPGRADE OF             │
            │     EXISTING MCU-8C          │
            │   PART NO. D13-62-104        │
            └──────────────────────────────┘
```

RS-232
CONTROL/STATUS
SERIAL DATA BUS

```
            ┌──────────────────────────────┐
            │     MODEM/TELCO LINE         │
            │        INTERFACE             │
            │   (CUSTOMER SUPPLIED)        │
            └──────────────────────────────┘
```

≈

```
            ┌──────────────────────────────┐
            │     MODEM/TELCO LINE         │
            │        INTERFACE             │
            │   (CUSTOMER SUPPLIED)        │
            └──────────────────────────────┘
```

RS-232
CONTROL/STATUS
SERIAL DATA BUS

```
            ┌──────────────────────────────┐
            │          MCU-8B              │
            │      REMOTE MATRIX           │
            │       CONTROL UNIT           │
            │   PART NO. D13-82-37-2       │
            └──────────────────────────────┘
```

RS-232
CONTROL/STATUS
SERIAL DATA BUS

```
            ┌──────────────────────────────┐
            │       COMM CONTROL           │
            │        COMPUTER              │
            │   (CUSTOMER SUPPLIED)        │
            │  WITH DELTA RCDS PROGRAM     │
            │   PART NO. D93-475-15        │
            └──────────────────────────────┘
```

Figure 1
System Configuration Diagram

			ANT 1	ANT 2	ANT 3	ANT 4	ANT 5	ANT 6	TRUNK 1 TO MX B	TRUNK 2 TO MX B	
			1	2	3	4	5	6	7	8	
ANT GND		A	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⅂
TX 1	⊕	B	O	O	O	O	O	O	O	O	⅂
TX 2	⊕	C	O	O	O	O	O	O	O	O	⅂
TX 3	⊕	D	O	O	O	O	O	O	O	O	⅂
TX 4	⊕	E	O	O	O	O	O	O	O	O	⅂
TX 5	⊕	F	O	O	O	O	O	O	O	O	⅂
TX 6	⊕	G	O	O	O	O	O	O	O	O	⅂
TX 7	⊕	H	O	O	O	O	O	O	O	O	⅂
TX 15	⊕	J	O	O	O	O	O	O	O	O	⅂
			⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	

FRONT VIEW

CROSSPOINT KEY

O MOTORIZED

□ MANUAL

⊗ LOCKED IN THRU POSITION

× BLANK FOR FUTURE EXPANSION

⊥ COLUMN ANTENNA GROUND

⅂ ROW ANTENNA GROUND

⊕ MOTORIZED ANTENNA GROUND

CONNECTOR KEY

◎ 1-5/8" MALE FLANGE

⊕ 7/8" MALE FLANGE

Ⓞ TYPE N FEMALE RECEPTACLE

DIMENSIONS AND WEIGHT

64.75" H X 33.25" W X 17.00" D
320 LBS

Figure 2
Model SLS-4M (8 X 9) Strip Line Switch
Matrix Configuration Diagram

			ANT 7 ⊕	ANT 8 ⊕	ANT 9 ⊕	ANT 10 ⊕	ANT 11 ⊕	ANT 12 ⊕	ANT 13 ⊕	ANT 14 ⊕	ANT 15 ⊕	ANT 16 ⊕	ANT 17 ⊕	ANT 18 ⊕	ANT 19 ⊕	ANT 20 ⊕	ANT 21 ⊕	ANT 22 ⊕	ANT 23 ⊕	ANT 24 ⊕	ANT 25 ⊕	ANT 26 ⊕	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
ANT GND		A	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊣
TX 8	⊕	B	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
TX 9	⊕	C	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
TX 10	⊕	D	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
TX 11	⊕	E	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
TX 12	⊕	F	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
TX 13	⊕	G	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
TX 14	⊕	H	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
TNK 1 FM MX A	⊕	J	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
TNK 2 FM MX A	⊕	K	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	⊣
			⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	

FRONT VIEW

CROSSPOINT KEY

O   MOTORIZED

□   MANUAL

⊗   LOCKED IN THRU POSITION

X   BLANK FOR FUTURE EXPANSION

⊥   COLUMN ANTENNA GROUND

⊣   ROW ANTENNA GROUND

⊕   MOTORIZED ANTENNA GROUND

CONNECTOR KEY

◎   1-5/8" MALE FLANGE

⊕   7/8" MALE FLANGE

O   TYPE N FEMALE RECEPTACLE

DIMENSIONS AND WEIGHT

64.75" H X 57.25" W X 17.00" D
500 LBS

Figure 3
Model SLS-4M (20 X 10) Strip Line Switch
Matrix Configuration Diagram

3.0   STARTING THE DIAGNOSTIC PROGRAM

To begin the program, place the program disk in Drive "A" or "B" as required by the disk size. Change to Drive A or B by entering <A:> or <B:>. Enter <RCDS> to begin the program. The screen displays the Delta logo while loading the main program. When the title screen appears, press <ENTER> to begin the program.

The program may be copied to and operated from the system hard disk. The matrix parameter files will be saved to the default drive and directory.

Use a mouse or the keyboard to select menu items. If you don't have a mouse, use the F10 key to access the menu bar and then use the arrow keys to access menu items. Select menu items using the enter key. You can also select menu items by pressing both the alternate key and entering the highlighted letter of the item. The help line gives a brief description of each menu item as it is selected. Use the Escape (ESC) key to exit menu operation.

Use the tab, shift-tab, enter and hotkeys to select items in control boxes and dialogue boxes if you don't have a mouse. The tab key cycles through the items, making each one the active item in sequence. The shift-tab key combination does the same thing, but reverses the sequence. The enter key will execute the active button (indicated by the white text), or if no button is active, it will execute the default button (indicated by the light blue text). Buttons with one letter in yellow indicate hotkeys. Pressing this letter on the keyboard will execute the button.

Press ALT-X (Alternate and X keys) to exit the program and return to DOS.

4.0   MENU SELECTIONS

Menu Item	Description

Status — Select Status Display(s)

Transmitter Tabulation	Transmitter Connection Tabular Status
Antenna Tabulation	Antenna Connection Tabular Status
Schematic Diagram	Matrix Connection Diagram
Serial Messages	Serial Control/Status Messages

Control — Select and Control Equipment

Schematic Diagram Select	Select Equipment Using Schematic Display
Tabular List Select	Select Equipment Using Tabular List
Schematic Diagram Preselect	Preselect Equipment Using Schematic Display
Tabular List Preselect	Preselect Equipment Using Tabular List

Equipment — Assign Equipment Parameters and Labels

Communication Parameters	Assign MCU Communication Parameters
Transmitter Labels	Assign Descriptive Transmitter Labels
Antenna Labels	Assign Descriptive Antenna Labels
Matrix Connectivity	Assign Equipment Connectivity Codes

Diagnostics — Conduct Diagnostic Test and Analyze Results

Test Initiation	Set Test Conditions and Conduct Test
Prior Test Results	Display Results of Prior Test
Prior Test Analysis	Display Prior Test Analysis
Clear Prior Test Results	Clear Results of Prior Test

Files — Load/Save Program Parameters from Disk

Communication Parameters	Load/Save Communication Parameters
Descriptive Labels	Load/Save Row and Column Labels and Abbrev.
Preselect Plans	Load/Save Matrix Preselect Configurations
Macros	Load/Save Macro Command Sequences
Matrix Connectivity	Load/Save Matrix Connectivity Codes

Utils — Print Status Summaries

Exit (Alt-X)	Exit Program and Return to DOS
Print ►	Print Status Summaries
Transmitter Tabulation	Print Connection Status of Transmitters
Antenna Tabulation	Print Connection Status of Antennas
Schematic Diagram	Print Schematic Diagram
Diagnostic Results	Print Results of Diagnostic Test
Diagnostic Analysis	Print Analysis of Diagnostic Test
Form Feed	Advance to Top of Form
Destination	Select Printer or File Option

Status:

Use the Status menu to open a new window to monitor the status of the remote matrix. As shown in Figure 1, the four types of status windows available are the transmitter tabulation, antenna tabulation, schematic diagram, and serial messages. Each of these status window types is resizable and scrollable using a mouse or the keyboard. The initial screen shows three status windows: a transmitter tabulation, an antenna tabulation and a schematic diagram. Click the mouse anywhere inside a window to make it the active window, on the top left-hand corner (the square icon) to close the window, on the top right-hand corner (the arrow icon) to toggle the window between full-screen mode and its previous size, or along the horizontal/vertical scroll bars to scroll the text through the window. Click the mouse and hold the button down on the upper border to move the window on the screen. Click the mouse and hold the button down on the lower right-hand corner to resize the window.

Status	Control	Equipment	Diagnostics	Files	Utils	03/26/98	12:00:00
Transmitter Tabulation							
Antenna Tabulation							
Schematic Diagram							
Serial Messages							

Figure 1
Status Screen Display

When using the keyboard, use the arrow keys and the function keys for active window manipulation. The active window is indicated by the double-line border. Use the arrow keys to scroll the text through the active window. Use function key **F3** to delete the active window. Use function key **F4** to select the active window to be moved or resized. With the window selected (indicated by the light green border), use the arrow keys to reposition the window on the screen, or use the shift and the arrow keys to resize the window. When sized and positioned, use the enter key to drop the window. Use function key **F5** to toggle the window between full-screen mode and its previous size. Use function key **F6** to select the next window as active.

1. Transmitter Tabulation:

    This window shows the connection status of the matrix using the 16 character descriptive labels. The display is indexed by transmitters.

2. Antenna Tabulation:

    This window shows the connection status of the matrix using the 16 character descriptive labels. The display is indexed by antennas.

3.   Schematic Diagram:

This window shows the connection status of the matrix using three character short labels with transmitters shown on the horizontal axis and antennas shown on the vertical axis.

4.   Serial Messages:

This window shows the serial communication to and from the Matrix Control Unit controlling the transmit matrix. Use this window at startup to verify communication before executing any control commands.

Control:

You can control the matrix in the immediate mode, in which all connect and disconnect commands take immediate effect on the matrix, or in the preselect mode, in which you select or edit an entire matrix configuration and then execute multiple changes at one time. The immediate mode provides the standard transmitter/antenna selection routines with matrix connectivity checks, busy transmitter caution, and busy antenna caution. The immediate mode also allows the definition of macro functions to store a sequence of transmitter select, antenna select, connect and disconnect commands which are frequently used. The preselect mode provides the creating, editing, previewing and executing of communication plans involving multiple transmitter/antenna connections. Use either the schematic diagram or tabular representation for either the immediate or preselect control mode. Each control window supports keyboard selection of transmitters and antennas as T01, T02, T03 through T24, and A01, A02, A03 through A24. See Figure 2 for typical control screen display.

Status	Control	Equipment	Diagnostics	Files	Utils	03/26/98	12:00:00

Schematic Diagram Select
Tabular List Select
Schematic Diagram Preselect
Tabular List Preselect

Figure 2
Control Screen Display

1.   Schematic Diagram Select:

Use this control window for immediate control of the matrix with a schematic diagram representation of current status. To select a transmitter or antenna with a mouse, click on the button adjacent to the transmitter or antenna label. To connect or disconnect with a mouse, click on the Connect or Disconnect buttons. To select a transmitter or antenna from the keyboard,

use the tab and shift-tab keys to cycle through the available buttons and use enter to select one, or use the standard keyboard selection. To connect or disconnect from the keyboard, move to the Connect or Disconnect button using tab and shift-tab, then enter to select it, or use the C or D hotkey as indicated by the highlighted letter on the buttons. The 16 letter descriptive labels appear in the lower left corner of the schematic when an item is selected, unless connection to it is prevented by the connectivity codes in which case the description of the connectivity code appears. Selected items are indicated by dark blue highlighting adjacent to the selected item. Items not available for connection as defined by the matrix connectivity codes are indicated by red highlighting adjacent to the transmitter label or the antenna label. When selected items are connected or disconnected, successful operation is confirmed by the 'Confirmed' message displayed below the descriptive labels. At this point, the items are deselected. The items operated on by the most recent connect or disconnect command are indicated by light blue highlighting.

Use the macro function to store a sequence of transmitter select, antenna select, connect and disconnect commands to be used again. To start a macro, select the Macro button with the mouse or the M hotkey. Select the define button with the mouse or the F hotkey. This will bring up the macro definition box. Type the name on the input line. Use the enter key to select the start button, or select it with a mouse. All item select, connect and disconnect commands will be saved to this macro until you end its definition. To end the macro's definition, select the macro button again and select the end definition button in the macro select box. To select a macro for execution, select the macro button and then select the name of the macro from the scrolling Macros box. Alternately, use the M hotkey to select the Macros button. Then, use the tab key or M hotkey to select the scrolling Macros box, and the up and down arrow keys to select the macro. Execute the macro with the Execute button, the E hotkey or the enter key. Delete the macro with the Delete button or the D hotkey. To exit the schematic diagram control window, select Exit or press X. Exiting this control window with a new or modified macro will bring up the filesave box prompting you to save your macro.

2.   Tabular Select:

Use this control window for immediate control of the matrix with a tabular representation of current status. All control features of this window are the same as those of the schematic diagram select window. Items not available for connection as defined by the matrix connectivity codes are indicated by red highlighted text describing the connectivity code adjacent to the unavailable item(s). Select Exit or press X to exit this control window.

3.   Schematic Diagram Preselect:

Use this control window to create, edit or execute preselect plans, or to preview them prior to execution. To create or edit a preselect plan, proceed exactly as if you were controlling the matrix by selecting transmitters and antennas, and entering connect or disconnect commands. Continue for all transmitters and antennas to be configured in the preselect plan. The Confirmed message is suppressed since the matrix does not actually change at this point. To execute this configuration, select the Preset button, then select the Execute button in the Preset Select box. Save the configuration by selecting the Save button from the Preset Select box, then typing the preset plan name in the Preset Definition box and pressing enter. To select a previously saved preselect plan for execution, select the Preset button and then select the preselect plan name from

the scrolling Preset box. Alternately use the P hotkey to select the Preset button. Then, use the tab key or P hotkey to select the scrolling Preset box, and the up and down arrow keys to select the preselect plan. The status window in the preselect control window will change to preview the selected configuration. Execute this configuration with the Execute button, the E hotkey or the enter key. Successful reconfiguration of the matrix is indicated by the confirmed message. Delete this preselect plan with the Delete button or the D hotkey. Select Exit or press X to exit this window. Exiting this control window with a new or modified preselect plan will bring up the filesave box prompting you to save your preselect plan.

4.   Tabular Preselect:

Use this control window for preselect control of the matrix with a tabular representation of the current preselect plan. All control features of this window are the same as those of the Schematic Diagram Preselect window.

Equipment:

See Figure 3 for typical equipment screen display.

Status	Control	Equipment	Diagnostics	Files	Utils	03/26/98	12:00:00

Communication Parameters
Transmitter Labels
Antenna Labels
Matrix Connectivity

Figure 3
Equipment Screen Display

1.   Matrix Control Unit Communication Parameters:

Use this dialogue box to set communication parameters such as parity, baud rate, communication port, stop bits and address for the computer/remote unit interface to the MCU. To select a parameter for changing, either click on it with the mouse or use the tab and shift-tab keys. After selecting the desired communication parameter, select the OK button to save the parameter and exit, or select the Cancel button to cancel all changes and exit. Exiting with OK will bring up the Filesave box, prompting you to save the communication parameters to disk (File Name = COMMPRMS.PRM). After exiting with the OK button, exit the program (ALT-X or Utils/Exit) and then restart the program to ensure that the asynchronous communication ports are properly initialized.

2.   Transmitter Labels:

Use this dialogue box to edit the transmitter 16 character descriptive labels and three character short labels which appear in the status and control windows. To select an item for editing, either click on it with the mouse or use the tab and shift-tab keys. After editing, select the Store button to save your changes and exit, or select the Cancel button to cancel all changes and exit. Exiting with Store will bring up the filesave box, prompting you to save your labels to disk.

3.   Antenna Labels:

Use this dialogue box to edit the antenna 16 character descriptive labels and three character short labels. Edit and save antenna labels in the same manner as the transmitter labels.

4.   Matrix Connectivity:

Use this dialogue box to edit the connectivity codes and descriptions associated with transmitters, antennas and crosspoints of the matrix. Select the item for editing in the same way as if you were operating the Schematic Diagram Select control window. The selected item is indicated by red highlighting. To lock out a transmitter or antenna, select only the transmitter or antenna, then change the lockout code. To lock out a transmitter-antenna crosspoint, select the transmitter and the antenna, then change the lockout code. To change the lockout code, operate one of the digit buttons (0-7) or type the digit. To edit the descriptive text associated with a connectivity code, select the Defs key. This will pop up the Lockout Definitions box which contains the descriptions for lockout codes 1 through 7. To select an item for editing, either click on it with the mouse or use the tab and shift-tab keys. The motorized lockout code 0 cannot be edited. Select Exit or press X to exit this window. Exiting the Matrix Connectivity box will bring up the filesave box prompting you to save your connectivity pattern.

Diagnostics:

The diagnostic program tests all selected and available crosspoints in the matrix. You can display the results in a grid format, which diagrams the matrix faults, or a text format, which tabulates the matrix faults and recommends corrective maintenance actions for these faults. The grid format automatically pops up when the diagnostics program is started, and the text format automatically pops up when the diagnostics program is finished. Close all diagnostic windows from prior tests before beginning a new diagnostic test. Also, since status windows are updated with the connections and disconnections, the diagnostic routine will run faster with all status windows closed. Depending on the number of open status windows, the processor speed and serial data baud rate, the diagnostic test requires approximately forty minutes to test all 348 motorized crosspoints on the two matrices. See Figure 4 for typical diagnostic screen display.

Test Initiation
Prior Test Results
Prior Test Analysis
Clear Prior Test Results

Figure 4
Diagnostics Screen Display

1.   Test Initiation:

Use this dialogue box to select transmitters and antennas to test from those which are not in use or locked out. To toggle a transmitter's or antenna's available crosspoints between selected and not selected, operate the Transmitter or Antenna button the same as in the matrix connectivity dialogue box. Items which are unavailable due to an existing connection appear as a solid white rectangle with gray highlight. Items which are unavailable due to matrix connectivity are indicated by a shading pattern. Items which have existing diagnostic information are indicated by a solid white dot. Items which have no existing diagnostic information are indicated by a white circle. Items which are selected for test are indicated by blue highlighting. This dialogue box initiates with all available crosspoints selected for diagnostic test.

2.   Prior Test Results:

Use this menu item to open a new diagnostic window with the grid format. This window cumulatively displays the results of all diagnostic tests that have been run since the program was started or the prior test results were cleared.

3.   Prior Test Analysis:

Use this menu item to open a new diagnostic window with the text format. This window displays a logical analysis of the diagnostic test results, and recommended corrective maintenance actions.

NOTE

Diagnostic test results and recommended maintenance actions are presented for the two matrices where Matrix A (Mx A) is the Model SLS-4M (8 X 9) Strip Line Switch, serial number 372, and Matrix B (Mx B) is the Model SLS-4M (20 X 10) Strip Line Switch, serial number 315.

4.   Clear Prior Test Results:

Use this menu item to clear the results of any diagnostic tests that have previously been run.

Files:

Use the Files menu to load or save matrix parameters (i.e. communication parameters, descriptive labels, connectivity, macros and preselect plans) to a disk. At program startup, these parameters will be read from the default files (COMMPRMS.PRM, MXLABELS.PRM, LOCKOUT.PRM, MACRO.PRM and PRESET.PRM) if they exist. Therefore, save your parameters under these filenames to have the program begin with the same parameters. See Figure 5 for typical file screen display.
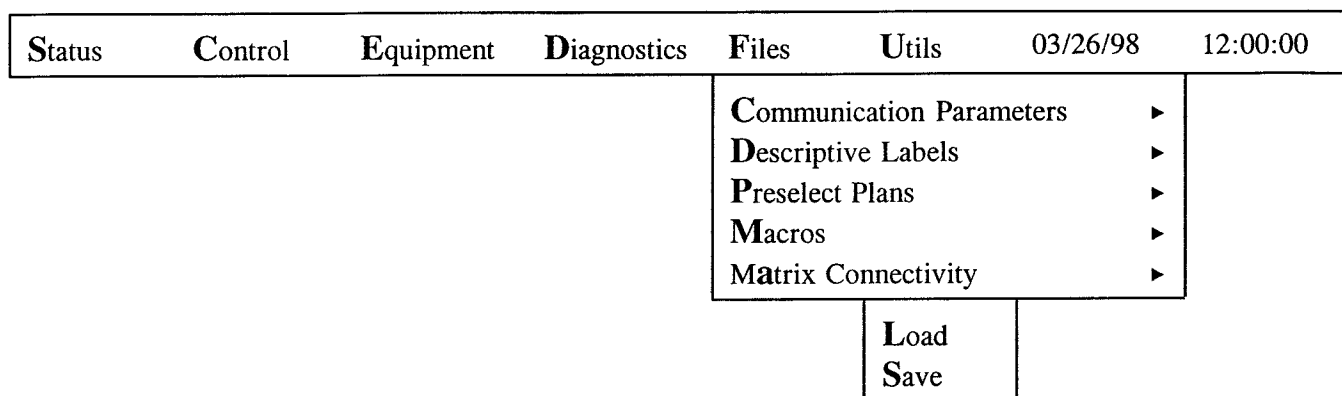
Status	Control	Equipment	Diagnostics	Files	Utils	03/26/98	12:00:00

Communication Parameters ▶
Descriptive Labels ▶
Preselect Plans ▶
Macros ▶
Matrix Connectivity ▶

Load
Save

Figure 5
Files Screen Display

1. Communication Parameters:

    Load or save communication parameters (i.e. baud rate, address, parity, etc.) to or from the selected file.

2. Descriptive Labels:

    Load or save transmitter and antenna 16 character descriptive labels and three character short labels to or from selected file.

3. Preselect Plans:

    Load or save preselect configurations to or from selected file.

4. Macros:

    Load or save macros to or from selected file.

5. Matrix Connectivity:

    Load or save connectivity codes and descriptions to or from selected file.

Utils (Utilities):

See Figure 6 for typical utilities screen display.

Status	Control	Equipment	Diagnostics	Files	Utils	03/26/98	12:00:00

Exit   Alt-X
Print   ►

Transmitter Tabulation
Antenna Tabulation
Schematic Diagram
Diagnostic Results
Diagnostic Analysis
Form Feed
Destination

Figure 6
Utilities Screen Display

1. Exit:

   Exits program and returns to DOS. ALT-X (Alternate and X keys) will also terminate the program and return to DOS.

2. Print:

   Prints via LPT1 or to a file the following:

   1. Transmitter Tabulation . . . . Connection status of transmitters

   2. Antenna Tabulation . . . . Connection status of antennas

   3. Schematic Diagram . . . . Schematic diagram status

   4. Diagnostic Results . . . . Results of diagnostic tests

   5. Diagnostic Analysis . . . . Analysis of diagnostic tests

   6. Form Feed . . . . Advance to Top of Form

   7. Destination . . . . Selects printer or file option

Destination:

Use this dialogue box to select LPT1 or a filename of your choice as the device to print to. Select LPT1: or File from the button with a mouse or use the Tab key to advance to them and the arrow keys to toggle them. Select the input lines for file prefix and suffix using the Tab key or a mouse. The underscore cursor indicates insert mode. If you have trouble entering text, try pressing the Insert key to enter overwrite mode, or pressing the Delete key to delete existing text before adding new text.

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