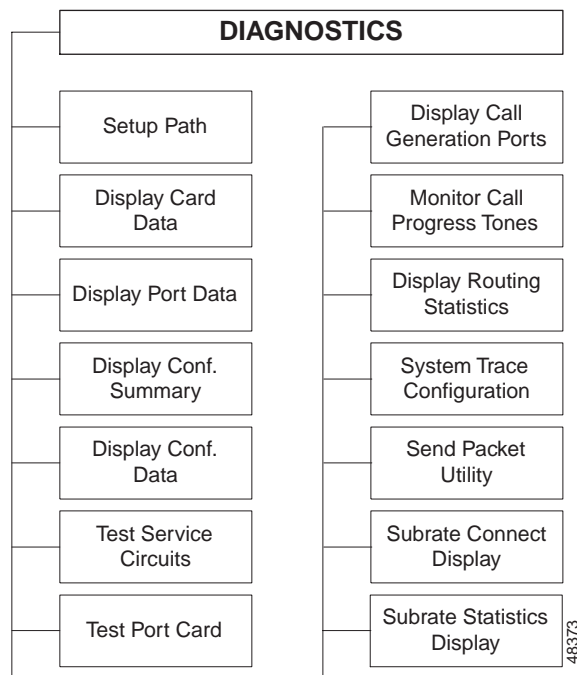




Diagnostics

The Routing Statistics Display diagnostic function allows you to view TeleRouter’s operating status. This function is accessed from the Diagnostics Menu screen, and is organized within the Diagnostic facilities as shown in Figure 6-1.

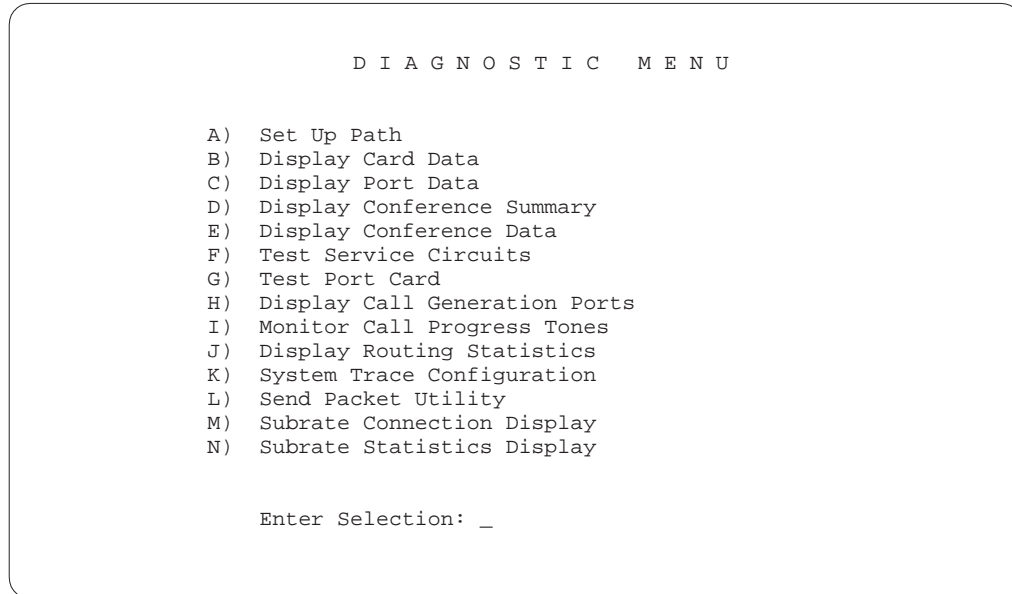
Figure 6-1 Diagnostics Menu Structure



To access the Diagnostics Menu screen (see Figure 6-2) from the Main Menu screen, type **D** and press **Enter**.

The cursor is located in the Enter Selection data entry field. To access a function, type the letter that precedes it and press **Enter**. To return to the Main Menu screen, press **Exit** or the **Prev Menu** or **Main Menu** key.

Figure 6-2 Diagnostics Menu



48385

Routing Statistics Display

The Routing Statistics Display screen is used to view the routing activity performed on an individual route or on all routes in a table. The screen indicates routing attempts for a specified table and route, and a tracing facility is also provided to trace routing activity. An elapsed time counter indicates the duration of the statistic collection period.

To access the Routing Statistics Display screen (see Figure 6-3) from the Diagnostics menu, type **J** and press **Enter**. The cursor is located in the Route Table command field.

Figure 6-3 Routing Statistics Display Screen

```

ROUTING STATISTICS DISPLAY

Route Table _   Number of Routes _   Route 0
Trace Route Activity (Y/N) N   Clear Stat Counts (Y/N) N
Elapsed Time 00:00:00

ROUTE TABLE STATISTICS   ROUTE STATISTICS
Direct Route Attempts     Pattern
Digit Route Attempts      Primary Attempts
Empty Field               Secondary Attempts
Short Collection          Final Attempts
Unmatched Pattern        Failures

Event #  Collected Digits  Matched Pattern  Route  Attempt  Group  Rule

```

Routing Statistics Display Screen Field Definitions

The Routing Table Configuration screen contains the following fields:

Route Table—*Data entry via main keypad.* Indicates the number of the routing table. Possible values for this field range between A and J.

Number of Routes—*Display only.* Indicates the number of routes that have been defined for this routing table. Possible values for this field range between 0 and 1000. The three exception conditions and direct routing are not included in this count.

Route—*Data entry via main keypad.* Indicates the number of the route for which the displayed information applies. Possible values for this field range between 0 and 1000. A value of 0 causes statistics for the entire route table displayed. The alphabetic characters S (short collection), E (empty collection), U (unmatched pattern), and D (direct route) can also be entered for exception cases.

Trace Route Activity (Y/N)—*Data entry via main keypad.* Specifies whether to trace activity on the tables and routes indicated in the Route Table and Route fields. Possible values are Y (perform trace) and N (do not trace). When tracing is enabled, routing events are displayed at the bottom of the screen.

Clear Stat Counts (Y/N)—*Data entry via main keypad.* Specifies whether to clear the run-time counters displayed for the route table and individual routes. Clearing the statistic counter also resets the Elapsed Time field. Possible values are Y (clear all counters) and N (do not clear counters).

Elapsed Time—*Display only.* Indicates the time elapsed since the statistic counters were last cleared, in terms of hours, minutes and seconds. Once the timer reaches 99 hours, 59 minutes and 59 seconds, it will reset itself. The timer can be reset using the Clear Stats Counts (Y/N) field above.

ROUTE TABLE STATISTICS fields—*Display only.* Indicates the number and types of events occurring on all routes defined on the specified route table. The fields are as follows:

Direct Route Attempts—The number of direct routing attempts made without performing digit matching.

Digit Route Attempts—The number of routing attempts made while performing digit matching.

Empty Field—The number of failed routing attempts due to the digit field being empty.

Short Collection—The number of failed routing attempts because of an insufficient number of digits in the digit field.

Unmatched Pattern—The number of failed routing attempts due to the inability of the system to match the digit field to a valid route.

ROUTE STATISTICS fields—*Display only*. Indicates the number and types of events occurring on the single route specified. The fields are as follows:

Pattern—The matching pattern defined for the route in the Route Table Configuration screen.

Primary Attempts—The number of attempts to route calls using the Primary resource group and impulse/outpulse rule.

Secondary Attempts—The number of attempts to route calls using the Secondary resource group and Impulse/Outpulse rule.

Final Attempts—The number of attempts to route calls using the Final resource group and Impulse/Outpulse rule.

Failures—The number failed calls due to the Primary, Secondary, and Final group/rule pair resources being exhausted.

The remaining seven field columns display routing events when the routing trace function is enabled (when **Y** is entered in the Trace Route Activity (Y/N) field). Up to six routing events are displayed at a time (additional events overwrite the displayed information).

Event #—*Display only*. Provides a sequential numbering of the routing events in chronological order.

Collected Digits—*Display only*. Indicates the digits collected for the routing attempt.

Matched Pattern—*Display only*. Indicates the pattern the collected digits matched with for routing.

Route—*Display only*. Indicates the route number associated with the matched pattern.

Attempt—*Display only*. Indicates whether the routing was completed using the Primary, Secondary, or Final instruction.

Group—*Display only*. Indicates the resource group used to route the call.

Rule—*Display only*. Indicates the impulse or outpulse rule (specified by an “I” or “O” prefix) performed during call routing.

Displaying Route Table and Route Information

To view the current routing activity for a route table, complete the following steps:

-
- Step 1** Display the Routing Statistics Display screen.
The cursor is located in the Route Table data entry field.
- Step 2** Specify the route table and/or specific route to display, as follows:
- To view routing statistics for all routes on a specified table, type the letter of the table and press **Next Field**. Type **0** (zero) in the Route field and press **Enter**. Routing attempts statistics will be constantly updated on the screen. To temporarily halt the screen updates, press any key. The cursor returns to the Route field. To resume the screen updates, press **Enter**.

- To view routing statistics for an individual route, type the letter of the route table and press **Next Field** to move the cursor to the Route field. Type the route number, or **S**, **E**, **U** or **D**, press **Enter**. The screen is updated to show the current activity on the route entered. To temporarily halt the screen updates, press any key. The cursor returns to the Route field. To resume the screen updates, press **Enter**.
- Step 3** To trace routing activity on a route table or an individual route, halt the screen updates by pressing any key. The cursor returns to the Route field. Use the **Prev Field** or **Next Field** key to position the cursor at the Trace Route Activity (Y/N) entry field. Type **Y** and press **Enter** to resume screen updates and start the trace. Routes used for call routing will be displayed under the last seven display field columns starting with Event #.
- Step 4** To clear the route statistics on the display, halt the screen updates by pressing any key. The cursor returns to the Route field. Use the **Prev Field** or **Next Field** key to move the cursor to the Clear Stat Counts (Y/N) field. Type a **Y** and press **Enter** to clear all statistics for the route or route table specified.
- Step 5** Press **Exit** or **Prev Menu** to return to the Diagnostics Menu screen.
-

Prompts, Warning, and Error Messages

In addition to the general messages listed in *Cisco VCO/4K System Messages*, the following messages may be displayed.

Error—Invalid Route Table

Explanation You entered a letter for the Route Table outside the range of A through J.

Error— Invalid Route For This Table

Explanation You entered a route number greater than the number of routes (XX) in the specified table.

Error—Y/N Only, Y To Enable Trace

Explanation You entered a value other than Y or N in the Trace Route Activity field.

Error—Y/N Only, Y To Clear Stats

Explanation You entered a value other than Y or N in the Clear Stat. Counts field.

Accessing Other Menus and Screens

You can access the following menus from the Routing Statistics Display screen:

- Main Menu Access—Press the **Main Menu** key.
- Diagnostics Menu—Press the **Prev Menu** or **Exit** key.

