CTS 850 Cross-Reference listing Vertical Menu Choices

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There are now two separate files. Each begins with the various major menus (Test Setups, Tx #1, Tx #2, Utility, etc.) and lists, for each horizontal menu button, the assocaited HIF page(s) and the sequence numbers of those pages in the listing. This "index" is new.

Then comes the main listing, a picture of each HIF screen listing the menu items on the screen together with their screen labels and either (1) the remote commands associated with each item, or (2) the vertical menu button choices associated with each item (new).

Document file **85p2cmds.doc** lists Remote Commands; Document file **85p2vert.doc** lists the Vertical Menu Choices.

INDEX
** denotes pages that have no menus and are not shown

```
----P_RESULTS_MAJOR_MENU1----
TEST       SDH        PDH        JITTE       ERROR      PERF       -more
SUMMA      RESUL      RESUL      WANDE       ANALY      ANALY      1 of
<bmp>      <bmp>      <bmp>      <bmp>       <bmp>      <bmp>      <bmp>
----------------------
Button    Page
   1.      **   P_RESULTS_TEST_SUMMARY_PARAM1
   2.      **   P_RESULTS_ALL_RESULTS_PARAM1
           **   P_RESULTS_ALL_RESULTS_SDH_SECTION_DEFECTS_PARAM1
   3.      **   P_RESULTS_ALL_RESULTS_PARAM1
           **   P_RESULTS_ALL_RESULTS_SDH_SECTION_DEFECTS_PARAM1
   4.      **   P_RESULTS_ALL_RESULTS_PARAM10
   5.      **   P_RESULTS_ALL_RESULTS_PARAM1
           **   P_RESULTS_ALL_RESULTS_SDH_SECTION_DEFECTS_PARAM1
   6.       3   P_PERFORMANCE_ANALYSIS_M2101_PARAM1
========================================

----P_RESULTS_MAJOR_MENU2----
TEST       SDH        PDH        HISTO       SAVE       RECAL      -more
SUMMA      RESUL      RESUL      GRAPH       RESUL      RESUL      2 of
<bmp>      <bmp>      <bmp>      <bmp>       <bmp>      <bmp>      <bmp>
----------------------
Button    Page
   1.      **   P_RESULTS_TEST_SUMMARY_PARAM1
   2.      **   P_RESULTS_ALL_RESULTS_PARAM1
           **   P_RESULTS_ALL_RESULTS_SDH_SECTION_DEFECTS_PARAM1
   3.      **   P_RESULTS_ALL_RESULTS_PARAM1
           **   P_RESULTS_ALL_RESULTS_SDH_SECTION_DEFECTS_PARAM1
   4.      **   P_RESULTS_HISTORY_GRAPHS_PARAM1
   5.       7   P_RESULTS_SAVE_RESULTS_PARAM1
   6.       6   P_RESULTS_RECALL_RESULTS_PARAM1
========================================

----P_RX_MAJOR_MENU----
RECEI      SIGNA      JITTE      TRANS       PATH
SETTI      STATU      WANDE      OVERH       OVERH
<bmp>      <bmp>      <bmp>      <bmp>       <bmp>
----------------------
Button    Page
   1.      19   P_RX_SETTINGS_PARAM1
           20   P_RX_SETTINGS_TRIB_PARAM1
   2.      **   P_RX_SIGNAL_STATUS_PARAM1
           **   P_RX_SIGNAL_STATUS_PARAM2
   3.      11   P_RX_JITTER_WANDER_PARAM1
           **   P_TX_JITTER_PARAM1_NO_OPTION
   4.      22   P_RX_TRANSPORT_OVERHEAD_PARAM1
   5.      12   P_RX_PATH_OVERHEAD_PARAM1
           13   P_RX_PATH_OVERHEAD_V5_PARAM1
           14   P_RX_PATH_OVERHEAD_VC12_PARAM1
           15   P_RX_PATH_OVERHEAD_VC3_PARAM1
========================================

----P_RX_SDH_MAJOR_MENU1----
RECEI      64k R      SIGNA      ANALY       JITTE                  -more
SETTI      SETTI      STATU      CONFI       WANDE                  1 of
<bmp>      <bmp>      <bmp>      <bmp>       <bmp>                  <bmp>
----------------------
Button    Page
   1.      17   P_RX_SDH_SETTINGS_PARAM1
           18   P_RX_SDH_SETTINGS_TRIB_PARAM1
   2.      16   P_RX_SDH_K64_SETTINGS_PARAM1
   3.      **   P_RX_SIGNAL_STATUS_PARAM1
           **   P_RX_SIGNAL_STATUS_PARAM2
   4.       8   P_RX_ANALYSIS_CONFIGURATION_SETTINGS_PARAM1
```

```
   5.      11   P_RX_JITTER_WANDER_PARAM1
           **   P_TX_JITTER_PARAM1_NO_OPTION
========================================

----P_RX_SDH_MAJOR_MENU2----
RECEI      64k R      SECTI      PATH       Rx CA                -more
SETTI      SETTI      OVERH      OVERH      VOICE                2 of
<bmp>      <bmp>      <bmp>      <bmp>      <bmp>                <bmp>
----------------------
Button    Page
   1.      17   P_RX_SDH_SETTINGS_PARAM1
           18   P_RX_SDH_SETTINGS_TRIB_PARAM1
   2.      16   P_RX_SDH_K64_SETTINGS_PARAM1
   3.      22   P_RX_TRANSPORT_OVERHEAD_PARAM1
   4.      12   P_RX_PATH_OVERHEAD_PARAM1
           13   P_RX_PATH_OVERHEAD_V5_PARAM1
           14   P_RX_PATH_OVERHEAD_VC12_PARAM1
           15   P_RX_PATH_OVERHEAD_VC3_PARAM1
   5.       9   P_RX_CAS_VOICE_SETTINGS_PARAM1
           10   P_RX_CAS_VOICE_SETTINGS_PARAM2
========================================

----P_TEST_SETUP_MAJOR_MENU----
TEST       RECAL      RECAL      SAVE       SAVE       JITTE
           INSTRUMENT PASS/      INSTRUMENT  PASS/
CONTR      SETUP      TESTS      SETUP      TESTS      TESTS
----------------------
Button    Page
   1.      36   P_TEST_SETUP_TEST_CONTROL_PARAM1
   2.      32   P_TEST_SETUP_RECALL_INSTRUMENT_SETUPS_PARAM1
   3.      33   P_TEST_SETUP_RECALL_PASS_FAIL_TESTS_PARAM1
   4.      34   P_TEST_SETUP_SAVE_INSTRUMENT_SETUPS_PARAM1
   5.      35   P_TEST_SETUP_SAVE_PASS_FAIL_TESTS_PARAM1
   6.      25   P_TEST_JITTER_OUTPUT_PARAM1
           26   P_TEST_JITTER_POINTER_PARAM1
           27   P_TEST_JITTER_RECALL_RESULTS
           28   P_TEST_JITTER_SAVE_RESULTS
           29   P_TEST_JITTER_SPECTRUM_PARAM1
           30   P_TEST_JITTER_TOLERANCE_PARAM1
           31   P_TEST_JITTER_TRANSFER_PARAM1
           **   P_TEST_JITTER_VIEW_DATA_TOLERANCE
           **   P_TEST_JITTER_VIEW_DATA_TRANSFER
           **   P_TEST_JITTER_VIEW_GRAPH_SPECTRUM
           **   P_TEST_JITTER_VIEW_GRAPH_TOLERANCE
           **   P_TEST_JITTER_VIEW_GRAPH_TRANSFER
           **   P_TX_JITTER_PARAM1_NO_OPTION
========================================

----P_TX_MAJOR_MENU----
TRANS      ERROR      POINT      JITTE      APS        TRANS      PATH
SETTI      & ALA      & TIM      WANDE      COMMA      OVERH      OVERH
<bmp>      <bmp>      <bmp>      <bmp>      <bmp>      <bmp>      <bmp>
----------------------
Button    Page
   1.      49   P_TX_SDH_SETTINGS_PARAM1
           50   P_TX_SDH_SETTINGS_TRIB_PARAM1
           51   P_TX_SETTINGS_PARAM1
           52   P_TX_SETTINGS_THROUGH_MODE_PARAM1
           53   P_TX_SETTINGS_TRIB_PARAM1
   2.      39   P_TX_ERRORS_ALARMS_PARAM1
   3.      45   P_TX_POINTERS_TIMING_FREQUENCY_PARAM1
           46   P_TX_POINTERS_TIMING_PARAM1
           47   P_TX_POINTERS_TIMING_SEQUENCE_PARAM1
   4.      40   P_TX_JITTER_PARAM1
           **   P_TX_JITTER_PARAM1_NO_OPTION
   5.      38   P_TX_APS_COMMANDS_PARAM1
   6.      54   P_TX_TRANSPORT_OVERHEAD_PARAM1
```

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   7.      41   P_TX_PATH_OVERHEAD_PARAM1
           42   P_TX_PATH_OVERHEAD_V5_PARAM1
           43   P_TX_PATH_OVERHEAD_VC12_PARAM1
           44   P_TX_PATH_OVERHEAD_VC3_PARAM1
=======================================

----P_TX_SDH_MAJOR_MENU1----
TRANS      64k T      DEFEC      POINT      JITTE      APS        -more
SETTI      SETTI      ANOMA      & TIM      WANDE      COMMA      1 of
<bmp>      <bmp>      <bmp>      <bmp>      <bmp>      <bmp>      <bmp>
----------------------
Button    Page
   1.      49   P_TX_SDH_SETTINGS_PARAM1
           50   P_TX_SDH_SETTINGS_TRIB_PARAM1
           52   P_TX_SETTINGS_THROUGH_MODE_PARAM1
           53   P_TX_SETTINGS_TRIB_PARAM1
   2.      48   P_TX_SDH_K64_SETTINGS_PARAM1
   3.      39   P_TX_ERRORS_ALARMS_PARAM1
   4.      45   P_TX_POINTERS_TIMING_FREQUENCY_PARAM1
           46   P_TX_POINTERS_TIMING_PARAM1
           47   P_TX_POINTERS_TIMING_SEQUENCE_PARAM1
   5.      40   P_TX_JITTER_PARAM1
           **   P_TX_JITTER_PARAM1_NO_OPTION
   6.      38   P_TX_APS_COMMANDS_PARAM1
=======================================

----P_TX_SDH_MAJOR_MENU2----
TRANS      SECTI      PATH       TRACE      SIGNA      OVERH      -more
SETTI      OVERH      OVERH      SETTI      LABEL      PRBS       2 of
<bmp>      <bmp>      <bmp>      <bmp>      <bmp>      <bmp>      <bmp>
----------------------
Button    Page
   1.      49   P_TX_SDH_SETTINGS_PARAM1
           50   P_TX_SDH_SETTINGS_TRIB_PARAM1
           52   P_TX_SETTINGS_THROUGH_MODE_PARAM1
           53   P_TX_SETTINGS_TRIB_PARAM1
   2.      54   P_TX_TRANSPORT_OVERHEAD_PARAM1
   3.      41   P_TX_PATH_OVERHEAD_PARAM1
           42   P_TX_PATH_OVERHEAD_V5_PARAM1
           43   P_TX_PATH_OVERHEAD_VC12_PARAM1
           44   P_TX_PATH_OVERHEAD_VC3_PARAM1
   4.      37   P_TRACE_SETTINGS_PARAM1
   5.      24   P_SIGNAL_LABELS_PARAM1
   6.       1   P_OVERHEAD_PRBS_TEST_PARAM1
=======================================

----P_UTILITY_MAJOR_MENU----
MISC       PRINT      REMOT      INSTR      SELF       JITTE
SETTI      SETUP      CONTR      CONFI      TEST       CAL
<bmp>      <bmp>      <bmp>      <bmp>      <bmp>      <bmp>
----------------------
Button    Page
   1.      58   P_UTILITY_MISC_SETTINGS_PARAM1
   2.      59   P_UTILITY_PRINTER_SETUP_PARAM1
   3.      60   P_UTILITY_REMOTE_CONTROL_PARAM1
   4.      57   P_UTILITY_INSTRUMENT_CONFIG_PARAM1
   5.      61   P_UTILITY_SELF_TEST_PARAM1
   6.      55   P_UTILITY_CALIBRATION_PARAM1
           **   P_UTILITY_CALIBRATION_M45_PARAM1
=======================================
```

1.

```
----P_OVERHEAD_PRBS_TEST_PARAM1----
Tx Overhead PRBS Test ......  None      2^15-1      Normal
Rx Overhead PRBS Test ......  None      2^15-1      Normal
  Pattern Lock ...            Unlocked

  Errors ...   <nbr>               BER ...   <nbr>
----------------------
```

```
 Item OVERHEAD_TEST_SELECT_TX_BYTE ("Tx Overhead PRBS Test ...")
     None
     E1
     E2
     F1
      -more- 1 of 2
     F2
     D1-D3
     D4-D12
      -more- 2 of 2

 Item OVERHEAD_TEST_SELECT_TX_PATTERN ("Tx Overhead PRBS Test ...")
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^11-1
     PRBS 2^9-1

 Item OVERHEAD_TEST_SELECT_TX_INVERT ("Tx Overhead PRBS Test ...")
     Normal
     Inverted

 Item OVERHEAD_TEST_SELECT_RX_BYTE ("Rx Overhead PRBS Test ...")
     None
     E1
     E2
     F1
      -more- 1 of 2
     F2
     D1-D3
     D4-D12
      -more- 2 of 2

 Item OVERHEAD_TEST_SELECT_RX_PATTERN ("Rx Overhead PRBS Test ...")
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^11-1
     PRBS 2^9-1

 Item OVERHEAD_TEST_SELECT_RX_INVERT ("Rx Overhead PRBS Test ...")
     Normal
     Inverted
==========================================
```

2.

```
----P_PERFORMANCE_ANALYSIS_G826_PARAM1----
Analysis Type ..............   G.826

SDH Allocation .............   <nbr>
PDH Allocation .............   <nbr>
Include UAS ................   No      Limit ..  <nbr>

 Current Results     <var>
          Near End   Far End             Near End   Far End
    RS    PASS                    140    PASS       PASS
    MS    PASS       PASS         34     PASS       PASS
    HP    PASS       PASS         8      PASS       PASS
    LP    PASS       PASS         2      PASS       PASS
----------------------

 Item PERFORMANCE_ANALYSIS_SELECT_ANALYSIS_G826_TYPE ("Analysis Type ...")
     G.826 Performance
     M.2101.1 Performance
     M.2100 Performance

 Item SENSE_DATA_MEASURE_ANALYSIS_G826_SDH_ALLOCATION ("SDH Allocation ...")
     Default (100%)
     25%
     50%
     75%
     USER DEFINED

 Item SENSE_DATA_MEASURE_ANALYSIS_G826_PDH_ALLOCATION ("PDH Allocation ...")
     Default (100%)
     25%
     50%
     75%
     USER DEFINED

 Item SENSE_DATA_MEASURE_ANALYSIS_G826_UAS_ENABLE ("Include UAS ...")
     Yes
     No

 Item SENSE_DATA_MEASURE_ANALYSIS_G826_UAS_LIMIT ("Limit ...")
     Default (0)
     100
     1000
     10000
     USER DEFINED
==============================================
```

3.

```
----P_PERFORMANCE_ANALYSIS_M2101_PARAM1----
Analysis Type ..............   M.2101.1

Test Type ..................   BIS
Allocation .................   <nbr>
Include UAS ................   No      Limit ..  <nbr>
APO Multiplier .............
          Section       ES .   <nbr>        SES ..   <nbr>
          Path          ES .   <nbr>        SES ..   <nbr>

 Current Results     Acceptable
          Near End            Far End
    RS    ACCEPTABLE
    MS    ACCEPTABLE          ACCEPTABLE
    HP    ACCEPTABLE          ACCEPTABLE
    LP    ACCEPTABLE          ACCEPTABLE
----------------------

 Item PERFORMANCE_ANALYSIS_SELECT_ANALYSIS_M2101_TYPE ("Analysis Type ...")
     G.826 Performance
     M.2101.1 Performance
     M.2100 Performance

 Item SENSE_DATA_MEASURE_ANALYSIS_M2101_TEST_TYPE ("Test Type ...")
     BIS
     PAR
     Mainten- ance
     Custom

 Item SENSE_DATA_MEASURE_ANALYSIS_M2101_ALLOCATION_HIF ("Allocation ...")
     Default (16.10%)
     25%
     50%
     75%
     USER DEFINED

 Item SENSE_DATA_MEASURE_ANALYSIS_M2101_UAS_ENABLE ("Include UAS ...")
     Yes
     No

 Item SENSE_DATA_MEASURE_ANALYSIS_M2101_UAS_LIMIT_HIF ("Limit ...")
     Default (0)
     100
     1000
     10000
     USER DEFINED

 Item SENSE_DATA_MEASURE_ANALYSIS_M2101_SECTION_ES_APOM_HIF ("ES ...")
     Default (0.100) / (0.100) / (0.500) / (0.500)
     USER DEFINED

 Item SENSE_DATA_MEASURE_ANALYSIS_M2101_SECTION_SES_APOM_HIF ("SES ...")
     Default (0.100) / (0.100) / (0.500) / (0.500)
     USER DEFINED

 Item SENSE_DATA_MEASURE_ANALYSIS_M2101_PATH_ES_APOM_HIF ("ES ...")
     Default (0.100) / (0.100) / (0.500) / (0.500)
     USER DEFINED

 Item SENSE_DATA_MEASURE_ANALYSIS_M2101_PATH_SES_APOM_HIF ("SES ...")
     Default (0.100) / (0.100) / (0.500) / (0.500)
     USER DEFINED
==========================================
```

4.

```
----P_RESULTS_ANALYSIS_SDH_G826_B1BIP----
Section Analysis (B1 BIP)
        Near End  B1-BIP      B2-BIP     B3-BIP     TU-BIP

        Far End               MS-REI     HP-REI     LP-REI
B1-BIP Analysis                           COUNT       RATIO
Errored Blocks                    <nbr>
Errored Seconds                   <nbr>              <nbr>
Background Block Errors           <nbr>              <nbr>
Severely Errored Seconds          <nbr>              <nbr>
Consecutive SES Periods           <nbr>
Unavailable Seconds               <nbr>              <nbr>

Analysis                                    PASS


----------------------

 Item ..._B1BIP

 Item ..._B2BIP

 Item ..._MSREI

 Item ..._B3BIP

 Item ..._HPREI

 Item ..._TUBIP

 Item ..._LPREI
==========================================
```

5.

```
----P_RESULTS_ANALYSIS_SDH_M2101_B1BIP----
Section Analysis (B1 BIP)
        Near End  B1-BIP      B2-BIP     B3-BIP     TU-BIP

        Far End               MS-REI     HP-REI     LP-REI
B1-BIP Analysis    (per G.829)            COUNT       RATIO
Errored Blocks                    <nbr>
Errored Seconds                   <nbr>              <nbr>
Background Block Errors           <nbr>              <nbr>
Severely Errored Seconds          <nbr>              <nbr>
Consecutive SES Periods           <nbr>
Unavailable Seconds               <nbr>              <nbr>

Analysis                         ACCEPTABLE


----------------------

 Item ..._B1BIP

 Item ..._B2BIP

 Item ..._MSREI

 Item ..._B3BIP

 Item ..._HPREI

 Item ..._TUBIP

 Item ..._LPREI
==========================================
```

6.

```
----P_RESULTS_RECALL_RESULTS_PARAM1----
 Memory                 Start Time                   Durati
Current        00:00:00    01-Jan-00            Running...r>

 Disk                    Description




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 Item RESULTS0_NAME
     Recall Result
     Delete File

     \012 Memory
     \011 Disk
==========================================
```

7.

```
----P_RESULTS_SAVE_RESULTS_PARAM1----
The results of the last test are stored in memory.
For a permanent record, they must be saved to disk.

Name ......................
Description ...............

 Save To Disk ...........      Select Action

 Memory              Start Time/Date             Duration
Current        00:00:00    01-Jan-00             Running...




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 Item ..._NAME ("Name ...")
     RESLT_XX
     Clear
     EDIT NAME

 Item SENSE_DATA_MEASURE_INFORMATION_DESCRIPTION ("Description ...")
     None
     Clear
     EDIT TEXT

 Item ..._SAVE_DISK ("\011 Save To Disk ...")
     Save Current

==============================================
```

8.

```
----P_RX_ANALYSIS_CONFIGURATION_SETTINGS_PARAM1----
FAS Error Threshold ..................... <nbr>
Pointer ss-Bit Mismatch Action .......... Loss of Pointer
Trace Mismatch Detection ................ Disabled
HP Unequipped Detection ................. Disabled
LP Unequipped Detection ................. Disabled
HP Signal Label Mismatch Detection..     Disabled
LP Signal Label Mismatch Detection...    Disabled
Severely Errored Second
 CRC Error Threshold ................... 300

Rx Error Trigger Output ................. None



----------------------

 Item ..._FAS_THRESHOLD ("FAS Error Threshold ...")
     1
     2
     3
     4
      -more- 1 of 2
     5
     6
     7
      -more- 2 of 2

 Item ..._POINTER_MISMATCH ("Pointer ss-Bit Mismatch Action ...")
     Loss of Pointer
     Ignore

 Item ..._TRACE_MISMATCH ("Trace Mismatch Detection ...")
     Disabled
     Enabled

 Item SENSE_DATA_POVERHEAD_HPUNEQUIPPED ("HP Unequipped Detection ...")
     Disabled
     Enabled

 Item SENSE_DATA_POVERHEAD_LPUNEQUIPPED ("LP Unequipped Detection ...")
     Disabled
     Enabled

 Item SENSE_DATA_POVERHEAD_HPPLM ("HP Signal Label Mismatch Detection..")
     Disabled
     Enabled

 Item SENSE_DATA_POVERHEAD_LPPLM ("LP Signal Label Mismatch Detection...")
     Disabled
     Enabled

 Item ..._SES_THRESHOLD ("CRC Error Threshold ...")
     300 (G.826)
     805 (G.821)
     2444 (G.826)
     45 (G.821)

 Item ..._ERROR_TRIGGER ("Rx Error Trigger Output ...")
     None
     Pattern
     B1
     B2
     B3
```

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9.

```
----P_RX_CAS_VOICE_SETTINGS_PARAM1----
CAS Display Mode.............   Single
Selected Timeslot............   <nbr>
Speaker......................   Off

                                TS     abcd
CAS Bit Values...............   <nb    <nbr>
```

Item ..._CAS_MODE ("CAS Display Mode...")
- Single
- Scan

Item ..._TIMESLOT ("Selected Timeslot...")
- SET TIMESLOT
- DONE

Item ..._VOLUME ("Speaker...")
- Off
- Low
- Medium
- High

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10.

```
----P_RX_CAS_VOICE_SETTINGS_PARAM2----
CAS Display Mode.............   Single

  TS  abcd       TS  abcd       TS  abcd       TS  abcd
   1  <nbr>       9  <nbr>      17  <nbr>      25  <nbr>
   2  <nbr>      10  <nbr>      18  <nbr>      26  <nbr>
   3  <nbr>      11  <nbr>      19  <nbr>      27  <nbr>
   4  <nbr>      12  <nbr>      20  <nbr>      28  <nbr>
   5  <nbr>      13  <nbr>      21  <nbr>      29  <nbr>
   6  <nbr>      14  <nbr>      22  <nbr>      30  <nbr>
   7  <nbr>      15  <nbr>      23  <nbr>      31  <nbr>
   8  <nbr>      16  ----       24  <nbr>



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 Item ..._CAS_MODE ("CAS Display Mode...")
     Single
     Scan
==========================================
```

11.

```
----P_RX_JITTER_WANDER_PARAM1----
Jitter Mode ................   Peak-Peak
Jitter Input Source ........   Line
Jitter Input Clock Rate ....   52MHz (STM-0)
Jitter Range ...............   Normal (6UI)
Jitter Measurement Filter ..   Wideband
                               (100Hz - 400kHz)
Fullband Highpass ..........   10.0Hz
Jitter Hit Threshold .......   <nbr>
Pointer Hit Threshold ......   <nbr>
```

```
----------------------

 Item RX_JITTER_WANDER_MODE ("Jitter Mode ...")
     Peak-Peak
     RMS

 Item RX_JITTER_WANDER_SOURCE ("Jitter Input Source ...")
     Line
     Clock

 Item RX_JITTER_WANDER_CLOCK_RATE ("Jitter Input Clock Rate ...")
     622MHz  STM-4
     155MHz  STM-1
     52MHz  STM-0
      -more- 1 of 2
     140MHz
     34MHz
     2MHz
      -more- 2 of 2
     45MHz
     34MHz
     2MHz

 Item RX_JITTER_WANDER_RANGE ("Jitter Range ...")
     Normal
     Extended

 Item RX_JITTER_WANDER_FILTER_TYPE ("Jitter Measurement Filter ...")
     Wideband
     Highband (Standard)
     Highband (National)
     Fullband
     500Hz
     6.50kHz
     65.0kHz
     400kHz
     USER DEFINED
     1.00kHz
     25.0kHz
     250kHz
     5.00MHz
     20.0Hz
     2.40kHz
     18.0kHz
     100kHz
     20Hz
     400Hz
     3.0kHz
     400kHz
```

```
     100Hz
     1.00kHz
     10.0kHz
     800kHz
     200Hz
     500Hz
     10.0kHz
     3.50MHz
     10Hz
     2.30kHz
     60.0kHz
     400kHz
     Highband
     Self Test
     SYS Int.
     SYS Ext.
      -more- 1 of 4 / of 3
     Protocol Bd
     Clock Bd
     O/E Mod.
     Tributary
      -more- 2
     CPU
     Display
     Front Panel
     Disk
      -more- 3
     Jitter
      -more- 4

 Item RX_JITTER_WANDER_FILTER_SUBBAND_HPASS ("Fullband Highpass ...")
     0.1Hz
     1.0Hz
     10.0Hz

 Item RX_JITTER_WANDER_HIT_THRESHOLD ("Jitter Hit Threshold ...")
     0.10UI
     0.50UI
     1.00UI
     1.50UI
     USER DEFINED

 Item RX_JITTER_WANDER_PTR_EVENT_THRESHOLD ("Pointer Hit Threshold ...")
     Min 0 ppm/sec
     Max 10 ppm/sec
     0.023 ppm/sec
     USER DEFINED
==========================================
```

12.

```
----P_RX_PATH_OVERHEAD_PARAM1----
Overhead View ..............   STS Path Overhead
External Drop ..............   None
Pause Control ..............   Updates Active
C2 Signal Label ............   (Undefined)
J1 HP Trace Format .........   64-byte

      Path Overhead            Path Trace Message
 J1:  <nbr>        <bmp
 B3:  <nbr>
 C2:  <nbr>
 G1:  <nbr>
 F2:  <nbr>
 H4:  <nbr>
 Z3:  <nbr>
 Z4:  <nbr>
 Z5:  <nbr>
----------------------

 Item ..._DISPLAY ("Overhead View ...")
     STS Path Overhead
     V5 Byte
     VC4
     VC3 Overhead
     VC12 Overhead

 Item ..._EXTERNAL_DROP ("External Drop ...")
     None
     F2

 Item RX_PATH_OVERHEAD_CONTROL ("Pause Control ...")
     Pause
     Continue

 Item RX_PATH_OVERHEAD_J1_TRACE_FORMAT ("J1 HP Trace Format ...")
     64-Byte
     16-Byte
==========================================
```

13.

```
----P_RX_PATH_OVERHEAD_V5_PARAM1----
Receiving   STS-1     with STS-1 :    1  under test
Overhead View ..............   STS Path Overhead
Pause Control ..............   Updates Active

                          <nbr>Overhead
                     V5:
```



```
----------------------

 Item RX_PATH_OVERHEAD_SELECT_V5
     STS Path Overhead
     V5 Byte
     VC4
     VC3 Overhead
     VC12 Overhead

 Item RX_PATH_OVERHEAD_V5_CONTROL ("Pause Control ...")
     Pause
     Continue
==========================================
```

14.

```
----P_RX_PATH_OVERHEAD_VC12_PARAM1----
Overhead View ..............   STS Path Overhead

Pause Control ..............   Updates Active
V5 Signal Label ............   (Unequipped)

      Path Overhead            Path Trace Message
 V5:  <nbr>
 J2:  <nbr>        <bmp
 N2:  <nbr>
 K4:  <nbr>




----------------------

 Item RX_PATH_OVERHEAD_SELECT_VC12 ("Overhead View ...")
     STS Path Overhead
     V5 Byte
     VC4
     VC3 Overhead
     VC12 Overhead

 Item RX_PATH_OVERHEAD_VC12_CONTROL ("Pause Control ...")
     Pause
     Continue
==========================================
```

15.

```
----P_RX_PATH_OVERHEAD_VC3_PARAM1----
Overhead View ..............   STS Path Overhead

Pause Control ..............   Updates Active
C2 Signal Label ............   <var>

      Path Overhead            Path Trace Message
 J1:  <nbr>        <bmp
 B3:  <nbr>
 C2:  <nbr>
 G1:  <nbr>
 F2:  <nbr>
 H4:  <nbr>
 Z3:  <nbr>
 Z4:  <nbr>
 Z5:  <nbr>

----------------------

 Item RX_PATH_OVERHEAD_SELECT_VC3 ("Overhead View ...")
     STS Path Overhead
     V5 Byte
     VC4
     VC3 Overhead
     VC12 Overhead

 Item RX_PATH_OVERHEAD_VC3_CONTROL ("Pause Control ...")
     Pause
     Continue
==========================================
```

16.

```
----P_RX_SDH_K64_SETTINGS_PARAM1----
2 Mb/s Framing.............   Framed
Configuration..............   N x 64k
Number of Timeslots.........   <nbr>
Starting Timeslot...........   <nbr>
Test Pattern...............   <nbr>2^23-1       Normal (ITU)

Active Timeslots

  << < <<  < << < < < < << <  << < <<  < << < <  << << <  < <
   1       5       10       15        20       25       30
```

```
 Item ..._FRAMING ("2 Mb/s Framing...")
     Framed
     Unframed
     Unframed
     PCM30 CAS / CRC
     PCM31 CRC
     PCM30 CAS
     PCM31
     PCM30 CAS / CRC
     PCM31 CRC
     PCM30 CAS
     PCM31
     C-Bit
     M13
     Unframed

 Item ..._CONFIGURATION ("Configuration...")
     1 x 64k
     N x 64k Contiguous
     M x 64k Noncontiguous
     128K Contiguous
     384K Contiguous

 Item ..._WIDTH ("Number of Timeslots...")
     SET VALUE
     Default T.S. 1 Only
     All Timeslots
     Edit Selection
     DONE
     Set
     Clear
     DONE

 Item ..._TIMESLOT ("Starting Timeslot...")
     SET VALUE
     DONE

 Item ..._TEST_PATTERN ("Test Pattern...")
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^9-1
      -more- 1 of 2
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
```

```
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
    Live
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more- 3 of 3
    Live
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more-

Item ..._TEST_PATTERN_POLARITY ("Test Pattern...")
    Normal (ITU)
    Inverted (Non-ITU)

Item ..._UBYTE ("Test Pattern...")
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
```

```
     PRBS 2^11-1
      -more- 1 of 3
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     QRSS 2^20-1
      -more-
     All Ones
     All Zeros
     User Word
     Live
      -more- 2 of 2
     PRBS 2^9-1
     1 in 8
     All Ones
     All Zeros
      -more- 2 of 3
     PRBS 2^9-1
     All Ones
     All Zeros
     TS Idle
      -more-
     All Ones
     All Zeros
     1 in 8
     3 in 24
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
     Live
      -more- 3 of 3
     Live
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
     Live
      -more-
==========================================
```

17.

```
----P_RX_SDH_SETTINGS_PARAM1----
Receive Rate ..............   STM-4             Optical
Receive Level .............   Cross Connect
AU Under Test .............   1
SDH Structure .............   AU-4 Bulk
TU Under Test .............   :1 (Group 1, TUG-2:1    TU-12:1
Payload Structure .........   140 Mb/suipped)Framed
  Test Pattern ............   <nbr>2^23-1       Normal (ITU)
  34Mb/s Active Channel.....   1
  8Mb/s Active Channel.....    1
  2Mb/s Active Channel.....    1
Payload Drop...............   Drop DS1 (AMI)
Tx/Rx Setup................   Independent



----------------------

 Item ..._RATE ("Receive Rate ...")
     STM-4
     STM-1
     STM-0
      -more- 1 of 2
     140 Mb/s
     140 Mb/s
     34 Mb/s
     8 Mb/s
     2 Mb/s
      -more- 2 of 2
     45 Mb/s

 Item ..._QUALIFIER ("Receive Rate ...")
     Optical
     Electrical

 Item ..._LEVEL ("Receive Level ...")
     Cross Connect
     Low
     High
     Monitor (-20 dB)
     0 dB
     -6 dB
     -12 dB

 Item ..._AU ("AU Under Test ...")
     1
     2
     3
     4
      -more- 1 of 3
     5
     6
     7
     8
      -more- 2 of 3
     9
     10
     11
     12
      -more- 3 of 3

 Item ..._STRUCTURE ("SDH Structure ...")
     VC4-4c Bulk
     AU-4 Bulk
```

```
    AU-4 140 Mb/s
    TU-3 Async 34 Mb/s / 34 or 45 Mb/s
    TU-12 Async 2 Mb/s

Item ..._TU_GROUP ("TU Under Test ...")
    VT :1
    VT :28
    Next
    Previous
    TU-3:1
    TU-3:2
    TU-3:3
    TUG-3:1
    TUG-3:2
    TUG-3:3

Item ..._TU2 ("TU Under Test ...")
    TUG-2:1
    TUG-2:2
    TUG-2:3
    TUG-2:4
     -more- 1 of 2
    TUG-2:5
    TUG-2:6
    TUG-2:7
     -more- 2 of 2

Item ..._TU12 ("TU Under Test ...")
    TU-12:1
    TU-12:2
    TU-12:3

Item ..._BULK_PAYLOAD ("Payload Structure ...")
    Bulk Fill Test Signal \200\024O.181
    Bulk Fill Equipped
    Bulk Fill Unequipped

Item ..._TU_PAYLOAD ("Payload Structure ...")
    140 Mb/s
    34 Mb/s
    8 Mb/s
    2 Mb/s
    64 Kb/s
    45 Mb/s

Item ..._TU_PAYLOAD_FRAMING ("Payload Structure ...")
    Framed
    Unframed
    Unframed
    PCM30 CAS / CRC
    PCM31 CRC
    PCM30 CAS
    PCM31
    PCM30 CAS / CRC
    PCM31 CRC
    PCM30 CAS
    PCM31
    C-Bit
    M13
    Unframed

Item ..._TEST_PATTERN ("Test Pattern ...")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
```

```
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
    Live
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more- 3 of 3
    Live
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more-

Item ..._TEST_PATTERN_POLARITY ("Test Pattern ...")
    Normal (ITU)
    Inverted (Non-ITU)

Item ..._UBYTE ("Test Pattern ...")
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
```

```
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
    Live
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more- 3 of 3
    Live
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more-

Item ..._M34_CHANNEL ("34Mb/s Active Channel...")
    1
    2
    3
    4

Item ..._M8_CHANNEL ("8Mb/s Active Channel...")
    1
    2
    3
    4

Item ..._M2_CHANNEL ("2Mb/s Active Channel...")
    1
    2
    3
    4

Item ..._PAYLOAD_DROP ("Payload Drop...")
    On AMI
    On B8ZS
    Off
    Off
    On HDB3 Unbal
```

```
     On HDB3 Bal
     On AMI Unbal
     On AMI Bal
     On
     On HDB3
     On AMI
     On B3ZS

 Item ..._TX_RX ("Tx/Rx Setup...")
     Independ- ent
     Coupled
     Through Mode
==========================================
```

18.

```
----P_RX_SDH_SETTINGS_TRIB_PARAM1----
Receive Rate ..............   STM-4             Balanced
Receive Level..............   Normal (Cross Connect)

Payload Structure ..........   140 Mb/s       Framed
  Test Pattern .............   <nbr>2^23-1       Normal (ITU)
  34Mb/s Active Channel.....   1
  8Mb/s Active Channel.....    1
  2Mb/s Active Channel.....    1
Payload Drop...............   Drop DS1 (AMI)
Tx/Rx Setup................   Independent
```

```
 Item ..._RATE ("Receive Rate ...")
     STM-4
     STM-1
     STM-0
      -more- 1 of 2
     140 Mb/s
     140 Mb/s
     34 Mb/s
     8 Mb/s
     2 Mb/s
      -more- 2 of 2
     45 Mb/s

 Item ..._QUALIFIER ("Receive Rate ...")
     HDB3
     AMI
     B3ZS
     HDB3 (Unbalanced)
     HDB3 (Balanced)
     AMI (Unbalanced)
     AMI (Balanced)

 Item ..._LEVEL ("Receive Level...")
     Normal
     Monitor (-20 dB)
     Monitor (-30 dB)
     Bridge
     Normal
     Monitor (-20 dB)
     Monitor (-30 dB)

 Item ..._PAYLOAD ("Payload Structure ...")
     140 Mb/s
     34 Mb/s
     8 Mb/s
     2 Mb/s
     64 Kb/s
     45 Mb/s

 Item ..._PAYLOAD_FRAMING ("Payload Structure ...")
     Framed
     Unframed
     Unframed
     PCM30 CAS / CRC
     PCM31 CRC
     PCM30 CAS
```

```
    PCM31
    PCM30 CAS / CRC
    PCM31 CRC
    PCM30 CAS
    PCM31
    C-Bit
    M13
    Unframed

Item ..._TEST_PATTERN ("Test Pattern ...")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
    Live
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more- 3 of 3
    Live
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more-

Item ..._TEST_PATTERN_POLARITY ("Test Pattern ...")
    Normal (ITU)
```

```
    Inverted (Non-ITU)

Item ..._UBYTE ("Test Pattern ...")
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
    Live
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more- 3 of 3
    Live
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more-

Item ..._M34_CHANNEL ("34Mb/s Active Channel...")
    1
    2
    3
    4

Item ..._M8_CHANNEL ("8Mb/s Active Channel...")
    1
    2
```

```
     3
     4

 Item ..._M2_CHANNEL ("2Mb/s Active Channel...")
     1
     2
     3
     4

 Item ..._PAYLOAD_DROP ("Payload Drop...")
     On AMI
     On B8ZS
     Off
     Off
     On HDB3 Unbal
     On HDB3 Bal
     On AMI Unbal
     On AMI Bal
     On
     On HDB3
     On AMI
     On B3ZS

 Item ..._TX_RX ("Tx/Rx Setup...")
     Independ- ent
     Coupled
     Through Mode
==========================================
```

19.

```
----P_RX_SETTINGS_PARAM1----
Receive Rate ..............   STS-1
Receive Level .............   Cross Connect
Signal Structure ..........   STS-1
STS Under Test ............   1
Mapping ...................   Bulk Fill (Equipped)
DS3 Framing ...............   DS3 C-bit 1, VT 1)    TU-12:1
DS1 Under Test ............   DS1 1nframed
DS1 Framing ...............   DS1 Unframed
Tributary Drop ............   Drop DS1 (AMI)
Test Pattern ..............   <nbr>2^23-1
Tx/Rx Settings ............   Independent




----------------------

 Item ..._RATE ("Receive Rate ...")
     STS-1
     STS-3
     OC-1
     OC-3
      -more- 1 of 3
     STM-1E (Electrical)
     STM-1 (Optical)
     STM-4  (Optical)
     STM-4E  (ECL Elec)
      -more- 1 of 2
     1 of 2
     OC-12
     STS-12 (ECL Elec)
     DS1
     DS3
      -more- 2 of 3
     STM-0E
     STM-0
      -more- 2 of 2
     DS3->DS1 Demux
      -more- 3 of 3
     2 Mb/s Balanced
     2 Mb/s Unbalance
     34 Mb/s
     140 Mb/s

 Item ..._LEVEL ("Receive Level ...")
     Cross Connect
     Low
     High
     Monitor (-20 dB)
     0 dB
     -6 dB
     -12 dB

 Item ..._SIGNAL_STRUCTURE ("Signal Structure ...")
     STS-1
     STS-3c

 Item ..._SPE ("STS Under Test ...")
     1
     2
     3
     4
      -more- 1 of 3
```

```
    5
    6
    7
    8
     -more- 2 of 3
    9
    10
    11
    12
     -more- 3 of 3

Item ..._SPE_MAPPING ("Mapping ...")
    Bulk Fill No Mapping (Equipped)
    Bulk Fill No Mapping (Unequipped)
    VT1.5 Async
    DS3
    DS3->DS1 Demux
    TU-12 Async
    TU-3 Async
    140 Mb/s

Item ..._VT_GROUP ("DS3 Framing ...")
    VT :1
    VT :28
    Next
    Previous
    TU-3:1
    TU-3:2
    TU-3:3
    TUG-3:1
    TUG-3:2
    TUG-3:3

Item ..._TU_TU12_CHANNEL ("DS3 Framing ...")
    TU-12:1 TUG-2:1 TU-12:1
    TU-12:2 TUG-2:1 TU-12:2
    TU-12:3 TU-G2:1 TU-12:3
    TU-12:4 TUG-2:2 TU-12:1
     -more- 1 of 6
    TU-12:5 TUG-2:2 TU-12:2
    TU-12:6 TUG-2:2 TU-12:3
    TU-12:7 TUG-2:3 TU-12:1
    TU-12:8 TUG-2:3 TU-12:2
     -more- 2 of 6
    TU-12:9 TUG-2:3 TU-12:3
    TU-12:10 TUG-2:4 TU-12:1
    TU-12:11 TUG-2:4 TU-12:2
    TU-12:12 TUG-2:4 TU-12:3
     -more- 3 of 6
    TU-12:13 TUG-2:5 TU-12:1
    TU-12:14 TUG-2:5 TU-12:2
    TU-12:15 TUG-2:5 TU-12:3
    TU-12:16 TUG-2:6 TU-12:1
     -more- 4 of 6
    TU-12:17 TUG-2:6 TU-12:2
    TU-12:18 TUG-2:6 TU-12:3
    TU-12:19 TUG-2:7 TU-12:1
    TU-12:20 TUG-2:7 TU-12:2
     -more- 5 of 6
    TU-12:21 TUG-2:7 TU-12:3
     -more- 6 of 6

Item ..._VT_FRAMING ("DS1 Under Test ...")
    DS1 Unframed
    DS1 SF (D4)
    DS1 ESF
    140 Mb/s
```

```
    140 Mb/s Framed
    2 Mb/s
    2 Mb/s PCM30 (CAS)
    2 Mb/s PCM31
    2 Mb/s PCM30CRC (CAS)
    2 Mb/s PCM31CRC
    34 Mb/s
    34 Mb/s Framed
    DS3
    DS3 C-bit
    DS3 M13

Item ..._DEMAP_FRAMING ("DS3 Framing ...")
    DS3 C-bit
    DS3 M13

Item ..._DEMUX_CHAN_READOUT ("DS1 Under Test ...")
    DS1 :1
    DS1 :28
    Next
    Previous

Item SENSE_DATA_TRIBUTARY_DEMUX_FRAMING ("DS1 Framing ...")
    DS1 Unframed
    DS1 SF (D4)
    DS1 ESF

Item ..._TRIBUTARY_DROP ("Tributary Drop ...")
    On AMI
    On B8ZS
    Off
    Off
    On HDB3 Unbal
    On HDB3 Bal
    On AMI Unbal
    On AMI Bal
    On
    On HDB3
    On AMI
    On B3ZS

Item ..._TEST_PATTERN ("Test Pattern ...")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
    Live
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
```

```
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more- 3 of 3
    Live
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
     -more-

Item ..._UBYTE ("Test Pattern ...")
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
    Live
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
```

```
      -more-
     All Ones
     All Zeros
     1 in 8
     3 in 24
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
     Live
      -more- 3 of 3
     Live
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
     Live
      -more-

 Item ..._TX_RX ("Tx/Rx Settings ...")
     Independ- ent
     Coupled
     Through Mode
==============================================
```

20.

```
----P_RX_SETTINGS_TRIB_PARAM1----
Receive Rate ..............   STS-1
Receive Level .............   Normal (Cross Connect)

DS3 Framing ...............   DS3 C-bitmed
DS1 Under Test ............   DS1 1
DS1 Framing ...............   DS1 Unframed

Test Pattern ..............   <nbr>2^23-1
Tx/Rx Settings ............   Independent
```

```
----------------------

 Item RX_SETTINGS_SELECT_TRIB_RATE ("Receive Rate ...")
     STS-1
     STS-3
     OC-1
     OC-3
      -more- 1 of 3
     STM-1E (Electrical)
     STM-1 (Optical)
     STM-4  (Optical)
     STM-4E  (ECL Elec)
      -more- 1 of 2
     1 of 2
     OC-12
     STS-12 (ECL Elec)
     DS1
     DS3
      -more- 2 of 3
     STM-0E
     STM-0
      -more- 2 of 2
     DS3->DS1 Demux
      -more- 3 of 3
     2 Mb/s Balanced
     2 Mb/s Unbalance
     34 Mb/s
     140 Mb/s

 Item RX_SETTINGS_SELECT_TRIBUTARY_LEVEL ("Receive Level ...")
     Normal
     Monitor
     Bridge
     Normal
     Monitor

 Item RX_SETTINGS_SELECT_TRIBUTARY_FRAMING ("Framing ...")
     DS1 Unframed
     DS1 SF (D4)
     DS1 ESF
     140 Mb/s
     140 Mb/s Framed
     2 Mb/s
     2 Mb/s PCM30 (CAS)
     2 Mb/s PCM31
     2 Mb/s PCM30CRC (CAS)
     2 Mb/s PCM31CRC
     34 Mb/s
```

```
    34 Mb/s Framed
    DS3
    DS3 C-bit
    DS3 M13

Item RX_SETTINGS_SELECT_TRIBUTARY_DEMAP_FRAMING ("Framing ...")
    DS3 C-bit
    DS3 M13

Item RX_SETTINGS_SELECT_TRIBUTARY_DEMUX_CHAN_READOUT ("DS1 Under Test ...")
    DS1 :1
    DS1 :28
    Next
    Previous

Item RX_SETTINGS_SELECT_TRIBUTARY_DEMUX_FRAMING ("DS1 Framing ...")
    DS1 Unframed
    DS1 SF (D4)
    DS1 ESF

Item RX_SETTINGS_SELECT_TRIB_TEST_PATTERN ("Test Pattern ...")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
    Live
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
    Live
```

```
      -more- 3 of 3
     Live
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
     Live
      -more-

 Item RX_SETTINGS_SELECT_TRIB_UBYTE ("Test Pattern ...")
     Set to 00000000
     Set to 11111111
     Default 10101010
     EDIT BYTE
     Predefined Patterns
     Edit 24 bits
     Edit 16 bits
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^9-1
      -more- 1 of 2
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^11-1
      -more- 1 of 3
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     QRSS 2^20-1
      -more-
     All Ones
     All Zeros
     User Word
     Live
      -more- 2 of 2
     PRBS 2^9-1
     1 in 8
     All Ones
     All Zeros
      -more- 2 of 3
     PRBS 2^9-1
     All Ones
     All Zeros
     TS Idle
      -more-
     All Ones
     All Zeros
     1 in 8
     3 in 24
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
     Live
      -more- 3 of 3
     Live
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
     Live
      -more-

 Item RX_SETTINGS_SELECT_TRIB_TX_RX ("Tx/Rx Settings ...")
     Independ- ent
```

```
     Coupled
     Through Mode
==========================================
```

21.

----P_RX_SET_BYTE_TRACE_PARAM1----

==========

22.

```
----P_RX_TRANSPORT_OVERHEAD_PARAM1----
Showing Overhead for .......   STS-1 :1
External Drop ..............   None
Pause Control ..............   Updates Active
J0 RS Trace ................   Tek CTS 850
S1 Sync. Status Message ....
      Column ?             Column ?             Column ?
 A1:  <nbr>           A2:  <nbr>           J0:  <nbr>
 B1:  <nbr>           E1:  <nbr>           F1:  <nbr>
 D1:  <nbr>           D2:  <nbr>           D3:  <nbr>
 H1:  <nbr>           H2:  <nbr>           H3:  <nbr>
 B2:  <nbr>           K1:  <nbr>           K2:  <nbr>
 D4:  <nbr>           D5:  <nbr>           D6:  <nbr>
 D7:  <nbr>           D8:  <nbr>           D9:  <nbr>
 D10: <nbr>           D11: <nbr>           D12: <nbr>
 S1:  <nbr>           Z2:  <nbr>           E2:  <nbr>

----------------------

 Item ..._COLUMNS_HIF ("Showing Overhead for ...")
     STS-1 :1
     STS-1 :2
     STS-1 :3
     STS-1 :4
      -more- 1 of 3
     AU-4 :1 cols 1,4,7
     AU-4 :1 cols 2,5,8
     AU-4 :1 cols 3,6,9
     AU-4 :2 cols 1,4,7
     STS-3c :1
     STS-3c :1
     STS-3c :1
     STS-3c :2
     STS-1 :5
     STS-1 :6
     STS-1 :7
     STS-1 :8
      -more- 2 of 3
     AU-4 :2 cols 2,5,8
     AU-4 :2 cols 3,6,9
     AU-4 :3 cols 1,4,7
     AU-4 :3 cols 2,5,8
     STS-3c :2
     STS-3c :2
     STS-3c :3
     STS-3c :3
     STS-1 :9
     STS-1 :10
     STS-1 :11
     STS-1 :12
      -more- 3 of 3
     AU-4 :3 cols 3,6,9
     AU-4 :4 cols 1,4,7
     AU-4 :4 cols 2,5,8
     AU-4 :4 cols 3,6,9
     STS-3c :3
     STS-3c :4
     STS-3c :4
     STS-3c :4

 Item ..._EXTERNAL_DROP ("External Drop ...")
     None
     D1-D3
     D4-D12
     F1
```

```
      -more- 1 of 2
     E1
     E2
     E1 to Handset
     E2 to Handset
      -more- 2 of 2

 Item RX_TRANSPORT_OVERHEAD_CONTROL ("Pause Control ...")
     Pause
     Continue

 Item RX_TRANSPORT_OVERHEAD_TRACE_J0 ("J0 RS Trace ...")
     Enable Trace
     Disable Trace
==========================================
```

23.

----P_RX_VIEW_BYTE_TRACE_PARAM1----

==========

24.

```
----P_SIGNAL_LABELS_PARAM1----
C2 HP-Signal Label            Measurement:     Disabled
   Expected ......    <nbr>        <var>
   Rx ............    <nbr>        (Undefined)
   Tx ............    <nbr>        <var>
C2 LP-Signal Label            Measurement:     Disabled
   Expected ......    <nbr>        <var>
   Rx.............    <nbr>        <var>
   Tx.............    <nbr>        <var>
V5 LP-Signal Label            Measurement:     Disabled
   Expected ......     000         (Unequipped)
   Rx.............     <nbr        (Unequipped)
   Tx.............     000         <var>



----------------------

 Item TX_SIGNAL_LABELS_C2_HP_EXPECTED_VALUE ("Expected ...")
     00000000 (Unequipped)
     00000001 (Equipped)
     00000010       (TUG)
     00000011 (TU-n Locked)
      -more- 1 of 4
     00000100 Async 34 Mb/s / 34 or 45 Mb/s
     00010010 Async 140 Mb/s
     00010011 (ATM)
     00010100  MAN(DQDB)
      -more- 2 of 4
     00010101 (FDDI)
     11111110 O.181 Test Signal
     11111111 (VC-AIS)
     11001111 (PPP)
      -more- 3 of 4
     Default 11111110 / 00000010 / 00010010
     EDIT BYTE
      -more- 4 of 4

 Item TX_SIGNAL_LABELS_C2_LP_EXPECTED_VALUE ("Expected ...")
     00000000 (Unequipped)
     00000001 (Equipped)
     00000010       (TUG)
     00000011 (TU-n Locked)
      -more- 1 of 4
     00000100 Async 34 Mb/s / 34 or 45 Mb/s
     00010010 Async 140 Mb/s
     00010011 (ATM)
     00010100  MAN(DQDB)
      -more- 2 of 4
     00010101 (FDDI)
     11111110 O.181 Test Signal
     11111111 (VC-AIS)
     11001111 (PPP)
      -more- 3 of 4
     Default <number>
     EDIT BYTE
      -more- 4 of 4

 Item TX_SIGNAL_LABELS_V5_LP_EXPECTED_VALUE ("Expected ...")
     Unequip (000)
     Equipped (001)
     Async (010)
     Bit-Sync (011)
      -more- 1 of 2
```

```
     Byte-Sync (100)
     Reserved (101)
     T.S.0.181 (110)
     VC-AIS (111)
      -more- 2 of 2
==========================================
```

25.

```
----P_TEST_JITTER_OUTPUT_PARAM1----
Test Type ..................   Output Jitter
Test Control ...............   Edit Setup
Test Duration ..............   1 min 0 sec

 No Data


                       Measured              Max Allowed
 Filter                Jitter                 (G.823)
 Wideband
 Highband

      Press START/STOP to Begin Jitter Transfer Test



----------------------

 Item ..._TYPE ("Test Type ...")
     Output Jitter
     Jitter Tolerance
     Jitter Transfer
     Pointer Jitter
     Jitter Spectrum

 Item ..._CONTROL ("Test Control ...")
     Edit Setup
     View Graph
     View Data
     Save Results
     Recall Results

 Item ..._DURATION ("Test Duration ...")
     15 sec
     30 sec
     1 min
     15 min
     USER DEFINED
==============================================
```

26.

```
----P_TEST_JITTER_POINTER_PARAM1----
Test Type ..................   Output Jitter
Test Control ...............   Edit Setup
Sequence Type (G.783) ......   a) Single Alternating

 No Data


                       Measured              Max Allowed
 Filter                Jitter                (G.783)
 Wideband
 Highband

(Go to Transmit POINTERS & TIMING to setup sequence)
      Press START/STOP to Begin Jitter Transfer Test


----------------------

 Item ..._TYPE ("Test Type ...")
     Output Jitter
     Jitter Tolerance
     Jitter Transfer
     Pointer Jitter
     Jitter Spectrum

 Item ..._CONTROL ("Test Control ...")
     Edit Setup
     View Graph
     View Data
     Save Results
     Recall Results

 Item SENSE_DATA_TEST_JITTER_POINTER_SEQUENCE_TYPE ("Sequence Type (G.783) ...")
     Single Alternating
     Regular + Double
     Regular + Missing
     Double Alternating
      -more- 1 of 4
     Single
     Burst
     Periodic 87-3
     Periodic 87-3 With Add
      -more- 2 of 4
     Periodic 87-3 With Cancel
     Periodic Continuous
     Periodic Continuous With Add
     Periodic Continuous With Cancel
      -more- 3 of 4
     Phase Transient
     USER DEFINED
      -more- 4 of 4
==============================================
```

27.

```
----P_TEST_JITTER_RECALL_RESULTS----
Test Type ..................   Output Jitter
Test Control ...............   Edit Setup
Choose Test ................   Select Action

 Disk                    Description




<




----------------------

 Item TEST_SETUP_JITTER_RECALL_RESULTS_TYPE ("Test Type ...")
     Output Jitter
     Jitter Tolerance
     Jitter Transfer
     Pointer Jitter
     Jitter Spectrum

 Item TEST_SETUP_JITTER_RECALL_RESULTS ("Test Control ...")
     Edit Setup
     View Graph
     View Data
     Save Results
     Recall Results

 Item TEST_JITTER_CHOOSE_TEST ("Choose Test ...")
     Recall File

 Item JITTER_RESULTS0_FILENAME
     Recall Results
     Delete File
     Exit

 Item JITTER_RESULTS1_FILENAME
     Recall Results
     Delete File
     Exit

 Item JITTER_RESULTS2_FILENAME
     Recall Results
     Delete File
     Exit

 Item JITTER_RESULTS3_FILENAME
     Recall Results
     Delete File
     Exit

 Item JITTER_RESULTS4_FILENAME
     Recall Results
     Delete File
     Exit

 Item JITTER_RESULTS5_FILENAME
     Recall Results
     Delete File
     Exit
```

==========

28.

```
----P_TEST_JITTER_SAVE_RESULTS----
Test Type ..................   Output Jitter
Test Control ...............   Edit Setup
File Name ..................
Description ................
Disk Operation .............   Select Action









----------------------

 Item TEST_SETUP_JITTER_SAVE_RESULTS_TYPE ("Test Type ...")
     Output Jitter
     Jitter Tolerance
     Jitter Transfer
     Pointer Jitter
     Jitter Spectrum

 Item TEST_SETUP_JITTER_SAVE_RESULTS ("Test Control ...")
     Edit Setup
     View Graph
     View Data
     Save Results
     Recall Results

 Item TEST_JITTER_SAVE_RESULTS_NAME ("File Name ...")
     RESLT_XX
     Clear
     EDIT NAME

 Item TEST_JITTER_SAVE_RESULTS_DESCRIPTION ("Description ...")
     None
     EDIT TEXT

 Item TEST_JITTER_SAVE_RESULTS_DISK ("Disk Operation ...")
     Save File
==========================================
```

29.

```
----P_TEST_JITTER_SPECTRUM_PARAM1----
Test Type ..................   Output Jitter
Test Control ...............   Edit Setup
Frequency Range ............   Spectral 0.1Hz - 1kHz

      Press START/STOP to Begin Jitter Transfer Test
```

```
----------------------

 Item ..._TYPE ("Test Type ...")
     Output Jitter
     Jitter Tolerance
     Jitter Transfer
     Pointer Jitter
     Jitter Spectrum

 Item ..._CONTROL ("Test Control ...")
     Edit Setup
     View Graph
     View Data
     Save Results
     Recall Results

 Item SENSE_DATA_TEST_JITTER_SPECTRUM_RANGE ("Frequency Range ...")
     0.1 Hz - 1.0 kHz
     1.0 kHz - 5.0 MHz
==========================================
```

30.

```
----P_TEST_JITTER_TOLERANCE_PARAM1----
Test Type ..................   Output Jitter
Test Control ...............   Edit Setup
Mask Type ..................   G.825
Start Frequency ............   <nbr>
End Frequency ..............   <nbr>
Number Freq Samples ........   <nbr>
Tolerance Criteria .........   Onset Of Errors Method
Record Error Threshold .....   SELECT ACTION
 Recommended BER (O.171)         ><nbr>
 Current BER (Threshold)          <nbr>       In Progress...

      Press START/STOP to Begin Jitter Transfer Test



----------------------

 Item SENSE_DATA_TEST_JITTER_TYPE ("Test Type ...")
     Output Jitter
     Jitter Tolerance
     Jitter Transfer
     Pointer Jitter
     Jitter Spectrum

 Item SENSE_DATA_TEST_JITTER_CONTROL ("Test Control ...")
     Edit Setup
     View Graph
     View Data
     Save Results
     Recall Results

 Item SENSE_DATA_TEST_JITTER_TOLERANCE_MASK ("Mask Type ...")
     G.825
     G.958 (Type A)
     G.958 (Type B)
     G.823 (Standard)
     G.823 (National)

 Item SENSE_DATA_TEST_JITTER_TOLERANCE_FREQUENCY_START ("Start Frequency ...")
     <number>
     <number>
     <number>
     <number>
      -more- 1 of 3 / 1 of 2
     <number>
     <number>
     <number>
     <number>
      -more- 2 of 3 / 2 of 2
     <number>
     <number>
      -more- 3 of 3

 Item SENSE_DATA_TEST_JITTER_TOLERANCE_FREQUENCY_END ("End Frequency ...")
     <number>
     <number>
     <number>
     <number>
      -more- 1 of 3 / 1 of 2
     <number>
     <number>
     <number>
     <number>
```

```
      -more- 2 of 3 / 2 of 2
     <number>
     <number>
      -more- 3 of 3

 Item SENSE_DATA_TEST_JITTER_TOLERANCE_SAMPLES ("Number Freq Samples ...")
     <number>
     <number>
     <number>
     <number>
     <number>

 Item SENSE_DATA_TEST_JITTER_TOLERANCE_METHOD ("Tolerance Criteria ...")
     Onset Of Errors
     BER Penalty

 Item SENSE_DATA_TEST_JITTER_TOLERANCE_MEASURE ("Record Error Threshold ...")
     Measure BER
     Record BER
==============================================
```

31.

```
----P_TEST_JITTER_TRANSFER_PARAM1----
Test Type ..................   Output Jitter
Test Control ...............   Edit Setup
Mask Type ..................   GR-253
Start Frequency ............   <nbr>
End Frequency ..............   <nbr>
Number Freq Samples ........   <nbr>
Action .....................   Perform Jitter Transfer

The calibration is performed to establish a 0dB amplitude
reference trace of the CTS (using an internal loopback).

Calibration Status:            Unsupported Settings

      Press START/STOP to Begin Jitter Transfer Test


----------------------

 Item ..._TYPE ("Test Type ...")
     Output Jitter
     Jitter Tolerance
     Jitter Transfer
     Pointer Jitter
     Jitter Spectrum

 Item ..._CONTROL ("Test Control ...")
     Edit Setup
     View Graph
     View Data
     Save Results
     Recall Results

 Item SENSE_DATA_TEST_JITTER_TRANSFER_MASK ("Mask Type ...")
     G.958 (Type A)
     G.958 (Type B)

 Item SENSE_DATA_TEST_JITTER_TRANSFER_FREQUENCY_START ("Start Frequency ...")
     <number>
     <number>
     <number>
     <number>
      -more- 1 of 3 / 1 of 2
     <number>
     <number>
     <number>
     <number>
      -more- 2 of 3 / 2 of 2
     <number>
     <number>
      -more- 3 of 3

 Item SENSE_DATA_TEST_JITTER_TRANSFER_FREQUENCY_END ("End Frequency ...")
     <number>
     <number>
     <number>
     <number>
      -more- 1 of 3 / 1 of 2
     <number>
     <number>
     <number>
     <number>
      -more- 2 of 3 / 2 of 2
     <number>
     <number>
```

```
      -more- 3 of 3

 Item SENSE_DATA_TEST_JITTER_TRANSFER_SAMPLES ("Number Freq Samples ...")
     <number>
     <number>
     <number>
     <number>
     <number>

 Item SENSE_DATA_TEST_JITTER_TRANSFER_STATE ("Action ...")
     Jitter Transfer
     Calibrate
==========================================
```

32.

```
----P_TEST_SETUP_RECALL_INSTRUMENT_SETUPS_PARAM1----
 Memory              Description
0. DEFAULT          FACTORY SETTINGS
1. EMPTY
2. EMPTY
3. EMPTY
4. EMPTY
5. EMPTY

 Disk                     Description




<

----------------------

 Item INSTRUMENT_SETUP0_NAME ("0.")
     Recall Setup
     Delete File
     \012 Memory
     \011 Disk

 Item INSTRUMENT_SETUP1_NAME ("1.")
     Recall Setup
     Delete File
     \012 Memory
     \011 Disk

 Item INSTRUMENT_SETUP2_NAME ("2.")
     Recall Setup
     Delete File
     \012 Memory
     \011 Disk

 Item INSTRUMENT_SETUP3_NAME ("3.")
     Recall Setup
     Delete File
     \012 Memory
     \011 Disk

 Item INSTRUMENT_SETUP4_NAME ("4.")
     Recall Setup
     Delete File
     \012 Memory
     \011 Disk

 Item INSTRUMENT_SETUP5_NAME ("5.")
     Recall Setup
     Delete File
     \012 Memory
     \011 Disk
==========================================
```

33.

```
----P_TEST_SETUP_RECALL_PASS_FAIL_TESTS_PARAM1----
 Disk                    Description









<


----------------------

 Item PASS_FAIL_TEST0_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST1_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST2_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST3_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST4_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST5_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST6_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST7_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST8_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST9_NAME
```

```
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST10_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST11_NAME
     Recall & Run Test
     Delete File
     \011 Disk

 Item PASS_FAIL_TEST12_NAME
     Recall & Run Test
     Delete File
     \011 Disk
==========================================
```

```
34.

----P_TEST_SETUP_SAVE_INSTRUMENT_SETUPS_PARAM1----
Set up the instrument as required. Then fill out the
parameters below and save to disk or memory.

Name ......................
Description ...............

 Save to Memory .........      Select Action
 Save to Disk ...........      Select Action









----------------------

 Item ..._NAME ("Name ...")
     SETUP_XX
     Clear
     EDIT NAME

 Item SYSTEM_DESCRIPTION ("Description ...")
     None
     Clear
     EDIT TEXT

 Item ..._SAVE_MEM ("\012 Save to Memory ...")
     Memory 1
     Memory 2
     Memory 3
     Memory 4
     Memory 5

 Item ..._SAVE_DISK ("\011 Save to Disk ...")
     Save File

==============================================
```

35.

```
----P_TEST_SETUP_SAVE_PASS_FAIL_TESTS_PARAM1----
Set up the instrument as required. Then fill out the
parameters below and save your test to disk.

Name .....................
Description ..............
Operator Start Prompt ......
Test Duration ..............
         <var>               <var>               <nbr>
         <var>               <var>               <nbr>
Fail If
         <var>               <var>               <nbr>
         <var>               <var>               <nbr>
Operator End Prompt ........
On Test Completion .........   Do Nothing
 Save to Disk ............      Select Action

----------------------

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_NAME ("Name ...")
     TEST_XX
     Clear
     EDIT NAME

 Item SENSE_DATA_MEASURE_STESTS_DESCRIPTION ("Description ...")
     None
     Clear
     EDIT TEXT

 Item SENSE_DATA_MEASURE_STESTS_START_PROMPT ("Operator Start Prompt ...")
     Default
     Clear
     Preview
     EDIT TEXT

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_DURATION ("Test Duration ...")
     5 min
     15 min
     1 hour
     Continuous
     USER DEFINED

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_CLASS1
     Alarm
     Failure
     Error Ratio
     Error Count
      -more- 1 of 2
     Errored Seconds
     Pointer
     Jitter
     None
      -more- 2 of 2

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_TYPE1

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_THRESHOLD1

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_CLASS2
     Alarm
     Failure
     Error Ratio
     Error Count
      -more- 1 of 2
     Errored Seconds
```

```
     Pointer
     Jitter
     None
      -more- 2 of 2

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_TYPE2

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_THRESHOLD2

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_CLASS3
     Alarm
     Failure
     Error Ratio
     Error Count
      -more- 1 of 2
     Errored Seconds
     Pointer
     Jitter
     None
      -more- 2 of 2

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_TYPE3

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_THRESHOLD3

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_CLASS4
     Alarm
     Failure
     Error Ratio
     Error Count
      -more- 1 of 2
     Errored Seconds
     Pointer
     Jitter
     None
      -more- 2 of 2

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_TYPE4

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_EVAL_THRESHOLD4

 Item SENSE_DATA_MEASURE_STESTS_END_PROMPT ("Operator End Prompt ...")
     Default
     Clear
     Preview
     EDIT TEXT

 Item SENSE_DATA_MEASURE_STESTS_ON_COMPLETE ("On Test Completion ...")
     Do Nothing
     Print Summary
     Save to Disk

 Item TEST_SETUP_SAVE_PASS_FAIL_TESTS_DISK_ACTION ("\011 Save to Disk ...")
     Save File

==========================================
```

36.

```
----P_TEST_SETUP_TEST_CONTROL_PARAM1----
Test Duration ..............
History Resolution .........   Normal (1 min samples)

 At 1 minute resolution the maximum history length
 is at least 5 days. Upon reaching the 5 day limit
 new data will begin overwriting the old data.









----------------------

 Item UTILITY_TEST_DURATION ("Test Duration ...")
     5 min
     15 min
     1 hour
     Continuous
     USER DEFINED

 Item ..._HIST_RES ("History Resolution ...")
     Normal (1 min)
     Low (15 min)
     High (1 sec)
==========================================
```

```
37.

----P_TRACE_SETTINGS_PARAM1----
Trace Select ... RS Trace (J0)   Measurement:     Disabled

  Expected .....


  Rx ...........


  Tx ...........







----------------------

 Item OVERHEAD_TEST_SELECT_TRACE ("Trace Select ...")
     RS Trace (J0)
     HP Trace (J1)
     LP Trace (J1) / (J2)

 Item OVERHEAD_TEST_EXPECTED_TRACE_1
     Clear Trace
     Copy Transmit
     Copy Receive
     EDIT TRACE
==========================================
```

38.

```
----P_TX_APS_COMMANDS_PARAM1----
APS Mode ...................   Span Network
                               USER SETUP  TRANSMIT    RECEIVE
K1 Full Byte ...............  <nbr>       <nbr>      <nbr>
Bits 1-4: Switch Request ...  ?           ?          ?
Bits 5-8: Channel Requesting  ?           ?          ?
K2 Full Byte ...............  <nbr>       <nbr>      <nbr>
Bits 1-4: Bridged Channel ..  ?           ?          ?
Bit 5: Architecture ........  ?           ?          ?
Bits 6-8: Status ...........  ?           ?          ?

Transmit Setup .............   Select Action




----------------------

 Item SOURCE_DATA_APS_MODE ("APS Mode ...")
     Span
     Ring

 Item TX_APS_K1_BYTE ("K1 Full Byte ...")
     Default 00000000
     Set to 11111111
     Set to <number>
     EDIT BYTE

 Item TX_APS_K1_BITS_1_4 ("Bits 1-4: Switch Request ...")
     NR No Request
     DNR / RR-R Do Not / Reverse Revert / Request Ring
     RR / RR-S Reverse Request / Request Span
     Not Used / EXER-R Exercise Ring
      -more- 1 of 4
     EXER / EXER-S Exercise Span
     Not Used / WTR Wait To Restore
     WTR / MS-R Wait To / Manual Restore / Switch Ring
     Not Used / MS-S Manual Switch Span
      -more- 2 of 4
     MS / SD-R Manual / Signal Switch / Degrade Ring
     Not Used / SD-S Signal Degrade Span
     SD-LP / SD-P Signal Degrade Low / Degrade
     SD-HP / SF-R Signal Degrade High / Fail Ring
      -more- 3 of 4
     SF-LP / SF-S Signal Fail Low / Fail Span
     SF-HP / FS-R Signal / Forced Fail High / Switch Ring
     FS / FS-S Forced Switch / Switch Span
     LP / LP-S Lockout of Protection
      -more- 4 of 4

 Item TX_APS_K1_BITS_5_8 ("Bits 5-8: Channel Requesting ...")
     0 (0000)
     1 (0001)
     2 (0010)
     3 (0011)
      -more- 1 of 4
     4 (0100)
     5 (0101)
     6 (0110)
     7 (0111)
      -more- 2 of 4
     8 (1000)
     9 (1001)
     10 (1010)
```

```
     11 (1011)
      -more- 3 of 4
     12 (1100)
     13 (1101)
     14 (1110)
     15 (1111)
      -more- 4 of 4

 Item TX_APS_K2_BYTE ("K2 Full Byte ...")
     Default 00000000
     Set to 11111111
     Set to <number>
     EDIT BYTE

 Item TX_APS_K2_BITS_1_4 ("Bits 1-4: Bridged Channel ...")
     0 (0000)
     1 (0001)
     2 (0010)
     3 (0011)
      -more- 1 of 4
     4 (0100)
     5 (0101)
     6 (0110)
     7 (0111)
      -more- 2 of 4
     8 (1000)
     9 (1001)
     10 (1010)
     11 (1011)
      -more- 3 of 4
     12 (1100)
     13 (1101)
     14 (1110)
     15 (1111)
      -more- 4 of 4

 Item TX_APS_K2_BIT_5 ("Bit 5: Architecture ...")
     1+1 / SHORT
     1:N / LONG

 Item TX_APS_K2_BITS_6_8 ("Bits 6-8: Status ...")
     IDLE
     BR Bridged
     BR & SW Bridged & Switched
     Not Used / EXT TR Extra Traffic on Prot. Chan.
      -more- 1 of 2
     Not Used
     Not Used
     MS-RDI
     MS-AIS
      -more- 2 of 2

 Item TX_APS_TRANSMIT_SETUP ("Transmit Setup ...")
     Transmit User Setup
     Transmit Default
     Transmit Illegal
==========================================
```

39.

```
----P_TX_ERRORS_ALARMS_PARAM1----
Error Type set to ..........   Section B1 BIP
Frame Bit Error Burst ......   <nbr>   Error in  <nbr>   Frames
PDH Anomaly Layer ..........   140 Mb/s       <var>

Transmit Alarm set to ......   None
PDH Alarm Layer ............   140 Mb/s       <var>

Transmit Failure set to ....   None
PDH Failure Layer ..........   140 Mb/s       <var>
 Press INSERT ERROR to insert a single error
into the transmitted signal.




----------------------

 Item ..._TYPE ("Error Type set to ...")
     None
     Section B1
     Line B2
     Path B3
      -more- 1 of 3
     RS B1 BIP
     MS B2 BIP
     Path B3 BIP
     1 of 3 / 1 of 2 / 1 of 4
     Pattern Bit
     Frame Bit
     Frame Bit Burst
      -more- 1 of 2
     Pattern Bit
     Frame Bit
     CRC (ESF)
     1 of 2
     HP-REI
     VT BIP
     VT FEBE
     Pattern Bit
      -more- 2 of 3
     Pattern Bit
     C-Bit Parity
     P-Bit Parity
     2 of 3 / 2 of 2 / 2 of 4
     PDH CRC
     Code
     C-Bit Parity
     P-Bit Parity
     REI
      -more- 2 of 2
     Bit Slip
     CRC (2Mb)
     P-Bit
     C-Bit
      -more-
     Frame Bit
     CRC (ESF)
     P-Bit
     C-Bit
     3 of 3
     TU Path BIP
     LP-REI
     PDH FAS
```

```
    PDH FAS Burst
     -more- 3 of 3 / 3 of 4
    PDH REI
     -more- 4 of 4

Item ..._RATE ("Error Rate set to ...")
    None
    1e-3
    1e-4
    1e-5
     -more- 1 of 2
    1e-6
    1e-7
    1e-8
    USER DEFINED
     -more- 2 of 2

Item ..._FAS_BURST_COUNT ("Error Rate set to ...")
    SET VALUE

Item ..._FAS_BURST_SIZE ("Error in")
    SET VALUE

Item ..._ERROR_LAYER ("PDH Anomaly Layer ...")
    140 Mb/s
    34 Mb/s
    8 Mb/s
    2 Mb/s

Item ..._ALARM ("Transmit Alarm set to ...")
    None
    Line AIS
    Line FERF
    Path AIS
     -more- 1 of 3
    MS-AIS
    MS-RDI
    AU-AIS
    1 of 3 / of 2
    PDH RDI
    PDH AIS
    PDH AIS
    Idle
    DSn Yellow
    DSn AIS
    DS3 Idle
    Path FERF
    VT AIS
    VT FERF
     -more- 2 of 3
    HP-RDI
    TU-AIS
    LP-RDI
    LP-RFI
    2
    DSn Yellow
    DSn AIS
    DS3 Idle
     -more- 3 of 3
    PDH AIS
    PDH RDI
    Idle

Item ..._ALARM_LAYER ("PDH Alarm Layer ...")
    140 Mb/s
    34 Mb/s
    8 Mb/s
```

```
     2 Mb/s

 Item ..._FAILURE ("Transmit Failure set to ...")
     None
     LOS
     LOF
     STS LOP
      -more- 1 of 2
     AU-LOP
      -more- 1 of 2
     LOS
     LOF
     VT LOP
     VT LOM
      -more- 2 of 2
     TU-LOP
     TU-LOM
     PDH LOF

 Item ..._FAILURE_LAYER ("PDH Failure Layer ...")
     140 Mb/s
     34 Mb/s
     8 Mb/s
     2 Mb/s
==========================================
```

40.

```
----P_TX_JITTER_PARAM1----
Jitter/Wander Generation ...   Off
Jitter Output ..............   Line
Jitter Clock Rate ..........   52MHz (STM-0)
Jitter Clock Offset ........   <nbr>
Jitter Frequency ...........   <nbr>
Jitter Amplitude ...........   <nbr>

 For Jitter Generation Set Jitter Frequency > 10 Hz
 For Wander Generation Set Jitter Frequency < 10 Hz
```

```
 Item TX_JITTER_MODE ("Jitter/Wander Generation ...")
     Off
     On

 Item TX_JITTER_SOURCE ("Jitter Output ...")
     Line
     Clock  0.8V
     2MHz G.703

 Item TX_JITTER_CLOCK_RATE ("Jitter Clock Rate ...")
     622MHz  STM-4
     155MHz  STM-1
     52MHz  STM-0
      -more- 1 of 2
     140MHz
     34MHz
     2MHz
      -more- 2 of 2
     45MHz
     34MHz
     2MHz

 Item TX_JITTER_CLOCK_OFFSET ("Jitter Clock Offset ...")
     +100ppm
     +4.6ppm
     -4.6ppm
     Default 0ppm
     USER DEFINED

 Item TX_JITTER_FREQUENCY ("Jitter Frequency ...")
     500Hz
     6.50kHz
     65.0kHz
     1.30MHz
     USER DEFINED
     500Hz
     6.50kHz
     65.0kHz
     400kHz
     1.00kHz
     25.0kHz
     250kHz
     5.00MHz
     20.0Hz
     2.40kHz
     18.0kHz
```

```
     100kHz
     20Hz
     400Hz
     3.0kHz
     400kHz
     100Hz
     1.00kHz
     10.0kHz
     800kHz
     200Hz
     500Hz
     10.0kHz
     3.50MHz
     10Hz
     2.30kHz
     60.0kHz
     400kHz
     Wideband
     Highband
     Fullband
     Self Test
     SYS Int.
     SYS Ext.
      -more- 1 of 4 / of 3
     Protocol Bd
     Clock Bd
     O/E Mod.
     Tributary
      -more- 2
     CPU
     Display
     Front Panel
     Disk
      -more- 3
     Jitter
      -more- 4

 Item TX_JITTER_AMPLITUDE ("Jitter Amplitude ...")
     1.50 UI (Max)
     0.15 UI (Max/2)
     0.0 UI
     USER DEFINED
==============================================
```

41.

```
----P_TX_PATH_OVERHEAD_PARAM1----
Transmitting    <var>          STS-1 :   1  under test
Overhead View ..............   STS Path Overhead
External Add ...............   None
C2 Signal Label ............   <var>
H4 Multiframe Sequence .....   4 Bytes

      Path Overhead            Path Trace Message
 J1:  <nbr>        <bmp
 B3:  <nbr>
 C2:  <nbr>
 G1:
 F2:  <nbr>
 H4:  <nbr>
 Z3:  <nbr>
 Z4:  <nbr>
 Z5:  <nbr>
----------------------

 Item ..._DISPLAY ("Overhead View ...")
     STS Path Overhead
     V5 Byte
     VC4
     VC3 Overhead
     VC12 Overhead

 Item ..._EXTERNAL_ADD ("External Add ...")
     None
     F2

 Item TX_PATH_C2_OVERHEAD_LABEL ("C2 Signal Label ...")
     Unequip- ped
     Equipped Non-specific
     TUG
     TU-n Locked
      -more- 1 of 3
     Async 34 Mb/s / 34 or 45 Mb/s
     140 Mb/s Asynchronous
     ATM
     MAN (DQDB)
      -more- 2 of 3
     FDDI
     O.181 Test Signal
     VC-AIS
     PPP
      -more- 3 of 3

 Item TX_PATH_OVERHEAD_H4_SEQUENCE ("H4 Multiframe Sequence ...")
     4 Bytes
     48 Bytes

 Item SOURCE_DATA_POVERHEAD_BYTENAME_J1
     Reset Overhead
     Null Trace
     Default Trace
     User Trace
     EDIT TRACE
     Null Trace
     Default Trace
     EDIT TRACE
     64-Byte Format
     16-Byte Format
     EDIT TRACE
      -more- 1 of 2
     Null Trace
```

```
     Default Trace
      -more- 2 of 2

 Item SOURCE_DATA_POVERHEAD_BYTENAME_B3

 Item SOURCE_DATA_POVERHEAD_BYTENAME_C2
     Reset Overhead
     00000000 (Unequipped)
     00000001 (Equipped)
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_POVERHEAD_BYTENAME_G1 ("\014\014\014\014")
     000
     001
     010
     011
      -more- 1 of 2
     100
     101
     110
     111
      -more- 2 of 2

 Item SOURCE_DATA_POVERHEAD_BYTENAME_F2
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE

 Item SOURCE_DATA_POVERHEAD_BYTENAME_H4
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_POVERHEAD_BYTENAME_Z3
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE

 Item SOURCE_DATA_POVERHEAD_BYTENAME_Z4
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE

 Item SOURCE_DATA_POVERHEAD_BYTENAME_Z5
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE
==========================================
```

42.

```
----P_TX_PATH_OVERHEAD_V5_PARAM1----
Transmitting    <var>          STS-1 :   1  under test
Overhead View ..............   STS Path Overhead


                      V5:









----------------------

 Item TX_PATH_OVERHEAD_SELECT_V5
     STS Path Overhead
     V5 Byte
     VC4
     VC3 Overhead
     VC12 Overhead

 Item TX_PATH_OVERHEAD_TRIB_VT_SIG_LABEL ("\014\014\014\014")
     Unequip (000)
     Equipped (001)
     Async (010)
     Bit-Sync (011)
      -more- 1 of 2
     Byte-Sync (100)
     Reserved (101)
     Reserved (110)
     Reserved (111)
      -more- 2 of 2
     Byte-Sync
     Reserved
     T.S. O.181
     VC-AIS
      -more-
==========================================
```

43.

```
----P_TX_PATH_OVERHEAD_VC12_PARAM1----
Transmitting    <var>          STS-1 :   1  under test
Overhead View ..............   STS Path Overhead

V5 Signal Label ............   <var>

      Path Overhead            Path Trace Message
 V5:
 J2:  <nbr>        <bmp    TEK CTS850
 N2:  <nbr>
 K4:  <nbr>




----------------------

 Item TX_PATH_OVERHEAD_SELECT_VC12
     STS Path Overhead
     V5 Byte
     VC4
     VC3 Overhead
     VC12 Overhead

 Item ..._V5 ("V5 Signal Label ...")
     Unequip (000)
     Equipped (001)
     Async (010)
     Bit-Sync (011)
      -more- 1 of 2
     Byte-Sync (100)
     Reserved (101)
     Reserved (110)
     Reserved (111)
      -more- 2 of 2
     Byte-Sync
     Reserved
     T.S. O.181
     VC-AIS
      -more-

 Item TX_PATH_OVERHEAD_TRIB_TU12_SIG_LABEL
     Unequip (000)
     Equipped (001)
     Async (010)
     Bit-Sync (011)
      -more- 1 of 2
     Byte-Sync (100)
     Reserved (101)
     Reserved (110)
     Reserved (111)
      -more- 2 of 2
     Byte-Sync
     Reserved
     T.S. O.181
     VC-AIS
      -more-

 Item TX_PATH_OVERHEAD_TRIB_VALUE_J2
     Null Trace
     Default Trace
     EDIT TRACE
```

```
 Item TX_PATH_OVERHEAD_TRIB_VALUE_Z6
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE

 Item TX_PATH_OVERHEAD_TRIB_VALUE_Z7
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE
==============================================
```

44.

```
----P_TX_PATH_OVERHEAD_VC3_PARAM1----
Transmitting    <var>          STS-1 :   1  under test
Overhead View ..............   STS Path Overhead

C2 Signal Label .............   <var>
H4 Multiframe Sequence .....   4 Bytes

      Path Overhead            Path Trace Message
 J1:  <nbr>        <bmp
 B3:  <nbr>
 C2:  <nbr>
 G1:
 F2:  <nbr>
 H4:  <nbr>
 Z3:  <nbr>
 Z4:  <nbr>
 Z5:  <nbr>
----------------------

 Item TX_PATH_OVERHEAD_SELECT_VC3 ("Overhead View ...")
     STS Path Overhead
     V5 Byte
     VC4
     VC3 Overhead
     VC12 Overhead

 Item ..._C2 ("C2 Signal Label ...")
     Unequip- ped
     Equipped Non-specific
     TUG
     TU-n Locked
      -more- 1 of 3
     Async 34 Mb/s / 34 or 45 Mb/s
     140 Mb/s Asynchronous
     ATM
     MAN (DQDB)
      -more- 2 of 3
     FDDI
     O.181 Test Signal
     VC-AIS
     PPP
      -more- 3 of 3

 Item ..._H4 ("H4 Multiframe Sequence ...")
     4 Bytes
     48 Bytes

 Item TX_PATH_OVERHEAD_TRIB_VALUE_J1
     Reset Overhead
     Null Trace
     Default Trace
     User Trace
     EDIT TRACE
     Null Trace
     Default Trace
     EDIT TRACE
     64-Byte Format
     16-Byte Format
     EDIT TRACE
      -more- 1 of 2
     Null Trace
     Default Trace
      -more- 2 of 2

 Item TX_PATH_OVERHEAD_TRIB_VALUE_C2
```

```
     Reset Overhead
     00000000 (Unequipped)
     00000001 (Equipped)
     Default <number>
     EDIT BYTE

 Item TX_PATH_OVERHEAD_TRIB_VALUE_G1 ("\014\014\014\014")
     000
     001
     010
     011
      -more- 1 of 2
     100
     101
     110
     111
      -more- 2 of 2

 Item TX_PATH_OVERHEAD_TRIB_VALUE_F2
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE

 Item TX_PATH_OVERHEAD_TRIB_VALUE_H4
     Default <number>
     EDIT BYTE

 Item TX_PATH_OVERHEAD_TRIB_VALUE_Z3
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE

 Item TX_PATH_OVERHEAD_TRIB_VALUE_Z4
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE

 Item TX_PATH_OVERHEAD_TRIB_VALUE_Z5
     Reset Overhead
     00000001
     00000000
     <number>
     EDIT BYTE
==============================================
```

45.

```
----P_TX_POINTERS_TIMING_FREQUENCY_PARAM1----
Pointer / Timing Mode ......   Pointer Movements
Offset Mode ................   Offset Line (Payload fixed)
Frequency Offset ...........   <nbr>

 Press POINTER ACTION for a single movement.   <nbr>
It will alternate between increment and decrement.









----------------------

 Item TX_POINTERS_TIMING_MODE_FO ("Pointer / Timing Mode ...")
     Pointer Movement
     Frequency Offset
     Pointer Sequences
     Pointer Seq. with Trib. Offset

 Item SOURCE_CLOCK_OFFSET_MODE ("Offset Mode ...")
     Line
     Payload (AU Pointers)
     Tributary (Mapping)

 Item TX_POINTERS_TIMING_OFFSET ("Frequency Offset ...")
     Max +100ppm
     Stress +4.6ppm
     Stress -4.6ppm
     Default 0ppm
     USER DEFINED
==========================================
```

46.

```
----P_TX_POINTERS_TIMING_PARAM1----
Pointer / Timing Mode ......   Pointer Movements
Pointer Type ...............   STS Pointer
Pointer Control ............   Set Value
Pointer Rate ...............   <nbr>
Pointer Direction ..........   Increment
Pointer ss-Bits ............   00

 Press POINTER ACTION for a single movement.   <nbr>
It will alternate between increment and decrement.
```

```
----------------------

 Item TX_POINTERS_TIMING_MODE ("Pointer / Timing Mode ...")
     Pointer Movement
     Frequency Offset
     Pointer Sequences
     Pointer Seq. with Trib. Offset

 Item TX_POINTERS_TIMING_TYPE ("Pointer Type ...")
     STS Pointer
     VT Pointer
     AU Pointer
     TU Pointer

 Item TX_POINTERS_TIMING_CONTROL ("Pointer Control ...")
     Single
     Burst
     Set Value
     Continuous
     Single
     Burst
     Set Value
     Continuous

 Item TX_POINTERS_TIMING_NBURST ("Pointer Rate ...")
     2
     3
     4
     5
      -more- 1 of 2
     6
     7
     8
      -more- 2 of 2

 Item TX_POINTERS_TIMING_MOVEMENT_VALUE ("Pointer Rate ...")
     Min 0
     Max 782
     Default 522
     Illegal (Max+1)
     USER DEFINED
     Max 103
     Default 78
     Illegal
     Max 139
     Default 105
     Illegal
     Max 764
```

```
    Default 595
    Illegal

 Item TX_POINTERS_TIMING_MOVEMENT_NDF ("Pointer Direction ...")
    Yes
    No
    Yes
    No

 Item TX_POINTERS_TIMING_MOVEMENT_SBITS ("Pointer ss-Bits ...")
    00
    01
    10
    11

 Item TX_POINTERS_TIMING_POINTER_RATE ("Pointer Rate ...")
    Max 2ms
    Min 10000ms
    Default 50ms
    USER DEFINED
    48ms
    36ms
    2ms

 Item TX_POINTERS_TIMING_DIRECTION ("Pointer Direction ...")
    Increment
    Decrement
    Alternate
    Increment
    Decrement
    Alternate
==========================================
```

47.

```
----P_TX_POINTERS_TIMING_SEQUENCE_PARAM1----
Pointer / Timing Mode ......   Pointer Movements
Pointer Type ...............   STS Pointer
Sequence Type (G.783).......   a) Single Alternating
Pointer Direction ..........   Increment
Pointer Rate ...............   <nbr>
Initialization Time ........
Cool Down Time .............
Tributary Mapping Offset ...   <nbr>
Status: Current State:                Not Running
        Time Between Anomalies:      <nbr>
        Time Until Next Anomaly:     <nbr>

 Press POINTER ACTION to START Pointer Sequences



----------------------

 Item TX_POINTERS_TIMING_MODE_PS ("Pointer / Timing Mode ...")
     Pointer Movement
     Frequency Offset
     Pointer Sequences
     Pointer Seq. with Trib. Offset

 Item TX_POINTERS_TIMING_TYPE_PS ("Pointer Type ...")
     STS Pointer
     VT Pointer
     AU Pointer
     TU Pointer

 Item SOURCE_DATA_POINTER_SEQUENCE_TYPE ("Sequence Type (G.783)...")
     Single
     Burst
     Phase Transient
     Periodic Continuous
      -more- 1 of 4
     Single
     Burst
     Phase Transient
     Periodic Continuous
     Single Alternating
     Regular + Double
     Regular + Missing
     Double Alternating
     Single Alternating
     Regular + Double
     Regular + Missing
     Double Alternating
     Periodic Continuous With Cancel
     Periodic Continuous With Add
     Periodic 87-3
     Periodic 87-3 With Cancel
      -more- 2 of 4
     Periodic Continuous With Cancel
     Periodic Continuous With Add
     Periodic 26-1
     Periodic 26-1 With Cancel
     Single
     Burst
     Periodic 85-5
     Periodic 85-5 With Add
     Single
     Burst
     Periodic 35-1
```

```
    Periodic 35-1 With Add
    Single
    Burst
    Periodic 87-3
    Periodic 87-3 With Add
    Periodic 87-3 With Add
    Single Alternating
    Double Alternating
     -more- 3 of 4
    Periodic 26-1 With Add
    Single Alternating
    Double Alternating
    Periodic 85-5 With Cancel
    Periodic Continuous
    Periodic Continuous With Add
    Periodic Continuous With Cancel
    Periodic 35-1 With Cancel
    Periodic Continuous
    Periodic Continuous With Add
    Periodic Continuous With Cancel
    Periodic 87-3 With Cancel
    Periodic Continuous
    Periodic Continuous With Add
    Periodic Continuous With Cancel
     -more- 4 of 4
    Phase Transient
    Phase Transient

Item SOURCE_DATA_TRIBUTARY_POINTER_SEQUENCE_TYPE ("Sequence Type (G.783)...")
    Single
    Burst
    Phase Transient
    Periodic Continuous
     -more- 1 of 4
    Single
    Burst
    Phase Transient
    Periodic Continuous
    Single Alternating
    Regular + Double
    Regular + Missing
    Double Alternating
    Single Alternating
    Regular + Double
    Regular + Missing
    Double Alternating
    Periodic Continuous With Cancel
    Periodic Continuous With Add
    Periodic 87-3
    Periodic 87-3 With Cancel
     -more- 2 of 4
    Periodic Continuous With Cancel
    Periodic Continuous With Add
    Periodic 26-1
    Periodic 26-1 With Cancel
    Single
    Burst
    Periodic 85-5
    Periodic 85-5 With Add
    Single
    Burst
    Periodic 35-1
    Periodic 35-1 With Add
    Single
    Burst
    Periodic 87-3
    Periodic 87-3 With Add
```

```
     Periodic 87-3 With Add
     Single Alternating
     Double Alternating
      -more- 3 of 4
     Periodic 26-1 With Add
     Single Alternating
     Double Alternating
     Periodic 85-5 With Cancel
     Periodic Continuous
     Periodic Continuous With Add
     Periodic Continuous With Cancel
     Periodic 35-1 With Cancel
     Periodic Continuous
     Periodic Continuous With Add
     Periodic Continuous With Cancel
     Periodic 87-3 With Cancel
     Periodic Continuous
     Periodic Continuous With Add
     Periodic Continuous With Cancel
      -more- 4 of 4
     Phase Transient
     Phase Transient

 Item SOURCE_DATA_POINTER_SEQUENCE_DIRECTION ("Pointer Direction ...")
     Increment
     Decrement

 Item SOURCE_DATA_TRIBUTARY_POINTER_SEQUENCE_DIRECTION ("Pointer Direction ...")
     Increment
     Decrement

 Item TX_POINTERS_TIMING_SEQUENCE_RATE ("Pointer Rate ...")
     34ms
     100ms
     1000ms
     10000ms
     USER DEFINED
     1000ms
     2000ms
     5000ms
     10000ms
     USER DEFINED

 Item TX_POINTERS_TIMING_SEQUENCE_IPERIOD_READOUT ("Initialization Time ...")
     On
     Off

 Item TX_POINTERS_TIMING_TRIBUTARY_SEQUENCE_IPERIOD_READOUT ("Initialization Time
..")
     On
     Off

 Item TX_POINTERS_TIMING_SEQUENCE_CPERIOD_READOUT ("Cool Down Time ...")
     On
     Off

 Item TX_POINTERS_TIMING_TRIBUTARY_SEQUENCE_CPERIOD_READOUT ("Cool Down Time ...")
     On
     Off

 Item TX_POINTERS_TIMING_SEQUENCE_MAPPING_OFFSET ("Tributary Mapping Offset ...")
     Max +100ppm
     Stress +4.6ppm
     Stress -4.6ppm
     Default 0ppm
     USER DEFINED
==========================================
```

48.

```
----P_TX_SDH_K64_SETTINGS_PARAM1----
2 Mb/s Framing.............   Framed
Configuration..............   N x 64k
Number of Timeslots.........   <nbr>
Starting Timeslot...........   <nbr>
Test Pattern...............   <nbr>2^23-1       Normal (ITU)

Active Timeslots

  << < <<  < << < < < < << <  << < <<  < << < <  << << <  < <
   1       5       10       15        20       25       30
```

```
----------------------

 Item ..._FRAMING ("2 Mb/s Framing...")
     Framed
     Unframed
     Ext Add
     Unframed
     Ext Add
      -more- 1 of 2
     PCM30 CAS / CRC
     PCM31 CRC
     PCM30 CAS
     PCM31
     C-Bit
     M13
     Unframed
     Ext Add
     PCM30 CAS / CRC
     PCM31 CRC
     PCM30 CAS
     PCM31
      -more- 2 of 2

 Item ..._CONFIGURATION ("Configuration...")
     1 x 64k
     N x 64k Contiguous
     M x 64k Noncontiguous
     128K Contiguous
     384K Contiguous

 Item ..._WIDTH ("Number of Timeslots...")
     SET VALUE
     Default T.S. 1 Only
     All Timeslots
     Edit Selection
     DONE
     Set
     Clear
     DONE

 Item ..._TIMESLOT ("Starting Timeslot...")
     SET VALUE
     DONE

 Item ..._TEST_PATTERN ("Test Pattern...")
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
```

```
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more- 3 of 3
    1020 Hz 0 dBm
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more-

Item ..._TEST_PATTERN_POLARITY ("Test Pattern...")
    Normal (ITU)
    Inverted (Non-ITU)

Item ..._UBYTE ("Test Pattern...")
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
```

```
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^11-1
      -more- 1 of 3
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     QRSS 2^20-1
      -more-
     All Ones
     All Zeros
     User Word
      -more- 2 of 2
     PRBS 2^9-1
     1 in 8
     All Ones
     All Zeros
      -more- 2 of 3
     PRBS 2^9-1
     All Ones
     All Zeros
     TS Idle
      -more-
     All Ones
     All Zeros
     1 in 8
     3 in 24
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
      -more- 3 of 3
     1020 Hz 0 dBm
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
      -more-
==========================================
```

49.

```
----P_TX_SDH_SETTINGS_PARAM1----
Transmit Rate ..............   STM-4             Optical
Transmit Clock .............   Internal
AU Under Test ..............   1igh
SDH Structure ..............   AU-4 Bulk
TU Under Test ..............   :1 (Group 1, TUG-2:1    TU-12:1
  TU Background Fill .......   Idle (11010101)
Payload Structure ..........   140 Mb/suipped)Framed
Add Signal Type & Level ....   HDB3>2^23-1    Normal (X-C)TU)
  34Mb/s Active Channel.....   1      Background     2^15-1
  8Mb/s Active Channel......   1      Background     2^15-1
  2Mb/s Active Channel......   1      Background     2^15-1
Tx/Rx Setup ................   Independent



----------------------

 Item ..._RATE ("Transmit Rate ...")
     STM-4
     STM-1
     STM-0
      -more- 1 of 2
     140 Mb/s
     140 Mb/s
     34 Mb/s
     8 Mb/s
     2 Mb/s
      -more- 2 of 2
     45 Mb/s

 Item ..._QUALIFIER ("Transmit Rate ...")
     Optical
     Electrical

 Item ..._CLOCK ("Transmit Clock ...")
     Internal
     Recovered
     External 2 Mb/s 2 MHz
     External 1.5 Mb/s BITS
     External DSn

 Item ..._LEVEL ("Transmit Level ...")
     Cross Connect
     High
     0 dB
     -6 dB

 Item ..._AU ("Transmit Level ...")
     1
     2
     3
     4
      -more- 1 of 3
     5
     6
     7
     8
      -more- 2 of 3
     9
     10
     11
     12
      -more- 3 of 3
```

```
Item ..._STRUCTURE ("SDH Structure ...")
    VC4-4c Bulk
    AU-4 Bulk
    AU-4 140 Mb/s
    TU-3 Async 34 Mb/s / 34 or 45 Mb/s
    TU-12 Async 2 Mb/s

Item ..._TU_GROUP ("TU Under Test ...")
    VT :1
    VT :28
    Next
    Previous
    TU-3:1
    TU-3:2
    TU-3:3
    All TU-3s
    TUG-3:1
    TUG-3:2
    TUG-3:3
    All TU-12s

Item ..._TU2 ("TU Under Test ...")
    TUG-2:1
    TUG-2:2
    TUG-2:3
    TUG-2:4
     -more- 1 of 2
    TUG-2:5
    TUG-2:6
    TUG-2:7
     -more- 2 of 2

Item ..._TU12 ("TU Under Test ...")
    TU-12:1
    TU-12:2
    TU-12:3

Item ..._TU_FILL_PATTERN ("TU Background Fill ...")
    PRBS 2^15-1
    Idle

Item ..._BULK_PAYLOAD ("Payload Structure ...")
    Bulk Fill Test Signal \200\024O.181
    Bulk Fill Equipped
    Bulk Fill Unequipped

Item ..._TU_PAYLOAD ("Payload Structure ...")
    140 Mb/s
    34 Mb/s
    8 Mb/s
    2 Mb/s
    64 Kb/s
    45 Mb/s

Item ..._TU_PAYLOAD_FRAMING ("     ")
    Framed
    Unframed
    Ext Add
    Unframed
    Ext Add
     -more- 1 of 2
    PCM30 CAS / CRC
    PCM31 CRC
    PCM30 CAS
    PCM31
    C-Bit
```

```
    M13
    Unframed
    Ext Add
    PCM30 CAS / CRC
    PCM31 CRC
    PCM30 CAS
    PCM31
     -more- 2 of 2

Item ..._TEST_PATTERN ("Test Pattern ...")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more- 3 of 3
    1020 Hz 0 dBm
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more-

Item ..._TEST_PATTERN_POLARITY ("Test Pattern ...")
    Normal (ITU)
    Inverted (Non-ITU)

Item ..._UBYTE ("Test Pattern ...")
```

```
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more- 3 of 3
    1020 Hz 0 dBm
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more-

Item ..._EXTADD_TYPE ("Test Pattern ...")
    HDB3
    AMI
    B3ZS
    HDB3 (Unbalanced)
    HDB3 (Balanced)
    AMI (Unbalanced)
    AMI (Balanced)

Item ..._EXTADD_LEVEL ("Test Pattern ...")
    Normal
    Monitor (-20 dB)
    Monitor (-30 dB)
    Bridge
    Normal
```

```
    Monitor (-20 dB)
    Monitor (-30 dB)

Item ..._M34_CHANNEL ("34Mb/s Active Channel...")
    1
    2
    3
    4
    All

Item ..._M34_FILL_PATTERN ("Background")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
     -more- 1 of 2
    All Ones
    All Zeros
    10101010
     -more- 2 of 2

Item ..._M8_CHANNEL ("8Mb/s Active Channel...")
    1
    2
    3
    4
    All

Item ..._M8_FILL_PATTERN ("Background")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
     -more- 1 of 2
    All Ones
    All Zeros
    10101010
     -more- 2 of 2

Item ..._M2_CHANNEL ("2Mb/s Active Channel...")
    1
    2
    3
    4
    All

Item ..._M2_FILL_PATTERN ("Background")
    PRBS 2^15-1
    All Ones
    All Zeros
    10101010

Item ..._COUPLING ("Tx/Rx Setup ...")
    Independ- ent
    Coupled
    Through Mode
==========================================
```

50.

```
----P_TX_SDH_SETTINGS_TRIB_PARAM1----
Transmit Rate ..............   STM-4             Balanced
Transmit Clock .............   Internal
Line Clock Offset ..........   <nbr>
SDH Output .................   Disabled          Optical
Transmit Level .............   0 dB

Payload Structure ..........   140 Mb/        Framed
Add Signal Type & Level ....   HDB3>2^23-1    Normal (X-C)TU)
  34Mb/s Active Channel.....   1      Background     2^15-1
  8Mb/s Active Channel......   1      Background     2^15-1
  2Mb/s Active Channel......   1      Background     2^15-1
Tx/Rx Setup ................   Independent




----------------------

 Item ..._RATE ("Transmit Rate ...")
     STM-4
     STM-1
     STM-0
      -more- 1 of 2
     140 Mb/s
     140 Mb/s
     34 Mb/s
     8 Mb/s
     2 Mb/s
      -more- 2 of 2
     45 Mb/s

 Item ..._QUALIFIER ("Transmit Rate ...")
     HDB3
     AMI
     B3ZS
     HDB3 (Unbalanced)
     HDB3 (Balanced)
     AMI (Unbalanced)
     AMI (Balanced)

 Item ..._CLOCK ("Transmit Clock ...")
     Internal
     Recovered
     External 2 Mb/s 2 MHz
     External 1.5 Mb/s BITS
     External DSn

 Item TX_SDH_SETTINGS_POINTERS_TIMING_TRIBUTARY_OFFSET ("Line Clock Offset ...")
     Max +100ppm
     Stress +4.6ppm
     Stress -4.6ppm
     Default 0ppm
     USER DEFINED

 Item ..._SDH_KEEPALIVE ("SDH Output ...")
     Disabled
     STM-4
     STM-1
     STM-0

 Item ..._SDH_KEEPALIVE_QUALIFIER ("SDH Output ...")
     Optical
     Electrical
```

```
Item TX_TRIB_SETTINGS_SELECT_LEVEL ("Transmit Level ...")
    0 dB
    -6 dB

Item ..._PAYLOAD ("Payload Structure ...")
    140 Mb/s
    34 Mb/s
    8 Mb/s
    2 Mb/s
    64 Kb/s
    45 Mb/s

Item ..._PAYLOAD_FRAMING ("Payload Structure ...")
    Framed
    Unframed
    Ext Add
    Unframed
    Ext Add
     -more- 1 of 2
    PCM30 CAS / CRC
    PCM31 CRC
    PCM30 CAS
    PCM31
    C-Bit
    M13
    Unframed
    Ext Add
    PCM30 CAS / CRC
    PCM31 CRC
    PCM30 CAS
    PCM31
     -more- 2 of 2

Item ..._TEST_PATTERN ("Test Pattern ...")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
```

```
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more- 3 of 3
    1020 Hz 0 dBm
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more-

Item ..._TEST_PATTERN_POLARITY ("Test Pattern ...")
    Normal (ITU)
    Inverted (Non-ITU)

Item ..._UBYTE ("Test Pattern ...")
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    User Word 8 bit
    User Word 16 bit
```

```
    User Word 24 bit
     -more- 3 of 3
    1020 Hz 0 dBm
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more-

Item ..._EXTADD_TYPE ("Test Pattern ...")
    HDB3
    AMI
    B3ZS
    HDB3 (Unbalanced)
    HDB3 (Balanced)
    AMI (Unbalanced)
    AMI (Balanced)

Item ..._EXTADD_LEVEL ("Test Pattern ...")
    Normal
    Monitor (-20 dB)
    Monitor (-30 dB)
    Bridge
    Normal
    Monitor (-20 dB)
    Monitor (-30 dB)

Item ..._M34_CHANNEL ("34Mb/s Active Channel...")
    1
    2
    3
    4
    All

Item ..._M34_FILL_PATTERN ("Background")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
     -more- 1 of 2
    All Ones
    All Zeros
    10101010
     -more- 2 of 2

Item ..._M8_CHANNEL ("8Mb/s Active Channel...")
    1
    2
    3
    4
    All

Item ..._M8_FILL_PATTERN ("Background")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
     -more- 1 of 2
    All Ones
    All Zeros
    10101010
     -more- 2 of 2

Item ..._M2_CHANNEL ("2Mb/s Active Channel...")
    1
    2
    3
    4
    All
```

```
 Item ..._M2_FILL_PATTERN ("Background")
     PRBS 2^15-1
     All Ones
     All Zeros
     10101010

 Item ..._COUPLING ("Tx/Rx Setup ...")
     Independ- ent
     Coupled
     Through Mode
================================================
```

51.

```
----P_TX_SETTINGS_PARAM1----
Transmit Rate ..............   STS-1
Transmit Clock .............   Internal
Transmit Level .............   High
Signal Structure ...........   1 x STS-1
STS Under Test .............   1
Mapping ....................   Bulk Fill (Equipped)
VT Under Test ..............   :1 (Group 1, VT 1)    TU-12:1
Payload ....................   DS1 External Add
Test Pattern ...............   <nbr>2^23-1
Background Pattern .........   Idle (11010101)
Tx/Rx Settings .............   Independent




----------------------

 Item ..._RATE ("Transmit Rate ...")
     STS-1
     STS-3
     OC-1
     OC-3
      -more- 1 of 2
     STM-1E (Electrical)
     STM-1 (Optical)
     STM-4  (Optical)
     1 of 2
      -more- 1 of 3
     OC-12
     DS1
     DS3
      -more- 2 of 2
     STM-0E
     STM-0
      -more- 2 of 3
     2 Mb/s Balanced
     2 Mb/s Unbalance
     34 Mb/s
     140 Mb/s
      -more- 3 of 3

 Item ..._CLOCK ("Transmit Clock ...")
     Internal
     Recovered
     External 2 Mb/s 2 MHz
     External 1.5 Mb/s BITS
     External DSn

 Item ..._LEVEL ("Transmit Level ...")
     Cross Connect
     High
     0 dB
     -6 dB

 Item ..._SIGNAL_STRUCTURE ("Signal Structure ...")
     3 x STS-1
     1 x STS-3c
     12 x STS-1
     4 x STS-3c

 Item ..._SPE ("STS Under Test ...")
     1
     2
```

```
    3
    4
     -more- 1 of 3
    5
    6
    7
    8
     -more- 2 of 3
    9
    10
    11
    12
     -more- 3 of 3

Item ..._SPE_MAPPING ("Mapping ...")
    Bulk Fill No Mapping (Equipped)
    Bulk Fill No Mapping (Unequipped)
    VT1.5 Async
    DS3
    TU-12 Async
    TU-3 Async
    140 Mb/s

Item ..._VT_GROUP ("VT Under Test ...")
    VT :1
    VT :28
    Next
    Previous
    TU-3:1
    TU-3:2
    TU-3:3
    All TU-3s
    TUG-3:1
    TUG-3:2
    TUG-3:3
    All TU-12s

Item ..._TU_TU12_CHANNEL ("VT Under Test ...")
    TU-12:1 TUG-2:1 TU-12:1
    TU-12:2 TUG-2:1 TU-12:2
    TU-12:3 TU-G2:1 TU-12:3
    TU-12:4 TUG-2:2 TU-12:1
     -more- 1 of 6
    TU-12:5 TUG-2:2 TU-12:2
    TU-12:6 TUG-2:2 TU-12:3
    TU-12:7 TUG-2:3 TU-12:1
    TU-12:8 TUG-2:3 TU-12:2
     -more- 2 of 6
    TU-12:9 TUG-2:3 TU-12:3
    TU-12:10 TUG-2:4 TU-12:1
    TU-12:11 TUG-2:4 TU-12:2
    TU-12:12 TUG-2:4 TU-12:3
     -more- 3 of 6
    TU-12:13 TUG-2:5 TU-12:1
    TU-12:14 TUG-2:5 TU-12:2
    TU-12:15 TUG-2:5 TU-12:3
    TU-12:16 TUG-2:6 TU-12:1
     -more- 4 of 6
    TU-12:17 TUG-2:6 TU-12:2
    TU-12:18 TUG-2:6 TU-12:3
    TU-12:19 TUG-2:7 TU-12:1
    TU-12:20 TUG-2:7 TU-12:2
     -more- 5 of 6
    TU-12:21 TUG-2:7 TU-12:3
     -more- 6 of 6

Item ..._VT_FRAMING ("Payload ...")
```

```
     DS1 Ext Add
     DS1 Unframed
     DS1 SF (D4)
     DS1 ESF
     140Mb/s Ext Add
     140Mb/s Unframed
     140Mb/s Framed
     2 Mb/s Ext Add (Balanced)
     2 Mb/s Ext Add (Unbalanced)
     2 Mb/s Unframed
     2 Mb/s PCM30 (CAS)
      -more- 1 of 2
     34 Mb/s
     34 Mb/s
     34 Mb/s
     DS3 Ext Add
     DS3 Unframed
     DS3 C-bit
     DS3 M13
     2 Mb/s PCM31
     2 Mb/s PCM30CRC (CAS)
     2 Mb/s PCM31CRC
      -more- 2 of 2

Item ..._TEST_PATTERN ("Test Pattern ...")
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^9-1
      -more- 1 of 2
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^11-1
      -more- 1 of 3
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     QRSS 2^20-1
      -more-
     All Ones
     All Zeros
     User Word
      -more- 2 of 2
     PRBS 2^9-1
     1 in 8
     All Ones
     All Zeros
      -more- 2 of 3
     PRBS 2^9-1
     All Ones
     All Zeros
     TS Idle
      -more-
     All Ones
     All Zeros
     1 in 8
     3 in 24
      -more-
     Set to 00000000
     Set to 11111111
     Default 10101010
     EDIT BYTE
     Predefined Patterns
     Edit 24 bits
     Edit 16 bits
     User Word 8 bit
```

```
    User Word 16 bit
    User Word 24 bit
     -more- 3 of 3
    1020 Hz 0 dBm
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more-

Item ..._UBYTE ("Test Pattern ...")
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more- 3 of 3
    1020 Hz 0 dBm
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more-

Item ..._VT_BACKGROUND_PATTERN ("Background Pattern ...")
    QRSS 2^20-1
    Idle (11010101)
    PRBS 2^15-1
```

```
     Idle

 Item ..._TX_RX ("Tx/Rx Settings ...")
     Independ- ent
     Coupled
     Through Mode
==========================================
```

52.

```
----P_TX_SETTINGS_THROUGH_MODE_PARAM1----
The test set is in Through Mode.
The transmitted signal is identical to the received
signal.  Transmitter changes will have no effect
in this mode.

Tx/Rx Settings .............   Independent
```

```
 Item TX_SETTINGS_SELECT_THROUGH_MODE_TX_RX ("Tx/Rx Settings ...")
     Independ- ent
     Coupled
     Through Mode
==========================================
```

53.

```
----P_TX_SETTINGS_TRIB_PARAM1----
Transmit Rate ..............   STS-1
Transmit Clock .............   Internal
Line Clock Offset ..........   <nbr>
Transmit Line Code .........   AMI

Framing ....................   DS1 External Add

Test Pattern ...............   <nbr>2^23-1

Tx/Rx Settings .............   Independent




----------------------

 Item TX_SETTINGS_SELECT_TRIB_RATE ("Transmit Rate ...")
     STS-1
     STS-3
     OC-1
     OC-3
      -more- 1 of 2
     STM-1E (Electrical)
     STM-1 (Optical)
     STM-4  (Optical)
     1 of 2
      -more- 1 of 3
     OC-12
     DS1
     DS3
      -more- 2 of 2
     STM-0E
     STM-0
      -more- 2 of 3
     2 Mb/s Balanced
     2 Mb/s Unbalance
     34 Mb/s
     140 Mb/s
      -more- 3 of 3

 Item TX_SETTINGS_SELECT_TRIB_CLOCK ("Transmit Clock ...")
     Internal
     Recovered
     External 2 Mb/s 2 MHz
     External 1.5 Mb/s BITS
     External DSn

 Item TX_POINTERS_TIMING_TRIBUTARY_OFFSET ("Line Clock Offset ...")
     Max +100ppm
     Stress +4.6ppm
     Stress -4.6ppm
     Default 0ppm
     USER DEFINED

 Item TX_SETTINGS_SELECT_LINE_CODE ("Transmit Line Code ...")
     AMI
     B8ZS

 Item TX_SETTINGS_SELECT_TRIBUTARY_FRAMING ("Framing ...")
     DS1 Unframed
     DS1 SF (D4)
     DS1 ESF
```

```
    2 Mb/s Unframed
    2 Mb/s PCM30 (CAS)
    2 Mb/s PCM31
    2 Mb/s PCM30CRC (CAS)
    2 Mb/s PCM31CRC
    34 Mb/s
    34 Mb/s Framed
    140 Mb/s
    140 Mb/s
    DS3
    DS3 C-bit
    DS3 M13

Item TX_SETTINGS_SELECT_TRIB_TEST_PATTERN ("Test Pattern ...")
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^9-1
     -more- 1 of 2
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    PRBS 2^11-1
     -more- 1 of 3
    PRBS 2^23-1
    PRBS 2^20-1
    PRBS 2^15-1
    QRSS 2^20-1
     -more-
    All Ones
    All Zeros
    User Word
     -more- 2 of 2
    PRBS 2^9-1
    1 in 8
    All Ones
    All Zeros
     -more- 2 of 3
    PRBS 2^9-1
    All Ones
    All Zeros
    TS Idle
     -more-
    All Ones
    All Zeros
    1 in 8
    3 in 24
     -more-
    Set to 00000000
    Set to 11111111
    Default 10101010
    EDIT BYTE
    Predefined Patterns
    Edit 24 bits
    Edit 16 bits
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more- 3 of 3
    1020 Hz 0 dBm
     -more-
    User Word 8 bit
    User Word 16 bit
    User Word 24 bit
     -more-

Item TX_SETTINGS_SELECT_TRIB_UBYTE ("Test Pattern ...")
```

```
     Set to 00000000
     Set to 11111111
     Default 10101010
     EDIT BYTE
     Predefined Patterns
     Edit 24 bits
     Edit 16 bits
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^9-1
      -more- 1 of 2
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     PRBS 2^11-1
      -more- 1 of 3
     PRBS 2^23-1
     PRBS 2^20-1
     PRBS 2^15-1
     QRSS 2^20-1
      -more-
     All Ones
     All Zeros
     User Word
      -more- 2 of 2
     PRBS 2^9-1
     1 in 8
     All Ones
     All Zeros
      -more- 2 of 3
     PRBS 2^9-1
     All Ones
     All Zeros
     TS Idle
      -more-
     All Ones
     All Zeros
     1 in 8
     3 in 24
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
      -more- 3 of 3
     1020 Hz 0 dBm
      -more-
     User Word 8 bit
     User Word 16 bit
     User Word 24 bit
      -more-

 Item TX_SETTINGS_SELECT_TRIB_TX_RX ("Tx/Rx Settings ...")
     Independ- ent
     Coupled
     Through Mode
==========================================
```

54.

```
----P_TX_TRANSPORT_OVERHEAD_PARAM1----
Transmitting    <var>          STS-1 :   1  under test
Showing Overhead for .......   STS-1 :1
External Add ...............   None
J0 RS Trace ................   Tek CTS 850
S1 Sync. Status Message ....   Quality Unknown
      Column ?             Column ?             Column ?
 <var <nbr>           <var <nbr>           <var <nbr>
 <var <nbr>           <var <nbr>           <var <nbr>
 <var <nbr>           <var <nbr>           <var <nbr>
 <var <nbr>           <var <nbr>           <var <nbr>
 <var <nbr>           <var <nbr>           <var <nbr>
 <var <nbr>           <var <nbr>           <var <nbr>
 <var <nbr>           <var <nbr>           <var <nbr>
 <var <nbr>           <var <nbr>           <var <nbr>
 <var <nbr>           <var <nbr>           <var <nbr>

----------------------

 Item ..._COLUMNS_HIF
     STS-1 :1
     STS-1 :2
     STS-1 :3
     STS-1 :4
      -more- 1 of 3
     AU-4 :1 cols 1,4,7
     AU-4 :1 cols 2,5,8
     AU-4 :1 cols 3,6,9
     AU-4 :2 cols 1,4,7
     STS-3c :1
     STS-3c :1
     STS-3c :1
     STS-3c :2
     STS-1 :5
     STS-1 :6
     STS-1 :7
     STS-1 :8
      -more- 2 of 3
     AU-4 :2 cols 2,5,8
     AU-4 :2 cols 3,6,9
     AU-4 :3 cols 1,4,7
     AU-4 :3 cols 2,5,8
     STS-3c :2
     STS-3c :2
     STS-3c :3
     STS-3c :3
     STS-1 :9
     STS-1 :10
     STS-1 :11
     STS-1 :12
      -more- 3 of 3
     AU-4 :3 cols 3,6,9
     AU-4 :4 cols 1,4,7
     AU-4 :4 cols 2,5,8
     AU-4 :4 cols 3,6,9
     STS-3c :3
     STS-3c :4
     STS-3c :4
     STS-3c :4

 Item ..._EXTERNAL_ADD ("External Add ...")
     None
     D1-D3
     D4-D12
     F1
```

```
     -more- 1 of 2
    E1
    E2
    E1 from Handset
    E2 from Handset
     -more- 2 of 2

Item TX_TRANSPORT_OVERHEAD_TRACE_J0 ("J0 RS Trace ...")
    Disable Trace
    Enable Trace
    Null Trace
    Default Trace
    EDIT TRACE

Item TX_TRANSPORT_OVERHEAD_S1_MESSAGE ("S1 Sync. Status Message ...")
    Quality Unknown
    G.811 PRC
    G.812 Transit
    G.812 Local
     -more- 1 of 2
    G.813 SETS
    Do Not Use
     -more- 2 of 2

Item SOURCE_DATA_OVERHEAD_BYTENAME_A1
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_A2
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_C1
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_B1

Item SOURCE_DATA_OVERHEAD_BYTENAME_E1
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_F1
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_D1
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE
```

```
Item SOURCE_DATA_OVERHEAD_BYTENAME_D2
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_D3
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_H1
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_H2
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_H3

Item SOURCE_DATA_OVERHEAD_BYTENAME_B2

Item SOURCE_DATA_OVERHEAD_BYTENAME_K1
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_K2
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_D4
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_D5
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE

Item SOURCE_DATA_OVERHEAD_BYTENAME_D6
    Reset Overhead
    Set to 10101010
    Set to 11111111
    Default <number>
    EDIT BYTE
```

```
 Item SOURCE_DATA_OVERHEAD_BYTENAME_D7
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_OVERHEAD_BYTENAME_D8
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_OVERHEAD_BYTENAME_D9
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_OVERHEAD_BYTENAME_D10
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_OVERHEAD_BYTENAME_D11
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_OVERHEAD_BYTENAME_D12
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_OVERHEAD_BYTENAME_Z1
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_OVERHEAD_BYTENAME_Z2
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE

 Item SOURCE_DATA_OVERHEAD_BYTENAME_E2
     Reset Overhead
     Set to 10101010
     Set to 11111111
     Default <number>
     EDIT BYTE
==========================================
```

55.

```
----P_UTILITY_CALIBRATION_PARAM1----
Calibration Control ........   Ready
Calibration System .........   Jitter Measurement
    Calibration Routine .....  All
STATUS
    <var>                      <var>
    Rate                       Generator         Measurement
    STM-4 ...................  Not available     <var>
    STM-1 ...................  <var>             <var>
    STM-0 ...................  <var>             <var>
    140 Mb/s ................  <var>             <var>
    34 Mb/s .................  <var>             <var>
    8 Mb/s ..................  <var>             <var>
    2 Mb/s ..................  <var>             <var>



----------------------

 Item UTILITY_CALIBRATION_CONTROL ("Calibration Control ...")
     Run

 Item UTILITY_CALIBRATION_SYSTEM ("Calibration System ...")
     Jitter Measure
     Jitter Generation

 Item UTILITY_CALIBRATION_ROUTINE ("Calibration Routine ...")
     All
     STM-0
     STM-1
     STM-4
      -more- 1 of 3
     All
     STM-0
     STM-1
     STM-4
     All
     STM-0
     STM-1
     STM-4
      -more- 1 of 2
     2 Mb/s
     34 Mb/s
     45 Mb/s
     140 Mb/s
      -more- 2 of 3
     Analog Output
      -more- 2 of 2
     2 Mb/s
     34 Mb/s
     45 Mb/s
     140 Mb/s
      -more-
     140 Mb/s
     Analysis Type ................................. Test Type
.................................
     Allocation ................................... Include UAS
............................. Limit ..... APO Multiplier ..........................
     Section ES ...... SES ...... Path ES ...... SES ......
     Current Results Acceptable / Unacceptable / Degraded / Provisional / Pass / Fail
/ No Data Near End Far End RS
     MS HP LP
     G.826 G.826 / M.2100 / M.2101 SDH Allocation ..................................
<number>
```

```
     PDH Allocation ................................. <number> No / Yes Limit .....
<number>
     Near End Far End Near End Far End
     RS 45 MS HP LP
     140 34 8 2
     140 Mb/s
     Analog Output
      -more- 3 of 3
==========================================
```

56.

----P_UTILITY_DISK_UTILITY_PARAM1----

==========

57.

```
----P_UTILITY_INSTRUMENT_CONFIG_PARAM1----
Model:
Serial Number:           000000000
Hardware Revision:
Option Revision:

Firmware Revision:
Options:
  Interface Module:      < Not Installed >
  Tributary Option:      < Not Installed >
  Jitter Option:         < Not Installed >

Firmware Build Date:



----------------------
==============================================
```

58.

```
----P_UTILITY_MISC_SETTINGS_PARAM1----
Display Brightness .........   High
Beeper .....................   Off
 If ON, the beeper will sound when any error
 or alarm is detected in the received signal

Current Date ...............   DD-MMM-YY
Current Time ...............   HH:MM:SS

Front Panel Controls .......   Enabled

Menu Selection Knob
  Direction ................   Clockwise is Down
  Action at Top/Bottom .....   Wrap Around



----------------------

 Item UTILITY_MISC_SETTINGS_DISPLAY_BRIGHTNESS ("Display Brightness ...")
     Low
     Medium
     High

 Item SYSTEM_BEEP_CONTROL ("Beeper ...")
     On
     Off

 Item UTILITY_SYSTEM_DATE ("Current Date ...")
     SET DATE

 Item UTILITY_SYSTEM_TIME ("Current Time ...")
     SET TIME

 Item LOCAL_CONTROL_LOCKOUT ("Front Panel Controls ...")
     Enabled
     Locked when Test Running
     Locked

 Item UTILITY_KNOB_MODE_DIRECTION ("Direction ...")
     Clockwise Down
     Clockwise Up

 Item UTILITY_KNOB_MODE_BEHAVIOR ("Action at Top/Bottom ...")
     Wrap Around
     Stop
==============================================
```

```
59.

----P_UTILITY_PRINTER_SETUP_PARAM1----
Printer Type ..............   Tek DPU-411
                              (No graphical data)

RS-232:
 Baud Rate .................   1200
 Stop Bits .................   1
 Parity ....................   None
 Flow Control ..............   Hardware

Print User & Company .......   Off
 User Name .................
 Company Name ..............



----------------------

 Item HCOPY_DEVICE_LANGUAGE ("Printer Type ...")
     Tek DPU-411
     Epson
     Thinkjet
     ASCII Text
      -more- 1 of 2
     To Disk BMP Format
     To Disk Ileaf Format
     To Disk EPS Format
     To Disk ASCII Text
      -more- 2 of 2

 Item UTILITY_PRINTER_SETUP_SERIAL_BAUD ("Baud Rate ...")
     1200
     2400
     4800
     9600

 Item UTILITY_PRINTER_SETUP_SERIAL_STOP ("Stop Bits ...")
     1
     2

 Item UTILITY_PRINTER_SETUP_SERIAL_PARITY ("Parity ...")
     None
     Odd
     Even

 Item UTILITY_PRINTER_SETUP_SERIAL_HANDSHAKE ("Flow Control ...")
     None
     Software
     Hardware
     H/W & S/W

 Item UTILITY_PRINTER_SETUP_TITLE_CONTROL ("Print User & Company ...")
     Off
     On

 Item SYSTEM_OPERATOR ("User Name ...")
     EDIT TEXT

 Item SYSTEM_OWNER ("Company Name ...")
     EDIT TEXT
==========================================
```

```
60.

----P_UTILITY_REMOTE_CONTROL_PARAM1----
GPIB Primary Address .......

RS-232:
 Baud Rate .................   1200
 Stop Bits .................   1
 Parity ....................   None
 Hardware Handshake ........   Off
 Software Handshake ........   None
 Data Carrier Detect .......   Off
 Tx Delay (Seconds) ........   <nbr>
 Tx Terminator .............   LF




----------------------

 Item UTILITY_REMOTE_CONTROL_GPIB_ADDRESS ("GPIB Primary Address ...")
     Default 4
     Inc
     Dec
     Offline

 Item SYSTEM_SERIAL_BAUD ("Baud Rate ...")
     1200
     2400
     4800
     9600

 Item SYSTEM_SERIAL_STOP ("Stop Bits ...")
     1
     2

 Item SYSTEM_SERIAL_PARITY ("Parity ...")
     None
     Odd
     Even

 Item SYSTEM_SERIAL_CONTROL_RTS ("Hardware Handshake ...")
     Off
     On

 Item SYSTEM_SERIAL_PACE ("Software Handshake ...")
     None
     Xon/Xoff

 Item SYSTEM_SERIAL_DCD ("Data Carrier Detect ...")
     Off
     On

 Item SYSTEM_COMMUNICATE_SERIAL_TX_DELAY ("Tx Delay (Seconds) ...")
     0
     1
     5
     Inc
     Dec

 Item SYSTEM_SERIAL_TX_TERM ("Tx Terminator ...")
     LF
     CR
     CR/LF
     LF/CR
==========================================
```

61.

```
----P_UTILITY_SELF_TEST_PARAM1----
Self Test Control ..........   Ready
Self Test Group ............   Power up Self Test
    Self Test Routine .......  All
Self Test Loop control......   Once
View Results ...............   Last Test

PASSED
```

```
 Item UTILITY_SELF_TEST_CONTROL ("Self Test Control ...")
     Run
     Abort

 Item DIAG_SELECT_GROUP ("Self Test Group ...")
     Self Test
     SYS Int.
     SYS Ext.
      -more- 1 of 4 / of 3
     Protocol Bd
     Clock Bd
     O/E Mod.
     Tributary
      -more- 2
     CPU
     Display
     Front Panel
     Disk
      -more- 3
     Jitter
      -more- 4
     500Hz
     6.50kHz
     65.0kHz
     400kHz
     USER DEFINED
     1.00kHz
     25.0kHz
     250kHz
     5.00MHz
     20.0Hz
     2.40kHz
     18.0kHz
     100kHz
     20Hz
     400Hz
     3.0kHz
     400kHz
     100Hz
     1.00kHz
     10.0kHz
     800kHz
     200Hz
     500Hz
     10.0kHz
     3.50MHz
```

```
    10Hz
    2.30kHz
    60.0kHz
    400kHz
    Wideband
    Highband
    Fullband

Item DIAG_SELECT_ROUTINE ("Self Test Routine ...")
    All

Item DIAG_SELECT_ROUTINE_CPU ("Self Test Routine ...")
    All
    Interrupt
    I2C bus
    Clk/Cal
     -more- 1 of 2
    Floating Pt. Processor
    DUART
     -more- 2 of 2

Item DIAG_SELECT_ROUTINE_PROTOCOL ("Self Test Routine ...")
    All
    Misc Regs.
    SETI Regs.
    Proto Regs.
     -more- 1 of 4
    Flash Vpp
    Checksum
    ITX RAM
    IRX RAM
     -more- 2 of 4
    PRX RAM
    ADC
    Pwr Supply
    IRX Fifo
     -more- 3 of 4
    52 Loop
    155 Loop
    622 Loop
    VC4-4c
     -more- 4 of 4

Item DIAG_SELECT_ROUTINE_CLOCK ("Self Test Routine ...")
    All
    Int. Ref.
    Freq. Offs.

Item DIAG_SELECT_ROUTINE_OE ("Self Test Routine ...")
    All
    Status
    Ident.
    Access
     -more- 1 of 3
    Tx Opt Pwr
    Rx Level
    Int 52
    Ext 52
     -more- 2 of 3
    Int 155
    Ext 155
    Int 622
    Ext 622
     -more- 3 of 3

Item DIAG_SELECT_ROUTINE_DISPLAY ("Self Test Routine ...")
    All
```

```
    Video RAM
    Video DAC
    White Field
     -more- 1 of 3
    Grey Field
    White Box
    Test Grid
    Composite
     -more- 2 of 3
    Scroll
     -more- 3 of 3

Item DIAG_SELECT_ROUTINE_FPANEL ("Self Test Routine ...")
    All
    Internal
    LEDs
    Speaker
    Manual

Item DIAG_SELECT_ROUTINE_DISK ("Self Test Routine ...")
    Disk All
    Register
    Cache
    Counter
     -more- 1 of 2
    Controller
    Drive
    Fmt/Verify
    Dysan
     -more- 2 of 2

Item DIAG_SELECT_ROUTINE_TRIB ("Self Test Routine ...")
    All
    Flash Vpp
    Checksum
    Register Access
     -more- 1 of 4
    1 of 9 / 1 of 8
    DS1 Ring
    DS3 Ring
    DS1 Test Set
    DS3 Test Set
     -more- 2 of 4
    2Mbs (Balanced)
    2Mb Ring
    34Mb Ring
    45Mb Ring
     -more- 2 of 9 / 2 of 8
    DS1 Line Interface (Internal)
    DS3 Line Interface (Internal)
    DS1 Line Interface (External)
    DS3 Line Interface (External)
     -more- 3 of 4
    2Mb Test Set
    8Mb Test Set
    34Mb Test Set
    140Mb Test Set
     -more- 3 of 9 / 3 of 8
    VT1.5 Map Demap
    DS3 Map Demap
     -more- 4 of 4
    2Mb Line
    8Mb Line
    34Mb Line (Internal)
    140M Line (Internal)
     -more- 4 of 9 / 4 of 8
    2Mb Line (External)
```

```
    8Mb Line (External)
    34Mb Line (External)
    140M Line (External)
     -more- 5 of 9 / 5 of 8
    TU-12 Map/Demap
    TU-3(34) Map/Demap
    140 Map/Demap
     -more- 6 of 9 / 6 of 8
    TU-3(45) Map/Demap
    140 Map/Demap
     -more-
    Mux/Dmx  E1Chan
    Mux/Dmx  E2Chan
    Mux/Dmx  E3Chan
     -more- 7 of 9 / 7 of 8
    Mux/Dmx  E1Patt
    Mux/Dmx  E2Patt
    Mux/Dmx  E3Patt
     -more- 8 of 9 / 8 of 8
    45Mb Test Set
    45Mb Line
    45Mb Line (External)
     -more- 9 of 9

Item DIAG_SELECT_ROUTINE_JITTER ("Self Test Routine ...")
    All
    Register Access
    Flash Checksum
    FIFO
     -more- 1 of 6
    DAC Loop
    Divider    A
    Track. PLL
    Clk Rec. (E1)
     -more- 2 of 6
    Clk Rec. (E2)
    Clk Rec. (E3)
    Clk Rec. (M45)
    Clk Rec. (E4/STM1)
     -more- 3 of 6
    Clk Rec. (STM0)
    Clk Rec. (STM4)
    Phase Detector
    PLL Locking
     -more- 4 of 6
    PLL Gain
    Analog Output
    LP Filter
    Wander Loop
     -more- 5 of 6
    Jitter Loop
    Jitter Gen.
     -more- 6 of 6

Item DIAG_SELECT_ROUTINE_MFG_RV ("Self Test Routine ...")
    All

Item DIAG_SELECT_ROUTINE_MFG_RTC ("Self Test Routine ...")
    All

Item DIAG_LOOP ("Self Test Loop control...")
    Once
    Ten
    Thousand
    Until Error
    Forever
```

```
 Item UTILITY_SELF_TEST_RESULTS ("View Results ...")
     Print Log
     Save Log to Disk
     Error Log
     Page Up
     1 of 1 Page Down
==========================================
```