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JDSU 3000 Ethernet Testing

Introduction to the HST Keypad and Screen

Familiarize yourself with the HST 3000 and the Ethernet SIM/GUI before starting the tests outlined in this document. This section provides an overview of the HST Mainframe, the Ethernet SIM, and the Ethernet GUI. When necessary, additional details will be highlighted in the figures accompanying the procedures.

Fig. 1.1: HST 3000 Front Panel

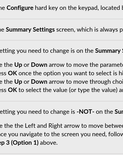
Fig. 1.1: HST 3000 Front Panel

Navigating the HST 3000 and Ethernet GUI

When using an HST 3000 equipped for Ethernet testing with version 6.00 or later software, a simplified user interface is used. The menu structure, tab layout, and setup screens are designed to enable quick and efficient configuration and testing. The sample in this document illustrate how to navigate the Ethernet GUI.

Navigate the Summary Results Screens

Fig. 2: Navigating the Summary Results Screens



Using the Arrow Keys, Keypad, and OK

Step 1) Press the soft key labeled **Display**, **Action**, **Results**, or **Restart**.

Step 2) Use the **Up** or **Down** arrows on the keypad to navigate the dropdown menu that appears.

Step 3) Press the **OK** key once the desired option is highlighted **-OR-** press the number on the keypad that corresponds to the option in the dropdown menu.

Using the Arrow Keys Only

Step 1) Use the **Right** and **Left** arrow keys to move between screens. The screen title appears in the upper-left corner of the display.

Navigate the Configuration Menu Screens

Fig. 3: Navigating the Configuration Menu Screens

Using the Arrow Keys, Keypad, and OK

Step 1) Press the **Configure** hard key on the keypad, located below the cancel **X** button.

Step 2) View the **Summary Settings** screen, which is always presented first.

Step 3) (Option 1) If the setting you need to change is on the **Summary Settings** screen:

1. Use the **Up** or **Down** arrow to move the parameter you intend to change.
2. Press **OK** once the option you want to select is highlighted.
3. Use the **Up** or **Down** arrow to move through choices for that parameter.
4. Press **OK** to select the value (or type the value) and then press OK.

Step 3) (Option 2) If the setting you need to change is **-NOT-** on the **Summary Settings** screen:

1. Use the the Left and Right arrow to move between various settings screens
2. Once you navigate to the screen you need, follow **Steps 3.1-3.4** listed in **Step 3 (Option 1)** above.

Using the Keypad Only

Step 1) Press the **Settings** soft key.

Step 2) Press the number on the keypad that corresponds to the settings screen you want to navigate to.

Step 3) On the new screen resulting from **Step 2**, press the number that corresponds to the parameter you intend to change.

Step 4) Use the number pad to select the value or the keypad to enter the necessary value(s).

Note on GUI navigation: parameters on the various settings screens will vary by **Tests**, **Encapsulation**, and other settings.

Configuring the HST 3000 for Layer 3 Ethernet Tests

The following procedure describes how to launch an Ethernet test using the HST 3000.

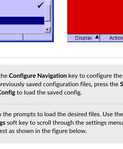
Launching an Ethernet Test

Step 1) On the **Main Menu**, select one of the following:

- **Electrical Ethernet** (launches a menu of test applications for testing 10/100/1000 Mbps electrical Ethernet)
- **Optical Ethernet** (launches a menu of test applications for testing 1000 Mbps optical Ethernet)

The HST will launch the test application and you will see the screen in the figure below. Connect to the network using R/T 1.

Fig. 4: Ethernet Test Applications



Step 2)

1. When the test screen appears (shown below), select **1 - Layer 3 Traffic**, press **OK**.
2. Select **4 - Layer 3 IP Traffic**.
3. Press **OK**

Fig. 5.1: Test Configuration

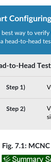


Fig. 5.2: Test Configuration Cont.

Step 3) Press the **Configure Navigation** key to configure the test settings **-OR-** if you have previously saved configuration files, press the **Save** soft key, then select **Load Config** to load the saved config.

Step 4) Follow the prompts to load the desired files. Use the **Right** arrow key or the **Settings** soft key to scroll through the settings menus and configure or update your test as shown in the figure below.

Fig. 6: Summary Settings Screen

--IMPORTANT--

Do **NOT** overload the circuit.

Check the bandwidth load before starting the test or you could DDoS the customer's circuit.

Note: the JDSU default load for any test is 1000 Mbps.

--IMPORTANT--

Start Configuring

The best way to verify that the equipment and the bandwidth are correct and working properly is to run a head-to-head test.

Head-to-Head Test Example (Wake Tech CC):

Step 1) Verify the load being tested is correct.

Step 2) Verify that the source and destination addressing is properly configured on both sides. The following examples show the correct set up.

Fig. 7.1: MCNC Location Device

Fig. 7.2: Customer Location Device

Step 3)

1. Press the **Home button** and select **Actions**.
2. Select **Start Traffic** (refer to Fig. 8 below)

Fig. 8: Start Traffic

Note: after selecting **Start Traffic** and the test starts, the background will turn from red to green.

Step 4) Once the test is complete, check the display by selecting **Display** for the desired parameter(s).

Refer to the figure below for an example (in practice, the background should be green, not red).

Fig. 9: Test Completed Display

END OF JDSU 3000 ETHERNET TESTING GUIDE