

Saving test results

Each DSL/IP test includes an **Upload/Save Result** tab to **Upload & Save** your test results using the existing in-band DSL or Ethernet connection made during the test; or you can **Save** your results to an internal memory file; or **Export** results to an HTML, MHTML, or XML report using a USB key.

To save, upload, or export results:

- Using the up/down arrow keys, select the parameters you want to edit and use the on-screen keyboard.
- Select Result File** to save your results to an existing **File Name** or **Upload & Save** your results via the following:
 - the existing in-band DSL or Ethernet connection made during the test
 - an out-band upload connection (Wi-Fi or Ethernet) if enabled and the test is stopped

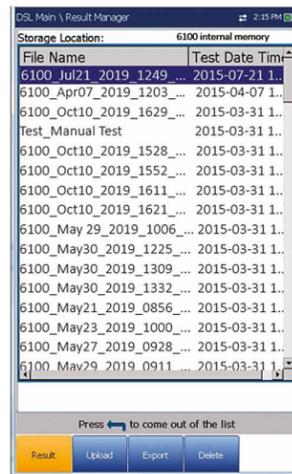
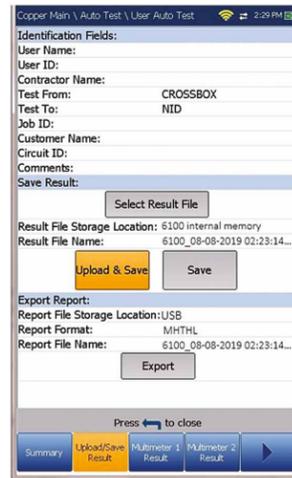
OR

- Select **Save** or **Export** buttons and press  to confirm your selection.

Managing saved test results

From the **DSL Main** pane, select **Result Manager** to do one of the following:

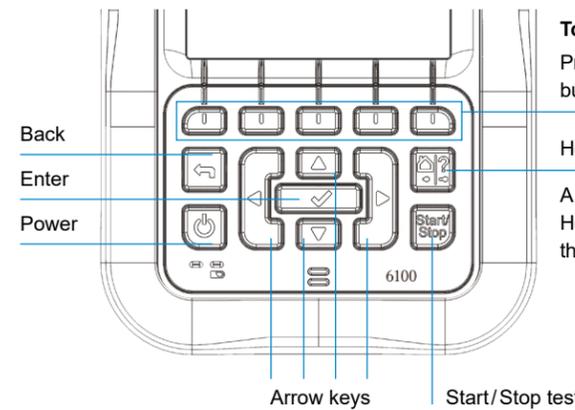
- Result tab** allows you to select a **File Name** and view the results from a list of files previously saved.
- Upload tab** allows you to upload the saved results to an FTP site or a USB. Here, you can also **Delete** selected XML files from the internal memory.
- Export tab** allows you to select a **File Name** or **All** files previously saved and export the results in the following **Report Format: HTML, MHTML or XML**.
- Delete tab** allows you to delete a selected File Name or All files saved in the 6100 internal memory only.



Working with the keypad

To access and modify on screen parameters:

Use the arrow keys to select an on-screen item then press .



To activate function buttons:

Press the key below the desired Function button

Home and Help key

A quick press and release acts as Home. Holding for 2 or more seconds activates the onboard help or screenshot capture

Note: Any reference to pushing buttons on the keypad can be replaced in most cases by clicking/tapping the touchscreen.

Charging the battery

Plug in the power adaptor (9 V, 1.66 A) and wait up to 6-8 hours to completely charge the battery or until the Battery Status displays 100%.

To view the battery status:

- From the **Home** pane, select **System Settings** and press .
- Select the **Battery Info** icon and press . **Battery Status** indicates the current power level for the battery, as a percentage.

Visit www.radiodetection.com

Radiodetection Ltd. (UK)

Western Drive, Bristol, BS14 0AF, UK Tel: +44 (0) 117 976 7776 rd.sales.uk@spx.com

Radiodetection (USA)

28 Tower Road, Raymond, Maine 04071, USA

Toll Free: +1 (877) 247 3797 Tel: +1 (207) 655 8525 rd.sales.us@spx.com

Follow us on:    

Copyright © 2020 Radiodetection Ltd. All rights reserved. Radiodetection is a subsidiary of SPX Corporation. Radiodetection and 6100 are trademarks of Radiodetection Ltd. Due to a policy of continued development, we reserve the right to alter or amend any published specification without notice. This document may not be copied, reproduced, transmitted, modified or used, in whole or in part, without the prior written consent of Radiodetection Ltd.

90/UG-6100-GFAST-ENG/01

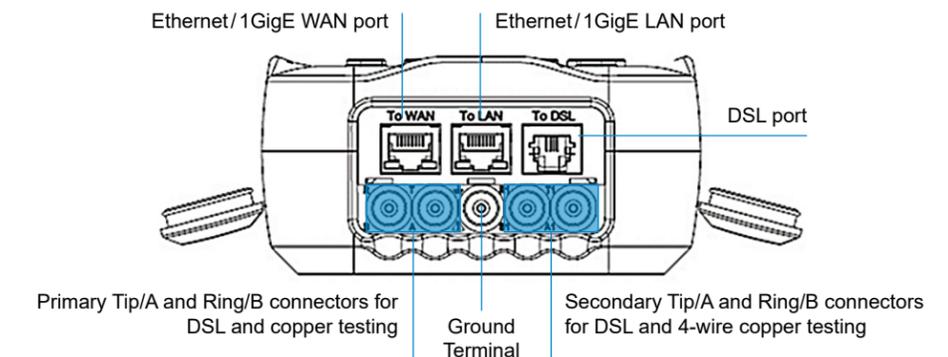
6100-Gfast

G.fast / VDSL / ADSL2+ Multi-play and Copper Test Set

User guide

Radiodetection's 6100-Gfast is the perfect tool for testing G.fast, VDSL2, and ADSL2+ broadband deployments up to 1 Gbit/s. The unit supports both GVXAA and GVXAB modems and can be used to install, troubleshoot and validate in-home multi-play services. Please see the 6100-Cu User Guide (document 90/UG-6100-CU-ENG/01) for information regarding Copper Tests.

Cable connections



DSL main menu

To access the Copper Main Menu:

- From Home, select DSL/IP Tests and press  to open the DSL Main menu page.
- Navigate to each icon using the up/down left/right arrow keys on the keypad.
- Press  to bring up the sub-menu of the selected icon.

- or **Auto, Manual Test** or **Ethernet Test**, the test will start and the screen control will navigate to the results summary page.

- Result Manager** opens the previously saved test files to view, **Upload, Export** and **Delete** results.

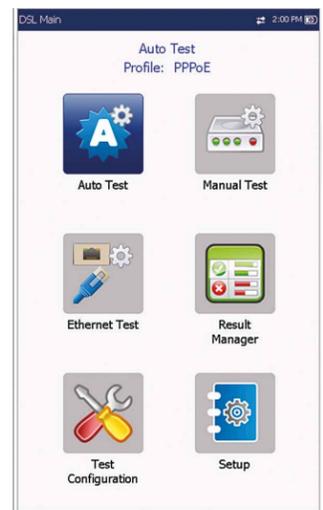
- Test Configuration** provides the utilities to setup test parameters.

- Setup** provides the means to configure the modem power schemes and preset the unit with specific DSL measurement values.

Note: **System Settings** can be found on the Home pane and allow you to set the parameters of the unit.

Note: Any reference to pushing buttons on the keypad can be replaced in most cases by clicking/tapping the touchscreen.

This guide is intended as a quick reference guide only. For detailed instructions, including the use of accessories, please refer to the 6100-Gfast Operation manual, which is available to download from www.radiodetection.com.



System settings

- **Display and Language** provides the setup for backlight, information on the title bar, language choice and **Touchscreen Calibration** button. The **Remote Display** tab allows you to connect the 6100-Gfast to your computer remotely.
- **Date and Time** also sets the date, time, their formats and time zone.
- **Battery Info** displays battery status and power schemes including **Power Save Mode**.
- **Software Options** lists all the **Configured Options** present on the unit.
- **Information** shows hardware/software/product information.
- **Upload Setup** allows you to enable in-band DSL FTP upload or select an Out-band Upload Method (Wi-Fi or Ethernet). Requires FTPUPLD option.



Wi-Fi test

The **Wi-Fi Test** activates a Wi-Fi scan, listing all available wireless networks with details for comparison. Details of the selected **Network Name** or SSID (service set Identifier), the name assigned to a wireless network, include the **Signal (RSSI)** strength which displays one of the following levels with the table cell shown in the corresponding color:

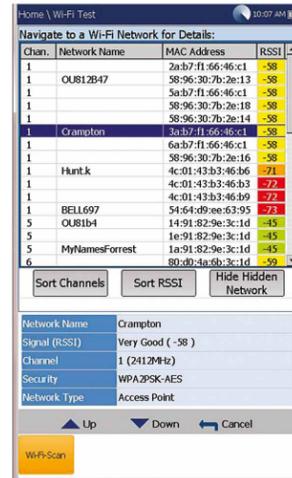
- No Signal (< -90/black)
- Very Low (-90 to -82/red)
- Low (-81 to -72/red)
- Good (-71 to -68/orange)
- Very Good (-67 to -58/yellow)
- Excellent (> -58/green).

Use the **Sort Channels/RSSI** buttons to toggle the values by ascending and descending.

Note: You can also sort the network names by clicking/tapping the column header on the touchscreen.

To navigate to a Wi-Fi network and view the details:

1. Press to get into the list.
2. Press the up/down arrow keys to select a network and view its details below.



Configuring tests

To setup an AutoTest, Manual Test or Ethernet Test:

1. From the **DSL Main** pane, select **Test Configuration** and press .
2. Select **Profile Details** and press .
3. Select the desired test setup and press .
4. You can configure the test parameters from the setup fields found on the following tabs: **Connection Setup, Thresholds, LAN Setup**.
5. From the **Select Tests** tab, Enable/Disable the optional sub-tests. When Access Mode is set to IPv6 (DHCP), Ping is the only test available.
6. Select the **Test Setup** tab to configure the following sub-tests (when highlighted): **VoIP Test, IPTV Test, Ping, FTP, HTTP, Throughput Test, Traceroute, Web Browser Test**.

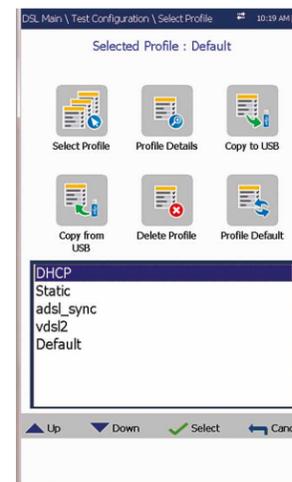
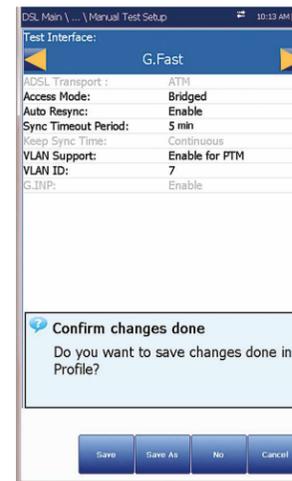
To change or create a new profile:

At power up, settings are read from the last loaded profile. If any changes are made to the parameter values, you can save them to an existing or new profile.

1. On any test setup screen, scroll through and set the options using the up/down and left/right arrow keys;
OR
Press on any value to open a list box of options.
2. Press from any setup screen to display the dialogue box asking you to confirm and save changes using the following buttons:
 - **Save** to current profile.
 - **Save as** displays a **New profile name** alphanumeric editor screen.
 - **No** does not save any changes to the profile, closes the dialogue box, and returns to **Profile Details** sub menu.
 - **Cancel** closes the dialogue box and returns to the setup screen.

To select a profile:

1. From the DSL Main pane, select Test Configuration and press .
2. Choose Select Profile and press . A list of available profiles is displayed in a list box.



Running tests

To run a test:

From the DSL Main pane, select the desired test icon and press . The test automatically runs. When in the desired test, you can also press the Start/Stop key to run the test.

Viewing Test Results

Once a test has run, the results obtained are displayed on the screen. Select the following tabs to view pass/fail status and results details:

- **Connection Summary** includes:

(for Auto and Manual Test) **Profile, Sync Time, Line Status, Operation Mode** and upstream/downstream SNR and Max Bitrate. You can select a new Profile from within the test results.

If unit has the Bonding option, data for pair 1 and pair 2 is displayed.

(for Ethernet) WAN/LAN Port Line Status/Link Speed/Connect Mode and Received/Transmitted Total Bytes/Packets/Ethernet Errors.

- **WAN Status** shows connection status of the wide area network. In **Manual Test**, you can also select which triple-play test you want to run or view.
- **LAN Status** shows connection status of the local area network.

- If the **VoIP Test** option is on the unit:

- **VoIP Call** allows you to place and receive VoIP calls, and displays **Call Information** such as the **VoIP Status**, number and Codec the call is connected to, duration and the pass/fail status of the test/call.

- **VoIP Summary** displays measurement details of the different parameters including **MOS, R-Factor, Latency, Jitter** and **Packets**.

- If the **IPTV Test** option is on the unit:

- **Join Leave** lists IPTV channels from the alias table and measured **Zap** time. **IPTV Summary** displays test results of the IPTV streams, Join/Leave, and Channel Analysis.

- **DSL Param Details** include **Downstream/Upstream** results for Data rates, **SNR, Attenuation, Capacity, Output Power, Latency, Interleave Delay/Depth, INP, Bitswap, Trellis, Phy-R** and **G.INP**.

- **DSL Statistics** include **DSL Counters**, transfer mode statistics including **KL0** and **EWL**, **Rate Adaptation**, and **Vector State** with **Performance Counters**.

- **Band Information** includes Down/Upstream results for **SNR Margin, Loop/Signal Attenuation, Output Power**, and **KL0**.

- **Loop Diagnostics** displays Down/Upstream SNR/ATTN (HLog)/QLN/ALN per Tone results in graphical format.

- **Data Tests Summary** displays results for Ping, Trace Route, FTP, and HTTP; and the enabled optional data tests including VoIP, IPTV, Throughput, and **Web Browser**.

When **IPv6 (DHCP)** is set as the **Access Mode** in **Connection Setup**, only **Ping Test** is displayed.

Throughput Test implements the **iPerf3** or **Ookla¹** tool for active measurements of the maximum achievable bandwidth on IP networks.

Note: *Ookla Privacy Policy:* <http://www.speedtest.net/privacy>.

You, the end user, understand and acknowledge, by performing the test contained in the Speedtest Powered Software Application, that Ookla, LLC may collect your IP address during the test and share it with selected third parties.

¹Ookla is a third party provider. The Ookla Speedtest Powered technology involves Ookla owned and/or controlled servers that may or may not be within your network. Ookla retains the right to aggregate test results and to monetize aggregated results as they see fit.

