Siretta

Enabling Industrial IoT

SNYPER-3G

Cellular Signal and Network Analyser

Quick Start Guide

Rev 1.6

SNYPER-3G Overview

What's in the Box?

As standard, the SNYPER-3G comes with the following:*

- SNYPER-3G signal and network analyser
- Multi region power supply
- Antenna
- Hard carrying case
- Quick start guide

*For replacement parts, please contact your Siretta representative or call us on +44 (0)118 976 9000

General Description

The SNYPER-3G is a high performance cellular signal and network analyser for the 2G / GPRS and 3G / UMTS networks.

The SNYPER-3G can perform a number of different functions to determine optimum antenna placement, performance of existing installations or choice of network operator. As an example, the SNYPER-3G can determine the strength of a particular network signal, or can review all available network signals in the area of use and rank these in order of received signal strength through its summary page.

The SNYPER-3G has been designed to be as logical and intuitive as possible, with a simple to use menu and operation system. Provided with a large high contrast LCD display, the SNYPER-3G ensures that all information is clearly visible, and allows for the presentation of considerable data at the same time.

All of these features combined make the SNYPER-3G one of the most powerful signal and network analysers available today, guaranteed to enhance your application.

Features

The SNYPER-3G has the following features:

- Measures and displays received network signal strength
- Summary view detailing of all networks in range
- Intuitive and powerful menu system
- Most recent survey analysis stored internally
- Large full colour portrait LCD screen
- Robust enclosure for rugged and continuous use
- Long life rechargeable battery gives up to 48 hours use on one charge
- Configurable ‘auto-off’ feature
- Supplied in a convenient hard carrying case with mains charger, antenna and quick start guide

SNYPER-3G Diagram

Figure 1. Front view of the SNYPER-3G

*The SNYPER-3G SIM slot located in the enclosure base is used for debugging and enhanced network services. It is not required for the standard SNYPER-3G functionality and can be ignored for normal operation.

Powering the SNYPER-3G

Power On

» The SNYPER-3G needs to be charged using the mains adaptor for at least 2 hours before use. The SNYPER-3G does **not** need a SIM card to perform network and signal tests.

» Ensure the antenna is screwed firmly into place on the SNYPER-3G and isn't loose.

» To power up the SNYPER-3G press the ON/OFF button. A welcome screen will be displayed briefly (as shown below in **figure 3**) before the main menu is displayed (as shown over page in **figure 5 'Main Menu screen'**.)

Figure 2. ON/OFF button

Figure 3. Power on message

Charging and Battery Status

Approximately 4 - 6 hours are needed to fully charge the unit using the default fast charging mode.

Figure 4. Charging and battery status

Charging and battery status bar:
During charging, the bar will increase and turn from red, to yellow, to green. The charge status LED will be red.

A full green bar indicates that the unit is fully charged.

During use, the bar will decrease and turn from green, to yellow, to red.

Recharging is recommended once the red bar is displayed on the SNYPER-3G battery status bar.

If the SNYPER-3G drops below allowable low battery usage the unit will switch off and charging will be required.

Main Menu

The SNYPER-3G main menu has 7 menus (as shown below in **figure 5**), these can be selected using the UP/DOWN buttons. Once the chosen menu is highlighted, click OK. Press the BACK button to return to the main menu.

Figure 5. 'Main Menu' screen

Saved Results: Reviews previously saved survey.

Survey: Used to perform a new survey.

Setup: Basic setups of the SNYPER-3G.

Options: User options for the SNYPER-3G.

About: Displays information about the SNYPER-3G.

PC Connect: Connects device to a PC as a memory stick to allow download of reports.

Power Off: Powers off the SNYPER-3G.

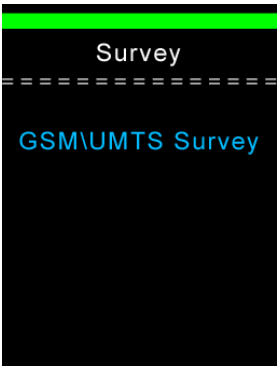
Survey Menu

Performing a Survey

Step 1. Select ‘Survey’ from the main menu and press OK.

Step 2. Select ‘GSM\UMTS Survey’ and press OK. The survey will begin.

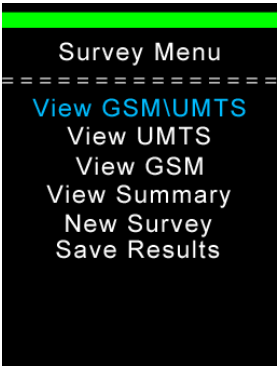
Figure 6. ‘Survey’ screen



GSM\UMTS Survey: Performs a survey for the GSM\UMTS network.

Step 2. Once the survey is complete, the screen will display a ‘Survey Menu’ as shown below. The ‘Survey Menu’ has 6 menus, these are selected using the UP/DOWN buttons. Once the chosen sub menu is highlighted, click OK.

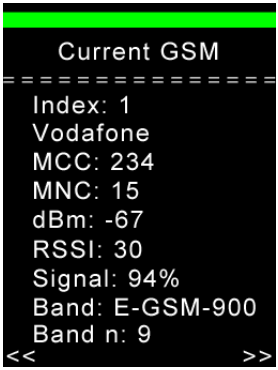
Figure 7. ‘Current Survey’ screen



Viewing Survey Results

Step 1. Select the results that you require to be displayed by highlighting ‘View GSM\ UMTS’, ‘View UMTS’ or ‘View GSM’, press OK. The SNYPER-3G will display all results with numbered cells from strongest to weakest. To switch between all signals found in the survey, use the LEFT/RIGHT buttons.

Figure 8. Displaying survey results



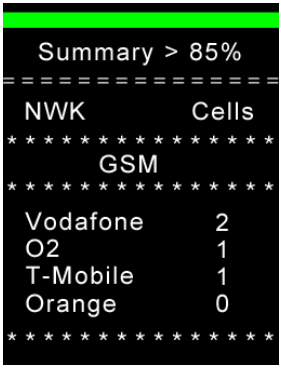
Press the back button to return to the ‘Current Survey’ menu.

Summary Menu

Highlight ‘Show Summary’ and press OK. The SNYPER will display the number of cells by each network in frequency bands. Use the LEFT/RIGHT buttons to switch between signal strengths received on the device.

NOTE - Two listings may be shown for one network operator. This listing is created by the MNC and is two different MNC’s both associated with the same network operator.

Figure 9. Displaying summary results



New Survey

Highlight ‘New Survey’ and press OK. The SNYPER will begin a new survey and all previous survey results will be lost.

Save Results

Highlight ‘Save Results’ and press OK to save results to the SNYPER-3G.*

Once the survey has been stored, the SNYPER-3G will return to the main menu.

NOTE - The SNYPER-3G can only store results from 1 survey. Therefore when saving a survey, the last saved survey will be overwritten.

*The SNYPER-3G doesn’t automatically save survey results, if you wish to save results from a survey follow the steps above. If you do not wish to save results from a survey, return to the main menu. Results which aren’t saved will be immediately lost.

Downloading Data

Step 1. To download data from the SNYPER-3G Spectrum, connect the USB cable supplied to the SNYPER-3G Spectrum and PC.

Step 2. From the SNYPER-3G Spectrum ‘Main Menu’ select ‘PC Connect’ and ‘Enable’. From the PC select ‘Open Folder to View Files’ and open saved files as required.

Figure 10. SNYPER-3G Spectrum data download set up

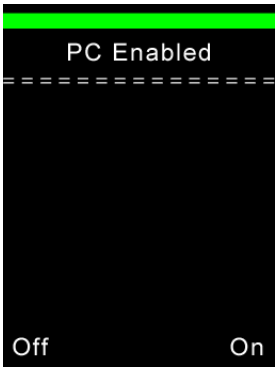
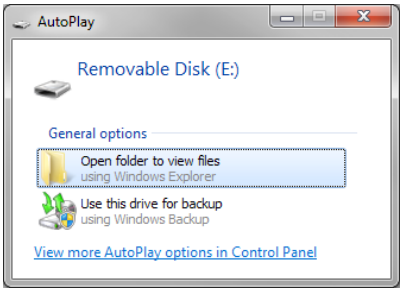


Figure 11. Downloading SNYPER-3G Spectrum data to PC



Power Off

After use, remember to power off the SNYPER-3G. The SNYPER-3G can be powered off in the following 2 ways:

» Selecting the 'Power Off' option from the main menu. The SNYPER-3G will display a power off message as shown below in **figure 13**.

Figure 12. Select 'Power Off'

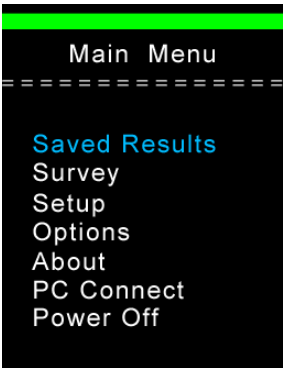
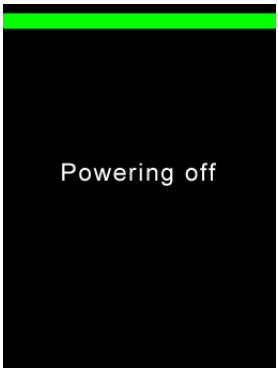


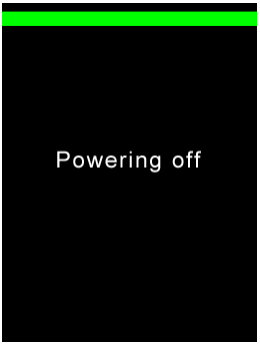
Figure 13. Power off message



» Press and hold the ON/OFF button on the SNYPER-3G for >2 seconds. The SNYPER-3G will display a power off message as shown below in **figure 15.**

Figure 14. ON/OFF button

Figure 15. Power off message



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