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Chapter 1 — Overview

1-1 Introduction

This document provides a brief overview of the Anritsu Tool Box™ and the Line Sweep Tools™ program. For detailed information about Line Sweep Tools, refer to the program Help.

1-2 Anritsu Tool Box with Line Sweep Tools

The Anritsu Tool Box is a central location to open an Anritsu measurement, visit the Anritsu web site, or launch an Anritsu application (Figure 1-1).

![Anritsu Tool Box](image)

**Figure 1-1.** Anritsu Tool Box
1-3 Why use Line Sweep Tools?

Line Sweep Tools is a program designed to increase productivity for people who work with dozens of Cable traces, Antenna traces, and Passive Intermodulation (PIM) traces every day. Line Sweep Tools will:

- Collect sweeps from Anritsu PIM and Line Sweep gear.
- Help verify that those sweeps are done properly and that the Cable, Antenna and PIM sweeps meet specifications.
- Help create reports of the findings quickly and to a professional standard.

Line Sweep Tools Features

The Line Sweep Tools user interface is familiar to users of Hand Held Software Tools, the current industry standard line sweep post-capture trace processing software. This leads to a short learning curve and easy trace collection, validation, and reporting.

Anritsu’s Line Sweep Tools program includes:

- Presets for markers and limit lines take hours off the report preparation time for a user with dozens of traces to verify.
- The Report Generator which makes generating PDF reports for multiple traces, with logos, quick and easy.
- Dual Trace viewing mode ensures compatibility with the E series line sweep instruments.
- A naming grid makes renaming files, titles, and subtitles much quicker and error free.
- Line Sweep Tools can open DAT or VNA files from a wide range of current and supported Anritsu hand-held instruments.
- Line Sweep Tools can open the PIM files generated by Passive Inter-Modulation measurements.
Chapter 2 — Installing the Software

2-1 System Requirements

- Microsoft® Windows® XP, Windows Vista® (32 or 64 Bit), or Windows 7 (32 or 64 Bit) Operating System
- 1.0 GB of RAM
- 100 MB of available hard disk space
- DVD Drive
- Microsoft .NET Framework 3.5 SP1 (included on installation disc)

2-2 Installation

Place the Installation DVD in your computer and follow the on-screen instructions (Figure 2-1).

Figure 2-1. Installing Anritsu Tool Box with Line Sweep Tools
2-3 Other Software  

Installing the Software

If the installer does not autostart, navigate to the DVD and run `install.bat` (Figure 2-2).

The installation will start. Follow the on-screen instructions. The software is also available for download from the Anritsu web site: [http://www.anritsu.com](http://www.anritsu.com).

2-3 Other Software

The Anritsu Tool Box may also link to the Anritsu Master Software Tools software and the Anritsu Map Master software. If this software had already been installed on your computer, the Tool Box will link to it. If not, clicking on the icons will bring you to the Anritsu web site, where you will be able to download the software free of charge.
Chapter 3 — Using Line Sweep Tools

3-1 Launching the Anritsu Tool Box

Open the Anritsu Tool Box by clicking on the shortcut icon on the desktop or from the Start | Programs | Anritsu folder. Once the Tool Box is open, move the mouse pointer over any of the application icons to view a short description of the application.

Figure 3-1. Anritsu Tool Box
Like its predecessor, Hand Held Software Tools (HHST), Line Sweep Tools is intuitive for most users. However, unlike HHST, Line Sweep Tools has the capability to work rapidly with a large number of traces.

Line Sweep Tools can open DAT files from HHST, or VNA/DAT files from Anritsu’s E-series instruments. It also can open PIM files. Either way, the file once opened, can be inspected and modified in many different ways. Line Sweep Tools saves files as a new type of DAT file, and can export traces as VNA, text, JPG, BMP, or PNG. Line Sweep Tools produces files that can be opened by HHST.
Using Line Sweep Tools 3-2 Markers and Limit Lines

3-2 Markers and Limit Lines

The easiest way to manage markers is to turn one on and use the mouse to drag it to the desired position. The marker toolbar is shown in Figure 3-3. Marker number 1 is On in the figure below. Markers can be set to an exact value by pressing the “e” button, which displays detailed marker controls, numeric value entry, peak find, and valley find.

![Figure 3-3. Limit Toolbar and Marker Toolbar](image)

The dark button on the left turns on the limit line. Once on, the limit line can be dragged to the desired place or put on an exact, y-axis value by entering a number.

**Marker Presets**

The fastest way to manage markers on multiple traces is to use the preset function. The marker and limit line preset toolbar allows users to quickly set all markers and the limit line to pre-defined values on similar traces (Figure 3-4).

![Figure 3-4. Preset Toolbar](image)

First, set the markers and limit lines on a trace to the desired values. Then, press the red “e” or edit button on the Preset toolbar. This puts the preset buttons into “learn” mode. Now, press a preset button (1 to 7). This programs the preset button where to put the markers and limit lines. Finally, press the red “e” button again to exit the learn mode.

The programmed button is now enabled. Line Sweep Tools can program up to 7 buttons with preset markers and limit line.

To use the preset, just press it and the markers and limit line will display at the programmed locations even when switching to a new trace. The two arrow keys make going to the next, or previous, trace simple. Using presets, a dozen similar traces can be reliably validated in seconds.
3-3 Renaming Grid

The renaming grid, much like the naming grid in the E series instruments, allows users to quickly and consistently rename filenames, trace titles, and trace subtitles. The grid can be set up with custom phrases to make the renaming process simpler.

To use the renaming grid:

1. Click on the left icon of the Renaming toolbar.
2. Select the filename, title, or subtitle box. Right-clicking on a box will allow you to change the text on the button.
3. Press buttons and type until the desired name is shown.
4. Press Remember Fields to copy the new name for later use.
5. On the toolbar, press the button that corresponds to the field to be renamed.
6. If desired, use the arrow keys on the Marker toolbar to go to the next trace.
3-4 Report Generator

To use the report generator in Line Sweep Tools, go to File menu and select Report Setup to tell Line Sweep Tools how you want the report to appear. In this case, the report will have the name of the contractor that did the work (Company field), the contractor logo, and will be generated in PDF format (Figure 3-6).

![Report Setup Tab](image)

**Figure 3-6.** Report Setup Tab
Once the report generator is set up, File > Generate Report, will create the PDF. The report will include all traces that were open at the time the report was made (Figure 3-7).