

# StealthWare Field Data Analysis Software



StealthWare Data Analysis Software provides cable network managers, engineers, technicians, and contractors the ultimate field data management tool for data and graph file archiving, analysis, and report generation. StealthWare quickly transfers all measurement data from field meters to a PC for analysis, reporting, printing or archiving. The data is stored in a database format, making it easy to find information by location, data, time, measurement type, or channel.

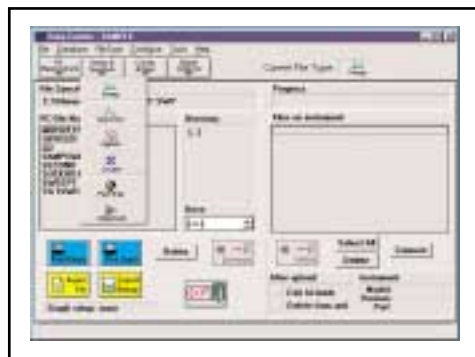
## Data Management System

Whether you are conducting Proof-of-Performance tests, system sweeping, or network troubleshooting, StealthWare will quickly transfer measured data from your field unit to your PC. Instrument set-up configurations, such as channel plans or test locations, can be created in StealthWare and downloaded to field instruments to maintain consistent measurement performance. Multiple data or graph files can be uploaded in StealthWare's Data Center. After files are uploaded to the PC, they may be viewed, validated, or printed by selecting the appropriate application in the StealthWare tool bar.

## Data Transfer and Print Functions

Automatically transfer stored measurement files in field test equipment, or in a StealthWare database. Time-consuming downloading, report exporting, and printing of individual results can

now be automated by intelligent time-saving selection features. The StealthWare Data Center application provides all the versatility you need for PC uploading, printing, and exporting files to other Windows™ applications. Within seconds, auto test data files can be uploaded or printed as a standard report or as a 24-hour test. Field measurement data files can also be selected individually or in groups for quick retrieval, viewing, and printing.



*StealthWare allows quick transfer of measurements from Acterna field meters to PC for archiving, evaluation, exporting, or printing.*

## Review Data and Generate Reports

The StealthWare Analysis Tool allows the user to review the collected data from the field instruments and generate reports. Data files may be viewed and printed in either a Table or Global format. Channel limits and Global lim-

- **Cable networks Field Data Management tool for:**
  - › Test documentation
  - › Analysis
  - › Report generation
- **Transfers Proof-of-Performance test, system sweeping, or network troubleshooting to PC for:**
  - › Evaluation
  - › Exporting
  - › Printing
- **Meter Configuration; Build Channel Plans/Limits and Test Locations and download to field meters**
- **Provides graphical views and table reports of cable network performance**
- **Compatible with Acterna field meters: MicroStealth, CLI, SAM, and SDA**

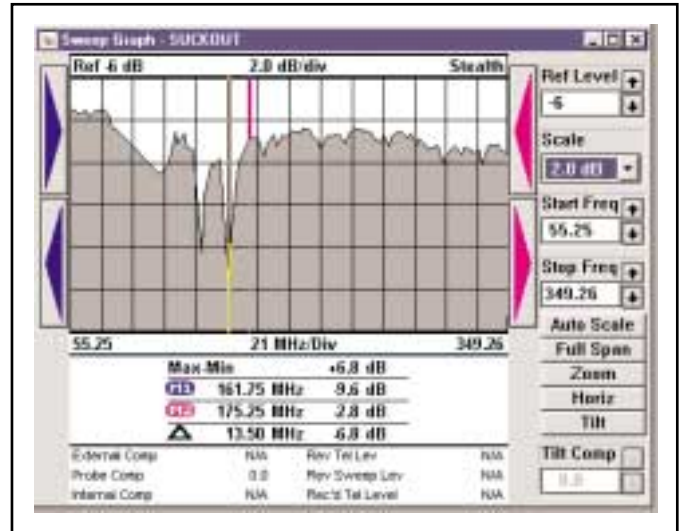
its (minimum video, Δ video/audio, Δ adjacent channel, etc.) may be applied to each format, with a color-coded alarm or warning indicator when a channel exceeds a specified limit. *Table View* displays the data in column format with channel frequency versus audio level and video level results. *Global View* provides a snapshot of the overall performance of the data set, flagging any channel sets that have exceeded a given limit.

**Acterna 24 Hour Test Report**

Date	Time	Channel	Video Level	Audio Level	Video Adj. Chan.	Audio Adj. Chan.	Video Adj. Chan. (dB)	Audio Adj. Chan. (dB)
11/11/11	00:00	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:05	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:10	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:15	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:20	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:25	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:30	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:35	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:40	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:45	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:50	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	00:55	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:00	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:05	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:10	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:15	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:20	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:25	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:30	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:35	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:40	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:45	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:50	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	01:55	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:00	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:05	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:10	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:15	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:20	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:25	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:30	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:35	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:40	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:45	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:50	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	02:55	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:00	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:05	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:10	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:15	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:20	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:25	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:30	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:35	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:40	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:45	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:50	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	03:55	100.00	45.0	45.0	0.0	0.0	0.0	0.0
11/11/11	04:00	100.00	45.0	45.0	0.0	0.0	0.0	0.0

*Performance Auto Test can be uploaded to StealthWare with pass/fail limits. The report generator can print one test or a series of comprehensive 24-hour reports that summarize data collected from up to four intervals.*

adjustable for tilt and horizontal marker position. A sweep graph overlay function allows comparison of multiple RF response variations over time. Previous sweep graphs can also be downloaded back into the SDA instrument for real-time comparison.



*Using the Graph Tool, graphs from Acterna field meters can be transferred from unit to StealthWare for quick system performance review, validation, or printing.*

A graph set-up feature permits the user to define specific graph parameters prior to uploading. Parameters such as marker position, reference level, scale, and start/stop frequency can be applied to all subsequently uploaded graphs. This feature allows supervisors and contractors of sweep technicians to ensure that sweep response reports are in a consistent format before submitting them for system acceptance.

**Global View**

Chan	Value	Units	Alarm	Warning	Warn Mark	Range	Units
1	45.0	dB				18.0	dB
2	45.0	dB				18.0	dB
3	45.0	dB				18.0	dB
4	0.0	dB				100.0	dB
5	0.0	dB				100.0	dB

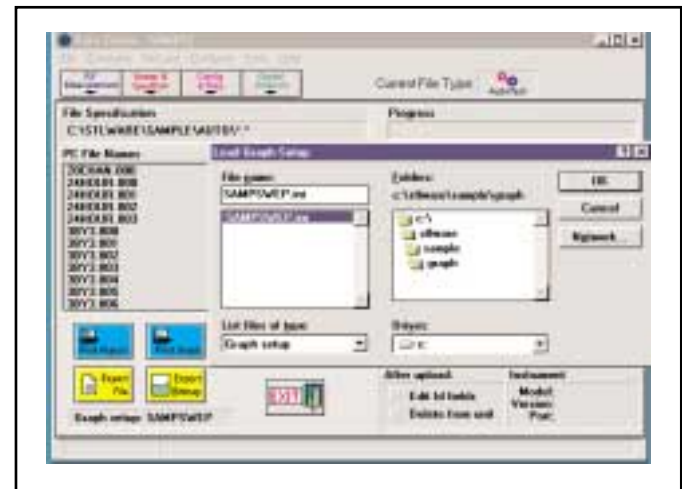
**Channel Specifications Dialog**

Parameter	Value	Alarm	Warning	Warn Mark	Range	Units
Video	45.0				18.0	dB
Audio	45.0				18.0	dB
Audio2	45.0				18.0	dB
CR	0.0				100.0	dB
Hum	0.0				100.0	dB
Mod	0.0				100.0	dB

*The global view gives a quick overview of data. The color of the cell indicates alarm status, and a letter displays which alarm was violated. Channel limits can be applied to all or selected channels.*

## Graph Tool

Graphical views of measurements from the SDA, MicroStealth, or CLI field meter can be transferred from unit to PC by utilizing StealthWare's Graph Tool feature. Graph selections include sweep, scan, and spectrum files from all SDA Sweep transmitters and receivers. MicroStealth and CLI graph selections are scan, 6-channel scan, tilt, and reverse ingress scan (sub-band option required in instrument). After the files have been uploaded, parameters such as reference level, scale, start/stop frequency, and marker position may be adjusted. SDA Sweep graphs are also

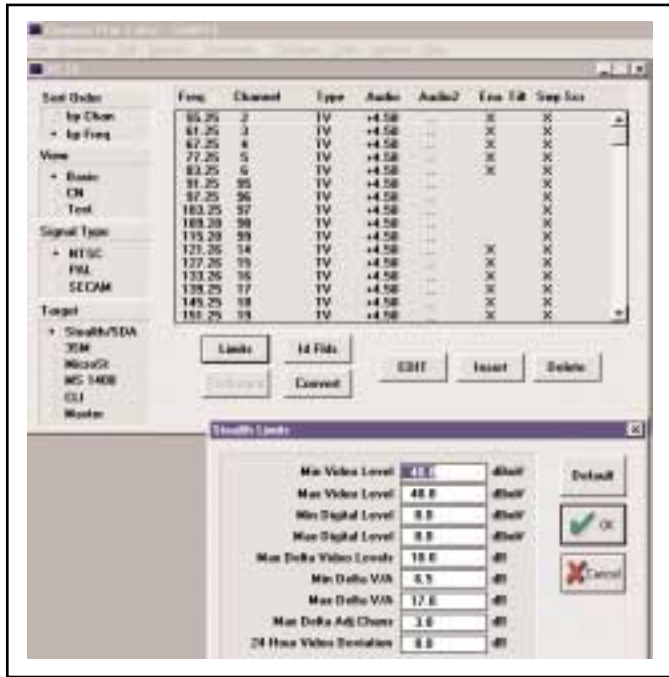


*After a graph set-up is selected in the Data Center, it is applied to all graphs that are viewed and printed until deactivated.*

## Build and Edit Channel Plans

The Channel Plan Editor allows users to view, modify, and create channel plans, then upload and download these plans to or from Acterna field meters. Channel plan limits can be edited and used to define the alarm and warning limits associated with monitoring operations.

Channel plans and limits files can be downloaded to field meters to guarantee measurement standard conformity from unit to unit, and also to provide a permanent master file in the event that an active plan is deleted from a technician's meter. This feature ensures consistent testing and eliminates room for human error during manual data entry.



**Build and edit channel plans for Acterna field meters in StealthWare then download to instruments. Define channel limits (including analog and digital) for NTSC/PAL/SECAM.**

All meter set-up parameters in the MicroStealth and CLI meters (including leakage) can be uploaded to the Data Center and stored in configuration files, then downloaded to the same or another meter to ensure correct and consistent meter configurations.

## QAM Measurement Files

With the ability to capture the QAM Summary MER/BER reading of the digital channel in StealthWare, users can more effectively monitor/manage digital services (which are more vulnerable than analog). QAM measurements can be stored and reviewed in StealthWare for troubleshooting, analysis, and network documentation. Exporting the Constellation display file to StealthWare enables visual analysis of pattern recognition for the QAM measurement. Because digital carriers receive so much corruption from ingress, error corruption capabilities do not work. With the "QAM Ingress" file, the StealthWare user can review the interference underneath the digital carrier to assist in troubleshooting.

## Special Features

### Data Center

- Saves time at database management
- Automates frequent file management tasks
- Move files between PC and field instrument
- Export data to other data formats
- Quick application access of field meter test data



### Analysis Tool:

- Saves time with automatic error (fault) search
- Data files can be viewed and printed
- Add data limits for trend analysis and overall system performance
- Customize auto test capabilities on individual channels or plans



### Graph Tool:

- Clearer reports with real graphical instrument screens
- Data can be uploaded from field instruments to graphs for storing, viewing, or printing
- View and manipulate graphed data on the screen



### Channel Plans:

- Ensures duplication—all technicians are using the same channel plan and instrument set-up
- Can be created and edited on the PC and downloaded to the field instrument



### Locations Editor:

- Prepares technicians for their daily work
- Eliminates confusion—test locations can be pre-stored via the PC instead of the instrument's keyboard.
- Used with auto test to build test point locations (ex: amp id, rev pad, fwd equalizer) and generate auto test reports



StealthWare Features	SDA QAM	SDA Series	SSA-1000	SAM 4040D	CLI-1750	CLI-1450	MS1400	MS1300	MS1200
Channel Plans	•	•	•	•	•	•	•	•	•
Auto Test Files/Report	•	•	•	•	•	•	•	•	•
Location Files	•	•	•	•	•	•	•	•	•
Scan Graph	•	•	•	•	•	•	•	•	•
Sweep Graph	•	•	•	•	•				
"Fast Sweep" Graph	•	•							
"Loopback Sweep" Graph	•	•							
Spectrum Graph	•	•	•	•					
Auto/Sweep Report	•	•	•	•					
Reverse Alignment Graph	•	•							
PathTrak "Field View"	•	•	•	•					
QAM Ingress	•								
QAM Constellation Files	•								
QAM Summary	•								
6 Channel Graphs					•	•	•	•	
Tilt Scan Graphs	•	•			•	•	•	•	
Installation Tests Graph					•	•	•	•	
Ingress Graph					•	•	•		
Configuration Files					•	•	•	•	
Locate Graph					•				

## Specifications

### STEALTH INSTRUMENT REQUIREMENTS

StealthWare is compatible with the MS1200\*, MS1300, and MS1400 meters, CLI-1450/1750, SAM® 4040D and SDA Stealth 3ST, 3SRT, 3SR, 3SRV, and SSA1000.

StealthWare requires Stealth firmware version 3.0 or higher to operate. For more information on firmware upgrades, see our website at [www.acterna.com/products/cable\\_network/cable\\_index.html](http://www.acterna.com/products/cable_network/cable_index.html)

\*only compatible with channel plans

### PERSONAL COMPUTER REQUIREMENTS

StealthWare requires a MS-DOS™ compatible 16 MHz 386 computer (486 recommended) with VGA display, mouse, hard drive, 4Mb RAM (8 Mb recommended), MS-DOS 6.0 or higher, and Windows 3.1 or higher.

## Ordering Information

### StealthWare

1010-00-0340

StealthWare includes the program CD, operators manual, and RS232 cables for the SDA, MicroStealth, and CLI instruments.

**Note:** Specifications, terms, and conditions are subject to change without notice.

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