



RADAN[®] for StructureScan Mini Manual

MN70-616 Rev G

Geophysical Survey Systems, Inc.

40 Simon Street • Nashua, NH 03060-3075 USA • www.geophysical.com



Limited Warranty, Limitations of Liability and Restrictions

Geophysical Survey Systems, Inc. hereinafter referred to as GSSI, warrants that for a period of 24 months from the delivery date to the original purchaser this product will be free from defects in materials and workmanship. EXCEPT FOR THE FOREGOING LIMITED WARRANTY, GSSI DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. GSSI's obligation is limited to repairing or replacing parts or equipment which are returned to GSSI, transportation and insurance pre-paid, without alteration or further damage, and which in GSSI's judgment, were defective or became defective during normal use.

GSSI ASSUMES NO LIABILITY FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR INJURIES CAUSED BY PROPER OR IMPROPER OPERATION OF ITS EQUIPMENT, WHETHER OR NOT DEFECTIVE.

Before returning any equipment to GSSI, a Return Material Authorization (RMA) number must be obtained. Please call the GSSI Customer Service Manager who will assign an RMA number. Be sure to have the serial number of the unit available.

Copyright © 2010-2017 Geophysical Survey Systems, Inc.
All rights reserved
including the right of reproduction
in whole or in part in any form

Published by Geophysical Survey Systems, Inc.
40 Simon Street
Nashua, New Hampshire 03060-3075 USA

Printed in the United States

SIR, RADAN and UtilityScan are registered trademarks of Geophysical Survey Systems, Inc.

Limited Use License Agreement

You should carefully read the following terms and conditions before opening this package. By opening this package you are agreeing to become bound by the terms of this agreement and indicating your acceptance of these terms and conditions. If you do not agree with them, you should return the package unopened to Geophysical Survey Systems, Inc.

Geophysical Survey Systems, Inc. (GSSI), an OYO Corporation, provides the computer software ("RADAN for StructureScan Mini") contained on the medium in this package, and licenses its use. You assume full responsibility for the selection of RADAN for StructureScan Mini to achieve your intended results and for the installation, use and results obtained from the Program.

LICENSE

- a) In consideration of the payment of a license fee, you are granted a personal, non-transferable license to use RADAN for StructureScan Mini under the terms stated in this Agreement. You own the USB or other physical media on which RADAN for StructureScan Mini is provided under this Agreement, but all title and ownership of RADAN for StructureScan Mini and enclosed related documentation ("Documentation"), and all other rights not expressly granted to you under this Agreement, remain in Geophysical Survey Systems, Inc.;
- b) RADAN for StructureScan Mini must be used by you only on a single computer;
- c) You and your employees and agents are required to protect the confidentiality of RADAN for StructureScan Mini. You may not distribute or otherwise make RADAN for StructureScan Mini or Documentation available to any third party;
- d) You may not copy or reproduce RADAN for StructureScan Mini or Documentation for any purpose except you may make one (1) copy of RADAN for StructureScan Mini if RADAN for StructureScan Mini is not copy-protected, in machine readable or printed form for backup purposes only in support of your use of RADAN for StructureScan Mini on a single computer. You must reproduce and include the Geophysical Survey Systems, Inc. copyright notice on the Backup copy of RADAN for StructureScan Mini;
- e) Any portion of RADAN for StructureScan Mini merged into or used in conjunction with another program will continue to be the property of GSSI and subject to the terms and conditions of this Agreement. You must reproduce and include the copyright notice on any portion merged into or used in conjunction with another program;
- f) You may not sublease, assign, or otherwise transfer RADAN for StructureScan Mini or this license to any other person without the prior written consent of GSSI. Any authorized transferee of RADAN for StructureScan Mini will be bound by the terms and conditions of this Agreement; and
- g) You acknowledge that you are receiving only a Limited License to use RADAN for StructureScan Mini and Documentation and GSSI retains title to RADAN for StructureScan Mini and Documentation.

You acknowledge that GSSI has a valuable proprietary interest in RADAN for StructureScan Mini and Documentation.

You may not use, copy, modify, or transfer RADAN for StructureScan Mini or Documentation, or any copy, modification, or merged portion, in whole or in part, except as expressly provided for this Agreement.

If you transfer possession of any copy, modification, or merged portion of RADAN for StructureScan Mini or Documentation to another party, your license is automatically terminated.

TERM

The license granted to you is effective until terminated. You may terminate it at any time by returning RADAN for StructureScan Mini and Documentation to GSSI together with all copies, modifications, and merged portions in any form. The license will also terminate upon conditions set forth elsewhere in this Agreement or if you fail to comply with any term or condition of this Agreement. You agree upon such termination to return RADAN for StructureScan Mini and Documentation to GSSI together with all copies, modifications, and merged portions in any form. Upon termination, GSSI can also enforce any rights provided by law. The provisions of this Agreement which protect the proprietary rights of GSSI will continue in force after termination.

LIMITED WARRANTY

GSSI warrants as the sole warranty provided to you that the USB on which RADAN for StructureScan Mini is furnished will be free from defects in materials and workmanship under normal use and conditions for a period of ninety (90) days from the date of delivery to you as evidenced by a copy of your receipt. No distributor, dealer, or any other entity or person is authorized to expand or alter either this warranty or this Agreement; any such representation will not bind GSSI.

GSSI does not warrant that the functions contained in RADAN for StructureScan Mini will meet your requirements or that the operation of RADAN for StructureScan Mini will be uninterrupted or error-free.

Except as stated above in this section, RADAN for StructureScan Mini and Documentation are provided "as is" without warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. You assume the entire risk as to the quality and performance of the program and documentation. Should the program prove defective, you (and not GSSI or any authorized GSSI distributor or dealer) assume the entire cost of all necessary servicing, repair, or correction.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

LIMITATION OF REMEDIES

GSSI's entire liability and your exclusive remedy will be:

- a) The replacement of any USB not meeting GSSI's "Limited Warranty" explained above and which is returned to GSSI with a copy of your receipt; or
- b) If GSSI is unable to deliver a replacement USB which conforms to the warranty provided under this Agreement, you may terminate this Agreement by returning RADAN for StructureScan Mini and Documentation to GSSI and your license fee will be refunded.

IMPORTANT: If you must ship RADAN for StructureScan Mini and Documentation to GSSI, you must prepay shipping and either insure RADAN for StructureScan Mini and Documentation or assume all risk of loss or damage in transit. To replace a defective USB during the ninety (90) day warranty period, if you are returning the medium to GSSI, please send us your name and address, the defective medium and a copy of your receipt at the address provided below.

In no event will GSSI be liable to you for any damages, direct, indirect, incidental, or consequential, including damages for any lost profits, lost savings, or other incidental or consequential damages, arising out of the use or inability to use RADAN for StructureScan Mini and Documentation, even if GSSI has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the limitation or exclusion of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. In no event will GSSI's liability for damages to you or any other person ever exceed the amount of the license fee paid by you to use RADAN for StructureScan Mini, regardless of the form of the claim.

U.S. GOVERNMENT RESTRICTED RIGHTS

RADAN for StructureScan Mini and Documentation are provided with restricted rights. Use, duplications, or disclosure by the U.S. Government is subject to restrictions as set forth in subdivision (b)(3)(ii) of the Rights in Technical Data and Computer Software clause at 252.277-7013. Contract/manufacture is Geophysical Survey Systems, Inc., 40 Simon Street, Nashua, New Hampshire 03060-3075.

GENERAL

This Agreement is governed by the laws of the State of New Hampshire (except federal law governs copyrights and registered trademarks). If any provision of this Agreement is deemed invalid by any court having jurisdiction, that particular provision will be deemed deleted and will not affect the validity of any other provision of this Agreement.

Should you have any questions concerning this Agreement, you may contact GSSI by writing Geophysical Survey Systems, 40 Simon Street, Nashua, New Hampshire 03060-3075 U.S.A.

You acknowledge that you have read this agreement, understand it and agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the Agreement between you and GSSI which supersedes any proposal or prior Agreement, oral or written, and any other communications between us relating to the subject matter of this Agreement.

Table of Contents

Chapter 1: Getting Started.....	1
System Requirements	1
GSSI Activation Policies	1
General Description	2
How to Use This Manual.....	2
Installing RADAN for StructureScan Mini	3
Installation Instructions	3
Activating/Validating the RADAN for StructureScan Mini Software	4
Activating the Software	4
Validating the Software	4
Updating the Software	5
Chapter 2: Using RADAN for StructureScan Mini	5
Setting Up Your Laptop/PC and Data Transfer.....	7
Transferring the Files	7
Launching and Navigating the Software	8
Launching the Software	8
Navigating Through the Main Screen	9
Viewing and Processing the Data	9
Preparing the Software.....	9
Opening a File	11
Processing the Data.....	12
Initial Process (automatically done by the software).....	12
Ribbon Options.....	13
Home Ribbon Options	13
Processing Options	13
3D Volume Options Ribbon	19

Chapter 1: Getting Started

Thank you for purchasing RADAN for StructureScan Mini™. The packing list included with your shipment lists all of the items in your order. The RADAN for StructureScan Mini program and example files are stored on a single USB flash drive. While the RADAN for StructureScan Mini program is pre-loaded on a standard USB drive, GSSI recommends that you not delete the USB drive after installing, in the event that you need to reinstall in the future.

System Requirements

- A Core i3 or better processor (2.0 GHz or greater recommended).
- GSSI will only support RADAN StructureScan Mini running on Windows Vista SP2, Windows 7 or Windows 8.

Note: While some laptops or desktops will say Vista ready, a Windows Vista Business Edition requires a minimum 1 GHz 32- or 64-bit processor; 1 GB of RAM; 128 MB of graphics memory, and 32 bits per pixel; 40 GB hard drive with 15 GB free space; DVD-ROM drive; audio output capability, and the ability to access the Internet.

- 2 GB of RAM minimum (3 GB or greater recommended).
- 160 GB hard drive with a minimum of 20 GB available space.
- 128 MB graphics chipset with OpenGL drivers (Note: We only support NVidia and Intel graphics chipsets.)

GSSI Activation Policies

Your RADAN for StructureScan Mini license includes one license for installation on one computer.



General Description

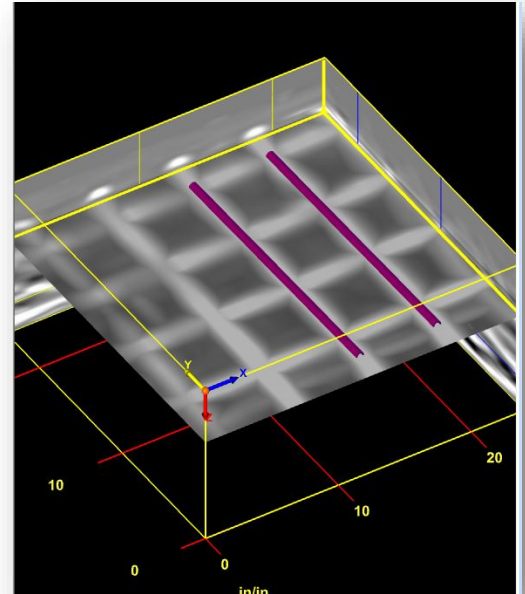
RADAN for StructureScan Mini software is designed to process, view, and document data collected with the StructureScan Mini.

RADAN for StructureScan Mini module can perform the following functions:

- Process data using Focus (Migration), Background Removal, and Gain Adjustment.
- Display 3D images and provide X, Y, and Z coordinates.
- Change colors to optimize images for documentation purposes.
- Export information to MS Excel for reports.
- Export a 3D image as a JPG file.
- Export target information to a CSV formatted file.

Included with RADAN for StructureScan Mini is RADAN Reader, which allows you to:

- View already processed 2D data as profiles and 3D data as depth slices.
- Modify the color table, color transform, and display gain.
- Show targets or picks added in one of the other displays.
- Save displayed data as .jpg images.




How to Use This Manual

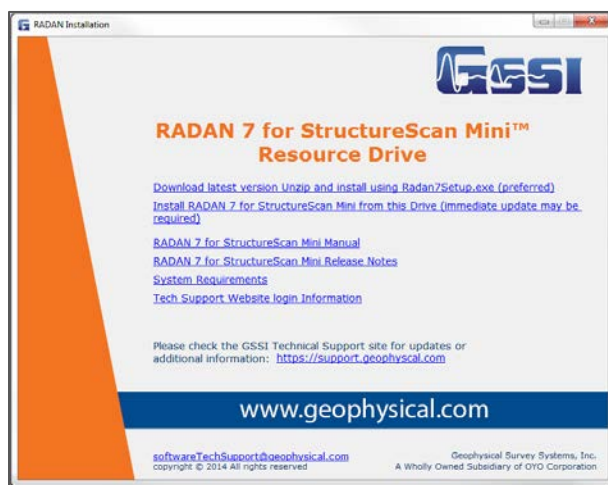
This manual is designed for both experienced and novice users of RADAN for StructureScan Mini.

We recommend that all users read the entire manual.

Installing RADAN for StructureScan Mini

It is highly recommended that you are connected to the internet when installing the software so that activation can take place and the program can check for any updates. If you are not, you will need to contact GSSI for other installation instructions.

- 1** Insert the RADAN for StructureScan Mini Installation USB drive into your computer's USB port.
- 2** The installation program should start automatically. Follow instructions on screen. If the program did not start automatically, skip to step 5.
- 3** Using Windows Explorer, double-click the drive letter that contains the RADAN for StructureScan Mini USB drive.
- 4** Find the RADAN Mini Start Icon and double-click it. 
- 5** Follow on-screen instructions:
 - **Install RADAN for StructureScan Mini:** Select this option to install the software onto your computer.
 - **Technical Support Web Site Info:** This will open a PDF file and has excellent information about our support web site and how to use this site. **It is highly recommended that you open, save and print this file.**



Installation Instructions

Click Install, Accept, Next, OK or Finish through all the screens.

Important Note: Depending upon the age of your computer, your operating system (Windows XP, Windows Vista, Windows 7, or Windows 8), and the age of your operating system, you may get other screens asking you to install other software. You should accept these, or if you have questions, contact your IT person or GSSI.

Activating/Validating the RADAN for StructureScan Mini Software

Activating the Software

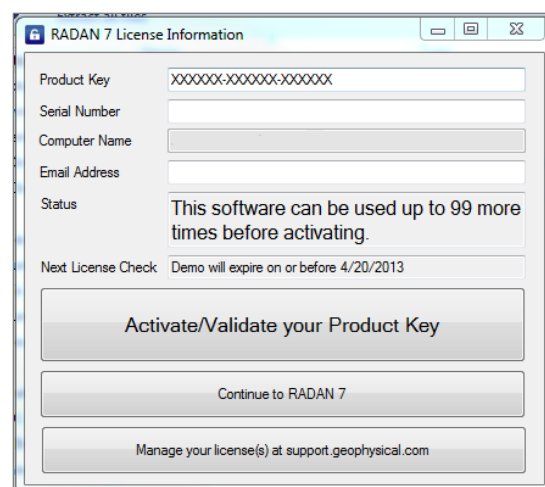
After installing the software, RADAN for StructureScan Mini will automatically start.

The first time you run the software, you will be asked to activate it. You MUST be connected to the internet to activate the software.

- 1 From the label located on the inside cover of the USB drive case, input the Product Key and the Serial Number into the appropriate fields.
- 2 The Computer Name is pre-filled by GSSI (this is the name of your computer from your computer system).
- 3 Enter a valid email address.
- 4 Click Activate/Validate your Product Key.

Note: If you choose not to activate your software at this time, the above screen will appear at the launching of the software until you activate the software.

Note: After activating the software, you do NOT have to be connected to the internet to run the software.



RADAN 7 License Information

Product Key: XXXXXX-XXXXXX-XXXXXX

Serial Number:

Computer Name:

Email Address:

Status: This software can be used up to 99 more times before activating.

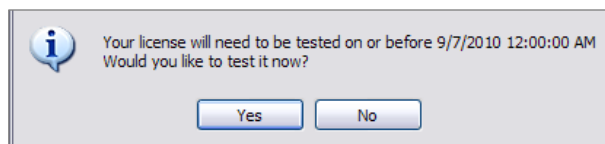
Next License Check: Demo will expire on or before 4/20/2013

Buttons: Activate/Validate your Product Key, Continue to RADAN 7, Manage your license(s) at support.geophysical.com

Validating the Software

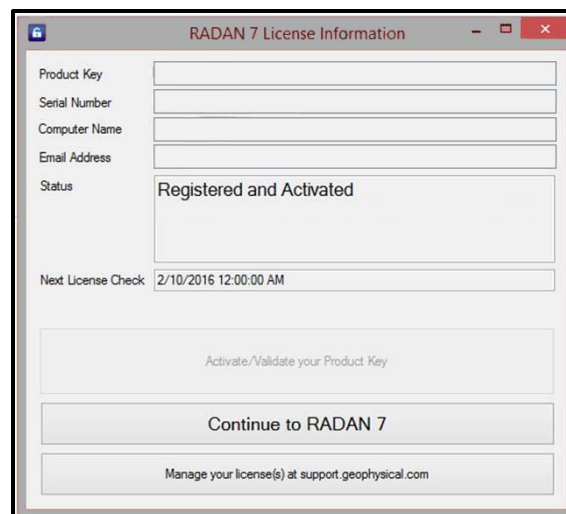
At times, upon launching RADAN for StructureScan Mini, you will be asked to test the license. Click Yes and a pre-populated screen will appear. Simply click Continue with RADAN Mini.

Note: You will need to be connected to the internet to complete this process.



Your license will need to be tested on or before 9/7/2010 12:00:00 AM
Would you like to test it now?

Buttons: Yes, No



RADAN 7 License Information

Product Key:

Serial Number:

Computer Name:

Email Address:

Status: Registered and Activated

Next License Check: 2/10/2016 12:00:00 AM

Buttons: Activate/Validate your Product Key, Continue to RADAN 7, Manage your license(s) at support.geophysical.com

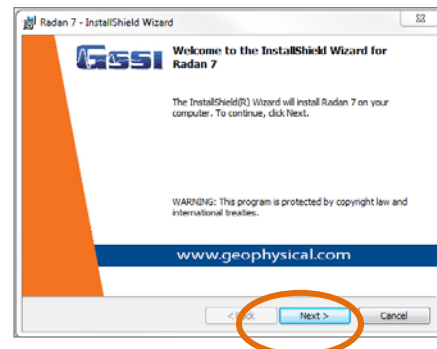
Updating the Software

GSSI can automatically update the software if there is one available. Upon launching RADAN for StructureScan Mini AND if you are connected to the internet, you will be asked if you would like to load the update.

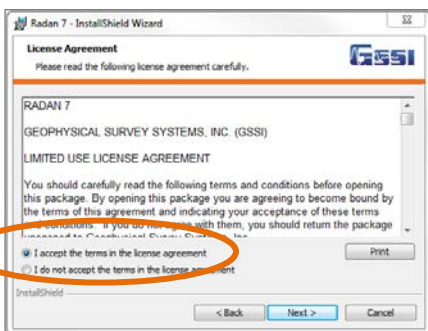
- Click Download and Install the latest update if you wish to update your software at this time.
- Click I will update later to update the software at a later date.



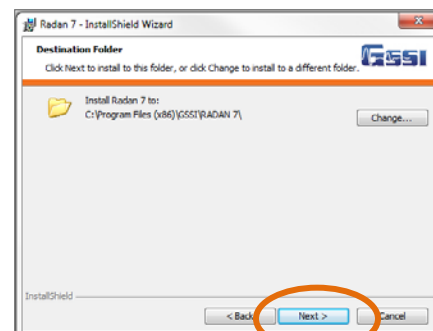
1



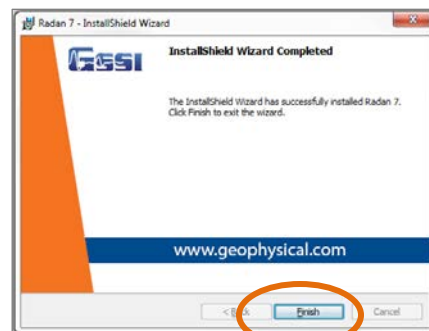
2



3



4



5

Chapter 2: Using RADAN for StructureScan Mini

Setting up Your Laptop/PC and Data Transfer

Create folders on your PC/Laptop. A different folder should be created for each of your projects. To create a new folder, right-click on your Windows Desktop and select New > Folder. Give the folder a unique name. However, if you are comfortable with PCs and Windows, you can organize your folders however you wish.

Transferring the Files

Copy the files you wish to view and/or process from the StructureScan Mini to the PC/Laptop.

- If you used the card to save data from the Mini, you may remove the card and insert the card into a card reader in your PC/Laptop. If you do not have a card reader, you will need to purchase one that will read the card. These are commonly available from any technology store.
- If you did not use the card while collecting the data on your Mini, you may use ActiveSync from the Microsoft web site. This is free to download from www.microsoft.com.

Regardless of the way you saved the data, you will need to copy the files from the StructureScan Mini to the folder you created previously.

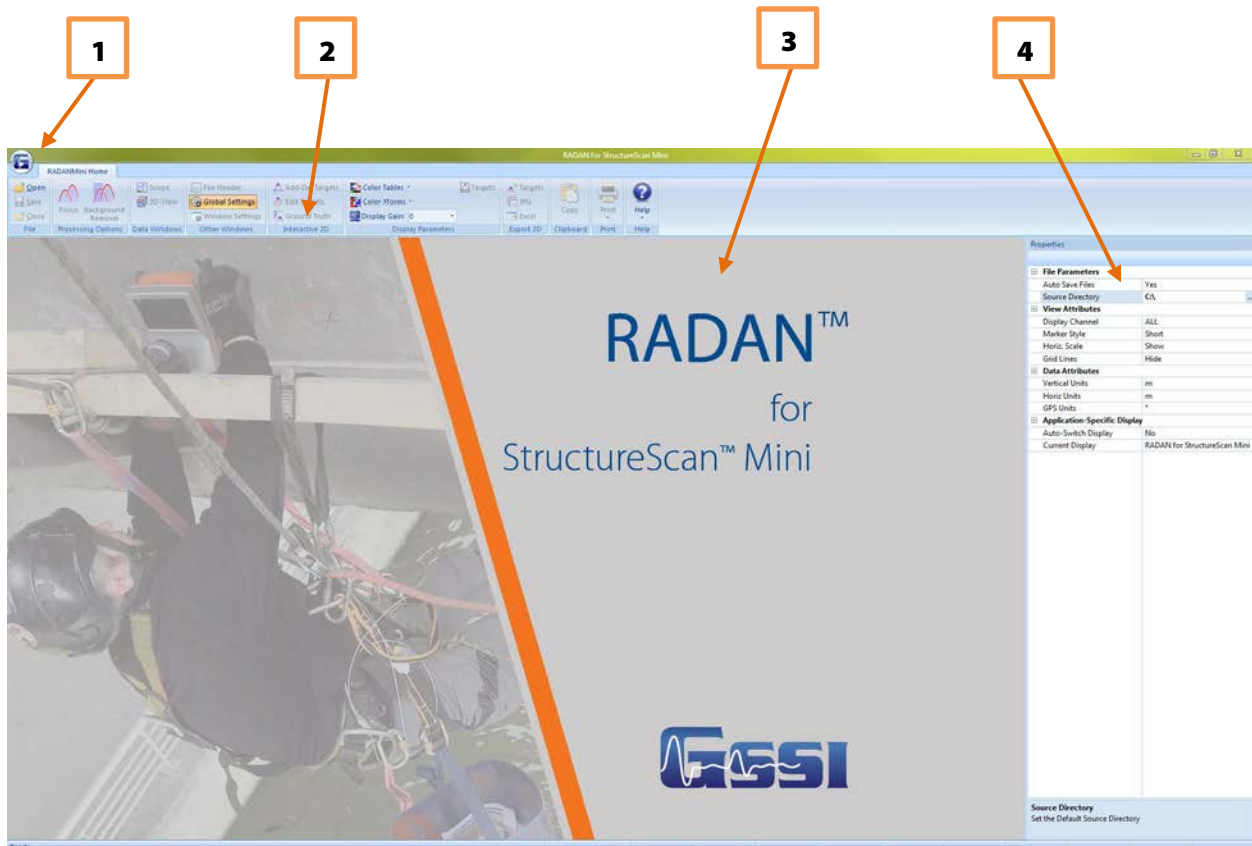
Launching and Navigating the Software

Launching the Software

Launch RADAN for StructureScan Mini by double-clicking the icon:



The following screen is displayed:



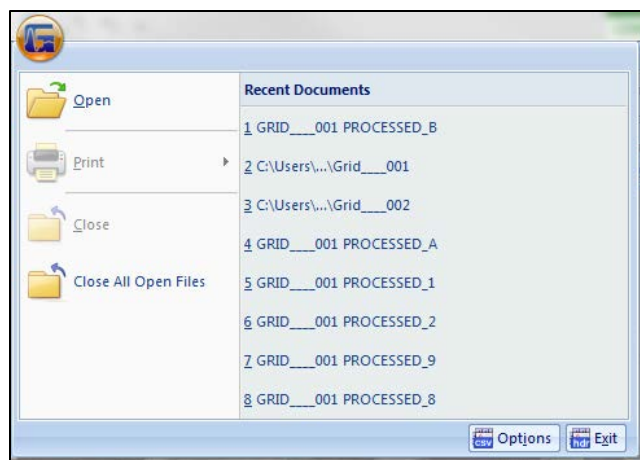
- 1** GSSI Button
- 2** Ribbon
- 3** Data Pane
- 4** Properties Pane

Navigating Through the Main Screen

1. GSSI Button

Clicking on the button allows you to:

- Open a File
- Print your data
- Close a File
- Close all open Files.
- Use Options to change the language
- Exit RADAN for StructureScan Mini Software



2. Ribbon

This area contains all the options and processes you can do with your data. This is also where you may open, save, or close a file. This is detailed more in the Viewing and Processing the Data section.

3. Data Pane

This is where your data is displayed when you open a file.

4. Properties Pane

This area will display Global Settings for all your files in a particular project, as well as Header and Properties information about a specific file (when opened).

Viewing and Processing the Data

Preparing the Software

Before opening a file, you will need to set up some Global Settings located on the right side of the screen. If the Settings info (at right) is not shown, click the Global Settings button from the Other Windows section of the Home tab. Click on the following to change the parameters:

Auto Save Files: Click here, then click on the down arrow to select one of the following values:

- **Yes:** Automatically save a processed file. RADAN will automatically create a folder called “Proc” inside your source directory and save processed data there.
- **No:** You will be prompted to save a processed file.

Properties	
File Parameters	
Auto Save Files	No
Source Directory	C:\MiniData
Output Directory	C:\MiniData\Output ...
View Attributes	
Display Channel	ALL
Marker Style	Short
Horiz. Scale	Show
Grid Lines	Hide
Data Attributes	
Vertical Units	m
Horiz Units	m
GPS Units	°
Application-Specific Display	
Auto-Switch Display	No
Current Display	RADAN for StructureScan Mini

Source Directory: Click here, then click on the three dots to browse to the source folder where you copied your source (original) data.

Output Directory: Click here, then click on the three dots to browse to the output folder you created from your source folder. You will not see this option if you have set your Auto Save File to Yes.

Marker Style:

- **Short:** Display user marks extending down a short distance from the top of the scan.
- **Long:** Display user marks extending through entire scan.
- **None:** Hide all marks.

Horiz. Scale:

- **Show:** Display horizontal scale.
- **Hide:** Do not display horizontal scale.

Grid Lines:

- **Show:** Display grid lines.
- **Hide:** Do not display grid lines.

Vertical Units: Units for the vertical scale.

Horiz Units: Units for the horizontal scale.

GPS Units: Different options to display GPS information, if it is available: (1) decimal degrees; (2) degrees, minutes, seconds; (3) decimal degrees and minutes; and (4) UTM.

Auto-Switch Display:

- **Yes:** The display will change based on the data file opened.
- **No:** Data will open in the currently selected display.

Current Display:

- **Reader:** Opens the RADAN Reader display, which allows you to view already processed 2D data as profiles and 3D data as depth slices. The color table, color transform, and display gain can also be modified. If targets or picks were added in one of the other displays they can be displayed as well. Displayed data can be saved as .jpg images. This display is available with any purchase of RADAN 7 and will become the only way of viewing data once the demo version of the software expires without activation.
- **RADAN for StructureScan Mini:** This is display that is designed specifically for data collected with the StructureScan Mini and includes the ability to instantly process data, do some additional processing, add interpretations, and export to a jpg or excel to quickly generate a report.

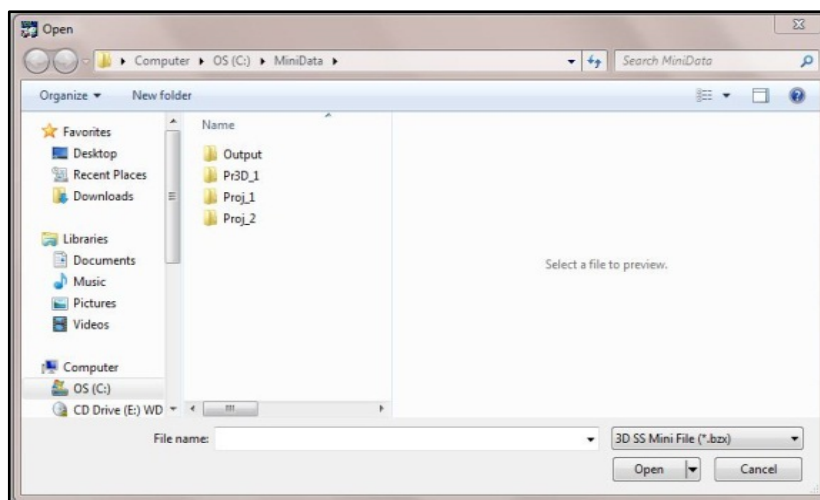
If any other RADAN modules have been purchased, they will appear here as additional display options.

Note: Once you open a file, you cannot change any of the Global Settings. You must close all files to make changes.

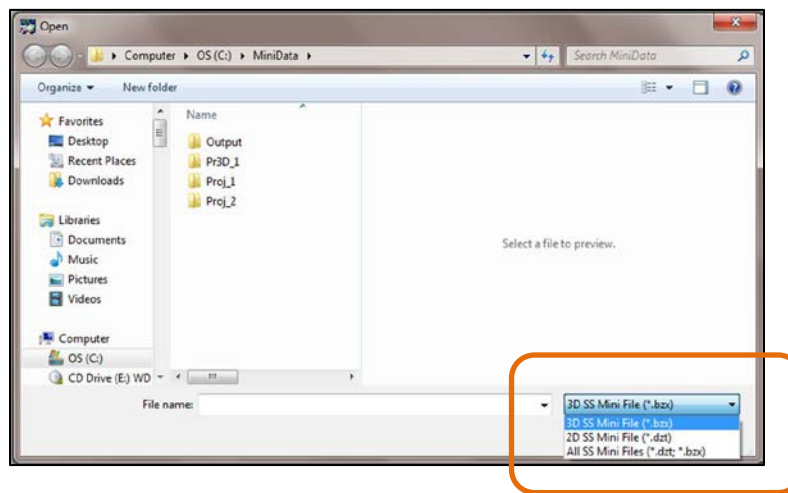
Opening a File

1 Click the Open icon located on the left side of the Ribbon. This will display a screen defaulted to the folder you set in the Global Parameters > Source Directory or click on the GSSI Button.

- Select a file to view/process and click Open.
- Or double-click on the Output Folder or Proc Folder to open a previously processed file.



Note: The default file type is to open a 3D file (.bzx) collected using the StructureScan Mini. If you wish to open a 2D file, you must change the type of file you wish to open (.dzt).

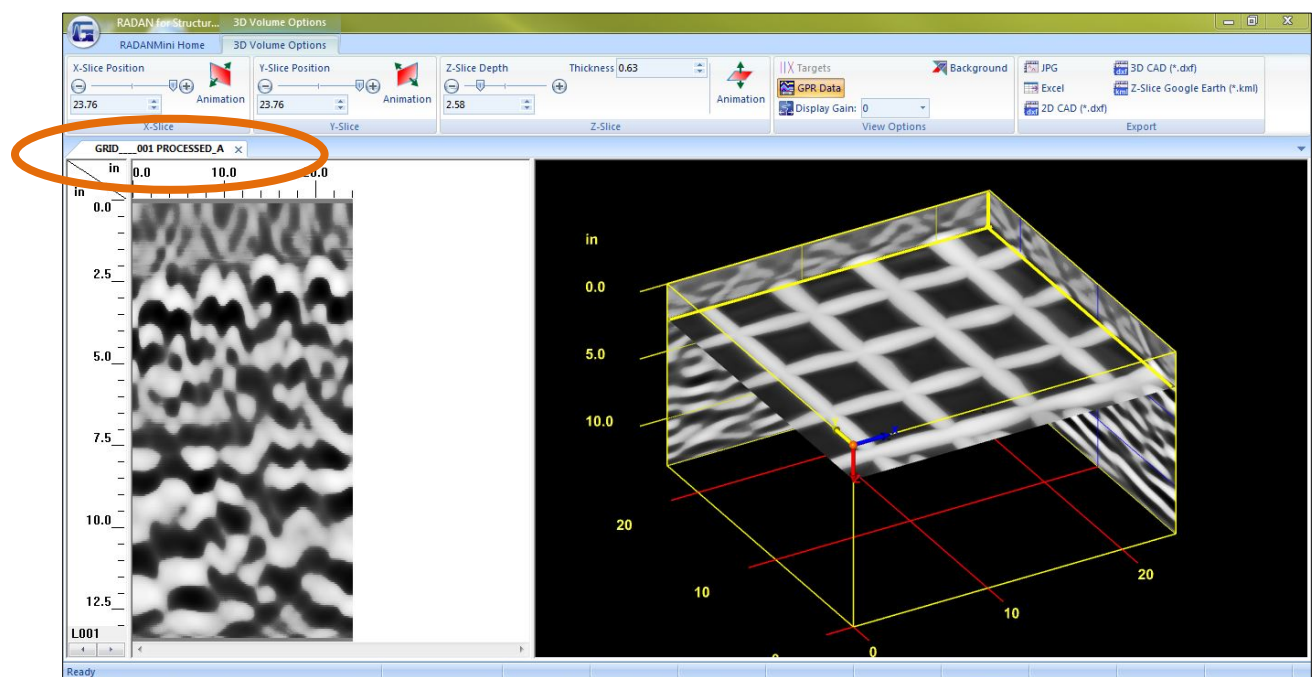


Processing the Data

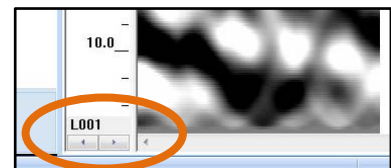
Initial Process (automatically done by the software)

Once a file is opened, the software will automatically process the original, raw data and create a new processed file so that it is viewable. The process done was Time Zero correction, Filtering, and Focus (Migration).

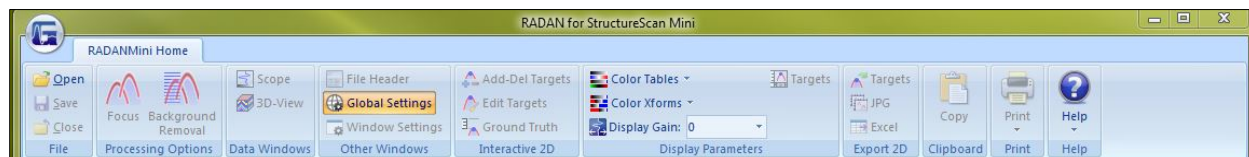
- If you have configured Auto Save File set as **Yes**, the software will process the original file, save the processed file to the Output folder, and name the new file as FileName+Processed+X, where X represents the number of times the original file was opened and processed.
- If you have configured Auto Save file set as **No**, the software will process the file, however will ask you to save the processed file.
 - You may save the file using the software's naming style.
 - Or you may rename the file to your style and save the file.
 - In either case, the processed file will be saved to the folder you indicated as the Output Directory.
- The original file still exists in the Source folder. This file remains untouched.
- Note the tabs (orange circle), these display the name of the file being displayed.



- The Properties Screen now displays Header information, which is information about the file.
- You may click on the left and right arrows located at the bottom of the scale to toggle through the different profiles of your data.



Ribbon Options



Home Ribbon Options

File

Open: Open another file. This will create another tab for that processed file. Click on the tab for the file you want displayed. That will be the current tab.

Save: Save the file located in the current tab.

Close: Close the file located in the current tab.

Processing Options

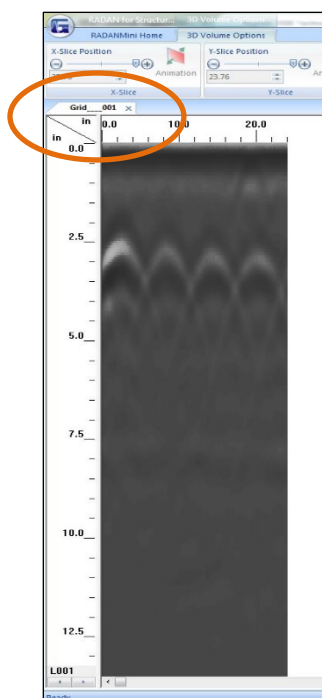
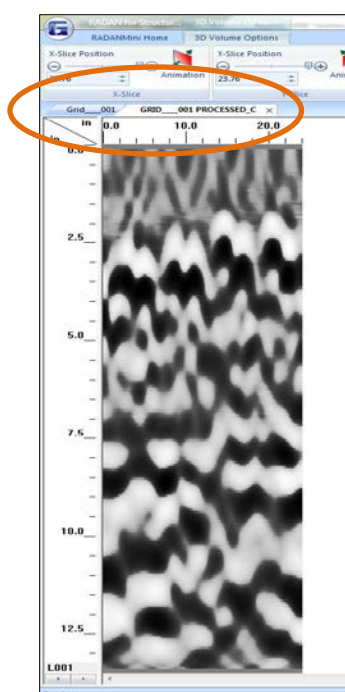
Focus

When the software automatically processes your data, it will use the dielectric number you configured and used when the data were collected. This value may or may not give you the optimum 3D display. The objects displayed in the 3D view may look blurred or bloby.

You can use the Focus option to re-adjust the dielectric for better depth accuracy and a better 3D display.



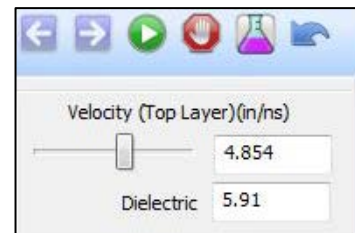
- 1 Close the 3D Tab by clicking on the X of the tab so only the original file tab remains.



2 Click on Focus.

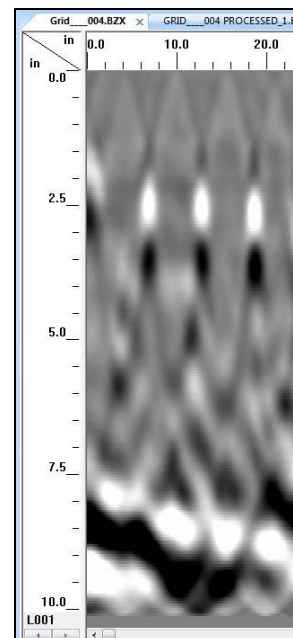
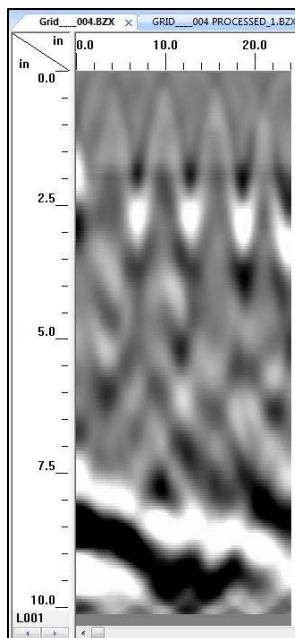
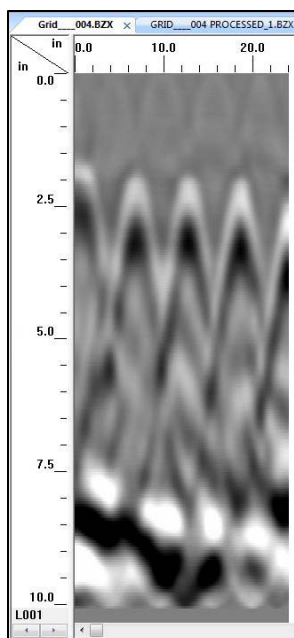


3 Adjust the slider bar to increase or decrease the velocity (thus increase or decrease the dielectric) and click on the Test Icon.



4 Continue to make adjustments and press the Test Icon until the hyperbolas become dots.

- The picture on the left has hyperbolas. Increase the velocity bar by sliding it to the right. This will automatically decrease the dielectric.
- The picture in the middle has upside-down hyperbolas. Decrease the velocity by sliding it to the left. This will automatically increase the dielectric.
- The picture on the right has no hyperbolas. Dots are present.



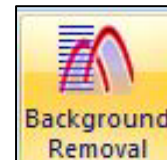
5 Click on the Process Icon to process the data.



6 Save the data if prompted to do so.

Background Removal

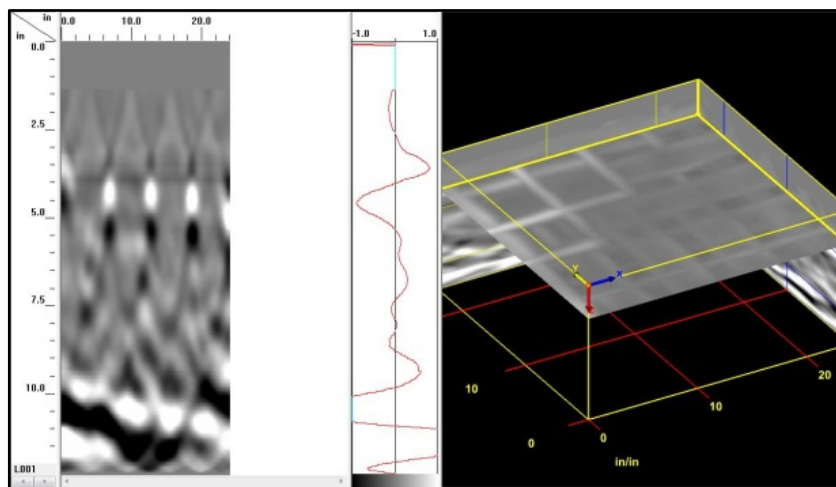
Remove any background noise your data may have. Clicking on this icon will immediately begin the process. Save the file if prompted.



Data Windows

Scope: Toggle on and off to display the O-Scope RADAR signal. (You may hold the left mouse button down on the data and move the mouse to view the RADAR signal at that position.)

3D View: Toggle between displaying the 3D Grid view.



Other Windows

Toggle On or Off different data property windows.

File Header: Header information about the displayed file.

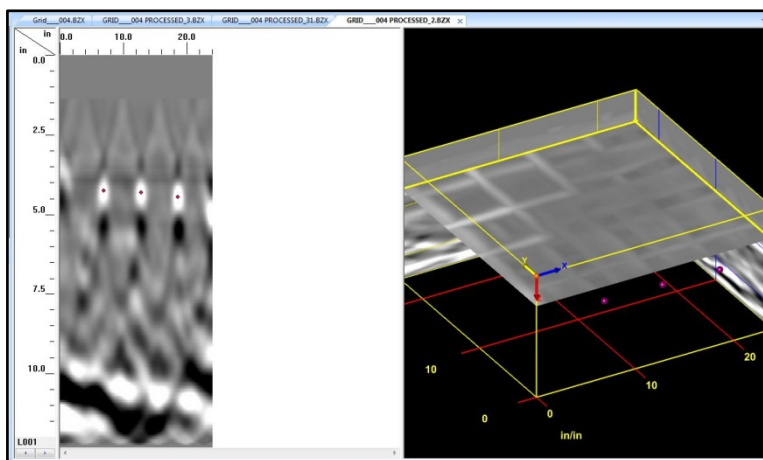
Global Settings: Display Global Parameters for all files prior to opening any files and allow you to switch between available Application Displays. Once a file is open, the Global Parameters cannot be changed.

Window Settings: The Properties Pane automatically updates with window-specific settings based on which data display, 2D or 3D is currently selected.

Interactive 2D

Perform the following steps on the 2D profile and not on the 3D View.

- **Add/Del Targets:** This will allow you to tag targets with a dot. Simply turn this on and left-click on a target to insert a dot. Right-click on a dot to delete the dot. These dots will contain information about the target such as horizontal distance and depth. The information can be exported as a comma delimited ASCII file. Also, note that the dots will appear on the 3D Grid as well.



- **Edit Targets:** This will allow you to click on a dot to change the color and size of the dot.
- **Ground Truth:** This will allow you to click on a target and enter the KNOWN DEPTH of that target. This will adjust the scale accordingly. To use, click “Ground Truth” than use your mouse cursor to left-click on something in the data. Usually this will be an embedded object, but a layer such as back of slab works also. A box will then pop up and you will enter in the known depth to that object.

Display Options

Color Tables: Change the color of your data.

Color Xforms: Change how the colors of your chosen color table are distributed.

Display Gain: Change the contrast (brightness) of your data. This changes the display only; it does not change the actual data.

Targets: Turn the display of the targets (dots) on or off.

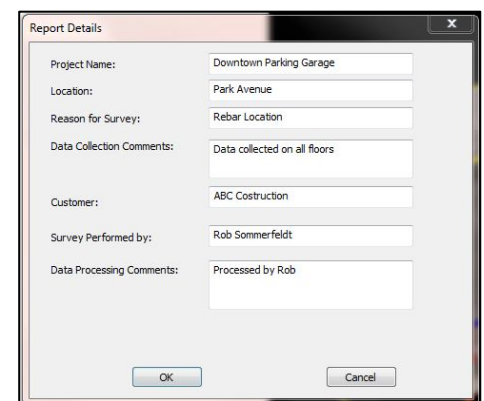
Export 2D

Targets: Export targets (dots) information (distance, depth) to a comma delimited ASCII file. The name of the file is FileName+X.csv located in the output folder.

JPEG: Save the current file as a JPEG file (Picture File). This file will be named FileName+X.jpg located in the output folder.

Excel: Create a report in MSExcel with user entered information, data information and a picture of the 3D Grid.

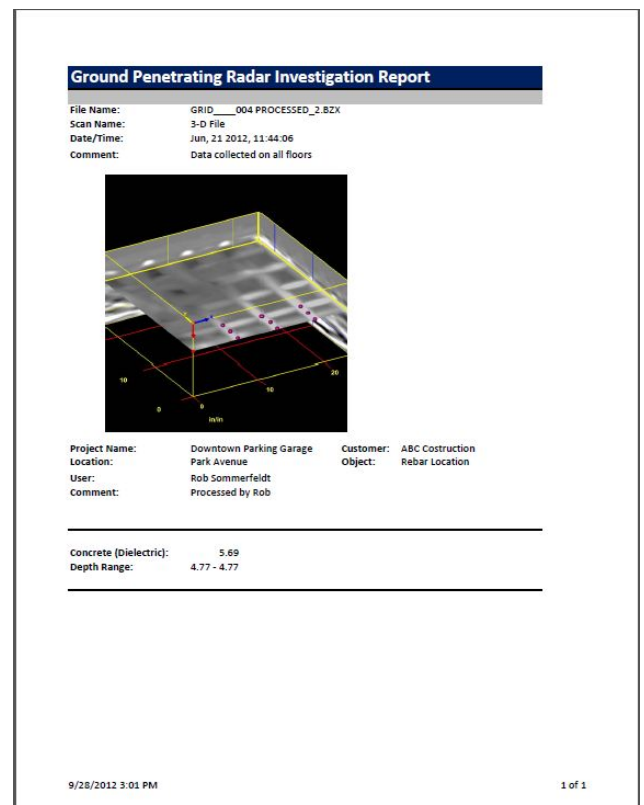
- Enter information if needed. Click on OK when done.
- Open the Excel by clicking at the bottom of the screen if it did not automatically open.
- In Excel move the picture and adjust the size of the picture as needed.
- Print the report.



Report Details

Project Name:	Downtown Parking Garage
Location:	Park Avenue
Reason for Survey:	Rebar Location
Data Collection Comments:	Data collected on all floors
Customer:	ABC Costruction
Survey Performed by:	Rob Sommerfeldt
Data Processing Comments:	Processed by Rob

OK Cancel



Clipboard

Copy: Click this to copy the current window display to the clipboard. This image then can be pasted to any other 3rd party software (PowerPoint, Word, etc.).

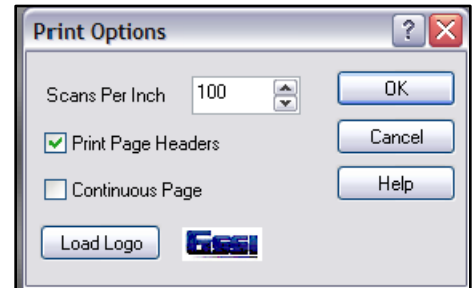
Print

Quick Print: Print the file as it is displayed in the linescan window.

Setup: Configure the printout.

- a) **Scan Per Inch:** Number of scans per inch. Setting this number higher will allow longer profiles to fit on a single page, but there will be a loss of resolution.
- b) **Print Page Headers:** Print Header information.
- c) **Continuous Page:** If data takes more than one page, print data on multiple pages or one page
- d) **Load Logo:** Load and print your own logo, or GSSI logo.

Print Preview: Preview the printout on screen before actually printing the data.



Help

Index: Opens the RADAN for StructureScan Mini Manual.

About: Display the current version of the software.

Update Notes: Retrieves notes related to the most recent available version of the software. An internet connection is required.

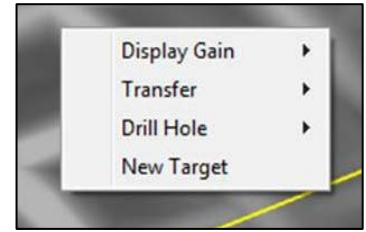
Update: Update the software to the latest version. You MUST be connected to the internet to do this.

Mouse Functions

Before we begin with the 3D Volume Options Ribbon, there are mouse functions that can be helpful while displaying the 3D Grid.

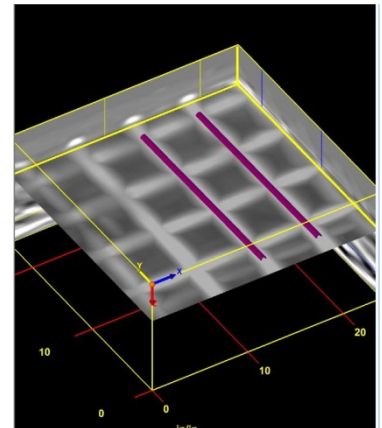
1 Right-click on the data area of the 3D Grid to:

- a) Display Gain:** Adjust the contrast of the screen display.
- b) Transfer:**
 - **None:** Display normally.
 - **Absolute:** Change all to positive.
 - **Negate:** Change negative to positive and positive to negative.
- c) Drill Hole:** Enter a tube to represent a hole or core.
- d) New Target:** Click here to add targets to your 3D Grid.
 - Click on New Target.
 - Double click on one end of a target.
 - Double click on the other end of a target.
 - Repeat process for more targets.



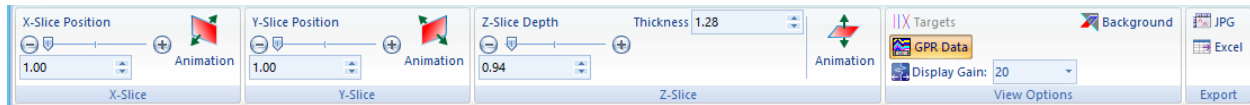
2 Right-click on a Target to:

- a) Delete:** Delete the target.
- b) Target Properties:** Name the target, change the color and/or the size of the target.



3 Point the mouse to the surface or any one of the walls, hold down the CTRL key and the left mouse button and move the mouse to move the surface or walls.

3D Volume Options Ribbon



X-Slice, Y-Slice, Z-Slice

Drag the slide bar or press the - +to move the slices of the 3D Grid according. You may also animate the slices individually by clicking on the Animation icon. This icon will turn animation on and off.

Thickness (Z-Slice): Adjust the thickness of the Z-Slice.

View Options

Targets: Toggle between displaying the targets.

GPR Data: Toggle between displaying the data of the 3D Grid.

Display Gain: Adjust the display gain (contrast).

Background: Toggle between a black background and white background.

Export

JPG: Export the 3D grid as a JPG file.

Excel: Create a report in MSExcel with user entered information, data information and a picture of the 3D Grid.

- Enter information if needed. Click on OK when done.
- Open the Excel by clicking at the bottom of the screen if it did not automatically open.
- In Excel move the picture and adjust the size of the picture as needed.
- Print the report.