INSTRUCTOR™ 3.0
Diamond Studio

December, 2013

1 PREFACE 2

2 OPERATING SYSTEM 2
2.1 Supported Operating Systems 2
2.2 64 bit installation 2

3 HARDWARE SUPPORT 3
3.1 Officially supported Sarin machines: 3
3.2 Unsupported Sarin machines: 3
3.3 NVidia card – H&A 3

4 SOFTWARE SUPPORT 4
4.1 New Installments 4
4.3 Drivers 5
4.5 License expiration 9
4.7 Xcaliber 2.5 10

5 MISCELLANEOUS 14
5.1 Migration issues 14
5.3 Restricted user – permissions concern 16
5.4 Accessors 20
1 Preface

This Document is intended for Technical, Support or IT engineer. It concerns new, need to know, features and information concerning Instructor™ 3.0 support. For other documents, please review below:

- Instructor™ 3.0 Release notes
- Instructor™ 3.0 Installation Guide

2 Operating System

2.1 Supported Operating Systems

Instructor™ 3.0 only supports **Windows 7 32/64 bit** operation system.

**Instructor™ 3.0 does not Support Win XP Operating System**

2.2 64 bit installation

Instructor™ 3.0 is installed under, **Windows 7 – 64 bit**, as a **32 bit** application.
3 Hardware Support

3.1 Officially supported Sarin machines:

Instructor™ 3.0 supports the following Sarin machines:

DiaScan S+, DiaExpert, DiaExpert-Eye, DiaMobile XL and DiaMension HD.

It is highly recommended for users to only work with these machines.

3.2 Unsupported Sarin machines:

Instructor™ 3.0 does not support the following Sarin machines:

DiaExpert-XL and DiaMension (Meteor2).

3.3 NVidia card – H&A

In order to use the H&A features, the following is a must:

NVidia® GeForce GT 430 – 96 CUDA Cores, 1 GB of Memory or higher.

Note: Others greater NVidia Cards with equals or more than 96 CUDA Core are supported as well. E.g. NVidia GeForce GT 440 (96 CUDA Core). Also see NVidia Driver support
4 Software Support

4.1 New Installments

4.1.1 Microsoft Dot.Net 4.5

The Installation will install New Dot Net during Installation –
After language Selection when you click on Next following Message appears –

![Installing Dot Net 4.5. This may take a few minutes...]

4.1.2 Microsoft SQL Server 2012 Express LocalDB

The Installation will install Microsoft SQL Server 2012 Express LocalDB
As soon as installation of Dot Net Completed, following message appears -

![Installing SQL Server 2012 Express LocalDB. This may take a few minutes...]
4.3 Drivers

4.3.1 New Hasp Driver Version 6.60

The Installation will install New Hasp Driver 6.60
To See hasp Drive Version –
Computer Management/ Device manager/ Universal Serial Bus Controller / SafenetInc. HASP Key/ Properties / Driver

4.3.2 New uEye driver 4.30


To See hasp Drive Version –
Computer Management/ Device manager/ Universal Serial Bus Controller / uEye UI-154xLE Series / Properties / Driver
4.3.3 **New USB to COM Driver**

New driver that supports 64 bit OS on the Installation CD, under 
...\**Utils\**\USB2RS232CABLE\ST-LAB

4.3.4 **New Driver to support PCI-e Com port card**

PCI-E com port card, on the Installation CD, under ...\**Utils\**\PCI-e Serial Com\Drivers -
New driver to support the new’ 4-Port Serial PCI-e Adapter’.

4.3.5 **NVidia Driver support**

If NVidia Card Driver is not updated (with recent Drivers),
The Hearts and Arrows button will be disabled and will display the tooltip message below when the mouse is over the button:

![Tooltip Message](image)

### 4.3.5.1 Check Driver Details:

After updating driver, open Graphic Card's Properties. Driver tab contains Driver Date and Driver Version. Windows should look like following one.

![Driver Details](image)

### 4.3.5.2 Driver Update

Please check for driver updates, see in this path:


In NVidia's website, you will need to fill the details of your graphic card, by click on Search you will know the last driver you need for this card of yours.
4.3.5.3 NVidia CUDA cores Checking:

The new generation of NVidia Graphic cards CUDA GPU cores technology.
In order to verify if that card support CUDA Please check in the driver of the card of go in the NVidia website. For example, for NVidia GeForce GT 440 card http://www.geforce.com/hardware/desktop-gpus/geforce-gt-440-channel/specifications
See pic below.

*Image from NVidia website*
4.5 License expiration

4.5.1 Instructor™ 3.0 license expiration

In case that the license has expired, the user will not be able to access the Instructor™ application or the Show Hasp dialog. In this case, the user will have to access the Show Hasp dialog through the Xcaliber application –

```
C:\Program Files\Sarin Technologies\Instructor\Xcaliber\Xcaliber.exe
```
And send the c2v file.

4.5.2 License warning

The license warning will appear at application start.
If a feature is left with only 30 days until expiration or is already expired, it will appear in this message box.
4.7 Xcaliber 2.5

New Xcaliber bears with it a few changes:

4.7.1 Histogram’s location

The histogram location, on the ‘Light calibration’ screen, has been moved to the bottom-right, as part of the Side-bar dialog:

![Diagram](image)

**Note:** Some resolutions may damage the view.

4.7.2 Resize Xcaliber’s window

From now on, resizing is enabled. The behavior is following the Windows OS conformity:
4.7.3 Crosser's position

When pressing the crosser button , the crosser will be centered at the middle of the screen as default:

After pressing the crosser button , you can now easily adjust and determine its position:
The current location of the Y and X axes is displayed at the left bottom of the main display (as displayed at the screen shot).

For moving the Y axis of the crosser, Press the left ‘Shift’ button and move the mouse courser horizontally to the desired location on screen.

For moving the X axis of the crosser, Press the ‘Ctrl’ button and move the mouse courser vertically to the desired location on screen.

4.7.4 New Rotation indication on the Engine control

To help clarify the direction of the stage rotation, a simple visualization was added to the Engine control ‘Left’ and ‘Right’ buttons:

This will help, in a very straightforward way, to press the correct desired directional button.
4.7.6 ROI values panel

'Region of Interest Calibration' screen (in short ROI) is finally displaying the ROI values:

The new panel is visible on the screen’s side bar.

4.7.7 Color indication for the 'Fix Difference' field

The added indication will mark the field’s value in red if the value differs in more than ±20 points:
5 Miscellaneous

5.1 Migration issues

5.1.1 Instructor 2.6

Instructor™ 2.6 migration is supported by the Installation. See Installation Guide

5.1.2 DiaVision 5.04

DiaVision™ user are needed to transfer the needed files manually –

5.1.2.1 Export files

Export files should be copied from DiaVision’s Export folder to Instructor™ 3.0 Export folder

5.1.2.2 Grading data files

Grading data files should be copied from DiaVision’s GradingData folder to Instructor™ 3.0 GradingData folder

5.1.2.3 User shapes files

User shapes files should be copied from DiaVision’s UserShapes and Myshapes folder to Instructor™ 3.0 UserShapes folder
5.1.2.4 Reports

Labels, Reports and RecutReports sub-folders, under Diavision's Reports folder, can be copied directly to their counterparts on Instructor™ 3.0 Reports folder.

5.1.2.5 Views

Views files should be copied from DiaVision's Views folder to Instructor™ 3.0 Reports sub-folder. That is – All Views files will reside under the path ...\ProgramData\Sarin Technologies\Instructor\Reports\Reports

5.1.3 Transferring Database

5.1.3.1 Transferring stones database from Instructor 2.x/Diavision 5.0x

The only method for moving the stones is to save each of them to a file, load them on Instructor™ 3.0 and save them to database.

5.1.3.2 Transferring database from Instructor 3.x – Fix Data Base permission tool

For transferring the Stones and/or environment settings database from one client to another, there are a couple steps needed to be performed –

1. Copy the desired database files under C:\ProgramData\Sarin Technologies\Instructor\DataBase to the designated computer (Note: you will need override the client's current database so it's best to back up the folder first)
2. Go to CD...\Utilis\FixDataBasePermissions and Run (Double Click) on either FixPermission_x32.exe, for Windows7-32 bit, or FixPermission_x64.exe, for Windows7-64bit. This will set the needed permissions for using the copied Databases
5.3 Restricted user – permissions concern

If user have a restricted account (is not an Administrator), he will need to set required permissions –

**Sarin Technologies inside Programed Data**

1. Go to C:\ProgramData
2. Right click on the Sarin Technologies folder and click on Properties

3. Go to Security Tab and Click on Advance Button –
4. Press the **Change Permission** Button

5. Press **Add** button
6. Write 'Everyone' in the text back, then press 'Check Names' and press ok after the text is underlined.

7. Give full control and press ok (just check the top left checkbox)
Sarin Technologies in Program Files –

1. Go to C:\Program Files
2. Right click on the Sarin Technologies folder and click on Properties, After that Steps are same as above. See

Sarin Technologies in AppData –

1. Go to C:\Users\User\AppData\Roaming
2. Right click on the Sarin Technologies folder and click on Properties, After that Steps are same as above. See
5.4 Accessors

5.4.1 Table Editor

5.4.1.1 Adding a user defined Accessor

Instructor™ 3.0 gives the user the ability to add additional, ready to use, accessors, in addition to the ones displayed on the selected view template. Instructor™ 3.0 also gives the ability to name the user defined accessors and to add a tooltip that describes them:

To add new accessors:

1. Go to Settings → Table Editor

2. Select The Required Template e.g. – "round" | "GIA2013" | "dual":

3. Start writing any accessor name in Accessor text file
4. After selecting an accessor to add, click on the Label field and Write something in the field. e.g. – “My”

5. In addition, write something in the Tool Tip field. e.g. – "Important"

6. Click on the Add button The accessor will be added to the User Customization section list below with the added tool tip and label:

7. Go to File (upper Left Corner) and Click on Save:
5.4.1.2 Viewing the user defined accessors on view

The added accessors will be added to the selected templates view, for the selected shapes and institutes (see section 6.3.1.1).

Here is how to view them:

1. On Instructor, Load a stone of the shape type you've set (e.g. – 'round')
2. Click on the template you've set (e.g. – "Table/3D" a.k.a "Dual")
3. Select the institute you've set (e.g. – "GIA 2013") and Scroll to the bottom of the table
4. In this example, You can see the accessor we've added at previous section 6.3.1.1:

5.4.1.3 Deleting user defined accessors

1. Go to Settings / Table Editor and Select The Required Template, e.g. – "round" | "GIA2013" | "dual"
2. Select any accessor that appears under the User Customization section's list, e.g. "My" accessor, and Click the [Delete] button

5.4.2 Recut Accessors Name convention change

There is a slight change in the Name convention for Recut accessors, between Instructor™ 2.6 and Instructor™ 3.0 –

On Instructor™ 2.6, Recut accessors were added with the '1' prefix:

[1.GIA2005.Table.width.avg.perc.nr]

On Instructor™ 3.0, this convention is replacing the '1' prefix with the 'activeplan' prefix:

[activeplan.GIA2005.Table.width.avg.perc.nr]