DGH SCANMATE v4.2
SOFTWARE

INSTALLATION GUIDE

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EC	REP
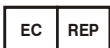
EMERGO EUROPE
PRINSESSEGRACHT 20, 2514 AP
THE HAUGE, THE NETHERLANDS

DOCUMENT #: SCANMATE-INSENG-R2

WARNINGS AND CAUTIONS

All warnings and cautions listed throughout this manual are to be observed when operating the device.

WARNING: Indicates a potentially hazardous situation which, if not avoided, could cause injury or harm to the patient or erroneous results.

CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor injury or harm to the equipment.

⚠️ GENERAL WARNINGS

WARNING: Using non-essential software in conjunction with the system could have unknown/ adverse impact on the operation of the device and is therefore not recommended.

WARNING: Due to the threat of computer viruses, it is recommended that an anti-virus program be installed on the computer running the Scanmate application and that patient records be backed up regularly.

WARNING: Electromagnetic interference may cause distortion of received ultrasonic signals. Such interference may result in distorted images or waveforms.

WARNING: Use of this equipment adjacent to or stacked with other equipment may result in improper operation and should be avoided. If such use is necessary, all equipment should be observed to verify normal operation.

WARNING: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the device, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

WARNING: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

WARNING: Improper backup/restoration of the Scanmate database could result in lost/ corrupted data.

WARNING: PCs connected to DGH devices must be isolated from ground using a medical grade power supply .

⚠️ GENERAL CAUTIONS

CAUTION: Disconnect the device from the host computer before performing routine maintenance or cleaning. Always follow the manufacturer's instructions when cleaning and disinfecting probes.

CAUTION: Changing network configuration and/or network devices may have an unknown/ adverse impact on connection of the Scanmate application to a remotely hosted database.

SYSTEM REQUIREMENTS

	Minimum	Recommended
Processor:	2.0 GHz	3.0+ GHz
Architecture:	32-bit or 64-bit	64-bit
Memory:	2 GB RAM	4 GB RAM
Hard Drive:	HDD or SSD	SSD
Storage Space:	1 GB	250 GB
Display:	1024 x 768 resolution[A]	
Peripherals:	Mouse/Touchpad, Keyboard	
Ports:	(2x) USB 2.0[B]	
PC Power Supply:	AC/DC Medical Grade Transformer[C]	

Compatible OS:	Microsoft Windows 7	(32-bit / 64-bit)
	Microsoft Windows 8/8.1	(32-bit / 64-bit)
	Microsoft Windows 10	(32-bit / 64-bit)
	Microsoft Windows Server 2008 R2[D]	(64-bit)
	Microsoft Windows Server 2012 / 2012 R2[D]	(64-bit)
	Microsoft Windows Server 2016[D]	(64-bit)

[A] *The software can be operated using touch controls on systems that have a touch-capable display. Buttons, sliders and combo boxes can be operated by touching the screen. Refer to the device's operating manual for more information.*

[B] *1 port used for USB interface, 1 port used for footswitch.*

[C] ⚠️ ***WARNING:** PCs connected to DGH devices must be isolated from ground using a medical grade power supply .*

[D] *Server Operating Systems only support installation of the SQL Server database. Refer to Installation Guide for more information.*

READ BEFORE INSTALLING

If the Scanmate software is to be used with a networked database, all networked computers that will be used with the Scanmate software must utilize the same domain. It is also necessary to verify that network firewall settings do not interfere with the computer connection.

It is essential that the system hosting the SQL Server database DOES NOT have a Windows login user name that matches the computer name. If this is the case, a SQL Server installation error will occur.

Before beginning installation, verify that you have full administrator access to the computer. Full administrator access is necessary for installation of the database server.

Installation prerequisites may be downloaded from internet repositories. An internet connection is required during installation.

WORKSTATION CONFIGURATION OPTIONS

Please consider the desired use of the Scanmate software before installation. Patient data may be saved on the computer operating the device or on a server. Deciding how a system shall be used will determine which software components must be installed.

Single PC Workstation: When a single computer will be used to operate the device (no connection to a remote database) the **Single PC** option may be used. This option installs the DGH Scanmate software and Scanmate database on the same PC. A single PC workstation can be connected to either a **SQL Server** or **SQLite** database.

ATTENTION: It is suggested that a SQL Server database be used if storing large video files or many patients records. A SQLite database is only suggested if storing few files (i.e. videos/images/reports are exported and then imported into an electronic medical records system).

ATTENTION: The only PC that can access a SQLite database is the PC that is storing the SQLite database. The SQLite database cannot be made available on a network.

ATTENTION: It is not suggested to use a SQLite database when saving large video files.

Single PC
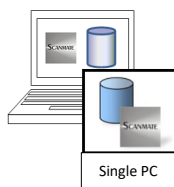
Database Server with Networked Workstations: The DGH Scanmate software may be networked so that one or more workstation computers connect to a SQL Server database that is stored on a local server. Workstation computers operate the devices and transfer patient data to/from the database. If this is the desired installation, first install the database on the server by selecting the **Server PC** option. Next install the Scanmate software on each workstation by selecting the **Client PC** option.

ATTENTION: All Server and Client PCs must be utilizing the same Windows Domain Network in order for the Client PCs to connect to the database.

Windows Domain Network

| Server PC | Client PC | Client PC |
| 1ST | 2ND | 2ND |
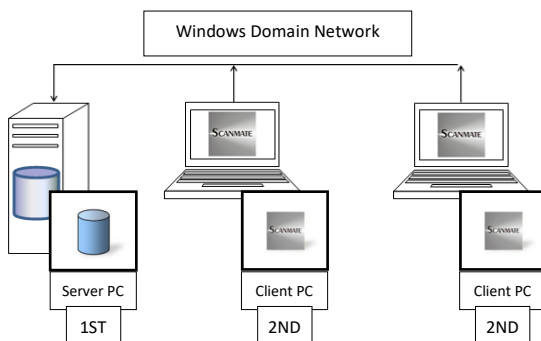
BEGINNING INSTALLATION

Insert the installation media that contains the Scanmate installation files and launch the installer application.

If the device will be used in a networked configuration, SQL Server should be installed on a the server prior to installation of the DGH Scanmate software on workstation PCs.

ATTENTION: All Server and Client PCs must be utilizing the same Windows Domain Network in order for the Client PCs to connect to the database.

ATTENTION: Installation prerequisites may be downloaded from internet repositories. An internet connection is required during installation.

PREREQUISITE INSTALLATION

The installer program will perform a search for necessary prerequisites. A message will appear if a prerequisite is missing from the system. Click **[NEXT]** to continue the installer, the installer will show a prompt indicating which prerequisites must be installed. Prerequisites will be marked for installation by default. Click **[NEXT]** to continue the installer.

A progress bar will display the installation status of the prerequisites. When prerequisite installation is complete, the installer will advance to the next screen.
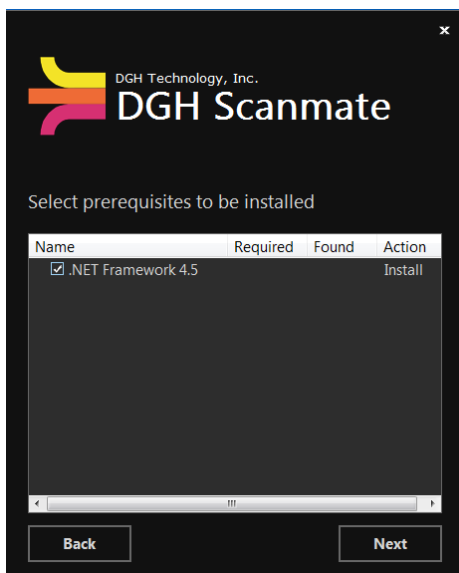
TERMS AND CONDITIONS

When starting the Scanmate Installer, the terms and conditions must be accepted. Review the End User License Agreement (EULA) by clicking on the "License terms and conditions" link.
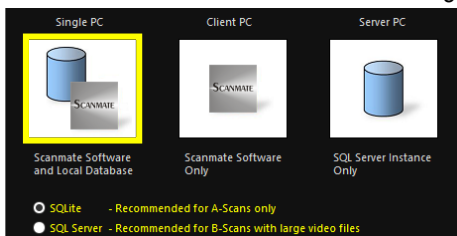
Mark the checkbox next to "I agree to the License terms and conditions". Click **[NEXT]** to continue the installer.
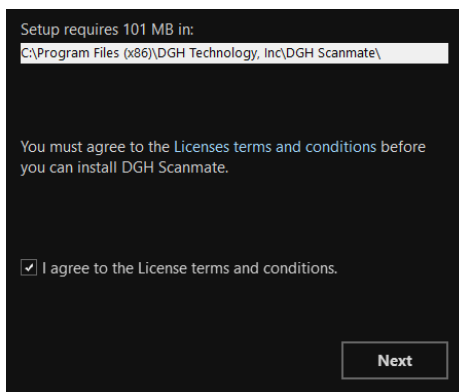
SINGLE PC

This option installs both the DGH Scanmate software and DGH Scanmate database on a PC.

Select the **Single PC** installation option., then select either the **SQLite** or **SQL Server** radio button. Click **[NEXT]** to continue.

IF installing **SQLite**, proceed to **Page 7** for **Single PC Installation: SQLite Database** information.

IF installing **SQL Server**, proceed to **Page 8** for **Single PC Installation: SQL Server Database** information.

Note: Refer to **Page 4** for information regarding SQLite and SQL Server databases.

SERVER PC

This option installs the SQL Server 2012 database program. This installation should be performed prior to running the Client PC installer.

Select the **Server PC** installation option and click **[NEXT]** to continue.
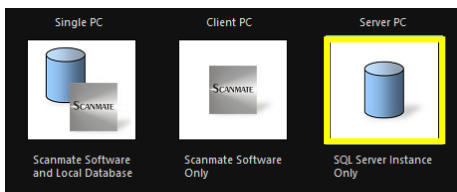
Proceed to **Page 9** for **Server PC Installation** information.

CLIENT PC

This option installs the DGH Scanmate software, which will be connected to a database on a network. This installation should be performed after running the Server PC installer.

Select the **Client PC** installation option and click **[NEXT]** to continue.
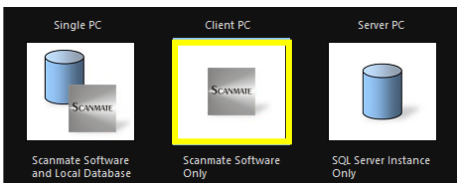
Proceed to **Page 10** for **Client PC Installation** information.

UPDATING DGH SCANMATE SOFTWARE

The installer program is capable of updating previous versions of the Scanmate software to the current version.

IF the previous version of software utilized a SQLITE DATABASE, follow the **Client PC** instructions (above) to perform the update. No additional configuration will be required. After update, double-click the desktop icon to start the software.

IF the previous version of software utilized a SQL SERVER DATABASE, an update to the database will be required before updating the software. Proceed to **Page 14** for **Updating SQL Server Database** instructions**.**

SINGLE PC INSTALLATION: SQLITE DATABASE

ATTENTION: The only PC that can access a SQLite database is the PC that is storing the SQLite database. The SQLite database cannot be made available on a network.

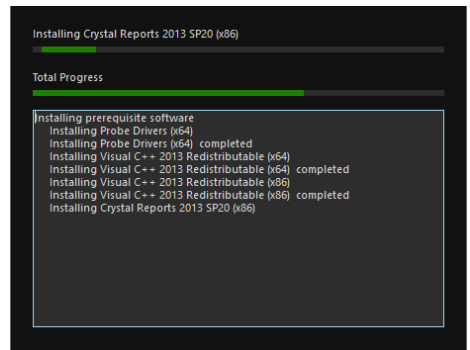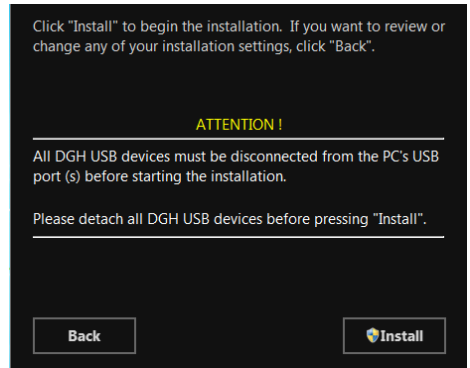**ATTENTION:** It is not suggested to use a SQLite database when saving large video files.

A prompt will be displayed to remove DGH USB devices. This DOES NOT include the USB stick containing the installation program.

Remove devices if needed and click the **[INSTALL]** button.

During installation, a progress bar will appear in the installation dialog box. SQLite and any additional prerequisites will be installed. Microsoft Windows may require approval to install components of the software. Select to allow the installation when prompts occur.

When the installation has finished, the installer will display a statement that installation was successful. Click **[FINISH]** to exit the installer.

Proceed to **Page 11** for **SQLite Configuration** information.

SINGLE PC INSTALLATION: SQL SERVER DATABASE

It is necessary to create a system administrator (sa) password when installing SQL Server. The password must be 8 characters long and contain at least one of each of the following:

- uppercase letter
- lowercase letter
- number
- symbol

Be sure to save the password in a secure place. The space below has been provided for recording the password.

Username: sa

Password: _____

Click **[NEXT]** to continue the installer.

A prompt will be displayed to remove DGH USB devices. This DOES NOT include the USB stick containing the installation program.

Remove devices if needed and click the **[INSTALL]** button.

During installation, a progress bar will appear in the installation dialog box. The software and any additional prerequisites will be installed. Microsoft Windows may require approval to install components of the software. Select to allow the installation when prompts occur.

When the installation has finished, the installer will display a statement that installation was successful. Click **[FINISH]** to exit the installer.

Proceed to **Page 12** for **SQL Server Configuration** information.

SERVER PC INSTALLATION

ATTENTION: All Server and Client PCs must be utilizing the same Windows Domain Network in order for the Client PCs to connect to the database.

It is necessary to create a system administrator (sa) password when installing SQL Server. The password must be 8 characters long and contain at least one of each of the following:

- uppercase letter
- lowercase letter
- number
- symbol

Be sure to save the password in a secure place. The space below has been provided for recording the password.

Username: sa

Password: _____

Click **[NEXT]** to continue the installer.

A prompt will be displayed to remove DGH USB devices. This DOES NOT include the USB stick containing the installation program.

Remove devices if needed and click the **[INSTALL]** button.

During installation, a progress bar will appear in the installation dialog box. The software and any additional prerequisites will be installed. Microsoft Windows may require approval to install components of the software. Select to allow the installation when prompts occur.

When the installation has finished, the installer will display a statement that installation was successful. Click **[FINISH]** to exit the installer.

After the Server PC installation has been completed, installation can be performed on the Client PCs.

Proceed to **Page 6** for **Client PC** information.

CLIENT PC INSTALLATION

A prompt will be displayed to remove DGH USB devices. This DOES NOT include USB sticks containing the installation program.

Remove devices if needed and click the **[INSTALL]** button.

Click "Install" to begin the installation. If you want to review or change any of your installation settings, click "Back".

ATTENTION !

All DGH USB devices must be disconnected from the PC's USB port (s) before starting the installation.

Please detach all DGH USB devices before pressing "Install".

Back   🛡Install

During installation, a progress bar will appear in the installation dialog box. The software and any additional prerequisites will be installed. Microsoft Windows may require approval to install components of the software. Select to allow the installation when prompts occur.

When the installation has finished, the installer will display a statement that installation was successful. Click **[FINISH]** to exit the installer.

Proceed to **Page 12** for **SQL Server Configuration** information.

Please wait while the Setup Wizard changes DGH Scanmate. This may take several minutes.

Changing Probe Drivers (64-bit)

Total Progress

Extracting prerequisite software
    Extracting Probe Drivers (64-bit)
    Extracting Crystal Reports 2013 (32-bit)
Changing prerequisite software
    Changing Probe Drivers (64-bit)

SQLITE CONFIGURATION

Double click the DGH Scanmate desktop icon. The DGH Scanmate Configuration utility will run after a new install or update. This configures how the Scanmate software will connect with the database. Click **[START]**.
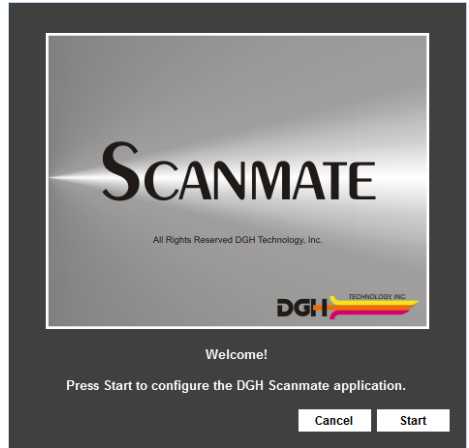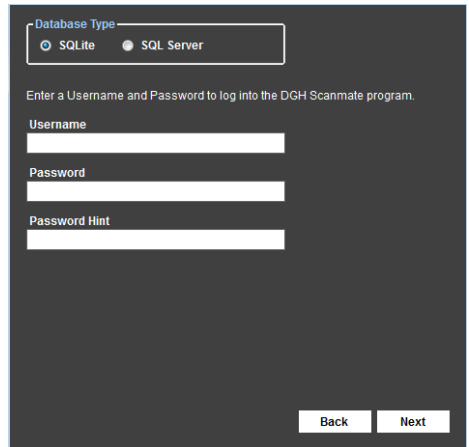
Check the radio button for **SQLite.**

Enter a Username, Password and Password Hint in the fields provided. This Username and Password is used to login to the DGH Scanmate program. It is strongly advised that the Username and Password be recorded and stored in a secure place.

Click **[NEXT]** to continue configuration.

Username: _____

Password: _____

The installer will prompt for confirmation that all credential information is correct. If all information is correct, click **[NEXT]**.

When configuration is complete, the application will display a message that the configuration was successful. Click the **[CLOSE]** button.

Proceed to **Page 15** for **First Time Startup** information.
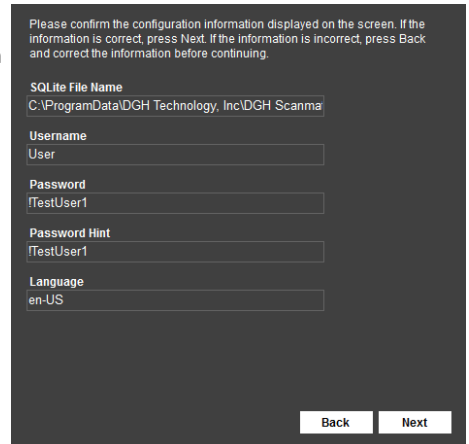
SQL SERVER CONFIGURATION

Double click the DGH Scanmate desktop icon. The DGH Scanmate Configuration utility will run after a new install or update. This configures how the Scanmate software will connect with the database. Click **[START]**.
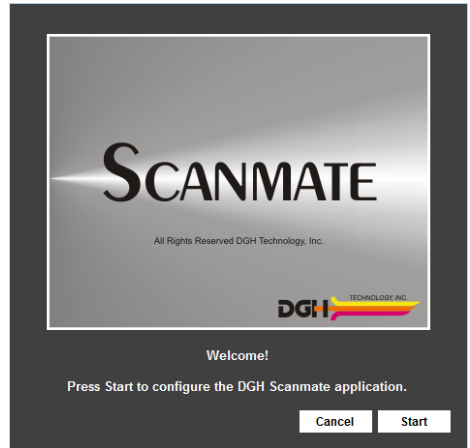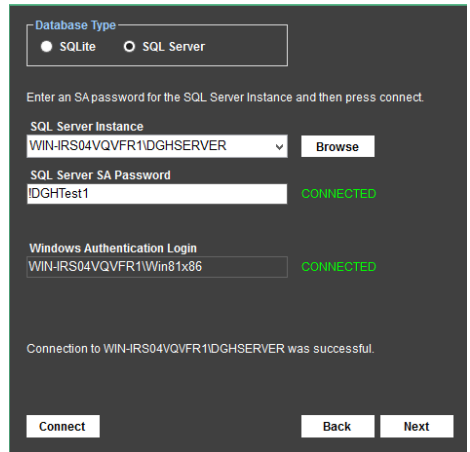
Check the radio button for **SQL Server.**

Click the **[BROWSE]** button. The SQL Server Name list will be updated with any instances of the DGH Server that are found. Select the instance of DGH Server.

Enter the 'sa' Password created during the Server PC installation and click **[CONNECT].** The status will be updated to "CONNECTED".

Once the status is "CONNECTED", click the **[NEXT]** button.

IF performing a FIRST TIME CONFIGURATION:

A default database location is displayed in dropdown box. Click the **[CREATE DB]** button. Once the database is created, a message will be displayed stating that database creation was successful. Click the **[NEXT]** button.
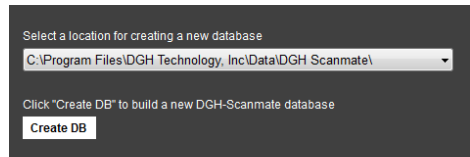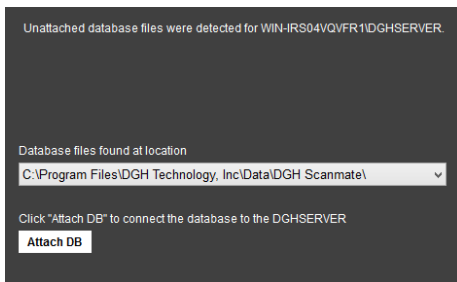
IF there is an EXISTING DATABASE:

A message will be displayed that a current database is already installed. Click the **[NEXT]** button.
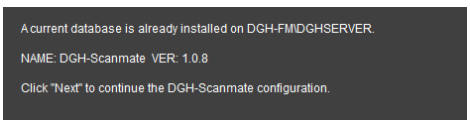
IF an EXISTING DATABASE requires UPDATE:

A message will be displayed that there is an unattached database. Click the **[ATTACH DB]** button. Once the database is attached and updated, a message will be displayed stating that database update was successful. Click the **[NEXT]** button.
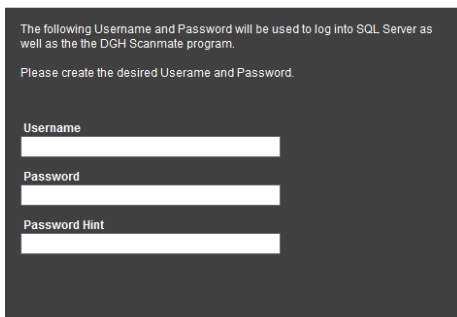
Enter a Username, Password and Password Hint in the fields provided. This Username and Password is used to login to the DGH Scanmate program. It is strongly advised that the Username and Password be recorded and stored in a secure place.

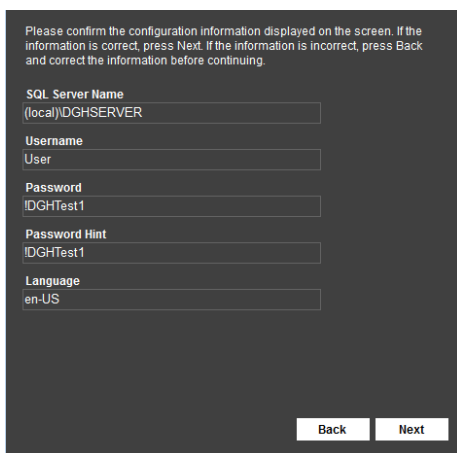Click **[NEXT]** to continue configuration.

Username: _____

Password: _____

The installer will prompt for confirmation that all credential information is correct. If all information is correct, click **[NEXT]**.

When configuration is complete, the application will display a message that the configuration was successful. Click the **[CLOSE]** button.

UPDATING SQL SERVER DATABASE

⚠️ **CAUTION:** The database should be backed up before performing any update operation. Refer to **Page 18** for **SQL Server Database Backup** instructions.

On the PC that is hosting the database, start the installer and select the Server PC installation option. Click **[NEXT]** to continue. The installer may require administrator credentials to perform the update. If so, verify credentials as described below.
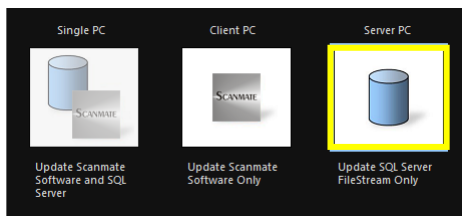
VERIFY CREDENTIALS
If administrator credentials are necessary, this dialog box will be displayed. Click **[TEST CONNECTION]**.
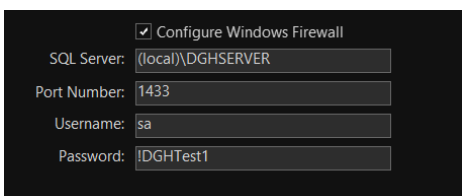
IF the connection is *OK*, click the **[NEXT]** button.
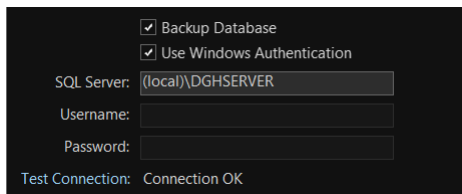
IF the connection fails, uncheck the **Use Windows Authentication** checkbox and enter the 'sa' password in the space provided. Test the connection again. One the connection is established, click the **[NEXT]** button.
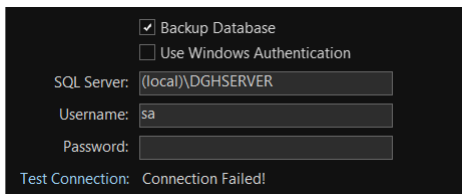
There is the option to modify the password if desired. Once the desired password is entered, click the **[NEXT]** button.

Click the **[INSTALL]** button.

During installation, a progress bar will appear in the installation dialog box. The software and any additional prerequisites will be installed. Microsoft Windows may require approval to install components of the software. Select to allow the installation when prompts occur.
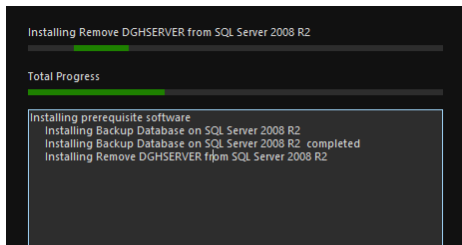
When the installation has finished, the installer will display a statement that installation was successful. Click **[FINISH]** to exit the installer.

After the Server PC has been updated, updates can be performed on the Client PCs. Refer to **Page 6** for **Client PC** information.

FIRST TIME STARTUP

After the Scanmate installation and configuration has been completed, the Scanmate software can be used.

Connect the USB cord of the device to an available USB port of the computer. The PC will recognize the device and perform additional driver installation. Typically this is initiated automatically and does not need to be performed by the user. Once the driver installation is complete, the Scanmate software is ready for use.

Note: The PC will perform a driver installation for each USB port of the PC that a DGH product is connected to. Steps may vary depending on the version of the Windows Operating System being used.

If the probe driver installation does not launch automatically, it is possible to initiate launch by pressing **[WINDOWS KEY + R]** on the keyboard to open the "Run" dialog box. Type *hdwwiz* into the available box and press the **[ENTER]** key on the keyboard.

If given the option to use "Windows Update" to search for software, select "No" and click the **[NEXT]** button. Select the option to allow Windows to "Install the software automatically (recommended)". Click **[NEXT]**.

Operator manuals are available in the software by navigating to **Help >> User Guides**

SQLITE DATABASE BACK UP

To prevent accidental data loss, it is recommended that backups be performed regularly and stored in a safe location. Preferably, backup files should not be stored on the same physical drive that hosts the database. To backup the SQLite database:

Open the Back Up / Restore window by selecting **File > Database > Backup / Restore**.

The combo box shows the default location where the backup file will be created. If a different location is desired, click the **[...]** button. A dialog window will open and allow a different location to be selected.
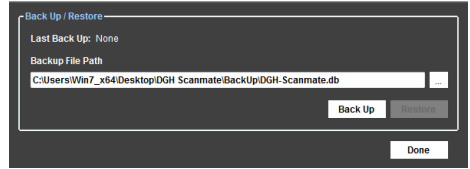
Once the desired backup location is selected, click the **[BACK UP]** button.

After the back up process has completed, a message box will display the location of the backup file. Click the **[OK]** button.

SQLITE DATABASE RESTORE

If it is necessary to restore a prior SQLite database, the back-up version can be reinstalled. Any records added since the date of the last back-up will be lost, so regular back-ups are essential.

Open the Back Up / Restore window by selecting **File > Database > Backup / Restore**.

The combo box shows the default location for backup files. If a different location is used for backup, click the **[...]** button. A dialog window will open and allow a different location to be selected.
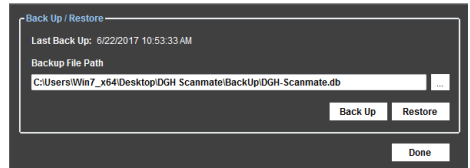
Once the correct backup location is selected, click the **[RESTORE]** button.

A message box will appear to warn you that the Restore Process will delete the current database. Any data that was saved since the last back up will be lost. Select **[YES]** if you wish to continue. The Backup / Restore tool will attempt to restore the database from the backup file.
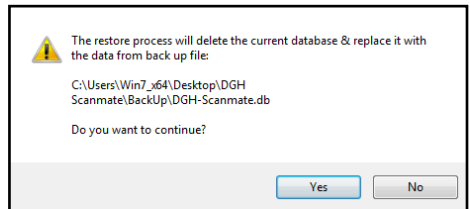
After the restore process has completed, a message box will display which backup location the database was restored from. Click the **[OK]** button.

MANUALLY COPYING A SQLITE DATABASE

Database backup can be performed by using the backup utility of the Scanmate software. Refer to **Page 16** for **SQLite Database Backup** information. The database can also be copied manually for the purposes of backup or for transfer to a new PC.

SQLite databases are single files and can be copied and pasted as other files are.

Using Windows Explorer, navigate to the location of the SQLite database file. The location of the database file is *C:\ProgramData\DGH Technology, Inc\DGH Scanmate\Data*.

Note: The ProgramData folder is a hidden folder by default on Windows systems. To make this folder visible, go to **Control Panel > Folder Options** and under the **View** tab mark the radio button for "Show hidden files, folders, and drives".

Right-click on the database file DGH-Scanmate.db and select **[COPY]** from the menu.
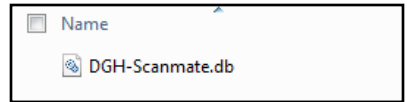
Using Windows Explorer, navigate to the location where the database is to be copied to. Right-click and select **[PASTE]** from the menu.

MOVING A SQLITE DATABASE BETWEEN SYSTEMS

The SQLite database is a single file and can be moved between systems by creating a copy (described in the **Manually Copying a SQLite Database** section above) and pasting the database file in the appropriate location of the destination PC.

On the origin PC, using Windows Explorer, navigate to the location of the SQLite database file and create a copy. The location of the database file is *C:\ProgramData\DGH Technology, Inc\DGH Scanmate\Data*.

Note: The ProgramData folder is a hidden folder by default on Windows systems. To make this folder visible, go to **Control Panel > Folder Options** and under the **View** tab mark the radio button for "Show hidden files, folders, and drives".

Transfer the file to the destination PC. The file must be copied to the *C:\ProgramData\DGH Technology, Inc\DGH Scanmate\Data* folder in order for the Scanmate program to locate it.

SQL SERVER DATABASE BACKUP

To prevent accidental data loss, it is recommended that backups be performed regularly and stored in a safe location. Preferably, backup files should not be stored on the same physical drive that hosts the database. To backup the SQL Server database:

Open the Back Up / Restore window by selecting **File > Database > Backup / Restore**.

Connect to the DGH Database Server by entering the system administrator username and password and click the **[CONNECT]** button.

Note: This is the same username and password created during SQL Server installation.

Once a connection has been established with the database, a message will be displayed stating the software is connected to the server. Click the **[OK]** button.

"DGH-Scanmate" will be displayed in the 'Database' combo box and click the **[BACK UP]** button.

A dialog box will be displayed. Select the desired backup location and click the **[OK]** button. Database backup will begin. A progress bar will display the backup status.

Once the back up process has completed, a message box will state that the backup has been completed, and will display the location of the backup file. Click the **[OK]** button.

SQL SERVER DATABASE RESTORE

If it is necessary to restore a prior database, the back-up version can be reinstalled. Any records added since the date of the last back-up will be lost, so regular back-ups are essential.

Open the Back Up / Restore window by selecting **File > Database > Backup / Restore**.

Connect to the DGH Database Server by entering the system administrator username and password and click the **[CONNECT]** button.

Note: This is the same username and password created during SQL Server installation.

Once a connection has been established with the database, a message will be displayed stating the software is connected to the server. Click the **[OK]** button.

"DGH-Scanmate" will be displayed in the 'Database' combo box and click the **[RESTORE]** button.

A dialog box will be displayed. Select the desired backup location and click the **[OK]** button.

A message box will appear to warn you that the Restore Process will delete the current database. Any data that was saved since the last back up will be lost. Select **[YES]** if you wish to continue. The Backup / Restore tool will attempt to restore the database from the backup file.

Once the restore process has completed, a message box will display which backup location the database was restored from. Click the **[OK]** button.
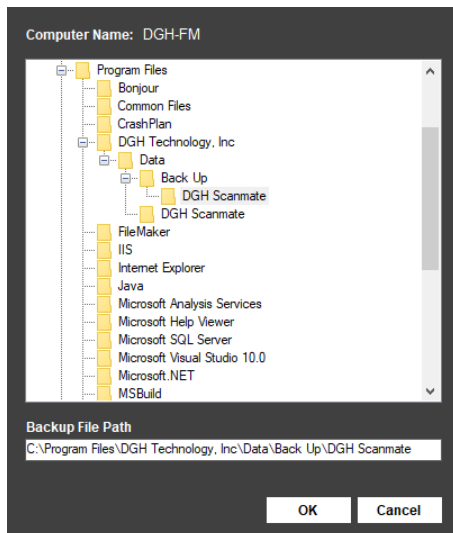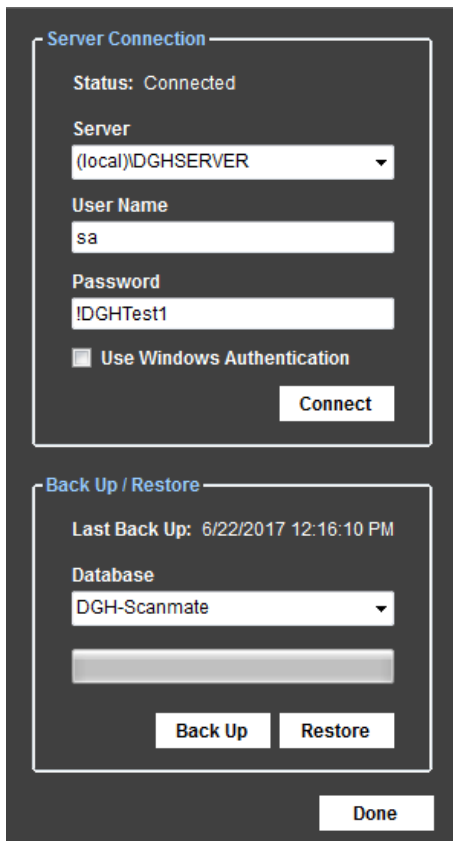
MANUALLY CONFIGURE FIREWALL PORTS

Note: Firewall configuration will be performed automatically during Server PC installation if the 'Configure Windows Firewall' checkbox is marked.

Note: Opening ports in your firewall may make your computer less secure and increase the risk of it being exploited by malicious software.

When a database is accessed over a network, the firewall of the computer hosting the database must be configured to allow access to SQL Server. Client computers will be unable to connect to the database unless this is done. If preferred, firewall settings may be configured manually by following the steps below.

On the Start menu of the computer/server hosting the database, click Run, type WF.msc, and then click **[OK]**.
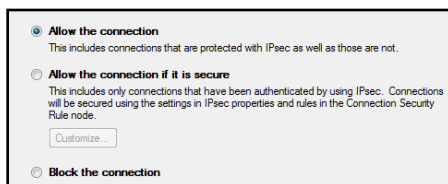
Left-Click on **Inbound Rules** to highlight it, then right-click on Inbound Rules and select **'New Rule'**.

In the window that opens, select the PORT radio button and then click **[NEXT]**

Select the "TCP" and "Specific Local Ports" radio buttons. Enter port number 1433 then click **[NEXT]**.
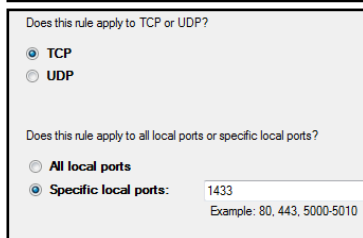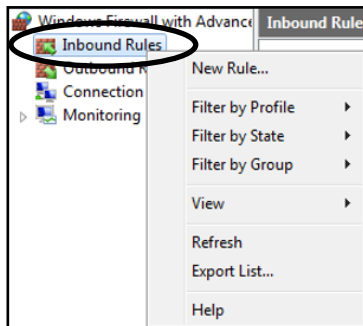
Select "Allow the connection" and then click **[NEXT]**.

Mark the checkbox for the network profiles where you want this rule to apply and then click **[NEXT]**.
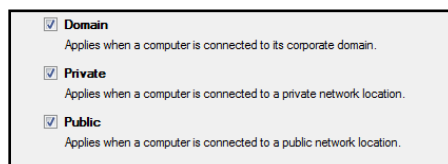
Enter a name for this Rule and then click **[FINISH]**.

A UDP port must also be configured for the firewall. To do this, follow the steps above, however during step 4, select UDP (instead of TCP), and enter 1434 (instead of 1433).

Once the firewall is configured, the database server must be configured to use the new ports. Refer to **Page 21** for **Manually Configuring SQL Server Firewall Settings** information.

MANUALLY CONFIGURE SQL SERVER FIREWALL SETTINGS

Note: Firewall configuration will be performed automatically during Server PC installation if the 'Configure Windows Firewall' checkbox is marked.

First the firewall of the computer hosting the database must be configured (see **Page 20, Manually Configure Firewall Ports**), then SQL Server must be configured to correctly use those ports. If preferred, SQL Server firewall settings may be configured manually by following the steps below.

Launch SQL Server Configuration Manager by going to the Start menu and selecting **Microsoft SQL Server 2012 > Configuration Tools > SQL Server Configuration Manager**.

In the left-hand panel go to **SQL Server Configuration Manager (Local)** > **SQL Server Network Configuration > Protocols for DGHSERVER**. This will change the items displayed on the right-hand side.
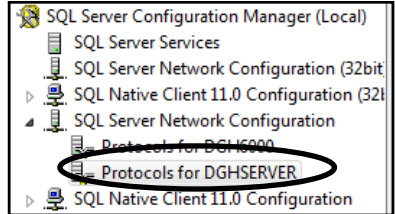
In the right-hand panel, right-click on TCP/IP and select **'Properties'**.
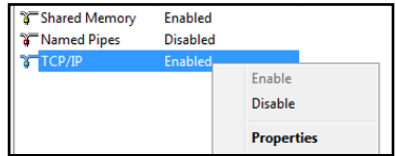
Select the **'IP Addresses Tab'** at the top of the menu and scroll down to IPAll section.
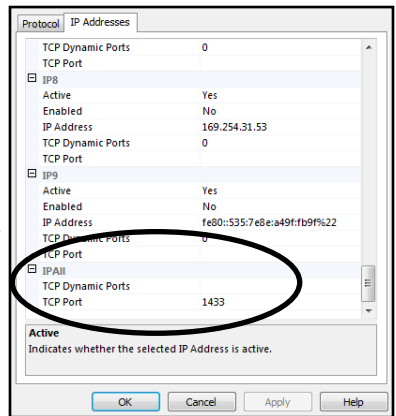
Delete the "0" from TCP Dynamic Ports field (so it is left blank) and enter "1433" in the TCP Port field.

Click **[OK]** to complete the change. A pop-up message will instruct you that SQL server must be restarted for the changes to apply. Click **[OK]**.

In the left-hand panel, left-click on **SQL Server Services**. This will change the items displayed on the right-hand side.
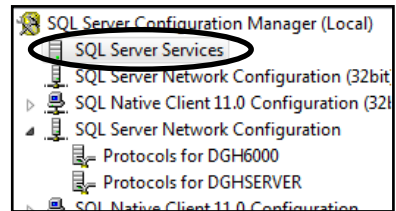
In the right-hand panel, right-click on **SQL Server (DGHServer)** and select **'Restart'**.
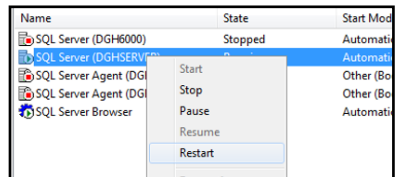
MANUALLY COPYING A SQL SERVER DATABASE

ATTENTION: To manually copy a SQL Server Database, the SQL Server Management Studio software must be installed. The software is not installed by default, but is available on the installation media.

ATTENTION: This should only be performed when the database is not being actively used. All active users will be disconnected from the database.

Database backup can be performed by using the backup utility of the Scanmate software. Refer to **Page 18** for **SQL Server Database Backup** information. The database can also be copied manually for the purposes of backup or for transfer to a new location.

Launch SQL Server Management Studio on the computer hosting the database. Management Studio can be found from the Windows Start Menu by selecting **Programs > Microsoft SQL Server 2012 > SQL Server Management Studio.**

Connect to DGH Server by changing the authentication to "SQL Server Authentication" and then enter the system administrator username (sa) and password that was created when performing the Server PC installation. Click the **[CONNECT]** button

Note: This is the "sa" username and password that were created during Server PC installation.

Stop the database by right-clicking on the DGHServer and selecting **"Stop"** from the drop-down menu.

Using Windows Explorer, navigate to the data directory of the program. This is found at: C:\Program Files\DGH Technology, Inc. of the computer hosting the database.

Copy the "Data" folder found in this directory and paste it in the desired location. For back-up purposes, this folder can be stored anywhere, though preferably on a separate physical drive.
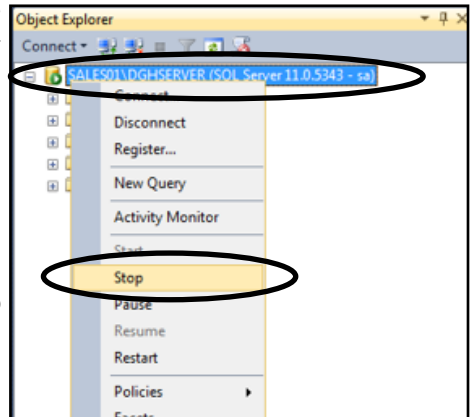
To restart the database, right-click on DGHServer and selecting **"Start"** from the drop-down menu.

If you plan to transfer the database for use on a different computer, refer to **Page 23** for **Attaching A SQL Server Database** information.

ATTACHING A SQL SERVER DATABASE

ATTENTION: To manually copy a SQL Server Database, the SQL Server Management Studio software must be installed. The software is not installed by default, but is available on the installation media.

If database files have been manually copied and moved to a new PC or drive, the files must be re-attached to the DGH-Server in order to be accessed by the Scanmate software. The destination PC must have SQL Server 2012 installed prior to performing this procedure (refer to **Page 6** for **Server PC** information).

Paste the database files to default location C:*Program Files\DGH Technology Inc\Data\DGH Scanmate,* otherwise they will not be identified by the software.

Launch SQL Server Management Studio on the computer hosting the database. Management Studio can be found from the Windows Start Menu by selecting **Programs > Microsoft SQL Server 2012 > SQL Server Management Studio.**

Connect to DGH Server by changing the authentication to "SQL Server Authentication" and then enter the system administrator username (sa) and password that was created when the DGH Database Server was installed. Click the **[CONNECT]** button

NOTE: This is the "sa" username and password that were created during Server PC installation.

Under the DGHServer, right click on **"Databases"** Folder and select Attach.

The "Attach Databases" dialog window will open. Click the **[ADD]** button
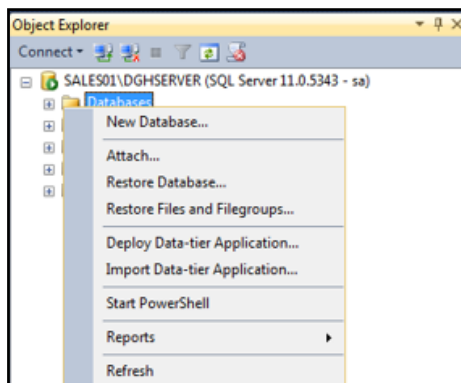
The "Locate Database Files" dialog window will open. Browse to the .mdf file for the DGH-Scanmate database that you wish to use.

Note: The .mdf file default location is C:\Program Files\DGH Technology Inc\Data\DGH Scanmate. If you have created a copy of the database (as described in the previous section) the .mdf file is located in the "Data" folder.

Select the .mdf file and click the **[OK]** button. The "Attach Databases" dialog window will now show the DGH-Scanmate.mdf Click **[OK]**.

MOVING A SQL SERVER DATABASE LOCALLY

The Scanmate application is capable of moving the database to other local disks on the same PC. This may be necessary if a physical drive is nearing capacity.

From the top Scanmate menu select **Preferences > System** then click the **[CHANGE CONFIGURATION]** button in the System Preferences menu. Click the **[START]** button when the splash screen is displayed.

Check the radio button for **SQL Server**.

Click the **[BROWSE]** button. The SQL Server Name list will be updated with any instances of the DGH Server found on the network. Select the instance of DGH Server.

Enter the 'sa' Password created during the Server PC installation and click [**CONNECT**]**.** The status will be updated to "CONNECTED".

Once the status is "CONNECTED", click the **[NEXT]** button.

The next screen will show a combo box with the current database location. Click on the combo box to expand it. Other potential database locations will be listed.

Click on the desired location and then click the **[MOVE DB]** button.

When the database is moved a message will be displayed stating the move was successful. Click the **[NEXT]** button.

After the database is moved, the installer will give the option to change the username and password. Changes may be made if desired, but are not necessary. Click the **[NEXT]** button.

The installer will prompt for confirmation that all credential information is correct. If all information is correct, click **[NEXT]**.

When configuration is complete, the application will display a message that the configuration was successful. Click the **[CLOSE]** button.

MOVING A SQL SERVER DATABASE BETWEEN SYSTEMS

The Scanmate application offers a Backup / Restore utility that can be used to move a database from an origin server to a destination server.

Perform a backup of the original database per **Page 18, SQL Server Database Backup**. The backup will be a single file. Copy this file to electronic media for transfer from the origin server to a destination server.

On the destination server, perform the **Server PC** installation (starting on **Page 6**).

Perform **Client PC** installations (starting on **Page 6**) on any Client PCs that will be connected to the destination server.

On a Client PC that is networked to the destination server, perform a database restore as per the **SQL Server Database Restore** section of this document (**Page 19**).

DELETING A SQLITE DATABASE

The SQLite database can be deleted by using Windows Explorer to navigate to the location of the database file (*C:\ProgramData\DGH Technology, Inc\DGH Scanmate\Data),* then right-clicking on the DGH-Scanmate.db file and selecting **[DELETE]** from the menu.

⚠️ **WARNING:** Ensure that the database has been successfully moved or backed-up before deleting. Deleting the database without backing-up will result in permanent data loss.

DELETING A SQL SERVER DATABASE

The following steps describe how to permanently delete the DGH Scanmate database.

⚠️ **WARNING:** Ensure that the database has been successfully moved or backed-up before deleting. Deleting the database without backing-up will result in permanent data loss.

Launch SQL Server Management Studio on the computer hosting the database. Management Studio can be found from the Windows Start Menu by selecting **Programs > Microsoft SQL Server 2012 > SQL Server Management Studio.** It can also be started by pressing **[WINDOWS KEY + R]** on the keyboard to open the "Run" dialog box and typing in *ssms.exe* into the box and clicking the **[ENTER]** key.

Connect to DGHServer by entering the system administrator username and password that was created when the DGH Database Server was installed.

Note: This is the "sa" username and password that were created during Server PC installation.

Under the DGHServer, expand the "Databases" Folder. Right-click on the DGH-Scanmate entry and select "Delete".

TROUBLESHOOTING GUIDE
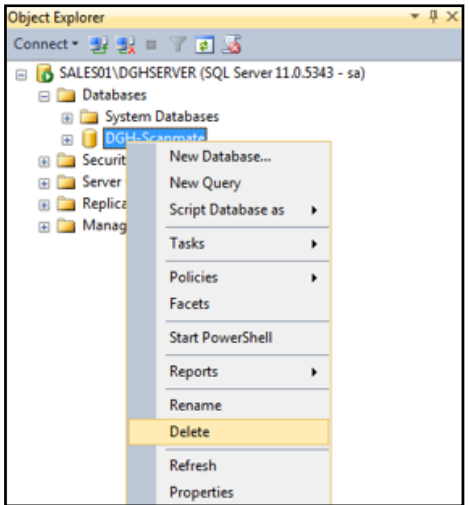
INSTALL ERROR—SQL SERVER

- The user installing SQL Server must have full administrative privileges for correct installation.

- If SQL Server was previously installed on the computer, the computer must be restarted before SQL Server can be reinstalled.

- SQL Server installation may fail if a "Strong" password isn't used. Make sure the system administrator password uses a mixture of capital and lowercase letters, numbers and symbols and is at least 8 characters long (!DGHTest1 is an example of a strong password).

- The PC user login name must be different than the PC system name.

UNABLE TO CONNECT—DGH DATABASE SERVER

-- Confirm that the location (computer name) and password for connecting to the database server are correct.

- If connecting to a database over the network, verify that the computer hosting the database is powered ON and that all network cables are connected. Verify that the firewall on the database host computer is configured to allow access to SQL Server (see MANUALLY CONFIGURE FIREWALL PORTS and MANUALLY CONFIGURE SQL SERVER FIREWALL SETTINGS sections).

- Verify that both computers are utilizing the same WINDOWS DOMAIN NETWORK.

- Confirm that the "SQL Server (DGHSERVER)" instance is running in SQL Server 2012.

  1. Launch SQL Server Configuration Manager on the computer hosting the database. Configuration Manager can be found in the Windows Start Menu by selecting Programs **> Microsoft SQL Server 2012 > Configuration Tools > SQL Server Configuration Manager**.

  2. In the SQL Server Configuration Manager's left-hand column select **SQL Server Configuration Manager > SQL Server Services**.

  3. The software will populate a list in the right-hand column. Confirm that the item labelled SQL Server (DGHSERVER) state is "Running". If this item is listed as "Stopped", right-click and select "Start" from the drop-down menu.

- If the system administrator password for SQL Server has been lost or forgotten, it will be necessary to reset it using Management Studio. The following steps must be performed by a user that has full administrator access to the PC.

  1. Launch SQL Server Management Studio on the computer hosting the database. Management Studio can be found from the Windows Start Menu by selecting **Programs > Microsoft SQL Server 2012 > SQL Server Management Stud**io.

  2. Select "Windows Authentication" instead of "SQL Server Authentication".

  3. Navigate to **Security > Logins** and right-click on the "sa" User Account, then select Properties.

  4. Enter and confirm a new password for the sa account.

UNABLE TO CONNECT—DGH SCANMATE DATABASE

- Confirm that the location, user name and password for connecting to the database are correct.

- If the database was moved, or SQL Server was reinstalled, you will need to reattach the DGH-Scanmate database to the DGH Database server.

- If connecting to a database over the network, verify that the computer hosting the database is powered ON and the firewall on the computer hosting the database has been configured to allow access to SQL Server (see the MANUALLY CONFIGURE FIREWALL PORTS and MANUALLY CONFIGURE SQL SERVER FIREWALL SETTINGS sections).

- Verify that both computers are utilizing the same WINDOWS DOMAIN NETWORK.

INSTALL ERROR—.NET FRAMEWORK ON WINDOWS SBS SERVER 2008

To install the .NET framework on Windows SBS Server 2008, follow the steps below:

1. On the Start Menu select: **Start > Administrative Tools > Server Manager.**
2. Click on "Features" in the left panel of the Server Manager dialog box.
3. Click on "Add Features" in the Features panel of the Server Manager dialog box.
4. Expand the ".NET Framework 3.5.1 Features" in the Select Features dialog box.
5. In the expanded ".NET Framework 3.5.1 Features" list, check ONLY ".NET Framework 3.5.1" and click the Next button.
6. Click the Install button on the "Confirm Installation Selections" dialog box.
7 When the "Installation Results" dialog box appears, click the Close button.

USB CONNECTION NOT DETECTED

- Confirm that the drivers have been installed for the USB 2.0 port the module is currently connected to.

- Confirm that the USB cable is fully inserted and firmly seated in the USB interface module/probe.

- Connect the USB Interface Module to other USB ports on the PC. Confirm that the USB cable is fully inserted and firmly seated in the USB connector on the PC.

PROBE KEY EXPIRED

- The USB Interface Module must be connected to the PC running the Scanmate application after every 20 hours of use.

- If connecting the USB Interface Module does not reset the Probe Key, try the steps described in "USB Connection Not Detected" section above.

NEW PROBE KEY REQUIRED

- If the software displays the message "Enter the key for the given probe and then press save" upon startup, contact DGH Technology Inc. to request a new probe key number.