SELENIA® Dimensions®

3Dimensions™

1.9.1 and 2.0.1 Customer Release Notes

MAN-05630 Revision 002

HOLOGIC®

Selenia® Dimensions® 3Dimensions™

Digital Mammography System

Digital Tomosynthesis System

Customer Release Notes

For Software Versions 1.9.1 and 2.0.1

Part Number MAN-05630
Revision 002

June 2018

Technical Support

USA:	+1.877.371.4372	Asia:	+852 37487700
Europe:	+32 2 711 4690	Australia:	+1 800 264 073
All Other:	+1 781 999 7750	Email:	BreastHealth.Support@hologic.com

HOLOGIC®

CE
0044

Table of Contents

Chapter 1: Quality Control Requirements (US Sites Only)

1.1 Introduction

This document is provided as an overview of Selenia® Dimensions® software version 1.9.1 and 3Dimensions™ software version 2.0.1.

Note

This document is not meant to replace the Selenia Dimensions system or 3Dimensions system *User Guide*. Changes described in these release notes may not be reflected in the current revision of the *User Guide*.

In order to have your system upgraded to Selenia Dimensions software 1.9.1 or 3Dimensions software 2.0.1, you may have to have your Acquisition Workstation hardware upgraded to a level that accommodates this new software, as some features have specific hardware requirements. Please check with your Hologic sales representative about whether a hardware upgrade is necessary.

1.2 Radiologic Technologist

This software upgrade requires that the radiologic technologist performs the following QC tests by following the corresponding tests in the technologist section of the Selenia Dimensions/3Dimensions system *Quality Control Manual*, part number MAN-03706:

- Phantom image evaluation
- Signal-to-noise and contrast-to-noise measurements
- DICOM printer quality control

The preceding tests shall be conducted on each individual Selenia Dimensions system and 3Dimensions system that was upgraded to this software release.

1.3 Medical Physicist

The software upgrade does not require any testing by a medical physicist. However, the tests described in the preceding section, which the technologist performs, are considered to be conducted under the oversight of the medical physicist retained by the facility. The medical physicist needs to be made aware of and provided the opportunity to review the results of the tests.

The medical physicist should check that the dose reported on the Mammography QC phantom after the software upgrade is similar to the dose reported during the last phantom image quality evaluation test performed by the technologist prior to the upgrade.

1.4 Applications Support

You can contact Hologic with any questions about this software version.

- In the United States: call the Hologic Applications Hotline at 877-371-4372.
- In Europe and the Middle East: email to *BE-Applications@hologic.com*.
- In Asia-Pacific: email to *AP-AppsSupport@hologic.com*.
- In Australia/New Zealand: email to *AU-ApplicationsSupport@hologic.com*.

Chapter 2: Selenia Dimensions Software 1.9.1 and 3Dimensions Software 2.0.1 Release Notes

2.1 Introduction

This chapter provides an overview of the enhancements associated with the 1.9.1 Selenia Dimensions software upgrade and the 2.0.1 3Dimensions software upgrade. This upgrade can affect daily workflow or other tasks. **Carefully review these customer release notes to understand the new software enhancements and software changes introduced with this upgrade.**

Note

This document is not meant to replace the Selenia Dimensions system and 3Dimensions system *User Guide*. Changes described in these customer release notes may not be reflected in the current revision of the *User Guide*.

2.2 Quality Control Enhancements

2.2.1 Light Field Characteristics for Tomo Quality Control Views

Quality control views specific to Tomo and TomoHD now present a light field that corresponds to the field size used by the Tomo projections to better facilitate quality control.

2.3 Resolved Known Software Issues

- The upgrade utility now automatically transfers the tube output configuration and custom defined QC procedures from previous versions of software.

- Resolved an issue introduced in 1.9.0 where automatic film printing could cause a brief video glitch.

- Resolved an issue introduced in 1.9.0 where the Exposure Index would use an incorrect target value.

Chapter 3: Selenia Dimensions Software 1.9.0 Release Notes

3.1   Introduction

This chapter provides an overview of the enhancements associated with the 1.9.0 Selenia Dimensions software upgrade. This upgrade can affect daily workflow or other tasks. **Carefully review these customer release notes to understand the new software enhancements and software changes introduced with this upgrade.**

> **Note**
>
> This document is not meant to replace the Selenia Dimensions system *User Guide*. Changes described in these customer release notes may not be reflected in the current revision of the *User Guide*.

3.2   Software Enhancements

3.2.1   Usage Statistics Feature

Manager-level users can now produce a customized, printable exposure report detailing the usage of the Selenia Dimensions system for a given time period.

3.2.2   Split Patient Feature

The Split Patient feature allows you to easily correct images from two different patients that are inadvertently captured within the same procedure. To use, highlight the "Source" patient which contains images of both patients from the *Select Patient* screen and select "Split". From the *Split Patient Records* screen, search for the Patient and Procedure that is missing images, select the Views to be moved and select "Split" from the bottom right.

The feature also allows you to easily correct images from a single patient that are inadvertently captured within the wrong procedure. To use, highlight the patient from the *Select Patient* screen and select "Split". From the *Split Patient Records* screen, search for the same Patient and the desired Procedure, select the Views to be moved and select "Split".

Note: Selecting "Archive" immediately transmits the newly corrected views to the Output Group.
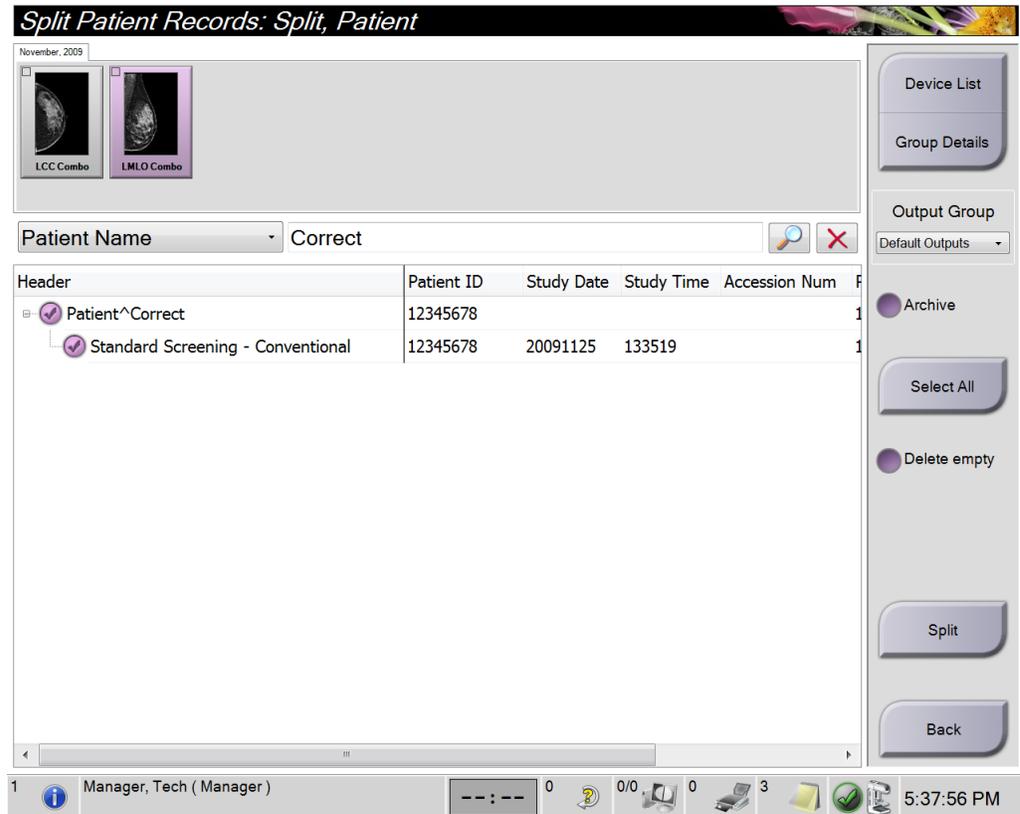
3.2.3   QC Output Group

A new default output group for Quality Control (QC) procedures has been created and is available to be selected through the *Manage Output Groups* screen.

3.2.4   Ordering of Select Patient Tabs

The *Select Patient* screen now allows you to choose the preferred order of Tabs.

3.2.5   Select Patient Screen Double-Click to Open Patient

On the *Select Patient* screen, double-clicking now opens the selected patient.

3.2.6 Procedure Screen Improvements
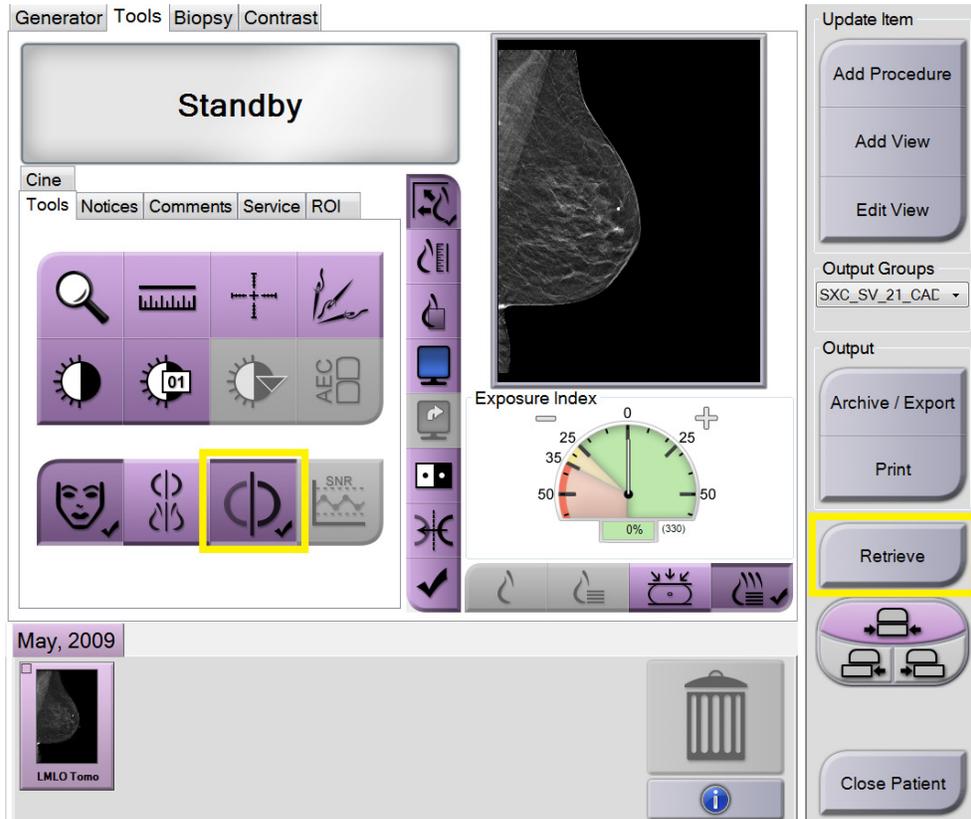
Auto-Pairing Selection

Auto-Pairing functionality can now be turned off and on from within the exam.

Query/Retrieve from Procedure Screen

Query/Retrieve can now be initiated from within a procedure. When initiated from within the procedure, the Patient Name, Patient ID, and Date of Birth fields are automatically entered.

Selected Tab in Auto-Accept and Auto-Pend Mode Now Configurable

When in Auto-Accept or Auto-Pend mode, the system now provides the ability to select whether the Tools tab or Generator tab is displayed.

3.2.7   Creation of Custom Views

Custom View names and types, including all available view modifiers, are now able to be created and saved. This feature allows these views to be natively added to procedures and the *Add View* screens.
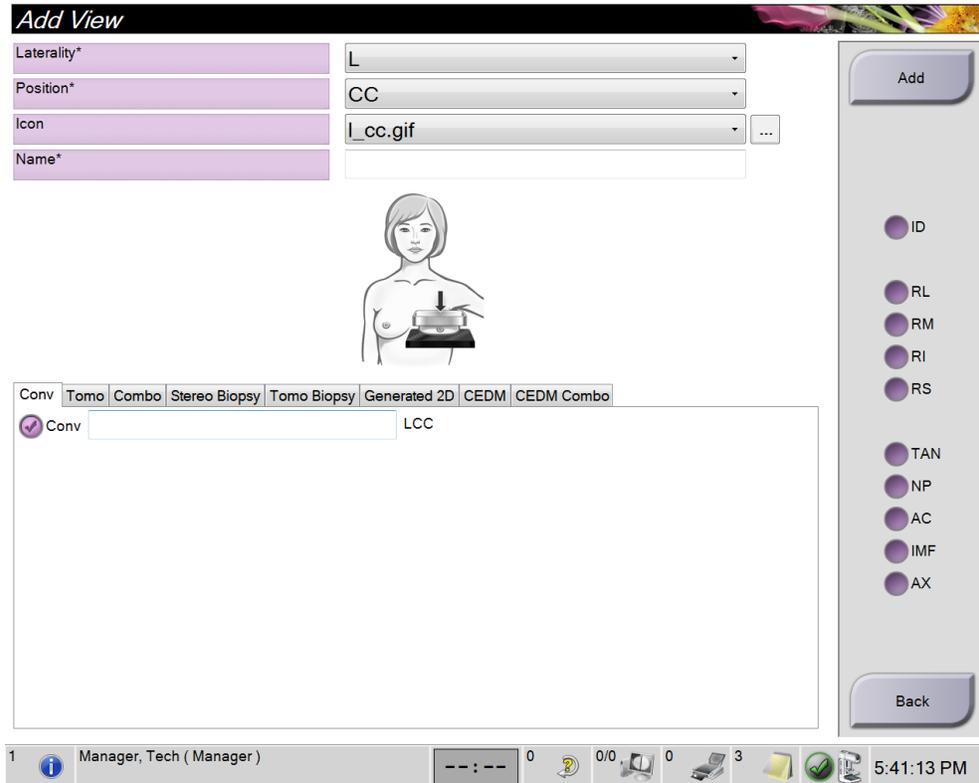
3.2.8   Ability to Import/Export QC Procedures

To further support region-specific Quality Control requirements, Quality Control procedures can now be imported and exported from Selenia Dimensions systems.

3.2.9   Audible Indicator when FAST Mode Is Engaged Improperly

When a non-FAST Compression Mode compatible paddle is installed and FAST Compression Mode is engaged, the system now alerts the user with three audible tones to return to Normal Compression Mode using the FAST Compression Mode Slide.

3.2.10   Light Field Default for 18x24 Paddles in Tomo and TomoHD Modes

When the 18 x 24 Screening Paddle or other paddle that produces 18x24 cropping is installed, the default light field now shows 18 x 24 rather than the current 18 x 29 in Tomo and TomoHD modes. This is configurable and the system can be set to either mode.

3.3 Tomo/C-View Image Processing Improvements

3.3.1 De-Metal

The de-metal processing that was previously enabled by pressing the 'de-metal' button is now 'On' by default for screening paddles. The de-metal algorithm was improved by more accurate detection of artifact producing metal and calcifications.

3.3.2 Skin Line/Shadow Improvements

For images where the skin line is excessively bright (white), the brightness has been reduced. Also, dark shadows that may appear just inside the bright skin line have been reduced.

3.4 Improvements

3.4.1 Biopsy Improvements

Ability to Hang Non-Biopsy Image within a Biopsy Workflow

To enable easier comparison between a Screening view and a Biopsy view, the software now allows a non-Biopsy view to be oriented and displayed with a Biopsy view on the Image Display Monitor.

Optimized Window/Level for Tomo Biopsy Images

For Tomo Biopsy images, metal objects are now excluded from the Window/Level calculation, improving the appearance of images that have metal in the field of view.

Collimator Light Stays on for Extended Periods

When a Biopsy Paddle or Needle Localization paddle is installed, the collimator light remains illuminated for a default time of 10 minutes when activated. The illumination time is configurable.

Additional Indicator to Accept/Reject Targets

After a biopsy target has been created on the Preview Display monitor, the System Messages panel now displays the indicator with a blue background (see the following image) to alert the operator to Accept or Reject the target.
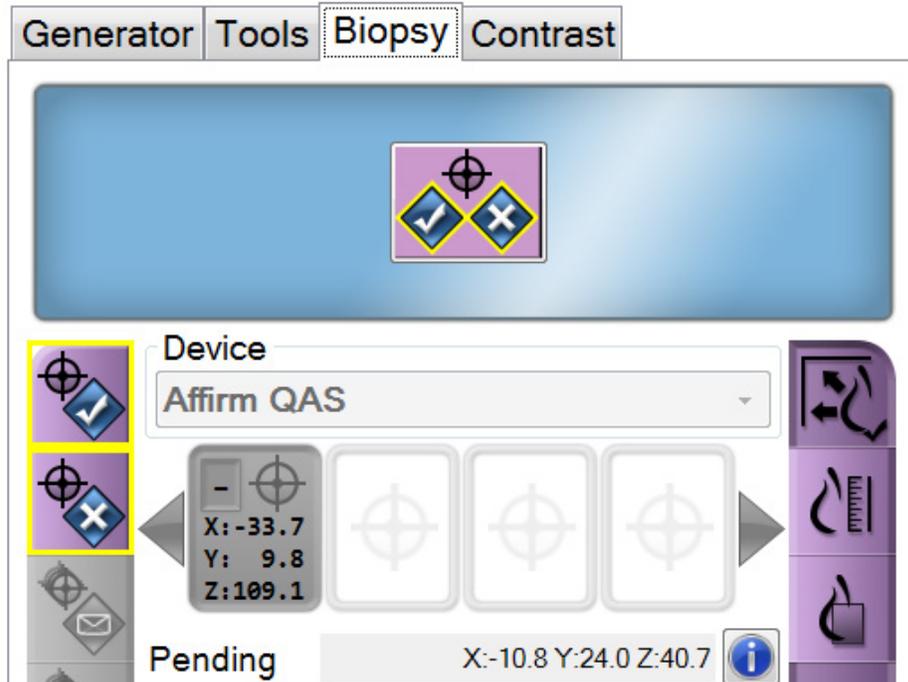
QAS Test Prompt with Coordinates

When the QAS Test is opened, the system now prompts the user to install the QAS phantom and shows the position of the coordinates for the test.
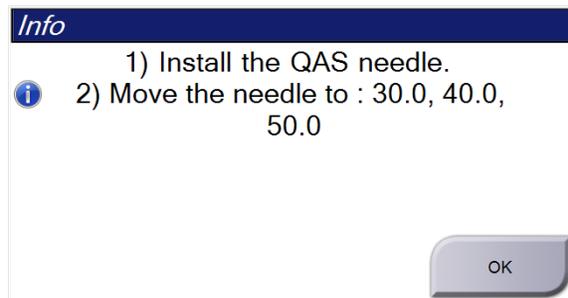
3.5   DICOM Enhancements

3.5.1   Breast Projection Object (BPO) Support

The Selenia Dimensions Acquisition Workstation now supports the creation of DICOM Breast Projection X-Ray Image Storage instances, also known as Breast Projection Objects. Breast Projection Object (BPO) support allows viewing of the processed breast projections on any third-party review workstation that support displaying BPO.

3.5.2   Export Defaults to BTO and BPO

When exporting studies to removable media, the system now defaults to using Breast Tomosynthesis Object (BTO) for reconstructed slices and Breast Projection Object (BPO) for processed projection images.

3.5.3   Support for DICOM Extended Image Types

The system now supports the DICOM Extended Images Types introduced in DICOM CP-1342 as part of the IHE (Integrating the Healthcare Enterprise) Radiology Digital Breast Tomosynthesis profile development effort. This feature allows workstations to better identify Tomosynthesis, Biopsy, and Contrast image types.

3.6   Security Enhancements

3.6.1   OS Patches

All necessary OS patches released before the final release of this software are installed on the system.

3.6.2   LDAP Support

The system now supports using LDAP for user authentication with a centralized LDAP server.

Chapter 4: Selenia Dimensions Software 1.8.4 Release Notes

4.1 Introduction

This chapter provides an overview of the enhancements associated with the 1.8.4 Selenia Dimensions software upgrade. This software upgrade adds a new, licensable module to support the use of the optional Affirm® Lateral Arm Upright Biopsy Accessory with the Selenia Dimensions Affirm breast biopsy guidance system. A number of other enhancements that are not associated with the Affirm Lateral Arm Upright Biopsy Accessory are listed in these release notes. This upgrade can affect daily workflow or other tasks. **Carefully review these customer release notes to understand the new software enhancements and software changes introduced with this upgrade.**

Note

This document is not meant to replace the Selenia Dimensions system *User Guide*. Changes described in these customer release notes may not be reflected in the current revision of the *User Guide*.

4.2 Software Enhancements

4.2.1 Image Presentation Enhancements

C-View Software Natural Look Image Processing (Not Available in All Markets)

An adjustment was made to the final image lookup table to improve image contrast within dense regions of the C-View™ software Natural Look images. This change only affects C-View software installations configured to use the Natural Look option.

4.2.2 Biopsy Enhancements

Affirm System Tomosynthesis Biopsy Enhancements

Support for Pre-Fire and Post-Fire Tomosynthesis Biopsy Views

The Selenia Dimensions Acquisition Workstation now supports Pre-Fire and Post-Fire Tomosynthesis Biopsy views. These views are able to inherit an AEC LOCK technique from the Scout image, similar to the way Pre-Fire and Post-Fire Stereotactic views behave.

4.2.3 DICOM Enhancements

Ability to Import Images Only Based on Patient ID and Date of Birth

To better support mixed operating environments, the Selenia Dimensions Acquisition Workstation now adds a configurable option to allow the import of images only based on Patient ID and Date of Birth and not consider *Issuer of Patient ID (0010,0021)* as a matching criteria.

4.2.4   I-View Software Enhancements

The I-View™ software algorithm now optimizes the mAs for the high energy portion of the exposure for large and dense breasts.

4.3   Security Enhancements

4.3.1   OS Patches

All necessary OS patches released before the final release of this software are installed on the system.