



SeaBat UI (version 4.1)

release notes

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Dated: 15-01-2014

AMENDMENT RECORD SHEET

Rev	Date	Reason for change	Revised by
18	15-01-2014	Version 4.1.0.7; several small issues fixed	H. M. Stoelinga

Document No.	1 / 1
Filename	SeaBat UI release notes.doc
Distribution	Teledyne RESON Customers

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1 INTRODUCTION

This document contains the release notes for the SeaBat UI application.

As the SeaBat UI application is build using PDS2000 core engine and visualization engine technology all improvements made in these engines will be available in the SeaBat UI also. Listed in this document are the items which are operator UI changes or changes that stand out and should be known to the operator of the software.

1.1 References

- 1) SeaBat UI User Manual.pdf
- 2) 7K IO Module Manual.pdf
- 3) 7K IO Module release notes.pdf

2 VERSION 4.1

2.1 4.1.0.7 (15-01-2014)

2.1.1 Bug fixes

1. 10272: Echo 7k 1207 - Set Recording Directory not handled. RDR recording folder is now synchronized between all SeaBat UI instances.
2. 10227: Wedge View: zooming in is now limited to a fixed zoom level; precision of annotation will be linked to zoom level.

2.1.2 Added features

1. New PosMV driver supporting Tightly coupled mode, closely coupled mode and Auxiliary GPS aided mode.
2. The following device drivers have been added:
 - a. PosMV all coupled modes- ethernet msg 3+10+12+20+102+104[pos].dev
 - b. PosMV ethernet 20+102+104[pos].dev
 - c. PosMV ethernet Closely coupled mode 3+10+102+104[pos].dev

2.2 4.1.0.6 (20-12-2013)

2.2.1 Bug fixes

- 1) 10097: Ignore range changes when Wedge view data is frozen.
- 2) 10122: 'Input Distribution (RRIO)' on SeaBat UI 'IO module' panel now works correctly for data distribution strings larger than 99 characters.
- 3) 10132: Fixed progress when normalizing 7125 SV2 at startup.
 - a. Added system text (e.g. 200 kHz) to the progress dialog.
 - b. Always show normalization status of the correct system enum.
 - c. Show error message in dialog when normalization fails.
 - d. Show correct status (last good) in hardware pane when normalization fails.
 - e. Support canceling of slave normalization.
- 4) 10176. Allow all measurements when history is enabled in wedge.
- 5) 10221: 7k IO Module: Possible crash, when sync character or string could not be detected in data string, has been fixed.
- 6) 7k IO Module: Closing socket connection has been made more robust when closing 7k IO module.
- 7) 7k IO Module: RRIO did also send data to local computer when address was blank. This has now been fixed.
- 8) The Pipe Detection and Tracking engine has been made more robust.
- 9) The 7k IO Module has been made more robust.
- 10) SeaBat UI internal improved handling attribute handling.
- 11) Fixed absolute gates when a maximum depth gate less than 2.1 m was entered.
- 12) Fixed SeaBat UI window title so that 7kControlCenter can stop it.

2.2.2 Modified features

- 1) 9268. Made BITE schema more compact vertically.
- 2) 10036. Support manual normalization in dual-head mode.

- 3) 10146: Dual Head Master Select fixed.
 - a. Never allow the following connections
 - i. Never connect invalid IP addresses
 - ii. Never connect the same IP addresses
 - iii. Never connect to 127.x.x.x slave IP address
 - iv. Never connect local master to local slave
 - b. Allow the following connections for valid IP addresses
 - i. Connect local master to remote slave
 - ii. Connect remote master to remote slave with different IP address
 - iii. Connect remote master to local slave with IP address unequal to 127.x.x.x
- 4) 10160: We would like to have more grid divisions below 1m. When zooming in to 1m range there is only one major gridline, which makes it impossible to see the range scale. This has now been implemented.
- 5) 10181: Show tooltip with angle when dragging wedge gripper. Also, hold down Control key to snap to 5 degree increments.
- 6) SeaBat UI User Manual has been updated to version 1.1.0.
- 7) Wedge view: fixed border width of legend boxes for bigger bathy points.
- 8) Only support beam spacing (not custom beam number) for True ED.
- 9) Made it easier to click on pins in BITE schema.
- 10) Color objects in BITE schema with only information items green or red. It used to be blue, which means 'no data'.
- 11) Show BITE items with an invalid location in a special category with 'FIX ME!'.

2.2.3 Added features

- 1) 10147: added a label in the title bar as: (Stand Alone) or (Master sonar with IP connected to slave sonar at IP).
- 2) 10148. Hide master or slave wedge by double-clicking on the head.
- 3) 10149: Show tooltip for which head is master or slave.
- 4) 7k IO Module: (from the PDS2000 release notes) Clock synchronization using remote 7k IO Module. This feature allows you to select a remote 7k IO Module from the Time Synchronization application. This feature exists next to the currently available (local) 7k IO Module time synchronization option. **This option will be available from 7k IO Module version 4.1.0.6 and higher.**
- 5) 7k IO Module: the 7k IO Module is now allowed to jump (synchronize) back in time.
- 6) Added support for True Equi-Distant beam mode.

2.3 4.1.0.5 (22-08-2013)

2.3.1 Bug fixes

- 1) 10027: Slave sonar layer attributes could be wrong. Don't disable slave layers when disconnected.
- 2) Fixed snippets computation for multi-detect. There can be more or less detections than beams.
- 3) Changed multi-detect parameter name from Object size to Object sensitivity.
- 4) Changed multi-detect parameter sensitivity slider ranges from 0-100 to 1-100.

- 5) SeaBat UI install folder name is now set back to: ..\SeaBat UI Vx.x.x.x
- 6) Advance pane: fixed scrollbar for constant spacing (steps smaller than one).

2.3.2 Modified features

- 1) 9824: Added 'ValueNoCheck' driver formula to not invalidate datablocks when non crucial data values in data string are empty.
- 2) 10030 and 10031: Don't automatically open property and control panes in the SeaBat UI. You now have to click on a tab to open it. Click anywhere outside of the pane to hide it. Disabled animation and eliminated wait time for auto-hide.
- 3) 10038: Disable check box to restore sonar factory settings in dual head mode.
- 4) Added text about drag and drop of license files on SeaBat UI. Drag on drop now also works on the license dialog.
- 5) Disable measuring of objects in the Wedge view when history is enabled.
- 6) Make history points in the Wedge view half the size of the active ping. Points of one pixel can sometimes be hard to see.
- 7) Annotate messages from the slave sonar with '(slave)'.
- 8) Combine status of Normalization, BITE, PPS, and motion LEDs for master and slave sonars.
- 9) Don't slave motion compensation and PPS edge control.
- 10) Disable more controls when in slave mode: Gates, Tracker, range, power, gain, pulse length, frequency, and beam mode.
- 11) Don't use slave status for Normalization LED when disconnected. Show normalization progress of master first, slave next.
- 12) Disabled manual normalization in dual-head mode.
- 13) Update Normalization LED when slave is connected or disconnected.
- 14) Auto-hide property panes when clicking in one of the control panes. Support quickly showing and hiding an auto-hide pane. Immediately hide Pipe Detection pane.
- 15) Enable frequency selector on dual head master. Full Rate Dual head (FRDH) is not supported at 200 kHz on 7125 ROV2.
- 16) 'Host Address' has been renamed to 'Destination Address' in the 'Input Distribution (RRIO)' node of the SeaBat UI 'IO Module' panel.
- 17) Support dual head master modes for both full and half rate.

2.4 4.1.0.4 (19-08-2013)

2.4.1 Bug fixes

- 1) 9966 & 9967: Enable Show History enables only the master Data Layer and Pipe Layer.
- 2) 9957: Pipe is not drawn with mounting offset in SeaBat UI wedge.
- 3) 9983: Scrollbars now move 1, 2, or 5 steps per page.
- 4) 9980: Snippets would freeze with multi-detect.
- 5) Display correct FM sweep on slave SeaBat UI.
- 6) Sonar controls were not initialized when SeaBat UI was started while normalizing.
- 7) Removed incorrect text about default values for multi-detect. The default is 50% (not 77%). You can reset them by choosing Restore Factory Settings.

2.4.2 Added features

- 1) 9029: SeaBat UI and related software versions must be shown. This has now been implemented in the About dialog.

- 2) 9860: Added 'Stop update' button to IO Module QC page to stop/resume updating the raw data message list.

2.5 4.1.0.3 (14-08-2013)

2.5.1 Bug fixes

- 1) 9898: The RDR recording file path is now properly remembered in between sessions.
- 2) 9837: The AVI / Snapshot recording file path is now properly remembered in between sessions.
- 3) 9908: Pass 7k IO Module Clock status to SeaBat UI IO Module QC Clock page.
- 4) 9027: Font size for all views / layers / panes is now set in the Application Settings dialog.
- 5) 9922: The Snippets display is now shown on the right of the Wedge display, when the Wedge and Snippets displays are active together.
- 6) 9917: Added check to context menu to show when in full screen.
- 7) 9948: Only show slave sonar when connected.
- 8) 9731: SeaBat UI crashes when Water column display is enabled.
- 9) 9900: Seabat UI FP4 crashes on windows XP.
- 10) 9956: Point size of history in Sonar Data layer should be smaller than current ping point size.
- 11) 9962: 7k IO module: Ensure only one device per device type (group) in 7k IO Module to be selected.
- 12) Group gating advice messages for all pipes in one message.
- 13) Browsing the network folders on MS-Windows 7 computers is now working properly.
- 14) SeaBat UI has been made more robust.
- 15) Improve starting and stopping of Pipe Detection and Tracking in SeaBat UI.
- 16) Improve synchronization of Pipe Detection and Tracking rendering with Wedge and Helmsman layers.
- 17) Disable frequency selector (200/400 kHz) when in FRDH.
- 18) Disable slave offsets when not connected.
- 19) Remove favorite driver mark ('>') in 7k IO Module when receiving 'set device' request to fix 7k IO Module configuration in legacy 7k UI.

2.5.2 Modified features

- 1) 9926: Pipetracker record 2004 is now recorded in S7k file.
- 2) 9378: Wedge items should be moved to the Data Layer, because these items are linked to the data and not to the wedge.
- 3) 9940: Changed text of 7k Data Distribution (7k IO Module) and Raw Data Distribution (SeaBat UI) for better distinction.
- 4) AVI recordings and Snapshots can now be made even if MS-Windows is in Aero mode.
- 5) Use multidetect primary detection for Pipe Detection and Tracking.
- 6) SeaBat UI 7k IO module QC: Implemented RRIO packets version 01 (according to RRIO Technical Bulletin version 1.1).
- 7) Disable center frequency control and FM sweep properties when in FRDH mode. Full-rate dual head uses fixed frequencies.
- 8) Renamed CW frequency to center frequency. It also works for FM.

2.5.3 Added features

- 1) Implemented Pipe Detection and Tracking gating control.
 - a. Add gating control to Pipe Detection and Tracking properties pane.
 - b. Always sent gating for all pipes.
 - c. Sent empty gating message when gating is stopped or no more pipes are tracked.
- 2) Multidetect is now available from the SeaBat UI.
 - a. Use multidetect primary detection for snippets in SeaBat UI. Detection priority is now a separate data array item.

2.6 4.1.0.2 (04-07-2013)

2.6.1 Bug fixes

- 1) IO Module: Favorite driver list (the drivers which are shown in the top of the IO Module driver selection controls) is now created more robust.
- 2) Computations are improved to be more agile when processing bulk datasets while in parallel computation attributes are changed (by the operator). This prevents the user interface to block.
- 3) Pipe steering is done immediately when pipe steering mode changes.
- 4) The check box for Custom Beam Mode was not checked when Constant Spacing was enabled. Also, the check box for Constant Spacing was gone in this case. This has now been fixed.

2.6.2 Modified features

- 1) The Pipe Detection computation has been made more robust.
- 2) Do not synchronize the Sonar Pipe layer in the Wedge view, it may stop updating the wedge.
- 3) Disable Tracker Coverage Angle option when Pipe Detection and Tracking Swat or Flexmode steering is enabled.
- 4) The SeaBat UI is now capable to capture snapshots in Windows 7 and Windows 8 Aero mode. The need to switch the Windows UI theme to Classic or Basic mode for creating snapshots is not available anymore.
- 5) Hide Cable Length property when not supported by the sonar. Expand Cable Length node when nothing has been selected yet.
- 6) Removed Cable Length of slave sonar (for now). Show vessel offsets under dual head.

2.6.3 Added features

- 1) IO Module: When clock and pulse in a clocksync device could not be matched by their time, a message will be reported.

2.7 4.1.0.1 (03-07-2013)

2.7.1 Bug fixes

- 1) 9387: IO Module: For some drivers are the { } visible. This has now been fixed.
- 2) Configuration panels; don't update grid properties while editing in-place.
- 3) Fixed installing of license file on system with no valid license or with a dongle.
- 4) Fixed reboot and shutdown of 7kCenter when started without a valid license.
- 5) Adaptive gates were not drawn when less detections than beams. This has now been fixed.
- 6) Fixed pipe detection for multiple detections per beam. Number of angles is not equal to number of detections.

2.7.2 Modified features

- 1) 9761: View list in Display pane: sorted main items on alphabet.
- 2) 9827: IO Module QC: Display same datablock items on clock page of 'IO Module QC' tab as on clock page of IO Module.
- 3) 9835: IO module QC: Hide dynamic delay datablock items on 'IO Module QC' device pages.
- 4) 9861: IO module QC: Fixed Raw Data Distribution in IO module (incorrect data string).
- 5) 9883: IO module QC: Fixed trailing spaces in device driver names in SUI.
- 6) 9885: Activation of cable length compensation requires reboot.
- 7) Possible time out of clock device data in IO Module with PosMV ('Generic ZDA + 1PPS' driver) has been fixed. Set 50ms tolerance in time difference of clock message and pulse.
- 8) Decreased default transparency of sonar data layer. Bathy points were barely visible.
- 9) Hardware property pane has been re-ordered to cope with all the hardware configurations for master and slave sonars.

2.8 4.1.0.0 (24-06-2013)

2.8.1 Bug fixes

Lots of small and big issues have been fixed.

2.8.2 New features

All these features can have more view layers and controls available for usage.

- 1) Water column visualization
- 2) Dual head display in one SeaBat UI application
- 3) Pipe detection and tracking, including a Helmsman view for pipe tracking (licensed feature)
- 4) IO module QC is now embedded in the Service page

2.8.3 Modified features

- 1) Improved Detect view
- 2) Improved History layer in the Wedge view
- 3) Improved layout of the Sonar Control panes
- 4) Improved Message view

3 VERSION 4.0

3.1 4.0.0.10 (30-01-2013)

3.1.1 Bug fixes

- 1) 9565, 9575: When the sound velocity override check box is clicked, the sound velocity control should be enabled. Currently, it works exactly the other way around! This is now fixed.
- 2) 9576: SUI Tracker button should be disabled when in master mode. This is now fixed.
- 3) Trigger is disabled for 8k wet end.

3.1.2 New features

- 1) 9255, 9543: Trigger configuration is added to the Hardware configuration page of the SUI.
- 2) 9461: For 7160 the FM sweep settings are added to the Hardware configuration page of the SUI.
- 3) 9536: For 7160 the frequency CW slider is added; the slider will be disabled when FM pulse type is selected.

3.1.3 Modified features

- 1) Dutch translation of the SeaBat UI has been completed.
- 2) Update 7k XML to support CW frequency step size.
- 3) Layout of the Advanced Settings page is updated due to the fact that the CW frequency slider is added.

3.2 4.0.0.9 (09-01-2013)

3.2.1 Bug fixes

- 1) 9325: SUI RDR pane has two issues (file size units and RDR other-records-selection). These have now been fixed.
- 2) 9432: Incorrect gain value shown on slider in SUI after switching TVG/Fixed. This is now fixed.
- 3) 9434: SUI should disable absorption and spreading controls in Fixed Gain mode. . This is now fixed.
- 4) 9441: Get number of 8k pulse length settings from sonar XML. . This is now fixed.
- 5) 9458: SUI should disable Range control when Tracker is enabled. . This is now fixed.
- 6) 9476: SUI should disable more controls in dual head slave mode. Also disable Tracker, Normalization and RDR Recording when in slave mode. . This is now fixed.
- 7) 9504: SUI could not be used for dual-head without FRDH license. . This is now fixed.
- 8) 9528: Head tilt in SUI editing 1000 times to great. . This is now fixed.
- 9) 9940: Power settings are wrong on 8125-H in SUI. (Use power settings from XML. Each 8k projector has its own set.) . This is now fixed.
- 10) Disable history in Detect view when upgrading to a newer SUI version.
- 11) Fixed transparent letters in splash image.
- 12) Added all levels of the main icon so in Windows the icons look good in all possible situations (zoom levels).
- 13) Fixed command for enabling dual head.
 - a. Some fields were uninitialized.
 - b. Enable trigger for FRDH.

- c. Set multiplier to 1.0 for ping-pong mode.

14) Fixed resetting to default coverage.

15) Improved scrollbar behavior in SUI.

3.2.2 New features

- 1) 9337: Add support for beam width option for 7160.

3.2.3 Modified features

- 1) Use default log file naming when starting 7k recording from the SUI.
- 2) Dutch translation of the SeaBat UI has been completed.
- 3) New icons for the existing tabs in the application are created.
- 4) Internal code clean-up.
- 5) Internal: source code improvements have been made.
- 6) Internal: source code has been made more robust.
- 7) Minimum gates window size set to 5 percent.

3.3 4.0.0.8 (18-10-2012)

3.3.1 Bug fixes

- 1) 9260: 7160 sonar beam modes did not fit the Beam Mode combo box. This has now been fixed.
- 2) 9152: Roll stabilization option is now grayed out for the 8125-H sonar.
- 3) 9195: Recording pane: label for 'Free disc space' now indicates the value is a percentage.
- 4) 9265: Recording pane: 'Current file size' for s7k recording is now updated while recording.
- 5) 9264: Recording pane: 'Records logged' is not updating during the recording, it is only updated when the recording is stopped. This has now been fixed.

3.3.2 New features

- 1) 9258: Pitch stabilization operator control has been added for the 7160 sonar.

3.3.3 Modified features

- 1) 8931: The About box lay-out has been improved.
- 2) Operator's manual has been updated.
- 3) Internal: source code improvements have been made.
- 4) Internal: source code has been made more robust.
- 5) Detect view: 'Only Show Valid Beams' enabled by default; in this case the auto extents works less dynamic.
- 6) Moved the History feature from the Detect view to the Wedge view.
 - a. History is now scrolling from top to bottom.
 - b. Added option to scroll to bottom left, bottom center or bottom right.
 - c. Added option for swath spacing.
 - d. Added option in the Data layer to set transparency from 0 to 100 percent. Switched off the transparency for the first swath. Use transparency for the history swaths only.

3.3.4 7k IO Module

3.3.4.1 New features

- 1) 9332: Added water temperature and depth pressure to 7610 SV 7k record. Modified PDS2000 and the 7k IO Module to support these new values.
 - a. There are currently two drivers that support the new fields:
 - i. RESON SVP70 RESON
 - ii. RESON SVP-C

3.4 4.0.0.7 (13-09-2012)

3.4.1 Bug fixes

- 1) Compatibility issue with Windows XP has been resolved (involved: GetTickCount64).
- 2) BITE pages will not report BITE issues when they are for Service personal only. Once the SeaBat UI application is set into Service mode these BITE issues will be shown.

3.5 4.0.0.6 (16-08-2012)

3.5.1 Bug fixes

- 1) Removed LockWindowUpdate calls; they block window updates in other applications, resulting in flickering.

3.6 4.0.0.5 (13-08-2012)

3.6.1 Bug fixes

- 1) TT 9014: Fixed setting swath steering angle to minimum and maximum. In wide mode the min/max values are -2.5/+2.5. These are rounded down/up to -3/+3.
- 2) TT 9052: Don't scroll BITE details list to the top every time it is updated.
- 3) TT 9060: When the slider for the Angle in changed and then on Default is clicked sometime the first time the slider does not react. The value itself jumps to the default value (140) but the slider not. Sometimes the slider jumps also to the default value of 140 but jumps directly back to 139 while the value stays on 140. This has now been fixed.
- 4) TT 7079: The max range shown for 200 kHz is 400 meter, but it is adjustable up to 750 meter. The static text controls are now updated when the frequency changes.
- 5) TT 9102: There is a possibility to click on a block in the BITE block diagram. This works fine unless the BITE block diagram scroll bar has been used. The orientation of the blocks (when you click on them) does not follow. Fixed mouse clicking in scrolled BITE schema.
- 6) TT 9138: The Pulse Type is now disabled when the SUI is acting as a Slave or Master. In normal mode the pulse type can still be changed.
- 7) TT 9150: When in the xml for the 400kHz the max power is changed it is not visible in the control pane of the SUI. When it is done for the 200kHz the right max power is visible. The selection of the power value is now linked to the frequency selection.
- 8) TT 9156: Adaptive Gates do not show on New UI 4.0.0.4. Fixed. Also affected: adaptive gate window percentage, adaptive gate search limits, and gain mode (TVG/Fixed).
- 9) TT 9181: Normalization does not work when SUI is loaded after Legacy UI. This has now been fixed (in the 7kCenter).
- 10) Configuration panes: Don't change value on first click of scrollbar property.
- 11) Pulse length scroll bar had a step size of 2 instead of being logarithmic. This has now been fixed.

- 12) Fixed jumping of scrollbar when setting manual sound velocity.
- 13) Support ping rate ratio from sonar configuration for step size other than one.
- 14) Enabling or disabling tracker did not work the first time. This has now been fixed.
- 15) Fixed wrong frequency in SUI when 7kCenter was restarted while SUI was running.

3.6.2 New features

- 1) TT 9006 & TT 9049: Normalization is now shown by means of a modal dialog which blocks the UI during the normalization.
- 2) TT 9100: Roll Stab format NMEA \$PASHR is now available.
- 3) Display 7k event messages in alert window.
- 4) Added levmar license info to the about dialog of the SeaBat UI app.

3.6.3 Modified features

- 1) TT 9022: The flex mode licensing has been adjusted so the 8125 Hybrid also properly handles flex mode licensing.
- 2) TT 9071: Limited scrollbar update rate to 5 times per second for all sliders which can be used to set a 7kCenter parameter.
- 3) TT 9099: Entering values for sonar gates now works like in wedge. When a gate comes too close to another it will change that value too.
- 4) Absolute gates option will not be shown when tracker is enabled.
- 5) Removed redundant BITE error alert.
- 6) Internal: source code cleanup.
- 7) Internal: source code restructuring.
- 8) Internal: stability improvements have been made.

3.7 4.0.0.4 (06-07-2012)

3.7.1 Bug fixes

- 1) TT 9087: When replaying 7k log data, the SeaBat UI shows horizontal black lines. To fix the problem the SeaBat UI Snippet computation now only uses beam quality 3 (brightness and colinearity bits set).
- 2) Sometimes the Hardware pane does not show all available frequencies at all times. This has now been fixed.
- 3) The Beam Mode licensed feature option has been improved to properly work with all sonar types.
- 4) Internal: source code cleanup.
- 5) Internal: source code restructuring.
- 6) Internal: stability improvements have been made.

3.7.2 New features

- 1) TT 9064: Multi frequency sonars: the Hardware pane now expands parts of the tree based on the frequency selected. And it collapses parts of the non-selected frequency(ies).
- 2) Control pane: adjust text above Gain scrollbar depending on Fixed checkbox.
- 3) Using full screen for a view does now not hide the floating panes; these will stay visible while all docked views will be hidden during the full screen state of the application.
- 4) Implemented the NMEA \$PASHR motion string as an option for the roll stab.

3.7.3 Modified features

- 1) TT 9087: SeaBat UI will reset to default coverage when switching beam modes.
- 2) SeaBatUI.ini file (and SeaBatUISlave.ini) is not installed by the installer anymore. It will be generated on the fly on an as-needed basis.
- 3) Dutch translation of the SeaBat UI has been completed.
- 4) Operator's manual has been updated.

3.7.4 7k IO Module

3.7.4.1 Bug fixes

- 1) TT 9804: All sound velocity drivers have been set to 10Hz input rate.
- 2) TT 8950: Time stamping of 7k IO Module has never been wrong; message display did not always display all the messages. See 7k IO Module technical bulletin.

3.7.4.2 New features

- 1) The 7k IO Module now comes with a technical bulletin "Technical Bulletin - Time Synchronization in 7k IO Module.pdf" which explains in great detail the inner workings of the 7k IO Module version before 3.7.x.x and the version 3.7.x.x onwards. The document is located in the manuals subfolder and can be accessed by the Documentation shortcut in the Windows Start Menu.

3.8 4.0.0.3 (20-06-2012)

3.8.1 Bug fixes

- 1) TT 9079: Control pane: 200Khz max range is wrong on the slider. This has now been fixed.
- 2) TT 9086: Snippets view will only process beams with co-linearity and brightness bits set (quality 3).
- 3) Finalized the implementation of the Load Factory Parameters option in the SeaBat UI (to be found in the Application Settings dialog).
- 4) Converted string literals to resource strings to get a better translated application.
- 5) Checking of Flex Mode license now has been fixed.

3.8.2 New features

- 1) Support running SeaBat UI of both master and slave on one system. The first SeaBat UI instance controls the local 7kCenter and 7k IO Module, while the second instance controls the slave 7kCenter and 7k IO module. The slave UI has separate settings (ini file and registry).

3.8.3 Modified features

- 1) Dutch translation of the UI has been completed.
- 2) Cosmetic textual improvements have been made.
- 3) SeaBat UI lay-out changes are now stored at registry location
 - a. "HKEY_CURRENT_USER\Software\Reson\SeaBat UI" or
 - b. "HKEY_CURRENT_USER\Software\Reson\Seabat UI Slave"

3.8.4 7k IO Module

3.8.4.1 Modified features

- 1) The Obsolete driver folder (subfolder of the General folder) is now installed in the SeaBat UI and 7k IO Module application folder. This can be used to use legacy drivers which customers might have in use in current projects.

3.9 4.0.0.2 (14-06-2012)

3.9.1 Bug fixes

- 1) TT 9024, TT 9059, TT 9077: LED's in the application toolbar now properly update their color when the corresponding data changes state.
- 2) TT 9030: 400 Khz and 396 Khz is now normalized to 400 Khz.
- 3) TT 9044: Don't set coverage to small angle at startup.
- 4) TT 9050: Detect view - removed obsolete annotation type item from Display pane.
- 5) TT 9051: Service page: date and time of last BITE message is reformatted.
- 6) TT 9056: AVI and Snapshot files now have UTC dates instead of localized dates.
- 7) TT 9060: Fixed head tilt for sonar wedge image.
- 8) TT 9065: Fixed manual setting of gate values, which sometimes didn't work at all.
- 9) TT 9070: Implemented separate minimum pulse length for FM.
- 10) License Information dialog will be more user when no license information is available.
- 11) Service status page: show "no errors" or "no bite data" depending on bite data (instead of "no bite data" only).
- 12) Cosmetically improved the Service pages.
- 13) Internal: source code cleanup.
- 14) Internal: source code restructuring.
- 15) Internal: performance improvements have been made.
- 16) Internal: stability improvements have been made.
- 17) Implemented a more robust way of getting the current sonar settings. This will benefit all functionalities in which that is needed (frequency switch, projector selection, ...).
- 18) Implemented a more robust way to get the available frequencies for the connected sonar.
- 19) Made processing of 7028 snippet data more efficient.
- 20) Optimized license check for frequencies in SeaBat UI.
- 21) Reset to default coverage when switching beam modes.
- 22) Push other gate out of the way when gates come too close together while dragging.

3.9.2 Modified features

- 1) Dutch translation of the UI has been completed.

3.9.3 7k IO Module

3.9.3.1 Bug fixes

- 1) SetTimeService service was not properly connected to the 7k IO Module. This has now been fixed. Thus the computer clock will now be synchronized properly.
- 2) Internal: source code cleanup.
- 3) Internal: performance improvements have been made.
- 4) Internal: stability improvements have been made.

3.10 4.0.0.1 (04-06-2012)

3.10.1 Bug fixes

- 1) TT 9000: Selection of beam mode is kind of difficult; this has now been fixed due to the Advanced pane layout change (9009).

- 2) TT 9009: Advanced Control pane slider controls are now placed horizontally.
- 3) TT 9011: Swath angle does not jump back to the minimum value due to gate changes.
- 4) TT 9016: The views in the SeaBat UI froze unexpected for a couple of seconds. This has now been fixed.
- 5) TT 9018: Handling of network ports for devices used in the 7k IO Module has been enhanced.
- 6) TT 9019: Removed button like behavior of the LED's in the application toolbar.
- 7) TT 9025: Communication to the 7kCenter has been bug fixed (after a frequency switch the sonar controls still behave as expected).
- 8) TT 9026: The names of external sensors used in the 7k IO Module are now also used in the 7k IO Module Settings pane.
- 9) TT 9028: Internal source code restructuring.
- 10) TT 9048: Roll stabilization in the Hardware Settings pane is greyed out while roll stab is enabled. This has now been fixed.
- 11) TT 9055: Hardware Settings pane typos have been corrected.
- 12) TT 9066: Normalization checkbox will now stay unchecked when selected.
- 13) TT 9067: Sound Velocity Filter combobox is now aligned with Sound Velocity slider in Advanced Control pane.
- 14) Main Control pane typo has been corrected.
- 15) Improved Message pane behavior when accepting alarms.
- 16) Internal: performance improvements have been made.
- 17) Internal: stability improvements have been made.
- 18) Internal: design improvements have been made.
- 19) Internal: source code clean-up.
- 20) Internal: display visualization performance management has been added.
- 21) Internal: removed unnecessary computations from Sonar devices.

3.10.2 Modified features

- 1) Dutch translation of the UI has been completed.
- 2) Operator's manual has been updated.

3.10.3 7k IO Module

3.10.3.1 Bug fixes

- 1) The 7k IO Module has been improved internally to work properly with both the SeaBat UI and the legacy UI.
- 2) Internal: performance improvements have been made.
- 3) Internal: stability improvements have been made.
- 4) Internal: design improvements have been made.

3.11 4.0.0.0 (24-05-2012)

3.11.1 Initial release SeaBat UI

- 1) The graphical user interface needs to provide the operator with sufficient information to correctly operate the system, provide displays to allow quality control of the data and provide information on system status and error checking. The SeaBat UI gives the user optimum processing power and brings a fresh new feel to the user without losing the critical information the operator needs to correctly and optimally use the system.

- 2) Please refer to chapter References for detailed information on the features in this initial release of the SeaBat UI.

3.11.2 7k IO Module

- 1) The 7k IO Module has been renewed. A new official release has not been made (will not be made). This does **not** mean that the SeaBat UI cannot work with the previously released version (3.7.0.14). The SeaBat UI just utilizes the new features of the new 7k IO Module version. The release notes document for previously released version (3.7.0.14) has been embedded in this installer for information completeness.
- 2) The new 7k IO Module has been integrated in the SeaBat UI installer. This is to limit the size of the total 7k software installer. Installer features of the previously released 7k IO Module installer (3.7.0.14) are mimicked by the SeaBat UI installer. Please use the new integrated 7k IO Module in combination with the SeaBat UI.

3.11.2.1 New features

- 1) 7k IO Module status output message added (for usage in the SeaBat UI Service pages).
- 2) The 7k IO Module now has a feature which enables filtering of sensor groups. This means only the valid sensor groups will be shown to the operator.

3.11.2.2 Bug fixes

- 1) The 7k IO Module now saves leap seconds.
- 2) Generic stability improvements.
- 3) Performance improvements.
- 4) Generic design improvements.

4 AMENDMENT RECORD SHEET

Rev	Date	Reason for change	Revised by
0	24-05-2012	First version of this document.	H. Stoelinga
1	04-06-2012	Bug fix release: (small) issues fixed	H. Stoelinga
2	13-06-2012	Bug fix release: toolbar LED behavior, 396 vs. 400 kHz, ...	H. Stoelinga
3	20-06-2012	Bug fix release: master / slave usage, reset sonar settings, ...	H. Stoelinga
4	06-07-2012	Bug fix release: (small) issues fixed	H. Stoelinga
5	13-08-2012	Bug fix release: (small) issues fixed.	H. Stoelinga
6	16-08-2012	Bug fix release: removed flickering of other applications when SeaBat UI is active.	H. Stoelinga
7	13-09-2012	Bug fix release: BITE and Window XP related	H. Stoelinga
8	18-10-2012	Bug fix release: (small) issues fixed.	H. Stoelinga
9	09-01-2013	Bug fix release: (small) issues fixed.	H. Stoelinga
10	30-01-2013	Bug fix release: (small) issues fixed.	M. Hartog
11	24-06-2013	Major new release 4.1.0.0	H. M. Stoelinga
12	03-07-2013	Version 4.1.0.1	H. M. Stoelinga
13	04-07-2013	Version 4.1.0.2	H. M. Stoelinga
14	14-08-2013	Version 4.1.0.3; major release; also small issues fixed	H. M. Stoelinga
15	19-08-2013	Version 4.1.0.4; small issues fixed	H. M. Stoelinga
16	22-08-2013	Version 4.1.0.5; several small and big issues fixed	H. M. Stoelinga
17	20-12-2013	Version 4.1.0.6; several small issues fixed	H. M. Stoelinga
18	15-01-2014	Version 4.1.0.7; several small issues fixed	H. M. Stoelinga