EDDYFI SWIFT-U 1.1R5 SOFTWARE RELEASE NOTES

System Requirements

- Silverwing Swift-U instrument with software version 1.0 or 1.1R1
- Scorpion2 or R-Scan system

Support Improvements

- Ability to activate / de-activate on-board joystick when present on the Swift.
- External joystick operation overrides internal joystick operation.

Bug Fixes

- Crash when using Scan Export for the first time on a new Swift instrument.
- Intermittent loss of connection between Swift and Scorpion

EDDYFI SWIFT-U 1.1R1 SOFTWARE RELEASE NOTES

System Requirements

- Silverwing Swift-U instrument with software version 1.0
- Scorpion2 or R-Scan system

Firmware

Included with this release of Swift v1.1 is firmware version 1.1 for the support with Scorpion2 and R-Scan systems.

This version software is to be installed on Swift instruments only

New Features and Improvements

R-Scan support - General

- Swift 1.1 now supports the R-Scan probe head
- R-Scan icon is now displayed next to Scorpion2 icon on select device screen.
- R-Scan or Scorpion2 icon can be selected to proceed to next window. Only active device is displayed in colour on the image. Inactive device displayed in black and white.
- The user can see on the system what data has been captured by R-Scan / Scorpion2 (identified via icons). The measurement data itself is of the same format, so can be exported to excel / csv in the same manner.
- The user can perform a manual calibration using the R-Scan (Scorpion2 calibration routine is still fully automated).
- R-Scan can only be used in manual scanning mode (no automatic options available). User Interface has been adapted in R-Scan mode to reflect this.
- User can set a predefined scan length for the R-Scan. Option will allow only the distance entered to be scanned.
- R-Scan can be used in free scan mode where a set scan length does not need to be applied.
- Floating gates also available in R-Scan acquisition mode as with Scorpion2.
- Updated Scorpion2 / R-Scan renders and icons to reflect latest specification / branding.

Emergency stop

- Handling of the emergency stop has been modified for R-Scan use. The software now sends the user back to the main screen in acquisition mode as emergency stop button cuts off encoder signals. In addition, when the emergency stop button is now activated, a bright yellow indicator is seen in the bottom left hand window to notify the user the button is active.

Automatic Gain Adjust

- Automatic Gain Adjustment button has been added. The user can press this button to adjust the gain to 80% FSH ±10% dependant on which gate is selected (i.e. if only gate 1 is active, the AGA will set the 1st BWE to 80%±10% FSH, but if gate 2 is active, the AGA will set the 2nd BWE to 80% ±10% FSH).

Gates

- Gate 2 naming has now changed from "Standard" to "FIXED" and "None" to "OFF" to make it easier for the user to distinguish what type of gate is being used.

Inspection Details

- When "Pipe" type has been selected during inspection setup, the user can now select which section of Pipe they are working on as well enter the diameter and length of the pipe.

Calibration

- Name change from "Pulses Per Revolution" to "Linear Resolution" (units displayed in pulses per mm). This has been modified as pulses per revolution is actually a specification of the encoder. Linear resolution actually changes dependent on surface condition, wheel diameter etc. so this is a more relevant description.
- During the saving of a calibration, the "Scanner description" has been changed to "Calibration file name" as the scanner description is also used for the scanner file name.

UI Improvements

- When loading a scan, an image of the device can now be seen next to the filename to distinguish between scans captured with the R-Scan and Scorpion2 system.
- Battery status indicator for Scorpion2 is hidden when using the R-Scan head.
- Workflow of the "Save and next scan" and "Save and go to inspection" buttons has been improved for more efficient user workflow.
- In the analysis window, "close scan" has replaced the "back" button, which was previously greyed out and not used in this window. Improvement to UI.
- If firmware is not updated after 120 seconds, the update process is now aborted to allow the Swift to continue to be used.

Export Improvements

- Ability to export all scans of an inspection to CSV or Excel format to a given step size.

Support Improvements

- Joystick Test option added to Settings which allows user to check the function of the joystick. An extra diagnostic tool.

Dropped Features

- None in this version

Resolved Issues

- 20 mm of data missing at beginning of scan with fast speed
- Feedback for emergency stop button in the Swift application
- Wrong Icon for the Update Scorpion confirmation
- Pop-up clash when license agreement and firmware update both required
- Changing material velocity for a scan after it has been taken should not be allowed
- Using the hand button to pause a scan doesn't enable pause mode
- Gate info field colour is not updated in A-Scan Configuration page
- Minimum separation value is incorrect in imperial
- Scan mode selection is not maintained between scans
- Reverse scan ruler error
- Scorpion unable to connect if firmware mismatch between Swift & Scorpion
- Invalid Operation Detected error on 1.0R5 when entering text in new inspection
- 4m Scan Length error in CSV export window.
- Message box hides when click Home from Analysis view and select no twice
- Incorrect B-Scan palettes installed for Swift
- Text does not fit on screen when no Swift available
- Message box text incorrect on calibration page
- Sleep delay text box doesn't handle large numbers correctly
- Save Scan: Limit scan name length to avoid errors
- Saving files as forbidden file names cause crash
- CMAP Colour palette for Scan with 2.1.3 issue
- B-Scan palette change causes crash

Known Issues, Limitations, and Restrictions

- Time Zone dialog edit requires UI redesign
- Minutes is not displayed in the correct format
- Scan length is displayed as 1mm less than actual
- Gate2 position moved during grid scanning from 2nd to 3rd backwall echo
- Notes: Only impacts R-Scan only, when using tracked gates.
- Multiple large scan loads crashes Swift
- Notes: Concerns export of data (whether CMX, XLSX, or CSV). Code has been improved so that this should only occur in extreme cases unlikely to be witnessed in the field e.g. exporting more than 25 50m scans.
- Scan details for manual backwards scan does not show correct start offset value.
- Notes: This concerns the summary data on the 'Load Scan' screen. It does not affect the data stored and it's display within the Analysis screen.
- Clear Details button not greyed out Export All Scans
- Gate2 tracking start with Load scan, close then return to Acquisition B-Scan
- Notes: Specific to Scorpion 2, tracking gates active, and loading scans only. This can be fixed by reloading the preferred A-Scan configuration once you've finished loading scans and wish to proceed to create new scans.