

SCOUT200 version 23.2 [Nov 2023]




Bently Nevada presents the v23.2 release of the SCOUT200 S1 Collector App, delivering a large number of new & enhanced capabilities:


SCOUT200 v23.2 Features

Data Management

Folder selection during Sync via Remote Comms



Select and delete specific Databases and Route folders



Keypad Entry measurements can be taken without connecting data collector.

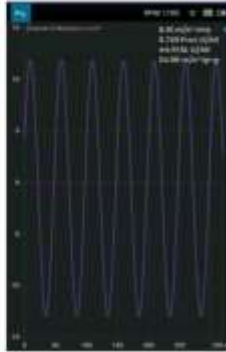
Plot Enhancements

Display overall value of previous and baseline sample in Plot.

Display True peak-peak (tp-p) on waveform plots

Intermediate averages displayed on Plot.


Cross Channel FRF Enhancements



Enhanced Settings

User Guide in S1 Collector app

Save and load configuration settings



Bently Nevada remains focused on delivering the world's premier plantwide machinery management solutions through bi-annual product releases.

Thank you,

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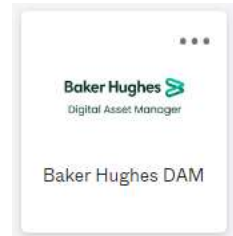
On behalf of your SCOUT200 Leadership and Development Teams.

1. V23.2 CAPABILITY OVERVIEW

SCOUT200 v23.2 Capabilities		
<u>Feature</u>	<u>Description</u>	<u>Section</u>
Folder selection during Sync via Remote Comms	Allows users to select specific folders for uploading data to Remote Comms.	2
Select and delete specific Databases and Route Folders	Allows users to clean up their device by deleting individual or multiple Route Folders and/or Databases.	3
Keypad Entry measurements can be taken without data collector connected.	Supports basic Operator Rounds by allowing users to take Keypad Entry measurements even when no data collector is connected. This applies to both off-Route (Measure mode) and on-Route recordings.	4
Display overall value of Previous and Baseline samples in plot.	S1 Collector now shows the Overall value of the Baseline measurement from System 1, on spectra & waveform plots. If any Previous measurements at this location are available on the device, the Overall of the most recent one is also displayed.	5
Display True peak-peak (tp-p) on waveform plots	S1 Collector now shows the True peak-peak value on all Waveform plots.	6
Intermediate averages displayed on plots.	S1 Collector now gives users a preview of the spectral data, by showing intermediate averages on plots while recording longer-duration measurements.	7
Cross Channel FRF Enhancements	S1 Collector now allows users to overwrite their recorded FRF measurements and improves the synchronization of cursors between plots.	8
Synchronized cursors between plots	S1 Collector now shows cursors in sync on ALL the plots on a page having the same X-axis multi-channel measurements, like normal waveforms and spectra.	9
Save and load configuration settings	Allows users to save a config file with Remote Comms Settings, Measurement Units, Route mode, Display preferences, Alarm types and Alarm Preset values. This file is loaded automatically when the app is launched.	10
User Guide in S1 Collector app	Allows users to open and view the SCOUT200 User Guide directly from the S1 Collector app on the handheld device.	11

Note: A video providing an overview of the v23.2 SCOUT200 enhancements is in the Bently Nevada Tech Support Training Library. A valid M&S agreement is required to access the video. Steps to follow:

1. Go to bntechsupport.com and either login or register for access.
2. Select the tile labelled "Digital Asset Manager, Baker Hughes DAM"
3. Select "Assets"
4. Select Asset Type = Videos
5. In the main search bar (top center), enter "SCOUT200"



2. FOLDER SELECTION DURING SYNC VIA REMOTE COMMS

S1 Collector app v23.2 now allows users to select and sync specific folders (instead of an entire database). This can be achieved from Sync with Remote Comms page (as shown below).

On the resulting database screen, deselect the "All" check box and select the route folders you would like to upload to Remote Comms, then select the Sync button. This will upload data only for the selected folder. Note that the app will still *receive all route folders* in the selected database during the Sync process i.e., the folder selectivity affects *sending* data only.



Figure 2-1

3. SELECT AND DELETE SPECIFIC DATABASES AND ROUTE FOLDERS

S1 Collector v23.2 now includes a new option “Delete Databases or Folders” within the Settings > Database Options menu. This displays a list of all databases and their associated route folders, to allow the user to tidy up the storage on their device.

You can collapse/expand each Database using the down/up arrows, or you can use the Collapse All/Expand All button.

Selecting a Database checkbox automatically selects all its associated Route Folders.

For safety, a confirmation dialog is displayed after the Delete button is pressed.

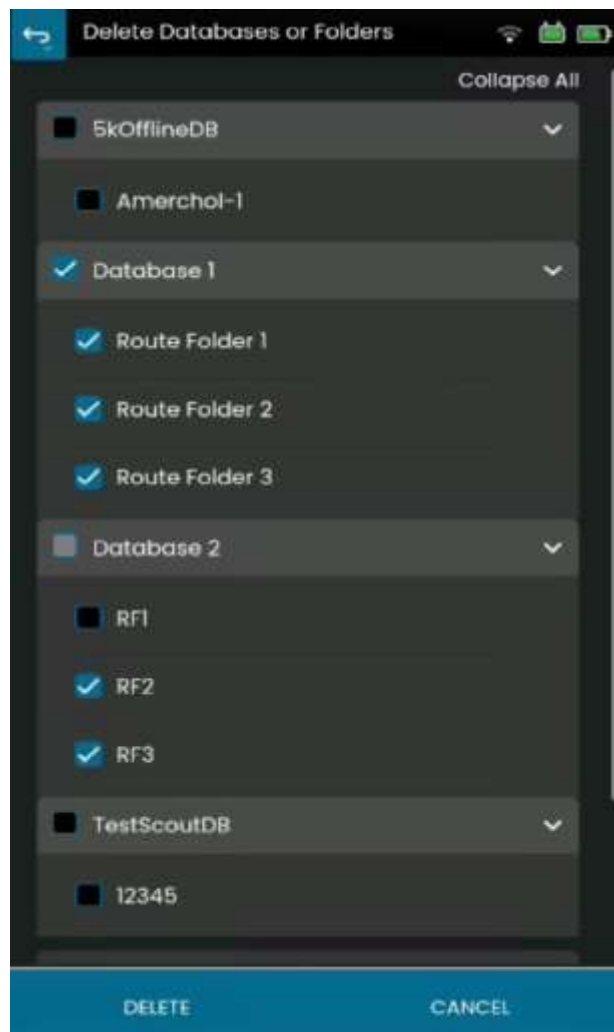


Figure 3-1

4. KEYPAD ENTRY MEASUREMENTS CAN BE TAKEN WITHOUT DATA COLLECTOR CONNECTED.

S1 Collector now allows users to take Keypad Entry measurements without connecting to a data collector. This applies to both off-Route (Measure mode) and on-Route recordings.

This enables the S1 Collector app as a convenient way to collect basic numeric data during operator rounds, and to enter those values into System 1 for trending & alarming. No data collector is required. Any mobile device can be used, once loaded with the S1 Collector app from the Google Play store or Apple Appstore. So, this ability comes at *no cost* to most holders of System 1 software licenses, even if they are not yet using SCOUT200 portables.

Note that for on-Route use, the Route must contain only Keypad Entries, no vibration measurements, otherwise a data collector will be requested.

5. DISPLAY OVERALL VALUE OF PREVIOUS AND BASELINE SAMPLES IN PLOT.

S1 Collector v23.2 now shows comparison values below the Overall value in the info panel at the top right of the plot:

1. Overall value of the most recent Previous sample on the device, if any (Prev. O/All).
2. Overall value of the Baseline sample, if this had been sent with the Route from System 1 (BL O/All).

These are both displayed in the same units as the measurement's Overall value, shown immediately above.

Note that this can cause the info panel to become rather large, especially if 1 or 2 cursors are also enabled. However, this panel can simply be dragged to a different location on the screen, to avoid it obscuring important spectral or waveform info.

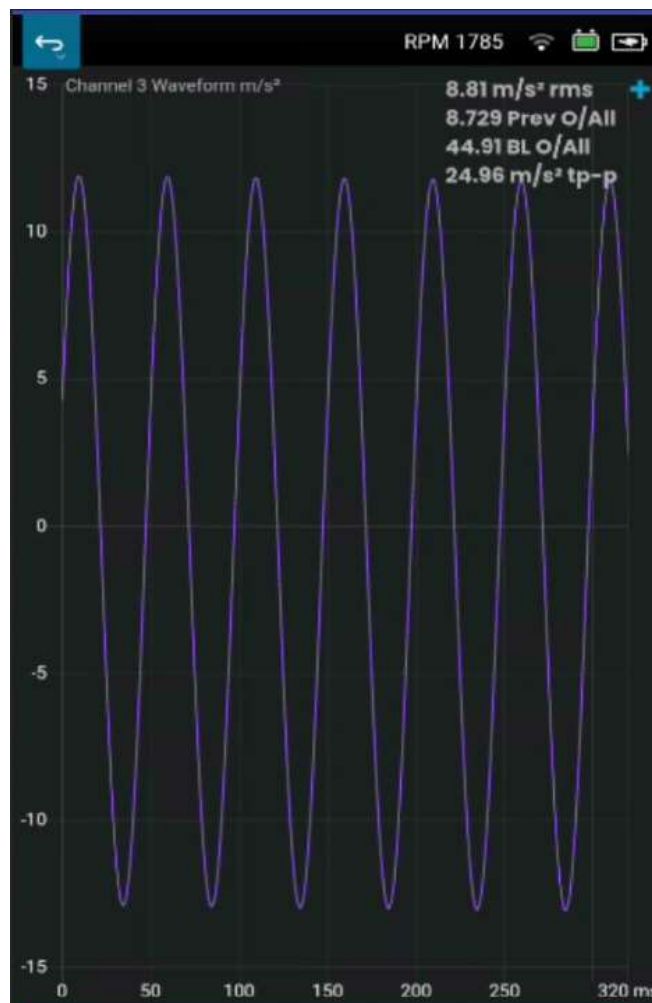


Figure 5-1

6. DISPLAY TRUE PEAK-PEAK (TP-P) ON WAVEFORM PLOTS

SI Collector v23.2 now shows true peak to peak values in the info pane at the top right of all waveform plots.

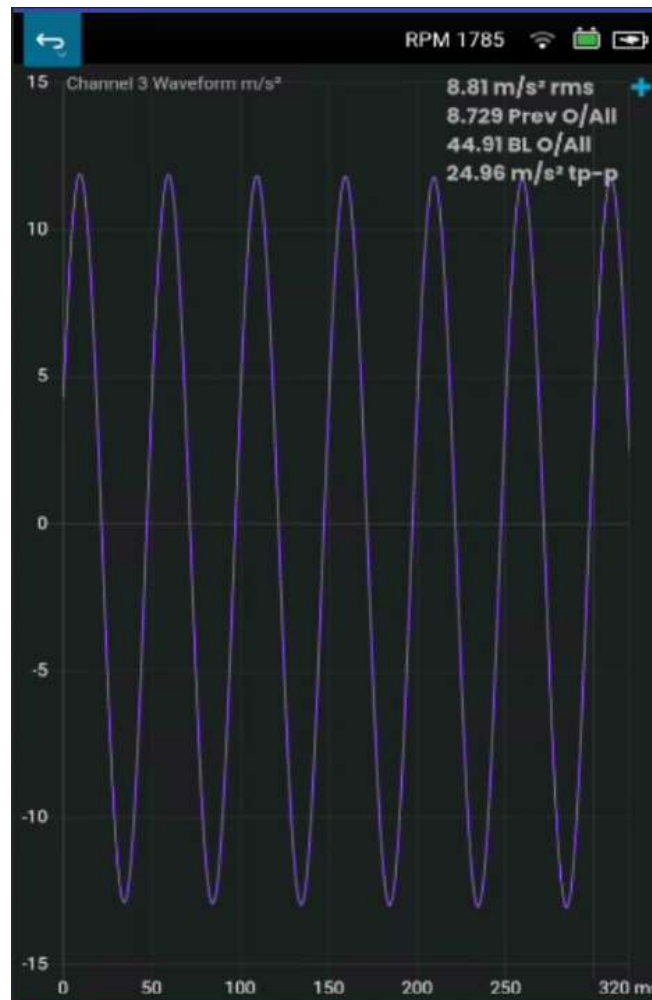


Figure 6-1

Note that the available scaling options for overall levels have always been: rms, dpk & dpp.

The “d” prefix for the peak and pk-pk options is to indicate that these are derived, i.e., they are calculated as a fixed ratio from the rms value. In contrast, “true” values are based on the highest momentary peaks present in the time waveform. The derived peak and pk-pk values match the true values only when the signal is a single-frequency sinusoid.

The measured true peak to peak value (tp-p) is now displayed whenever it is available i.e., on all waveform plots.

7. INTERMEDIATE AVERAGES DISPLAY ON PLOT

SI Collector v23.2 now shows intermediate averages on plots while it is recording longer-duration measurements.

Some measurements take considerable time to record, especially those on slow speed machines, with high resolution and many averages. This new feature allows an analyst to see spectral data from the first average, and possibly subsequent averages, as the data is being acquired. This is done in a way that does not slow down data acquisition, as intermediate results are only displayed if the result is some time off.

Previously the app displayed a rather uninformative "Recording..." message.

The Averages counter is displayed on plot header in the format <current average>/<configured averages>.

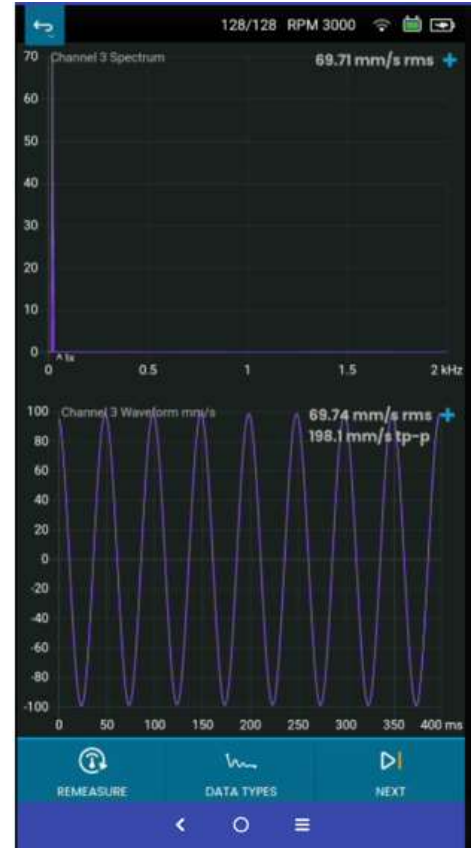


Figure 7-1

When recording on Route in Gauge display mode (rather than Plots mode), the Average counter is simply displayed as a progress bar, with the gauge displayed after all averages are complete.

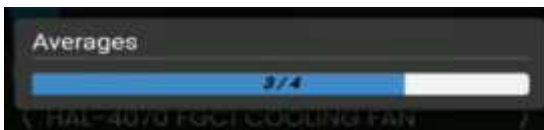


Figure 7-2



Figure 7-3

8. CROSS CHANNEL FRF ENHANCEMENTS

S1 Collector v23.2 now has the following enhancements related to Frequency Response Function measurements (which are used during data collection for Operating Deflection Shapes analysis):

- If a user realizes that an FRF measurement had some sort of data quality issue, or was taken at the wrong location, they can now **overwrite** the previous measurement. Whenever the app detects that a measurement is being saved to a combination of Reference and Roving Sensor locations which already contain data, a confirmation message pops up. The user is asked to confirm Overwrite (removal) of the existing recordings. Otherwise, both the existing and new recordings are kept.
- A minor improvement was made to the **recording count** for FRF measurements displayed in Record-Review mode. For the unusual situation where the Reference and Roving Sensors are at the same location, the count is now shown correctly as 2 recordings instead of 1.

9. CURSORS SYNCHRONIZED BETWEEN PLOTS

Synchronized cursors were implemented in v23.1 for the specialized FRF plot (displaying Coherence, FRF magnitude & FRF phase). This implementation has now been extended to ALL plots on a page having the same X-axis. i.e., if you add a cursor to any one of the plots, it will also be added to all others. And when you move any one of the cursors, all will move. This means that not only do the FRF spectral plots now benefit from sync'd cursors, but that all the common measurement types now have it, like normal spectra & waveforms.

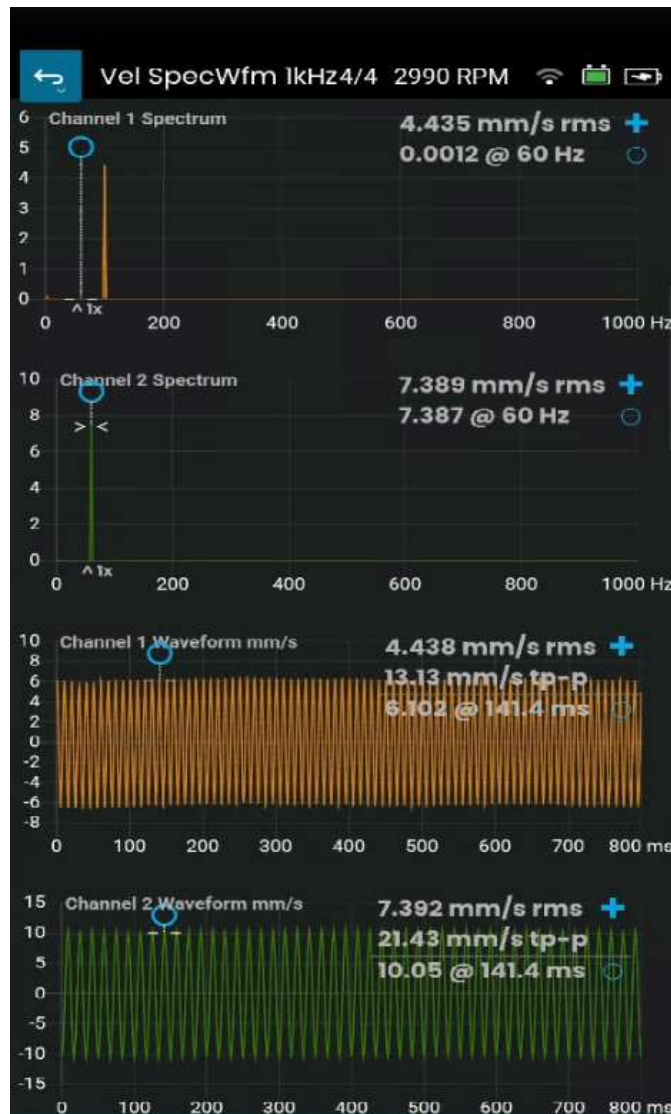


Figure 9-1

10. SAVE AND LOAD CONFIGURATION SETTINGS

S1 Collector v23.2 allows users to save the following settings in a config file:

- Remote Comms Server settings
- Measurement Units
- Route mode, Display preferences, Alarm preferences and Alarm preset values.

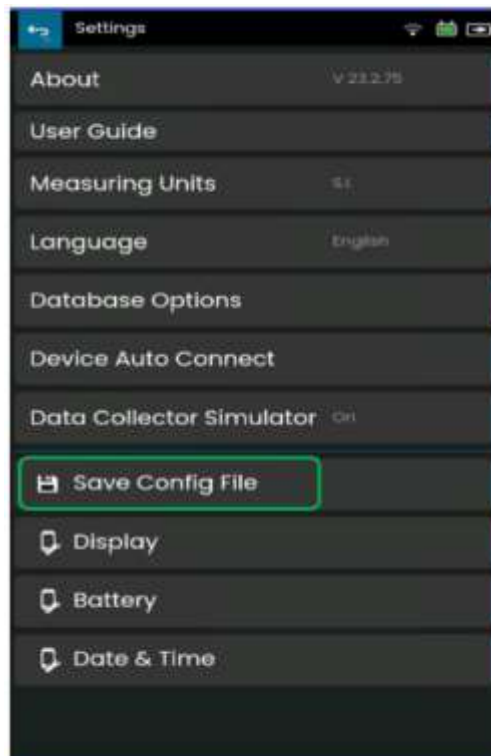


Figure 10-1

Config files can be used for multiple purposes:

- To automate the entry of complex settings like the Remote Comms Server settings, or the Alarm Preset values.
- To allow two or more staff who share the same device to conveniently reset to their own preferences. If more than one file exists, the user is asked which to load.
- To allow two or more sites or customers to use different settings (like measurement Units).

The config file is loaded automatically when the app launches, and all the saved settings are restored.

11. USER GUIDE IN S1 COLLECTOR APP

S1 Collector v23.2 allows users to launch and view the SCOUT200 Series User Guide. To view this file, ensure a pdf viewer is installed on the handheld.

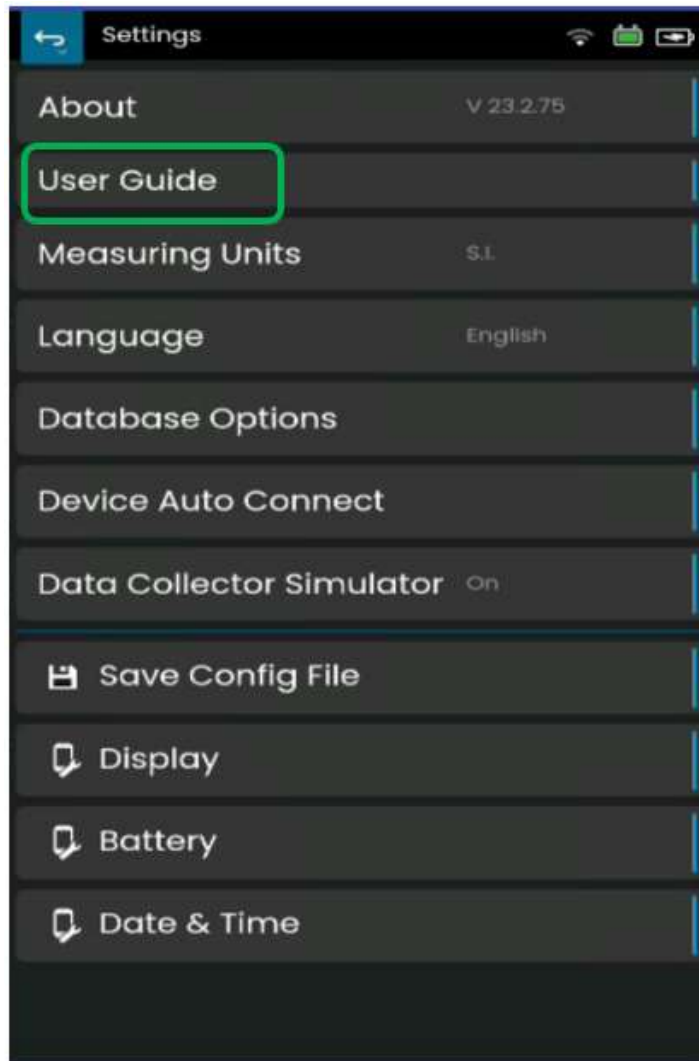


Figure 11-1

The User Guide is opened as a separate app (the pdf viewer), so the Android or iOS app-switcher button can be used to jump quickly between the S1 Collector app and its User Guide.

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