Bently Nevada

SCOUT200 version 21.1 [May 2021]

Bently Nevada is pleased to present the v21.1 release of the SCOUT200 S1 Collector App, with many new capabilities (Figure 1-1).

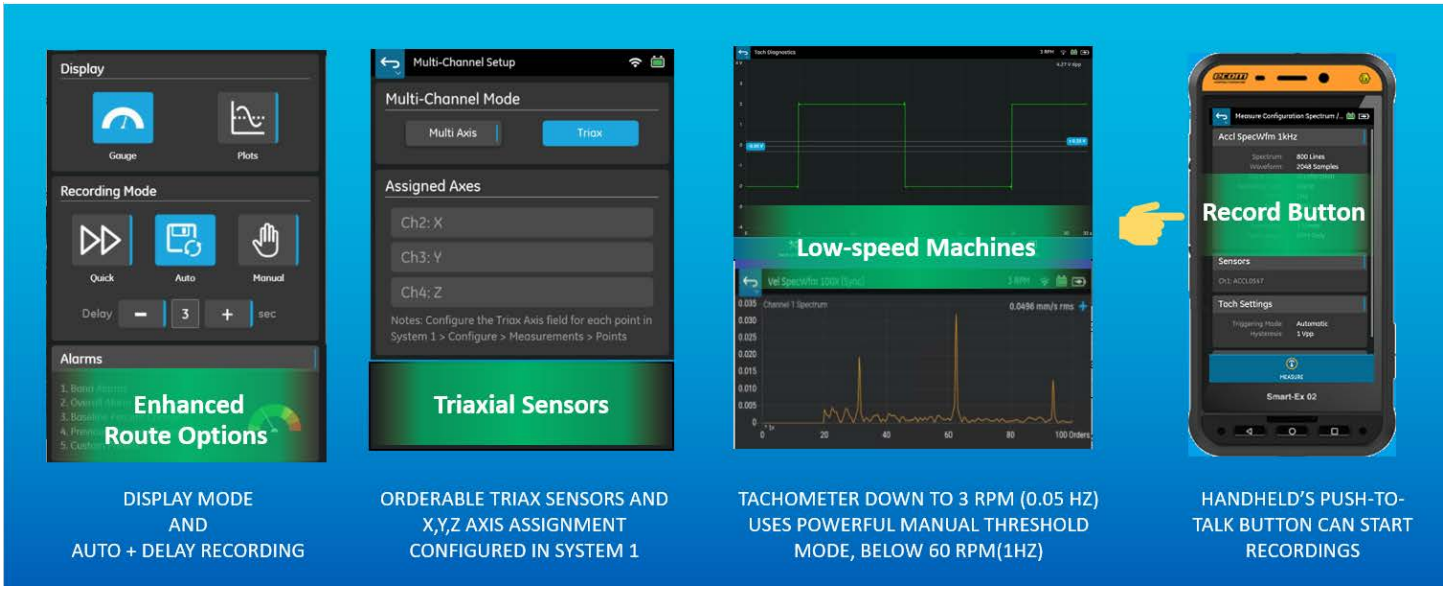

Figure 1-1 What's New in v21.1

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

Thank you,

Nigel Leigh.

Sonu Jain

Nigel Leigh, *Product Line Manager*

Sonu Jain, *Technical Product Manager*

On behalf of your SCOUT200 Leadership and Development Teams

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1. V21.1 CAPABILITY OVERVIEW

V21.1 SCOUT200 Overview video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

SCOUT200 v21.1 Capabilities		
Route Collection Mode Enhancements	Route Collection has been enhanced with 3 mode options for Recording and 2 mode options for Data Display. This includes the much-requested short pause Recording Mode, allowing users a quick review of the data between recordings.	2
Triaxial Sensor Support	The Triax Axis field within System 1 now controls the mapping of the X, Y & Z axes of the sensor to the Horizontal, Vertical, and Axial points of each bearing. This ensures that data is consistently stored in the correct locations.	3
Low Speed Machine Support	SCOUT200 is now capable of reading a tachometer input as slow as 0.05 Hz (3 rpm) [NOTE: Previous limit was 1 Hz (60 rpm)]. This is achieved by using the powerful manual-thresholding mode, which displays the full tachometer waveform and allows the user to manually control both threshold and hysteresis.	4
PTT Button Support	The Push to Talk button on the handheld can start measurement collection, which removes the need for dirty gloves on the touch screen during normal operation.	5
System 1: Browse Device using Manual IP address	To connect to SCOUT devices within System 1, users now have the option to manually enter the device IP address (rather than relying on System 1 searching the network).	Refer System 1 v21.1 What's New
System 1: Route Report – Machine Summary	System 1 v21.1 adds a new route report, *Route Report – Machine Summary*, which summarizes the collection status of all routes and machines within a Database or Route Folder.	

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2. ROUTE COLLECTION MODE ENHANCEMENTS

Route Collection has been enhanced with 3 mode options for Recording and 2 mode options for Data Display (Figure *2-1*).

Recording Mode

1. **Quick**: S1 Collector app takes all the required recordings at this measurement location as quickly as possible, without any delays or user intervention. The Quick mode is terminated if an alarm is detected. Only Gauge display mode can be selected with Quick Recording mode.
2. **Auto**: S1 Collector app automatically moves on to subsequent recordings at this measurement location. But the user can pre-configure a short delay, to provide a quick preview of each recording.
3. **Manual**: S1 Collector app allows you to view the data and remeasure, before manually proceeding to the next measurement.

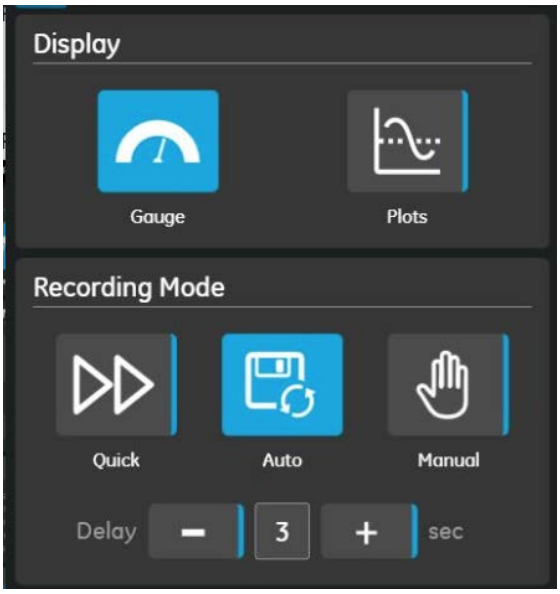

Figure 2-1: Route Collection Modes

Display Mode

1. **Gauge**: Displays a color-coded gauge depicting the vibration level compared to the alarm threshold(Figure 2-2)

Figure 2-3 Display Gauge

2. **Plots**: Displays spectra &/or waveform charts for the recording you have taken (Figure 2-3)

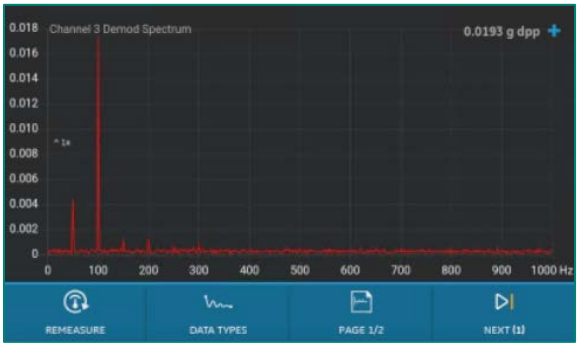

Figure 2-4: Display Plot

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3. TRIAXIAL SENSOR SUPPORT

If you have a four-channel instrument, you can save time by using a Triax sensor to take three measurements at once (Figure 3-1). When configuring in System 1, use the same measurement parameters for each location/direction on the bearing, and assign the Triax Axis to be X, Y, or Z, matching the orientation of the sensor when mounted. The three measurements will be stored individually under their respective locations, with identical timestamps.

Triax sensor kit has also been added to the datasheet, so compatible sensors, cables, and magnets can be ordered directly from Bently Nevada.

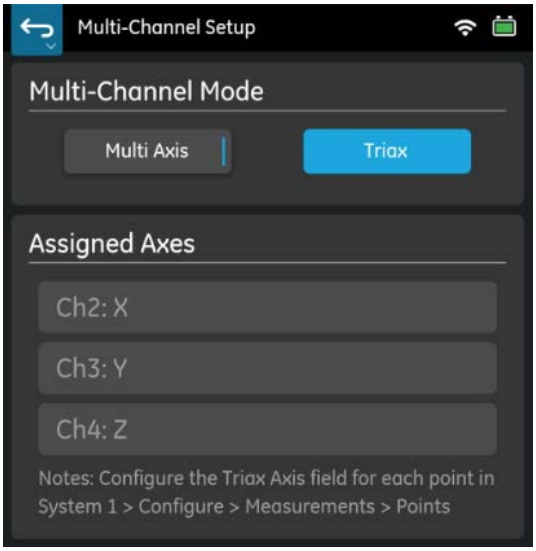

Figure 3-1: Triax Multi-Channel Mode

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4. LOW SPEED MACHINE SUPPORT

The SCOUT200 tachometer input can now measure down to 0.05 Hz (3 RPM). Previously the lower limit was 1 Hz (60 rpm). For these low speed machines, you need to set the tachometer Threshold and Hysteresis manually in Tach Diagnostic Setting.

- First, select Tach Diagnostics, this displays a waveform of the tach signal
- Next, select Tach Settings. Now, select Manual as Triggering Mode.
- Drag the Threshold line on the chart (middle line), so it sits approx. halfway between the min and max tach signal levels (Figure 4-1-1).
- If necessary, drag the Hysteresis line on the chart so the tach signal consistently crosses through all three lines. The Hysteresis does not need to be large, just greater than any noise spikes on the signal.
- Click on Store to save the Tach Settings
- You are now set to measure data on this low-speed machine (Figure 4-24-2)

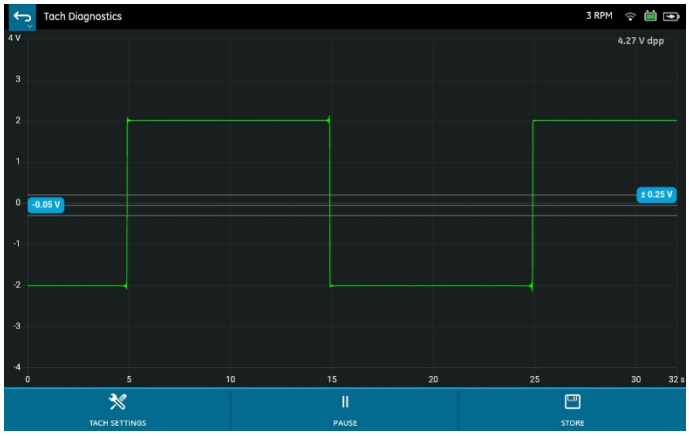

Figure 4-1: Tach Input Waveform

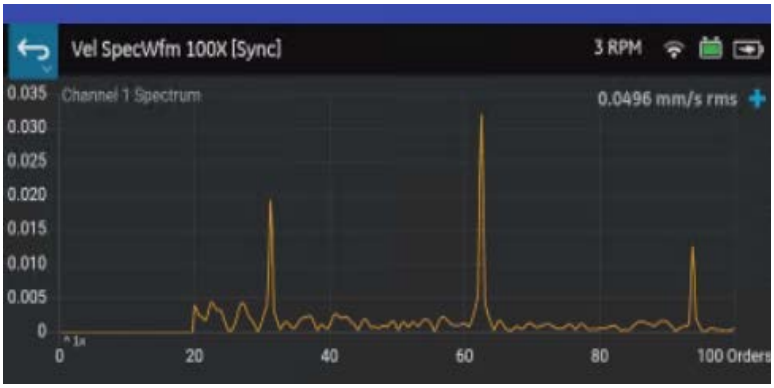

Figure 4-2: Measured Data for Low-Speed Machine

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5. PTT BUTTON SUPPORT

For ease of use, the Push to Talk button on handheld can start measurements. This is excellent for on-route data collection, removing the need for dirty gloves on the touch screen during normal operation. The user simply places the sensor with one hand, then presses the PTT button with the other (which is holding the handheld).

We have enabled this feature for all models of handheld which we've stocked, and which have PTT buttons. Typically, this is the ~5" smartphone-sized models. For others, the Record button on the top of the SCOUT200 itself is still available.

Figure 5-1: Push-To-Talk button (PTT) to start recordings

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