



# Sentinel R9 Release Notes

Release Date: June 2018



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# Release Overview

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## Sentinel R9 Release

This release offers software only feature enhancements on Sentinel. No new options are associated with these enhancements.

The software has added the following feature and change to Sentinel:

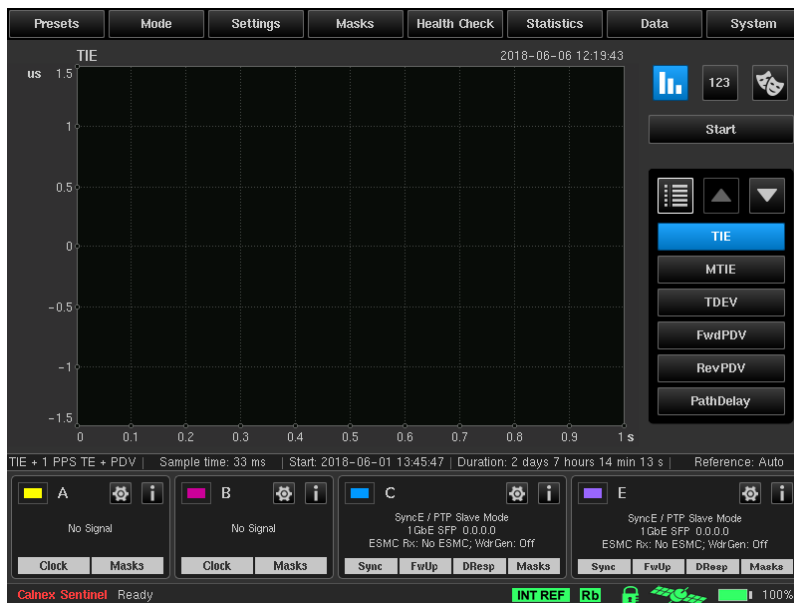
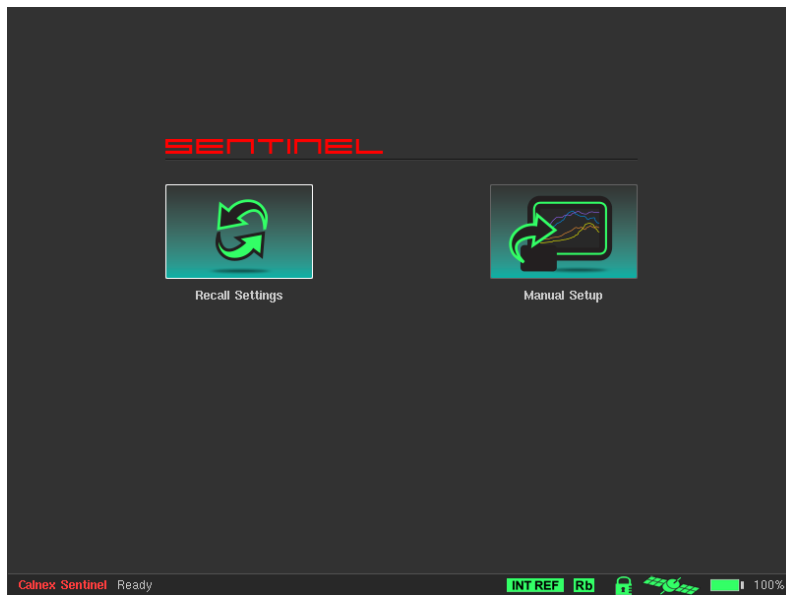
- New enhanced GUI, allowing for faster set-up and ease of use
- Enhanced 1PPS measurement
- 2Way TE measurement now uses a 0.1Hz filter

**NOTE:** this revision of firmware can only be installed on Sentinels with a serial number greater than 300000.

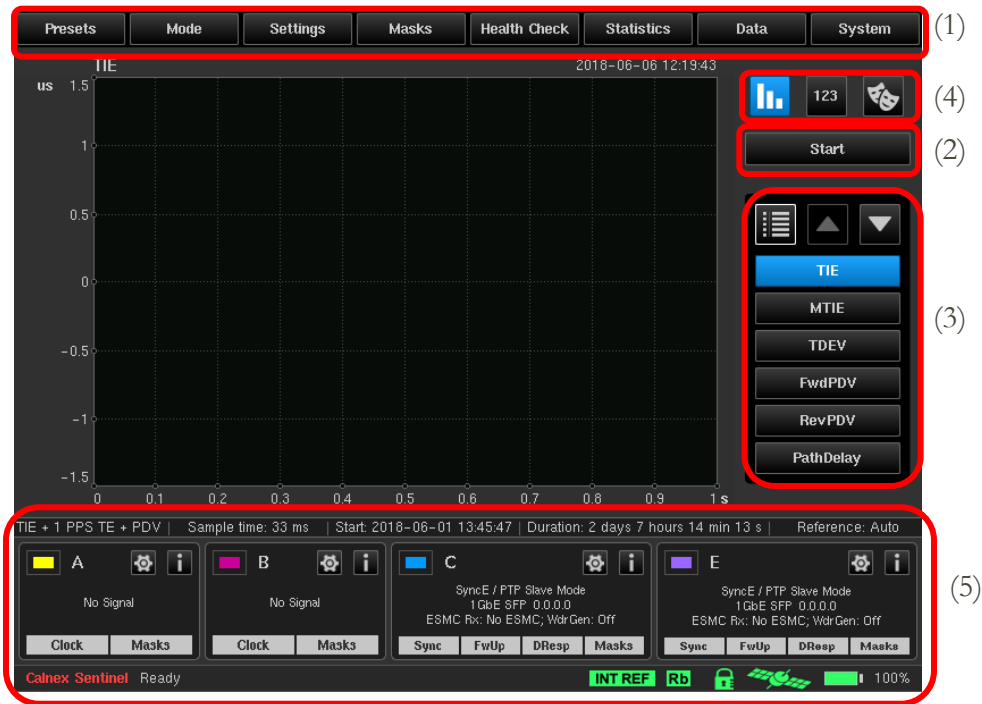
# Features Description

## New GUI

The Sentinel GUI has been redesigned to allow a better work flow and ease of use. When Sentinel is first powered up the following screen appears. The Recall settings option allows previously saved configuration files to be re-loaded. Selecting the Manual Setup option moves directly to the main operating screen as shown below.



The main screen contains controls to allow simple, ordered configuration (1) and operation (2) of Sentinel. Navigation buttons allow movement between each measurement result graph (3) and



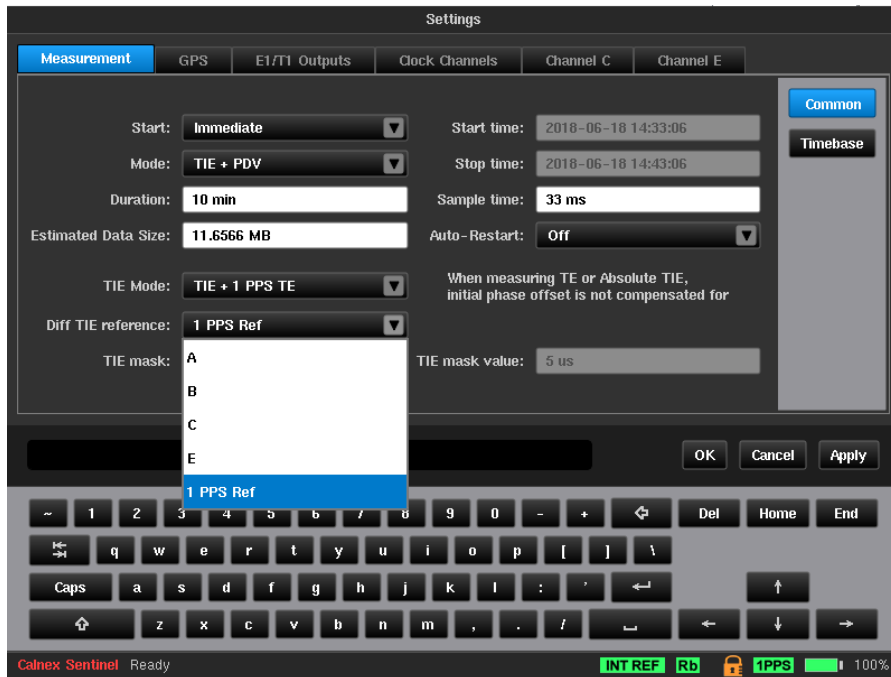
change the mode of viewing results (4). The status of the measurement sub system is shown in widgets and icons at the bottom of the screen (5).

For further details regarding setting up Sentinel using the new GUI please refer to the G.8265.1 and G.8275.1 Getting Started Guides available on the Calnex website.

## Enhanced 1PPS TE measurement

When making a 1PPS TE measurement there is now no need to have the external loop-back cable connected. This frees up the second port on the clock card allowing 2 1PPS measurements to be made at the same time.

When setting up a 1PPS TE measurement the Diff TIE reference should now be set to 1PPS Ref in the drop-down menu as shown below:



## 2Way TE now uses 0.1Hz filter

Previously, the 2Way TE graph used a 10s average. This has now been changed to a 0.1Hz filter, allowing the result to be similar to CAT.

## Known Potential Issues

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The following items are being investigated by Calnex and product updates will be provided as and when resolved:

1. Saving measurement data to USB memory may encounter issues with some memory stick types. If this issue is seen, we recommend using a different brand of memory stick or use the internal memory.
2. The Measurement Duration setting can incorporate processing times of  $\pm 1$  second for TIE and  $\pm 10$ s for PDV measurements
3. Loss of Signal: Short link down events may not be reported in the log if they happen between status requests to the PTP board
4. When using IP Multicast mode, no Del Req messages are sent if the gateway address is not on the same subnet.
5. In Pseudo-slave mode, setting 128 packets/second rate on Sentinel will actually run at a lower rate (i.e. 105 packets/second)