

IBEX-Series Procedures to Verify Test Data

Overview

To protect the integrity of measurement data taken with the IBEX, measurement results may not be modified after they are saved into Exmons battery management software. The exception to this is when the data is exported into Excel format.

To ensure that accurate measurement data is saved in the management software, several safeguards have been put into place to make it easier to verify test data before saving it.

The following four procedures should be used to prevent faulty measurement data from being saved in the software:

- 1. Listen for the alarm sound when testing; if the warning or fail alarm beeps, check to verify result.
- 2. If you cannot hear the alarm while testing a battery, verify that the result displayed on the screen is correct and check to make sure the PASS LED is lit.
- After testing a battery bank (or anytime during) check the status of the batteries tested in the REPORT submenu. Retest any bad cells if necessary.
- 4. Before saving the data in the software, verify it in the temporary repository.

If the four procedures above are performed before leaving the test site, the chance of needing to return for a retest will be minimal. Please see below for details on the procedures for verifying test data.

Before Testing – Setting proper alarms

This step can be performed before testing batteries. Every IBEX unit can store a variety of battery alarms which can be set on the unit or in the software (Pro & Ultra models only). Alarms contain all of the information needed to diagnose the state of health of a battery (reference resistance, ohmic percent, voltage over & under, and temperature over).

- 1. Determine the parameters of the batteries being tested
- 2. Enter the alarm settings for each battery in the software or directly on the IBEX. See page 24 in the IBEX manual to set alarms.

While Testing – Listening for alarm sound, checking alarm LED, checking measurement result, & verifying test data on the IBEX

There are several methods of verifying measurement data while on the test site:

- 1. If the proper alarm is set for the battery being tested, the IBEX will sound different beeps for different states of battery health. Pass, Warning, Fail all have a different beep as well as a color specific LED on the front of the unit.
- 2. When testing, the measurement results will be displayed on the screen until the user removes the test leads from the battery posts
- 3. After testing a battery bank the measurement data can be verified in the **REPORT** submenu. Any cells that are in Warning or Fail state will be highlighted so they can be easily identified.
- 4. Bad cells can be tested over as many times as the user desires until they are confident that the reading is correct.

In the Software - Viewing test data before saving

Although Exmons battery management software does not allow direct editing of test data, the data can be verified before saving into the repository.

NOTE: If the above procedures are followed, it is unlikely that the below situation will occur. However, it is still recommended that the test data be checked before saving it.

- 1. After transferring data into the software it will appear in the Temporary Repository.
- 2. Double clicking a test bank in the Temporary Repository will display all of the measurement data in that bank.
- 3. If there is any doubt that the data is not accurate, retest the battery bank before saving.