IBEX-Series
Procedures for Testing

Overview

The following procedures will help minimize the time needed to test and save data using the IBEX. The most complete method starts and ends with the Exmons battery management software. While testing it is possible that the memory on the IBEX will become full and the test data will need to be saved in the software before continuing.

With the availability of laptop computers, it is recommended that a computer be brought along testing for trips which require more tests than the IBEX can store.

Step 1 – Setting up Battery Banks in the Software

Before using the IBEX you can setup all of the battery banks you plan on testing in the software. With this method, the IBEX is simply used as a tool to move battery data from the batteries into the software.

Having the software configured on the frontend allows for greater testing flexibility by allowing the IBEX to store as little information about the batteries as necessary. Although it is up to the user, the IBEX can be left entirely generic, as long as the bank size matches that being tested (see step 2).

All of the bank information and alarm values can defined in the software. This step is especially useful if testing more banks than the memory of the IBEX can store.

In Exmons:

1. **Folder structure:** Setup the Root Group, Sites, and Banks in the Data Repository. *See page 4 in the Exmons manual.*
2. **Bank & Alarm info:** Enter necessary Bank and Alarm Information, if you do not know the alarm settings they can always be modified later. *See page 5 in the Exmons manual.*

At this point the software is setup to receive measurement data from the IBEX.

Step 2 – Setting up the IBEX

Although all bank and alarm information can be set exclusively in the software, it can be beneficial to save this information to the IBEX. Saving alarm settings can help avoid faulty measurements and saving bank names can eliminate confusion when transferring measurement data into the software, but they also add time to the process.

1. **Bank size:** The memory on the IBEX needs to be configured for the correct number of cells per bank being tested. This step should only be done once, unless larger banks enter the test practices of the user. (Ex. If you are testing up to 60 cell banks, the IBEX should be setup with banks that have at least 60 cells) *See page 26 in the manual for changing bank size.*
2. **Alarm & Bank info (optional):** If desired, alarm & bank information can be set on the IBEX using the Exmons software. *See page 12 in the Exmons manual for changing these values.*

Step 3 – Taking Measurement

With the IBEX properly configured the unit is ready for measurement.

1. **Testing:** Select a bank on the IBEX and begin taking measurements. If you did not change the bank name, be sure to take note of which bank in the software the bank being tested corresponds with. (Ex. Data in "BANK_01" on the IBEX should be transferred into a bank created in the software with a different name"
2. **Verifying test data:** Before leaving the test site verify that the measurement data looks correct. See "Steps to Verify Test Data" for instructions on verifying test data.

Step 4 – Transferring Data from IBEX to Software

The final step is saving test data into Exmons.

1. **Data Transfer:** Transfer test data into Exmons. Drag the test date from banks in the IBEX to the banks created in the Data Repository. *See pages 3-4 in the Exmons manual.*
2. **Future Transfers:** Since the folder structure is setup in the software, future test dates can be easily added to the banks in the software.

Review

In review, there are four steps to using the IBEX efficiently

1. Setting up the software
2. Setting up the IBEX
3. Taking measurement
4. Saving data to the software

If the workload for the IBEX is fixed, step one and two only need to be done once, from there step 3 and 4 are repeated every time tests are needed to be made.