



Criterion 4 Quick Start Guide

The Criterion App is downloaded from the Excell Battery website (www.excellbattery.com). All future releases will be distributed through the Excell Battery website, and the app will automatically alert users for updates. Previous versions installed via the Google Chrome Store are no longer offered or supported. New versions will work with any browser and will no longer require that Google Chrome be installed on the computer.

The Criterion App can be located at:

<https://excellbattery.com/products/criterion/cr4-download/>

Complete the short form and click on Submit

Criterion Download Request

Current Version: V4.2.0.2197

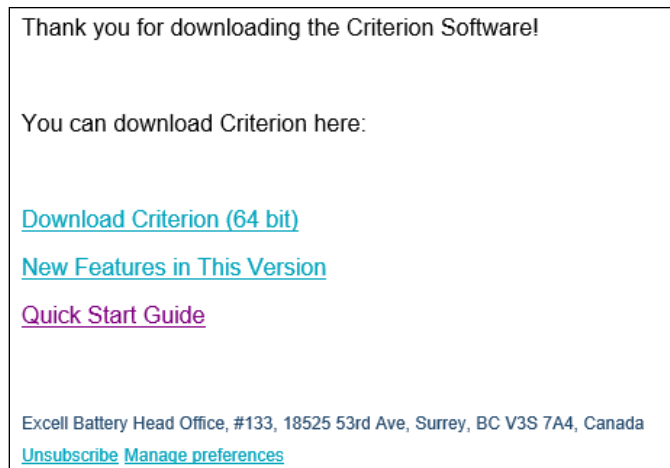
Please use the form below to submit a request for the latest version of our Criterion software.

First name*	Last name*
Email*	Phone number
Company name*	Job Title*

protected by reCAPTCHA
Privacy - Terms

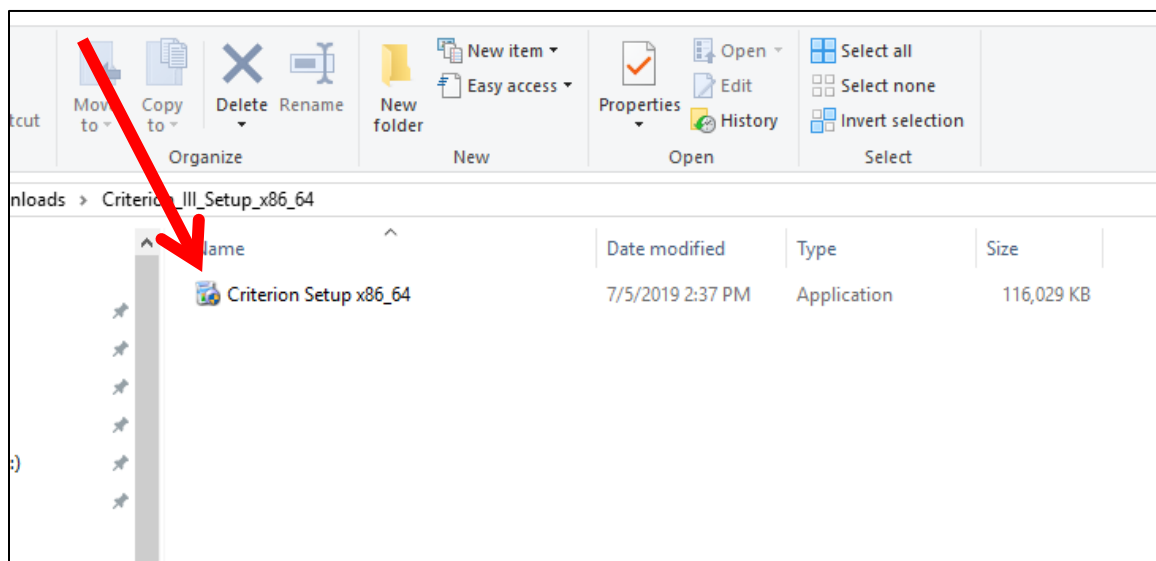
Submit

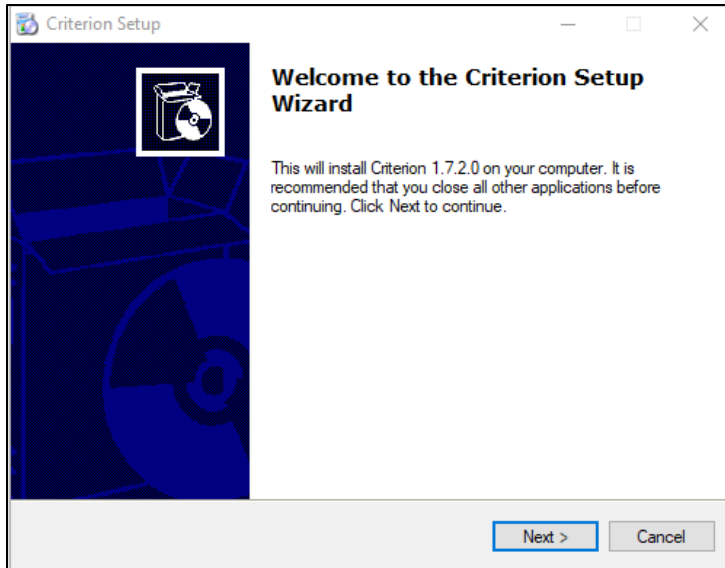
An email should appear in your inbox shortly. Click on Download Criterion (64 bit), and the Criterion App will download to your Download folder.



The downloaded file will be a Compressed (“Zip”) file. Uncompress or unzip this file to your hard disk using whatever method is used on your computer. Ensure that the file is extracted to your hard disk.

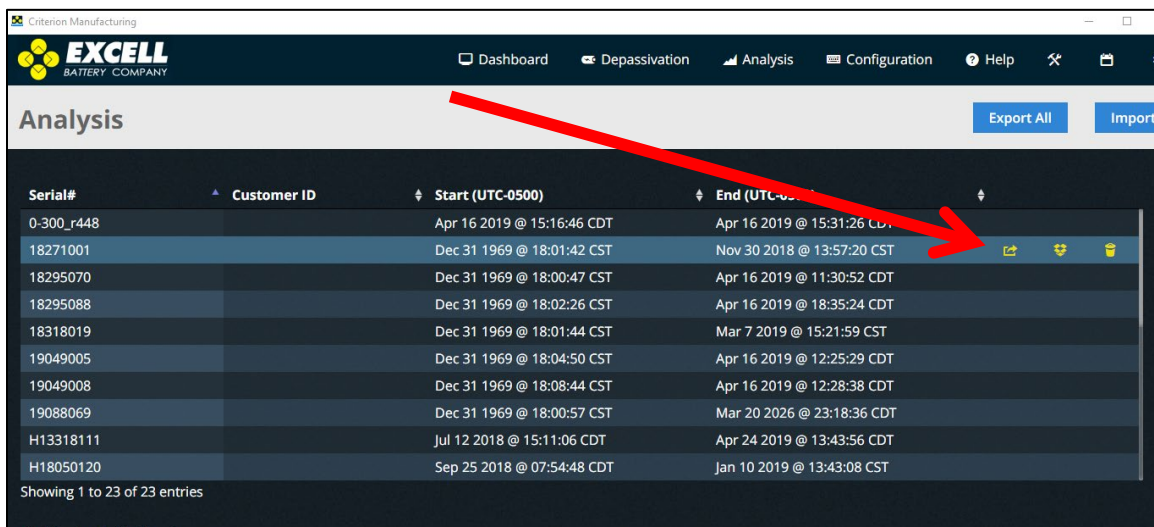
Click on the extracted exe file appropriate to your computer and proceed through the installation.

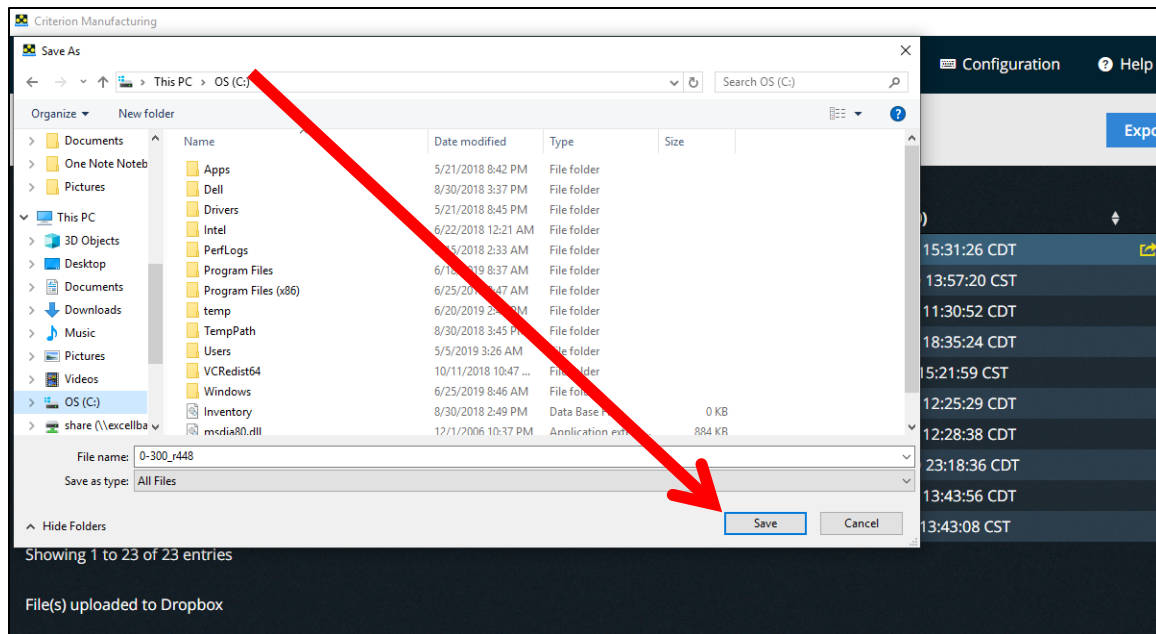




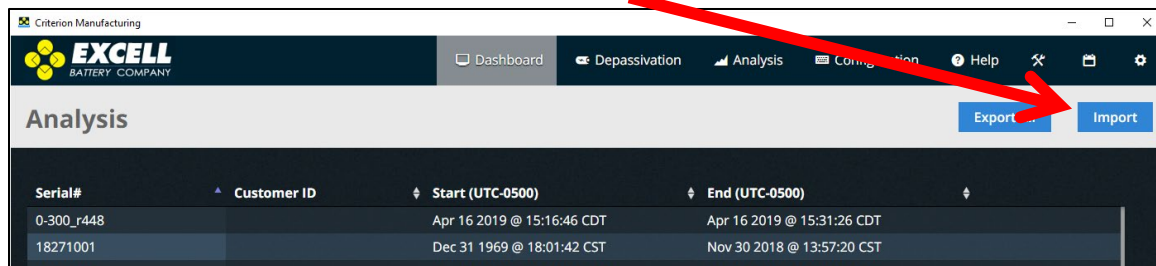
VERY IMPORTANT

Previous Chrome Store versions should be uninstalled. However, before the previous version is uninstalled, all Criterion ebl files must be exported from the old app and then imported into the newly installed Criterion app. If this step is not performed, and the previous Chrome Store version is uninstalled, all ebl files will be lost permanently. To export the ebl files, go to the "ANALYSIS" screen, select an ebl file, and then click on the export icon. Select a place on your hard drive to save the file.



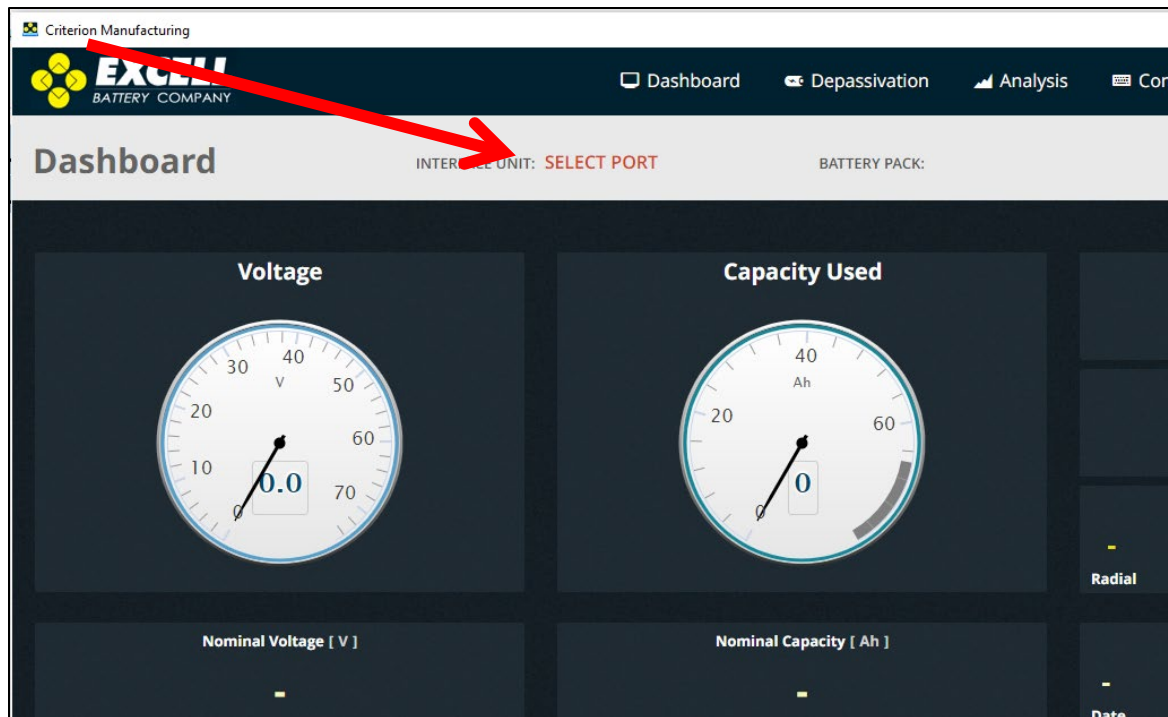


To Import the ebl files to the newly installed Criterion App, go to the “ANALYSIS” screen, and click on IMPORT. Select the file from the saved location, and save to the Criterion App.

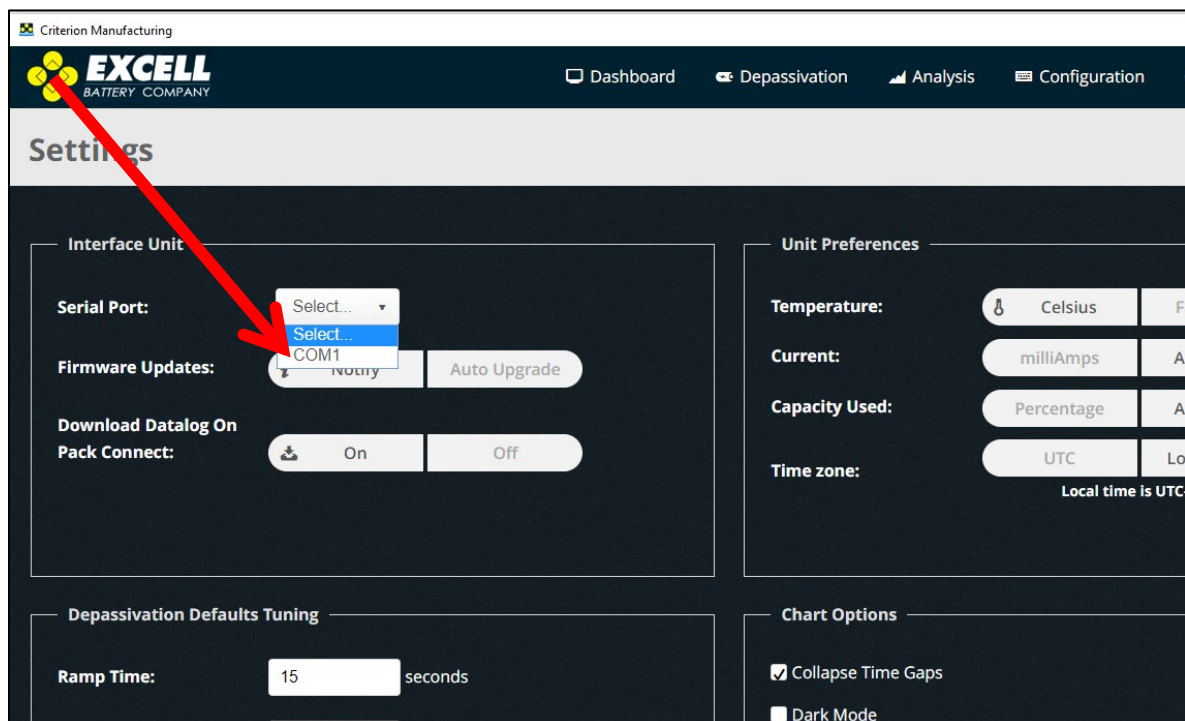


CRIII INTERFACE UNIT Driver Installation

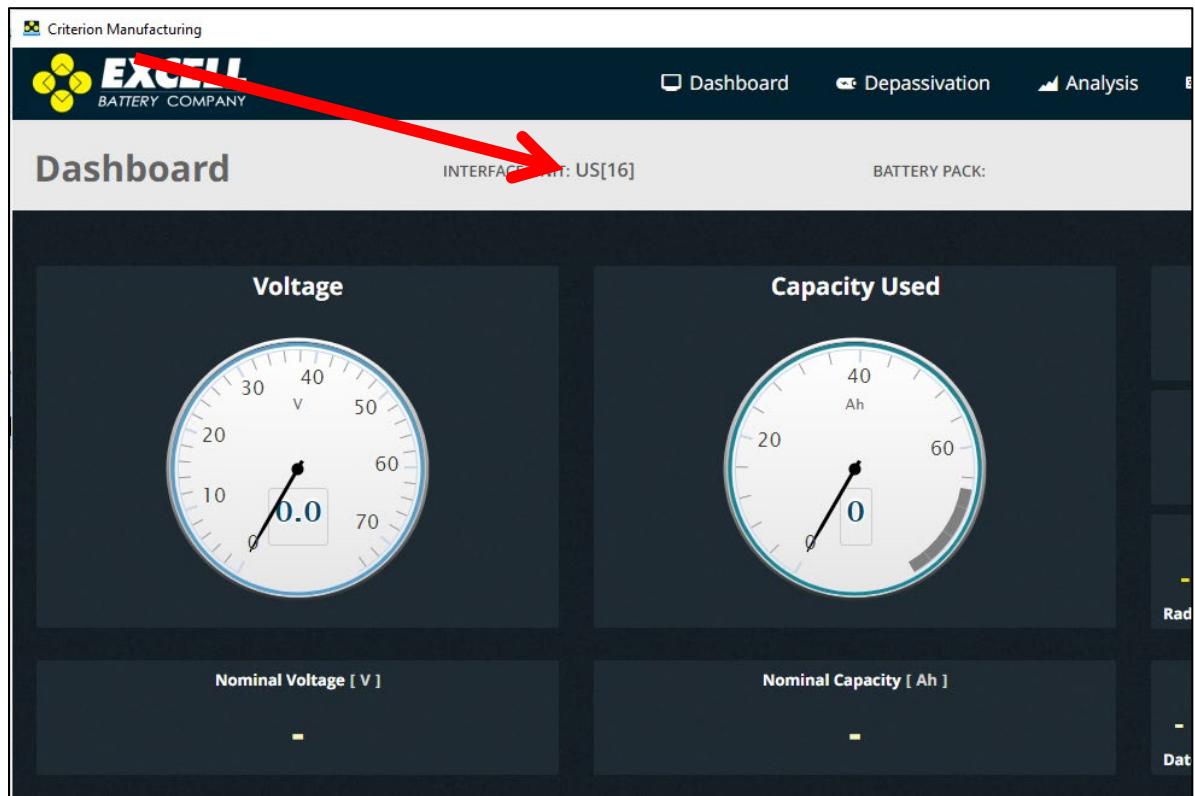
1. Close Criterion App if open
2. Plug Interface into available USB port
3. Computer may try to install Silicone Labs CP210x USB to UART Bridge VCP driver. If the driver does not automatically install, driver can be downloaded at https://www.silabs.com/documents/public/software/CP210x_Universal_Windows_Driver.zip
4. Extract downloaded file and install the 32-bit or 64-bit P210xVCPInstaller_x86 or CP210xVCPInstaller_x64 app as appropriate to the computer.
5. Open Criterion App
6. After Criterion App opens for the first time, a **Select Port** warning will likely appear next to Interface Unit at top of window.



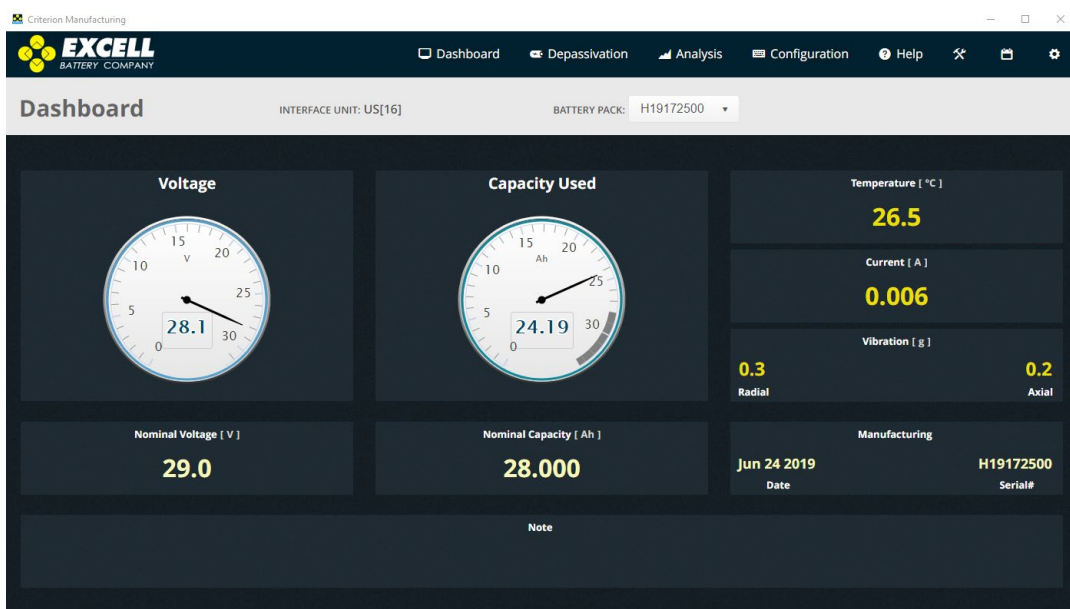
7. Click on **Select Port** which will take you to Settings Screen. Select correct serial port connected to Interface Box.



8. After the correct port is selected, the Dashboard will indicate a connection to the Interface Box by listing the Interface box number. It will always show "US[16]"



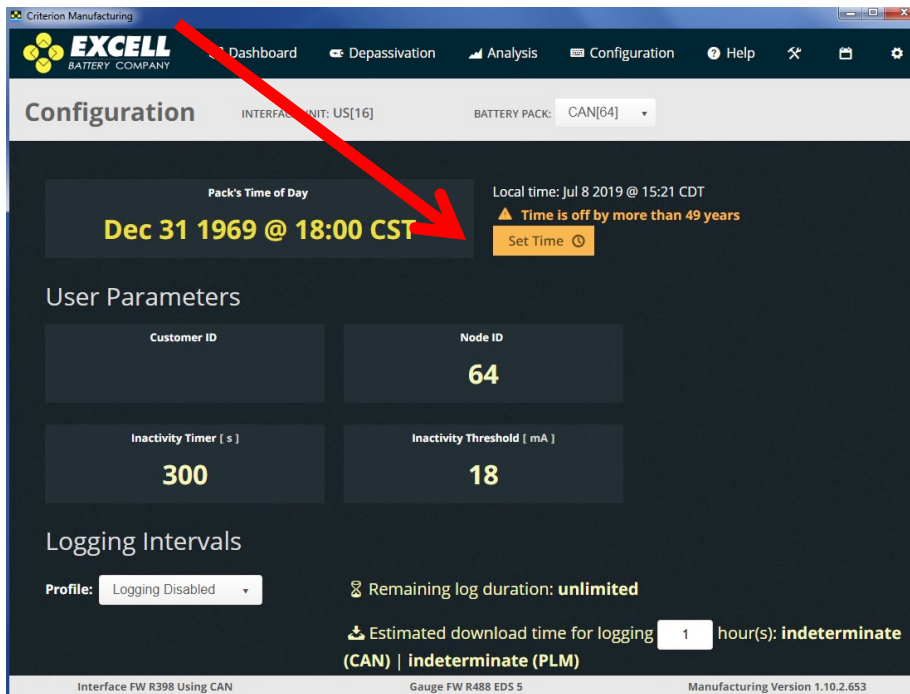
9. Connect Battery (with greater than 6V) to Interface Box. Dashboard screen will now show live battery readings.



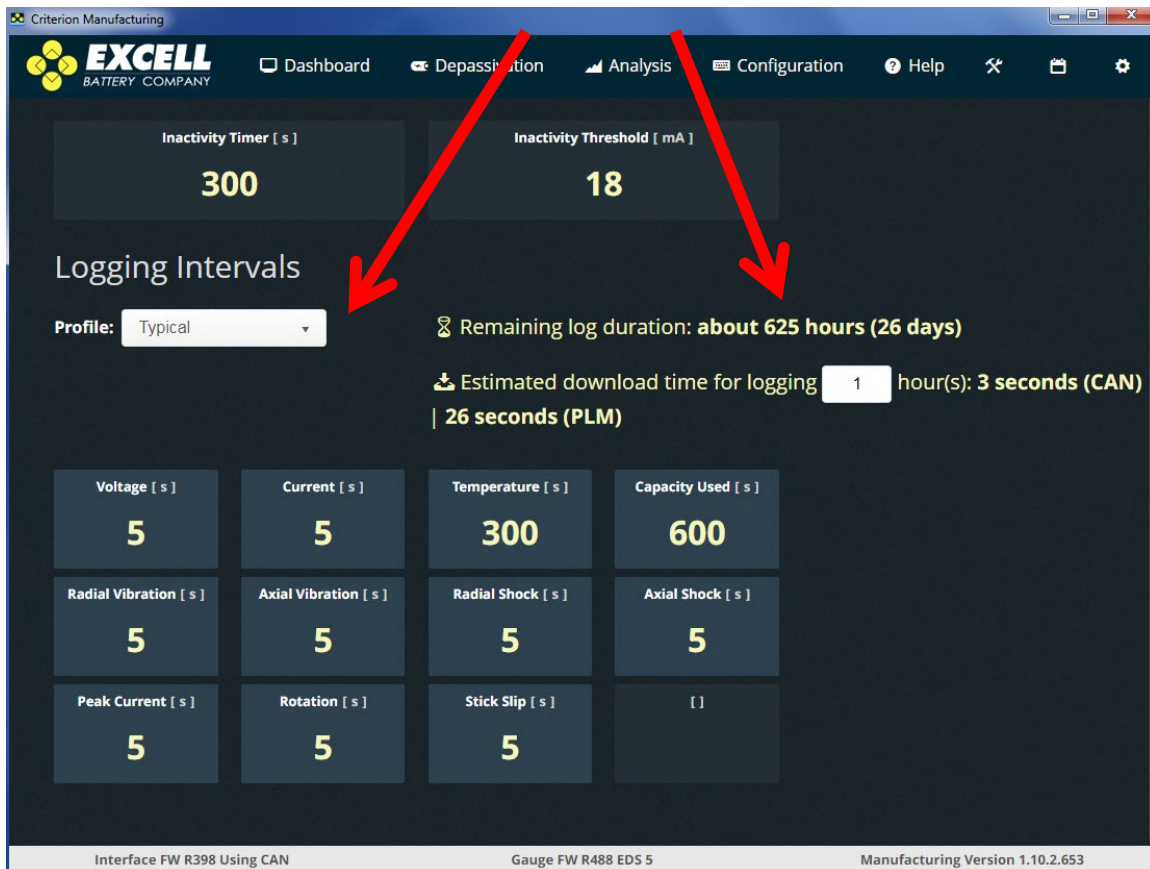
Battery Configuration

Two steps must be completed to prepare battery for downhole use. It is recommended that these steps be completed as close to deployment as possible.

1. In Configuration screen, set clock to agree with Computer clock by clicking on Yellow “Set Time” Button. *Pack’s Time of Day* should now agree with current time.



2. Under *Logging Intervals*, select a logging interval appropriate to the length of time battery is expected to be discharged until fully depleted. Ensure the *Remaining log duration* time exceeds the expected discharge time.



Each logging parameter can be changed from no logging (0) to a maximum time. The higher the logging interval, the less memory is used, and the longer the memory will last.

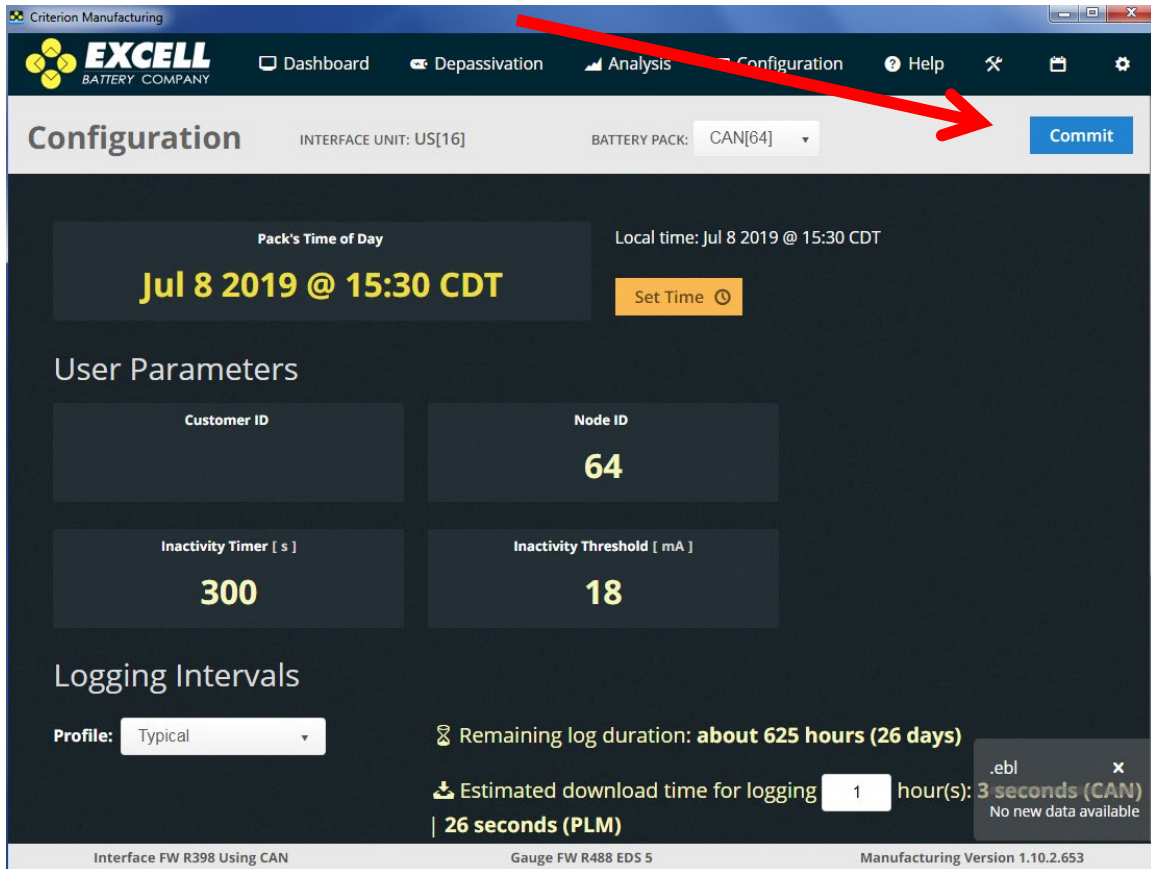
For any given Logging Interval setting, the *Remaining log duration* time and the *Estimated download time* is estimated on the configuration screen.

Any logging interval combination can be saved for future use by putting a name in the *Custom Name* box. With subsequent batteries, this custom logging interval can be selected which will populate the Logging Intervals with the saved values.

If the Logging Disabled is selected, the battery will discharge normally; however, no data will be recorded.

VERY IMPORTANT

After setting the Logging Interval, click on the blue “Commit” button at the top of screen to ensure these values are saved.



The screenshot shows the 'Configuration' page of the EXCELL BATTERY COMPANY web interface. The top navigation bar includes links for Dashboard, Depassivation, Analysis, Configuration, Help, and a settings icon. The 'Configuration' page header shows 'INTERFACE UNIT: US[16]' and 'BATTERY PACK: CAN[64]'. A red arrow points to the blue 'Commit' button in the top right corner. The main content area displays the 'Pack's Time of Day' as 'Jul 8 2019 @ 15:30 CDT' with a 'Set Time' button. Below this are 'User Parameters' including 'Customer ID', 'Node ID' (64), 'Inactivity Timer [s]' (300), and 'Inactivity Threshold [mA]' (18). The 'Logging Intervals' section shows a 'Profile' dropdown set to 'Typical', a 'Remaining log duration' of 'about 625 hours (26 days)', and an 'Estimated download time for logging' of '1 hour(s): 3 seconds (CAN)' and '26 seconds (PLM)'. A status box in the bottom right indicates '.ebl' and 'No new data available'. The footer shows 'Interface FW R398 Using CAN', 'Gauge FW R488 EDS 5', and 'Manufacturing Version 1.10.2.653'.

Criterion Manufacturing

EXCELL BATTERY COMPANY

Dashboard Depassivation Analysis Configuration Help

Configuration INTERFACE UNIT: US[16] BATTERY PACK: CAN[64] Commit

Pack's Time of Day

Local time: Jul 8 2019 @ 15:30 CDT

Jul 8 2019 @ 15:30 CDT Set Time

User Parameters

Customer ID Node ID 64

Inactivity Timer [s] Inactivity Threshold [mA]

300 18

Logging Intervals

Profile: Typical

Remaining log duration: about 625 hours (26 days)

Estimated download time for logging 1 hour(s): 3 seconds (CAN) | 26 seconds (PLM)

.ebl x No new data available

Interface FW R398 Using CAN Gauge FW R488 EDS 5 Manufacturing Version 1.10.2.653