Battview Mobile Installation

IMPORTANT SAFETY INSTRUCTIONS

While every care has been taken to ensure the completeness and accuracy of this manual, Advanced Charging Technologies Inc. assumes no responsibility or liability for losses or damages resulting from the use of the information contained in this document. Due to technical improvements, some information contained in this manual may change without notice. Before attempting to install and begin logging data with the Battview unit, please read this manual.

WARNING

RISK OF ELECTRICAL SHOCK. When working with batteries, please proceed with extreme caution. The installation should be performed by qualified personnel. Individual safety requires plenty of ventilation. Remove jewelry, wear protective clothing, and eye wear (safety glasses), and exercise caution. Always follow the manufacturer's instructions for correctly installing batteries

CAUTION

RISK OF ELECTRIC SHOCK AND/OR ELECTRIC ENERGY - HIGH CURRENT LEVELS. Do not touch un-insulated battery connectors or terminals. Be sure to discharge static electricity from tools and technician by touching a grounded surface near the batteries but away from the cells and flame arrestors. All tools should be adequately insulated to avoid the possibility of shorting connections. Do not lay tools on top of the battery.

INTRODUCTION

Battview is an intelligent battery monitoring device that measures and logs critical battery performance data. This unit incorporates an advanced digital microprocessor design that supports advanced programming and data logging capabilities. The Battview Mobile unit continuously measures and logs battery voltage and current and aggregates various performance data including amp-hours used and replaced, charge, in-use, and idle hours, as well as aggregate lifetime performance data. Battview Mobile supports Wi-Fi connectivity, enabling access and data upload using laptops and tablets, and ACT's ACTview cloud software. The integration with ACTview allows end users to centrally access data and analyze batteries and fleet performance. Installing Battview Mobile devices is a 3-step process:

1. Physical installation on the Battery
2. Adjusting the Battview setting to match the battery rating to start a new study.
3. Download the data from the Battview and upload the data to ACTview to view the results.
4. The Installation Manual will walk the user through these steps in the following sections.

PACKAGE CONTENTS AND NEEDED TOOLS

Contents

The Battview Mobile package contains the following items:

1 x Battview Mobile unit

1 x Installation Manual

2 x Battery voltage sense leads

Needed Tools (NOT SUPPLIED)

Items needed to install and configure Battview:

Philips head screwdriver

13-mm ratcheting wrench

Tie wraps are recommended to secure the Battview to the Truck

To program the Battview Mobile:

ACT Mobile Router

ACT Windows tablet or Windows laptop with ACTlink software installed

BATTVIEW MOBILE INSTALLATION

The Battview Mobile unit has two separate battery voltage sense leads, and a Hall effect current sensor as shown below.

INSTALLATION PROCEDURE

IMPORTANT: IT IS RECOMMENDED THAT THE BATTVIEW MOBILE UNIT BE INSTALLED ON THE TRUCK CABLES RATHER THAN THE BATTERY CABLES!

CAUTION! Don't install Battview on batteries that could be charged with EnerSys Enforcer or Hawker LifePlus chargers. They will damage the Battview and void the warranty.

1. Using the 13-mm ratcheting wrench (not supplied) open the jaws of the 2 piercing connectors and clamp them on the positive (RED) and negative (BLACK) battery terminals. Make sure the battery voltage sensing leads are also clamped securely to the piercing connectors.

2. Once the positive lead is connected, the Battview will blink Blue one time.

> NOTE: When the Battview powers up, it will blink Blue one time and then perform a hardware check that could take up to 3 seconds. The Battview should blink Green 3 times to indicate hardware check completed successfully. If the BATTview doesn't show this color pattern, check leads connection to ensure the leads are in full contact with the battery. Check Battview troubleshooting guide if this issue persists.

3. Hall-effect Current Sense Installation: Using the reference picture below, open the Hall-effect sensor by unscrewing the side screw. Install the Hall-effect on the negative battery cable, making sure that the arrow is pointing out of the battery negative terminal and into the Truck. Close the Hall effect and tighten the screw. Use a zip tie to secure the cable as shown in the picture.
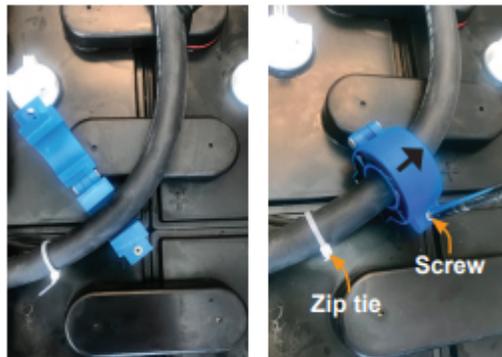
UPDATE BATTVIEW MOBILE SETTINGS

Follow the steps below to launch ACTlink Software, program Battview settings, and upload the settings to ACTview cloud server.

1. Turn on ACT Mobile router.

   NOTE:

   ACT Mobile router is a hand-held router that can be purchased from ACT. It comes preconfigured with ACT network credentials and can be used for configuring or downloading data from Battview and Quantum chargers. ACT Mobile router is not internet based. It will not connect to the cloud; it will just form a local area network.

   NOTE:

   ACT Stationary router could also be used configure the Battview Mobile settings.

2. Launch ACTlink Software from Windows tablet or laptop.
3. Log in using your assigned email and password.
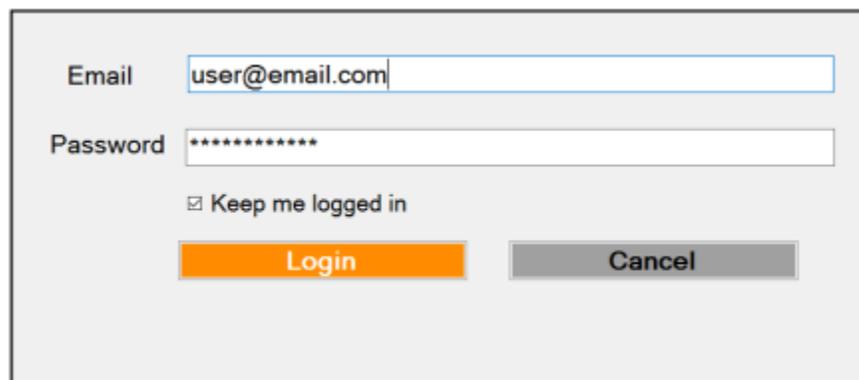
NOTE: Users can obtain ACTview Username and Password by registering at www.act-view.com

4. Choose Mobile Router Mode from list of connectivity options. If a stationary router is used for the installation, choose stationary Router (ACT Access) option.
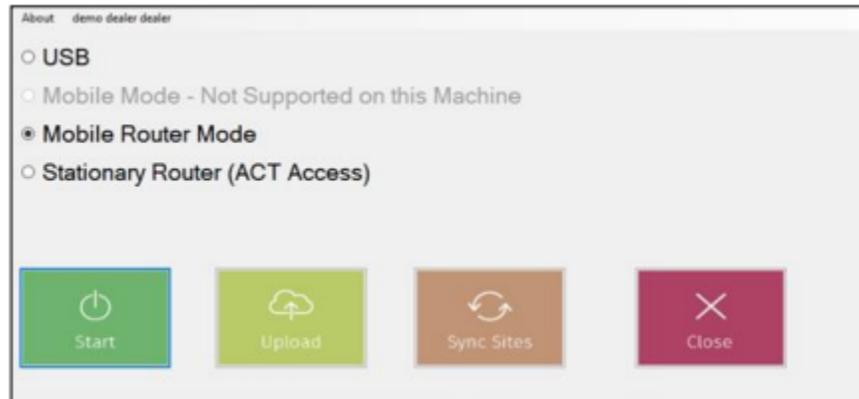

5. ACTlink Software will start searching for surrounding devices.
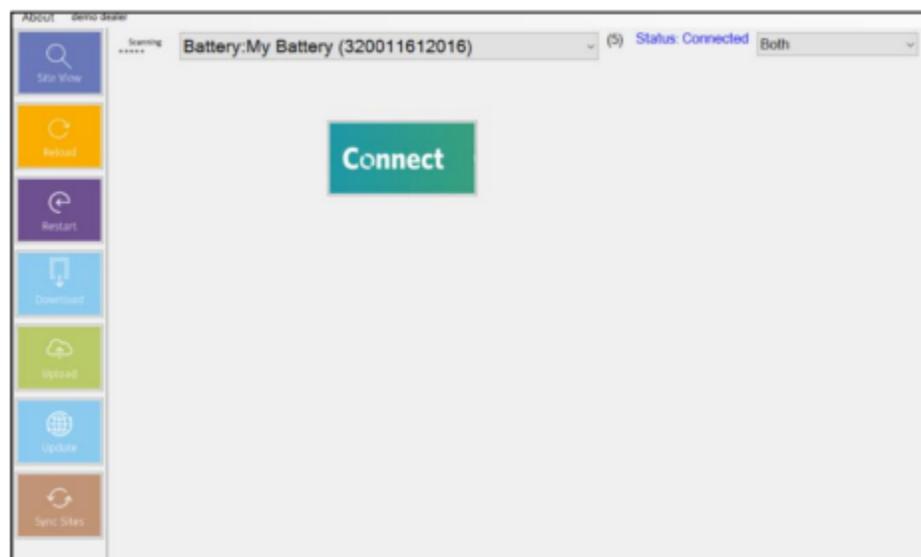
NOTE: Based on the site environment, surrounding Wi-Fi networks, and the number of installed devices, it might take up to 20 minutes to connect to all devices in the facility. Try rebooting the computer if connections are not established.
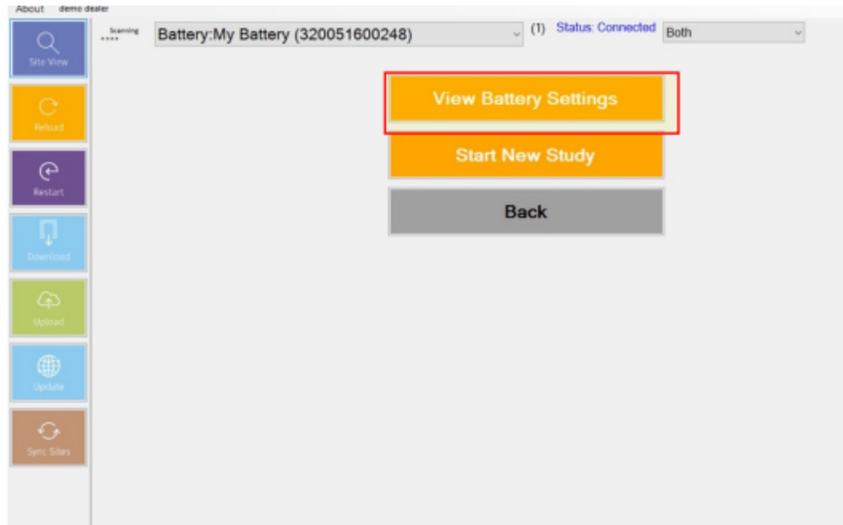
6. Once a device is detected it will appear in the pulldown menu, select the target Battview device by choosing the device Serial Number or ID and click Connect. ACTlink Software will continue searching for devices and will display more devices as it locates them.
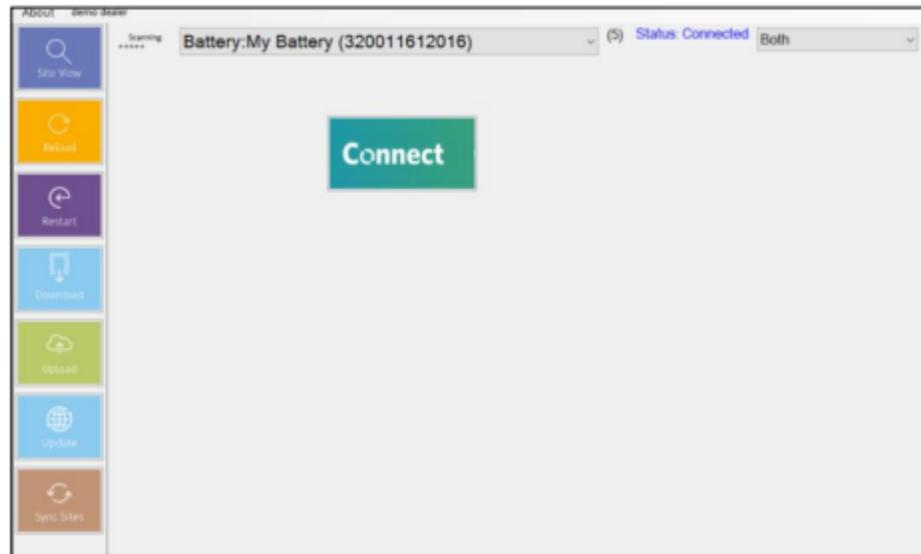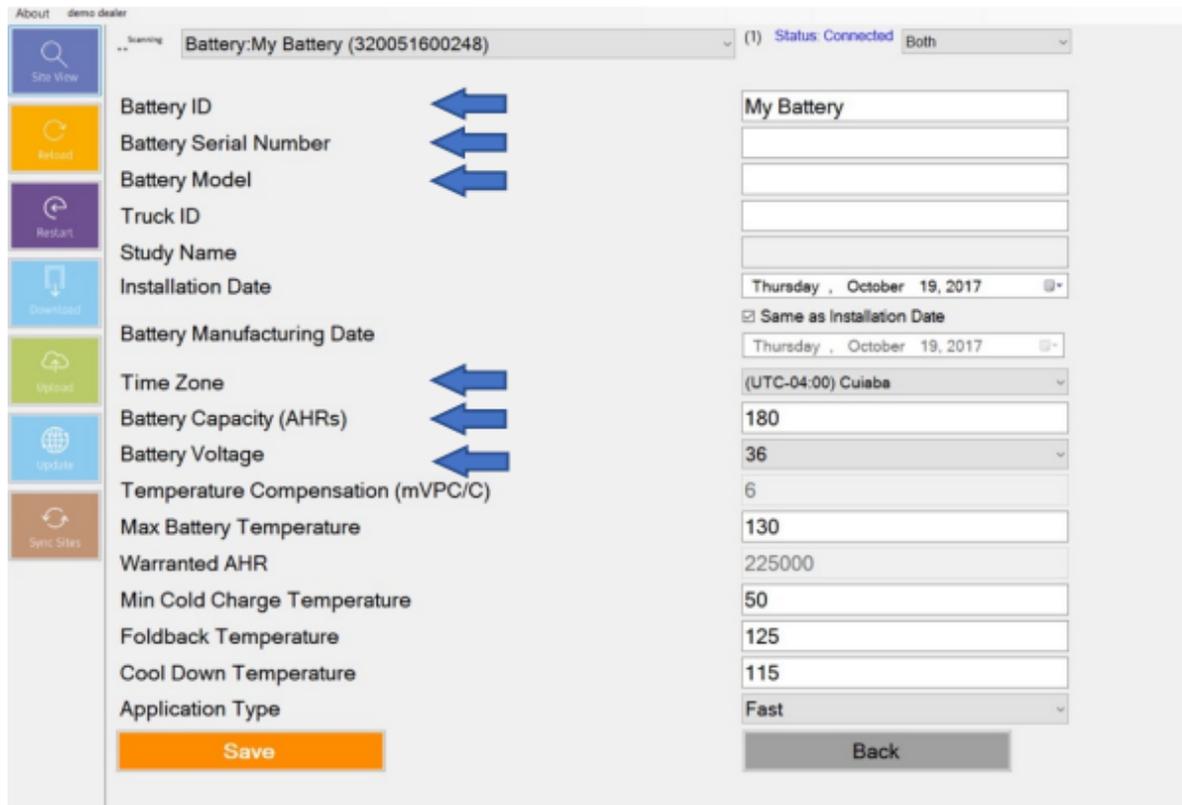

7. To set/edit battery settings, click on "BATTERY INFO" button.
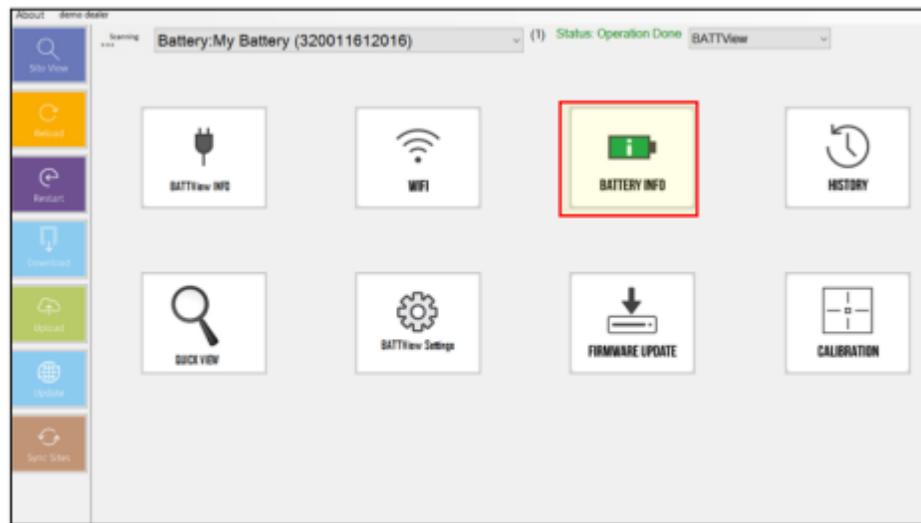
Click the "View Battery Settings" button.

The "Battery Settings" screen will appear. Enter the battery information (ID, S/N, Model, Installation Date, Time Zone). Next enter Battery Capacity and Voltage. The other fields will have Default configurations. Click the Save once the values are updated.

8. Click on "Start New Study".
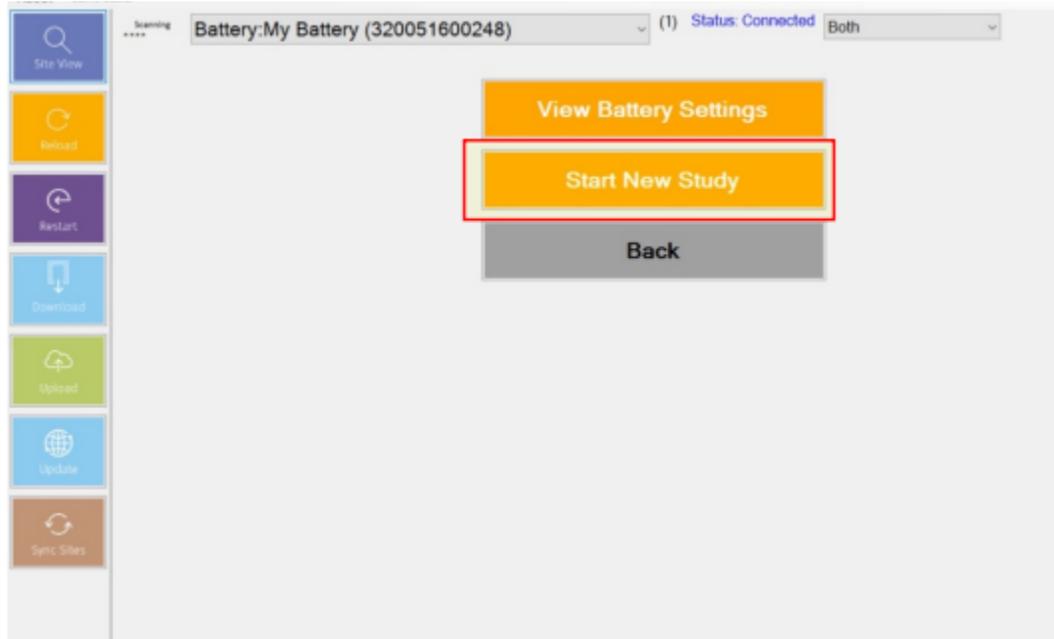
Fill out the Fields with the Study Name and the Truck ID. Click "Start New Study" to begin the Study.
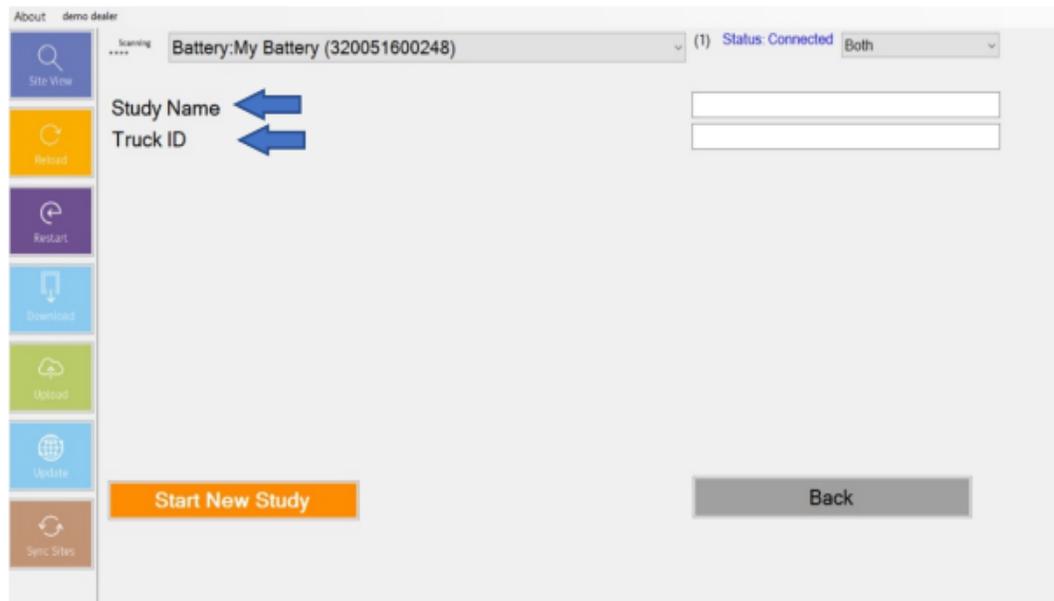
Note: If installing more than one Battview Mobile under the same Study Name the Study Name must be exactly the same.

9. A warning message will appear. Once a new Study is created, all old data on the Battview mobile will be erased. Make sure that all data is synched before you Click OK. The Battview will restart, and a message will appear on the screen.
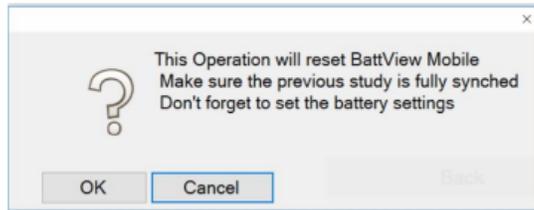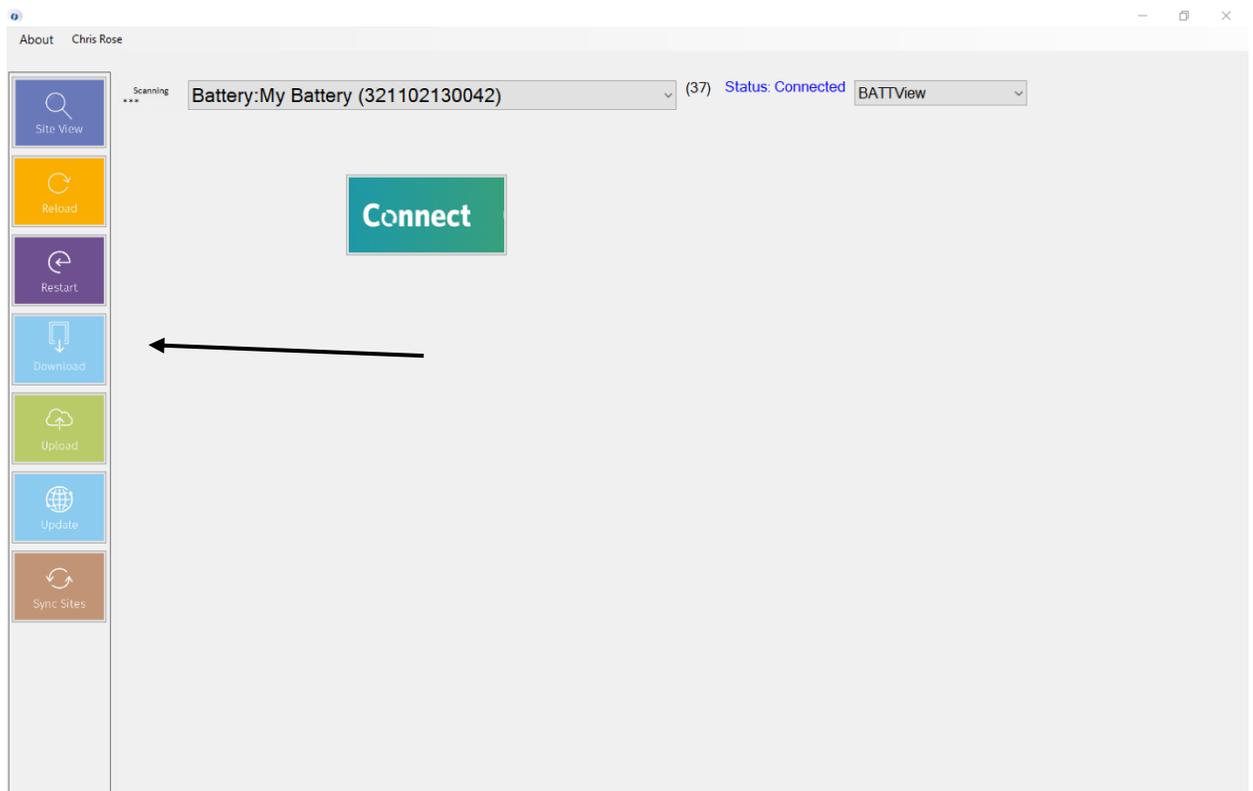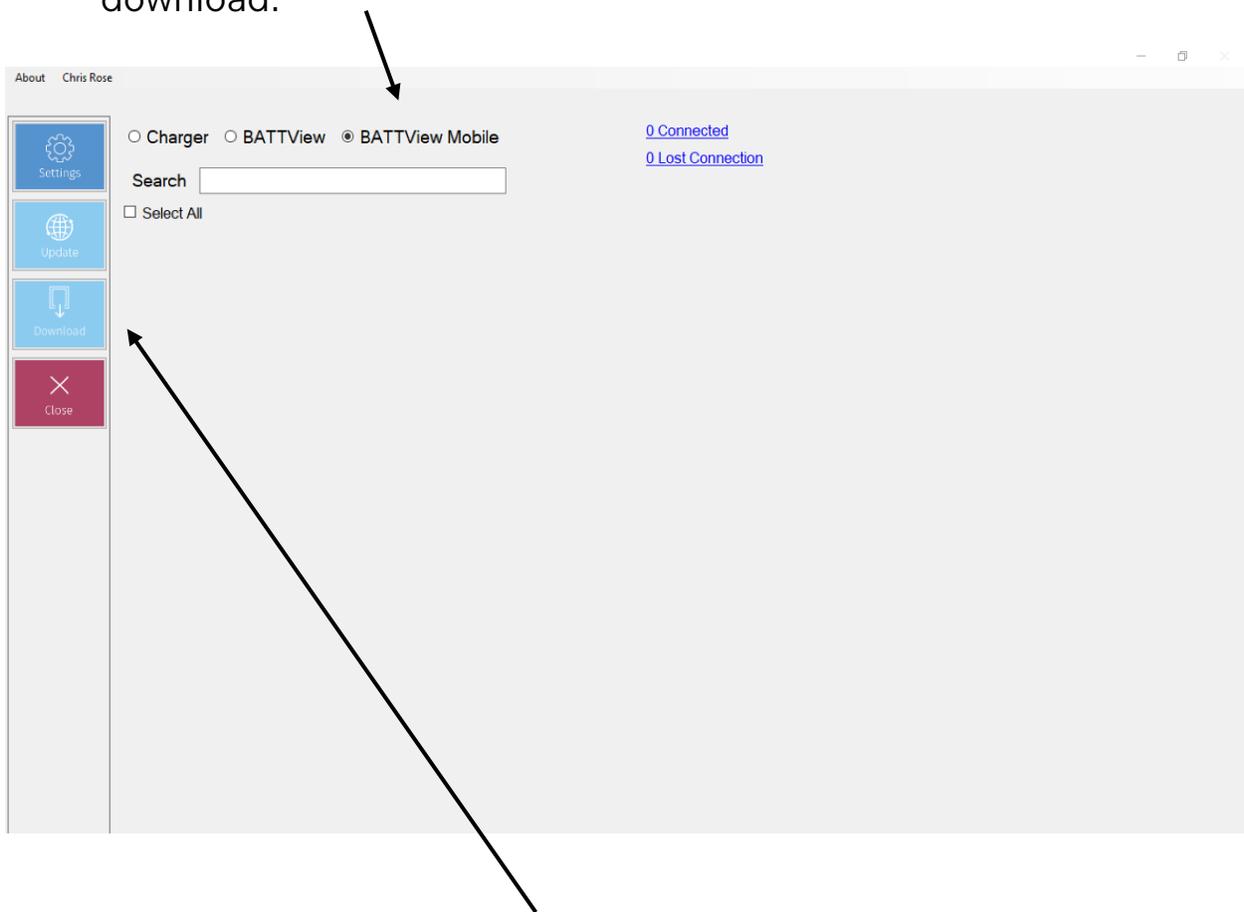
DOWNLOADING THE DATA

Once the Study is complete, follow the steps below to download the data from the installed Battview mobile device.

> NOTE: If the Battview mobile device was part of ACTintelligent with a stationary router, the data will be uploaded to ACTview automatically.

1. Follow steps 1-5 in the Update Battview Mobile Setting section below to connect to the Battview mobile device.
2. Click on the Download button on the side menu.

3. Click on the Battview Mobile button to show only Battview mobile devices, then select one or more Battview mobile devices for the download.
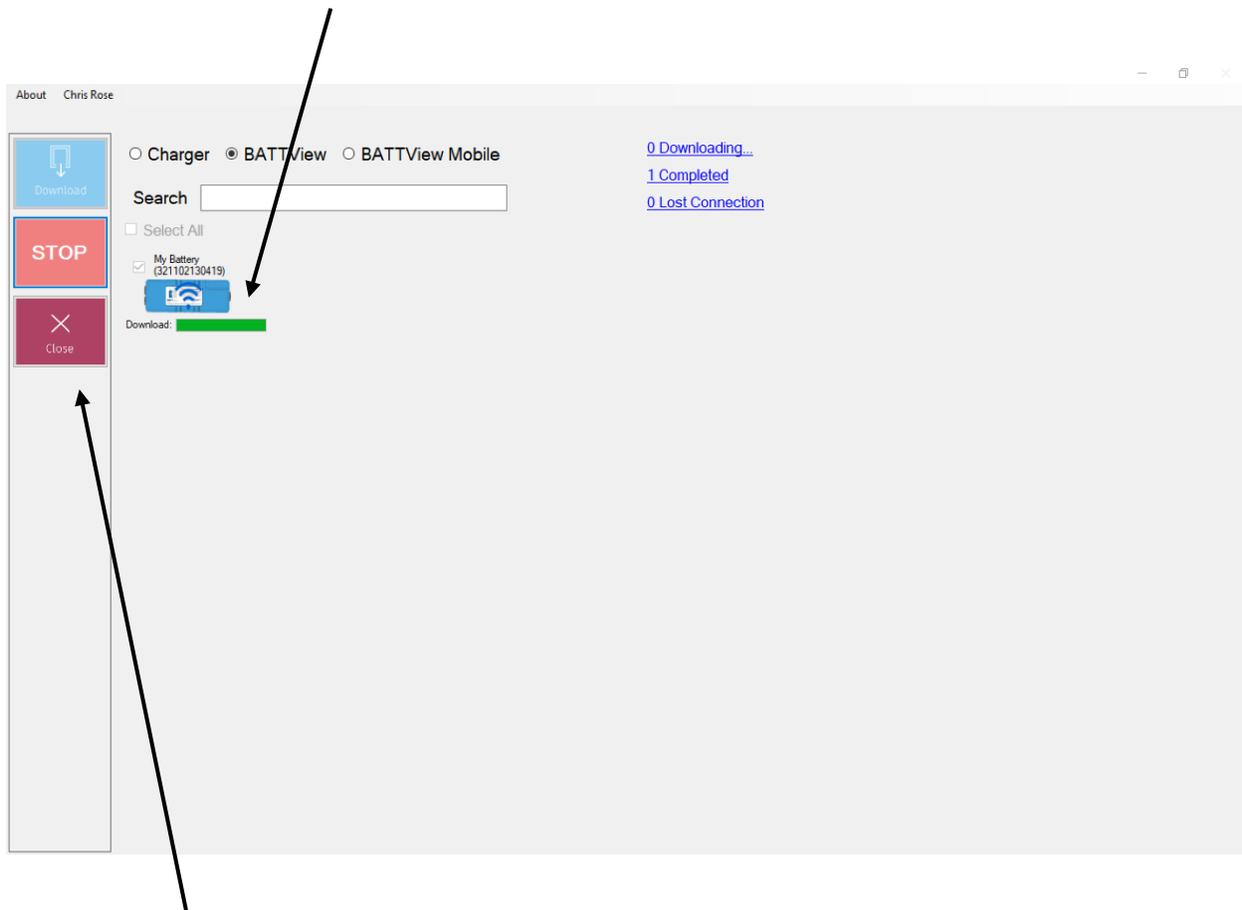

4. Click on the download button on the side menu, the download process will start.

NOTE:
If the Battview mobile device was part of ACTintelligent with a stationary router, the data will be uploaded to ACTview automatically.

A progress bar will show the download status.

Once Complete Push Close

UPLOADING THE DATA TO ACTVIEW

After downloading the data to the local machine, the data needs to be uploaded to the ACTview website for viewing and analysis. Follow the steps below to upload the data.

1. Close ACTlink software and connect to a network with internet access.
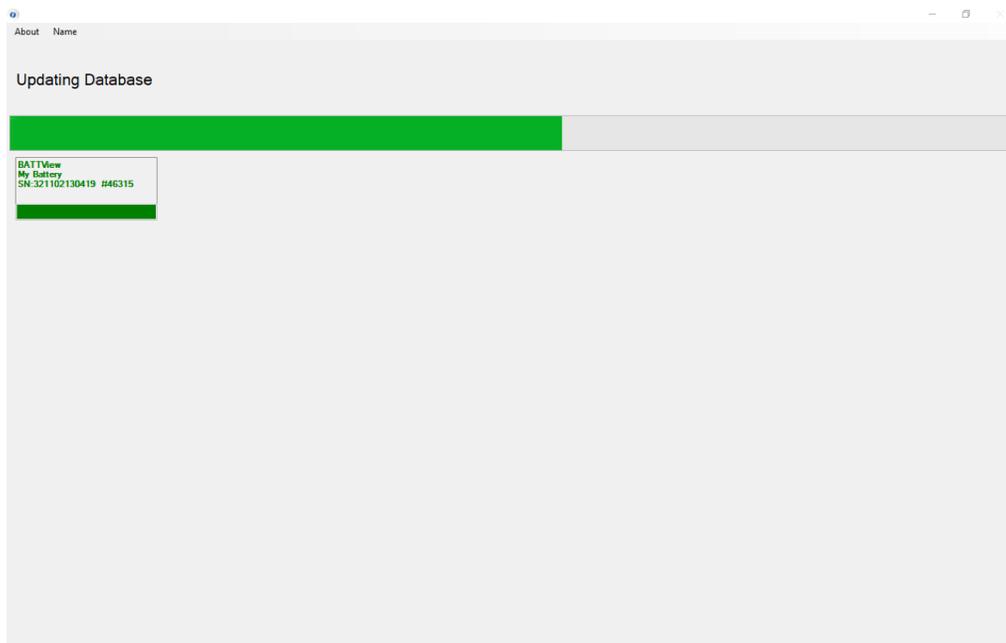
If there is no internet connection available at the site, this step and the following step can be performed off-site when an internet connection is available

2. Re-open ACTlink software, click on the Upload button.
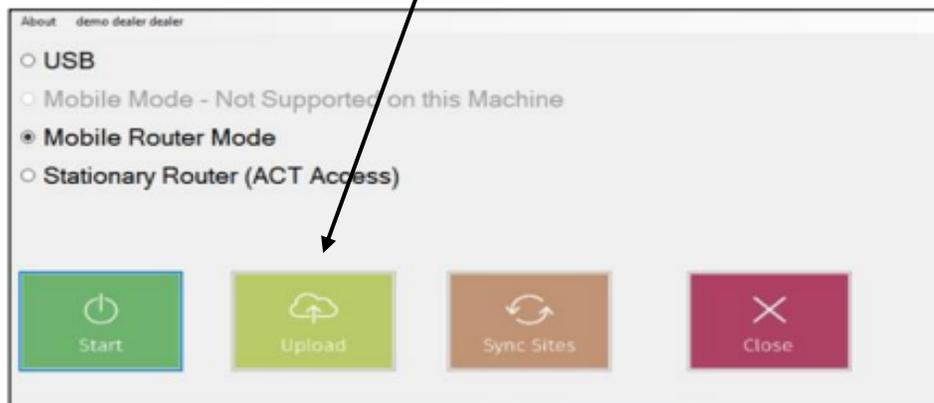
3. All devices with downloaded data will be displayed. The Upload process will start automatically.

4. A message will appear indicating the Upload process is complete. Click OK.