

# XM360 X-Tractor System Overview

## 1. System Purposes


- Use X-Tractor to create Preventative Maintenance Certification (PMC) reports
- Manually complete a PMC report
- Load previously created PMC reports for editing
- Upload PMC reports to Alpha's servers
- Open the reports directory to view the PMC PDFs

## 2. System Installation

The software can be downloaded using a setup.exe file that guides the user through the installation process.

Installed items include:

- XM360 X-Tractor
- Java and open-sourced libraries used by X-Tractor
- Serial to USB driver (for DSM1 and DSM2 transponders)
- Java 7, 32-bit

Name	Date modified	Type	Size
 setup.exe	6/28/2013 1:34 PM	Application	58,833 KB

## 3. System Requirements

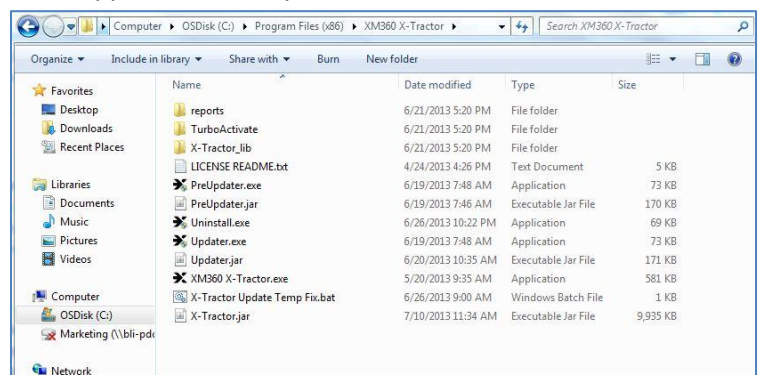
- XM360 X-Tractor was developed to operate on Windows 7 and Windows 8 systems, both 32 and 64 bit.
  - ✓ **NOTE:** There are known problems with running X-Tractor on Windows Vista.
- It is recommended to have at least 2 GB of RAM to smoothly run the software.
- Minimum monitor resolution should be 900 x 700 (width x height). Recommended monitor resolution is at least 1200 x 700 px.
- X-Tractor requires the latest version of Java to run the program.

## 4. Location of Files:

- During the install process, the user has the chance to specify where to install the executable code of the program. It will default to the Program Files (x86) directory. Location may vary depending on operating system. Folder includes:

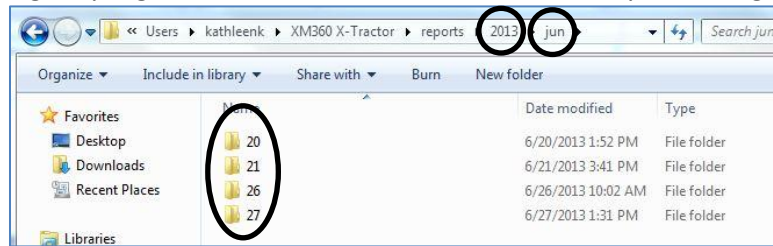
1. TurboActivate folder – required for registration
2. X-Tractor\_lib folder – contains libraries used by X-Tractor
3. License Readme.txt – contains legal information
4. PreUpdater.exe – executable file that calls upon PreUpdater.jar
5. PreUpdater.jar – During an update, the Updater may need to be replaced.
6. Uninstall.exe – Uninstalls X-Tractor, including program files directory and registry entries, but leaves the reports in the User directory and data in the AppData directory.
7. Updater.exe – executable file that calls upon Updater.jar
8. Updater.jar – extracts the downloaded update.zip file and distributes to proper destination

- The PM Certification Reports (PDF version of

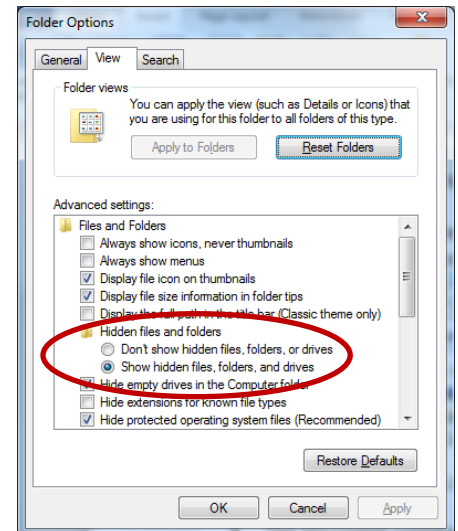
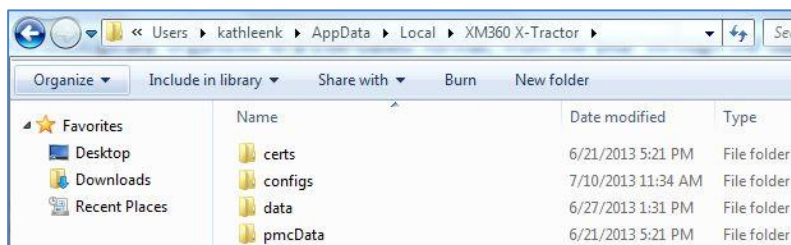


all reports) will be saved to the <user directory>/XM360 X-Tractor folder.

1. The reports folder contains an archive of all the PDFs ever created using X-Tractor.
2. Reports are chronologically organized in a tree-based format, from the year through the day.

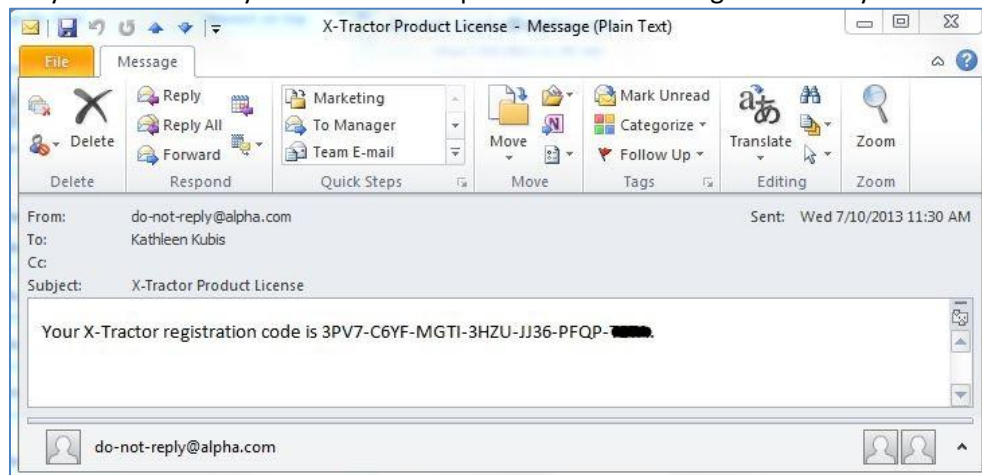


- The encrypted configuration and report data files will be saved to the AppData/local/XM360 X-Tractor directory. This is a hidden folder. You can access this folder by changing your folder settings. You can change folder settings by going to Control Panel > Folder Options > View tab > click Show hidden files, folders and drives.
1. Certs folder – contains certificate information that X-Tractor uses to communicate with the XM360 web service via SSL.
  2. Configs folder – contains the files with information used to connect to the different types of power supplies and transponders.
  3. Data folder – contains the yet-to-be-uploaded encrypted report data.
  4. PMC Data – contains the configuration scripts used to create the PMC PDFs.



## 5. Activating the Software

- The first time you start the software, the program will prompt you to input the registration key. This will be provided via email. You must be connected to the internet to activate the software with the registration key. Please keep this key for future purposes.  
✓ **NOTE:** You may need to check your Junk Box or Spam folder for the registration key.



## 6. Starting the Program

There are several ways the program can be run:

1. Double-click the desktop shortcut.
2. Click the start menu -> All Programs -> XM360 X-Tractor -> XM360 X-Tractor
3. There may an XM360 X-Tractor shortcut in the start menu taskbar.

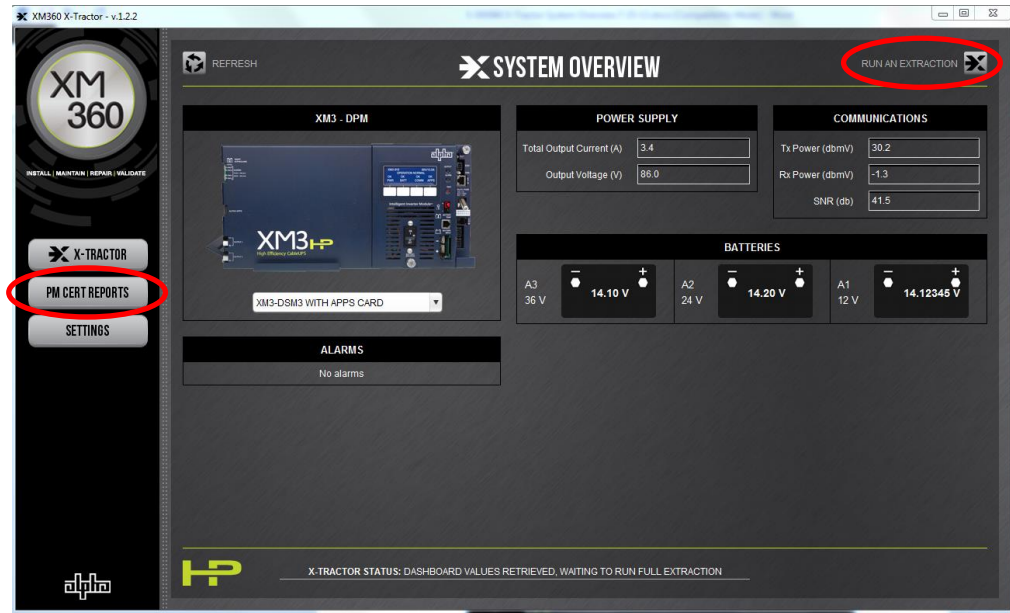


## 7. Using X-Tractor

- When you open XM360, a splash screen will appear while the program is loading.



- Once the loading screen has completed, the “System Overview” page will appear. From here you can run X-Tractor or go to PM Cert Reports to access old reports or create a manual report.



- Before running X-Tractor, you must be connected to the power supply from which you wish to extract data. For proper use, ensure the following:
  - The power supply must be turned on and you must be connected via an Ethernet cord or USB-to-Serial adapter and Craft Cable adapter (for DSM1 and DSM2 transponders only).
  - Your static IP address is set to 192.168.100.2, and your DSN address is 255.255.255.0.
  - The transponder information is accessible via the webpage, which can be accessed by opening an internet browser and typing in 192.168.100.1 in the address bar.
- Every 15 seconds, the program updates the basic information that can be derived from the power supply transponder. You can force the program to refresh sooner by clicking the Refresh button in the top-left corner of the screen.
- When the fields on the System Overview page have been populated, click the “Run an X-Traction” button in the top-right corner to create a new report and extract the system information. The X-Traction may take 5 to 30 seconds depending on the type of power supply and transponder configuration. You can start completing the remaining fields while the X-Traction is running.
- The X-Traction will complete as much of the report as possible that can be derived automatically from the transponder. (The amount varies depending on the system configuration. For more detail, reference the examples at the back of the training guide). The user will have to complete the remaining fields as indicated by the white fields. A blue asterisk indicates a required field. A red x indicates in invalid field. You can save and upload a report with remaining required fields incomplete, but you cannot upload a report with an invalid field.
- You can navigate the pages in various ways:

1. Using the navigation bar on the left side
2. Using the buttons in the top-left and top-right corners of each screen
3. Using the “Next” button at the bottom-right of every screen

- Additional buttons include the following:
  1. Change Batteries – there is a “Change Batteries” button that allows you to save data on existing or old battery information, as well as add information for newly installed batteries.
  2. Self-Test – This button allows the user to run a 9 minute self-test.
  3. XM3 Advanced and Discharge pages – When running an X-Traction on an XM3, you may get additional data, including utility information, battery discharge graphs and transponder information.
- When you are done completing the report, click the “Save and Close” button in the bottom-right corner of the screen. The “Site ID” and “MSO Name” fields must be completed in order to save a report. All other fields can be completed after the report has been saved.

**XM360 X-Tractor - v.1.2.2**

**BATTERIES**

TRANSPONDER

**CHARGER**

Mode:  Current (A):  Accept (VIC):   
 Float (V/C):  Temp Comp (mV/C/C):  Current Limit (A):

**MISCELLANEOUS**

Battery Temp (°F):   
 Battery Temp (°C):

**BATTERIES - STRING A**

Battery #	Manufacturer	Date Code MYY	ID Number	BS Conductance (mhos)		Voltage (VDC) No Load	Voltage (VDC) Under Load (After 9 min self-test)
				Meter Reading	Corrected 77°F		
A1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="14.12"/>	<input type="text"/>
A2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="14.20"/>	<input type="text"/>
A3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="14.10"/>	<input type="text"/>
String A Total						<input type="text" value="42.42"/>	<input type="text"/>

Battery Separator Present: ☐ YES ☐ NO String Fused: ☐ YES ☐ NO

**ADD BATTERY** **CHANGE BATTERIES**

**ADD STRING**

**SELF-TEST**

Self-Test Performed: ☐ YES ☐ NO Self-Test Start Time:  Self-Test Finish Time:  **CANCEL** **RUN SELF-TEST**

**ADD GENERATOR** **NEXT**

**X-TRACTOR STATUS: FINISHED EXTRACTION** **CANCEL** **SAVE & CLOSE**



## 8. PM Cert Reports Page

- This page allows you to view all reports in a table format. Reports can be edited, viewed and deleted by selecting a row and clicking the action of choice.
- The “Upload” button in the bottom-right corner of the screen will allow the user to transfer reports to the Alpha server. After uploading, the reports will be deleted from the reports table, but the PMC PDFs will remain in your archive folder which can be accessed directly from this page.
- If something goes wrong during the upload process, an error message may appear. A box may appear asking if you want to upload an error report. This report is not viewable, but it will send a text file to the server to be added to an error log. It contains X-Tractor debug output and minimal system information only used to help diagnose and fix the problem.

The screenshot shows the XM360 X-Tractor v1.2.2 application window. The title bar reads "XM360 X-Tractor - v1.2.2". The interface has a dark theme. On the left is a sidebar with a large "XM 360" logo and buttons for "INSTALL", "MAINTAIN", "REPAIR", and "VALIDATE". Below these are buttons for "X-TRACTOR", "PM CERT REPORTS", and "SETTINGS". The main area is titled "PM CERT REPORTS" and includes a "REFRESH" button and a "NEW MANUAL ENTRY REPORT" button with a plus icon. A table titled "REPORTS PENDING UPLOAD" contains one row of data. To the right of the table are buttons for "EDIT", "DELETE", and "VIEW PDF". At the bottom right are buttons for "VIEW ARCHIVES" and "UPLOAD REPORTS".

Site ID	Date	Time	City	Address	Invalid Fields	% Complete	Upload Progress
YK0750C	2014-07-21	11:38:08	YAKIMA	AHTANUM RD AT 5...	0	100	



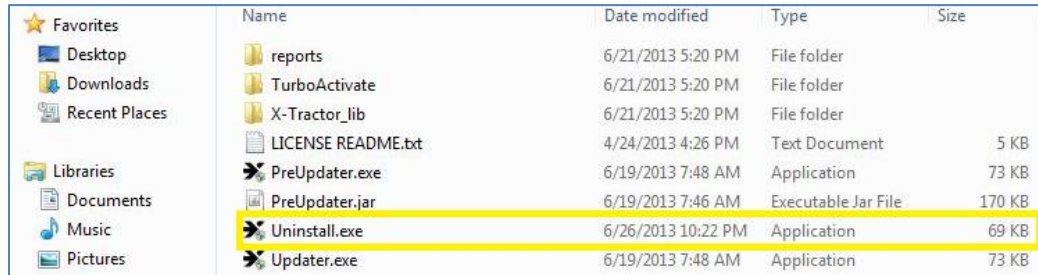
## 9. Software Updates

When a new version of X-Tractor is released, you will be prompted to update your version upon program start-up and before every report upload. You will need to work from the most current of X-Tractor to ensure consistency of data collection and transfer. Users can identify the version of software in the window header of the program.

## 10. Uninstalling the Program

An uninstall.exe file is located in the XM360 X-Tractor install directory. This will guide the user through an uninstall process that deletes X-Tractor from the computer, specifically the Program Files directory and the registry entries. Reports and configuration files will remain on the computer until manually deleted.

- ✓ **NOTE:** Some components included with XM360 are not automatically removed during installation. These programs and drivers (Java 7 Update 21 and PL-2303 USB-to-Serial) can be uninstalled by using the appropriate tool in the Control Panel to uninstall any application installed on the computer.



	Name	Date modified	Type	Size
★ Favorites				
Desktop				
Downloads				
Recent Places				
Libraries				
Documents				
Music				
Pictures				
	reports	6/21/2013 5:20 PM	File folder	
	TurboActivate	6/21/2013 5:20 PM	File folder	
	X-Tractor_lib	6/21/2013 5:20 PM	File folder	
	LICENSE README.txt	4/24/2013 4:26 PM	Text Document	5 KB
	PreUpdater.exe	6/19/2013 7:48 AM	Application	73 KB
	PreUpdater.jar	6/19/2013 7:46 AM	Executable Jar File	170 KB
	Uninstall.exe	6/26/2013 10:22 PM	Application	69 KB
	Updater.exe	6/19/2013 7:48 AM	Application	73 KB