

# **VFC 400:**

# **Vaccine Monitoring Data Logger Kit**

# **Start-up Instructions**

## ***VTMC Software Version 2.9.6***

Arizona Immunization Program Office

# Your VFC 400 Vaccine Monitoring

Certificate of Calibration

## Calibration Certificate

Certificate ID: 544022

Customer Information		Equipment Information	
Customer:	Control Solutions, Inc.	Equipment ID:	V17-4000
Address:	35851 Industrial Way, Suite D	Model No:	VFC400
		Manufacturer:	LOG TAG
City, State Zip:	St. Helens, OR 97051	Serial No:	1860922670
Contact:			
Phone:	503-443-5411		
Calibration Summary			
Calibrated:	Temp: 70F +/- 10		
Next Cal:	Humidity: 50% +/- 20		
Frequency:	Technician: Nicole H		
Remarks:			
Measure:	As Found	Result	Pass
Tolerance:	In Variance		
Tolerance (+/-)	As Found		

Temperature Probe

Acrylic Stand

VFC 400 data logger

Mounting Bracket

Extra Battery

Installation Kit

# VFC 400 Vaccine Monitoring Kit

Everything needed comes within the kit, which includes:

- VFC 400 data logger
- Stainless steel temperature probe with 5' of cable in a shatter-proof glycol filled bottle
- Acrylic stand so your glycol bottle can stand up in the fridge or freezer
- Mounting bracket to be attached to the side or front of your fridge/freezer
- Installation Kit- Adhesive backed cable tie mounts with tie wraps so you can secure the cable to the side of the fridge/freezer
- One extra battery. The data logger comes with a battery installed in the logger and an extra battery
- 2 year NIST traceable Certificate of Calibration compliant to ISO 17025; 2005

# Contents

- Step 1:  
Install the temperature probe in the cold storage unit
- Step 2:  
Control Solutions VTMC Software download
- Step 3:  
Software settings
- Step 4:  
VFC 400 data logger configuration
- Step 5:  
Operation of the VFC 400

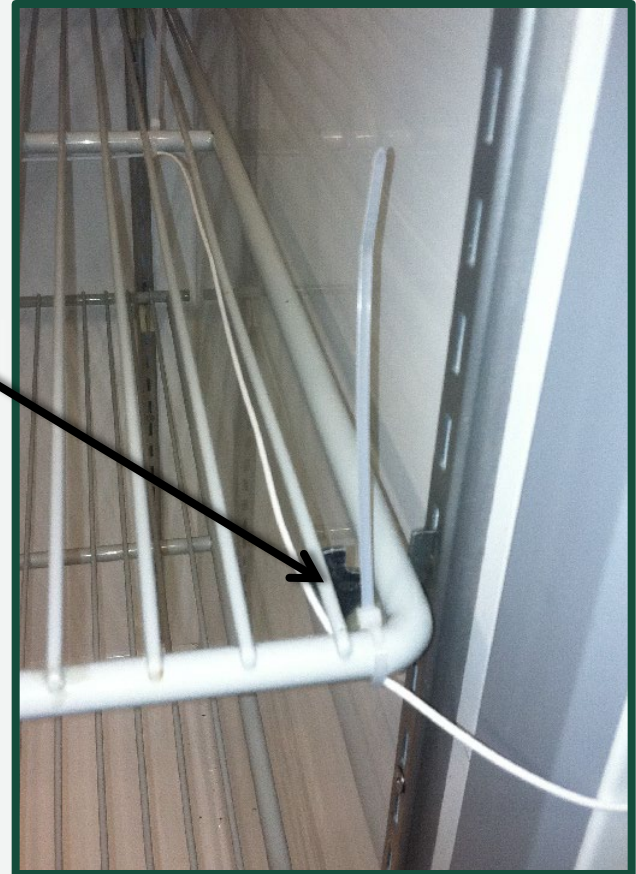
# STEP 1: Installing the Probe



1. Place the acrylic stand and probe vial in the cold storage unit on the center rack where the VFC vaccines are required to be placed.
2. Run the cable underneath the wire rack and secure it with a zip tie.

# STEP 1: Installing the Probe

4. Route the cable toward the wall of the hinge side and secure with a zip tie.
5. Continue to route the cable towards the front of the fridge/freezer on the hinge side and secure.



# STEP 1: Installing the Probe

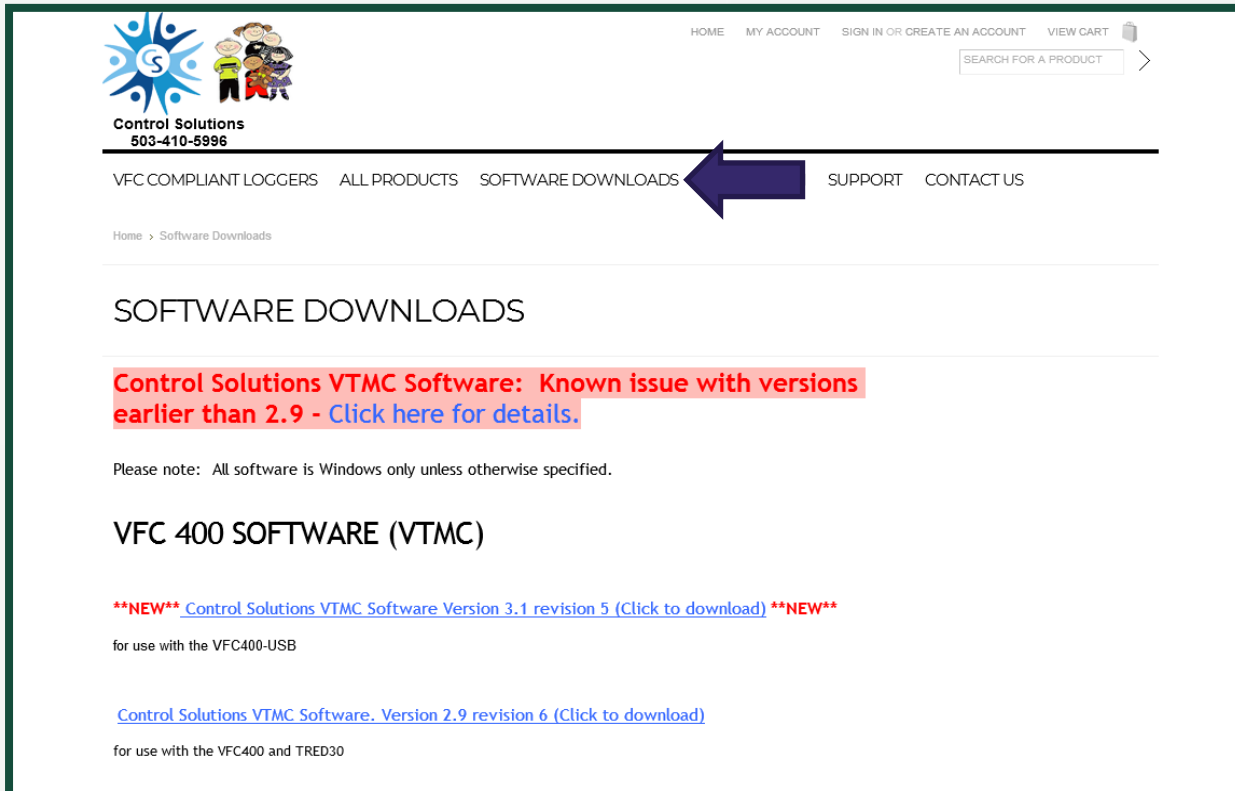
6. Place the logger into the wall mounting bracket, plugging the sensor wire into the logger (left side).
7. Adhere the mounting bracket for the VFC 400 to either the side or front of the door in a spot that is easy to view and operate.
8. About 6 inches underneath the logger, secure the cable tie bracket and secure the cable with a zip tie.
9. Leave enough slack in the cable so you can plug and unplug the VFC 400 easily.





# STEP 2: VFC 400 Software Download

- From the internet, go to [www.vfcdataloggers.com](http://www.vfcdataloggers.com) to download the latest software revision.
- Click on ***Software Downloads*** and then click on “***VFC 400 Software Download***”.



The screenshot shows the Control Solutions website. The header includes the company logo, contact information (503-410-5996), and navigation links: HOME, MY ACCOUNT, SIGN IN OR CREATE AN ACCOUNT, VIEW CART, and a search bar. A large blue arrow points to the 'SOFTWARE DOWNLOADS' link in the navigation bar. Below the navigation bar, the page title is 'SOFTWARE DOWNLOADS'. A red banner reads: 'Control Solutions VTMC Software: Known issue with versions earlier than 2.9 - Click here for details.' Below this, a note states: 'Please note: All software is Windows only unless otherwise specified.' The section is titled 'VFC 400 SOFTWARE (VTMC)'. Two software versions are listed: '\*\*NEW\*\* Control Solutions VTMC Software Version 3.1 revision 5 (Click to download) \*\*NEW\*\*' for use with the VFC400-USB, and 'Control Solutions VTMC Software. Version 2.9 revision 6 (Click to download)' for use with the VFC400 and TRED30.

Control Solutions  
503-410-5996

HOME MY ACCOUNT SIGN IN OR CREATE AN ACCOUNT VIEW CART  
SEARCH FOR A PRODUCT >

VFC COMPLIANT LOGGERS ALL PRODUCTS SOFTWARE DOWNLOADS SUPPORT CONTACT US

Home > Software Downloads

## SOFTWARE DOWNLOADS

**Control Solutions VTMC Software: Known issue with versions earlier than 2.9 - Click here for details.**

Please note: All software is Windows only unless otherwise specified.

### VFC 400 SOFTWARE (VTMC)

**\*\*NEW\*\*** [Control Solutions VTMC Software Version 3.1 revision 5 \(Click to download\)](#) **\*\*NEW\*\***

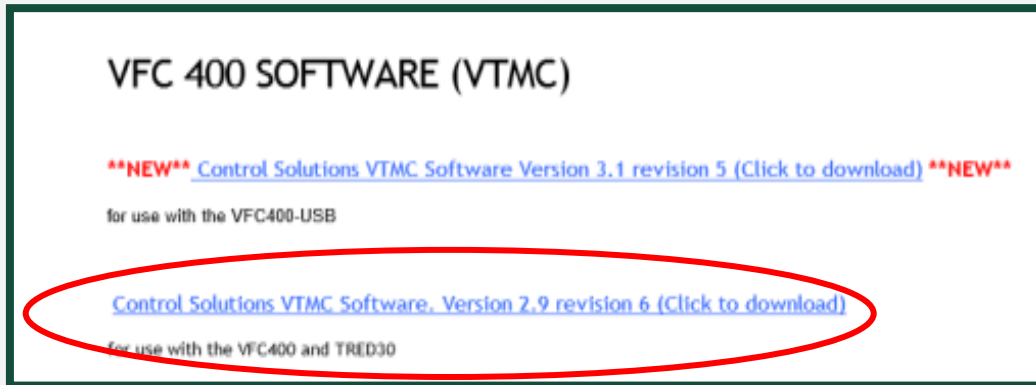
for use with the VFC400-USB

[Control Solutions VTMC Software. Version 2.9 revision 6 \(Click to download\)](#)

for use with the VFC400 and TRED30

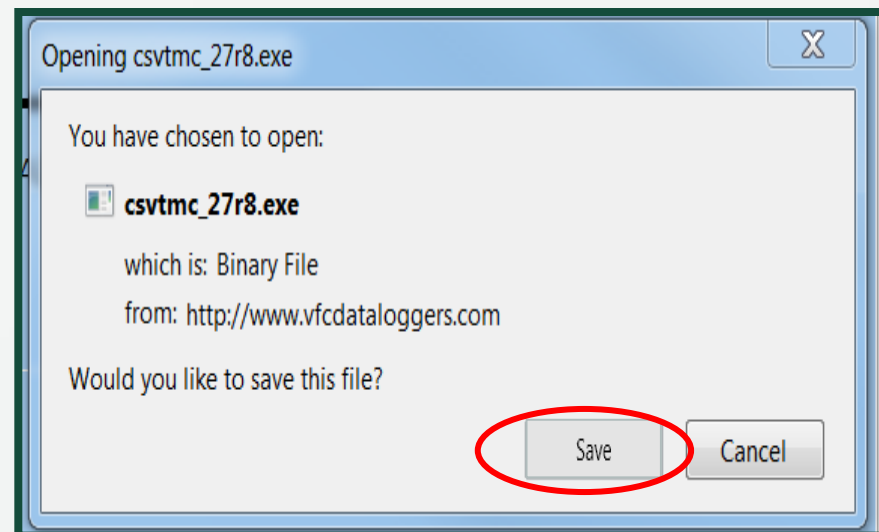


# STEP 2: VFC 400 Software Download



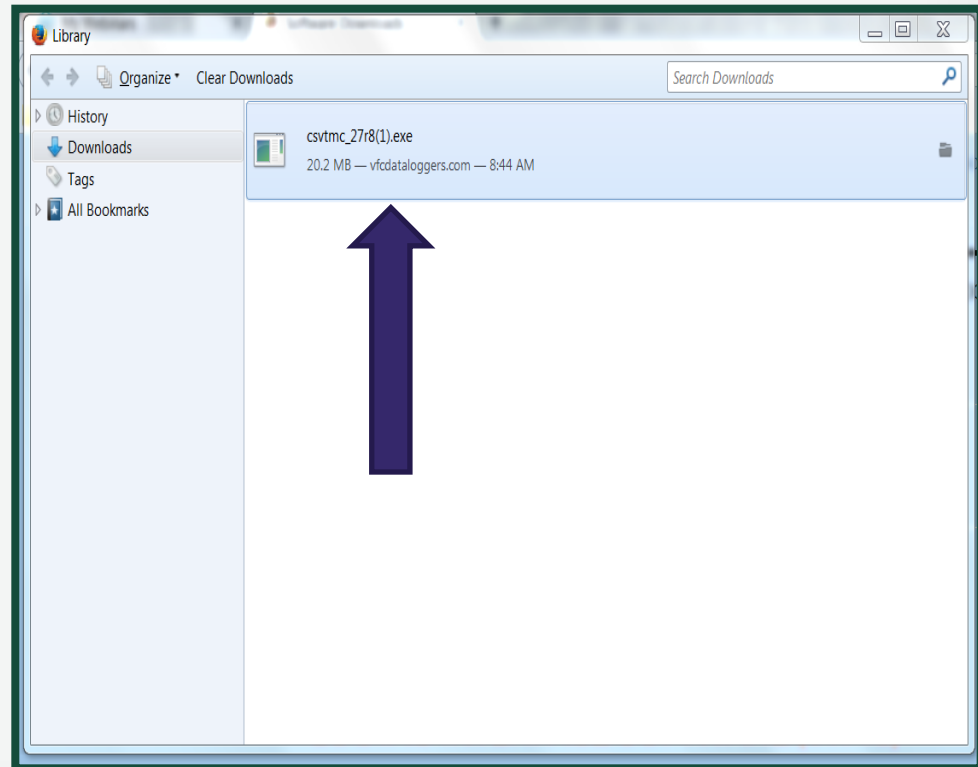
Scroll down and click on “Click to Download”.

When the box shows up as shown, click on “Save”.



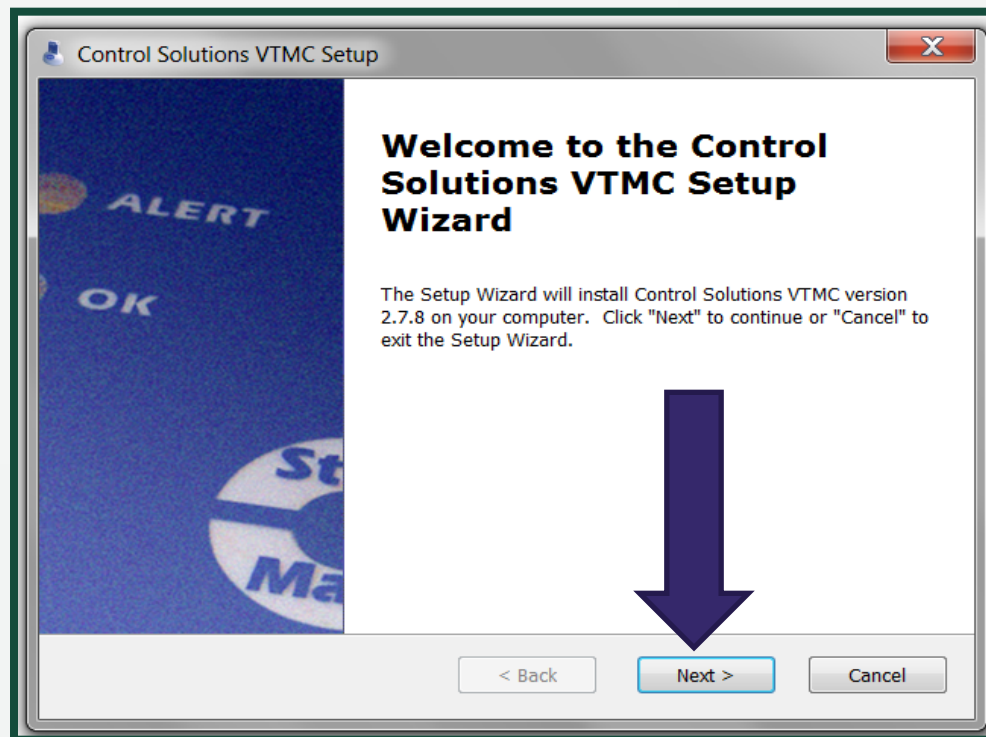
# STEP 2: VFC 400 Software Download

- Go to where you saved the file and click on the file to start the download. You will need administration rights to do this and may need IT support.
- The file is saved as a zip file. Double click on the zip file and then double click on file *“csvtmc\_27r8.exe”*.

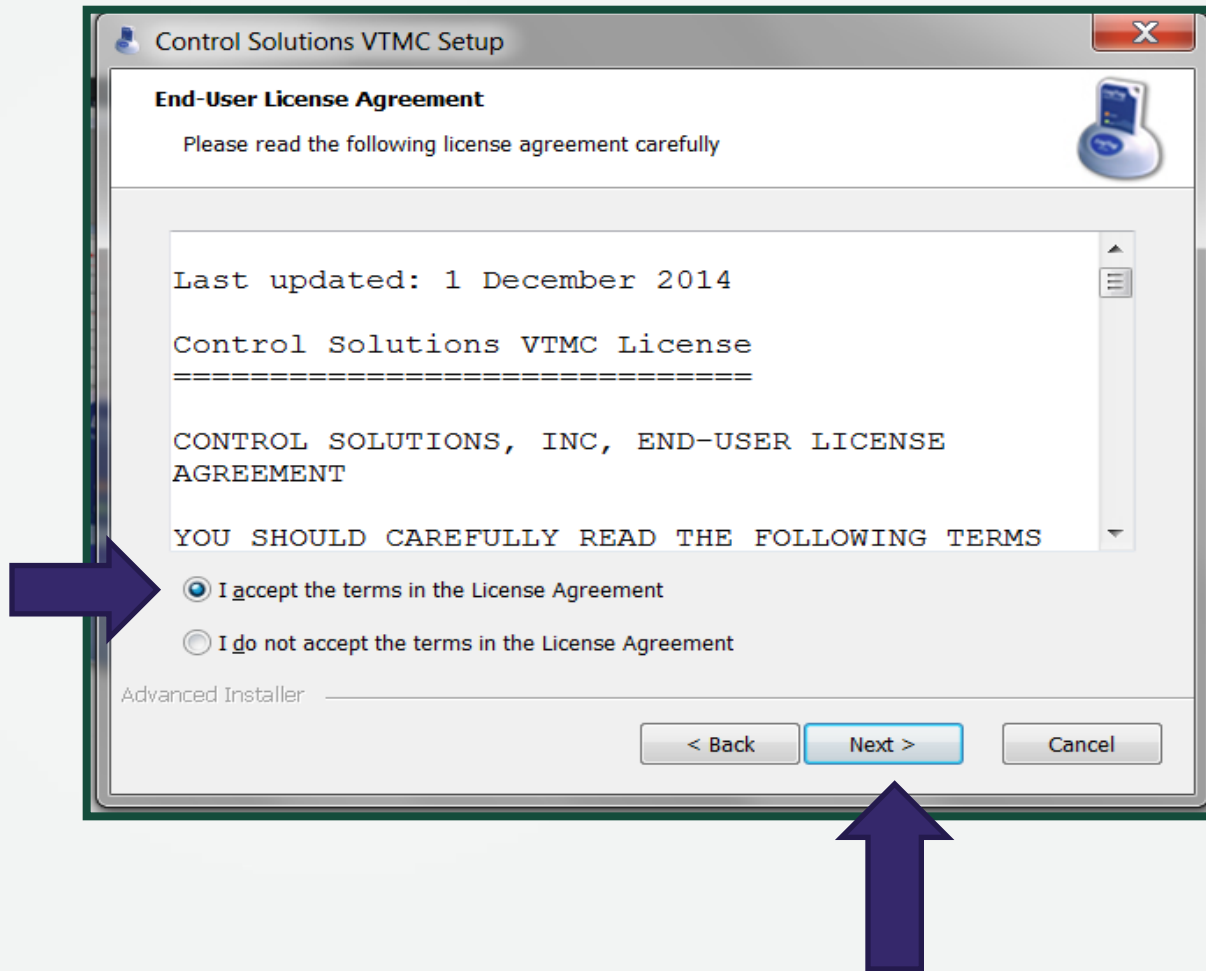


# STEP 2: VFC 400 Software Download

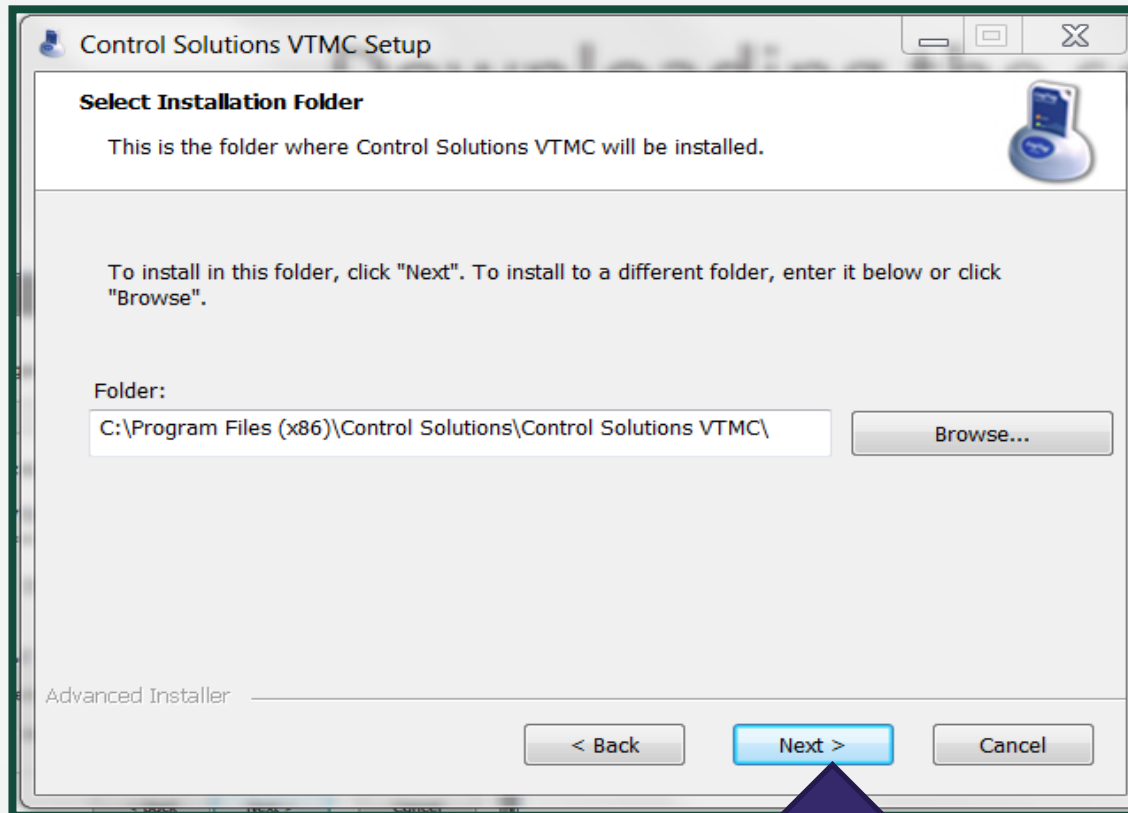
- A pop-up will appear that asks “Do you want to allow the following program to make changes to this computer?”. Click yes.
- The next series of pop-ups click as shown by the arrows.



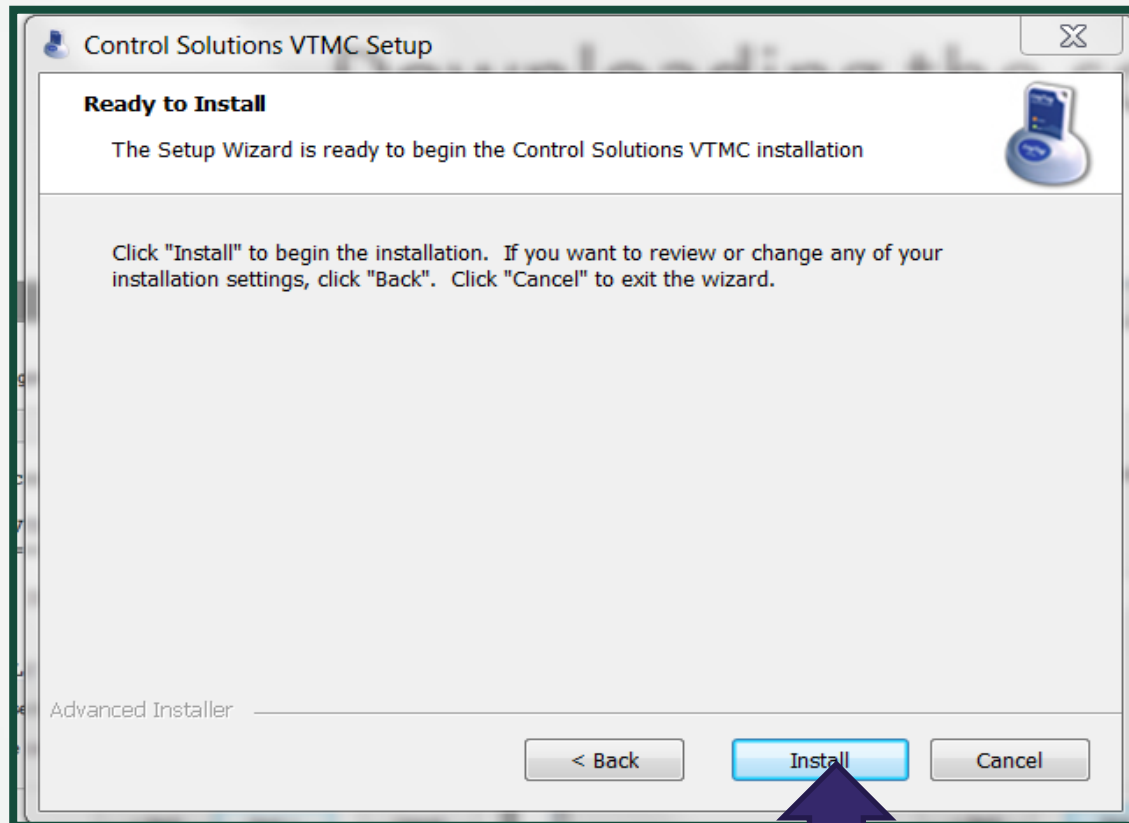
# STEP 2: VFC 400 Software Download



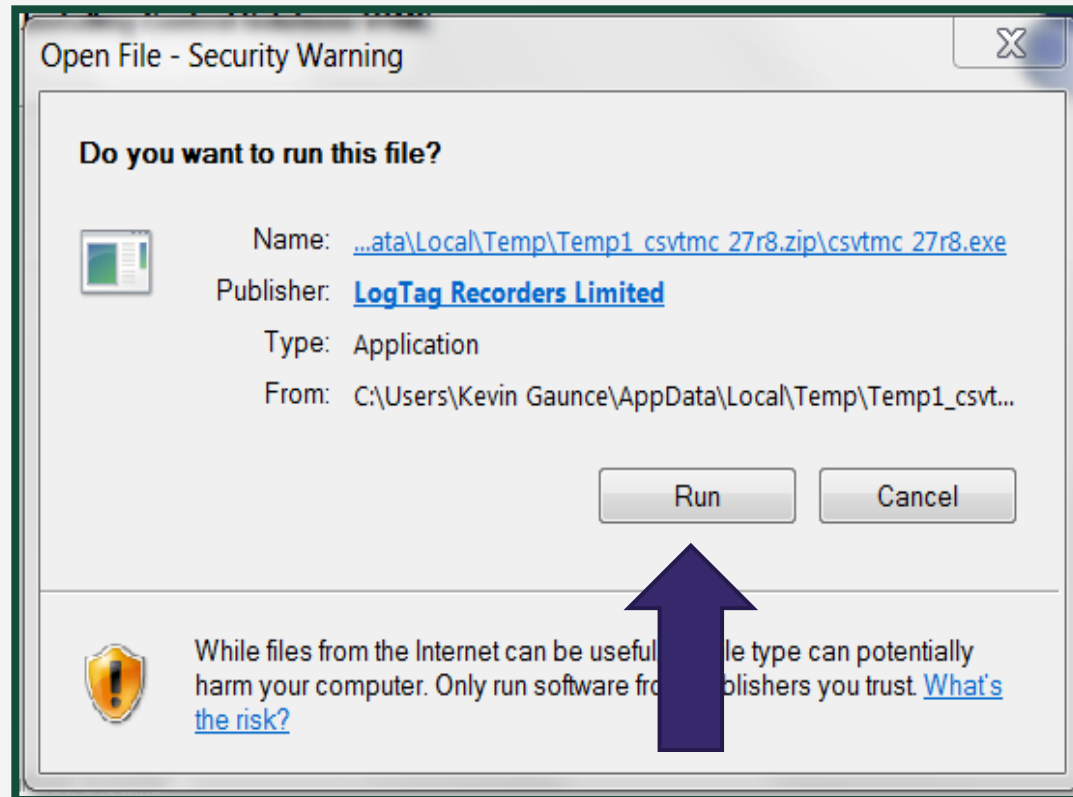
# STEP 2: VFC 400 Software Download



# STEP 2: VFC 400 Software Download

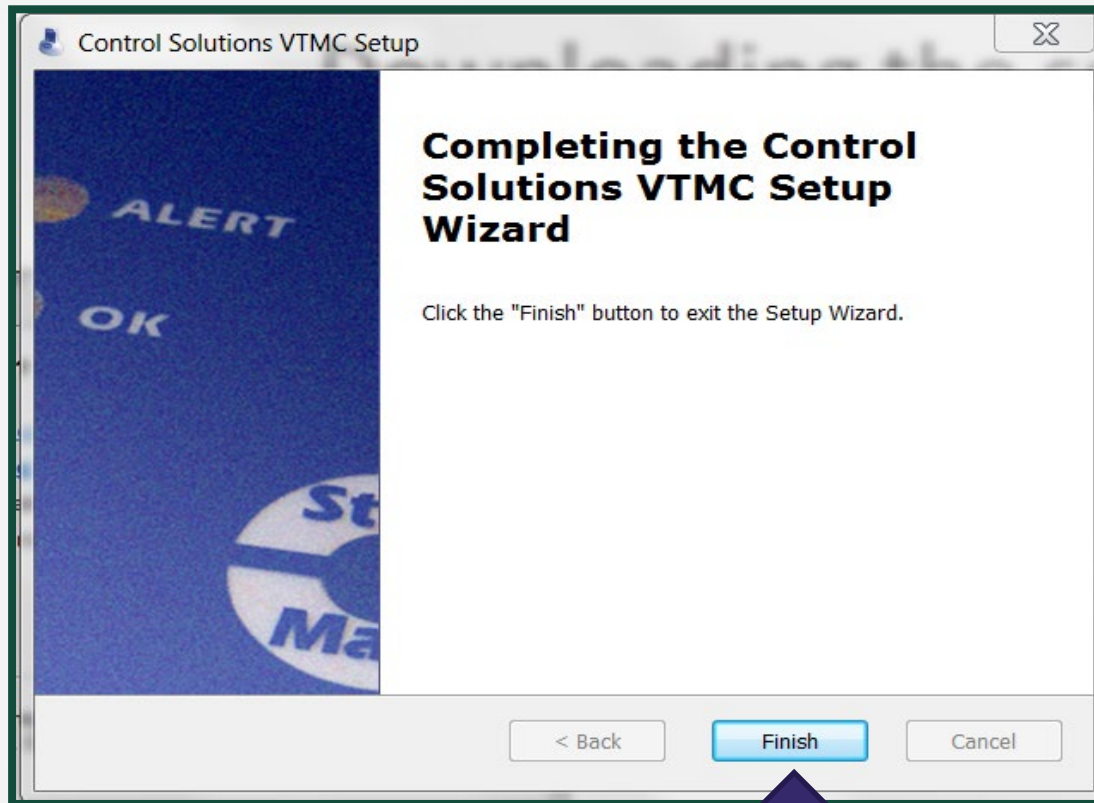


# STEP 2: VFC 400 Software Download

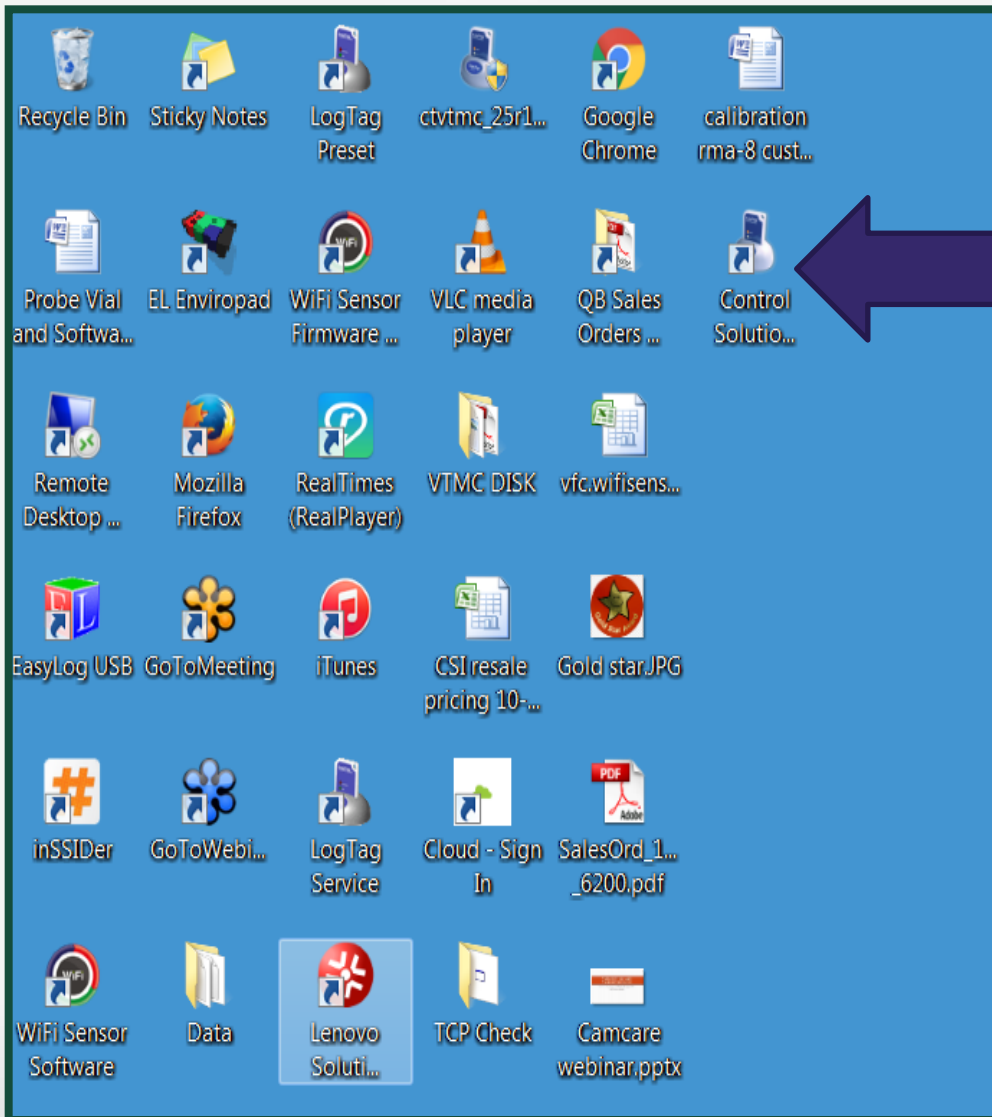




# STEP 2: VFC 400 Software Download



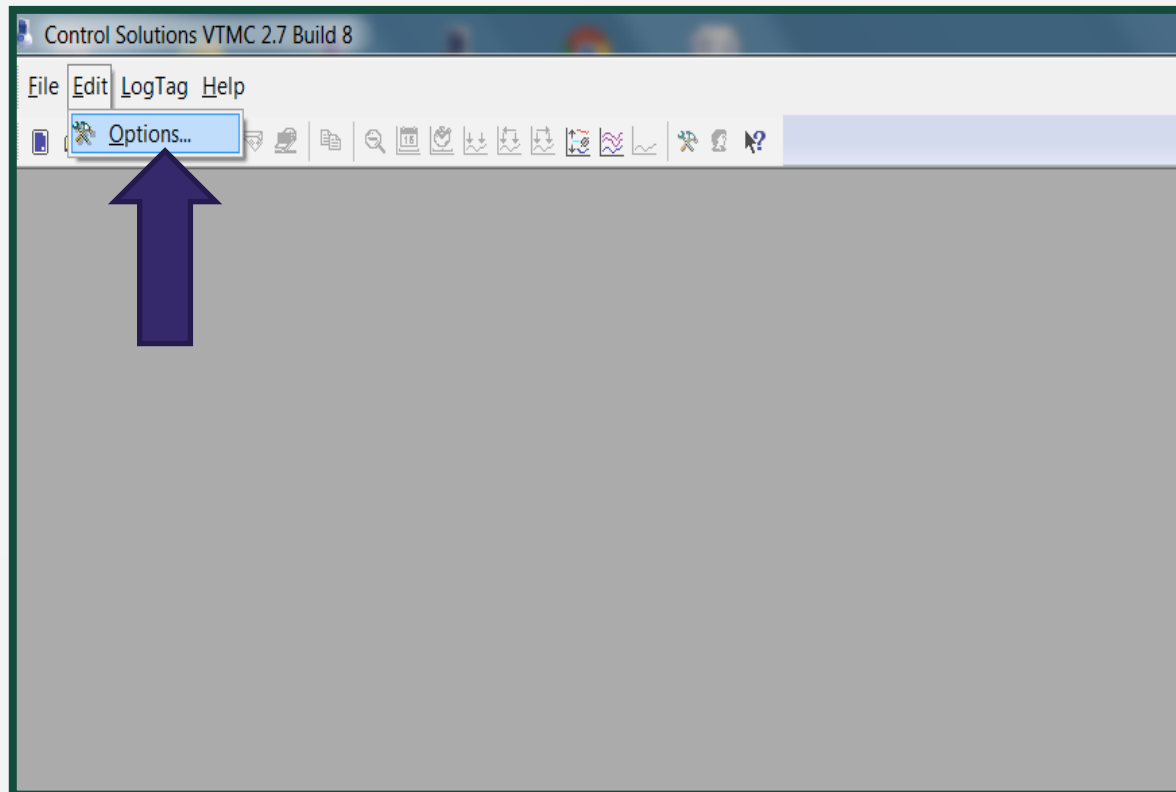
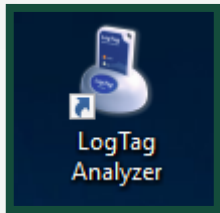
# STEP 2: VFC 400 Software Download



You should now have an icon on your desktop that looks like this.

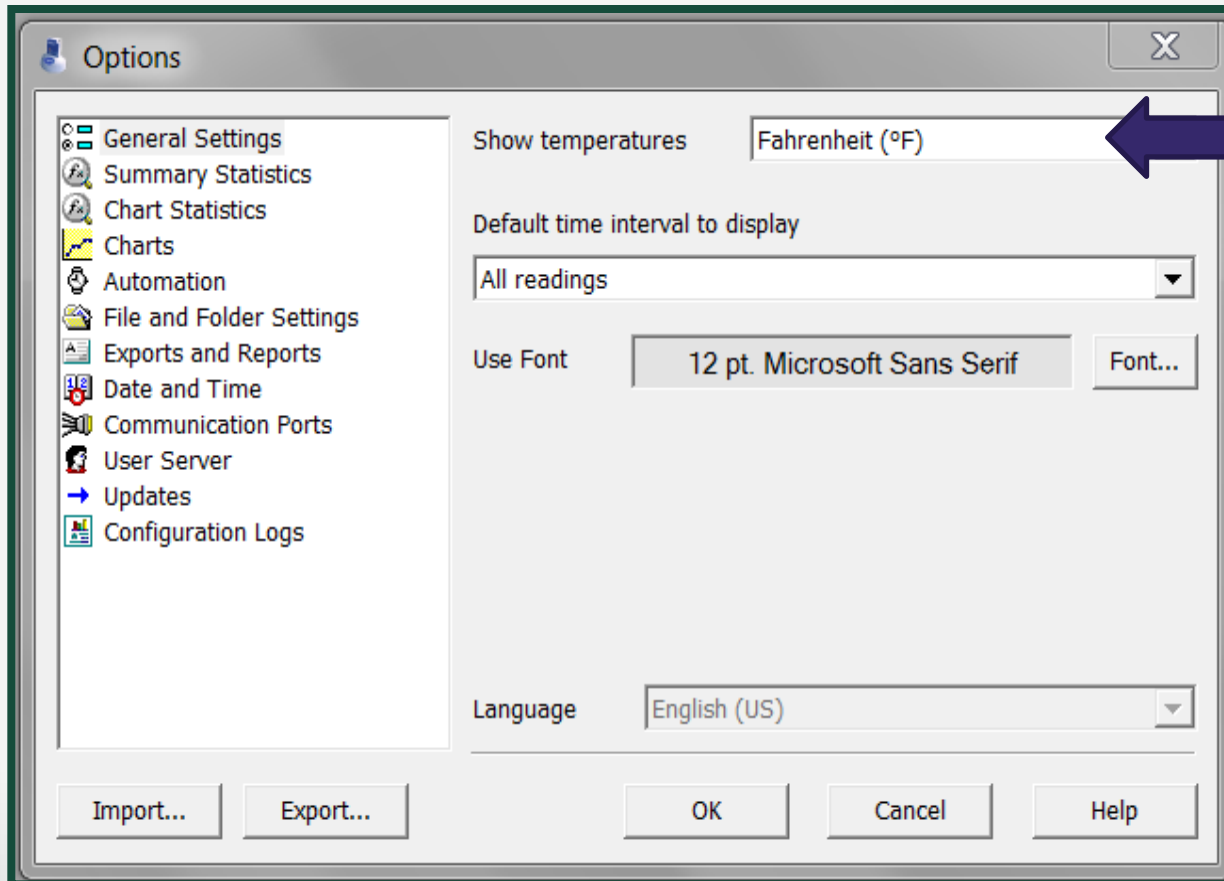
# STEP 3: Software Set-up Configuration

- After the software has been installed, go to the icon on your desktop and double click to open.
- Click on Edit and then click on Options in the drop down.



# STEP 3: Software Set-up Configuration

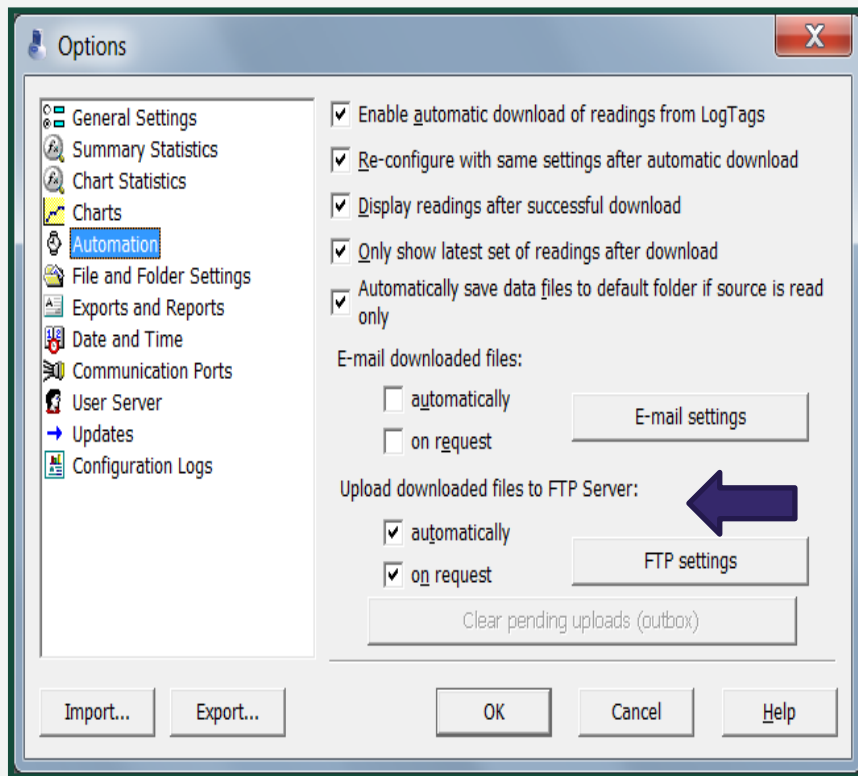
Click on “General Settings”.



Select °F or °C in the drop down list. This will be how the temperature will be displayed in your software.

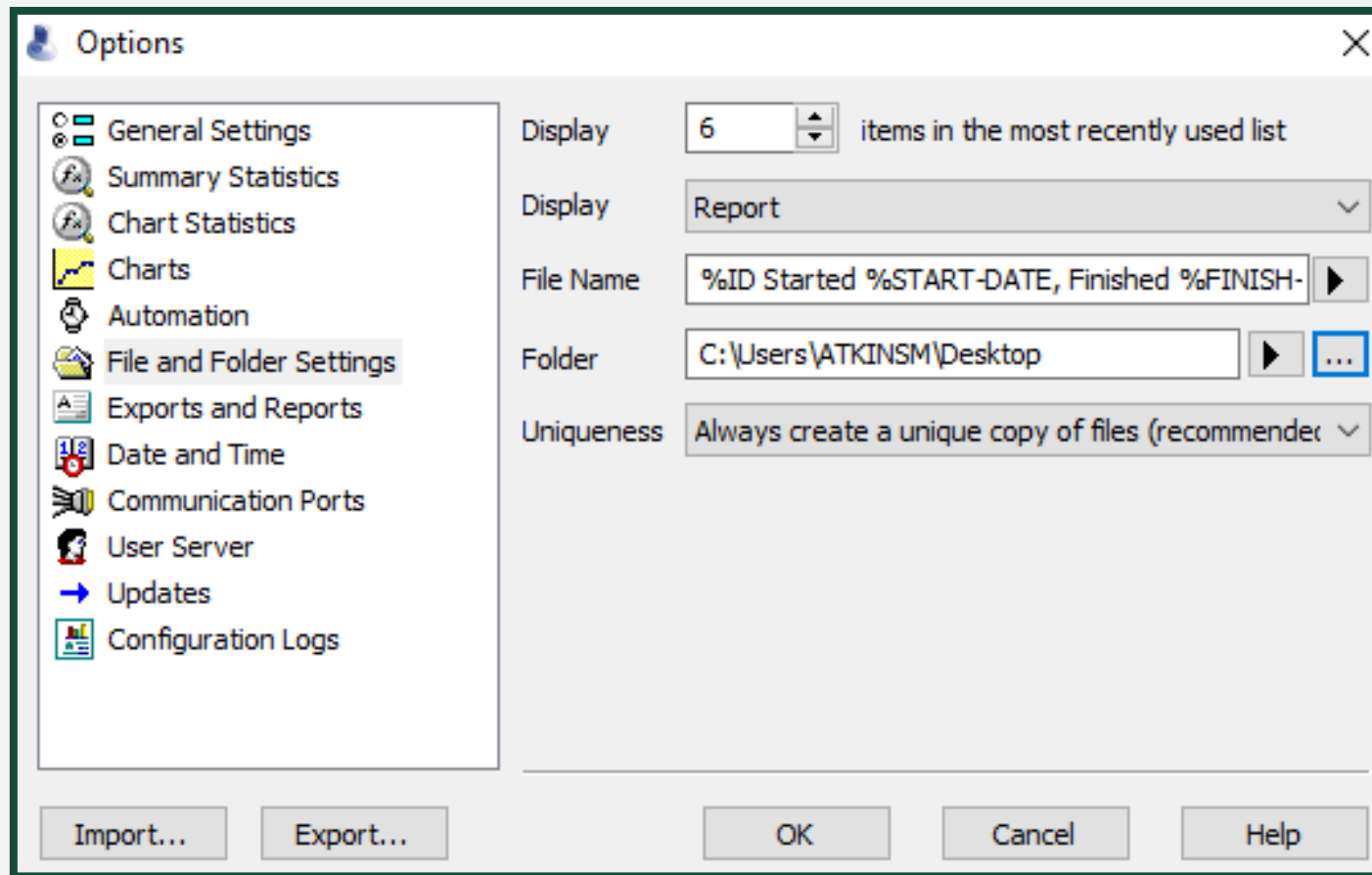
# STEP 3: Software Set-up Configuration

Click on Automation Settings and check the “Automatically” box.



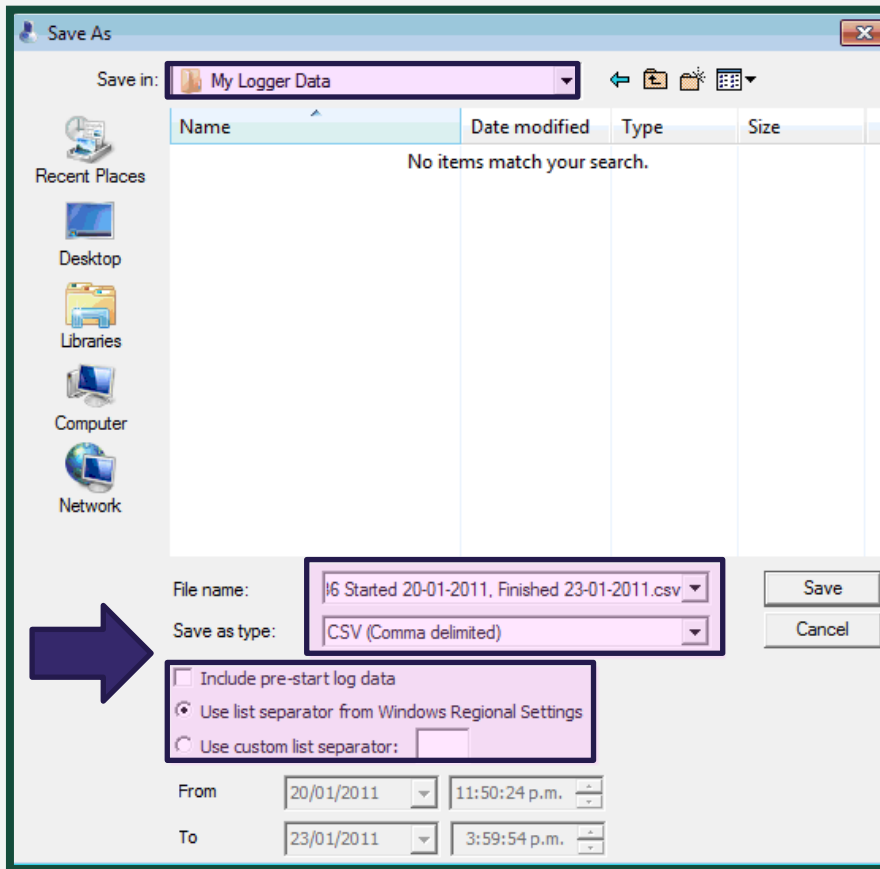
Select Automation from the left hand side menu, then click on "automatically" under the “Upload downloaded files to FTP Server” to be able to send data logger data to the VTMC (Vaccine Temperature Monitoring Cloud), allowing automatic transmission of the data logger data to the VTMC each time the data logger is docked.

# STEP 3: Software Set-up Configuration



- Click “File and Folder Setting”
- Select the “...” to select an alternative destination for the data logger reports.

# STEP 3: Software Set-up Configuration



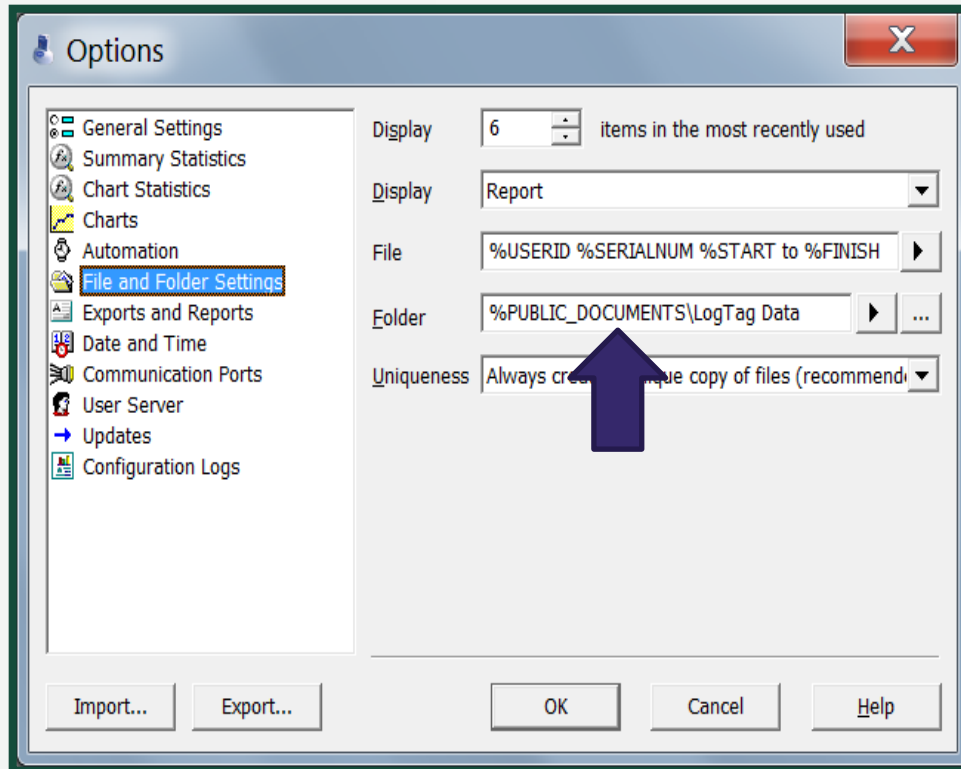
If you desire to export your data to another location such as an external drive or shared drive:

- Click “File”
- Click “Save As”
- Select file destination
- Type in a Unique File Name
- Select the file type (.txt, .ltd, .csv)
- Click “Save”

**Note:** This method allows others to have access to the file in your absence or if the computer fails. This must also be saved in accordance with your organization’s protocols.



# STEP 3: Software Set-up Configuration

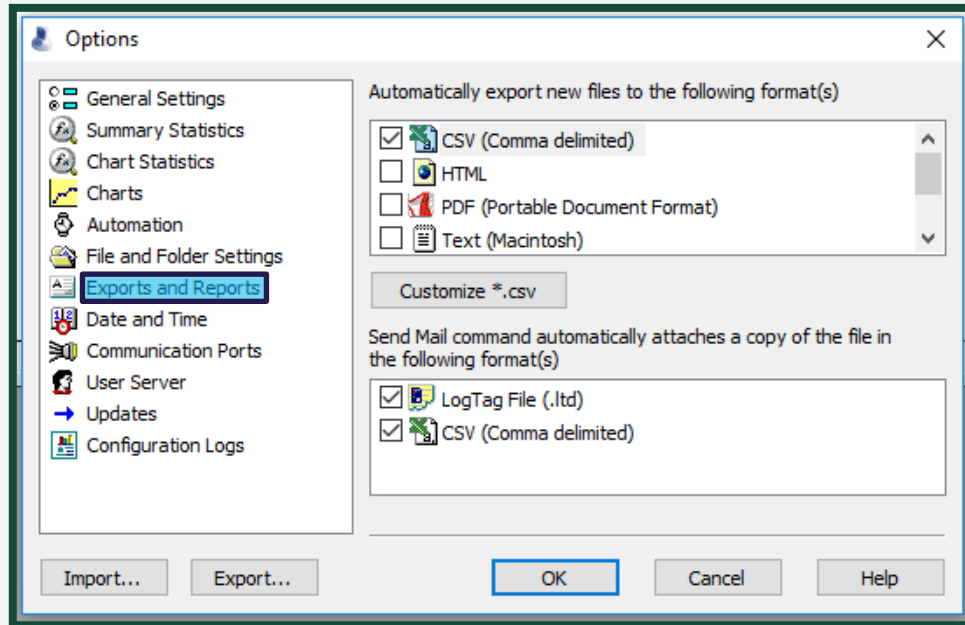


If you desire to save your data on your current computer.

- Click on File and Folder Settings.
- By default the VFC 400 software will save the data to:  
***Public>Documents>Log Tag Data*** so anyone logged onto the PC can access the data.

**Note:** If you prefer to save the data to a network or shared drive, click the button with 3 dots(...). A box will appear saying “Locate Folder”. Select the desired folder and click “OK”.

# STEP 3: Software Set-up Configuration



**To set up the default exporting format:**

- Click Exports and Reports
- Select your desired method (.csv, .txt)

**To set up the default sending format:**

- Click Exports and Reports
- Select your desired method (.csv, .ltd)

# STEP 4: VFC 400 Data Logger Configuration

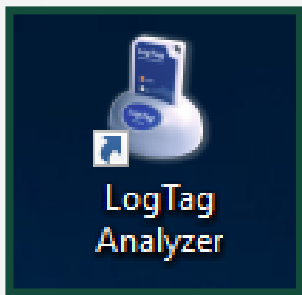
**Note:** *Control Solutions will pre-configure data loggers sent to the Department of Health Services. The box and logger should be labeled Fridge or Freezer. The following instructions are for loggers that are pre-configured.*

*If the data logger is not configured upon receiving it, please call the Arizona Immunization Program Office for assistance.*

# STEP 4: VFC 400 Data Logger Configuration

- Open the VFC 400 (LogTag Analyzer) software on the computer to download the data.
- Plug the docking station into the USB port of the computer.
- Firmly insert data logger into the docking station.

*Note: Both the red and blue data loggers are compatible with the old and new docking stations.*



Docking Station  
Options



USB Interface Cradle













LTI-HID USB Cradle

# STEP 4: VFC 400 Data Logger Configuration

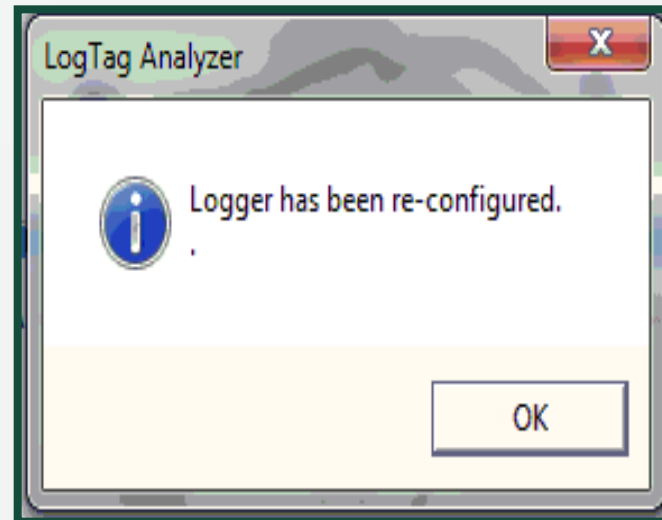
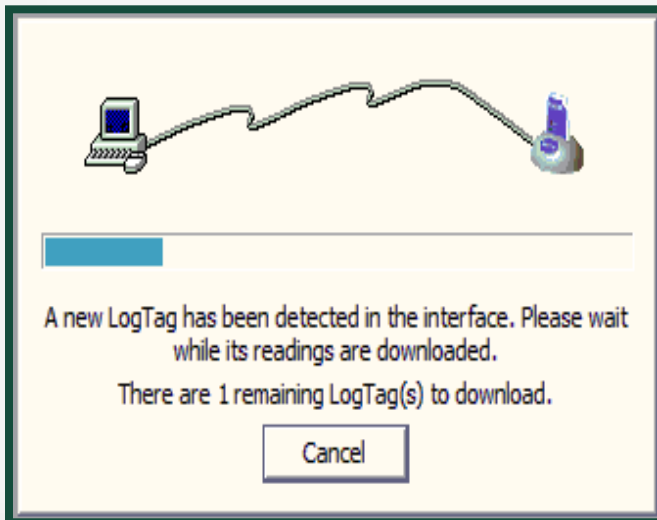
If you have the LTI-HID Docking station, you will be using a dual LED light indicator.

## LED Signals

Action	Green (Ready)	Red (Busy/Error)	Visual
Power up	simultaneous rapid blinking, 7 times		
USB setup incomplete	off	slow blinking	
No application running	off	off	
Ready for a logger	solid on	off	
Logger being downloaded	off	solid on	
Download successful	fast blinking	off	
Logger being configured	off	solid on	
Configuration successful	fast blinking	off	
Logger being hibernated	off	solid on	
Hibernation successful	fast blinking	off	
Problems during data exchange	off	fast blinking	

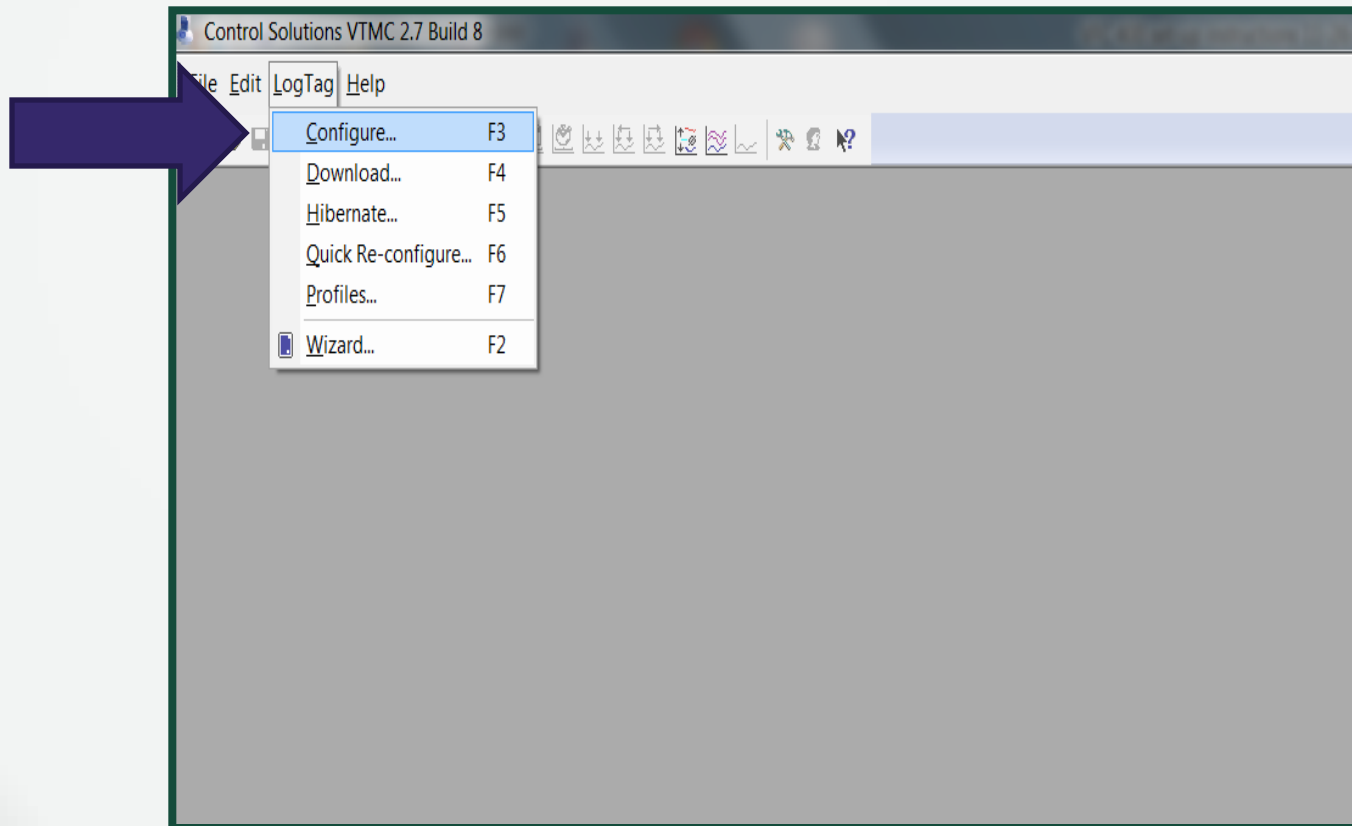
# STEP 4: Downloading Data Logger Reports

- After you insert the logger into the docking station you should see 2 screens in succession.
- When you see “Logger has been re-configured” click OK and then you should be back to the grey screen.



# STEP 4: VFC 400 Data Logger Configuration

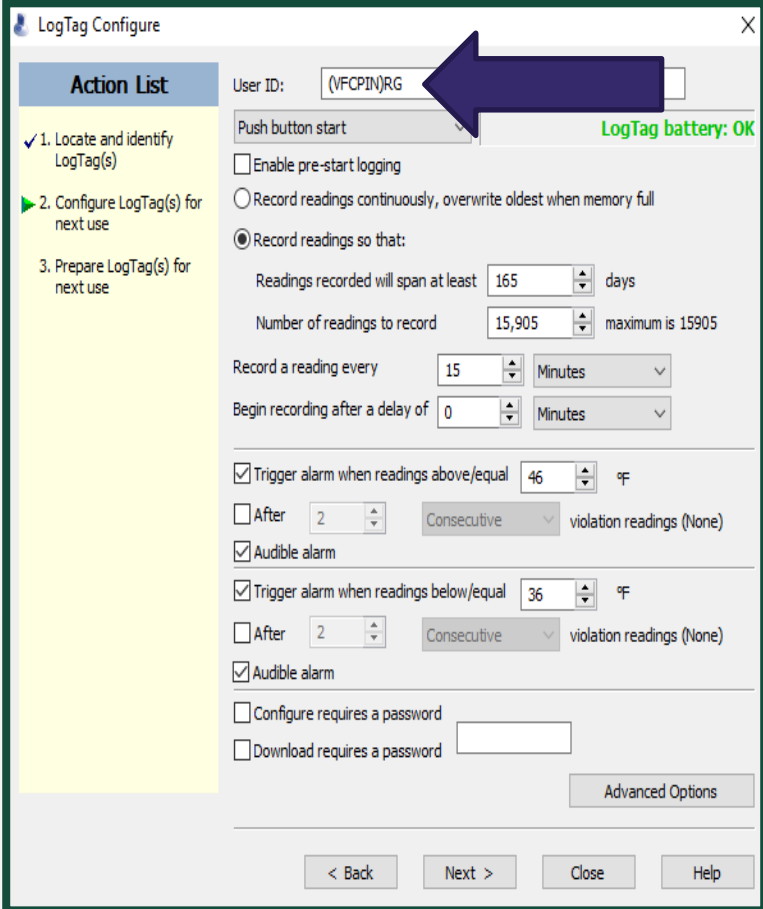
In the upper left corner of the software click on “LogTag” then click on “Configure” from the drop down menu.





# STEP 4: VFC 400 Data Logger Configuration

- The top field is the User ID field. Select a name for your data logger.
- *VFC providers must select a User ID that contains their VFC pin and type of cold storage unit.*
  - Example: Pin# FG Primary
  - Up to 58 Characters long



The screenshot shows the 'LogTag Configure' window. On the left is an 'Action List' with three steps: 1. Locate and identify LogTag(s) (checked), 2. Configure LogTag(s) for next use (highlighted with a green arrow), and 3. Prepare LogTag(s) for next use. The main configuration area includes: 'User ID:' field with '(VFCPIN)RG' entered and a blue arrow pointing to it; 'Push button start' button; 'LogTag battery: OK' status; 'Enable pre-start logging' checkbox; 'Record readings continuously, overwrite oldest when memory full' radio button; 'Record readings so that:' section with 'Readings recorded will span at least' set to 165 days and 'Number of readings to record' set to 15,905 (maximum is 15905); 'Record a reading every' set to 15 Minutes; 'Begin recording after a delay of' set to 0 Minutes; 'Trigger alarm when readings above/equal' set to 46 °F with 'After' set to 2 Consecutive violation readings (None) and 'Audible alarm' checked; 'Trigger alarm when readings below/equal' set to 36 °F with 'After' set to 2 Consecutive violation readings (None) and 'Audible alarm' checked; 'Configure requires a password' checkbox; and 'Download requires a password' checkbox. At the bottom are '< Back', 'Next >', 'Close', and 'Help' buttons. An 'Advanced Options' button is also present.

# STEP 4: VFC 400 Data Logger Configuration

The data logger is all setup. To apply the changes, click the next button at the bottom.

**LogTag Configure**

**Action List**

- ✓ 1. Locate and identify LogTag(s)
- 2. Configure LogTag(s) for next use
- 3. Prepare LogTag(s) for next use

User ID: (VFCPIN)RG

Push button start LogTag battery: OK

☐ Enable pre-start logging

☐ Record readings continuously, overwrite oldest when memory full

☒ Record readings so that:

Readings recorded will span at least 165 days

Number of readings to record 15,905 maximum is 15905

Record a reading every 15 Minutes

Begin recording after a delay of 0 Minutes

---

☒ Trigger alarm when readings above/equal 46 °F

☐ After 2 Consecutive violation readings (None)

☒ Audible alarm

---

☒ Trigger alarm when readings below/equal 36 °F

☐ After 2 Consecutive violation readings (None)

☒ Audible alarm

☐ Configure requires a password

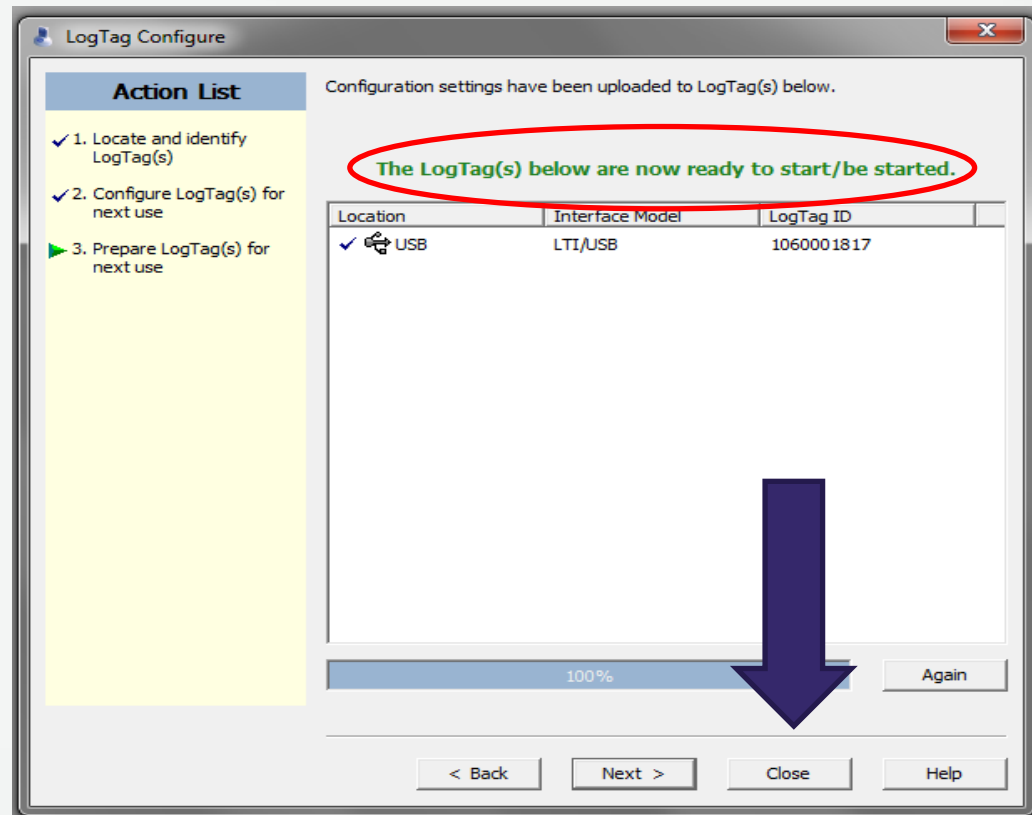
☐ Download requires a password

Advanced Options

< Back Next > Close Help

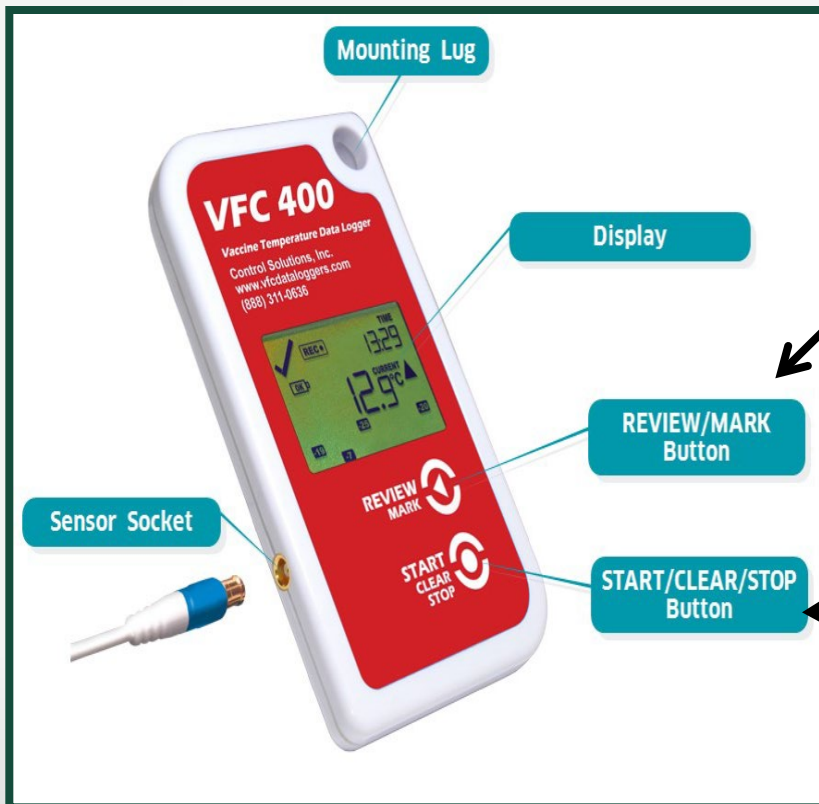
# STEP 4: VFC 400 Data Logger Configuration

When this screen appears click “Close”. Take the data logger out of the docking station and plug it back into the probe as is it is ready to begin recording.



# STEP 5: Operation of the VFC 400

## Buttons Actions Overview



### Review/Mark button

Press to enter REVIEW mode and then press again to advance through the min/max temperatures.

***Note: This will also place an inspection mark in the log if RECORDING is active. This validates your twice daily temperature logs.***

### Start/Clear/Stop button

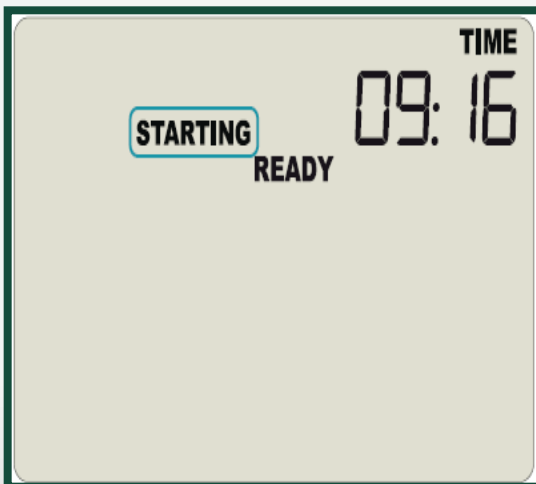
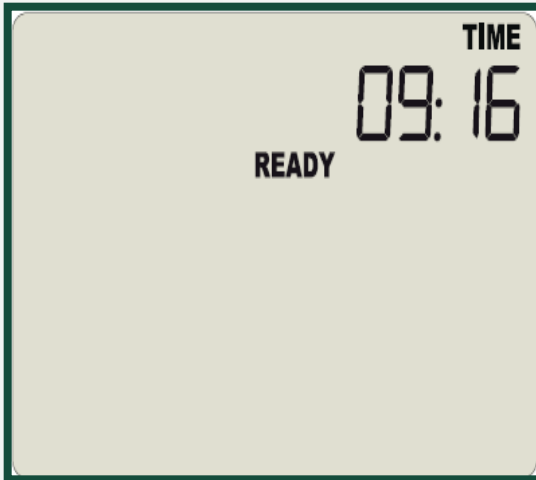
Press to start recording

Press to stop recording

Press to exit day summary

# STEP 5: Operation of the VFC 400

## Starting The Logger



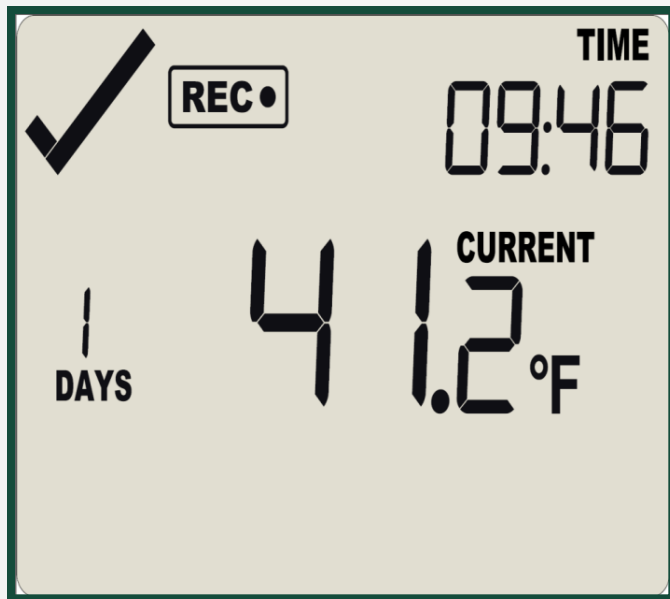
## Recorder in *READY* mode

- The recorder must be in Ready Mode for it to be started.
- In Ready Mode, the recorder displays the time and the READY icon.
- Press and hold the Start/Clear/Stop button.
- STARTING will appear and blink 6 times prior to stopping. RECORDING will appear and remain once the START/CLEAR/STOP has been released.

***Note: STARTING will display in addition to READY and then READY will disappear.***

# STEP 5: Operation of the VFC 400

## Starting The Logger



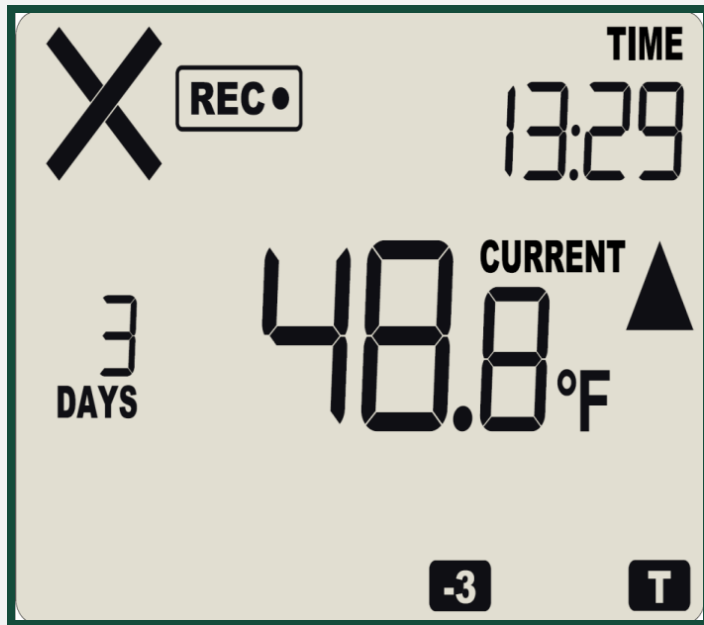
The VFC 400 is recording temperature data once READY disappears. Release the button within two seconds and STARTING will also disappear, and the REC● icon will display.

**Note:** The recorder will **not** start if you release the button before READY disappears. Continue holding the button for more than 2 seconds after READY disappears.

An indicator that there are no alarms is the ✓ icon in the upper left corner and the audible alarm is not beeping.

# STEP 5: Operation of the VFC 400

## Recording Display

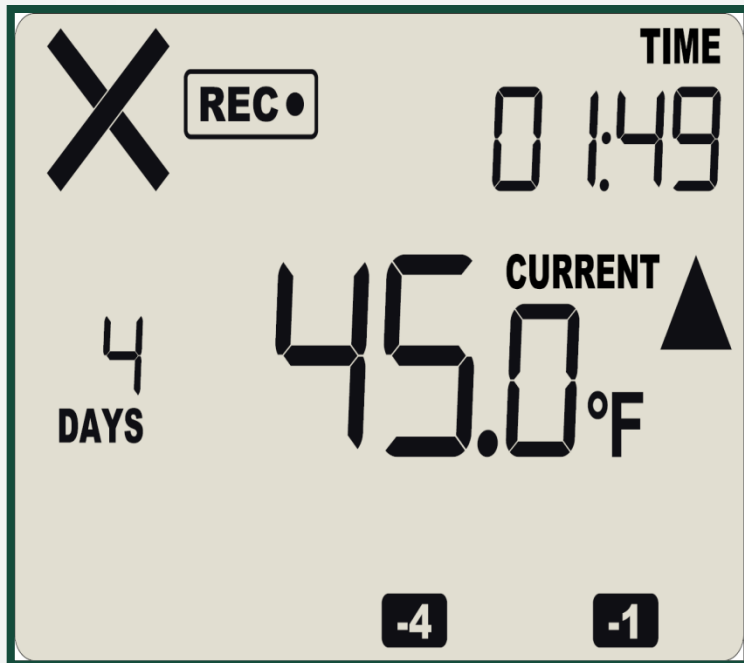


- During normal operation, the display shows the most recently recorded temperature. The current time is also displayed (24 HR/military time).
- A tick symbol ✓ is shown as long as no alarm events have occurred.
- If an alarm event is registered, an X icon is shown instead of the tick. In this example, there is an alarm event as the temperature is above 46°F.
- The upper left corner has the X symbol and the audible alarm is sounding. The time displayed is 1:29 pm (24 HR/military time).
- The bottom of the display has an alarm day summary, where all alarms are shown for the last 30 days.
- Alarm events were recorded today (indicated by the “T”) and 3 days ago (indicated by -3). We can see they were high alarms because of the up triangle ▲.



# STEP 5: Operation of the VFC 400

## Recording Display

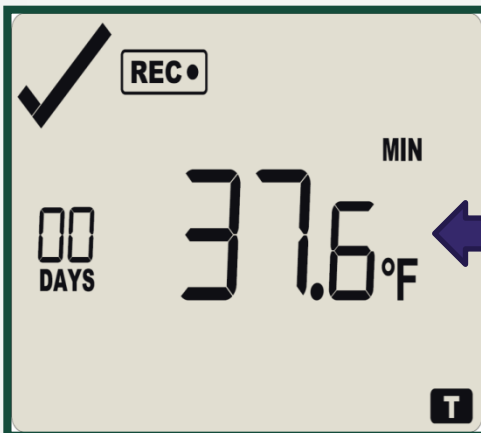
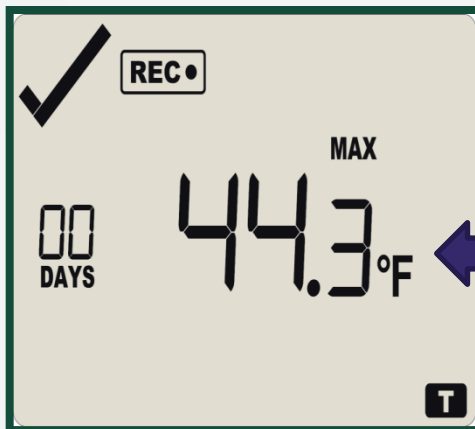


At 1:49 am the next day the display shows the following:

- The temperature has returned to the acceptable range but the alarm remains present. The **X** is still displayed and the audible alarm is still sounding.
- The day summary has shifted by 1 day as the display time has gone through midnight (00:00). -4 day and 1 day are displayed indicating an alarm occurred 4 days ago and 1 day ago.

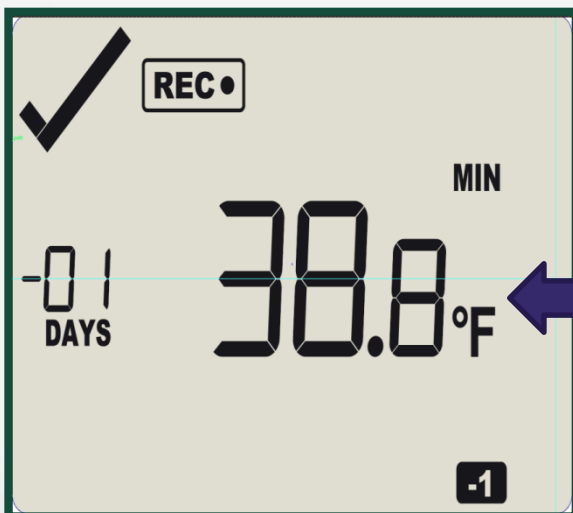
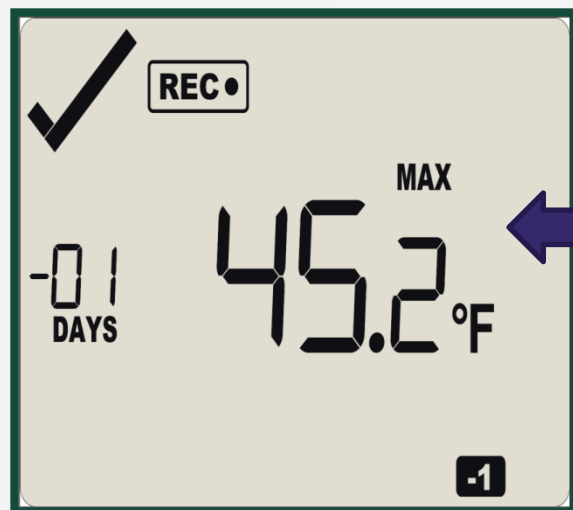
# STEP 5: Operation of the VFC 400

The review of daily minimum/maximum (min/max) temperatures is accessed by pressing the **REVIEW/MARK** button and is accessible in RECORDING and STOPPED modes only.



- Pressing the **Review/Mark** button displays current day's max temperature.
- The "T" flashes (indicating Today) and "Day 00" is shown to indicate the 'Today' selection.
- In this screen example the selected day (Today) does not have any recordings that are outside the acceptance range.
- Pressing Review button again displays the day's minimum temperature (the "T" flashes).

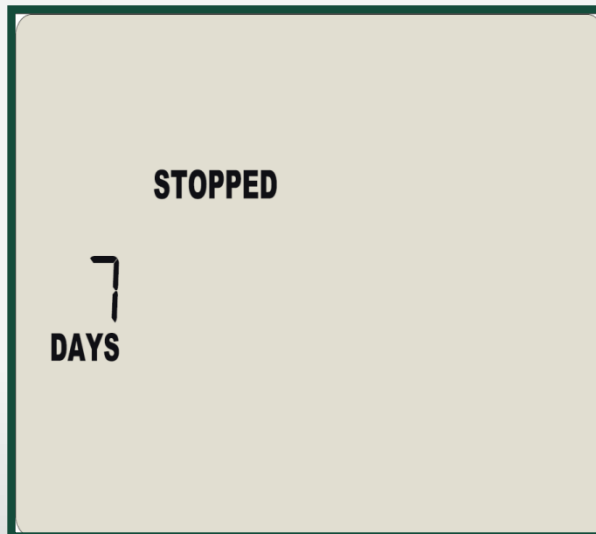
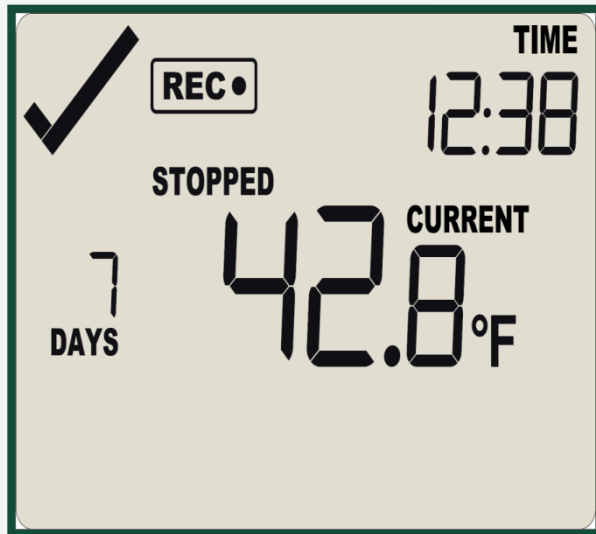
# STEP 5: Operation of the VFC 400



- Pressing the **Review/Mark** button a 3<sup>rd</sup> time displays the previous day's max temperature.
- The "" flashes (indicating yesterday) and "-01 days" is shown to indicate the previous day's selection.
- Pressing the Review/Mark button a 4<sup>th</sup> time displays the previous day's min temperature.
- The "" flashes (indicating yesterday) and "-01 days" is shown to indicate the previous day's selection. You can review the min/max for up to 30 days or as long as the logger has been logging.

**Note:** *If no button is pressed for 30 seconds, the regular display returns.*

# STEP 5: Operation of the VFC 400



## Stopping the Data Logger

- Hold down the Start/Clear/Stop button for 1-2 seconds. The word STOPPED will appear as the logger stops recording temperatures .
- The REC symbol will disappear when you take your finger off the button quickly.
- The logger will stop and the screen will only say STOPPED and show the number of days data was collected.
- Take the logger to your PC, open the software and insert the logger in the docking station to download the data.

***Note: The logger must be stopped before it can be unplugged and placed in the docking station.***

# Questions



**If you have any questions, please contact the  
Arizona Immunization Program Office (AIPO)**

**Main Line: 602-364-3630**

**Vaccine Center: 602-364-3642 | Email: [ArizonaVFC@azdhs.gov](mailto:ArizonaVFC@azdhs.gov)**

**ASIIS Help Desk: 602-364-3899 | Email: [ASIISHelpDesk@azdhs.gov](mailto:ASIISHelpDesk@azdhs.gov)**

**ADHS is open Monday through Friday from 8:00 am - 5:00 pm with the  
exception of federal holidays.**