2019 Data Logger Updates

LogTag® Tred30-7R (BLUE)

&

VFC 400 (RED)

Back up DDL Requirement

As of January 2018, CDC will require that back-up thermometers be continuous recording devices (DDLs)

To meet VFC Program requirements the device must be equipped with:

1. A temperature probe
2. An active temperature display that can be easily read from the outside of the unit
3. The capacity for continuous monitoring and recording capabilities where the data can be routinely downloaded

Additional recommended features:

- **Alarm for out-of-range temperatures**
- **Current, minimum, and maximum temperatures display**
- **Low battery indicator**
- **Accuracy of +/- 1°F (0.5°C)**
- **Memory storage of at least 4,000 readings**
- **Reading rate at a time interval of every 15 minutes**
- **Use of a probe that best reflects the temperature of the vaccine (such as a buffered probe)**

Back up DDL Requirement

- Clinics only need ONE (1) DDL to remain in compliance
- Can purchase multiple if they want, but NOT required
- Does NOT need to be on unit—just in clinic ready to use

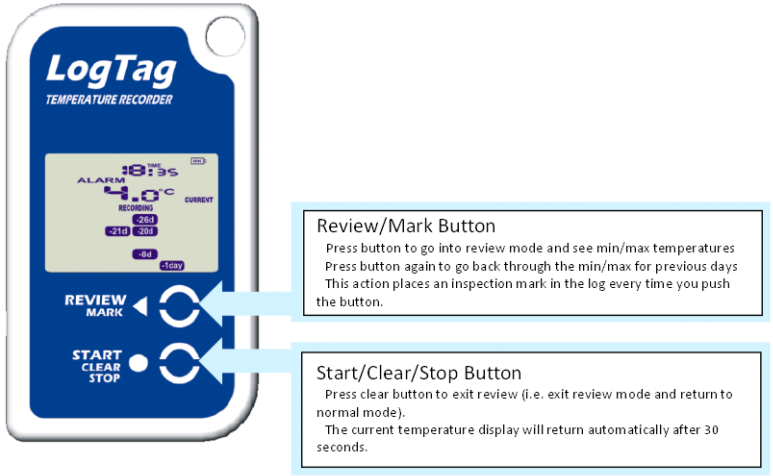
Question: If a provider has 2 refrigerators and 1 freezer, how many *back up DDLs* do they need?

Answer: 1 backup DDL

Buttons

The RED VFC 400 has the same buttons as the BLUE LogTag

Buttons



VFC400 (RED) Device Overview

Device and Buttons Actions Overview

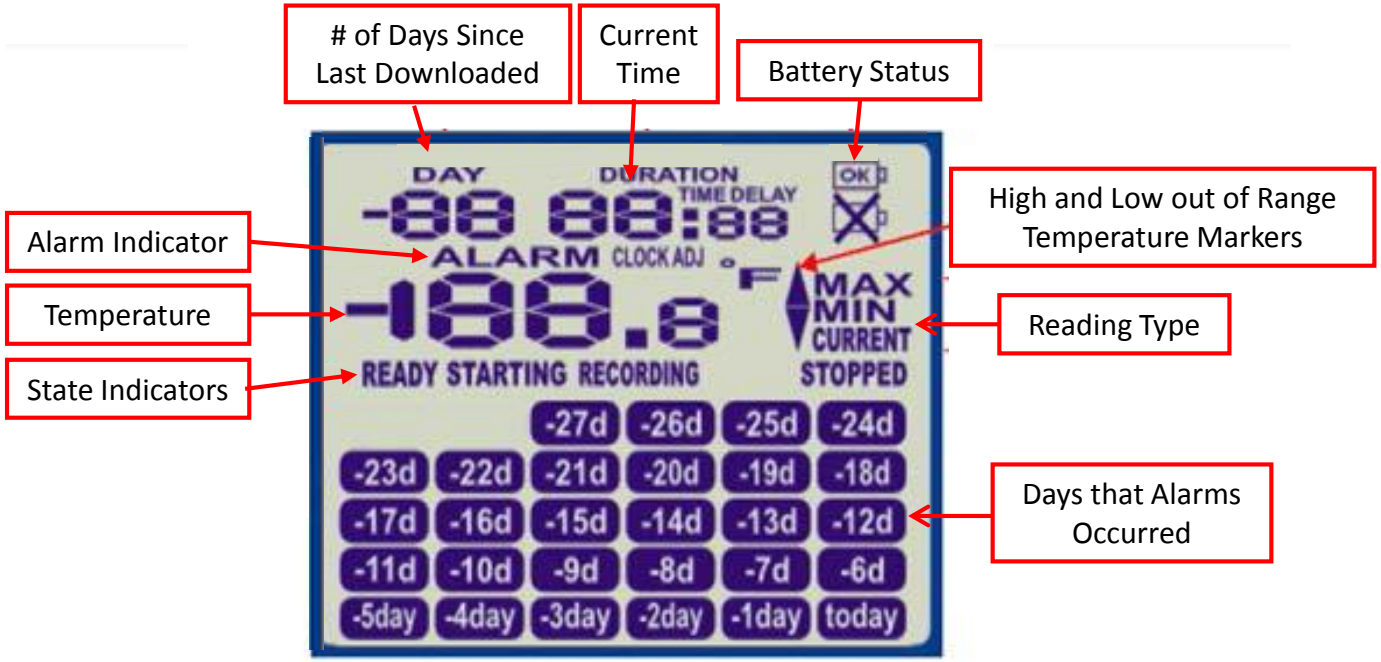
Pressing the Review/Mark button will place the logger in review mode.

Pressing this button again while in review mode will allow you to review up to 30 days of min/max temperatures.

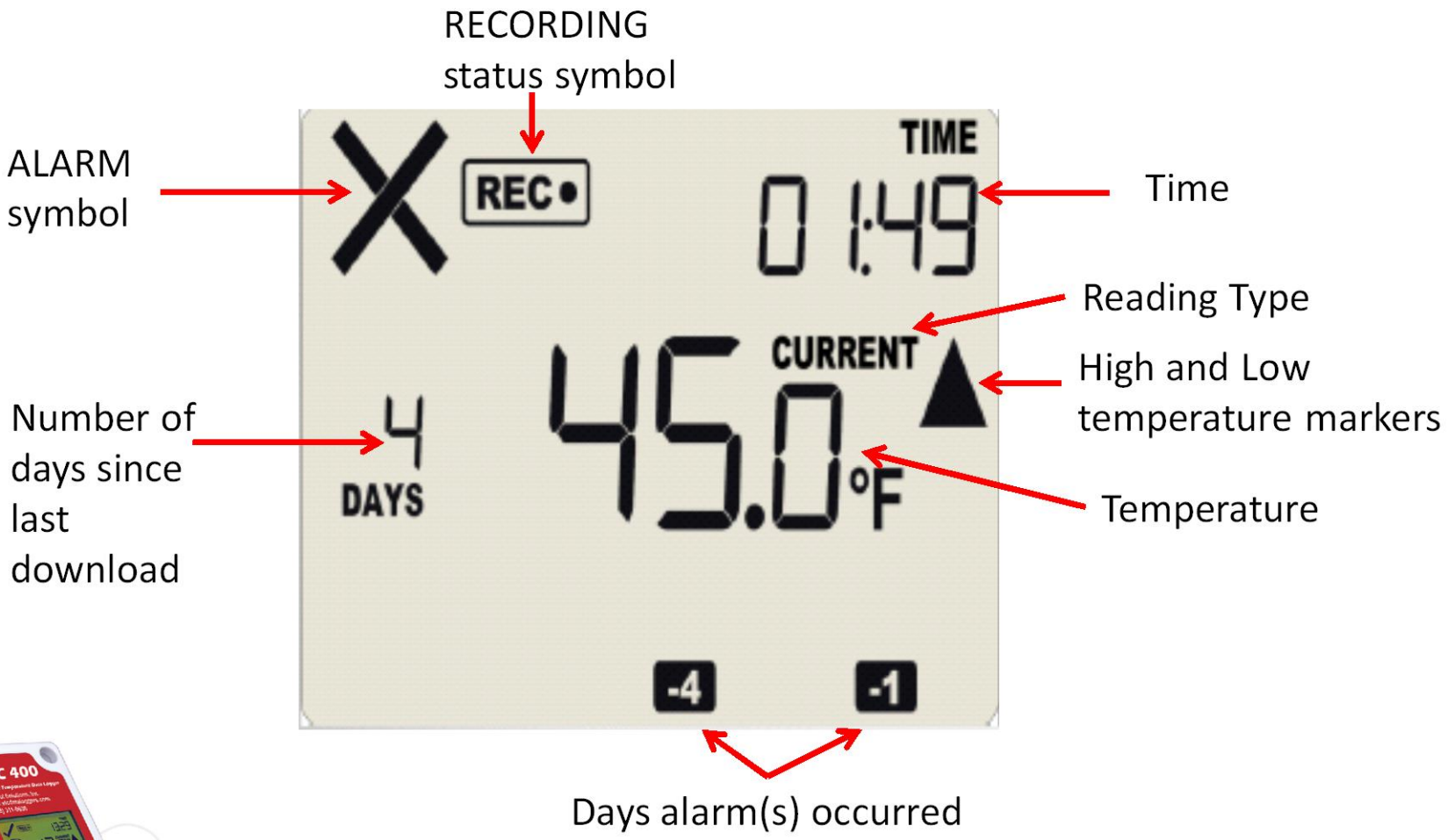
This action also places an inspection mark in the log if recording is active. The inspection marks validate your twice daily temperature checks.

The Start/Clear/Stop button has multiple functions:
Press to start your recording.
Press to stop your recording.
Press to exit the day summary mode.

LogTag (BLUE) Display Overview

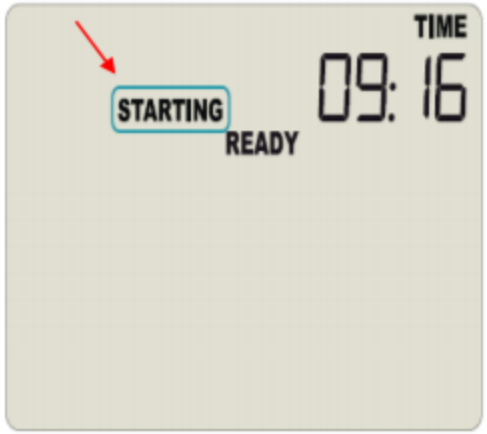


VFC 400 (RED) Display Overview



Starting the Logger

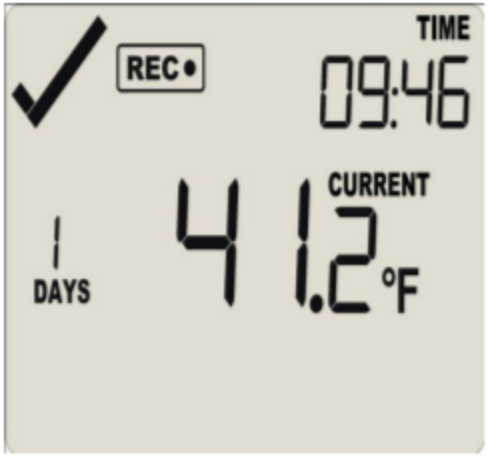
#1 The logger must be in Ready mode for it to be started. The logger displays READY.



#2 Press and hold the Start/Clear/Stop button. STARTING is displayed in addition to READY.

- Ready will disappear
- Release the button when Ready disappears
- Starting will also disappear

This check mark indicates no alarm



#3 REC• appears indicating your logger is recording temperature data

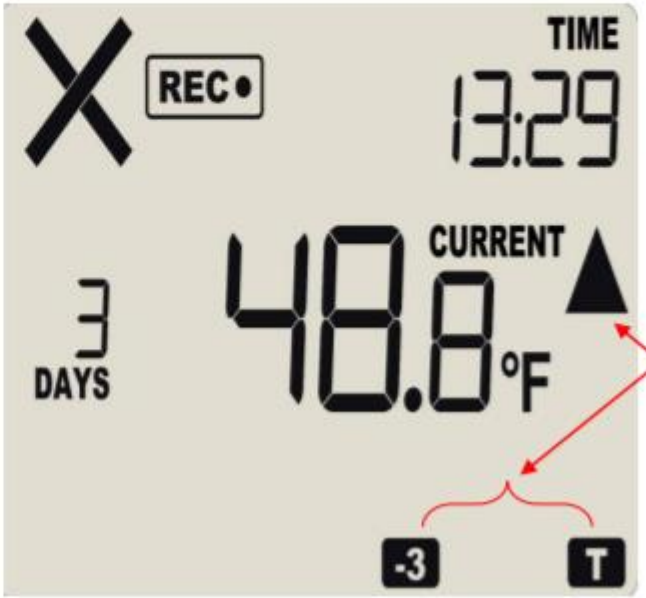
Logger not starting?

Your logger will not start if…
You release the Start button before READY disappears
You hold the button longer than 2 seconds after READY disappears

Reading the Display

The most recently recorded temperature, 48°F, is displayed. This is updated at the same rate as the logging interval.

An X is shown instead of ✓ because there is an alarm.



The current time is shown in 24hr (military) format, 1:29pm.

The alarm day summary shows when an alarm was recorded.

▲ indicates high alarms

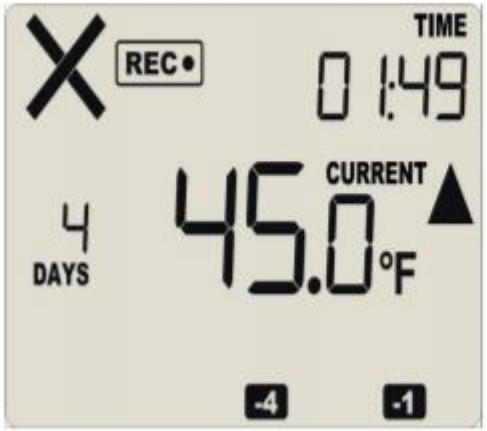
T indicates an alarm today

-3 indicates an alarm 3 days ago

The number of days the logger has been recording is shown here.

Remember to download data on a regular schedule. Allowing the memory to become full will cause your logger to stop recording.

The temperature has returned to an acceptable range but the alarm status remains.



This example shows the next day at 1:49am

The temp is now within range however; the X remains and the audible alarm will continue to sound until the data is downloaded.

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.

Reviewing Daily Statistics

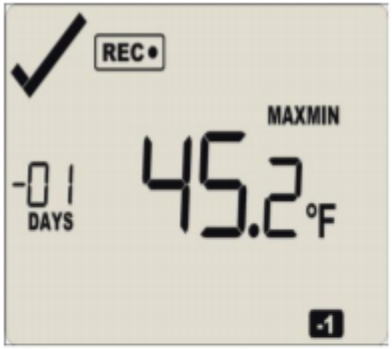
One press of the Review/Mark button puts the logger in review mode allowing you to view minimum/maximum (min/max) temperatures.

Min/Max temps can only be viewed when the logger is in Recording or Stopped mode.

Pressing the Review/Mark button again, shows the current day's maximum (max) temperature.

Pressing Review/Mark button again displays the day's minimum (min) temperature.

"T" will flash (indicating Today) | 00 Days is shown indicating 'Today'



Pressing Review/Mark a 3rd time shows yesterday's max temperature.

Pressing the Review/Mark button a 4th time displays yesterday's min temperature.

-1 flashes indicating yesterday | -01 days is shown indicating "Yesterday"

You can review the min/max for as many days as the logger has been logging.
After pressing the review button if nothing is pressed for 30 seconds the regular display returns.

Stopping the Logger

Stopping the logger prior to downloading is recommended.

Press and hold the Start/Clear/Stop button for 1-2 seconds.

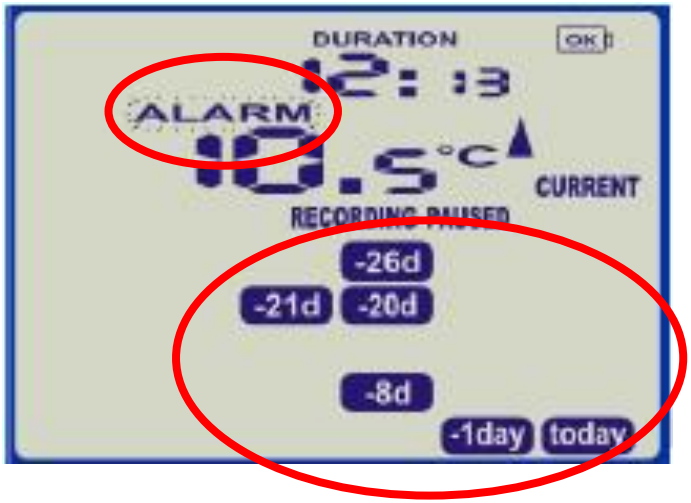
- STOPPED will appear
- REC● will disappear after 1-2 seconds
- Release the button when REC● disappears

The display will say STOPPED and show only the number of days collected.

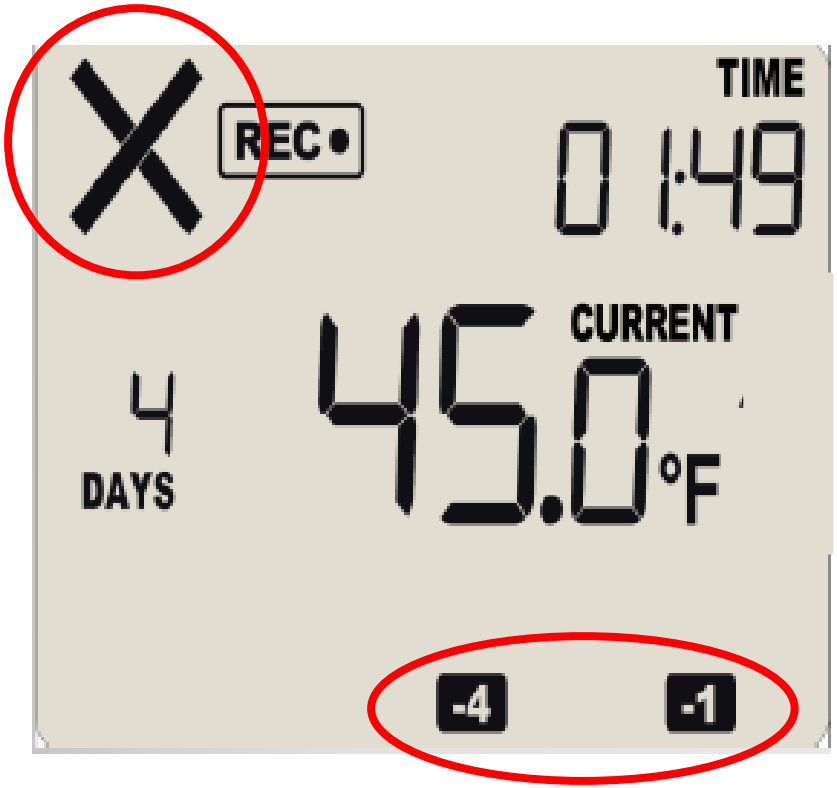
Now you can download your data.

- Take the logger to your PC
- Open the Control Solutions VTMC software (you can get the software here)
- Place the logger in the docking station to download the data

ALARM Status (BLUE)



ALARM Status (RED)



Can be set to have audible “beeping” alarm when out of range!

Recalibration

- <u>It will be the provider's responsibility to get their data logger recalibrated when the certificate of calibration expires.</u>
- Send ~2-4 weeks before due date
  - Back of DDL ("Due Date") OR calibration certificate ("Next Cal")

Calibration Certificate

Certificate: ID-539352

Customer Information		Equipment Information	
Customer:	Chicago Dept of Public Health	Equipment ID:	LT16-0921
Address:	2160 West Ogden Ave.	Model No:	TRED30-7R
		Manufacturer:	LOG TAG
City, State Zip:	Chicago IL 60612	Serial No:	1860917461
Contact:			
Phone:			

Calibration Summary

Calibrated:	10/07/2016	Temp: 70F +/- 10	As Found: In Tolerance
Next Cal:	10/07/2018	Humidity: 50% +/-20	Result: Pass
Frequency:	2 Years	Technician: Angela Relyea	
Remarks:			

Measurement Group 1

Tolerance	Units	As Found	Result	Procedures
Tolerance (+/-) 0.3	°C	In Tolerance	Pass	CSI-CWB-1 R3

Desc	Nominal	Limits Upper	Limits Lower	As Found Actual	As Found Error	As Found Result	As Left (Cal Status) Actual	As Left (Cal Status) Error	As Left (Cal Status) Result
	-15.0	-14.7	-15.3	-14.8	00.2	Pass	-14.8	00.2	Pass
	05.0	05.3	04.7	05.2	00.2	Pass	05.2	00.2	Pass

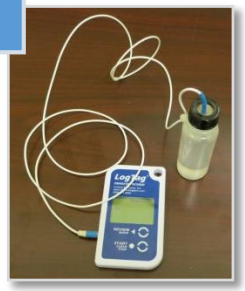
Standard Equipment Used

Equip ID	Model	Description	Cal Due	Cert
Control Co.2	4000		12/08/2016	4000-6397718
Water Bath 4	PD15R-30-A11B		12/29/2016	75591
Water Bath 6	PD15R-30-A11B		03/01/2017	76054

Control Solutions, Inc. certifies that the above equipment has been calibrated using instrumentation capable of producing results that are traceable through NIST to the International System of Units (SI). Control Solutions, Inc. is accredited to ISO/IEC 17025:2005.

Recalibration

1



Stop the data logger. Remove the DDL, glycol bottle, and probe from your storage unit.

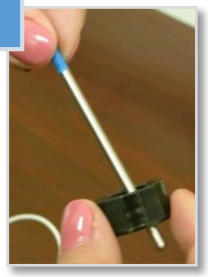
2

Download the information to your computer.

3

Clip the plastic tie around the top of the bottle. A new tie will be sent when your DDL is returned.

4

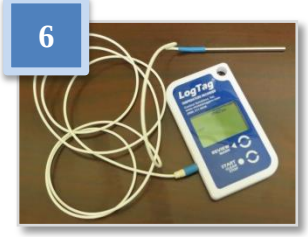


Remove the metal probe from the glycol bottle.

5

Put a piece of tape over the hole left from the probe and store the bottle safely until you get the data logger back.

6



Attach the probe to the data logger and place both items into a padded envelope or small box with bubble wrap. **Complete the City of Chicago NIST Calibration RMA Form and include this form with the package.**

Recalibration

City of Chicago NIST Calibration RMA Form

Contact Information

Company Name	
Contact Name	
Phone Number	
Email Address	
Billing Address	
Shipping Address (if different than billing address)	
PO Number (if needed)	

Instrument Information

Qty of Loggers	
Any problems with the instrument(s)?	

Calibration Pricing	2-point $40

2-Point calibration at Refrigerator & Freezer temps (+5 deg C & -15 deg C) **Includes: Replacement battery, spare battery & (5) zip ties**

Calibration Notes: Control Solutions is accredited to the ISO/IEC 17025:2005 standard. All calibrations come complete with an NIST traceable Certificate of Calibration compliant to ISO/IEC 17025:2005.

Please send your probe with the data logger when returning for re-calibration

Accessories

Spare Battery	VFC Battery $5 each Qty_____ or LogTag Battery $2 Qty_____
5' probe with Glycol buffer vial	$30 each Qty____
10' probe with Glycol buffer vial	$40 each Qty____
Glycol bottle only	$5 each Qty____
Glycol bottle and Installation Kit (includes acrylic stand)	$20 each Qty____

- Providers **DO NOT** need to order extra battery (calibration includes the extra battery)
- Can call Control Solutions with questions **(888) 311-0636**

- **This form is available to download on the VFC Program HAN website.**

Changing the Battery

LogTag uses a watch battery type CR2032

1. Remove the sticker where the calibration information is printed (Figure 1.)
2. Remove battery compartment cover by turning the cover with a coin or the new battery
3. Remove the battery with a paper clip and replace the battery* (Figure 3.)
4. Replace the battery compartment cover and the calibration sticker

Figure 1.

Figure 2.

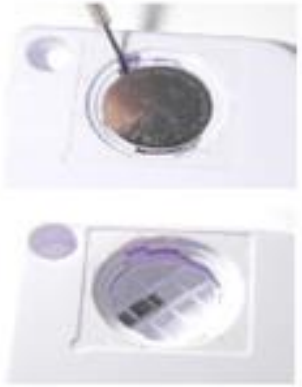


Figure 3.

*Note: It may be challenging to remove the battery. Use a paper clip to help. DO NOT use a pen or pencil as this can damage the battery holder.

DDL Reports – What to Look For

LogTag

Recorder has been downloaded 4/14/2017 2:39:43 PM (UTC -06:00, daylight time)

Alarm Status

Low ✗ Fail
High ✗ Fail

Recorder Info

Serial # : **1860919869** *Model :* **TRED30-7R** *Battery :* **OK** *Trip # :* **3**
User ID :

Recorder Configuration

Start type : **Push button start**
Start delay : **None**
Interval : **15 Minutes**
Alarm indicator : **Enabled lower & upper**

Temperature alarms
Lower : **35.0 °F**
Upper : **46.0 °F after 4 Consecutive**

Recorded Data

First reading : **11/8/2016 7:44:42 AM**
Last reading : **1/27/2017 7:29:42 AM**
Elapsed Time : **79 Days, 23 Hours, 45 Minutes**
Total readings : **7680**
First evaluated : **11/8/2016 7:44:42 AM**
Last evaluated : **1/27/2017 7:29:42 AM**
Evaluated Time : **79 Days, 23 Hours, 45 Minutes**
Evaluated Readings : **7680**

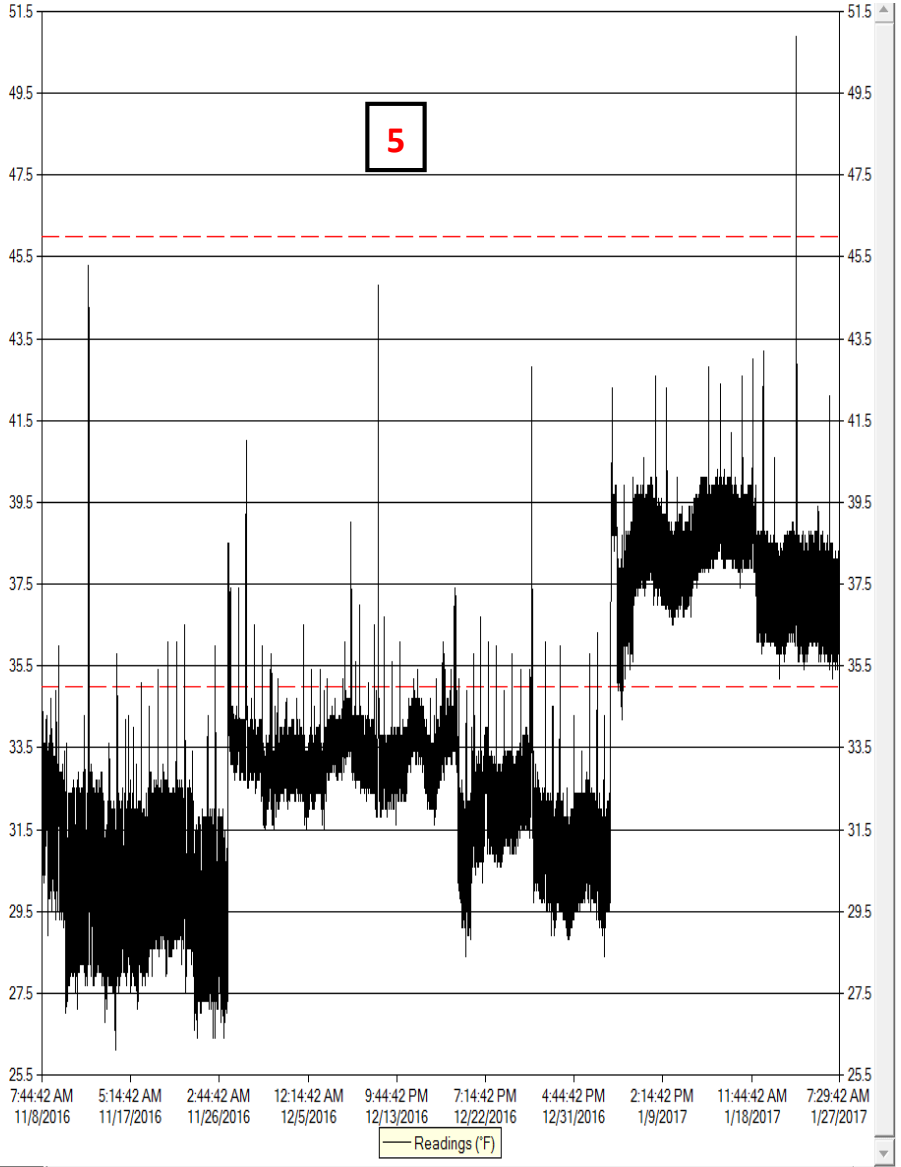
Temperature statistics
Lowest : **26.1 °F**
@ 11/15/2016 4:59:42 PM
Highest : **50.9 °F**
@ 1/22/2017 11:59:42 PM
Average reading : **33.7 °F**
Standard Deviation (S) : **3.3 °F**
Mean Kinetic Temperature **34.11 °F**

Low Alarm

Triggered : **@ 11/8/2016 7:44:42 AM**
Time below : **55 Days, 10 Hours, 37 Minutes, 30 Seconds**
Occurrences : **63**
°F - Minutes below : **252165.12**

High Alarm

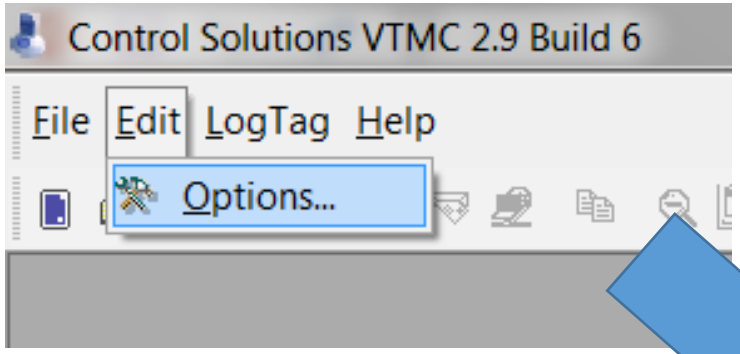
Triggered : **@ 1/22/2017 11:59:42 PM**
Time above : **1 Hour, 15 Minutes**
Occurrences : **1**
°F - Minutes above : **292.28**



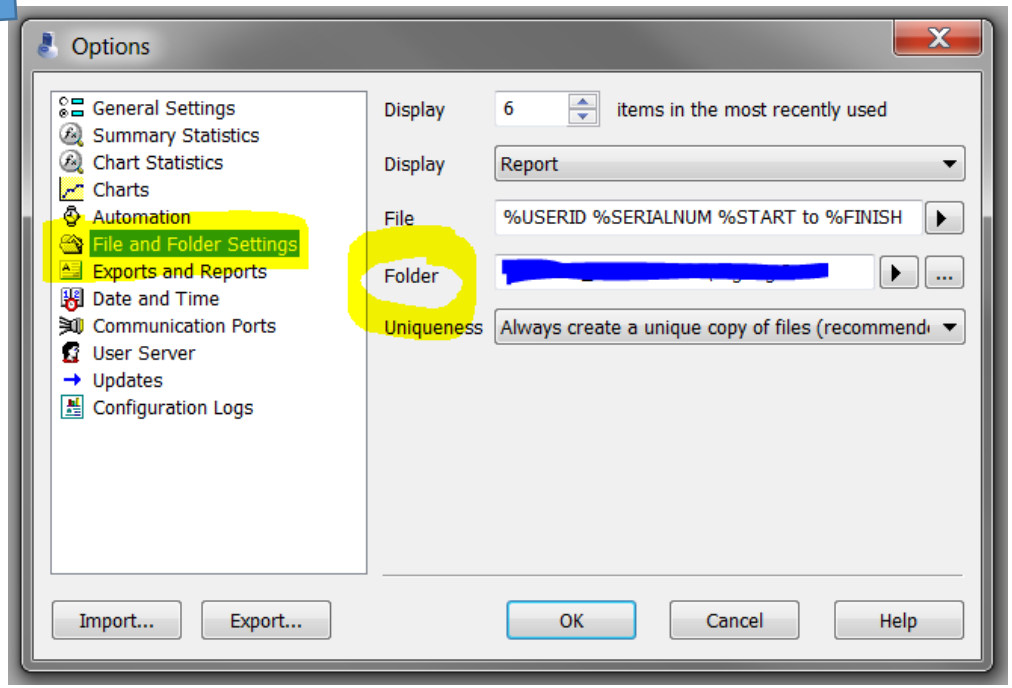
Report | Chart | Data | Summary | Day Summary

1: The red "X" means you had temperatures out of range
2: Your temperature alarm settings should be 36-46 F/2-8 C for refrigerators, (-40)-5F/(-40)-(-15)C for freezers
3: Your highest highs and lowest lows are stored here
4: The duration and start of high/low excursions are here
5: A graph of your clinic's temperatures appears here
6: Make sure your alarms are set for upper and lower, and the recording interval is 15 minutes
7: Make sure your battery status is OK
8: All the data since you last downloaded will be here

Where can I find my previous DDL files on my computer?



- This dialog box will tell you where your DDL files are saved.
- Only some people at your practice might have access to that folder, so you *may* need to log off and log someone else onto the computer before you can open that file.



Email all temp excursions to chicagovfc@cityofchicago.org

- Any time you have a temperature excursion, you need to email the following to Chicago VFC's email:
  - **The DDL file(s) including the beginning (when the temperatures first went out of range), middle, and end of the temperature excursion (when the temperatures went back into range). If your clinic is on the Cloud, upload your temperatures and notify Chicago VFC that you have done so.**
  - **An explanation of what occurred, and why the temperatures were out of range. Include what you've done to fix the problem so far, if applicable.**
  - **The time the vaccines were moved out of the unit, if they were moved.**
  - **Your VFC PIN (in the subject line).**

- WAIT to use vaccines on patients until Chicago VFC has evaluated the viability of the vaccine.