

Easy Log Temperature Probe Data Logger with LCD and USB Interface



Data Logger Setup

- Install the software & USB Driver from www.lascarelectronics.com



Welcome to Lascar Electronics

Lascar Electronics is a leading provider of [digital panel instruments](#), [data loggers](#) and [custom design & manufacturing solutions](#). Lascar's EasyLog data loggers are the world's first direct USB data loggers, providing a cost effective, easy-to-use method of recording temperature, humidity, voltage, 4-20mA and carbon monoxide. Our extensive range of panel instruments and voltmeters provide display solutions for a wide range of applications within the instrumentation and sensors industries.

Coupled with our data logger and panel meter ranges, we offer a comprehensive custom design and manufacture service that brings together our extensive industrial design and electronic design experience, with the cost savings associated with Far-Eastern manufacture.

Lascar Electronics is an ISO 9001:2008 accredited company ensuring our business practices are carried out to the best possible standards [click here to view our certificate of registration](#).



FM 53591



Data Logger Setup

- Install the software & USB Driver from www.lascarelectronics.com

EL-WIN-USB Windows Control Software (V7.2)

EL-WIN-USB is the software platform for Lascar's standalone USB data loggers. It is compatible with 32-bit and 64-bit versions of Windows XP, Vista, 7 & 8.

The latest build of the software includes a change to use an International date format to avoid incompatibility with certain location settings when exporting data to Excel.

Installing EL-WIN-USB on Windows



Begin Software Download



EL-WIN-RT Windows Control Software (V2.0.10)

EL-WIN-RT Windows Control Software is the software platform for the EL-USB-RT real-time data logger. It is compatible with 32-bit versions of Windows XP, Vista and 7 (note, it is NOT compatible with 64-bit Windows operating systems).

Installing EL-WIN-RT on Windows



Begin Software Download



Data Logger Setup

- An icon will appear on your desktop, “EasyLog USB”



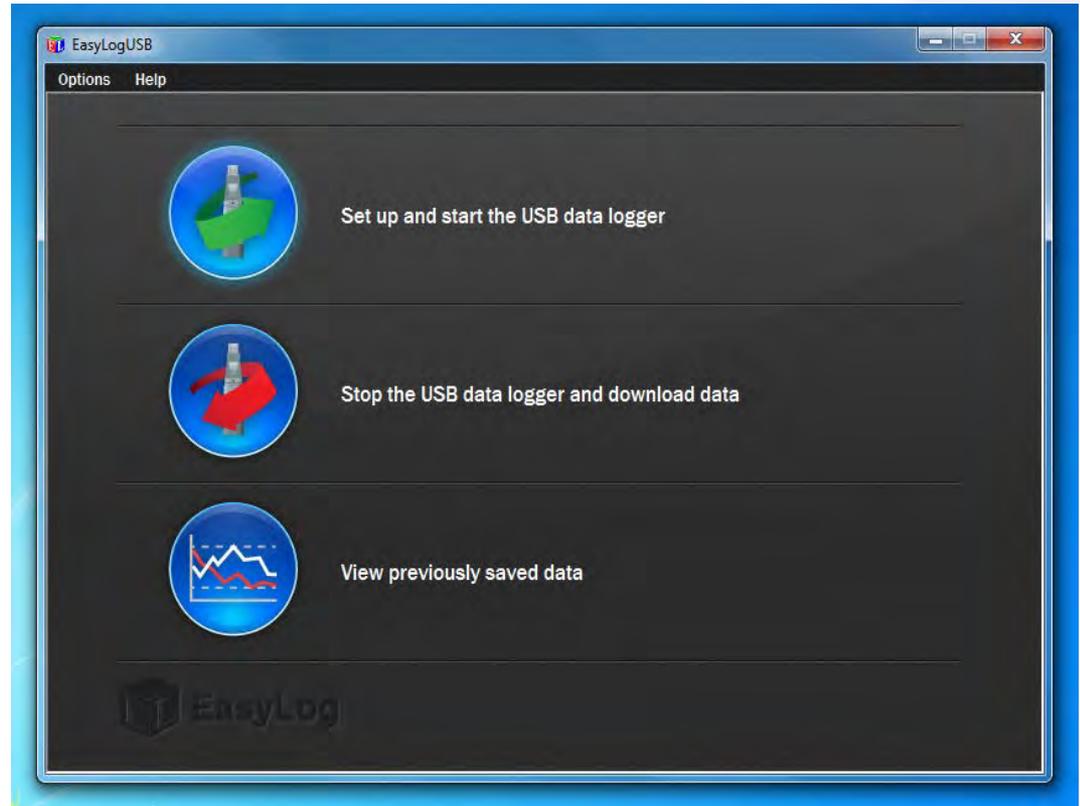
Easy Log Software Options

- Connect the data logger to the computer, using the USB port
- Double click on the EasyLog USB icon on your Windows® desktop- this will load the configuration software
- You have 3 options:
 - Setup and start the data logger
 - Stop and download the data logger
 - View previously saved data



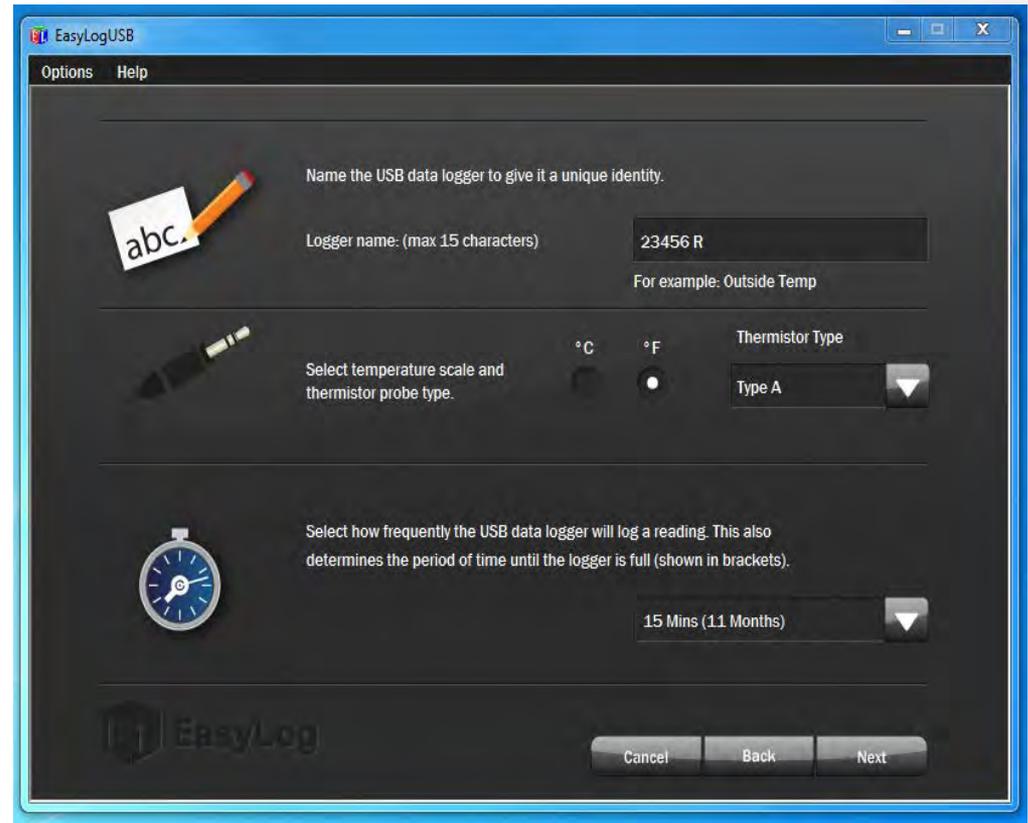
Easy Log Software Options

- To set up the data logger, select 'Set up and start the USB data logger' (Select the green arrow)



Easy Log-Setup and start the USB data logger

- Name your logger (VFC 5-digit number, starting with “2” and indicate “R” for refrigerator or “F” for freezer (add more info to clarify additional storage units. E.g. Lab refrigerator, pharmacy freezer, etc.)
- Select the temperature scale the provider prefers - Fahrenheit or Celsius
- Select ‘15 minutes’ for the frequency that the logger will log a reading (11 months)
- Select NEXT



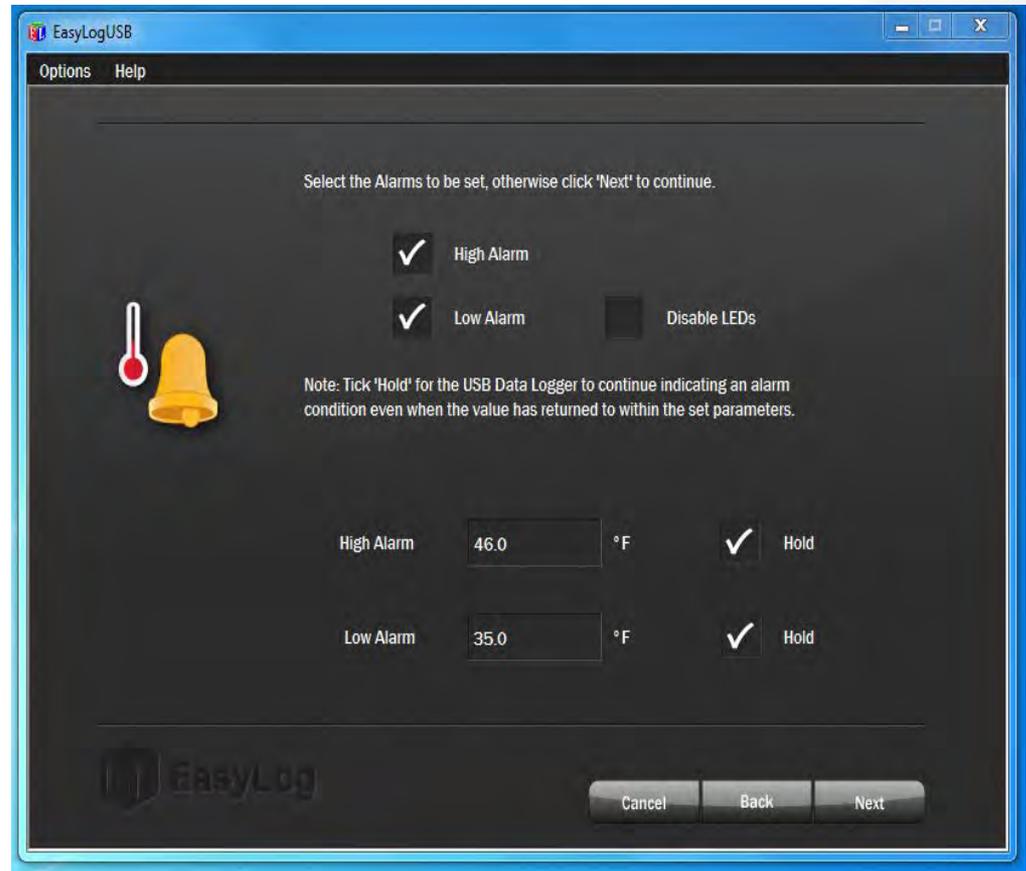
Easy Log-Setup and start the USB data logger (cont.)

- Select 'LCD Always On'
- Select 'Logger continues to log, overwriting the oldest data when full'
- Select NEXT



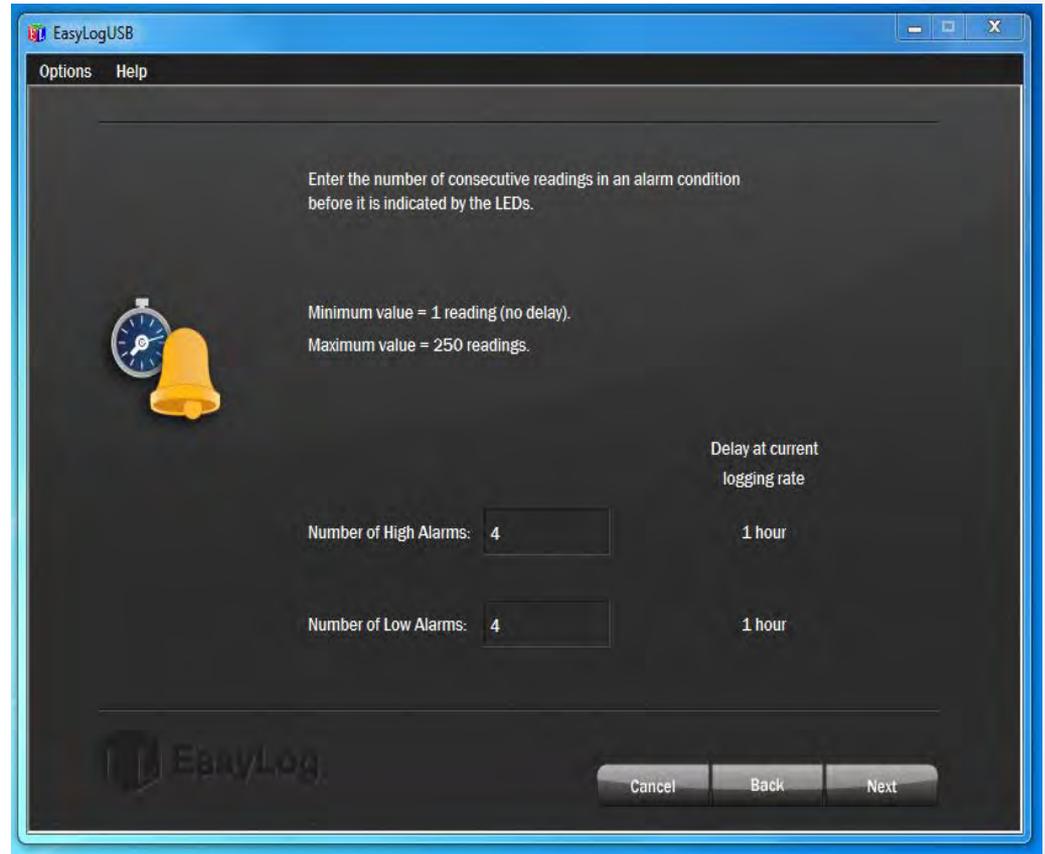
Easy Log-Setup and start the USB data logger (cont.)

- Select High and Low alarm for refrigerator
 - Refrigerator
 - High alarm: 46°F / 8° C
 - Low alarm: 35°F / 2° C
- Select High alarm for freezer
 - Freezer
 - High alarm: 5°F / -15° C
 - Low alarm: n/a
- Check the hold box for each alarm you set
- Ensure 'Disable LEDs' is unchecked
- Select NEXT



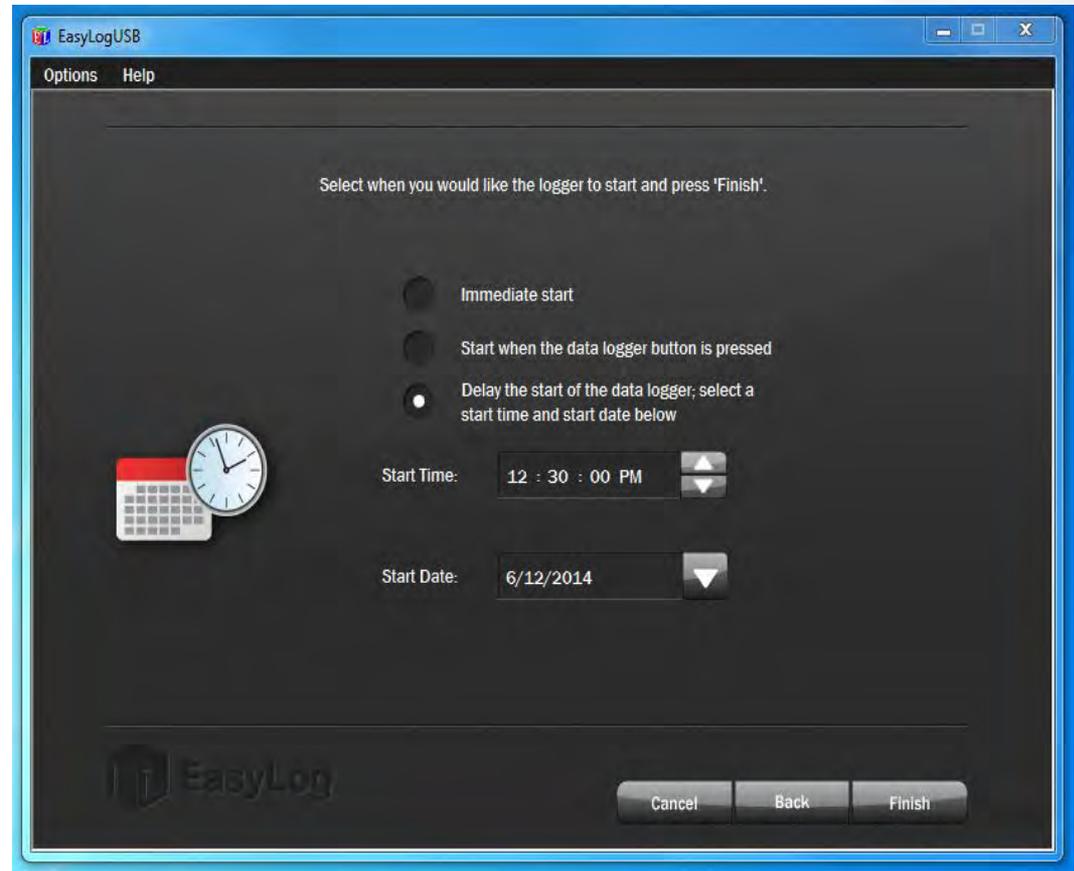
Easy Log-Setup and start the USB data logger (cont.)

- Enter '4' as the number of alarms (i.e. one hour) that should have a time delay threshold
- Select NEXT



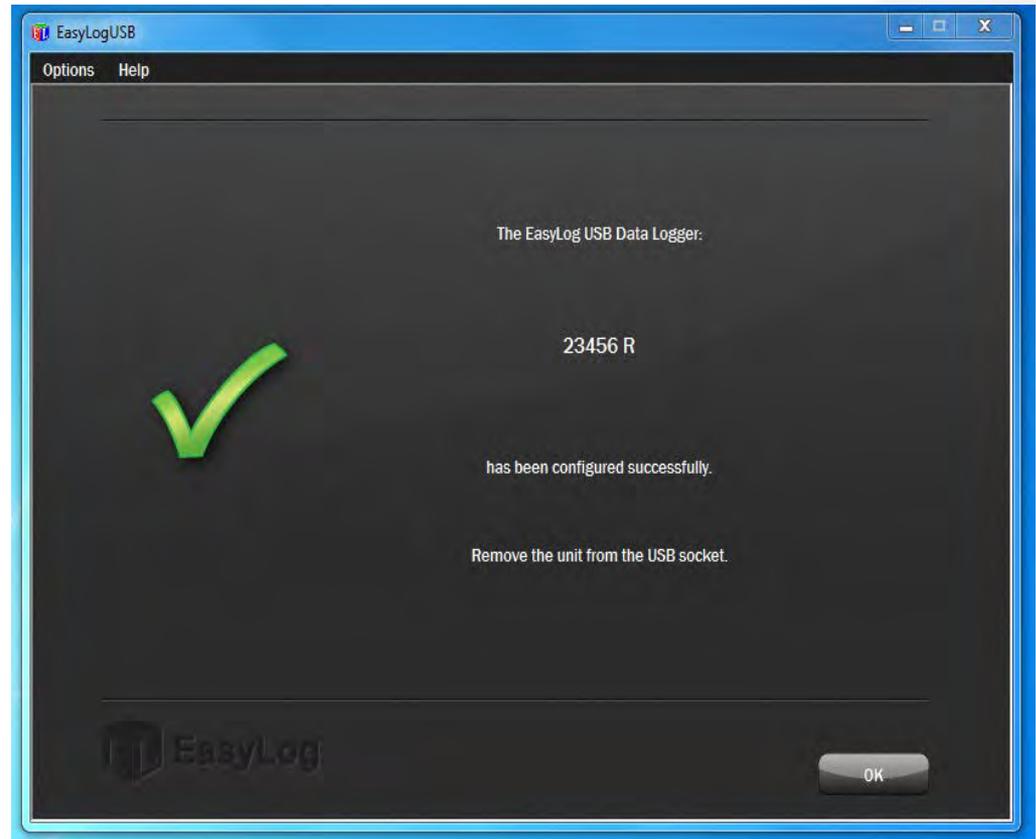
Easy Log-Setup and start the USB data logger (cont.)

- Installing the data logger for the first time? (If not, see slide #13)
- Select the 'Delay the Start time of the data logger; select a start time and start date' option for launching the data logger button.
 - **Plan the Start Time for 2 hours after installation. This will allow the glycol adequate time to stabilize in the refrigerator or freezer.**
 - *It is recommended to start the data logger on the hour or half-hour (e.g. 11:00 am, 2:30 pm, 5:00 pm.)*
- Select FINISH



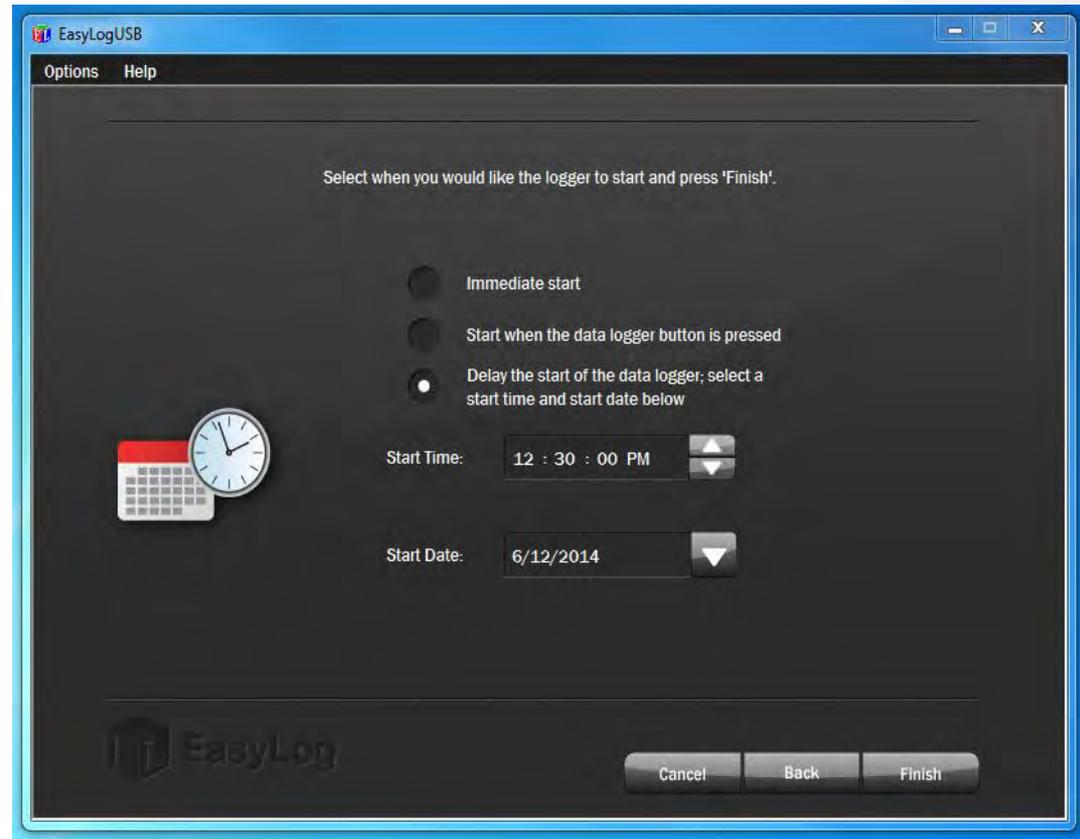
Easy Log-Setup and start the USB data logger (cont.)

- Click OK
- Remove the data logger from the USB port, use the plastic cap to cover the USB tip, and connect the thermistor probe to the socket at the base of the data logger
- Be sure not to mix up the freezer logger with the refrigerator logger prior to placement in the storage unit(s)



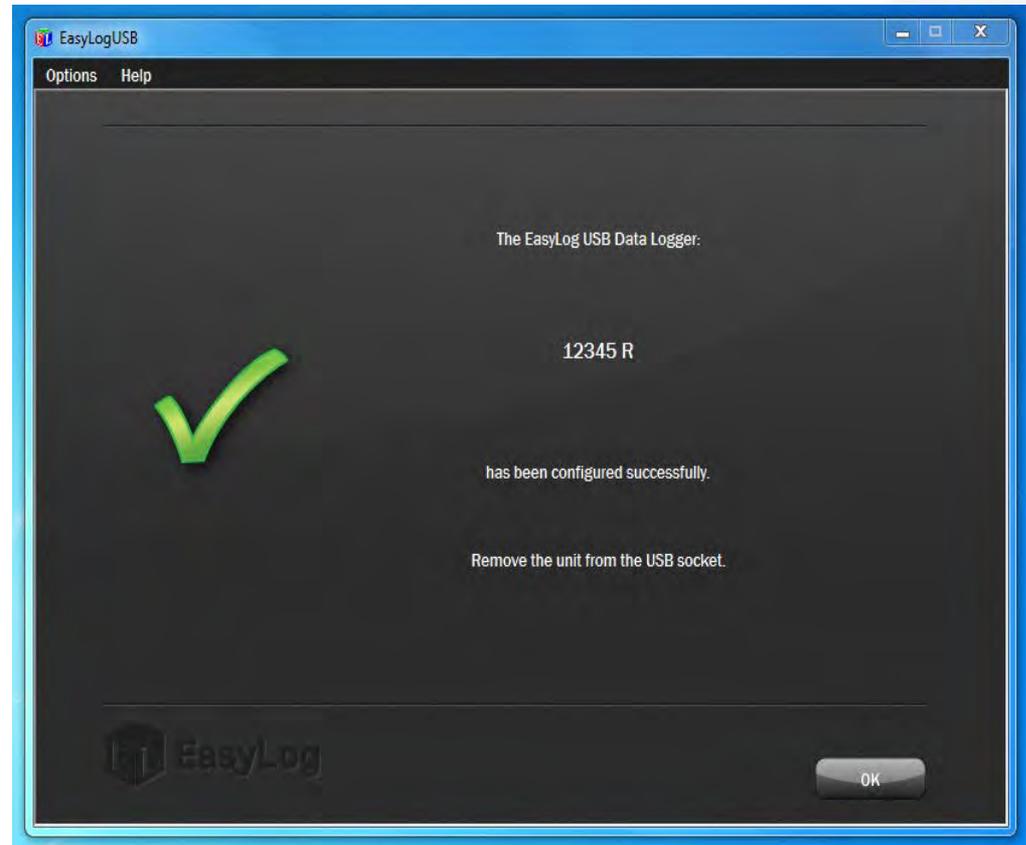
Easy Log-Setup and start the USB data logger (cont.)

- Re-starting the data logger and the glycol is currently in the storage unit?
 - Select 'Delay the start of the data logger'
 - Add start date/time for launching the data logger (round up to the next half hour, i.e. convert 11:07 AM to 11:30 AM)
- Select FINISH



Easy Log-Setup and start the USB data logger (cont.)

- Click OK
- Remove the data logger from the USB port, use the plastic cap to cover the USB tip, and connect the thermistor probe to the socket at the base of the data logger
- Be sure not to mix up the freezer logger with the refrigerator logger prior to placement in the storage unit(s)



Easy Log-Setup and start the USB data logger (cont.)

- If you press the button on the logger, the screen will display the message 'dS' and indicate the logger is set to delayed start mode (the date and time entered by the provider during initial setup)



Easy Log- Stop the USB data logger and download data

- Detach the logger from the refrigerator/freezer by unplugging it from the thermistor probe. Leave the glycol/probe in the storage unit.
- Connect the data logger to the computer through the USB port
- Open the EasyLog USB software from your desktop
- When do I download the data logger?
 - Upon observation of a flashing red light alarm. (Note: Data logger flashes a green OR red light every 10-15 seconds, so be sure to observe the flashing light to determine next steps)
 - ODH recommends downloading the data loggers once per month to practice downloading data, review the stability of the storage units, and to ensure data is not overwritten when the logger is full



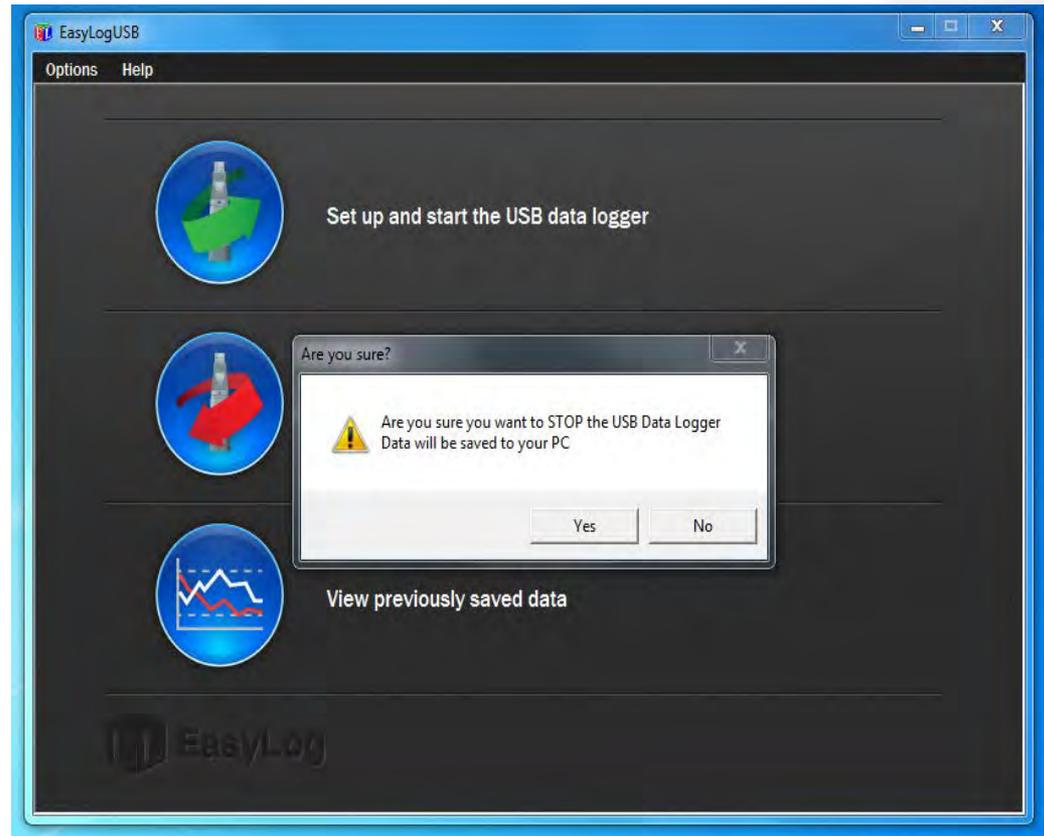
Easy Log Software Options

- To stop and download the data logger, select 'Stop the USB data logger and download data' (Select the red arrow)



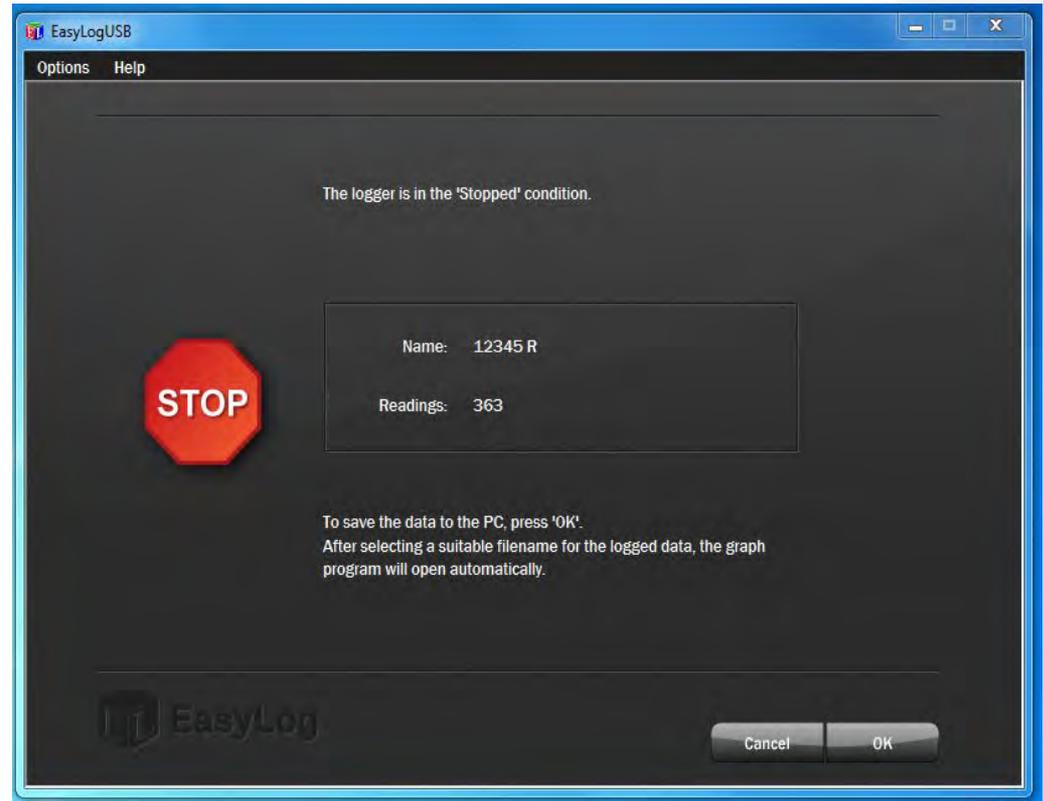
Easy Log- Stop the USB data logger and download data

- You will receive a “Are you Sure you want to STOP the Data Logger?” message
- Select -YES



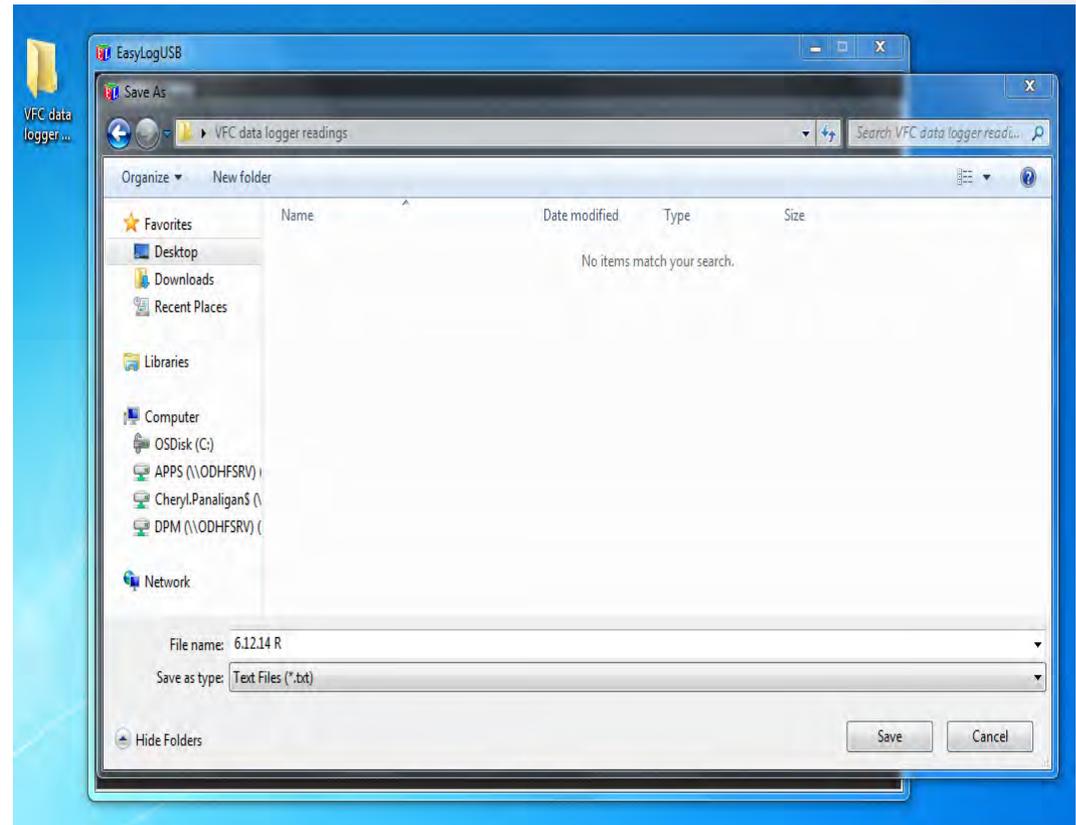
Easy Log- Stop the USB data logger and download data

- You will receive a message that the logger is in the Stopped position and the number of recorded readings
- Select 'OK'



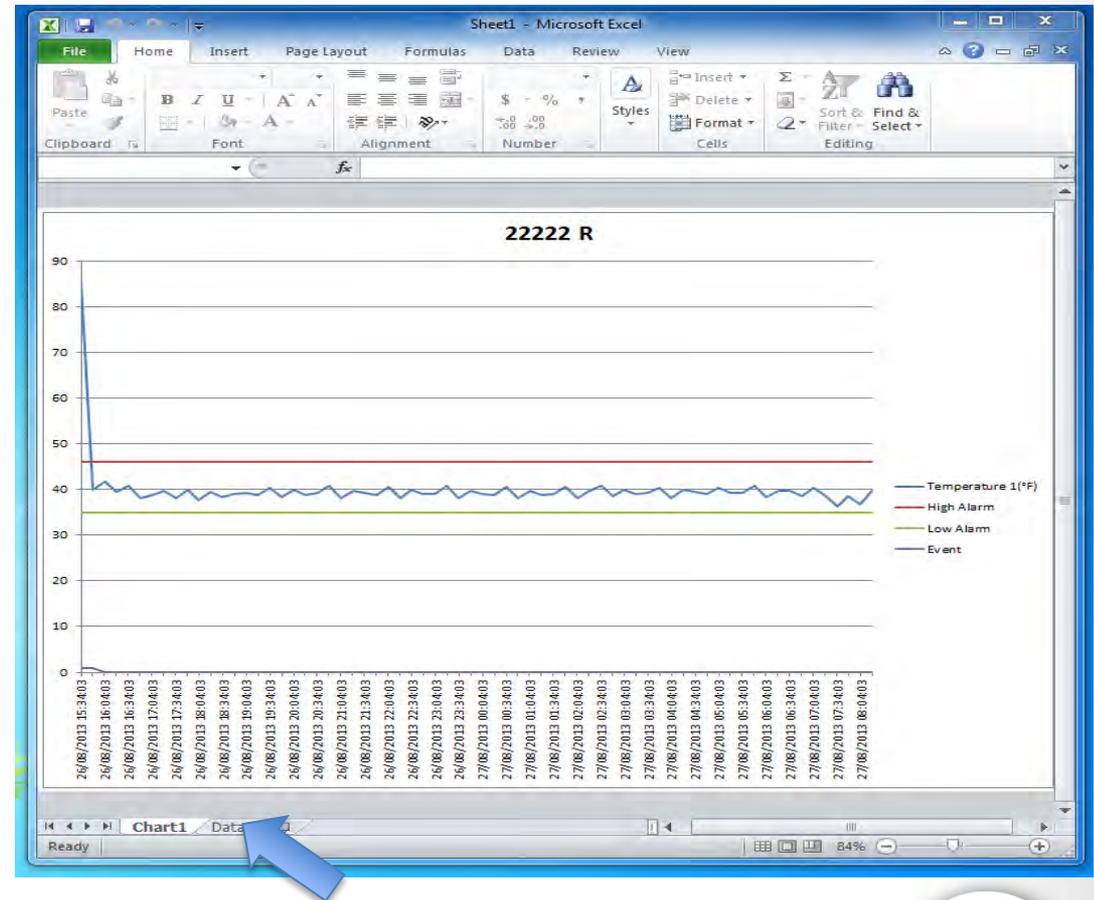
Easy Log- Stop the USB data logger and download data

- Please make certain the file location displayed is dedicated to data logger files (i.e. VFC data logger readings). Change the pathway to save the file to an alternate location (e.g. Shared drive, My Documents, etc.).
- **Note: All providers should have a dedicated file on their computer to store data logger files**
- Change the file name every time you download data to avoid overwriting previously saved data



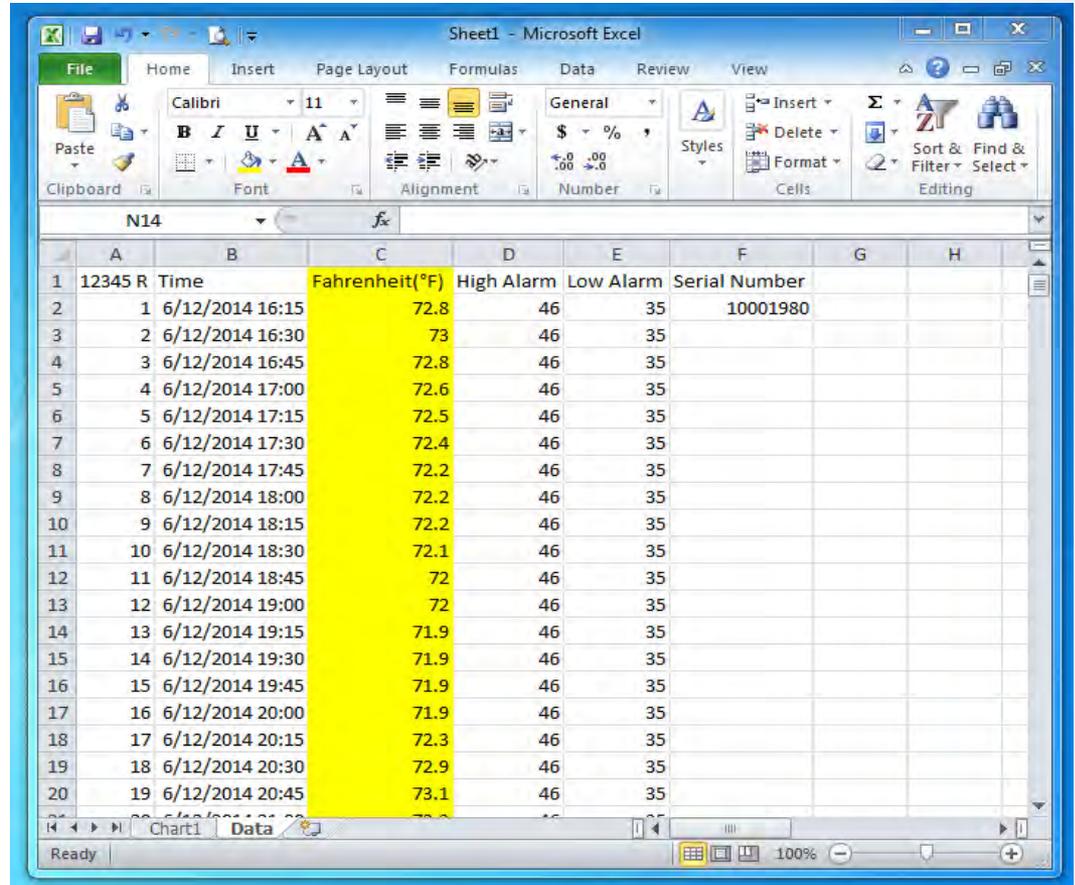
Easy Log- Stop the USB data logger and download data (cont.)

- Once the data has been exported to Excel®, a graph will appear
- If you select the Data tab, you can view the data in a spreadsheet format



Easy Log- Stop the USB data logger and download data (cont.)

- ODH has a requirement that providers contact vaccine manufacturers to determine vaccine stability if the data loggers record 4 consecutive out-of-range temperatures
- Please contact your VFC consultant if you have questions 1-800-282-0546



Sheet1 - Microsoft Excel

	A	B	C	D	E	F	G	H
1	12345 R	Time	Fahrenheit(°F)	High Alarm	Low Alarm	Serial Number		
2	1	6/12/2014 16:15	72.8	46	35	10001980		
3	2	6/12/2014 16:30	73	46	35			
4	3	6/12/2014 16:45	72.8	46	35			
5	4	6/12/2014 17:00	72.6	46	35			
6	5	6/12/2014 17:15	72.5	46	35			
7	6	6/12/2014 17:30	72.4	46	35			
8	7	6/12/2014 17:45	72.2	46	35			
9	8	6/12/2014 18:00	72.2	46	35			
10	9	6/12/2014 18:15	72.2	46	35			
11	10	6/12/2014 18:30	72.1	46	35			
12	11	6/12/2014 18:45	72	46	35			
13	12	6/12/2014 19:00	72	46	35			
14	13	6/12/2014 19:15	71.9	46	35			
15	14	6/12/2014 19:30	71.9	46	35			
16	15	6/12/2014 19:45	71.9	46	35			
17	16	6/12/2014 20:00	71.9	46	35			
18	17	6/12/2014 20:15	72.3	46	35			
19	18	6/12/2014 20:30	72.9	46	35			
20	19	6/12/2014 20:45	73.1	46	35			



Easy Log – Data Logger

- Once the data is downloaded, the logger is in the stopped mode
- **Remember to go back to the setup step to re-start the logger**
 - **Select the ‘Delay the start of the data logger’**
 - **Add start date and start time for launching the data logger (round up to the next half hour, i.e. convert 11:07AM to 11:30AM)**
- The file created is a text file with the extension: .txt- **Note: ODH will request this txt. file in situations involving temperature excursions**
- The file can be found in the dedicated data logger file created on the computer
- The step-by-step setup & download instructions can be found in your red VFC binder or

<http://www.odh.ohio.gov/odhprograms/dis/immunization/Vaccines%20for%20Children%20Manual.aspx>



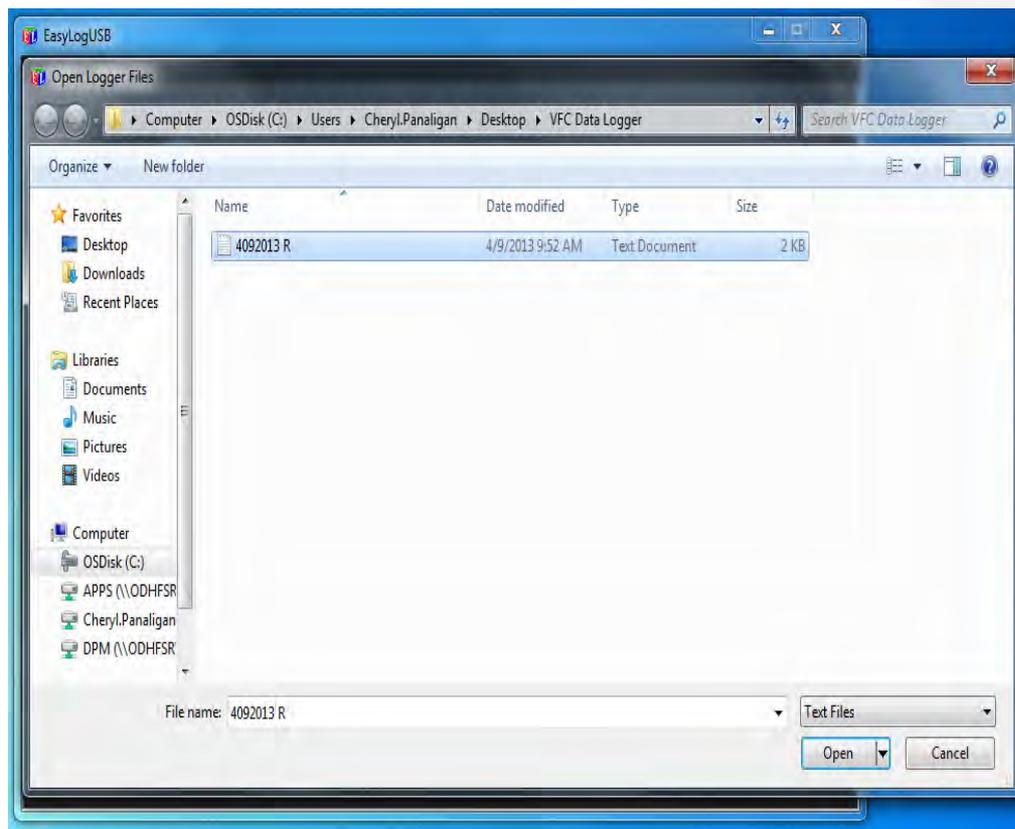
Easy Log Software Options

- To view previously saved data, select 'View previously saved data' (Select the graph)



Easy Log – view previously saved data

- Open your dedicated Data Logger folder from your computer
- Select the .txt file
- Select - Open



Easy Log – view previously saved data

Sample refrigerator data



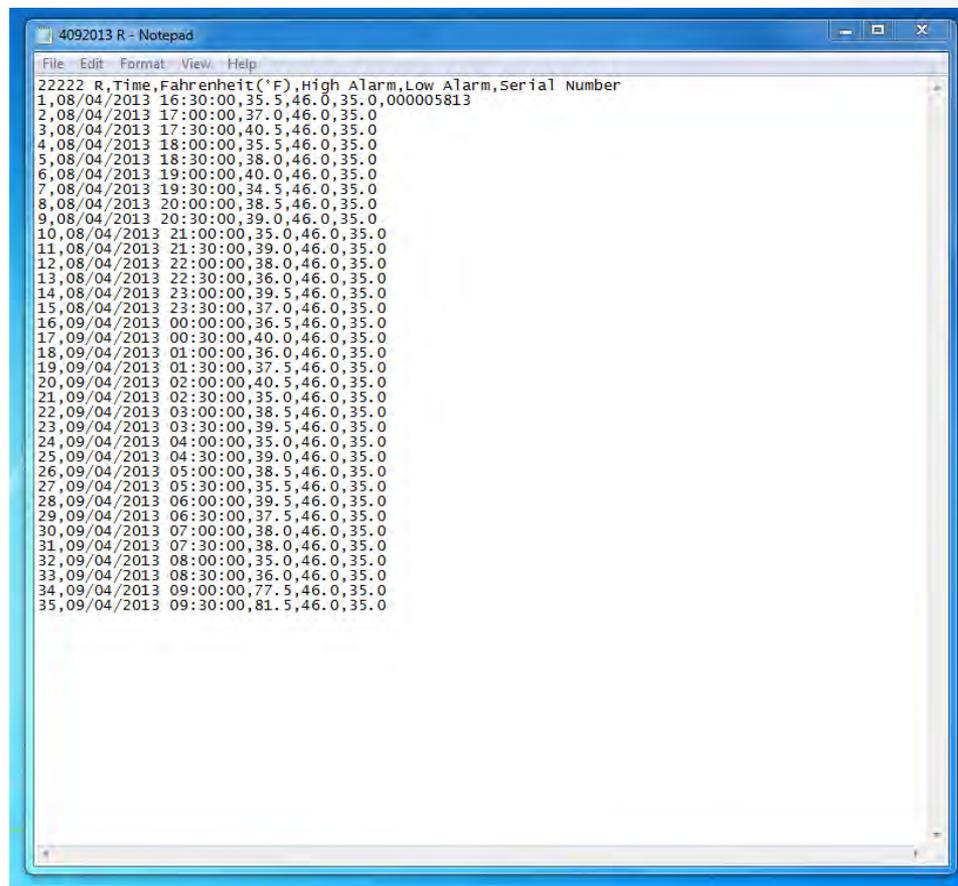
Easy Log – view previously saved data

Sample freezer data



Easy Log – view previously saved data

- Note: If you attempt to directly open the .txt file from your computer (instead of opening the .txt file using the Easy Log software, the data is difficult to read and you will not be able to view the information in a graph nor export the data to Excel®



```
4092013 R - Notepad
File Edit Format View Help
22222 R,Time,Fahrenheit(°F),High Alarm,Low Alarm,Serial Number
1,08/04/2013 16:30:00,35.5,46.0,35.0,000005813
2,08/04/2013 17:00:00,37.0,46.0,35.0
3,08/04/2013 17:30:00,40.5,46.0,35.0
4,08/04/2013 18:00:00,35.5,46.0,35.0
5,08/04/2013 18:30:00,38.0,46.0,35.0
6,08/04/2013 19:00:00,40.0,46.0,35.0
7,08/04/2013 19:30:00,34.5,46.0,35.0
8,08/04/2013 20:00:00,38.5,46.0,35.0
9,08/04/2013 20:30:00,39.0,46.0,35.0
10,08/04/2013 21:00:00,35.0,46.0,35.0
11,08/04/2013 21:30:00,39.0,46.0,35.0
12,08/04/2013 22:00:00,38.0,46.0,35.0
13,08/04/2013 22:30:00,36.0,46.0,35.0
14,08/04/2013 23:00:00,39.5,46.0,35.0
15,08/04/2013 23:30:00,37.0,46.0,35.0
16,09/04/2013 00:00:00,36.5,46.0,35.0
17,09/04/2013 00:30:00,40.0,46.0,35.0
18,09/04/2013 01:00:00,36.0,46.0,35.0
19,09/04/2013 01:30:00,37.5,46.0,35.0
20,09/04/2013 02:00:00,40.5,46.0,35.0
21,09/04/2013 02:30:00,35.0,46.0,35.0
22,09/04/2013 03:00:00,38.5,46.0,35.0
23,09/04/2013 03:30:00,39.5,46.0,35.0
24,09/04/2013 04:00:00,35.0,46.0,35.0
25,09/04/2013 04:30:00,39.0,46.0,35.0
26,09/04/2013 05:00:00,38.5,46.0,35.0
27,09/04/2013 05:30:00,35.5,46.0,35.0
28,09/04/2013 06:00:00,39.5,46.0,35.0
29,09/04/2013 06:30:00,37.5,46.0,35.0
30,09/04/2013 07:00:00,38.0,46.0,35.0
31,09/04/2013 07:30:00,38.0,46.0,35.0
32,09/04/2013 08:00:00,35.0,46.0,35.0
33,09/04/2013 08:30:00,36.0,46.0,35.0
34,09/04/2013 09:00:00,77.5,46.0,35.0
35,09/04/2013 09:30:00,81.5,46.0,35.0
```



**“My Data Logger is flashing a red light?!?
What does this mean? What do I do?”**



Out-of-Range Temperatures

- ✓ Mark vaccine as “DO NOT USE” and quarantine the vaccine in the storage unit
- ✓ Download the data logger and review temperature excursions
- ✓ Contact ODH Immunization Program at 1-800-282-0546 to discuss temperature excursion, recent storage unit activity, and determine next steps
- ✓ **ODH has a requirement that providers contact vaccine manufacturers to determine vaccine stability if the data loggers record 4 consecutive out-of-range temperatures**
- ✓ As appropriate, contact vaccine manufacturers and request written responses and forward to ODH
- ✓ Document temperature excursion, actions taken to resolve situation, and results on a vaccine storage troubleshooting record (available in the red VFC binder)



Vaccine Manufacturer Contact Information

Manufacturer/Website	Phone Number	Products
Berna Products Corp. www.bernaproducts.com	800-533-5899	Vivotif
CSL Biotherapies www.cslbiotherapies.com	888-435-8633	Afluria
Emergent BioSolutions www.biothrax.com/forhealthpros/	877-246-8472	Biothrax
GlaxoSmithKline www.gskvaccinesdirect.com	866-475-8222	Infanrix, Kinrix, Pediarix, Havrix, Engerix-B, Twinrix, Hiberix, Cervarix, Fluarix, FluLaval, Rotarix, Boostrix
Intercell Biomedical www.intercell.com/main/forvaccperts/	301-556-4500	Ixiaro
MedImmune, Inc. www.medimmune.com	877-633-4411	FluMist
Merck & Co., Inc. www.merckvaccines.com	800-637-2579	PedvaxHIB, Comvax, Vaqta, Recombivax-HB, Gardasil, M-M-R II, ProQuad, Pneumovax 23, RotaTeq, Varivax, Zostavax
Novartis Vaccines www.novartisvaccines.com/	800-244-7668	Fluvirin, Agriflu, Menveo, RabAvert (distributor for Ixiaro)
Pfizer (Wyeth Vaccines) www.pfizer.com/products/	800-934-5556	HibTITER, Prevnar 13
sanofi Pasteur www.vaccineshoppe.com	800-822-2463	Daptacel, Tripedia, TriHIBit, Pentacel, ActHIB, Fluzone, JE-VAX, Menomune, Menactra, IPOL, Imovax, ACAM 2000, Decavac, Tenivac, Adacel, Typhim Vi, YF-Vax

January 2011



Sample – Vaccine Storage Troubleshooting Record

Vaccine Storage Troubleshooting Record

Use this page to record the details of the vaccine storage incident, including the date and time of the last known temperature within the appropriate vaccine storage range.

Date	Time	Storage Unit Temp	Room Temp	Incident	Action Taken	Results	Initials

