Retriever™ User Guide





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NCAT Ignition Furnace is a product of the ThermoFisher Company.

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- 1. Retriever PCB Board
- 2. Installation Hardware Kit
- 3. Ribbon Cable
- 4. USB Mounting Box
- 5. USB Cable
- 6. USB Drive

Note: Different spacers and screws are used depending on the year your NCAT Oven was manufactured. Two sets of four standoffs and four screws are included. Only one set will be necessary for installation.

Introduction:

The **Retriever** from InstroTek is designed to give USB storage capability to the NCAT Ignition Furnace. It is designed to efficiently collect and securely store the data that is sent to the printer. The **Retriever** can be used with or replace the existing thermal printer. The data can now be stored, emailed, and secured easily on any computer. The data saved on the USB flash drive is encrypted for security and tampering with data will result in loss of information. The **Retriever** is provided with the application software, **EZRetrieve**, which provides a platform to securely open the data files from the USB drive. Always use the **EZRetrieve** application to open, store and print the NCAT data stored on the flash drive.

Caution!!!

Unplug the FURNACE before installing the *Retriever*.

Installing the Retriever:

<u>Step 1:</u>

Remove the four front panel screws.

<u>Step 2:</u>

Remove and replace the four screws holding the scale/ load cell display board with included 0.5" standoffs (use either the #4 screw size or the #6 screw size).



<u>Step 3:</u>

Mount the *Retriever* board on the standoffs with the included screws, using either the #4 or #6 screws depending on the standoffs used.

<u>Step 4:</u>

Connect the provided ribbon cable to the existing printer cable in the oven, connect the middle connector of the ribbon cable to the thermal printer (if using the *Retriever* to replace the existing printer, this step may be omitted), and the other end to the *Retriever* board. The *Retriever* is powered through the ribbon cable by the oven power supply.



<u>Step 5:</u>

Feed the cable through one of the vent holes on the side of the unit and connect to *Retriever* board. Attach the grey flat wire to the white connector on the board. Make sure the arrow on the black male connector is facing up.

ATTENTION: Arrow on black connector must be facing up.



<u>Step 6:</u>

Align the USB box on either side of the NCAT Oven and use a pen or felt tipped marker to indicate where to drill the two mounting holes.



<u>Step 7:</u>

Use a 7/64" drill bit to create the two holes which were marked in the previous step. Then affix the USB box with the two #6 black sheet metal screws included with the Installation Hardware Kit.



Caution: Before drilling, ensure no wire or obstructions are on the opposite side of the mounting location!

<u>Step 8:</u>

Replace the four front panel screws.

<u>Step 9:</u>

Plug the furnace in and use as directed by the oven's manufacturer.

Getting the Data from the NCAT:

Insert the USB drive into the **Retriever**. Press START on the oven. When the test is finished, the data will be converted into a bin file and placed on the USB drive in a folder called "InstroTek" with a file name that contains the current date and time.

Example Data File Name: F:\INSTROTEK\OvenTest 03-16-13 15_38_40.BIN

EZRetrieve Application Setup:

Insert the USB drive that came with the *Retriever* in your computer and run the setup file: "*EZRetrieve.exe*"

This will install the needed software on the PC and will add the InstroTek icon to the desktop. Double Click the **EZRetrieve** icon on the desktop to open the application.



Important: The **EZRetrieve** software is designed to run in Microsoft Windows XP or Windows 7 operating systems.

Important : The computer may require you to have administrative rights to install the **EZRetreive** software.

Important: If the "System Update Required" popup box (below) appears, navigate to the publish folder on the USB drive and install the .NET 4.0. This will install the necessary Microsoft .NET Framework 4.



Windows[®], Windows XP[®], Windows7[®], and .NET Framework are registered products of the Microsoft Company.

Review, Print, Store Data:

- To retrieve the data stored on the USB drive, plug the USB drive into a PC with the *EZRetrieve* software installed.
- Open the Software by double clicking the *EZRetrieve* icon.
- Select File
- Select Open
- Navigate to the file you wish to open, select it, and then press **Open**.



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- After the file is opened fill in operator name, mix type, sample ID and a digital signature (if you want your signature to appear on the report). Sign the test using the mouse (left click and draw with the mouse).
- Click Add to add the information to the test results.
- Select File and Save. This will save the file as a .bmp (bitmap) in the file location of your choice. Always open the data using the **EZRetrieve** software. If NCAT data has been changed or for any reason tampered with, opening the file in **EZRetrieve** will indicate "Caution- Data has been changed and cannot be opened"



• The Graph tab on the *EZRetrieve* allows the operator to display a plot of data. Select the data you want displayed using the radio buttons and check boxes on the left. You may change the color used for the Y-Axis data by right clicking on them.

