# **TEI 49I Ozone Analyzer Calibration and Record Download**

### **Calibration**

1. Turn on external pump



CONC	CENTRATION
03	Ø.5 PPB
	16:21 JG DIRGS ALARM

- Hit "RUN" button once (should go to "zero" mode)
- 3. Run zero for 10-12 minutes
- 4. Run level 1 for 10-12 minutes
- 5. Run level 2 for 10-12 minutes

- After levels are done, then hit "Run" 1 more time to get to "Sample" mode
- 7. Turn external pump off



### **Download Data**

- 1. Log onto computer
- 2. Open Iport (The software program used for downloading the data and viewing the operation of the analyzer is called TEI iPort. There is a desktop shortcut for this software on the laptop



things started.) You should NOT leave the communications program (iPort) running continuously when you are not performing a specific task with the computer (such as downloading the data). The communication between the computer and the analyzer is slow and if the program is running continuously it interferes with the recording of the data on the analyzer itself.

computer that accompanies the analyzer. Click on this icon to get

#### 3. Under **Comm** menu – click **Connect**



5. (You won't need to do Step 5 if it's in autopoll and goes directly to O3 Analyzer screen)

🎫 Thermo	Electron Corpora	tio	n	
File Comm	Instrument Window	l H	telp	
2 <b>E</b> 3	Poll Serial TCP Connect	•	Config: 49 All	<i>i</i>
Consol Ready.	Set Timer Refresh		Set Config Edit Config	
Initializin Done. Initializin Done.	Load Records Log File Backup/Restore Update Firmware	٠	8, 1, N, none) 8, 1, N, none)	
		٠		
а.	Size	•		

Under Instrument menu – Poll Serial → Config : 49

6. Click on the **Load Records** icon (OR click on the word **Instrument** on the menu line at the top of the initial window, then click on **Load Records**).

🎟 Thermo Electron Corporation	
File Comm Instrument Window Help	
Console	
Do Ini 12 O3 Analyzer ID=49	
Dc Concentration 49i 01.05.00.159 Pa 03 27.0 Dc	CONCENTRATION
Coefficient Time 14:53 03 1.000 Date 03-30-11	
Bkg 03 0.0 Pressure(torr)	Оз 27.0 ррв

- 7. In Specify Data Records box
  - a. click **short records**
  - b. click **starting at** records back and type **2400** (see \* if more than 1 week) into box
  - c. Check "Save to file"
  - d. Add two letters specifying site (ie sp, as, etc...) and change file extension to **.src**, leaving the rest. Example **sp**49I- 033011 1454**.src**



- 8. Repeat Step 7 to download Long Records (hourly-averaged records).
- 9. In Specify Data Records box
  - e. click **long records**
  - f. click **starting at** records back and type **200** (see \* if more than 1 week) into box
  - g. Check "Save to file"
  - h. Add two letters specifying site (ie sp, as, etc ...) and change file extension to **.lrc**, leaving the rest. Example **sp**49I- 033011 1454**.lrc**

\*The number of records back needs to cover the entire period since the last download. The 49i analyzer has a relatively large memory and will store data for a number of weeks (or in the case of the long records set for hourly averaging, several months). For normal <u>weekly</u> downloads the number of records back should be set to 200 for the long records (lrc). For the short records (src) the number of records back should be set to 2400. This will give some overlap with the previous download, which is fine. For each day there are 24 long (hourly average) records (lrc) and 288 short (5 minute averages) records. If there is more than a week between downloads, a corresponding number of records should added to the nominal weekly number.

## **All-Data Download**

This is for special cases when data files are missing or there is a problem and you will not normally need to go through this process.

- 1. Do Step 6 in Download Records section above.
- 2. In Specify Data Records box
  - a. click **long records**
  - b. click **starting** records back and type **3600** into box
  - c. Check "Save to file"
  - d. Add two letters specifying site (ie tk, bb, et, etc...) and change file extension to **.lrc**, leaving the rest. Example tk49I- 033011 1454**.lrc**

	Fetcl	n  all	<ul> <li>long records</li> <li>⇒ short records</li> </ul>	>
<	starting	3600	records back	>
\$	starting a	t 00:00	12-15-10	
$\langle \rangle$	Real time	,		
V	Save to file	e <mark>tk</mark> 491-	033011 1905.lm	
No. of Concession, name				