

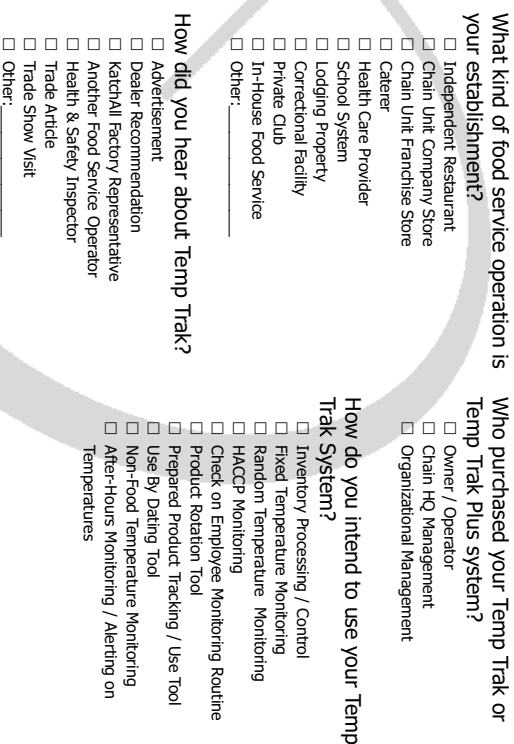


Registration Card

User Information

First Name	Middle Initial	Last Name
Name of Establishment, Organization or Company		
Street Address		
City	State	ZIP Code
Phone	FAX	E-Mail
Hardware Serial Number		
Commanders	Sentries	Echos
XP's		
Liberators		
Communicators		

Questions



What kind of food service operation is your establishment?

- ☐ Independent Restaurant
- ☐ Chain Unit Company Store
- ☐ Chain Unit Franchise Store
- ☐ Caterer
- ☐ Health Care Provider
- ☐ School System
- ☐ Lodging Property
- ☐ Correctional Facility
- ☐ Private Club
- ☐ In-house Food Service
- ☐ Other: _____

How did you hear about Temp Trak?

- ☐ Advertisement
- ☐ Dealer Recommendation
- ☐ Katchall Factory Representative
- ☐ Another Food Service Operator
- ☐ Health & Safety Inspector
- ☐ Trade Article
- ☐ Trade Show Visit
- ☐ Other: _____

Who purchased your Temp Trak or Temp Trak Plus system?

- ☐ Owner / Operator
- ☐ Chain HQ Management
- ☐ Organizational Management

How do you intend to use your Temp Trak System?

- ☐ Inventory Processing / Control
- ☐ Fixed Temperature Monitoring
- ☐ Random Temperature Monitoring
- ☐ HACCP Monitoring
- ☐ Check on Employee Monitoring Routine
- ☐ Product Rotation Tool
- ☐ Prepared Product Tracking / Use Tool
- ☐ Use By Dating Tool
- ☐ Non-Food Temperature Monitoring
- ☐ After-Hours Monitoring / Alerting on Temperatures

This registration card must be completed and returned to Katichall Technology Group, Inc. within 30 days of purchase in order to validate the warranty on your new Temp Trak software and hardware components.

By registering your Temp Trak system, you will receive free software upgrades for one year from purchase date and notification of any new modules or advances to the system.

PLACE
STAMP
HERE



5800 Creek Road
Cincinnati, OH 45242



Version 1.0.1



KatchAll®
Technology Group, Inc.

A wholly owned subsidiary of

KatchAll Industries International, Inc.

5800 Creek Road

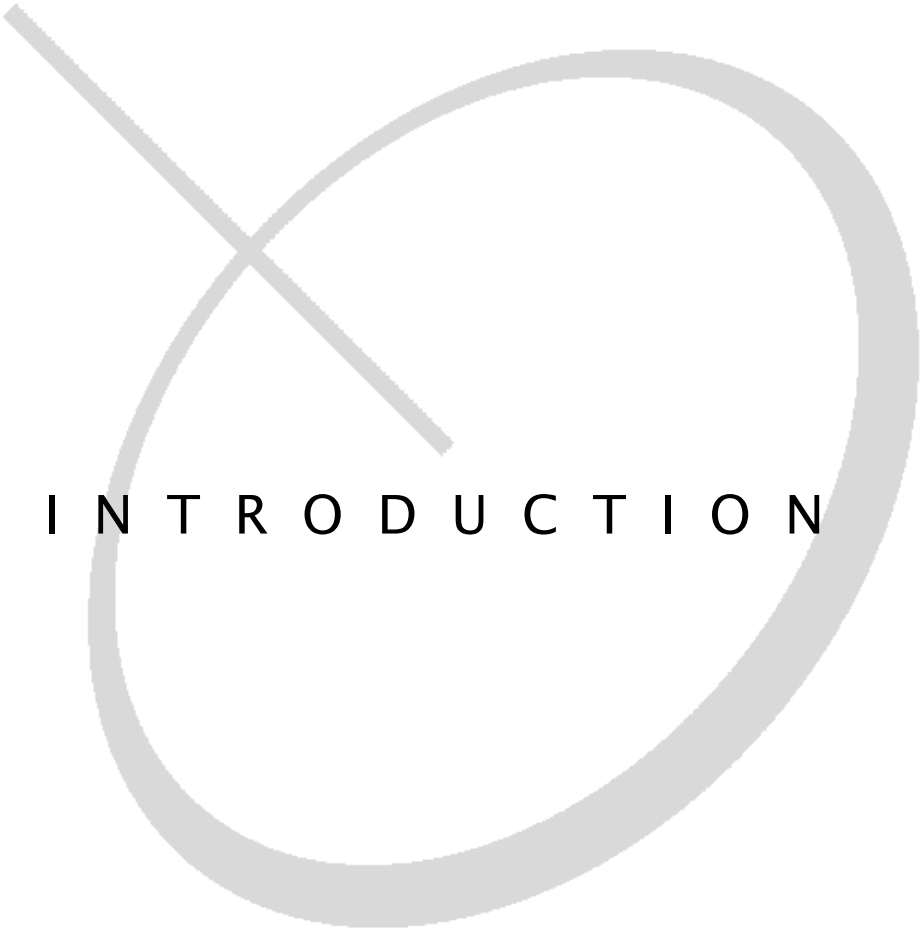
Cincinnati, OH 45242

FAX 513-793-4895

www.katchall.com

© 2000, KatchAll Technology Group, Inc.

Patents Pending, All Rights Reserved, Printed in USA



I N T R O D U C T I O N

Congratulations!

Temp Trak is a quantum leap into the future of food service management, and you have its benefits today.

With Temp Trak, you possess the most advanced total quality management and time-on-task breakthrough in the history of our industry. It is easy to learn and user friendly to operate.

Temp Trak is a unique, innovative system that gives you the capability to read and record temperatures, and with Temp Trak Plus — track inventory, all automatically! Both Temp Trak and Temp Trak Plus are wireless, accurate and global, allowing management to obtain precise operating information anytime, anywhere.

Welcome to the world of Temp Trak, the new standard in food service management from KatchAll Technology Group — Bringing you the Future in Food Safety!

Need Help?!

Temp Trak and Temp Trak Plus include a wide range of on-line help files that assist with many common problems. For instance, if you're having trouble setting up a new printer, on-line help will guide you through the process — just click on the *Help* button, it's that easy!

If you would like to visit our web site, direct your browser to:

<http://www.katchall.com>

There you will find answers to commonly asked questions, software upgrades and new products.

Warranty & FCC Licensing

Temp Trak and Temp Trak Plus both come with a standard 90 day warranty on parts and labor.

The Temp Trak units have been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: 1. This device may not cause harmful interference, and 2. This device must accept any interference that may cause undesired operation.



END-USER LICENSE AGREEMENT FOR TEMP TRAK SOFTWARE

IMPORTANT – READ CAREFULLY: This End-User license Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and KatchAll Technology Group, Inc. ("KatchAll") for the Temp-Trak™ software product identified above, which includes computer software and may include associated media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT"). The SOFTWARE PRODUCT also includes any updates and supplements to the original SOFTWARE PRODUCT provided to you by KatchAll. Any software provided along with the SOFTWARE PRODUCT that is associated with a separate end-user license agreement is licensed to you under the terms of that license agreement. By installing, copying, downloading, accessing or otherwise using the SOFTWARE PRODUCT, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, do not install or use the SOFTWARE PRODUCT; you may, however, return it to your place of purchase for a full refund.

SOFTWARE PRODUCT LICENSE

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed, not sold.

1. GRANT OF LICENSE. This EULA grants you the following rights:

- **Systems Software.** You may install and use one copy of the SOFTWARE PRODUCT on a single computer, including a workstation, terminal or other digital electronic device ("COMPUTER").
- **Storage/Network Use.** You may also store or install a copy of the SOFTWARE PRODUCT on a storage device, such as a network server, used only to install or run the SOFTWARE PRODUCT on your other COMPUTERS over an internal network; however, you must acquire and dedicate a license for each separate COMPUTER on or from which the SOFTWARE PRODUCT is installed, used, accessed, displayed or run. A license for the SOFTWARE PRODUCT may not be shared or used concurrently on different COMPUTERS.

2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS.

- **Academic Edition Software.** If the SOFTWARE PRODUCT is identified as "Academic Edition" or "AE," you must be a "Qualified Educational User" to use the SOFTWARE PRODUCT. If you are not a Qualified Educational User, you have no rights under this EULA. To determine if you are a Qualified Educational User, please contact KatchAll or the KatchAll distributor serving your area of the country.
- **Not for Resale Software.** The SOFTWARE PRODUCT is "Not For Sale" or "NFR," and, notwithstanding other sections of this EULA, your use of the SOFTWARE PRODUCT is limited to your own use including demonstration, test, or evaluation purposes and you may not resell, or otherwise transfer for value, the SOFTWARE PRODUCT.
- **Limitations on Reverse Engineering, Decompilation, and Disassembly.** You may not reverse engineer, decompile, or disassemble the SOFTWARE PRODUCT, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation.
- **Separation of Components.** The SOFTWARE PRODUCT is licensed as a single product. Its component parts may not be separated for use on more than one computer.
- **Rental.** You may not rent, lease or lend the SOFTWARE PRODUCT.
- **Trademarks.** This EULA does not grant you any rights in connection with any trademarks or service marks of KatchAll.
- **Support Services.** KatchAll may provide you with support services related to the SOFTWARE PRODUCT ("Support Services"). Use of Support Services is governed by the KatchAll policies and programs described in the user manual, in "online" documentation and/or other KatchAll provided materials. Any supplemental software code provided to you as part of the Support Services shall be considered part of the SOFTWARE PRODUCT and subject to the terms and conditions of this EULA. With respect to technical information you provide to KatchAll as part of the Support Services, KatchAll may use such information for its business purposes, including for product support and development. KatchAll will not utilize such technical information in a form that personally identifies you.
- **Software Transfer.** The initial user of the SOFTWARE PRODUCT may make a onetime permanent transfer of this EULA and SOFTWARE PRODUCT only directly to an end user. This transfer must include all of the SOFTWARE PRODUCT (including all component parts, the media and printed materials, any upgrades, this EULA, and, if applicable, the Certificate of Authenticity). Such transfer may not be by way of consignment or any other indirect transfer. The transferee of such onetime transfer must agree to comply with the terms of this EULA, including the obligation not to further transfer this EULA and SOFTWARE PRODUCT.
- **Termination.** Without prejudice to any other rights, KatchAll may terminate this EULA if you fail to comply with the terms and conditions of this EULA. In such event, you must destroy all copies of the SOFTWARE PRODUCT and all of its component parts.

3. UPGRADES. If the SOFTWARE PRODUCT is labeled as an upgrade, you must be properly licensed to use a product identified by KatchAll as being eligible for the upgrade in order to use the SOFTWARE PRODUCT. A SOFTWARE PRODUCT labeled as an upgrade replaces and/or supplements the product that formed the basis for your eligibility for the upgrade. You may use the resulting upgraded product only in accordance with the terms of this EULA. If the SOFTWARE PRODUCT is an upgrade of a component of a package of software programs that you licensed as a single product, the SOFTWARE PRODUCT may be used and transferred only as part of that single product package and may not be separated for use on more than one computer.

4. COPYRIGHT. All title and intellectual property rights in and to the SOFTWARE PRODUCT (including but not limited to any images, photographs, animations, video, audio, music, and text, incorporated into the SOFTWARE PRODUCT are owned by KatchAll or its suppliers. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE PRODUCT is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content. All rights not expressly granted are reserved by KatchAll.

5. DUAL-MEDIA SOFTWARE. You may receive the SOFTWARE PRODUCT in more than one medium. Regardless of the type or size of medium you receive, you may use only one medium that is appropriate for your single computer. You may not use or install any other medium on another computer. You may not loan, rent, lease, lend or otherwise transfer any other medium to another use, except as part of the permanent transfer (as provided above) of the SOFTWARE PRODUCT.

6. BACKUP COPY. After installation of one copy of the SOFTWARE PRODUCT pursuant to this EULA, you may keep the original media on which the SOFTWARE PRODUCT was provided by KatchAll solely for backup or archival purposes. If the original media is required to use the SOFTWARE PRODUCT on the computer, you may make one copy of the SOFTWARE PRODUCT solely for backup or archival purposes. Except as expressly provided in this EULA, you may not otherwise make copies of the SOFTWARE PRODUCT or the printed material accompanying the SOFTWARE PRODUCT.

7. U.S. GOVERNMENT RESTRICTED RIGHTS. The SOFTWARE PRODUCT and documentation are provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7031 or subparagraph (c)(1) and (2) of the Commercial Computer Software Restricted Rights at 48 CFR 52.227-19, as applicable. Manufacturer is KatchAll Technology Group, Inc. 5800 Creek Road, Cincinnati, Ohio 45242.

8. EXPORT RESTRICTIONS. You agree that you will not export or reexport the SOFTWARE PRODUCT to any country, person, entity or end user subject to U.S. export restrictions. You specifically agree not to export or reexport the SOFTWARE PRODUCT: (i) to any country to which the U.S. has embargoed or restricted the export of goods or services, which currently include, but are not necessarily limited to Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria, or to any national of any such country, wherever located, who intends to transmit or transport the products back to such country; (ii) to any end-user who you know or have reason to know will utilize the SOFTWARE PRODUCT or portion thereof in the design, development or production of nuclear, chemical or biological weapons; or (iii) to any end-user who has been prohibited from participating in U.S. export transactions by any federal agency of the U.S. government.

M I S C E L L A N E O U S

If you acquire this product in the United States, this EULA is governed by the laws of the State of Ohio.

If this product was acquired outside the United States, then local law may apply.

Should you have any questions concerning this EULA, or if you desire to contact KatchAll for any reason, please write:

KatchAll Industries International, Inc.
5800 Creek Road
Cincinnati, Ohio 45242

L I M I T E D W A R R A N T Y

LIMITED WARRANTY. KatchAll warrants that (a) the SOFTWARE PRODUCT will perform substantially in accordance with the accompanying written materials for a period of ninety (90) days from the date of receipt, and (b) any Support Services provided by KatchAll shall be substantially as described in applicable written materials provided to you by KatchAll, and KatchAll support engineers will make commercially reasonable efforts to solve any problem. To the extent allowed by applicable law, implied warranties in the SOFTWARE PRODUCT, if any, are limited to ninety (90) days. Some states/jurisdictions do not allow limitations on duration of an implied warranty, so the above limitation may not apply to you.

CUSTOMER REMEDIES. KatchAll's and its suppliers' entire liability and your exclusive remedy shall be, at KatchAll's option, either (a) return of the price paid, if any, or (b) repair or replacement of the SOFTWARE PRODUCT that does not meet KatchAll's Limited Warranty and that is returned to KatchAll with a copy of your receipt. This Limited Warranty is void if failure of the SOFTWARE PRODUCT has resulted from accident, abuse, or misapplication. Any replacement SOFTWARE PRODUCT will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Outside the United States, neither these remedies nor any product support services offered by KatchAll are available without proof of purchase from an authorized international source.

NO OTHER WARRANTIES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, KATCHALL AND ITS SUPPLIERS DISCLAIM ALL OTHER WARRANTIES AND CONDITIONS, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OR CONDITIONS, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT, WITH REGARD TO THE SOFTWARE PRODUCT, AND THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHERS, WHICH VARY FROM STATE/JURISDICTION.

LIMITATION OF LIABILITY. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL KATCHALL OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE PRODUCT OR THE FAILURE TO PROVIDE SUPPORT SERVICES, EVEN IF KATCHALL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, KATCHALL'S ENTIRE LIABILITY UNDER ANY PROVISION OF THIS EULA SHALL BE LIMITED TO THE GREATER OF THE AMOUNT ACTUALLY PAID BY YOU FOR THE SOFTWARE PRODUCT OR U.S. \$5.00; PROVIDED, HOWEVER, IF YOU HAVE ENTERED INTO A KATCHALL SUPPORT SERVICES AGREEMENT, KATCHALL'S ENTIRE LIABILITY REGARDING SUPPORT SERVICES SHALL BE GOVERNED BY THE TERMS OF THAT AGREEMENT. BECAUSE SOME STATES/JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

An abstract graphic featuring a thick, light gray oval that is slightly tilted. A thin, dark gray diagonal line crosses the oval from the upper left towards the center. The word "INSTALLATION" is centered horizontally across the middle of the oval.

I N S T A L L A T I O N

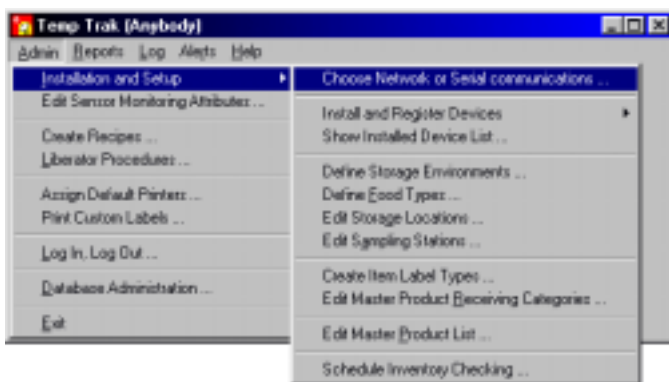
Step 1 — Installing The Program

- Insert the Temp Trak CD into your CDROM drive.
- Follow the instructions on the screen.
- Double-Click on the Temp Trak icon.

Step 2 — Communications Setup

During Installation and Setup use the serial cable provided to connect the **Commander** units to the PC, even if you will eventually use a computer network.

- Select *Communications Setup* from the menu.



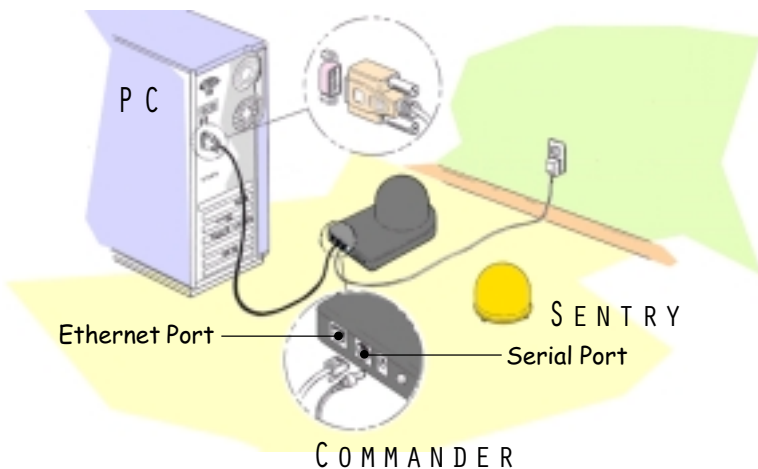
- Set CommType to *Serial*.
- Select an appropriate Comm Port.

If you do not know how to determine which comm port is which, refer to your computer manufacturer's manual or contact your system administrator.

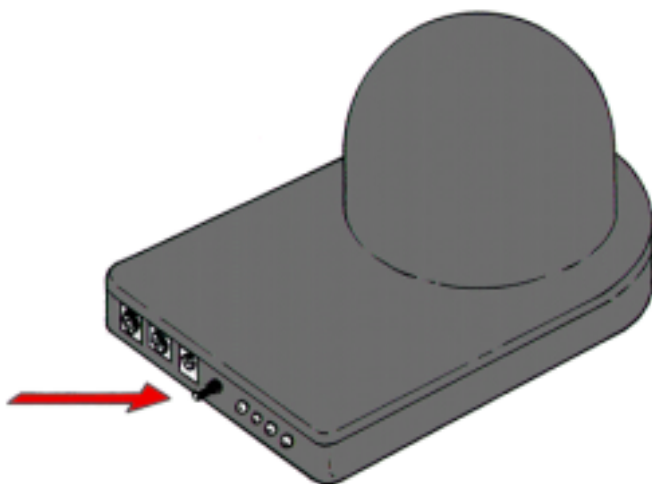
Step 3 — Registering the Commander

*(Repeat this step to register additional **Commanders**)*

— Connect the system as shown.



— Press the **Attention** button on the Commander.



Step 4 — Registering Sentries

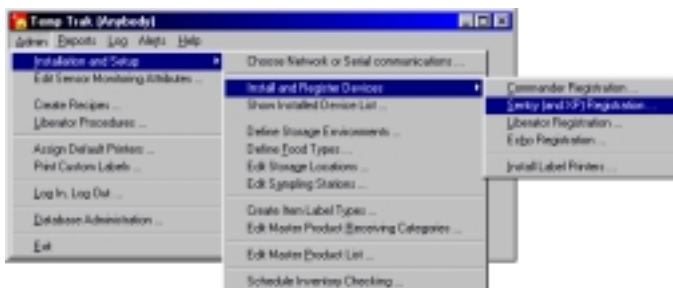
(Repeat this step to register additional Sentries)

- Insert a 9V battery into the **Sentry** or plug it into a wall outlet with the AC power adapter.

For added protection for your investment, it is suggested that you use a surge protector when using AC power adapters to power your Temp Trak system.



- Place the **Sentry** next to the **Commander**.
- Select **Sentry (and XP) Registration** from the menu.



- Follow the instructions from the *Sentry Registration* window prompt.
- You may change the sampling interval at this time or wait until *Step 9* where we will discuss this in further detail.

When the attention button on the Sentry unit is pressed a series of beeps will be heard. Within 5 to 10 seconds the bar code identification and temperature sampling interval will appear on the screen.



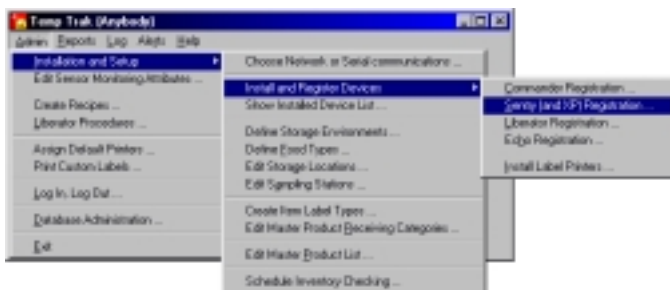
Step 5 — Registering Sentry XPs

(Repeat this step to register additional *Sentry XPs*)

The **Sentry XP** is very similar to the **Sentry** in many respects. The major difference and advantage of the **Sentry XP** over the **Sentry** is that it has eight thermocouple ports instead of two. This expansion to the **Sentry** allows the user to monitor more temperatures in a given area without having to have multiple **Sentries**.

When registering the **Sentry XPs** follow the same procedure as when registering a **Sentry**.

- Plug the **Sentry XP** it into a wall outlet with the AC power adapter.
- Place the **Sentry XP** next to the **Commander**.
- Select *Sentry (and XP) Registration* from the menu.



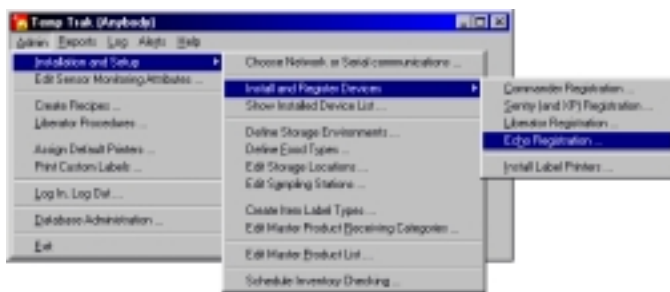
- Follow the instructions from the *Sentry Registration* window prompt.
- You may change the sampling interval at this time or wait until Step 9 where we will discuss this in further detail.

Step 6 — Registering Echos

(Repeat this step to register additional **Echo units**)

If you have to go the extra distance or have to reach around corners or large obstacles, you may need to use an Echo. This unit aids in extending your radio range by acting as a “repeater” to a local Commander unit. The Echos can be strung together one after another in a fire chain fashion in order to reach a maximum distance of 300 meters (or four Echo units in a row). When placing echos in your facility, follow the same procedures as when positioning Sentries.

- Place the **Echo** next to the **Commander**.
- Select *Echo Registration* from the menu.



- Follow the instructions from the *Echo Registration* window prompt.

When selecting a location within the current configuration tree for the echo unit, be aware that the hierarchy displayed in the tree must mimic your physical configuration for the system to work properly. For instance if your echo unit to be registered is going to communicate with Commander-TTB0000000999TT in the field, this is the unit you must select in the configuration tree when you register the Echo unit. If you are going to configure the Echo unit to communicate to another Echo unit, you must select that Echo unit in the configuration tree when registering the new Echo.

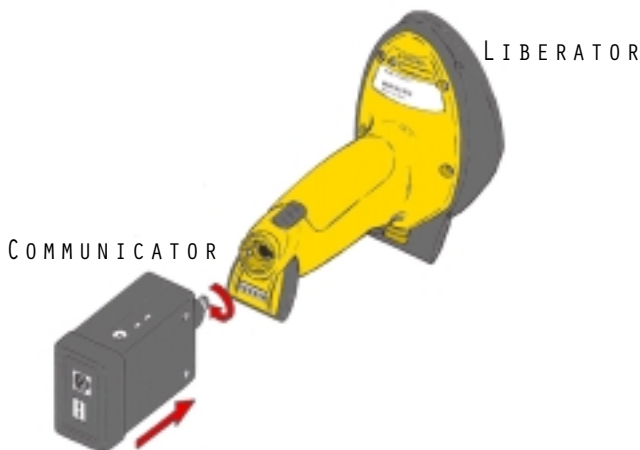
As a note, you may have multiple echo units communicate to a single commander or other echo unit, but the maximum number of “children” that can talk to a single “parent” is three and the maximum number of “generations” allowed is four.



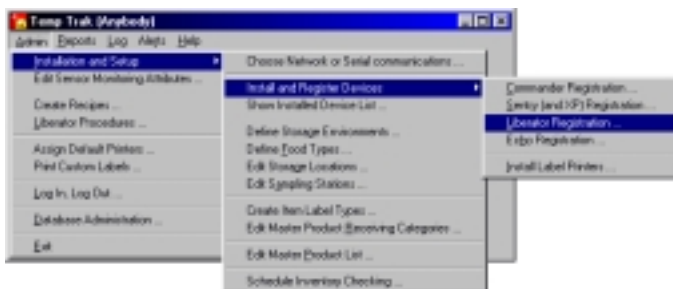
Step 7 — Registering the Liberator

(Repeat this step to register additional **Liberators**)

- Assemble the **Liberator** and the **Communicator**.



- Hold the **Liberator** next to the **Commander**.
- Select *Liberator Registration* from the menu.



- Pull the Liberator trigger to wake it up.
- Follow the instructions from the *Liberator Registration* window prompt.
- Use the up/down arrows on the liberator keypad to select option 4. *Attention*.
- Press the **Enter** button on the Liberator to select the Attention option.

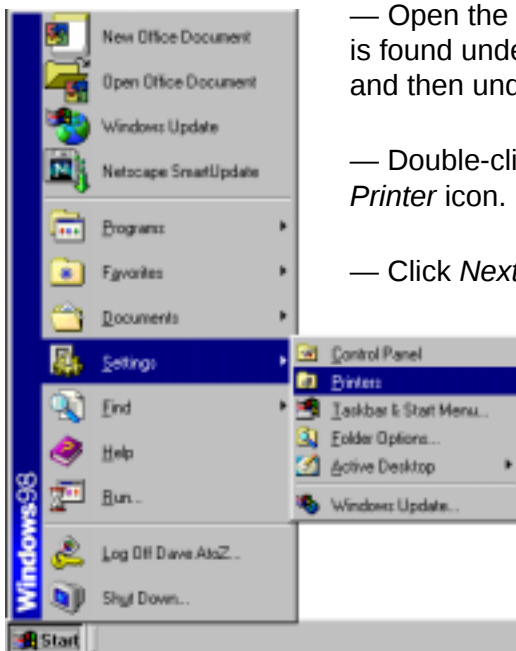
Step 8 — Printer Setup

There are two types of printers that Temp Trak Plus uses, Auto Labeler label printers for printing labels and regular office printers for printing placards. Placards can only be printed from the Temp Trak software and only to an office printer connected to that PC. Labels, however, can be printed from and to almost anywhere as long as you have installed and assigned an Auto Labeler correctly.

Auto Labelers can be physically connected to a PC, Commander, Echo, or Liberator and can be printed to by any operator using a Liberator or PC. The only exception is that an operator can only print to Portable Auto Labelers that are directly connected to their Liberator.

To use an Auto Labeler you must first install your Auto Labeler and then assign it to be the default printer for a PC or Liberator. Once assigned as a default printer, the Liberator or PC will print to that Auto Labeler until the default printer is reassigned.

- Connect the Auto-Labeler printer to PC using a standard parallel printer cable.



- Open the Printers folder. This is found under the Start Menu and then under Settings.

- Double-click on the *Add Printer* icon.

- Click *Next*.

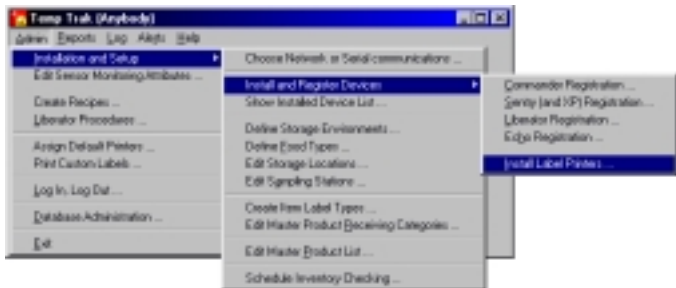
- Select *Local Printer* and click *Next*.

- Under the *Manufacturers* list, select **Generic**.



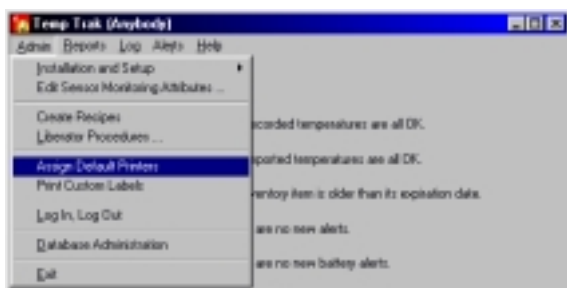
Step 8 — (...continued)

- Under the *Printers* list, select **Generic / Text Only**.
- Click *Next*.
- Under the *Available Ports* list, select **LPT1**.
- Click *Next*.
- Click *Next*.
- Select *No* for printing a Test Page and click *Finish*.
- In Temp Trak select *Install Label Printers* from the menu.



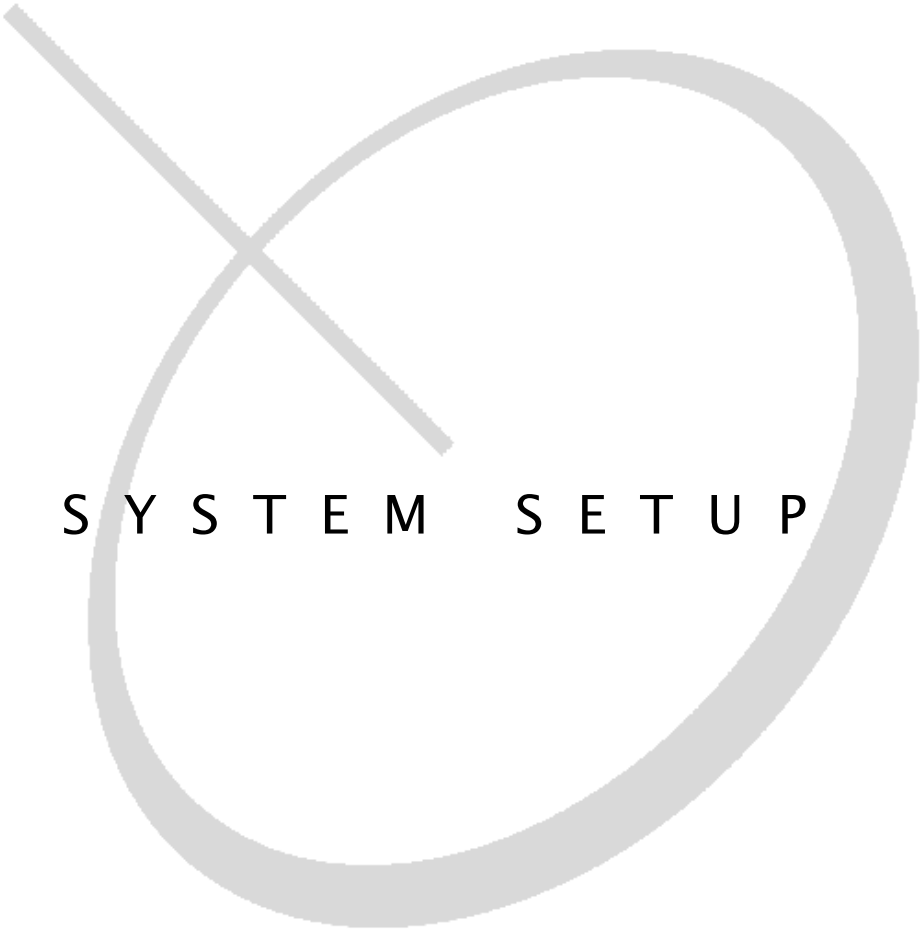
- Click *Setup*.
- Follow the instructions in the *Label Printer Set Up* window.

- Repeat this for each of your printers.
- Now assign a default printer for your computer and each of your liberators. Select *Assign Default Printers* from the menu.



- Next to each of the devices listed click on the '...' to select a printer to be the default printer for that device.

Multiple Auto Labelers can be used in a Temp Trak Plus system. To change printers, simply reassign the default printer to the desired printer.



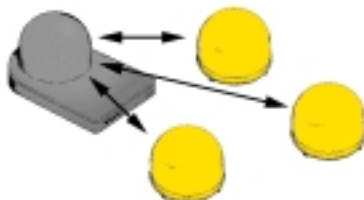
S Y S T E M S E T U P

Step 9 – Configuring Sentries

- Make sure a **Commander** unit is connected to the PC with the serial cable (*Step 3*).

Even if you are eventually going to use an existing computer network to communicate to your **Commander** unit(s), connect just one **Commander** to your PC using the serial cable provided.

- Place all of your **Sentries** near the **Commander**.



- Repeat Step 4 and set the *Sampling Interval* for each **Sentry**.

Sampling Interval is the time that the **Sentry** unit will wait before it “wakes up” and takes a temperature reading, or a *sample*. Between each sample, the **Sentry** sleeps and uses little or no power, which means that the longer the **Sentry** sleeps the longer its battery will last. Conversely, the more often the **Sentry** takes samples (or the shorter the *Sampling Interval*), the more power will be used, therefore shortening the battery life.

SAMPLING INTERVAL	BATTERY LIFETIME
5 Minute	3 Months
10 Minute	6 Months
30 Minute	1.5 Years
1 Hour	2 Years
2 Hours	2 Years

By default the Sampling Interval is set to 30 minutes.

To the left is a table with **estimated** battery lifetimes and *Sampling Intervals*. These numbers are only a rough estimate and will vary depending on the type of battery used and the conditions your system is running in. Note that any **Sentry** operating with a *Sampling Interval* of 1 minute or less will use up batteries in a matter of weeks! In situations where an interval of 5 minutes or less is necessary, it is strongly sug-

gested that a power cable is used to supply the **Sentry** with power.

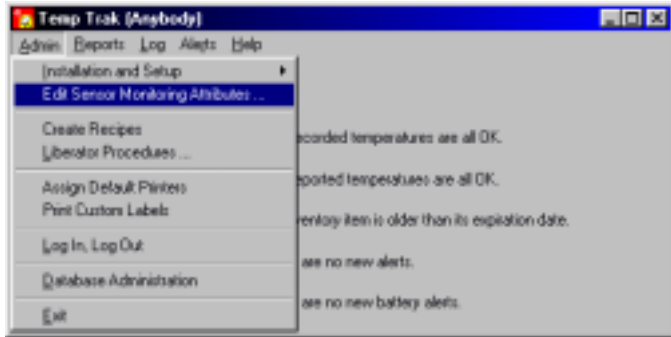
When choosing an appropriate *Sampling Interval* make sure to take into consideration what the sentry will be monitoring.



Step 9 — (...continued)

- Set the *Sensor Attributes* for each **Sentry**.

For each **Sentry** in your system you can define certain attributes such as *Normal Working Range*, *Hours of Operation*, *Alert Thresholds* and *Alert Types*. In addition you can give each temperature sensor on each **Sentry** a name that is appropriate, such as “Hot Holding Cabinet” or “Walk-In Freezer.” This can be done by selecting *Edit Sensor Monitoring Attributes* from the menu.



Step 10 — Network Configuration

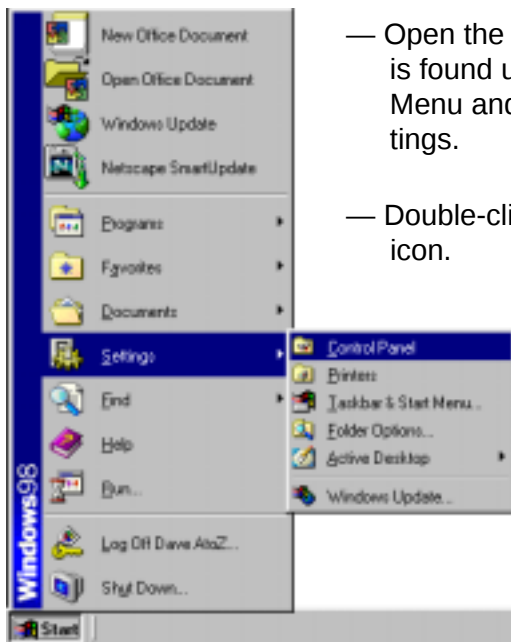
If your system involves only one Commander unit and this unit will be connected to the PC with the serial cable, you may skip this step and go to Step 11.

This step will assume that you are connecting to a preexisting 10BaseT compatible ethernet network. **If you are not sure if this is what you have, please contact your system administrator.**

SYSTEM ADMINISTRATORS
This step of the system setup will configure a pre-installed ethernet card to use the TCP / IP protocol.

- Install your ethernet card.

Follow the directions supplied by the manufacturer of your ethernet card to physically install the card and setup your PC to recognize it.



- Open the Control Panel. This is found under the Start Menu and then under Settings.

- Double-click on the *Network* icon.



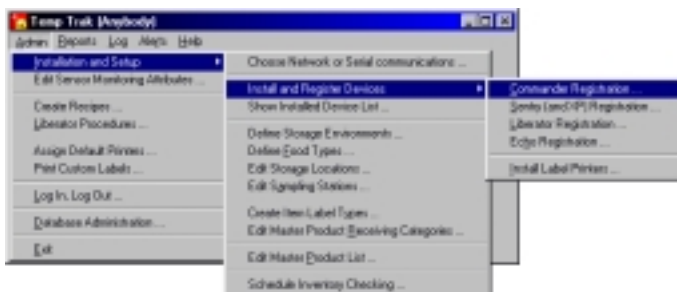
Step 10 — (...continued)

- If TCP / IP is not in the installed network component list and bound (denoted by the ->) to your ethernet card you must add a new protocol.

Adding the TCP / IP protocol

- Click *Add...*
- Select Protocol.
- Click *Add...*
- In the *Manufacturers* list select **Microsoft**.
- In the *Network Protocols* list select **TCP / IP**.
- Click OK.
- Select the TCP / IP protocol which is bound to your ethernet card from the installed network component list.
- Click *Properties*.
- Select the *IP Address* tab.
- Select *Specify an IP Address*.
- Enter the IP Address (such as 192.168.0.1)
(See your network administrator for this number.)
- Enter the Subnet Mask (such as: 255.255.255.0)
(See your network administrator for this number.)
- Click OK.
- Click OK.

- Restart your PC.
- Connect your PC to the network.
- Connect the **Commander** units to the network.
- In Temp Trak select *Commander Registration* from the menu.



- From the *Commander Registration* window select each **Commander** and click *Edit*.

Each Commander must be given a unique IP address.

- Select *Network Connection* and enter an IP Address (such as 192.168.0.2)
(See your network administrator for this number.)
- Configure the IP Address for each **Commander**.
- Select *Communications Setup* from the menu.
- Set CommType to *Network*.

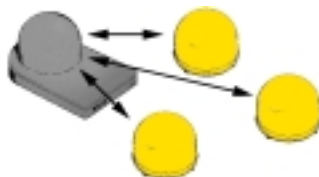


Step 11 - Locating the System

When placing the Temp Trak Commander and Sentry units within your facility you must follow a few simple rules.

Rule #1 — If possible, place the Sentry units in direct line of sight with a Commander unit.

Direct line of sight — means that between two units (a Sentry and a Commander) there are no physical objects obstructing their view of one another. While this is optimal, the Sentry and Commander units can communicate through interior, non-metallic walls if necessary.



Rule #2 — Place the Commander units “high” to avoid transmission blockages such as counters, cabinets, people, etc. The fewer obstacles that the radio waves must travel through, the better the range.

The Sentries, Commanders and Liberators all communicate over radio waves just like cell phones and cordless phones. As such, the Temp Trak equipment is susceptible to interferences that you would normally hear as static or bad reception. To reduce reception interference, try to limit the number of walls that the units must communicate through over long distances. For instance if you need to place a Sentry 100 feet away from the nearest Commander, try not to put more than one wall between them. In addition, stay away from metal hoods and metal cabinets since radio waves will not travel through metallic objects.

The range between Sentries / Liberators and Commander / Echos is dependent upon the physical environment in which the radio waves must travel. Range of up to 250ft is possible in an ideal line of sight environment, although typically ranges are roughly 100ft to 150ft in most cases. Liberator communication range is usually less due to physical blockage of the radio signal by the operator.

After you have located your Sentries and Commanders, verify that each Sentry is in communication with a Commander. Place the Sentry in the desired location and press the *attention* button. When you hear a series of short beeps the Sentry and Commander are communicating. If you are having trouble getting your system to communicate try placing the units above head height or try rotating the modules by 90 degrees.

Rule #3 — Use batteries in conjunction with AC power adapters.

The Sentry can be powered by either an AC adapter plugged into a wall outlet or by a 9V battery. The advantage of the 9V battery is that your Sentry can be placed virtually anywhere. The problem is that a 9V battery does not last forever, and depending on the configuration of your Sentry possibly only a month or two (*Please refer to Step 9 for more details on battery life*). Plugging your Sentry into the wall resolves this problem except when there are power outages. The best solution is to both install a battery in the Sentry and use the AC wall adapter. In this configuration, the Sentry will use the AC power as long as there is power to your building, but in the event of a power outage, the Sentry will automatically switch to the 9V battery. This will extend the life of the 9V battery and provide your system with uninterrupted power for a longer period of time.

During power outages your Commander units will not operate since they only run with an AC wall adapter. As long as your Sentries have a good battery installed they will continue to collect temperature data, store it to memory and when the Commanders come back on-line, upload the backlogged data so your Temp Trak system won't miss a beat.

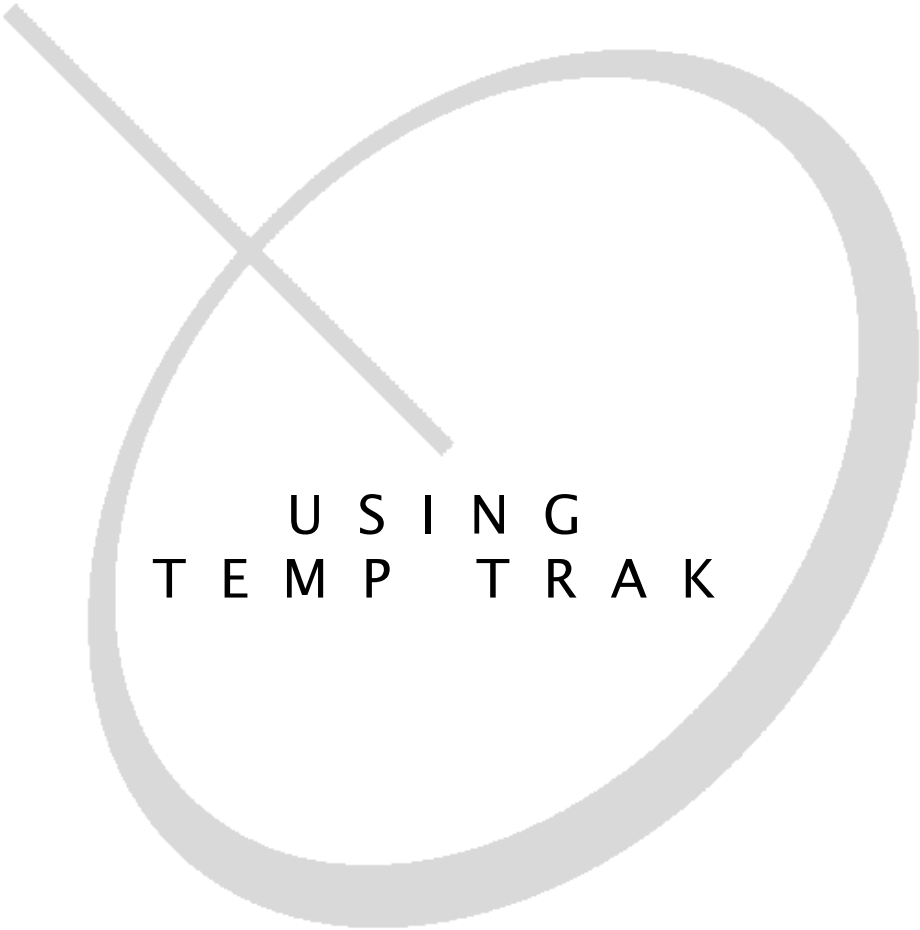
If for some reason your Sentries are running low on power, Temp Trak will let you know. The green indicator on the main screen next to the Battery Alerts button will turn red indicating that at least one Sentry has a low battery. Clicking on the Battery Alerts button will display a screen with more details on each Sentry that is reporting a low battery.

Rule #4 — Keep Sentry sampling intervals within a reasonable range.

As mentioned in Step 9 of this guide, the sampling interval for each Sentry has a direct effect on the lifetime of its battery. It also has a direct impact on the performance of the Temp Trak system as a whole.

For most applications the default setting of 30 minutes is usually enough precision, but if you find yourself needing more data you can reduce the sampling time. Beware that reducing the sampling interval on a number of Sentries could dramatically inhibit the performance of the system. It is a good idea to use the longest sampling interval as possible (based on your needs and the situation). For example, using a sampling interval of 5 minutes for a freezer is extremely excessive since freezers are usually insulated and fairly stable, while for a grill 5 minutes may be reasonable since the temperature of a grill may fluctuate dramatically over a short period of time.





U S I N G
T E M P T R A K

Overview of Temp Trak

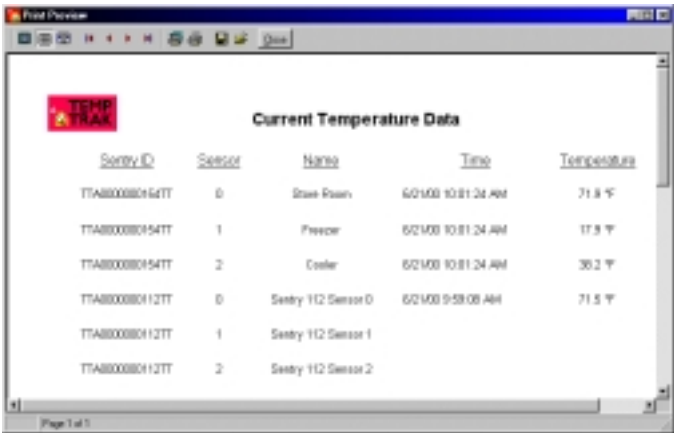
Temp Trak gives you the power to monitor the temperature of many parts of your operation – automatically.

By placing Sentries or Sentry XPs near your food or equipment to be monitored, Temp Trak will measure and log temperature readings day and night if need be of all the stationary points in your operation. Each Sentry unit has one on board sensor for ambient temperature readings and two external ports for K type thermal probes. With Temp Trak in place you can sleep easy knowing that your operation is under constant watch.

Reports

The Temp Trak system logs and stores a massive amount of data which can be somewhat overwhelming. Fortunately Temp Trak also provides an easy way to sort through all this information and view it in useful formats.

Temp Trak allows you to view the current status and history of any and all sensors in your operation. Selecting Current Temperature Report from the menu will display a list of all the sensors and their current temperatures.



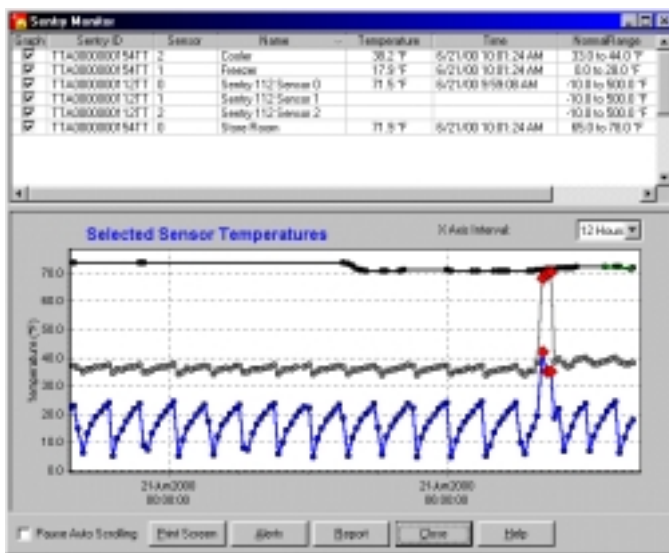
The screenshot shows a window titled "Print Preview" with a "Temp Trak" logo in the top left. The main content area is titled "Current Temperature Data" and contains a table with the following columns: Sentry ID, Sensor, Name, Time, and Temperature. The table lists six data points for different sensors, including a Steak House, Freezer, Cooler, and three Sentry 112 sensors.

Sentry ID	Sensor	Name	Time	Temperature
TTAB000000154TT	0	Steak House	6/21/03 10:51:24 AM	71.8 °F
TTAB000000154TT	1	Freezer	6/21/03 10:51:24 AM	17.9 °F
TTAB000000154TT	2	Cooler	6/21/03 10:51:24 AM	38.2 °F
TTAB000000112TT	0	Sentry 112 Sensor 0	6/21/03 9:58:08 AM	71.5 °F
TTAB000000112TT	1	Sentry 112 Sensor 1		
TTAB000000112TT	2	Sentry 112 Sensor 2		

Page 1 of 1

Reports — (...continued)

Selecting Review Temperature Sensor Data from the menu will display a plot of selected sensor data from the current time backwards in history.

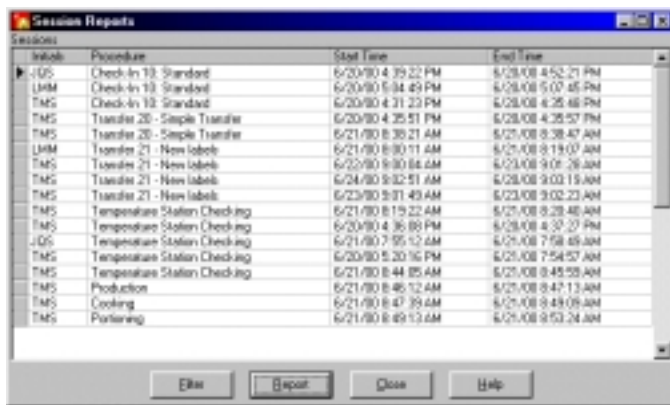


To make a report of the plotted data, click Report.

The screenshot shows the 'Print Preview' application window. It displays a table titled 'Temperature Data' with columns: SensorID, Sensor, Name, Time, and Temperature. The table lists 12 data points for the 'Store Room' sensor (T1A000800154T1) at various times on 21 Jun 2008. The temperatures range from 71.2 °F to 72.2 °F. The window includes a 'Print' button and a 'Page 1 of 15' indicator at the bottom.

SensorID	Sensor	Name	Time	Temperature
T1A000800154T1	0	Store Room	21 Jun 2008 18:01:24 AM	71.9 °F
T1A000800154T1	0	Store Room	21 Jun 2008 09:44:34 AM	72.1 °F
T1A000800154T1	0	Store Room	21 Jun 2008 09:30:50 AM	72.2 °F
T1A000800154T1	0	Store Room	21 Jun 2008 08:48:30 AM	72.2 °F
T1A000800154T1	0	Store Room	21 Jun 2008 08:42:52 AM	71.9 °F
T1A000800154T1	0	Store Room	21 Jun 2008 08:37:17 AM	71.8 °F
T1A000800154T1	0	Store Room	21 Jun 2008 08:31:41 AM	71.7 °F
T1A000800154T1	0	Store Room	21 Jun 2008 08:25:05 AM	71.6 °F
T1A000800154T1	0	Store Room	21 Jun 2008 08:20:29 AM	71.5 °F
T1A000800154T1	0	Store Room	21 Jun 2008 08:14:53 AM	71.3 °F
T1A000800154T1	0	Store Room	21 Jun 2008 08:09:19 AM	71.2 °F

As users operate Temp Trak, all of their actions are logged in the database and can be viewed by selecting Session Reports from the main menu.

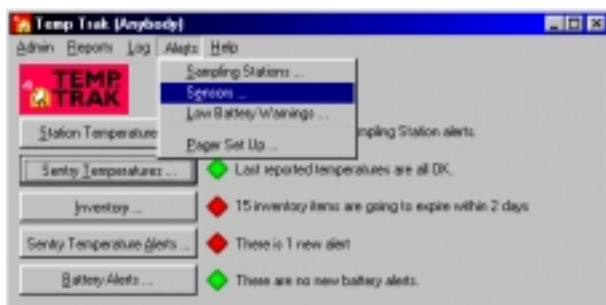


Initials	Procedure	Start Time	End Time
JQS	Check-In 10: Standard	6/20/00 4:35:22 PM	6/20/00 4:52:21 PM
LHM	Check-In 10: Standard	6/20/00 5:04:49 PM	6/20/00 5:07:45 PM
TMS	Check-In 10: Standard	6/20/00 4:31:23 PM	6/20/00 4:35:48 PM
TMS	Transfer 20 - Simple Transfer	6/20/00 4:35:51 PM	6/20/00 4:35:57 PM
TMS	Transfer 20 - Simple Transfer	6/21/00 8:38:21 AM	6/21/00 8:38:47 AM
TMS	Transfer 21 - New labels	6/21/00 8:00:11 AM	6/21/00 8:19:07 AM
TMS	Transfer 21 - New labels	6/22/00 9:00:04 AM	6/23/00 9:01:26 AM
TMS	Transfer 21 - New labels	6/24/00 9:02:51 AM	6/23/00 9:03:19 AM
TMS	Transfer 21 - New labels	6/23/00 9:01:49 AM	6/23/00 9:02:23 AM
TMS	Temperature Station Checking	6/21/00 8:19:22 AM	6/21/00 8:28:46 AM
TMS	Temperature Station Checking	6/20/00 4:36:08 PM	6/20/00 4:37:27 PM
JQS	Temperature Station Checking	6/21/00 7:55:12 AM	6/21/00 7:58:49 AM
TMS	Temperature Station Checking	6/20/00 5:20:16 PM	6/20/00 7:54:57 AM
TMS	Temperature Station Checking	6/21/00 8:44:05 AM	6/21/00 8:45:59 AM
TMS	Production	6/21/00 8:46:12 AM	6/21/00 8:47:13 AM
TMS	Cooking	6/21/00 8:47:39 AM	6/21/00 8:49:06 AM
TMS	Portering	6/21/00 8:49:13 AM	6/21/00 9:53:24 AM

Alerts

When configuring the Sentries, you had the opportunity to establish alerts and alert thresholds. In doing so you configured Temp Trak to know when monitored temperatures ventured out of normal operating range. In addition you also configured Temp Trak to know how many of these range violations constituted an actual alert.

During operation Temp Trak logs any and all alerts and allows you to address each one. Select Sensors from the Alerts menu item to display a list of alerts resulting from temperature sensors which have measured too many out of range temperatures.



Alerts — (...continued)

Clear	Sensor ID	Sensor Name	Time	Temperature	Normal Range
...	1A0000007541	Freeze	25-Jan-2000 08:11:42 AM	42.1 F	30°Fo-26.6 F

Clear	Sensor ID	Sensor Name	Time	Temperature	Normal Range	Correction Action	Acknowledged Time	Done
...	1A0000007541	Freeze	25-Jan-2000 08:04:54 PM	58.8 F	20°Fo-44.6 F	Open/Close the lid	25-Jan-2000 09:06:11 PM	1 MO
...	17A00000076477	Code	25-Jan-2000 08:10:32 PM	47.3 F	33°Fo-66.6 F	Called the cops	25-Jan-2000 08:25:44 PM	1 MO

The top portion of this window lists the alerts that have occurred but have not been addressed by a user. To clear an alert, click on the ‘...’ next to the alert. You will be prompted to select an action to take on the alert that would show that it was taken care of. The list of actions is editable and can be customized to anything the user feels necessary.

When the alert is cleared it is moved automatically to the bottom half of the window where it remains for historical purposes. The same alert monitoring feature is also available for Sampling Stations, and Low Battery Warnings.

U S I N G T E M P T R A K

Temp Trak Tale I

— Basic Monitoring —



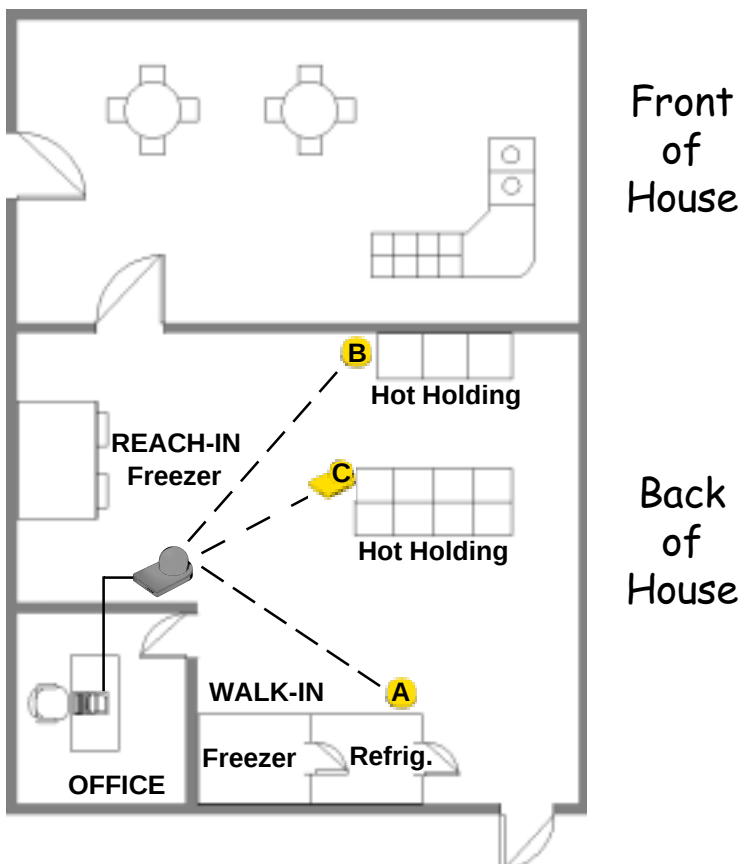
1 — Commander 

2 — Sentries 

1 — Sentry XP 

Overview

A restaurant manager, Patti, would like to monitor the temperature of a combination walk-in refrigerator and freezer and a hot holding cabinet she uses to keep her side dishes warm. The Temp Trak System will allow her to inspect current temperatures of monitored devices and also easily review accumulating temperature trends.



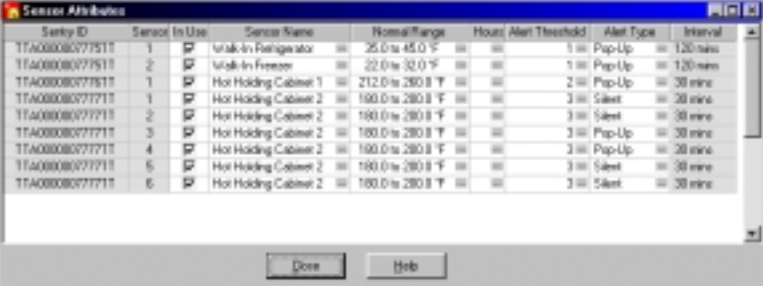
Positioning the Commander unit

Patti first locates the Commander unit outside of her back office on a wall that overlooks as much of the kitchen as possible.

Locating the Sentries

By standing in each potential Sentry spot, Patti can look back to see if the grey dome of the Commander is visible. If it is, then she knows that this is a good spot. If not, she repositions the Commander until she can see it. By repeating this process for each location she can be confident that each Sentry is in *direct line of site* of the Commander. While direct line of site is optimal, the Sentry and Commander units may communicate through interior, nonmetallic walls. To verify the units are communicating, press the attention button on the Sentry or Sentry XP and listen for a series of beeps.

Monitoring



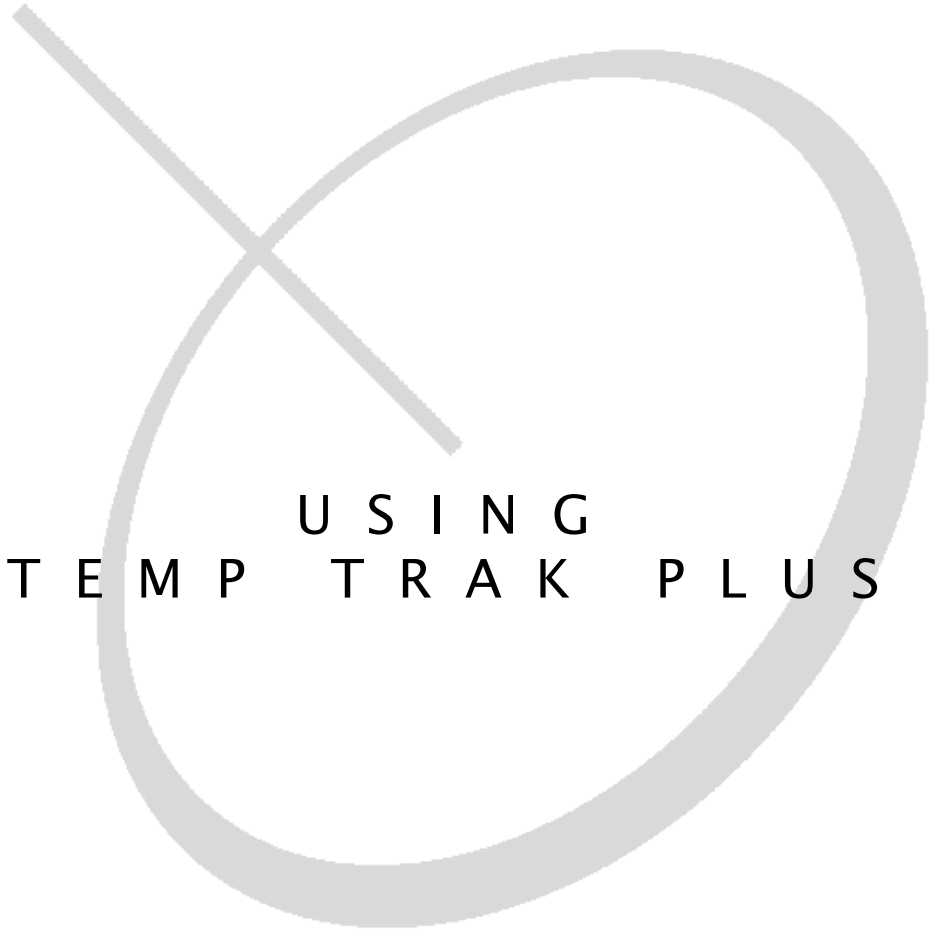
Sentry ID	Sensor In Use	Sensor Name	Normal Range	Hours	Alert Threshold	Alert Type	Interval
TTA000080777511	1	Walk-In Refrigerator	25.0 to 45.0 °F		1	Pop-Up	120 mins
TTA000080777511	2	Walk-In Freezer	22.0 to 32.0 °F		1	Pop-Up	120 mins
TTA000080777511	1	Hot Holding Cabinet 1	212.0 to 280.8 °F		2	Pop-Up	30 mins
TTA000080777711	1	Hot Holding Cabinet 2	180.0 to 280.8 °F		3	Silent	30 mins
TTA000080777711	2	Hot Holding Cabinet 2	180.0 to 280.8 °F		3	Silent	30 mins
TTA000080777711	3	Hot Holding Cabinet 2	180.0 to 280.8 °F		2	Pop-Up	30 mins
TTA000080777711	4	Hot Holding Cabinet 2	180.0 to 280.8 °F		3	Pop-Up	30 mins
TTA000080777711	5	Hot Holding Cabinet 2	180.0 to 280.8 °F		3	Silent	30 mins
TTA000080777711	6	Hot Holding Cabinet 2	180.0 to 280.8 °F		3	Silent	30 mins

Hot Holding Cabinet

Patti would like to monitor her hot holding cabinets just during normal business hours (since this is the only time these appliances will be in use). Patti configures Sentries B and C (*Step 9 in this guide*) based on the table above. She uses the *Setup* button under the *Sensor Attributes* menu item to establish minimum and maximum temperature values for each sensor on each **Sentry**.

Walk-In Refrigerator & Freezer

These appliances need to be monitored 24 hours a day but require less data than the other areas. Patti determines that she will set her *sampling interval* for both sensors on Sentry A to 2 hours. In the Temp Trak program, Patti configures Sentry A and establishes minimum and maximum temperature values for each sensor. 📡



U S I N G
T E M P T R A K P L U S

Overview of Temp Trak Plus

Temp Trak Plus gives you the power to track inventory items throughout their entire life-span. By scanning items as they are moved from one location to another, Temp Trak Plus can monitor each item and determine whether it has been out of its normal temperature range for too long.

With the Liberator Temp Trak Plus can expand your monitoring world to include mobile points in your operation. Go off line with the Liberator and log temperature after temperature without having to be in constant communication with a Commander. When you return from your mission, the Liberator will upload all the data you took to the nearest Commander.

Operators log in to the system via the program or a Liberator using a user ID or PIN number. If you are setting up the system, assign a four digit number to each person who will be using your system. During operation all actions and events are logged and associated with the ID or PIN number of the user currently logged into the system. Be sure each user logs out of the system when they are done with their operation, otherwise actions and events will be associated with the wrong person. If you are a user and the system has already been setup, refer to your system administrator or manager to be assigned an ID or PIN number.

Tracking of the inventory usually starts when the items are received from shipping. Each item is entered into the system by scanning the manufacturer's bar code with the Liberator. On entering the system, Temp Trak Plus will print a new bar code label to be placed on the new item. From this point forward, the normal manufacturer's bar code is no longer utilized.

Once your inventory has been received and entered into the Temp Trak Plus, use the Liberator to let the system know when inventory moves from one storage location to another.



The Basics of ^{the} Liberator

Scan the Entire Bar Code

- Pull the trigger of the Liberator to activate the scan beam.
- Your scan beam must cross every bar and space on the symbol.
- The larger the symbol, the farther away you should hold the scanner.
- Hold the scanner closer for symbols with bars that are close together.
- A short, high tone beep indicates a good decode.



Hold at an Angle

Do not hold the Liberator directly over the bar code. Laser light reflecting *directly* back into the Liberator from the bar code is known as specular reflection. This strong light can “blind” the Liberator and make decoding difficult. The area where specular reflection occurs is known as a “dead zone.”

You can tilt the Liberator up to 65° forward or back and still achieve a successful decode.

Simple practice quickly shows what tolerances to work within.

Getting Around the Keypad

If nothing appears on the LCD screen of the liberator, press the trigger. This will *wake up* the Liberator.

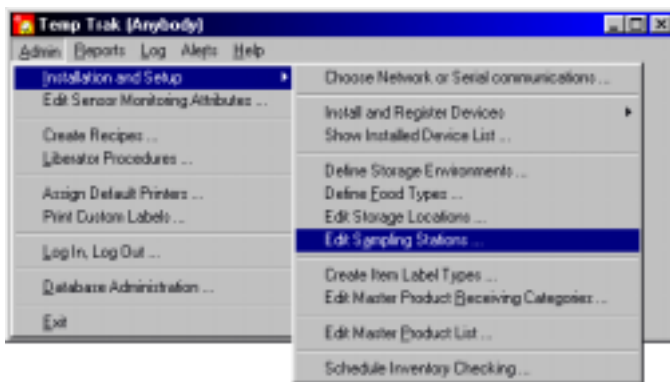
Use the up and down arrows to change menu items. To select an item, press the *Enter* key.

To back out of a menu item, press the *FUNC* key and then press the *BK* key.

For more details on using the Liberator keypad see the appendix.

Sampling empowers the user of Temp Trak to take temperature samples of anything — anytime! All you have to do is configure Temp Trak to recognize an area or item in your facility as a sampling station (items on a salad bar for instance). Then with the help of the Liberator, you can take temperature readings of your sampling station anytime you would like, and Temp Trak will record all the data. No need for clip boards or note pads.

- Select *Edit Sampling Stations* from the menu.



- Create a new sampling station or edit an existing one and print a station label.
Here you can assign a name to the sampling station and configure a normal operating temperature range.
- Attach a thermal probe to the Liberator.
- Log into the Liberator.
Select *Login* on the Liberator menu and enter your ID.
- Enter process number 30 (Sampling Mode).
Use the trigger on the Liberator to accept the temperature and send the data to the system. The Liberator will prompt you for the next reading.
- Exit to the main menu of the Liberator.
Press the FUNC key then press the BK key.



Temp Trak Tale II

— Sampling Stations —



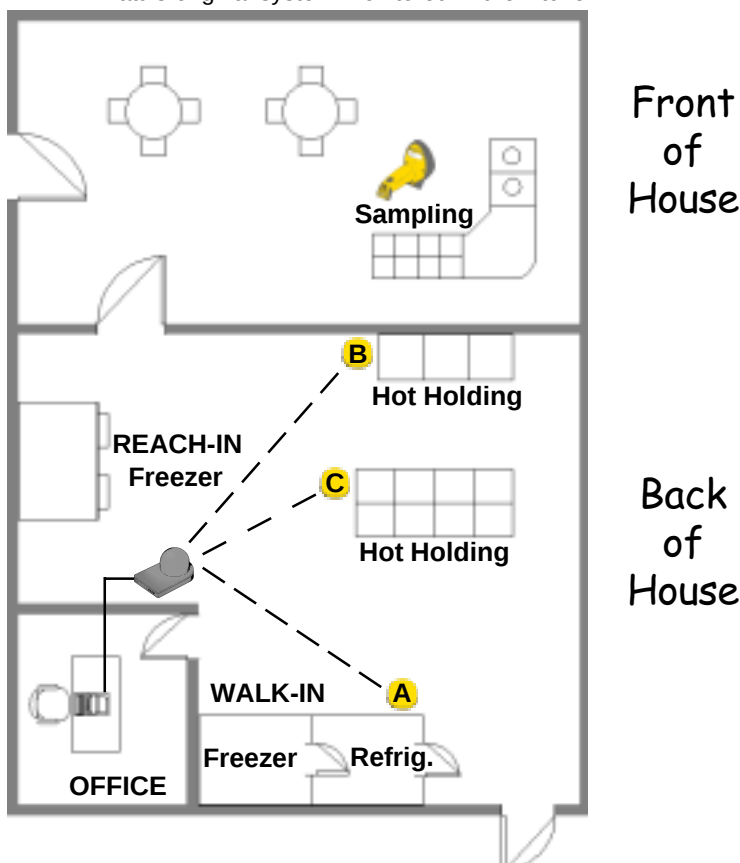
1 — Commander 

3 — Sentries 

1 — Liberator 

Overview

Omar was expanding his franchise of all you can eat buffets and had bought Patti's old delicatessen. In the deal Omar inherited Patti's Temp Trak system. While Omar understood the advantages of the current system, he also realized that his needs were going to be different. He wanted to expand the system to periodically monitor the food in the dining area as well as what Patti's original system monitored in the kitchen.



Temp Trak to Temp Trak Plus

Temp Trak Plus includes a Liberator unit which is a hand-held data acquisition device which allows the user the freedom to be mobile and record temperature data from virtually anywhere. The Liberator is ideal for situations where a Sentry may be impractical or overbearing, perfect for buffet counters, salad bars and random temperature gathering.

How to Sample

Omar placed a bar code label printed from the Auto-Labeler next to each of the four dishes he wanted to monitor on the buffet table. An operator could then scan the bar code which identified the dish and take a temperature reading — at any time! The Temp Trak system then automatically would log the bar code information and it's associated temperature for later analysis.

Setting Up Temp Trak Plus

To get this up and running, Omar had to first setup his Auto-Labeler label printer (*Step 8 in this guide*) and then configure the software to be aware of his new setup. In the Temp Trak program Omar selected the *Editing Sampling Stations* menu item to add the four new stations to the list. For each station he could specify a name and an appropriate temperature range for alerting the user when an item was out of range. In addition, Omar printed a combination of labels and placards to be posted to identify the particular stations (*see the appendix for more details on placards*). Omar placed his placards in the kitchen area, while for the dinning room he printed individual labels that he could discreetly affix to the edge of the buffet table.

Using the Liberator

When sampling the food on his salad bar, Omar first logs into the Temp Trak system via the Liberator and then inputs process 30 at the liberator prompt. The liberator prompts him to scan a sampling station code, which he does. The Liberator then tells him to take a temperature. Omar places his temperature probe into his first pan and waits for the temperature to stabilize. During the reading, the liberator tells Omar wether or not the food being measured is within normal range. When he's satisfied with the temperature reading, Omar pulls the trigger and the reading is locked in and sent to the PC. The Liberator then prompts him for the next station.

Omar repeats this procedure of scanning station labels and taking temperatures until he is finished. He presses the FUNC key and then the BK key to back out to the main menu. 📡



Tracking Inventory

Temp Trak gives you the power to track inventory items throughout their entire life-span. By logging (or scanning) items as they are moved from one location to another, Temp Trak can monitor each item and determine whether it has been out of its normal temperature range for too long.

Shelf life of your inventory varies and depends on food type and where it is being stored. The user needs to define storage environments and then assign them to storage locations. Think of it as describing the different generic types of places inventory can be stored for a period of time and then assigning a specific location to be similar to that type. The type of storage environment is defined in Temp Trak and has characteristics that tell Temp Trak how long any type of food can stay there.

Based on these assignments, Temp Trak then calculates the expiration date when an item is received into a storage location. If the storage location of the product is changed (i.e. transferred) a new expiration date is calculated. The operator has the option to print a new Temp Trak label with the new expiration date.

If a new label is printed, the old label, and bar coded Temp Trak ID number, become inactive. The new label with a new Temp Trak ID number is now used to track the item.

If no new label is printed, the old label remains active, but the expiration date on the label may no longer be correct. The PC will track the updated expiration date correctly. If you do not want to reprint labels you may want to omit the expiration date from your labels.

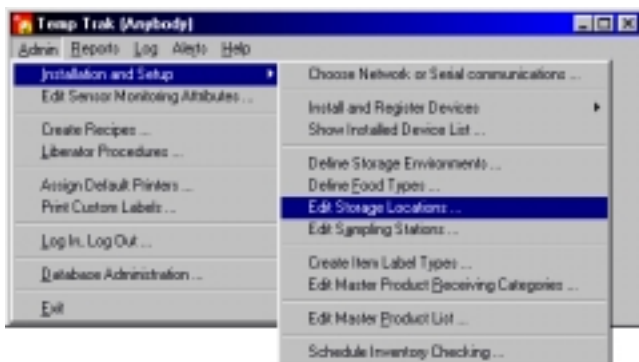
- Select *Define Storage Environments* from the menu.



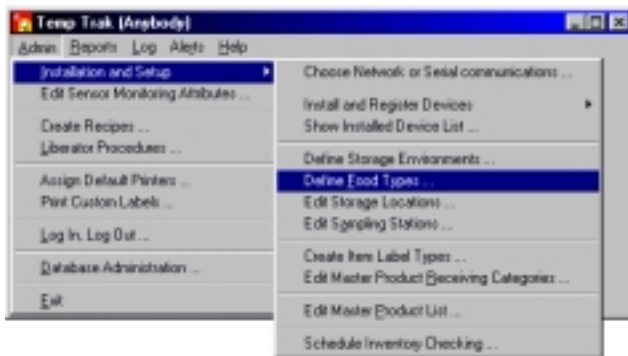
- Create a new storage environment or edit an existing one.

Here you can assign a name to the storage environment and configure a normal operating temperature range as well as a default expiration date.

- Select *Edit Storage Locations* from the menu.



- Create a new storage location or edit an existing one.
Here you can assign a name to the storage location and a storage environment type.
- Print a storage location label or a placard of all the storage location bar codes.
- Select *Define Food Types* from the menu.

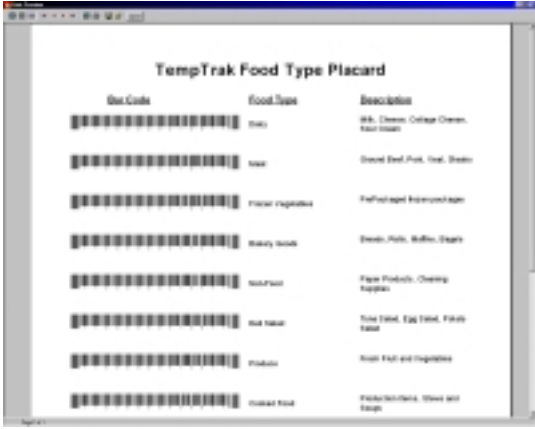


Tracking Inventory — (...continued)

Food Types are used when adding a specific item to be received into your operation. Each item that is received is assigned a food type so that it may take on the predefined rules of that food type.

When defining a food type, you specify maximum storage times for each of the predefined storage environments in your operation. In this way Temp Trak will automatically know how long each item is allowed to stay resident in a storage location without spoiling.

- Create a new food type or edit an existing one.
Here you can assign a name, description and default expiration times to the food type.
- Print a placard of all the food type bar codes.

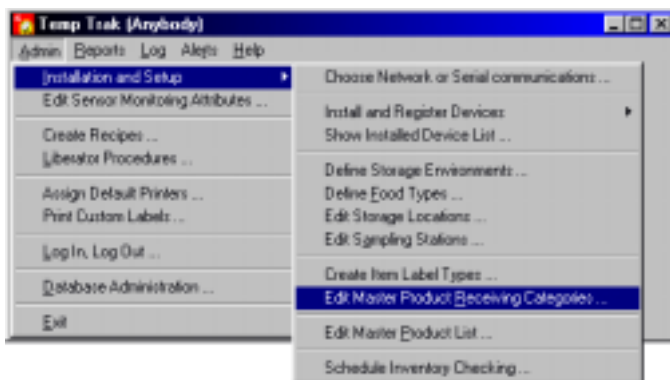


Bar Code	Food Type	Description
[Barcode]	Meat	Meat, Chicken, Chicken, Chicken, Chicken
[Barcode]	Meat	Ground Beef, Pork, Veal, Chicken
[Barcode]	Protein Vegetables	Protein Vegetables, Protein Vegetables
[Barcode]	Meat, Poultry	Meat, Poultry, Chicken, Chicken
[Barcode]	Meat/Poultry	Egg, Poultry, Chicken, Chicken
[Barcode]	Meat, Poultry	Turkey, Turkey, Turkey, Turkey
[Barcode]	Protein	Protein, Protein, Protein, Protein
[Barcode]	Protein, Poultry	Protein, Poultry, Protein, Poultry

To aid in setting up your system, refer to the Workbook section in the Appendix. There you will find blank worksheets to fill out while you are planning your system. You may find it helpful to fill these sheets out and carry them with you as you install components and setup the software.

Tracking of the inventory usually starts when the items are received from shipping. Each item is entered into the system by scanning the manufacturer's bar code with the Liberator. On entering the system, Temp Trak will print a new bar code label to be placed on the new item. From this point forward, the normal manufacturer's bar code is no longer utilized by Temp Trak.

- Select *Edit Master Product Receiving Categories* from the menu.



- Create a new category or select an existing one.
Here you can assign a name to the category, enter a description, and configure options that will prompt the user when an item is received for the first time.
- Log into the Liberator.
- Enter process number 10 (Check-In 10: Standard).
- Follow the Liberator prompts to scan the manufacturer's bar code.
- Enter the number of labels to print (if prompted).
For food items that can be split into smaller packages Temp Trak allows you to print a label for each of the packages.
- Exit to the main menu of the Liberator.

Transferring & ^{the} Liberator

Once your inventory has been received and entered into the Temp Trak system, use the Liberator to let Temp Trak know when inventory moves from one storage location to another.

- Log into the Liberator.
- Enter process number 20 (Transfer 20 - Simple Transfer).
- Follow the Liberator prompts to scan the new storage location from the storage location placard.
- Scan the Temp Trak labels of all the item being transferred to the new storage location.
- Exit to the main menu of the Liberator.

Process #20 is a predefined procedure which does not specify that a new label is to be printed each time a product is moved from one storage location to another. If you would like to have a new label printed each time use predefined procedure #21 (Transfer 21 - New Labels).

Liberator — Stand Alone Mode

During normal operation the Liberator is in constant communication with the Temp Trak system. This requires the operator to be range of a Commander or Echo Unit. If this is not possible you can switch the Liberator into stand alone mode. In this mode of operation the Liberator will prompt the user to scan a Temp Trak bar code and take a temperature reading. This will repeat as long as desired. When the operator returns to within communication range of the Temp Trak system, the user can select "Upload" to upload all of the Liberator's archived data.



Overview

At this point Omar was fairly familiar with his Temp Trak system and decided to expand to track inventory. Basically, he wanted to track cheese, ground beef and a few basic vegetables as they made their way through his restaurant to verify his system maintains the proper temperature of his product.

Setting Up Temp Trak

Temp Trak gives you the power to track inventory items throughout their entire life-span. By logging (or scanning) items as they are moved from one location to another, Temp trak can monitor each item and determine whether it has been out of its normal temperature range for too long.

Temp Trak does not inherently know what the normal temperature range is for any one item or what types of storage locations exist in any one facility. You, the user, need to provide Temp Trak with this basic information.

Defining Storage Environments

A Storage Environment is a generic, physical location where an item from your inventory can reside, even if only for a few minutes.

Now Omar happened to have two refrigerators, but he only has one location type to describe both since they both ran within the same temperature range. In fact operating temperature range and default expiration times are what distinguish one environment from another. Dry Storage was a type he used to describe his pantry and kitchen shelf storage. The temperature ranges for these areas was room temperature and anything stored in these areas that could spoil would spoil in only an hour. Omar set up his storage environment as follows:

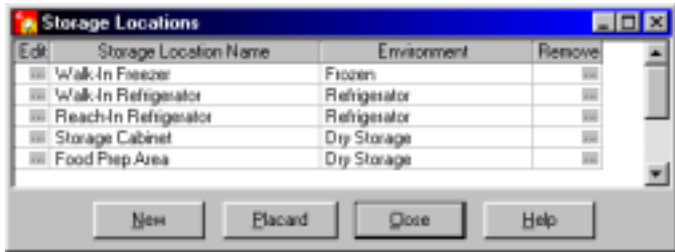
A screenshot of a software window titled "Storage Environments". It contains a table with columns: Edit, Name, Min. Temp, Max. Temp, and Default Expiration. There are three rows of data: Frozen, Refrigerator, and Dry Storage. Below the table are three buttons: New, Close, and Help.

Edit	Name	Min. Temp	Max. Temp	Default Expiration
	Frozen	0.0 °F	0.0 °F	90 Days
	Refrigerator	34.0 °F	45.0 °F	4 Days
	Dry Storage	60.0 °F	65.0 °F	1 Hour

Temp Trak Tale III – (...continued)

Editing Storage Locations

After defining the different types of storage environments, Omar needed to configure Temp Trak with the specific storage locations that he had. In doing so he assigned an environment to each specific location:



Defining Food Types

Food Types are similar to storage environments in that they are a generic. But instead of describing places of storage, food types describe different classifications of food such as Dairy, Beef, Bread, etc. Each item in your inventory should be classified with a food type. In Omar's case he defined the following food types:



Product Categories

Product Receiving Categories are classifications for specific inventory items (like food types) but instead of describing what the item is, categories describe how to treat it when it is received into the system. For instance on receipt of an item, a temperature reading can be required, labels can be printed and if the item can be split (i.e. a pallet of beef), multiple labels can be printed. The receiving categories define how the Liberator will prompt the user when using the receiving procedures 10 - 19.

Tracking Inventory

Tracking of the inventory usually starts when the items are received from shipping. Each item is entered into the system by scanning the manufacturer's bar code with the Liberator. On entering the system, Temp Trak will print a new bar code label to be placed on the new item. From this point forward, the normal manufacturer's bar code is no longer utilized by Temp Trak.

Receiving Inventory

At the receiving dock, Omar's number one employee, Mary stands among the new shipment of boxes. With her Liberator in hand, she logs into the Temp Trak system and begins her receiving procedure #10.

She scans the bar code on her placard that reads Walk-In Freezer. Looking around, Mary finds all the boxes destined for the freezer and starts to scan. For each box she scans a label is printed on her Auto—Labeler printer. Mary affixes this new Temp Trak label on the box she has just scanned and places the box on her cart.

When she scans the box labeled frozen peas, the Liberator prompts her to enter a number of labels to be printed. She realizes that in this box there is a dozen bags of frozen peas. Each one of these bags is to be tracked individually, so she enters 12 and the Auto—Labeler hums away. She affixes one label on each bag and replaces them in their original box for easy storage.

Scanning the box of hamburger patties initiates a required temperature reading. Mary uses the temperature probe on the Liberator and takes 3 readings, since this is what Omar had configured Temp Trak to require for all boxes containing hamburger meat. Once Mary completes the receiving procedure for all new boxes of food, she logs out of Temp Trak and stores everything in their appropriate areas.

Transferring Inventory

Mary's friend, Evan works as a cook at Omar's all you can eat buffet. In the morning Evan's job is to prepare the kitchen for the afternoon lunch.

One of his first duties is to move some of the hamburger meat from the walk-in freezer to the walk-in refrigerator to thaw. Evan picks up the Liberator and logs in using the ID code that was assigned to him. He enters item transfer procedure #20 into the Liberator to enter the transfer mode. The predefined transfer procedure will guide Evan through moving the meat from one storage location to another.

Evan is prompted to scan the new location from the placard Omar has posted next to the walk-in freezer and walk-in refrigerator. Evan scans the bar code next to Walk-In Refrigerator, since this is where the meat is destined. The Liberator then prompts him to scan the Temp Trak label of each item he is going to transfer to the refrigerator.

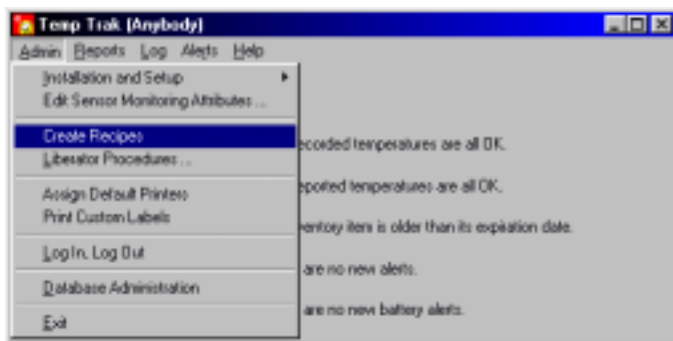
When Evan is finished, he logs out of the system and returns the Liberator secure in the knowledge that Temp Trak is on the job.



Creating Recipes

Recipes in Temp Trak are no different than regular cooking recipes; procedures to create a food item that is created from a number of combined foods. By creating a recipe in Temp Trak and telling the system what is in it, Temp Trak will then know how to associate the items to the recipe.

- Select *Create Recipes* from the menu.



- Create a new recipe or edit an existing one.

Here you can assign a name to the recipe, enter a description or special instructions, define the cooking requirements and tell Temp Trak which food items are used in the recipe.

- Print a recipe placard.



Producing A Recipe

- Log into the Liberator.
- Enter process number 40 (Production Procedure).
- Follow the Liberator prompts to scan the recipe bar code and all the ingredients from the recipe placard.
- Scan the *Last Ingredient* bar code after scanning the last ingredient's bar code.
- Print the production label.
- Exit to the main menu of the Liberator.

Cooking A Recipe

- Log into the Liberator.
- Enter process number 50 (Cooking Procedure).
- Follow the Liberator prompts to scan the production bar code and take a temperature reading.
- Validate the terminal temperature reading.
If the temperature has reached the terminal temperature of the recipe the Liberator will display OK, otherwise it will display REJ. Each time a temperature reading is made, it is logged into the system and recorded.
- Exit to the main menu of the Liberator.



Portioning A Recipe

After producing and cooking a recipe (chili for example) you may want to divide the initial batch into smaller portions and store away in a refrigerator for later use. Temp Trak Plus allows you to do this and continue tracking each of the portions separately.

- Log into the Liberator.
- Enter process number 60 (Portioning Procedure).
- Follow the Liberator prompts to scan the production bar code and the bar code of the storage location where each of the smaller portions will be stored.
- Enter number of labels to print (one per container).
- Exit to the main menu of the Liberator.

Spoilage & Consume Procedures

To declare an item spoiled or consumed and ultimately remove it from the Temp Trak system, use procedures 90 and 91.

- Log into the Liberator.
- Enter process number 90 (Spoilage Procedure) or Enter process number 91 (Consume Procedure).
- Scan the production bar code of the item to be declared spoiled or consumed.
- Exit to the main menu of the Liberator.

Temp Trak Tale IV

— Recipes —



Overview

Omar decided that to complete the total Temp Trak experience, he needed to track produced food products such as chili, soup and chili from the very beginning. The ability to track the individual components of one recipe was very powerful. If he had made a batch of chili which had ground beef in it that had been recalled, he could trace the meat back to its original box. From there he could trace forward and find all the other composite foods that had used this particular box of meat. With Temp Trak Omar could trace, backwards and forwards, everything he used and identify any out of date ingredient he had happened to use.

Working with Recipes

A recipe describes a food product that is created from a number of combined ingredients. By creating a recipe in Temp Trak and telling the system what is in it, Temp Trak will then know how to associate the items to the recipe.

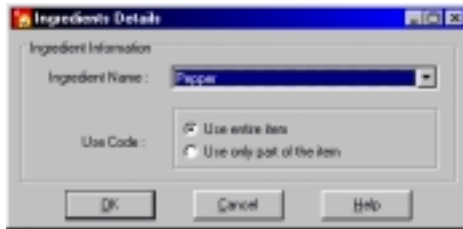
Creating Recipes

Omar set his head chef, Tim, on the task of configuring Temp Trak with all the recipes he used on a daily basis. Tim started with his chili...

A screenshot of the 'Edit Recipe' dialog box in the Temp Trak Plus software. The dialog has a title bar 'Edit Recipe'. It contains several fields and sections: 'Recipe Name' with the text 'Chili Con Carne'; 'Description or Special Instructions' with a list: 'Makes 10 Servings: 1 pound Onions, 1 Tbs Vegetable Oil, 2 lbs ground beef (Temp Trak Item), 2 lbs tomatoes'; a section for 'Cooking' with a checked 'Cooking is required' option, a 'Terminal Temperature' field set to '165', and an unchecked 'Cooking is not required' option; a 'Food Type' dropdown menu set to 'Dairy'; and an 'Ingredients' section with a table. The table has two columns: 'Name' and 'Use Code'. It lists 'Beef Patties' with 'All' and 'Pepper' with 'Some'. At the bottom are buttons for 'Add', 'Remove', 'Print', 'OK', 'Cancel', and 'Help'.

Temp Trak Tale IV – (...continued)

Tim added each of his ingredients one by one.



The use code is to let Temp Trak know if any of the food in the package is left unused. If there is any left over, the use code is some and Temp Trak continues to track the unused portion.

When it was time for Tim to actually make his chili, he took his Liberator and logged in. By entering production procedure #40, he was ready to start making the chili. The Liberator prompted Tim to scan the recipe bar code on the chili placard and then each of the ingredients used. When Tim reached the last ingredient in the list, he scanned the Last Ingredient bar code. This caused Temp Trak to print out a new label to be associated with the chili as it cooked.

Cooking Recipes

While the chili cooked, Tim monitored its temperature to determine when it was done. Already logged into Temp Trak via the Liberator, he entered Cooking Procedure #50. Tim was then prompted to scan the newly printed production label and to take a temperature reading of the chili. Tim continued this process every half hour or so until the temperature he read was equal to the terminal cooking temperature of the chili denoted by the OK displayed on the Liberator.

When Recipes Are Done (Portioning)

Once the chili was fully cooked, Tim needed to portion it into several containers and store it in the refrigerator for later use. To do this in Temp Trak Tim entered the portioning procedure #60 into the Liberator and followed the prompts. Temp Trak asked him to scan the production code of the chili so Temp Trak would know what Tim was going to portion out. He then was prompted to scan the code for the destination location of the final portions of chili. Temp Trak knew what he was going to split up and where it was all going so it directed Tim to enter the number of labels to be printed. Tim entered four since he had made his usual two-gallon pot of chili and liked to store it in half-gallon jugs. Temp Trak then printed out his labels, Tim affixed them to the pans of chili and finally he stored them in the refrigerator for later use. 🍲

A P P E N D I X

Liberator — Keypad Operation

To enter numeric characters, press the number key on the keypad. A high-pitched click lets you know that the entry was accepted.

To enter alpha characters, press the Mode key once to put the Liberator in Alpha Mode. Press the numeric key with the letter you want above it - once for the first letter, quickly twice for the second letter, or quickly three times for the third letter. Every time you press the key, you hear a low-pitched click to let you know that the entry was registered but not accepted yet, and a high-pitched key click after a second or so to let you know that the entry was accepted.

You can go from one key to another before hearing the high key click (i.e., from the "a" to the "d"), but you must first hear the high click to go to a different letter on the same key (i.e., the "a" to the "c").

To return to numeric mode, press the Mode key again.

To put a decimal point into numeric data, type in the numbers before the decimal point. Then press the mode key, press the decimal, and press the mode key again. Now resume typing in the numeric entry.

Menu Options

1. Login —
Log into the Temp Trak System. All operations will be associated with the Login ID entered.
2. Stand Alone —
Allow the user to roam and collect data without having to communicate to a commander unit.
3. Upload Data —
Upload all data to the Commander collected during Stand Alone operations.
4. Attention —
Used during Liberator Registration
5. Clear Data —
Erases all the data collected during Stand Alone operation.
6. Version —
Displays the version number of the Temp Trak System
7. Reset —
Resets the Liberator software but does not affect data stored on the PC.

Liberator — Troubleshooting

Nothing happens when you follow the operating instructions?

You Should

- Check for loose cable connections at the scanner, AC power supply, or host device.
- Check the Liberator's battery.
- Check the symbol to make sure it is not defaced.
- Try scanning similar symbols of the same code type.
- Be sure you're within the proper scanning range.

The Liberator emits transmit errors (error beeps after decode)?

You Should

- Check that the Liberator is powered up and that its cable connections are secure.
- Be sure the cable connection to the host is secure.

Liberator — Maintenance

- Do not allow any abrasive material to touch the Liberator window.
- Remove any dirt particles with a damp cloth.
- Wipe the Liberator window using a damp cloth, and if necessary, a non-ammonia based detergent.
- Do not spray water or other cleaning liquids directly into the Liberator window.
- Change the battery when it no longer provides 8 hours of scanning in typical usage. This should occur after 2 years or more, depending on your daily use.

Liberator — Changing the Battery

Removing the Battery

1. Slide the battery compartment release switch down.
2. Remove the battery compartment cover.
3. Slide the battery towards the bottom of the Liberator.
4. Pull the bottom of the battery out and away from the Liberator.



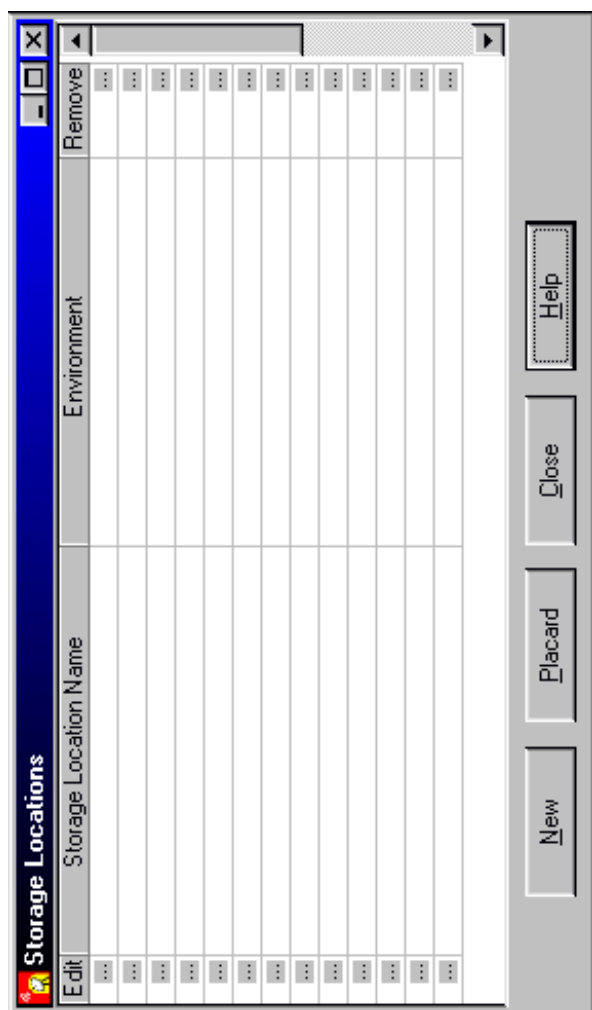
Replacing the Battery

1. Seat the battery fully in the Liberator.
2. Slide it up in the handle.
3. Replace the battery compartment cover.
4. Slide the release latch up to secure the cover in place.

Note: Replacement battery part number is: TTP-L-112.

As food for thought, here's a small list of other things you could track with your Temp Trak system:

refrigerators	buffet foods in service
walk-ins	salad bars
freezers	sandwich stations
cold-holding systems	dipping cabinets for ice cream
cold-holding transporters	beverage dispensers
blast chillers	iced tea makers
refrigerated trucks	coffee makers
compressors	espresso makers
deep-fat fryers	pizza delivery pouches
griddles	air temperatures at drive-up windows
grills	ambient temperatures in kitchens
kettles	external temperatures for efficiency calculations of HVAC units
wood-fired ovens	HVAC output
hot-holding systems	exhaust from range foods
hot-holding transporters	hot water heater
ovens	dishwasher water temp
ranges	and more!
cooking foods	
cooked foods ready to serve	



**Sampling Stations**

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

New

Placard

Close

Help