



Invisible Service Technician

INVISIBLE SERVICE TECHNICIANS, LLC

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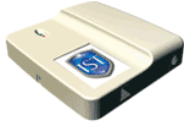
*Invisible Service Technician* Monitoring System

# Owner's Manual for Air Conditioning Units and Heat Pumps

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## Introduction



### Product Description

The *Invisible Service Technician* Monitoring System is a device that combines real-time performance data from all critical operations of a forced-air heating and air-conditioning system with ongoing instantaneous service support from Invisible Service Technicians, LLC to the installing HVAC contractor, property owner, and/or facilities maintenance personnel. The *Invisible Service Technician* works with new or existing residential and light commercial HVAC systems and must be installed by a trained service technician.

### Detect

The *Invisible Service Technician* continuously tracks specific equipment operation through advanced sensor technology. When any sensor reading is detected outside the recommended performance parameters or an LED trouble code is present, an alarm is triggered and the *Invisible Service Technician* dials a toll free number and transmits a full report of current conditions to the IST Data Center. If the phone number is busy, the call is retried until successful.

An “alarm” may result from such conditions as:

- The indoor temperature is outside the comfort range
- The supply air “Heat Rise” or “Cool Drop” is out of limits
- Airflow is restricted due to a dirty or inappropriate filter
- The cooling coil drain pan water level is too high
- An ultraviolet light has failed
- A fault-indicating LED from the control board has started flashing
- Refrigerant liquid or suction line temperature is out of limits
- The blower fan motor is overheating

In addition to these and other alarm conditions, the monitor automatically sends scheduled downloads of run times and other temperature data to the IST Data Center.

See the appended Table 2 for a complete list of alarms.

### Alert

The IST Data Center immediately alerts the installing HVAC contractor with detailed information about the location and reason for the alarm, the equipment information, previous alarm and scheduled transmissions from that site and a table showing recent run times in various modes. Email notifications will include a web link to the IST Data Center at [www.istmonitor.com](http://www.istmonitor.com) where the contractor will find further information about the customer, installation, and alarm history. This instant online access to performance data enables detailed diagnosis of a problem before scheduled equipment inspection.

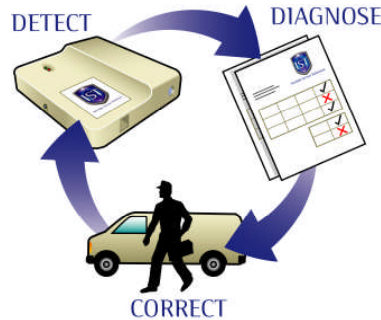
### Correct

The HVAC contractor calls the property owner to schedule and discuss solutions for correcting the problem. With the help of the *Invisible Service Technician*, the contractor can determine whether the problem needs immediate attention or if it can be resolved during the course of a routine maintenance call.

## System Overview

**Monitoring Unit** resides on the customer's HVAC equipment and monitors numerous system operating parameters

**Customer Service Personnel or Contractor's Office** has a personnel computer with internet access, a web browser, and a user name & password to access equipment data



**IST Data Center** resides at a **SECURE** site and is operated by IST

	<b>Contractor's Office</b>	<b>IST Data Center</b>	<b>Monitoring Unit</b>
<b>Installing the Invisible Service Technician</b>	The contractor installs the <i>Invisible Service Technician</i> and sensors on the customer's HVAC system and sends a log sheet to IST	The IST Data Center downloads parameters customized to the HVAC equipment onto the <i>Invisible Service Technician</i>	The <i>Invisible Service Technician</i> dials into the IST Data Center to register its activation
<b>Normal Operation</b>	The owner and/or contractor can review all historical operating data at any time	A historical record of all operating data is kept within the Data Center	Periodically (e.g. once each week) the <i>Invisible Service Technician</i> dials into the Data Center to upload operating data.
<b>When a Problem is Detected</b>	The owner and /or contractor can review the details of the alert and all operating data	The IST Data Center immediately issues an alert to the contractor and/or the customer via pager, phone fax or e-mail	The <i>Invisible Service Technician</i> immediately dials into the Data Center to upload the operating data
<b>After the Contractor has made Repairs</b>	The contractor repairs the customer equipment and presses the "Reset" button on the monitor	The <i>Invisible Service Technician</i> immediately dials into the Data Center to show that the problem has been corrected	The Data Center records that the problem has been corrected

## Installation

The installer must be an experienced HVAC technician and be fully trained to install the *Invisible Service Technician*. Please refer to your *Invisible Service Technician* Installation Guide for more detailed information.

Failure to comply with these requirements may result in injury to the installer or damage to the *Invisible Service Technician*, its accessories, and/or the customer's HVAC equipment.

## Logging onto the IST Web site

Go to [www.istmonitor.com](http://www.istmonitor.com), IST's homepage. At the top of the page, you will see a place to enter your IST username and password. Upon successful login you will be directed to your personal homepage; this is the IST Data Center page. On the Data Center page you will be able to:

- View your active monitor(s)
- Review installation information
- Review parameter and sensor information
- Review monitored equipment descriptions
- Review alert recipients
- Review viewing privileges
- View a device report log
- Review individual detailed reports
- Review your monitor(s) call-in schedule

## Troubleshooting Guide

On  
Monitoring  
Unit:

Symptom	Indicates	Recommended Actions
<b>IST Monitor Control Board</b>		
Red and Green LED's are off	No power to the control board or failure of the control board	<ol style="list-style-type: none"> <li>1. Ensure that there is 24VAC to the board.</li> <li>2. Look for physical signs of component failure (burns or other indications of burned components)</li> <li>3. Contact IST for assistance and replacement board.</li> </ol>
Green Light is lit, Red flashes then pauses, and then flashes again.	Alarm condition exists or air flow temperature sensors have failed	<ol style="list-style-type: none"> <li>1. Go to the Data Center and check the Supply, Return and Outside temperature indications. Any one with a -99 will cause this alarm indication.</li> <li>2. Check for recent alerts at the Data Center to see if there is an indication of a problem.</li> <li>3. Resolve the sensor or alarm condition and reset the unit (remotely or by pressing the reset button).</li> </ol>
Red & Green lights blink alternately.	Unit is initializing	Wait a moment and this should cease. This is a normal function during the initial power up of the unit. No action is required.
Red & Green lights on continuously	Control board failure	<ol style="list-style-type: none"> <li>1. Ensure that terminals T2 are not jumpered.</li> <li>2. Call IST for assistance and replacement control board.</li> </ol>
No two flashes on reset	Reset not engaged	Depress the reset button again; holding it down until the two flash code occurs. This can take a while if the control board is in the middle of scanning the sensors.
Five flashes on reset	Normal	Upon reset the unit will immediately try to call into the server. As a result, immediately following the two flash codes indicating the reset is engaged, you will see a three flash code indicating a transmission has started to the server. No action is required.
Five flashes after a three flashes	Modem error	<ol style="list-style-type: none"> <li>1. The modem was unable to complete a call to the server. Disconnect the phone line.</li> <li>2. Using a spare phone, plug the phone line</li> </ol>

IST Report  
or Web-  
Site

		<p>into the phone. Check for dial tone.</p> <ol style="list-style-type: none"> <li>If there is a dial tone, call IST for assistance in troubleshooting.</li> <li>If there is no dial tone, check the phone line wiring for mistakes (see phone line installation instructions).</li> </ol>
<b>Sensors</b>		
<b>Temperature value is -99</b>	<ol style="list-style-type: none"> <li>Sensor polarity is wrong</li> <li>Sensor wiring is faulty</li> <li>Sensor is faulty</li> </ol>	<ol style="list-style-type: none"> <li>The color lead on temperature sensors should be the positive side. Reverse the leads if necessary.</li> <li>Reset the <i>Invisible Service Technician</i>.</li> <li>Check the new reading at the Data Center.</li> <li>If still -99, check the wiring and sensor by switching a working temperature sensor with the suspect one at the control board.</li> <li>Reset the Invisible Service Technician.</li> <li>Check the new reading at the Data Center.</li> <li>If the same reading is -99 then the Control Board is faulty – Call IST for a replacement.</li> <li>If the reading is good then the wiring or sensor is faulty.</li> <li>If additional wiring has been added to the sensor, remove the sensor at the splice.</li> <li>Connect the sensor to the control board with the shorter leads (these should be the wiring leads furnished by IST).</li> <li>Reset the IST Monitor</li> <li>Check the new reading at the Data Center.</li> <li>If the value is still -99 then the sensor is faulty – call IST for a replacement.</li> <li>If the value is good then the wiring is faulty and should be replaced. There are three potential causes: 1) a bad splice, 2) a broken wire, 3) the wire is too long or 4) there is too much interference from heavy equipment. If thermostat wire has been used to extend the wire length, replace with twisted pair wire. Ensure that all splices are solid.</li> </ol>
<b>UV Light is on but is alarming</b>	Failed UV Sensor	<ol style="list-style-type: none"> <li>Using a volt ohm meter disconnect the sensor from the control board and check for continuity. The sensor should conduct in the presence of light and be open in darkness.</li> <li>If this is not true, call IST and order a replacement sensor.</li> <li>If the sensor is working properly, call IST to modify alarm parameters.</li> </ol>
<b>Filter sensor on but filter is clean</b>	Filter Sensor has not been calibrated.	Perform the filter sensor calibration procedure (see installation instructions).
<b>Temperatures are inaccurate</b>	<ol style="list-style-type: none"> <li>Sensor is not installed correctly</li> <li>Sensor is faulty</li> </ol>	<ol style="list-style-type: none"> <li>Ensure that the sensor is installed correctly. Ensure that air flow is not blocked to the sensor for air flow sensors and that the sensors are making contact with the metal tubing and fan casing.</li> <li>If sensors are installed correctly, call IST for a replacement sensor.</li> </ol>

## Warranty

Invisible Service Technicians, LLC (IST) manufactures its products from parts and components that are new or equivalent to new in accordance with industry standard practices. Subject to the conditions, exclusions and limitations set forth herein, IST warrants to the original purchaser that the products it manufactures (*IST Products*) will be free from defects in materials and workmanship. The warranty term is one year beginning on the date of monitoring service activation as described in the following paragraph.

If any part in an IST Product fails due to a defect in material or workmanship within the first year from the date of service activation, a replacement part will be provided free of charge except for the freight costs, which are the owner's responsibility. IST will not pay for parts purchased in the field from other than IST or an IST distributor. Replacement parts are warranted only for the balance of the original warranty period.

Complete customer satisfaction is our goal. If your IST system should ever require service, your professional IST certified contractor is standing by with heating and cooling system expertise. You can find your local IST Representative by calling 1-(866) 763-5500.

### Limited Warranty Conditions and Exclusions

- 1) The IST Product must be installed and serviced by a dealer or contractor licensed at the time of installation.
- 2) The IST Product must be installed in accordance with IST's installation instructions and in compliance with local codes and ordinances.
- 3) The IST Product and/or replacement parts must be operated in accordance with IST operating instructions provided with each unit. The IST Product must not be misused or damaged by anyone.
- 4) This limited warranty does not cover damage due to external causes, including accident, abuse, misuse, problems with electrical power, problems caused by faulty installation, use of parts and component not supplied or approved by IST, adverse weather, acts of God, and all other causes external to the components and workmanship rendered by IST.
- 5) This limited warranty does not cover damage to property or injury to persons caused by or arising out of the actions or omissions of the dealer or contractor that installs the IST Product. As to any such damage or injury your recourse is against the dealer or contractor, not IST.

THIS LIMITED WARRANTY IS THE ONLY WARRANTY MADE BY IST. IST DISCLAIMS ALL OTHER EXPRESSED OR IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A SPECIFIED PURPOSE. OUR EXCLUSIVE REMEDIES SHALL BE REPAIR OR REPLACEMENT OF THE IST PRODUCT, AS SET FORTH ABOVE. IST'S TOTAL LIABILITY FOR ANY AND ALL LOSSES, WITHOUT LIMITATION, DEFECTS IN THE IST PRODUCT (WHETHER SUCH CASE BE BASED IN CONTRACT, PATENT INFRINGEMENT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE *IST* PRODUCT OR REMEDYING OF ANY INFRINGEMENT. IN NO EVENT SHALL IST BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES RESULTING FROM ANY CAUSE.

No action, regardless of form, arising out of transactions involving the IST Product, may be brought by the original purchaser or any other party more than six (6) months after the cause of action has occurred. Any modification of this limited warranty must be set forth in a written instrument signed by a duly authorized representative of IST. This limited warranty shall be construed, performed, and enforced under the internal substantive laws of the State of Ohio. Any dispute with respect to this limited warranty shall be litigated exclusively in the state and federal courts located in Hamilton County (Cincinnati), Ohio.

## Customer FAQ

### **Does the *Invisible Service Technician* equipment installed in my home or business require any maintenance?**

No, the *Invisible Service Technician* monitor and sensors do not require any maintenance. Should the protective plastic shell of the monitor crack or otherwise be damaged, notify your contractor for a replacement to avoid dirt and moisture from possibly damaging your monitor.

### **When the monitor calls the IST Data Center, does it interfere with phone calls, call waiting, or Internet dial-up?**

No. Phone lines are never interrupted. The *Invisible Service Technician* listens for a dial tone before attempting a call. If no dial tone is detected, the *Invisible Service Technician* will wait and then retry the call.

### **How long does the call take? Who pays for it?**

Each call takes about thirty seconds and is made with a toll-free number that is pre-programmed into the monitor. *Invisible Service Technicians, LLC* pays for the call.

### **I may be moving in the next year or so. Can I take my *Invisible Service Technician* monitor and sensors with me?**

Yes! Just call your installing contractor and have them remove the monitoring system and notify *Invisible Service Technicians, LLC*. When you arrive at your new home or business, contact an Authorized *Invisible Service Technician* HVAC Contractor and have them reinstall the monitoring system. They will notify us of your new address and we will continue your monitoring services. It's that easy. If you need help finding a new HVAC Contractor, contact IST, LLC.

Please note: Removal attempts by untrained persons are dangerous and could severely damage the *Invisible Service Technician*. The warranty becomes void in the event of such an attempt.

### **Where does the monitor get power? What happens if the electricity goes out?**

The *Invisible Service Technician* needs a 24V power source and a working phone line to transmit performance data. In the event of a power outage, the monitor will NOT lose any data and will send a report of the power interruption to the IST Data Center as soon as power is restored. An optional backup power supply is available for the *Invisible Service Technician*. Please contact IST for ordering information.

### **Who has access to my *Invisible Service Technician* data?**

*Invisible Service Technicians, LLC* believes in your right to privacy. Your personal information will not be shared with any marketing or recruiting companies. As standard practice, your HVAC performance data will be reviewed by only the IST Data Center and your designated/installing HVAC contractor.

Performance data without customer identifying information may also be shared with the manufacturer of your HVAC system, and used to help them improve their product. These manufacturers specify the performance parameters that the *Invisible Service Technician* monitors in your HVAC equipment.

## Installation Questions

### **How much time does it take to install an *Invisible Service Technician*?**

IST has invested a lot of effort in keeping the installation of the *Invisible Service Technician* sensors as simple and as quick as possible. Of course, installation time varies and is dependent on the difficulty in routing the sensors and the phone line. In most cases, installation should take between one and two hours.

### **What instructions does IST provide?**

A very detailed and illustrated installation manual that addresses most installation situations is included with every monitor kit. You may also review these documents at [www.istmonitor.com](http://www.istmonitor.com)

### **Does the IST Monitor come with its own wiring?**

Each sensor has a 10-foot long, color-coded lead. You can splice additional wire to extend the run (not provided by *IST*). Temperature sensors should have twisted-pair wire and the run should be as short as possible. Thermostat wire can be used for all contact closure sensors to extend their reach. In addition, 10 feet of phone cable with an RJ-11 connector and splicing materials are also included.

### **How do I set or change performance parameters?**

Performance parameters are set via the installation log sheet filled out and sent to IST at the time of installation. If the values sent at installation need to be changed, you can send an updated log sheet to IST and the parameters will be changed. These values will be updated in the monitor the next time it calls into the Data Center.

## Operation Questions

### **Using the *Invisible Service Technician***

#### **How soon am I notified that a component (s) of my equipment is operating out of parameters?**

The monitor acquires data from each sensor every minute. When a sensor detects the performance of a part is operating out of its parameters, it will wait approximately 5 minutes before sending an alarm to the IST Data Center (and then to you) to ensure that there is an actual alarm.

#### **How am I notified? Can I be notified in more than one way?**

You can be notified in any combination of ways. These include e-mail, fax, phone and pager. Regardless of which notification methods you select, you will also receive notification via e-mail.

#### **What information do I get from IST that helps make a remote diagnosis of the problem?**

All temperatures and contact sensors monitored by the *Invisible Service Technician* are sent to a server for historical record keeping and analysis. This information can be used to analyze the performance of a customer's HVAC equipment for any performance degradation.

#### **How often can I receive information from the *Invisible Service Technician*, and in what format?**

A new report on each system will be available on a weekly basis. All operating data is available to review on the Data Center website and can be accessed using your secure login and password. In addition, operating data will be e-mailed to you if the *Invisible Service Technician* detects a problem with the equipment. Should you select fax as one of your methods of notification, operating data will be part of the faxed message.

#### **How do I know if the unit is working properly?**

The monitor will have a solid green light on indicating that it has power. The red light will be off if there are no alarms. The red light uses flash codes to indicate certain activities in its operation. They are explained on page five. From the information available on the Data Center screen, you can also see if the monitor is operating correctly.

**Why is the red light blinking on my unit?**

The red light blinks when there is an alarm condition or there is a malfunction with a temperature sensor. The blinking pattern stops when the unit is scanning the sensors. That is why there is a pause between periods of flashing. Additionally, the pause between flashing can indicate the unit is calling the IST Data Center.

**What is done after repairs have been made to correct an alarm condition?**

Reset the monitor. This is done by placing a small screwdriver or toothpick into the reset hole and pushing the reset button. You will know you have reset the unit when the red LED blinks twice. This will be followed by three blinks as the unit attempts to communicate with the server. After about 20 seconds you should see either 4 flashes (successful transmission) or 5 flashes (unsuccessful transmission). If you see 5 flashes, please check the phone line to ensure that the unit can communicate with the server.

**What happens when the unit is reset?**

Pushing the reset button resets the status of all alarms. It is critical that the unit be reset once maintenance is done on the HVAC unit eliminating the cause of the alarm. The unit will now be "armed" to alert on any condition that is out of limits.

**What happens when the HVAC unit loses power?**

Because the monitor is connected to the HVAC power, it will also lose power. When power is restored, the unit is reset. This arms the unit to discover any alarm conditions after the HVAC unit is given a few minutes to reach steady state. On power up, an alert is sent to the server indicating the duration of the power outage. An optional backup power supply is available for the *Invisible Service Technician*. Please contact IST for ordering information.

**The green and red LED's flashed before going back to normal operation when the HVAC system was powered back on after fixing a problem. What is the unit doing?**

During a power up, the unit initializes itself. The alternating red and green led flashes indicate various stages of this initialization. Once the initialization is complete the unit resumes its normal operation.

**What does a temperature reading of -99 signify?**

When a temperature sensor is not hooked up correctly or has failed, the unit communicates a value of -99 to the server for this sensor.

To troubleshoot this problem, you will need to be at the HVAC unit.

- The first thing to try is to reverse the leads on the questionable sensor. This is because the temperature sensor has polarity and the positive side must be on the inside of the monitor board (or the side where the sensors are labeled) and the negative side should be connected to the outside of the board or the side labeled "common."
- Once this is done, push the reset button.
- Check the data to see if a valid temperature reading is observed.
- The next thing to check is the length of wire used for this sensor. The sensors are provided with ten feet of twisted wire. In some cases this will not be enough and the sensor will be spliced to another wire used for extending the reach.
- If this is done, disconnect the sensor at the splice and connect it to the unit by its original wire.
- Push the reset and check to see if the data is valid.
- Be sure to check the polarity if you need to as well.

If the data is still showing -99 then the sensor is malfunctioning. Please contact IST for a replacement.

If the data shows a valid temperature, then the wiring is malfunctioning. We suggest that you try replacing the wiring with twisted pair wire to see if that will work better than the current malfunctioning wire. The temperature sensors can malfunction when the wire length is too long or there is interference from motors or other electromagnetic devices.

## Alarm List

The *Invisible Service Technician* continuously monitors your equipment and if a problem is identified one of the following alerts will be sent to IST

Alarms	Alarms
Scheduled Call	Minimum Heat Rise Exceeded
Push Button Depressed	Maximum Cool Drop Exceeded
Filter Pressure High	Minimum Cool Drop Exceeded
Ultraviolet Light Out	The Unit has Powered Up
High Water Level in the Condensate Pan	Power Fail
High Water in the Furnace Sump Pump	Door Switches
Indoor Flash Code	User Defined Alarms
Indoor Flash Code 2	Maximum Fan Motor Temperature Exceeded
Ultraviolet Light 2 Out	Maximum Liquid Line Temperature Rise Exceeded
High Water at Room Sump Pump	Minimum Liquid Line Temperature Rise Exceeded
Maximum Return Air Temperature Exceeded	Maximum Suction Line Temperature Drop Exceeded
Minimum Return Air Temperature Exceeded	Minimum Suction Line Temperature Drop Exceeded
Maximum Heat Rise Exceeded	

## Return Policy

We believe in offering the very best product-Value, Quality and Performance. You may return unused items within 90 days from the date of purchase for a refund or exchange used items within 30 days from the date of purchase. There will be a 15% restocking fee for returned items. Custom orders may not be returned unless defective. Please include a copy of the receipt or purchase order along with the unused product and original packaging.

### To Return or Exchange an item by Mail:

1. Contact IST, LLC and request an Exchange/Return form and a RMA number so we may process your return. Please make sure that the return item is in new condition and please remember to contact us first for a RMA number prior to returning any product. Please follow the directions and fill out the form fully to expedite the process. Also indicate exchange or additional order items.
2. Box the item securely. The original invoice is required. Enclose the invoice plus all original packaging and accessories. RMA number must be displayed on box.
3. Please address the package using the return shipping address provided on the invoice.
4. If your return is approved, we will issue a credit to the original credit card for the cost of the item and the sales tax minus the restocking fee, if applicable. Please allow 10 to 15 business days for the credit to appear on your credit card account. If you paid by check IST will issue a check for the cost of the item and the sales tax minus the restocking fee, if applicable. Please allow 10 to 15 business days to process. Shipping charges are not refundable, and shipping will be charged for the new items(s) sent.

### Special & Custom Order Items:

You may change or cancel your order if we are informed of same before production of your custom order begins. We cannot make changes or cancel Special or Custom Orders once production has begun.

Special & Custom Order Items: If we made an error on your order we will fix the order immediately at no charge to you. If you made an error in your order, unfortunately we cannot issue a return or refund because we are unable to recover our cost on special order items. We do our best to minimize the chance for errors by helping you collect the necessary information to process your order.


# Sample Report

HOME | SITE MAP | CONTACT US LOGOUT ▶



**Invisible Service Technician**  
*Dramatically Reduce Your Heating & Cooling Costs!*

Manufacturer Rep Support



Manufacturer Rep Support
Distributor Support
Contractor Support
Profile Management
Data Center
IST Monitor Activation

Customer:  
IST Monitor ID:

Active Monitors

Unassigned Monitors

Inactive Monitors

Monitor Details

Monitor Report

**MONITOR REPORT**

◀ Back Next ▶ Show Most Recent

Number of transmission retries: 0  
Number of power fails ignored: 0

Sensor Key: ● = Enabled    ◻ = Not Installed    ◻ = Disabled    Status Key: ✓ = OK    ✗ = Fault

Parameters	Report Date 02/15/2005 18:11:05 (CT) Type: Scheduled - Scheduled Call						Previous Report Date 02/15/2005 17:11:01 (CT) Type: Scheduled - Scheduled Call			
	Reported Value	Min Value	Max Value	Lower Limit	Upper Limit	Status	Reported Value	Min Value	Max Value	Status
Return Air Temperature	67	67	67	55	80	✓	67	67	68	✓
Supply Air Temperature	49	49	49	42	115	✓	49	49	49	✓
Liquid Line Temperature	90	88	91	65	150	✓	79	79	81	✓
Suction Line Temperature	58	58	59	48	68	✓	59	58	59	✓
Fan Motor Temperature	80	idle	idle	0	150	✓	error	idle	idle	✓
Outside Temperature	63	63	66	0	0	✓	66	66	67	✓
Heat Rise	idle	idle	idle	20	65	✓	idle	idle	idle	✓
Cool Drop	18	18	18	14	22	✓	18	18	19	✓

Enough Data Is Reported To Enable Diagnosis Of The Problem Without Visiting The Site

	Status	Previous Status
● System Power	✓	✓
● Filter Pressure Differential	✗	✓
◻ Ultraviolet Light	✓	✓
● Water Level - Drain Pan	✓	✓
◻ Control Board Reader - Indoor	✓	✓
◻ Second Ultraviolet Light	✓	✓
◻ Water Level - Condensate Pump	✓	✓
◻ Water Level - Sump Pump	✓	✓
◻ Control Board Reader 2	✓	✓

The data is protected and is only accessible via a unique username and password

	Reporting Cycle Totals	Condition at Time of Report	Previous Cycle Totals	Condition at Time of Previous Report
Fan Minutes	59	ON	59	ON
Cool1 Minutes	59	ON	59	ON
Cool2 Minutes	0	OFF	0	OFF
Heat1 Minutes	0	OFF	0	OFF
Heat2 Minutes	0	OFF	0	OFF
Reverse Valve Minutes	59	ON	59	ON
Emergency Heat Minutes	0	OFF	0	OFF
Aux 3 Minutes	0	OFF	0	OFF
Heating Degree Days	0	-	0	-
Cooling Degree Days	0	-	0	-

## Important Information about your *Invisible Service Technician*

Purchase Date: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Web Site Login: \_\_\_\_\_

Web Site Password \_\_\_\_\_

In case of Alert, Primary Contact information:

Name: \_\_\_\_\_

Phone# \_\_\_\_\_

Entry Key:      YES                      NO

In case of Alert, Secondary Contact information:

Name: \_\_\_\_\_

Phone# \_\_\_\_\_

Entry Key:      YES                      NO

*Installing Technician* name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Office Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Pager #: \_\_\_\_\_

Date of Installation: \_\_\_\_\_

Date of Activation: \_\_\_\_\_







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