

TABLE OF CONTENTS

1. Important Safety Information..... 3

1.1 Federal Communications Commission Warning 4

2. Key Features and Markings 5

3. Introduction..... 6

4. Getting Started 6

4.1 Installation..... 6

4.2 Setup & Programming Instructions 6

4.2.1 Equipment and Software Requirements 7

4.2.2 Administrator Programming Software Installation..... 8

4.2.3 Identifying Device Voltage Requirements..... 8

4.2.4 Driver Installation..... 8

4.2.5 Programming Output Voltage 9

4.2.6 Connecting Battery Peripheral Cables 10

4.2.7 Connecting Battery Cable Harness..... 10

4.3 Turning On the ST7 LiFe Battery..... 11

4.4 Turning Off the ST7 LiFe Battery..... 11

4.5 Charging the ST7 LiFe Battery..... 12



(CONTINUED ON NEXT PAGE)

TABLE OF CONTENTS (CONTINUED)

- 4.6** Discharge Status 11
 - 4.6.1** Charge Status..... 12
 - 4.6.2** Troubleshooting 12
- 4.7** LiFeView Battery Monitoring Software 13
 - 4.7.1** LiFeView Troubleshooting..... 15
- 4.8** Battery Replacement 15
- 4.9** Battery Disposal 15
- 5.** Routine Maintenance 16
 - 5.1** Preventive Maintenance 16
 - 5.2** Cleaning 16
- 6.** Specifications 16
 - 6.1** Electrical..... 16
- 7.** Support Services 17
 - 7.1** Technical Support..... 17
 - 7.1.1** Technical Support Process..... 17

1. IMPORTANT SAFETY INFORMATION



WARNING

READ AND SAVE THESE INSTRUCTIONS – This manual contains important instructions for your ST7 LiFe Battery system that should be followed during installation and maintenance of the battery.

1. The ST7 LiFe Battery system is intended for use in an indoor temperature controlled area free of conductive contaminants.
2. The ST7 LiFe Battery system generates a Direct Current (DC) voltage output and is for use with portable computers and electronic data processing loads only.
3. Do not disassemble the ST7 LiFe Battery system. There are no internal user serviceable parts including fuses.







CAUTION: Hazardous live parts within the ST7 LiFe Battery system remain energized even when the unit is disconnected from the AC wall outlet and in standby mode. Attempting to service the ST7 LiFe Battery system could cause an electrical shock or fire. Contact the manufacturer, or distributor for servicing information.

4. To reduce the risk of electrical shock, switch the ST7 LiFe Battery system to standby mode, and unplug the unit before attempting to perform any maintenance or cleaning.
5. To reduce the risk of damage to the cord or electric plug, always disconnect the ST7 LiFe Battery system power cord by pulling the plug and not the cord.
6. Do not operate the ST7 LiFe Battery system if it has received a sharp blow, or has been dropped or damaged in any way. Immediately contact the manufacturer, or distributor for servicing information.
7. To reduce the risk of overheating or fire, keep the ventilation openings clear.
8. When replacing batteries only use replacement batteries recommended by the manufacturer – see battery replacement information on the InfoLogix Support website, located at www.infologix.com/st7life/replacement.

	Risk of Energy Hazard. Before replacing batteries, remove conductive jewelry such as chains, wrist watches, and rings. High energy through conductive material could cause severe burns.
	Do not dispose of batteries in a fire. The batteries may explode.
	Do not open or mutilate batteries. Released material is harmful to the skin and eyes. It may be toxic.
	The negative (-) black lead is connected to the chassis.

1. IMPORTANT SAFETY INFORMATION (CONTINUED)

	<p>Risk of electric shock and energy hazard. Hazardous live parts within the ST7 LiFe Battery system remain energized even when the unit is disconnected from the AC wall outlet and in standby mode. Press the rear battery switch down to turn off the outputs. Unplug the power cord from the AC wall outlet. Remove all mounting screws and unplug the cable harness from its white connector on the battery.</p>
	<p>The power supply cord is the means for main disconnect.</p>
	<p>Grounding reliability can only be achieved, when the equipment is connected to an equivalent receptacle marked "hospital grade"</p>
	<p>Where the integrity of the external PROTECTIVE EARTH CONDUCTOR arrangement is in doubt, EQUIPMENT should be operated from its INTERNAL ELECTRICAL POWER SOURCE.</p>

1.1 Federal Communications Commission Warning

This device complies with Part 15 of the FCC Rules and Regulations.

Operation is subject to the following two conditions:

- This device may not cause harmful interference and
- This device must withstand any interference received, including interference that may cause undesired operation.

The ST7 LiFe Battery system is a Class A digital device pursuant to Part 15 of the FCC Rules and Regulations. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the installation manual, may cause harmful interference to radio and television communications. Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the interference at his or her own expense. Do not attempt to repair or modify this equipment. Any repairs to the unit must be performed by InfoLogix or an InfoLogix-authorized representative.

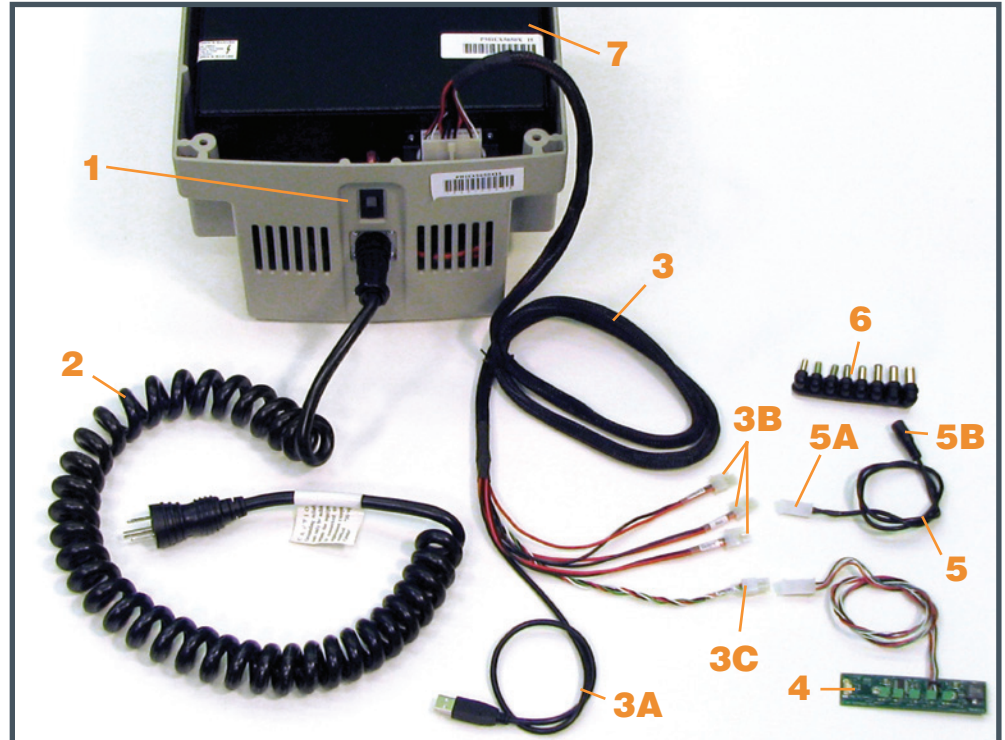
- Maximum Combined Output = 300 Watts DC, 100 each output
- Classification: Class 1
- No applied parts
- Ordinary EQUIPMENT (enclosed EQUIPMENT without protection against ingress of water).
- No sterilization or disinfecting required.
- EQUIPMENT not suitable for use in the presence of a FLAMMABLE ANAESTHETIC MIXTURE WITH AIR or WITH OXYGEN OR NITROUS OXIDE.
- Intended for continuous operation.

2. KEY FEATURES AND MARKINGS

Key Features

1. Power Switch
2. Power Cord
3. Cable Harness
 - 3A. USB Connection
 - 3B. Output Connections
 - 3C. LED Board Connection
4. LED Board
5. Peripheral Cable
 - 5A. White Output Connector
 - 5B. Blank End for device tip
6. Universal Tip Kit
7. Battery Casing*

*Depending on the mobile cart platform, the ST7 LiFe Battery casing design can be slightly different than shown in the diagram.



Markings



On - Moving the rear switch to the up position will allow the ST7 LiFe Battery system to energize the power outlets. If the unit is plugged in at the time this switch is moved to the “on” position it will not be necessary to energize the ST7 LiFe Battery system, once the unit is unplugged from power.



Standby - Moving the rear switch to the down position will turn off the power at the outputs. **CAUTION:** Hazardous live parts inside remain energized when the ST7 LiFe Battery system is in standby. The power supply cord is the means for mains disconnect. Do not at any time attempt to disassemble the ST7 LiFe Battery system.



Caution or Warning - Take all necessary safety precautions when this mark is included with instructions or labels.



Dangerous Voltage Present - Take precautions when this mark is included with instructions or labels. Dangerous voltages may be present.

3. INTRODUCTION

Congratulations on the purchase of your new InfoLogix ST7 Lithium Iron Phosphate (LiFe) Battery system. Your ST7 LiFe Battery system contains state of the art Lithium Nanophosphate batteries, designed to provide superior performance when compared to other Lithium chemistries.

The InfoLogix ST7 LiFe Battery system can change your workflow by providing you with 20+ hours of runtime daily for all your mobile computer cart needs. With improved battery monitoring and diagnostic capabilities, your new ST7 LiFe Battery system has been designed to recharge up to 6x faster than traditional batteries, can last 3-5 years without replacement, and at the same time, it saves you money.

Please read this manual to understand the capabilities of the ST7 LiFe Battery system, and how to properly operate and care for the ST7 LiFe Battery system.

4. GETTING STARTED

4.1 Installation

The ST7 LiFe Battery system needs to be securely mounted to the base of a mobile cart. The list of compatible mobile carts and mounting instructions can be found on the InfoLogix website at www.infologix.com/st7life/replacement.

After properly mounting the battery to the base of the mobile cart, install the computer and auxiliary devices to the cart following their respective manufacturers' procedures. Route and secure all cords, including the ST7 LiFe Battery system coiled power cord, to ensure no cords will drag or get caught as the mobile cart is moved.

DO NOT plug the devices into the ST7 LiFe Battery system until the system has been properly set up and programmed. Failure to follow the directions can cause damage to the attached computer, auxiliary devices and ST7 LiFe Battery.

4.2 Setup & Programming Instructions

WARNING: Depending on the mobile cart platform, the ST7 LiFe Battery outputs come pre-programmed from the factory. The ST7 LiFe Battery system has three (3) outputs capable of providing 5-24 volts DC. It is recommended to check to make sure the outputs are set to the correct DC voltage for the computer and auxiliary devices that will be plugged into the ST7 LiFe Battery. If they are not pre-programmed, the outputs will be turned off and they need to be configured properly before attaching equipment to the ST7 LiFe Battery. Failure to follow the directions can cause damage to the attached computer, auxiliary devices and ST7 LiFe Battery.

InfoLogix, Inc. and Power^Up Manufacturing are not responsible for device damage as a result of improper programming or connection of the device to the ST7 LiFe Battery system. Please read and understand this section prior to programming and connecting devices for the mobile cart to the ST7 LiFe Battery system.

4.2.1 Equipment and Software Requirements

1. An administrative PC with the administrator programming software, Smart Power System Administrator Control, installed. The administrative PC must have an available USB connection. The programming software only needs to be installed on one PC, and does not need to be installed on each computer attached to a ST7 LiFe Battery system.
2. The computer and auxiliary devices that will be attached to the ST7 LiFe Battery system. Do not connect them to the ST7 LiFe Battery system until all Set Up and Programming steps are complete.
3. Known voltage requirement for the computer and auxiliary devices that will be attached to the ST7 LiFe Battery system.
4. One universal tip kit for each device to be attached to the ST7 LiFe Battery system (included).
5. One peripheral cable for each device to be attached to the ST7 LiFe Battery system (included).
6. An AC wall outlet.

4.2.2 Administrator Programming Software Installation

Before beginning, the user needs to download the administrator programming software from the InfoLogix website at www.infologix.com/st7life/setup. It is recommended the software be installed on a separate administrative PC, not the computer that will be used on the mobile cart.

Once the installation file is downloaded to the administrative PC, open the installation file and run the installation. Press "Next" to step through the installation and choose the path where the program will be installed. By default, an icon is placed on the desktop to access the program. The icon is called "Smart Power System Administrator Control". Before running the program, it is recommended to 1) locate and document the correct voltage required for the computer and auxiliary devices for the mobile cart and 2) connect the administrative PC to the ST7 LiFe Battery and allow the drivers to install.

4.2.3 Identifying Device Voltage Requirements

It is necessary to know and document the required voltage of the devices that will be attached to the ST7 LiFe Battery. To find this information, refer to the specification labels on the devices or power supply provided with the devices (see Image A).

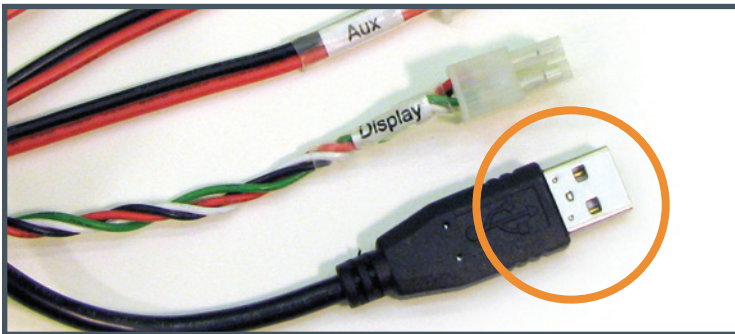


A

NOTE: For this example, the output is 20 volts DC. The output DC voltage can be different for all devices.

4.2.4 Driver Installation

Plug the ST7 LiFe Battery into a wall outlet and make sure the rear switch is in the down or “off” position before doing any service. Remove the mobile cart work surface cover and set it aside. The cable harness for the ST7 LiFe Battery is located inside. The cable harness breaks out into five individual cables. One of these cables is the USB connection to be used for setting the battery (see Image B).

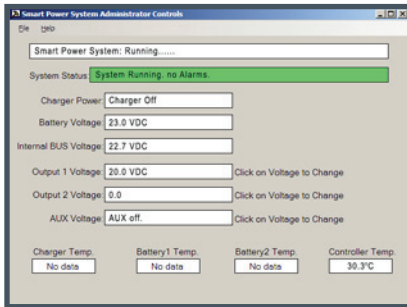


B

With the administrative PC turned on, plug the USB connection into the administrative PC and allow it to load the appropriate drivers. If the “Found New Hardware” wizard comes up, step through and select it to “Install the software automatically”.

4.2.5 Programming Output Voltage

With the administrative PC still connected to the ST7 LiFe Battery, launch the “Smart Power System Administrator Control” program by double clicking on the icon on the desktop. The administrative dashboard will open, find the connected battery, and display the load and output settings (see Image C).



C

When programming multiple ST7 LiFe Battery systems, always remain consistent when setting voltage for the batteries.

- Output 1: typically for the computer
- Output 2: typically for the monitor
- Aux: typically for the auxiliary devices, like wireless bar code scanners or vital monitors.

To set the voltage for the computer and auxiliary devices, click on the outputs that need to be changed (either 1, 2, or Aux), type in the appropriate voltage of the devices, and press “Enter” key on the administrative PC. If unsure of voltage output, refer to Identifying Device Voltage Requirements section.

NOTE: If an output has already been programmed to a specific voltage and needs to be turned off, type “0” (zero) in the text box. This will shut off the output. Turning off unused outputs will ensure the longest runtime possible.

Once the voltage is set for the outputs, close the program, unplug the USB from the administrative PC and set the computer aside.

4.2.6 Connecting Battery Peripheral Cables

Before connecting any peripheral cables, make sure the ST7 LiFe Battery is unplugged from the wall outlet and the rear switch is in the down or “off” position. The battery peripheral cables come with a universal tip kit and a blank end on the cable (see Image D). Select the tip that fits into the device that will be attached to the ST7 LiFe Battery.

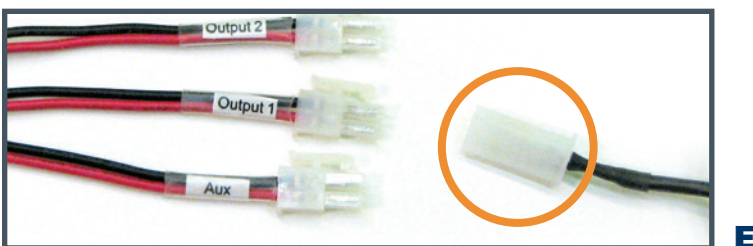


Hint: For easy tip selection, compare the tip kit with the tip of the power supply provided with the device.

Plug the selected tip into the blank end on the peripheral cable and then plug the tip into the device. **DO NOT PLUG THE TIP INTO DEVICE TO BE POWERED UNTIL THE SYSTEM IS SUCCESSFULLY PROGRAMMED.** If unsure, please refer to the Programming Output Voltage section.

4.2.7 Connecting Battery Cable Harness

On the other end of the peripheral cables is a white connector. The white end needs to attach to the appropriate output cables on the cable harness (see Image E). The output cables are labeled “Output 1”, “Output 2”, and “Aux”.



The devices **MUST** be connected to the corresponding programmed outputs. If unsure, please refer to the Programming Output Voltage section.

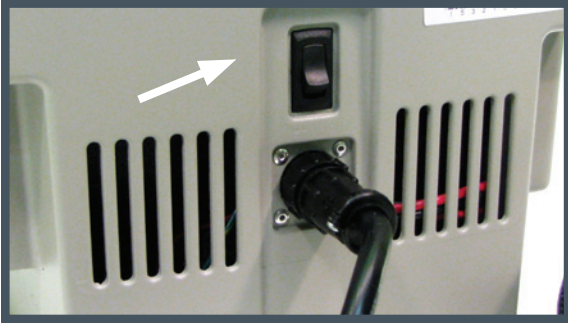
- Output 1: typically for the computer
- Output 2: typically for the monitor
- Aux: typically for the auxiliary devices, like wireless bar code scanners or vital monitors.

Finally, plug the USB cable from the cable harness that was used for the administrative programming into the computer that will be used on the mobile cart to enable battery monitoring.

4.3 Turning On the ST7 LiFe Battery

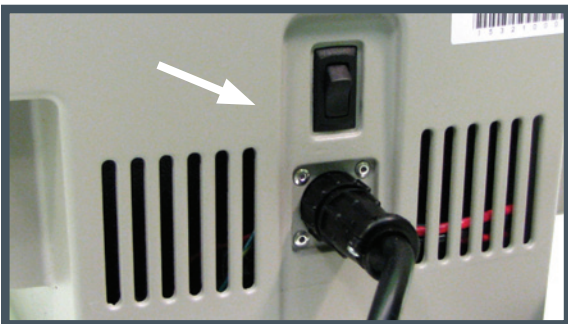
The ST7 LiFe Battery is shipped from the factory ready to use. **Before turning on the new battery for the first time please refer to the previous sections for proper set up and programming the ST7 LiFe Battery system. Failure to follow the directions can cause damage to the attached computer, auxiliary devices and ST7 LiFe Battery.**

To power up the ST7 LiFe Battery, press the rear switch of the ST7 LiFe Battery to the up or “on” position (see Image F). Turn on the computer and auxiliary devices on the mobile cart. Follow the device manufacturers’ specific instructions.

**F**

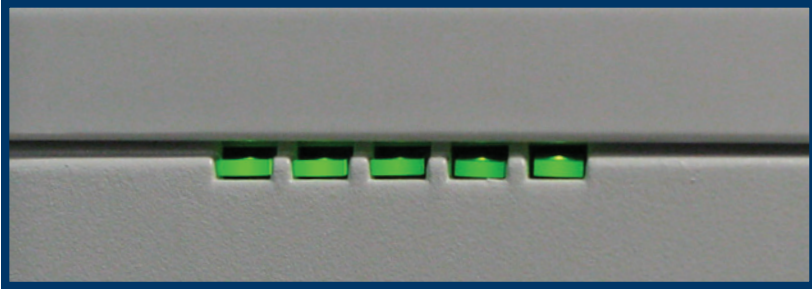
4.4 Turning Off the ST7 Life Battery

Before turning off the ST7 LiFe Battery, be sure to follow the manufacturers’ recommendations for turning off the computer and auxiliary devices powered by the ST7 LiFe Battery. To turn off the ST7 LiFe Battery, press the rear switch to the down or “off” position (see Image G).

**G**

4.5 Charging the ST7 LiFe Battery

To charge the ST7 LiFe Battery, plug the battery into a wall outlet at any time. The ST7 LiFe Battery system will automatically detect the battery status and begin charging the battery. The LED display on the front of the mobile cart will indicate the battery is charging by blinking (see Image H). There is no need to fully discharge the battery before charging it.



H

4.6 Discharge Status

The ST7 LiFe Battery will communicate its status using the five segment LED indicator on the front display of the mobile cart. During operation a number of LED's will remain lit to indicate how much charge is left in the system. Five LED's indicates full charge, and LED's will turn off from right to left to indicate a decreasing battery capacity. When one LED is lit it is time to plug in the ST7 LiFe Battery to charge.

When low battery occurs the ST7 LiFe Battery will automatically disconnect the DC outputs and shut itself off to preserve the onboard battery.

It will be necessary to plug the ST7 LiFe Battery in before power can be restored to the computers and/or auxiliary devices plugged into the ST7 LiFe Battery system.

NOTE: When the ST7 LiFe Battery shuts off the power automatically, computers without internal batteries will shut off, causing the possible loss or corruption of data.

4.6.1 Charge Status

When charging, a scrolling light will move from left to right on the five segment LED indicator on the front display of the mobile cart as capacity is returned to the battery. When the ST7 LiFe Battery is fully charged, it will automatically switch to a "float charge" mode. All five LED sections on the front of the mobile cart will be a solid green. It is safe to leave the battery plugged in while in "float charge."

The ST7 LiFe Battery can be taken off charge at anytime during its charge cycle, and will be charged to greater than 90 percent in about one hour.

4.6.2 Troubleshooting

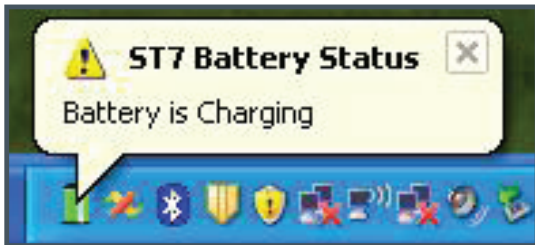
For minor troubleshooting support, Frequently Asked Questions (FAQs) can be found on the InfoLogix Support website, under the **Knowledge Center** at www.infologix.com/support. If further assistance is necessary, please refer to the Support Services section for direction on how to contact InfoLogix Support. Do not attempt to repair or modify the ST7 LiFe Battery system at anytime.

4.7 LiFeView Battery Monitoring Software

The LiFeView monitoring software is an application that runs on the client PC on the mobile cart. It is compatible with Windows XP Professional, Windows Vista Business, and Windows 7 Professional. LiFeView gives on-screen feedback of current battery status, including temperature, capacity, and an estimate of remaining capacity.

The LiFeView software reads information from the ST7 LiFe Battery via the USB connection to the client PC on the mobile cart. In order to operate correctly, the battery USB cable needs to be plugged into the client PC before the software can run.

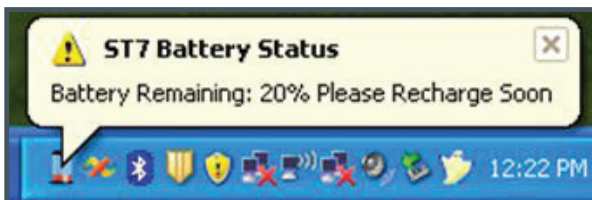
The software runs minimized in the task tray, with a dynamic icon that shows capacity and charge status. At different capacity levels, alerts will also pop up above the task tray as illustrated below:



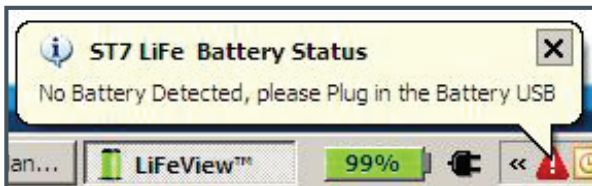
Green icon when Battery above 50%



Yellow icon when Battery is above 20% but below 50%

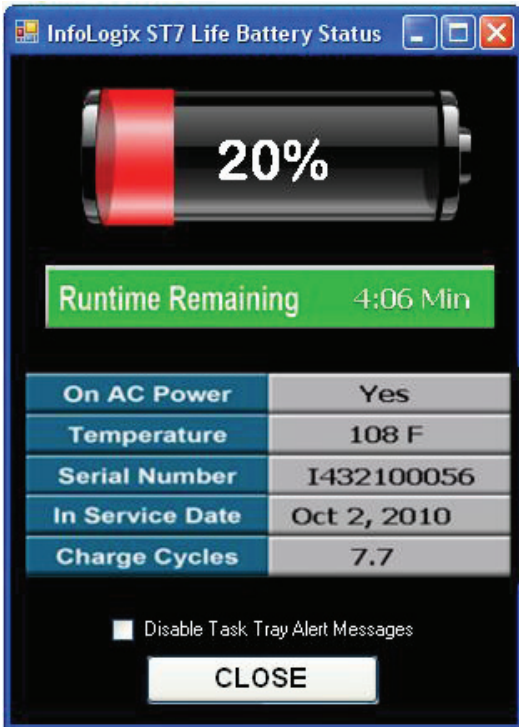


Red icon when Battery is below 20%



Red triangle when battery not detected

The main LifeView window is accessible by double clicking on the task tray icon.



The main window will automatically pop up and contain more detailed battery information (see Image I).

The main window shows the following battery statistics:

Capacity: 0 to 100%, with 100% being completely full

Runtime Remaining: Estimate in hours and minutes of the remaining time the battery will run before it is completely drained. This assumes the load is constant which may not be true if there are power saving modes set on the computer. In this case, the Runtime will be adjusted based on the current load detected.

On AC Power: If yes, the battery is charging; if no, the battery is running on its own power

Temperature: The internal temperature (in degrees Fahrenheit) of the power system

Serial Number: The unique identifier for the power system that is used to track warranty and service contracts

In Service Date: The day, month, and year that the battery was first recognized by the LiFeView software

Charge Cycles: The number of cycles used by the battery (a full cycle is from completely charged to completely discharged).

The main LiFeView window also allows the user to disable the task tray alerts if they find them distracting.

By right clicking on the task tray icon, the user can also find out information about the software, like version number. They can also Exit the software. The software will not run in the background once the Exit is clicked.

The LiFeView software can be installed at any time after the ST7 LiFe Battery system has been successfully programmed. The LiFeView software can be downloaded at www.infologix.com/st7life/setup.

4.7.1 Troubleshooting Common Installation Issues

For minor troubleshooting support, Frequently Asked Questions (FAQs) can be found on the InfoLogix Support website, under the **Knowledge Center** at www.infologix.com/support.



The LiFeView FAQs are located under the ST7 LiFe Battery section. If further assistance is necessary, please refer to the Support Services section for direction on how to contact InfoLogix Support.

4.8 Battery Replacement

The ST7 LiFe Battery system's internal batteries are not replaceable. To replace the internal batteries please contact InfoLogix or an InfoLogix-authorized representative to have the power system's internal batteries replaced. Please refer to the Support Service section for directions on how to contact InfoLogix Support.

4.9 Battery Disposal

The ST7 LiFe Battery system contains Lithium components. **DO NOT DISCARD THE BATTERY IN THE TRASH.** Contact local battery recycler and recycle the internal Lithium Iron Phosphate batteries properly, in accordance with local codes.

	<p>Do not dispose of batteries in a fire. The batteries may explode.</p>
	<p>Do not open or mutilate batteries. Released material is harmful to the skin and eyes. It may be toxic.</p>

5. ROUTINE MAINTENANCE

5.1 Preventative Maintenance

The ST7 LiFe Battery must be properly maintained. Failure to do so may void the product warranty. Batteries that are not in use should be stored with the rear switch in the down or “off” position and must be fully charged every 60 days. Proper storage and maintenance will also ensure long battery life.

Inspect the ST7 LiFe Battery at least once a month, for the following items:

1. Check the coiled input cord integrity
2. Check for cuts or nicks in the wire insulation
3. Check the security of the plug, and plug prongs
4. Check that the fans are clear of obstruction
5. Check that all openings in the battery casing are clear of obstruction

Should any service be required on the ST7 LiFe Battery system, please refer to the Support Services section for directions on how to contact InfoLogix Support.

5.2 Cleaning

The ST7 LiFe Battery needs to be turned off while performing any maintenance and cleaning. Press the rear switch to the down or “off” position and unplug the battery from the wall outlet.

Should the fans or the ventilation holes become obstructed, it will be necessary to clear them with a soft dry brush, and or a vacuum cleaner to remove the obstruction. Clean the exterior of the ST7 LiFe Battery casing with a damp cloth.



DO NOT clear any obstructions with fingers or stick anything into the fans or openings of the ST7 LiFe Battery system.

6. SPECIFICATIONS

6.1 Electrical

Input Power: 120 VAC 5 A 60 Hz

Output Power: 3 Programmable 100 watt DC outputs

Output Waveform: Direct Current DC only

Efficiency: 90%

Specifications are subject to change without notice.

Transport & Storage Conditions: -40° C – 85° C

7. SUPPORT SERVICES

7.1 Technical Support

Our Help Desk is available for quick answers to troubleshooting questions. Our expert technicians have been providing technology support for more than a decade. We offer basic services as well a wide range of optional custom services.

To initiate support, call 215-639-8899 or 800-328-0030; at the menu prompt, select InfoLogix Support. We can be reached Monday through Friday from 8:30 AM to 5:30 PM Eastern time. Or online at www.infologix.com/support.

7.1.1 Technical Support Process

The Support analyst will require the following information to process the call:

- Company Name
- Contact
- Address
- Phone Number
- Email address
- Model Number
- Serial Number
- Description of problem

After the initial support call, a replacement request form will be sent via email that must be completed, signed and returned via fax to 215-639-9538 before obtaining a RMA (Return Materials Authorization) number.

When the replacement battery is received, the inoperable battery is to be immediately returned with the issued RMA number clearly marked on the outside of the box. The return address is noted on the replacement request form. The Support analyst will follow up to make sure the new battery was install appropriately and up and running.

NOTE: For additional information on ST7 LiFe Battery System removal and installation, go to www.infologix.com/st7life/replacement.