

# i-STAT TECHNICAL BULLETIN

## INSTRUCTIONS FOR UPDATING i-STAT 1 HANDHELD SOFTWARE

### Overview

This Technical Bulletin has been created specifically to guide you through the process of updating the software on your i-STAT 1 Handheld(s). This process should take less than 10 minutes for the first Handheld, and less time for additional Handhelds.

### Why Do i-STAT Handhelds Need Software Updates?

The i-STAT 1 System is designed to eliminate operator influence on delivered results.

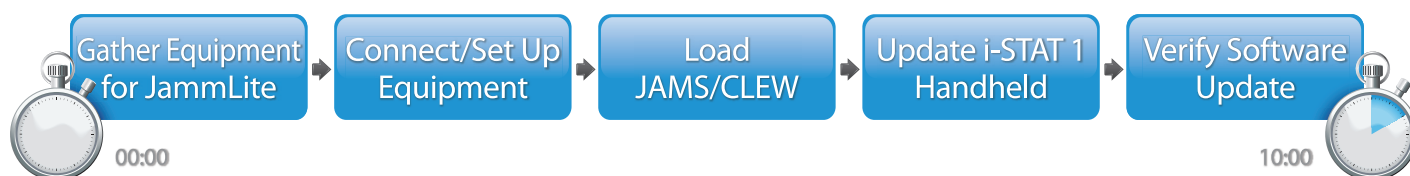
Due to the continuous manufacturing process improvements to the i-STAT System, it is necessary to update standardization values from time to time to maintain long-term consistency of performance. These updates are equivalent to manually adjusting calibration on a traditional laboratory analyzer.

New CLEW software—delivered twice a year on a CD-ROM—re-establishes these standardization values and incorporates refinements to the internal quality monitoring system. New JAMS application software allows the

i-STAT 1 Handheld to recognize any newly launched cartridge types and to perform any newly launched features.

### JammLite Process Overview

Whether updating one, two, or many i-STAT 1 Handheld(s), the JammLite procedure must be used to update the first i-STAT 1 Handheld. This process is noted in the diagram below.



i-STAT is for *in vitro* diagnostic use.



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## Optional Steps

Once the first i-STAT 1 Handheld has been updated using the JammLite Utility, additional i-STAT 1 Handhelds may be updated the same way or by using the Handheld-to-Handheld method.

1. Update with  
JammLite Utility

or

2. Update with the  
Handheld-to-Handheld Process

## Choosing the Best i-STAT 1 Handheld Update Method

### JammLite

Always update the first i-STAT 1 Handheld using the JammLite method. It's best to update all Handhelds via JammLite if they are readily available and near the PC you will use to run JammLite.

### Handheld-to-Handheld

The Handheld-to-Handheld method is a good choice after the first Handheld has been updated via JammLite and other Handhelds that need updating are not near the PC that was used to run the JammLite Utility

### i-STAT/DE


Users of i-STAT/DE with either Medical Automation Systems RALS-Plus® or Abbott Diabetes Care PrecisionWeb® who would like to update i-STAT 1 Handhelds via i-STAT/DE, please consult "Network Options for Updating the i-STAT 1 Handheld" (i-STAT Technical Bulletin 725768).

## Instructions for Using This Technical Bulletin


### Color-Coded Sections

This bulletin contains color-coded sections to easily identify the steps associated with the different methods for updating i-STAT 1 Handhelds.

### Color-Coded, Numbered Steps

As stated above, there are several options for updating i-STAT 1 Handhelds. The color-coded, numbered steps help guide the user through a selected update process, as well as provide direction within the bulletin should the user encounter a technical issue, or need to repeat a step. For example,  indicates section 2 (Handheld-to-Handheld update method).

### Tips for Troubleshooting

Troubleshooting tips are incorporated throughout the technical bulletin where needed. These tips are identified by the  icon, and appear on the right side of the page.

## 1. Update with JammLite Utility

Update with the Handheld-to-Handheld Process

### Follow these steps to update with the JammLite Utility

## Gathering Equipment for JammLite

### i-STAT 1 JammLite Utility

1.1

Before starting the process make sure all the required equipment is available:

- Computer with:
  - Windows 2000, Windows XP or Windows 7
  - A 9-pin serial port or USB port (if using a DRC-300)
  - A CD-ROM drive
- i-STAT System Equipment:
  - (1) Serial Downloader/ Recharger (DRS-300) or DRC-300  
or
  - (2) Serial Downloader (DS-300)
  - (3) Downloader power supply
  - (4) i-STAT 1 Handheld
  - (5) 9-Pin null modem serial cable supplied with the DS-300 or DRS-300 downloader
  - (6) USB cable supplied with the DRC-300
  - (7) The latest i-STAT Software and Documentation CD
  - (8) Electronic Simulator



When using a DS-300 or DRS-300, a computer with a traditional 9-pin serial port is required. If the computer does not have one, follow your internal technical support procedure (i.e., contact the IT Department or the individual in your office responsible for computer support). Indicate that the i-STAT 1 software update process requires:

- a 9-pin serial port
- a CD-ROM Drive

Need technical support?

Call Abbott Point of Care (APOC) Technical Support:

- Hospital-based customers call:  
1-800-366-8020 option 1
- All other customers call:  
1-800-284-0702 option 1



## 1.2

Ensure your i-STAT 1 Handheld has enough battery power (7.5 volts or higher).

To do this:

- Press the **On/Off** (⏻) key
- Press the **MENU** key
- Press **1** for Analyzer Status
- Confirm the battery voltage



If you have rechargeable batteries, charge your analyzer until it has at least 7.5 volts.



Rechargeable Batteries



If you have disposable batteries, replace with fresh ones.



Disposable Batteries

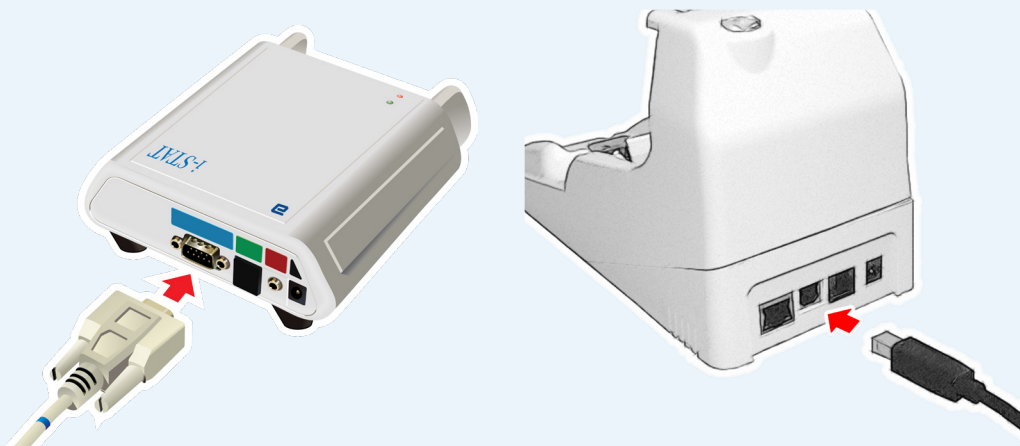
## Connecting/Setting Up Equipment

### i-STAT 1 JammLite Utility

## 1.3

If using a Serial Downloader or Serial Downloader/Recharger, connect the i-STAT 1 Serial Downloader to the 9-pin serial port on the back of the computer with the 9-pin null modem serial cable as shown.

If using a DRC-300, connect the DRC-300 to the USB port on the back of the computer with the USB cable as shown. **Note:** These instructions assume that the DRC-300 has already been installed per section 6 of the i-STAT System Manual for serial communications.



## 1.4

Connect the power supply:

- to the i-STAT 1 Serial Downloader or Serial Downloader/Recharger, and
- to a wall outlet or power strip



When power is supplied to the Serial Downloader, a green light will illuminate.

When power is supplied to the Serial Downloader/Recharger or DRC-300, it will look as it did before power was supplied.

## Loading JAMS/CLEW

### i-STAT 1 JammLite Utility

## 1.5

Close all open programs on the computer .

## 1.6

Before inserting the Software and Documentation CD, check that the JAMS application and CLEW match the Product Update.

## 1.7

Insert the Software and Documentation CD into the CD-ROM drive.

**1.8**

Wait 30 seconds and then close all windows that appear.

**1.9**

To open the Software and Documentation CD-ROM:


- Double click the following icon:



- Double click **CD-ROM Drive**





The following window will appear:


 Analyzer\_Software\_(No\_Data\_Management\_OR\_DE\_Versions\_2.8.0.1\_and\_greater)

**1.10**

To open the JAMMLITE Utility:

Double click  Analyzer\_Software\_(No\_Data\_Management\_OR\_DE\_Versions\_2.8.0.1\_and\_greater)

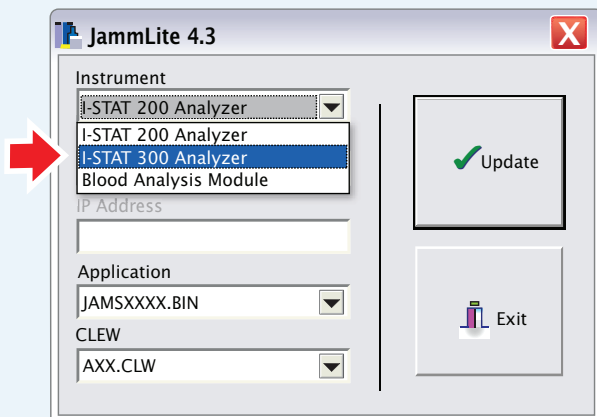
Double click  Unpacked\_AXI\_i-STAT\_Analyzer\_Software

Double click  JAMMLITE.EXE

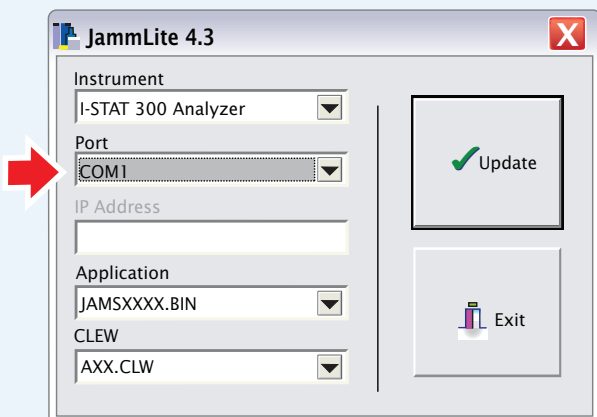


If the JammLite program does not launch or you receive an error message, contact APOC Technical Support and tell the support specialist you are unable to complete step **1.10** of this document.

- 1.11** In the JammLite utility, select the **i-STAT 300 Analyzer** within the instrument dropdown menu.



- 1.12** By default, the lowest numbered COM port will automatically be selected. If the downloader is connected to a different COM port, change the selection to that COM port now.



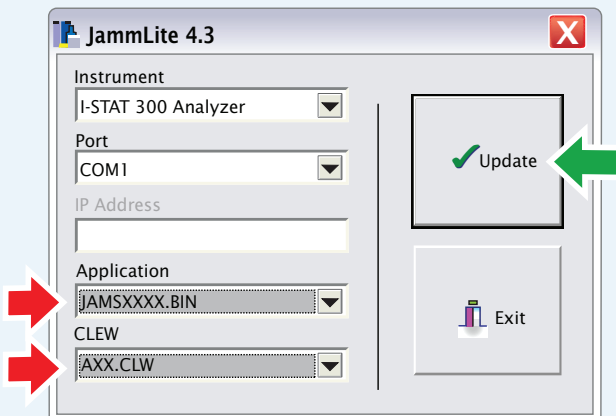
If no ports are displayed, close all open programs including JammLite, and then re-launch JammLite.

If JammLite still has no available COM ports listed, call APOC Technical Support for assistance.

## 1.13

Check that the **Application** and **CLEW** listings match those in the Product Update.

Click the **Update** button.



**Note:** Application and CLEW numbers are for example only. The “numbers” have been replaced with X’s in the example above and will change with each software update.



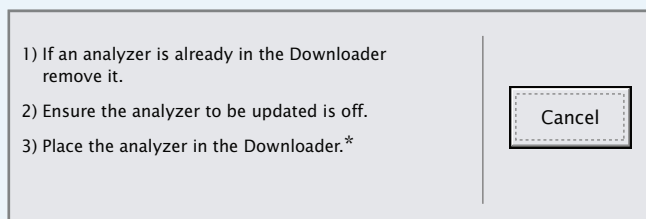
If an error occurs, check the serial connection between the downloader and the PC, as well as the power connection to the downloader.

If connected correctly, select a different COM port (**Do not select TCP/IP**) within the dropdown menu and click **Update**.

If errors persist after trying each of the COM ports listed in JammLite, verify the serial number of your downloader and call APOC Technical Support for assistance.

## 1.14

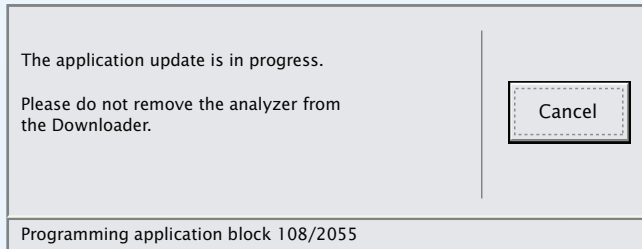
Follow the onscreen instructions.



\*If using the Serial Downloader/Recharger, a **blue light** will illuminate when the Handheld is placed correctly within it. If using the Serial Downloader, a **red light** will illuminate when the Handheld is placed correctly within it..

**1.15**

When the update is in progress, the following screen will appear:

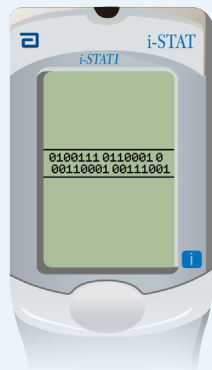


If you do not see the screen shown on the left—

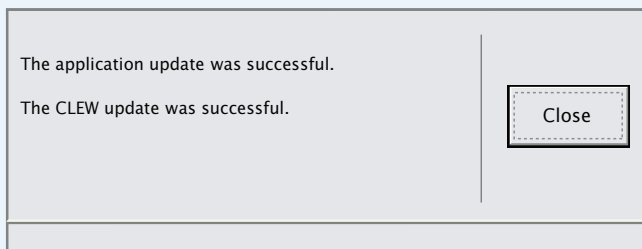
—acknowledge the error message(s) and click **OK**.

Return to Step **1.13**

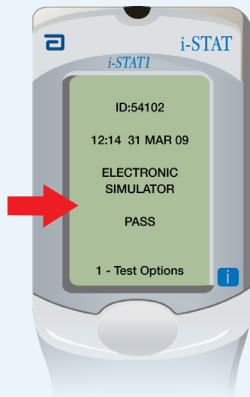
The Receiving Handheld will have 1's and 0's streaming across the screen signifying that it is receiving the software.



**Do not move the Handheld until the success screen is displayed.**



- 1.16** Run the Electronic Simulator in the Handheld. When the simulator finishes, PASS should be displayed.



**!** If **PASS** is not displayed, re-run the Electronic Simulator. If the repeated Electronic Simulator attempt fails, please contact APOC Technical Support.

**!** For additional information on running the electronic simulator, please see:

- Section 14 of the i-STAT 1 System Manual, or
- The Introduction and Start-up section of the i-STAT System Manual for Waived Tests

## Congratulations. The process for updating the first i-STAT 1 Handheld is complete.

Review the options below for additional instructions.

If there are no additional Handhelds to update, the process is complete:

- Click the **X** button in the upper right corner of the software screen
- Close all other open boxes
- Confirm all messages

If there are additional Handhelds to update via JammLite:

- Click **Close**
- Repeat Steps **1.13** through **1.16**

If there are additional handhelds to update with the Handheld-to-Handheld process:

- Go to **2. Update with the Handheld-to-Handheld Process**

Update with  
JammLite Utility

2. Update with the  
Handheld-to-Handheld Process

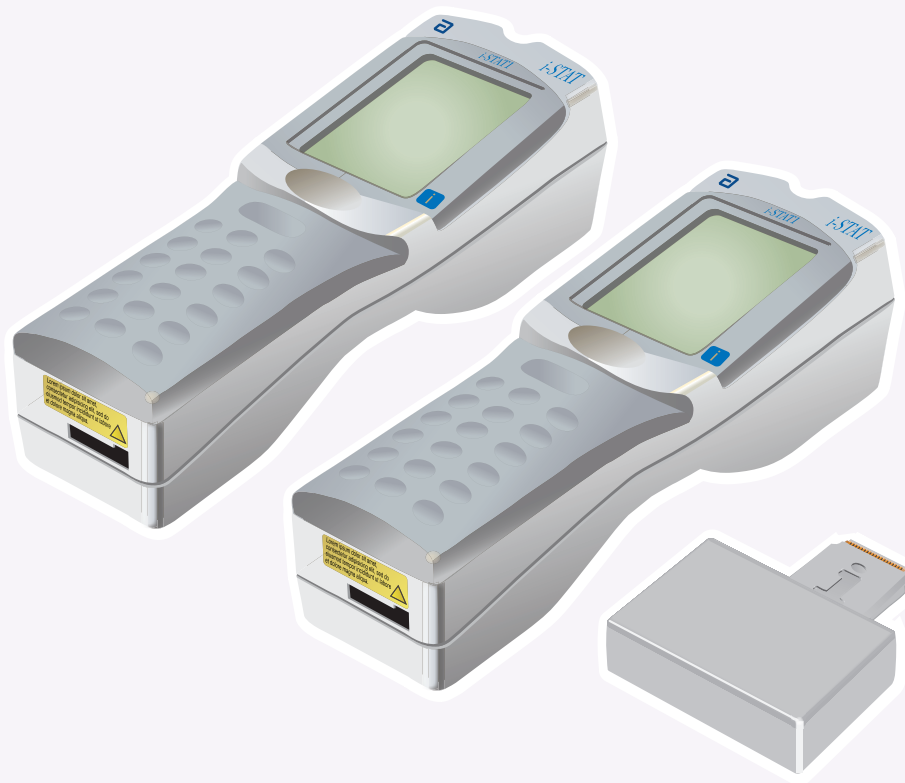
**After updating the first i-STAT 1 Handheld, follow these steps to update additional Handhelds with the Handheld-to-Handheld Process**

## Gathering All Equipment

### Handheld-to-Handheld

**2.1** Before starting the process make sure all the required equipment is available:

- Recently updated i-STAT 1 Handheld (referred to in this section as the Sending Handheld) charged to 7.5 volts or higher\*
- The Handheld unit to be updated (referred to in this section as the Receiving Handheld) charged to 7.5 volts or higher\*
- Electronic Simulator



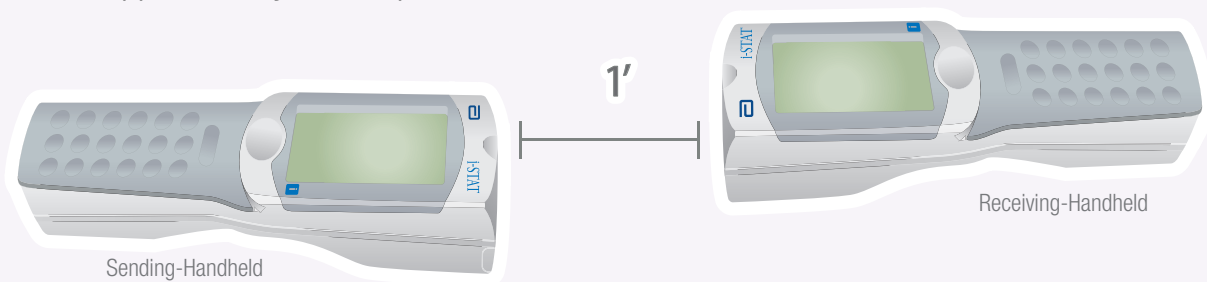
\* For information on checking battery power see step **1.2**

## Connecting/Setting Up Equipment

### Handheld-to-Handheld

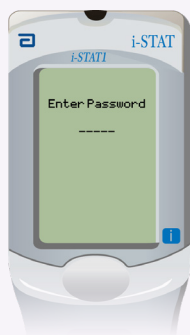
**2.2** Make sure the power is **off** on the Receiving Handheld.

**2.3** Place Sending and Receiving Handhelds on a flat surface with infrared (IR) windows aligned, approximately 1 foot apart.



**2.4** Turn **on** the Sending Handheld, press **MENU**, and select **7-Utility**.

**2.5** When prompted for a password, press **ENT** and continue.



**Note:** Abbott Point of Care Inc. recommends changing the default password.



If the correct password was not entered, the Utility Menu will not appear. Check for data entry errors and retry.

If still unsuccessful, call APOC Technical Support and indicate:

- A Handheld-to-Handheld update has been attempted
- Password for Utility Menu is unknown

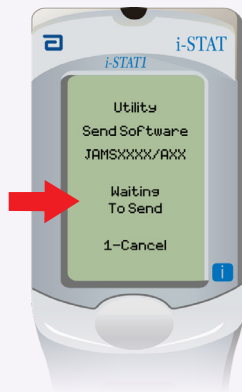
If that did not work, a password is needed.  
Enter the password defined by your facility and press **ENT**.

### 2.6 In the Utility Menu:

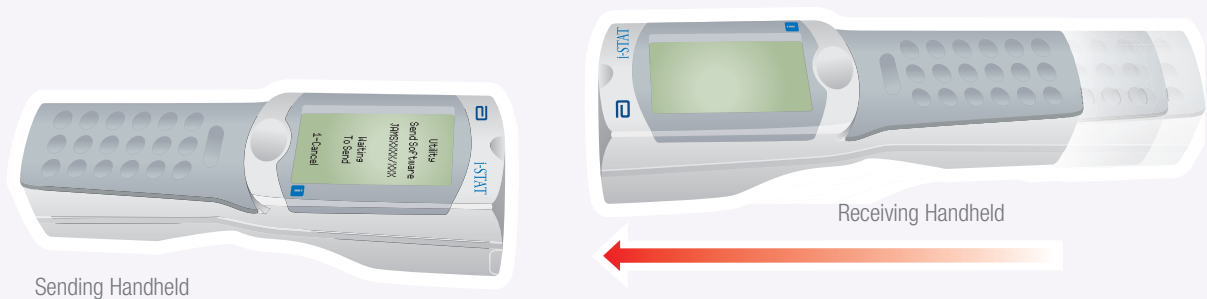
- Press **1-SEND SOFTWARE**
- Press **1-SEND**

Make sure the Receiving Handheld's power is **off**.

### 2.7 When the Sending Handheld displays **WAITING TO SEND**:

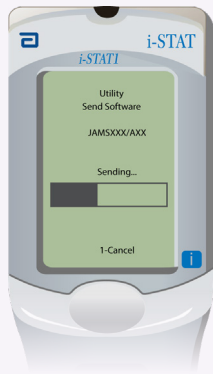


- Keep the infrared windows aligned
- Without lifting either Handheld off the flat surface move the Receiving Handheld towards the Sending Handheld until the Sending Handheld displays **SENDING**.



## 2.8

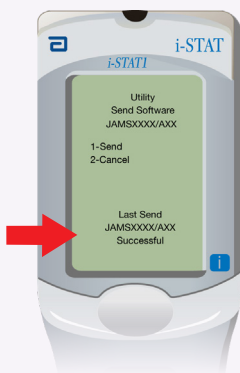
When the update is in progress, the Sending Handheld will display **SENDING** along with a bar indicating that the software is being sent.



The Receiving Handheld will have 1's and 0's streaming across the screen signifying that it is receiving the software.



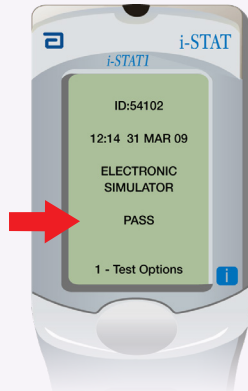
Do not move the Handhelds until the Sending Handheld goes back to the Utility menu, and displays **Last Send Successful**. The update is now complete.



**2.9**

**Run** the Electronic Simulator in the newly updated Handheld.

When the simulator finishes, PASS will be displayed..



If **PASS** is not displayed, re-run the Electronic Simulator. If the repeated Electronic Simulator attempt fails, please contact APOC Technical Support.



For additional information on running the electronic simulator, please see:

- Section 14 of the i-STAT 1 System Manual, or
- The Introduction and Start-up section of the i-STAT System Manual for Waived Tests

**Congratulations. The process for updating an additional i-STAT 1 Handheld is complete.**

If there are other i-STAT 1 Handhelds to update, repeat steps **2.2** through **2.9**

If there are no other Handhelds to update, the process is complete.

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