

## Upgrading LCR.iQ Software from *1.09 or Higher* to the latest software version

### 1. OBTAIN THE LATEST VERSION OF LCR.iQ SOFTWARE

- Ensure that your register has SR1000 V1.09.00 (or higher) and BR1000 V1.72 (or higher) software currently installed. If not, please consult with Liquid Controls Technical Service Department for instructions upgrading to the latest version from an older version of software.
- Access the latest software from <https://lcmeter.com/lc-software>
- Download the .zip file with the latest version for LCR.iQ software to your local PC.
- Save both software files in the “Import” folder you just created on the USB drive.
- Extract the Import folder from the downloaded zip file directly to the root of a USB drive.
- The “Import” folder you just copied from the USB drive will contain 2 files, SR1000 V1.xx.xx and LCR Components-signed.tar.gz. Both of these files are needed in the Import folder for this upgrade.

### 2. OPEN THE REGISTER

- Ensure paper is in the printer and printer is properly installed and ready to print.
- Cut the calibration seal wire (if applicable) and loosen the calibration screw using a 7/16 wrench until the calibration ticket begins to print automatically. (If no ticket printer is installed, the LCR.iQ will display the main menu once the calibration screw activates calibration mode.)
- Using a 3/16” allen wrench, remove the four screws in the outer corners of the front cover of the register and swing the door to the left to open the register.

### 3. SAVE THE CURRENT CONFIGURATION: >This saves the current settings on the register and allows you to reload the settings at the end of the upgrade process.

- Insert the USB drive used to save the new files in Step 1 into the USB slot on the register.
- Go to the Main Menu > Setup Menu > Security and press Software Update.

**Tip:** Be sure to keep the calibration ticket that prints out in a safe place for the final step of this process.

- Select Save Configuration on the Software update page.
- On the Save Configuration page, select File Name then enter the desired name for this configuration. Then press OK button on the keypad.

**Tip: Default Destination should be “USB” and Configuration Style should be “UNIT”**

- Upon returning to the **Save Configuration** page, click **Save**. When you see “The Configuration was successfully saved”, Click **OK**, then **Close** to return to the **Software Update** page.

#### **4. UPDATE THE REGISTER SOFTWARE, DATABASE, & DEPENDENCIES:**

- On the **Software Update** page, select **Load files from USB**. When successfully loaded, you will see a confirmation screen, saying “File Load was successful”. Click “**OK**”, and you will return to the **Software Update Page**.
- On the **Software Update Page**, select **Install Main Processor Firmware**.
  - Select the **SR1000\_V1.18.00-signed.deb**
  - If “**Digital Signature successfully verified...**” appears, click **OK**.
  - When “**Are you sure you want to install...**” appears, click **Yes**.
  - The register will install the software then reboot. When “**Maintenance Mode POWER DOWN FOR 30s**” appears, you may **power off the register for 30 seconds** or the register will power cycle on its own within 30 seconds of displaying this message.
  - **If you’d previously been running software older than v1.15.00**
    - Upon rebooting the database will automatically load and install.
    - When finished loading, it will display “**The software components have been installed successfully!**”, then click **OK** to continue.
  - Once the unit reboots you will see a screen that shows **SYSTEM ALERT. The Memory is corrupt... Perform a CLEAR ALL...** (this is normal for this process) - Press **OK**
  - Navigate to **SETUP MENU>SECURITY>RESET REGISTER FIELDS** and press **OK**
  - Go to **RESET REGISTER FIELDS** and press **OK**
  - Select **CLEAR ALL** from the list and press **OK**
  - The register will then ask are you sure you want to Clear All settings.... Press **YES**
  - The register will tell you there is an update to SR1010 software available for your unit... would you like to install this update now? Press **YES**. The screen will show you that is it upgrading the I/O board

Firmware. Wait for it to complete (100%)

- Once the SR1010 software is applied, the SUCCESS screen will display and say that the I/O board software was loaded successfully.... Press **OK**
- *If you are asked: “New LCR.iQ Software is detected, would you like to install it?” (“Yes” is highly recommended for most users.) Click **YES**. Once completed it will confirm “The I/O board firmware was loaded successfully.” Click **OK**.*
- *When you get the following message: “If your LCR.iQ is setup with SENSEiQ boards, please be sure to access the first I/O setup Screen and enter the number of SENSEiQ boards installed. This will complete the software upgrade for any installed SENSEiQ boards.” Click **OK**. You will perform this activity last if applicable.*
- **To update the dependencies, return to the Software Update Page, and select Install Main Processor Firmware.**
  - Select the **LCRComponents-signed.tar.gz**
  - If “**Digital Signature successfully verified...**” appears, click **OK**.
  - When “**Are you sure you want to install...**” appears, click **Yes**.
  - The register will install the software then reboot. When “**Maintenance Mode POWER DOWN FOR 30s**” appears, you may **power off the register for 30 seconds** or the register will power cycle on its own within 30 seconds of displaying this message.
  - Once the unit reboots you will see a screen that shows, “**The Main Processor firmware was loaded successfully. The I/O Board firmware is already up to date!**” – Click **OK**.

## 5. LOADING A SAVED CONFIGURATION

- Navigate to the Security screen: **Main Menu > Setup Menu > Security** then press **Software Update** on the bottom of screen.
- Select **Load Configuration** on the Software Update page.
- Be sure **Perform Clear All First** is marked “**Yes**”.
- Select **File Name**, then scroll down to the previously saved file name. Click **OK**, then **Load**.
- The unit will display “The Configuration was successfully loaded!” Click **OK**, then **Close**.

## 6. VERIFY PULSER CALIBRATION AND FLOW DIRECTION

- Referencing the calibration ticket in step 1, locate “PULSES/[unit of measure]”.
- Navigate to **Main Menu > Setup Menu > Calibration**. Confirm that the “Pulses/[unit of measure]” matches the value on your calibration ticket. If you wish to change it:
  - Select “Pulses/[unit of measure]”
  - Enter in the value indicated on your calibration ticket

- To confirm or change your flow direction, navigate to **Main Menu > Setup Menu > Meter > Flow Direction**
  - Confirm that your flow direction matches the value on your calibration ticket (< or >). If you wish to change it, select the appropriate setting on the register.

**7. SETUP SENSEiQ EXPANSION BOARDS** *(Only if SENSEiQ expansion boards are installed)*

- Navigate to **Main Menu > Setup Menu > I/O Setup**
- Select “Number of SENSEiQ Boards”
- Enter the number of expansion boards installed

**8. PERFORMING A REGISTER FIELD “Clear All”** *\*Only required if indicated by the register in step 3 AND if you did not “Load a Saved Configuration” above.*

- Go to **Main Menu>Setup Menu>Security>Reset Register fields** then Select “**Clear All**”
- “Are you sure?” – click “**Yes**”