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Firmware Update Instructions
Model 3000, 3001, 3005, 3006, 3019, and 3276 Series
Using Lumic Firmware Updater
Revision: 1

Written by:	*[signature]*	**Date:** 04 Nov 2021
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GENERAL

While great effort has been made to maintain compatibility over the years, some improvements to the firmware and hardware make it necessary to perform unique steps to update the firmware to the newest revision level. To maintain proper calibration, please perform these steps carefully. If you have any concerns, please don't hesitate to contact your local sales representative or Ludlum Measurements.

SETUP

Please download the latest Firmware Updater Software from the Ludlum website. In addition to the software, a special USB cable is required to flash the firmware onto the instrument. Since the cable is not readily available at your local store, we recommend you contact your local sales rep or Ludlum Measurements to order one (pn: 22-9150).

SELECTING FIRMWARE

The firmware update available for your instrument is hardware dependent. You will need to know the instrument model number and the circuit board number installed in your instrument. To find the part number:

- Power off the instrument
- Remove the six flat-head screws holding the chassis and can together
- Carefully lift the can away from the chassis to expose the circuit board
  - Note: The can and the chassis are internally connected by a battery cable. This cable may be disconnected for easier access to the printed circuit board.
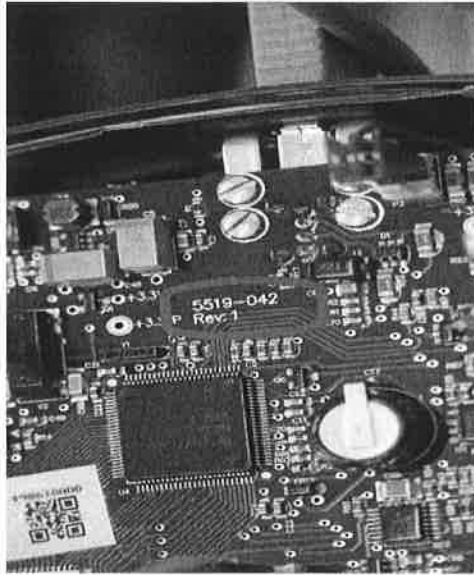- Locate the part number printed on the circuit board.
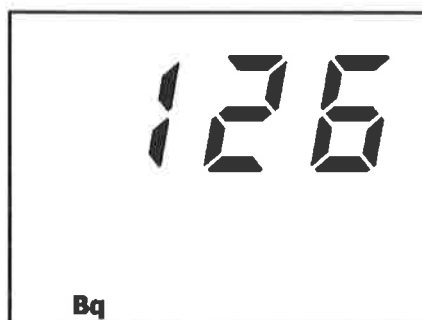
Figure 1- Example of a part number

To obtain the latest version of firmware available for your instrument, please visit our website, select your instrument from the available Model 3000-Series Firmware, and select the appropriate printed circuit board number for your instrument.

Example:

Please select your instrument with the printed circuit board number it contains.

Instrument	Model 3001 ⌄
Printed circuit board number	please select your board ⌄

The next step is to determine which version of firmware is currently installed on your instrument. Power on your instrument and after all the segments are illuminated, the display will show three digits identifying the instrument type and firmware version.

Figure 2 - Example Firmware Version

The first digit refers to the instrument model number:

> 0: Model 3000 - no datalogging
>
> 1: Model 3001 - no datalogging
>
> 4: Model 3276
>
> 5: Model 3000 - w/datalogging
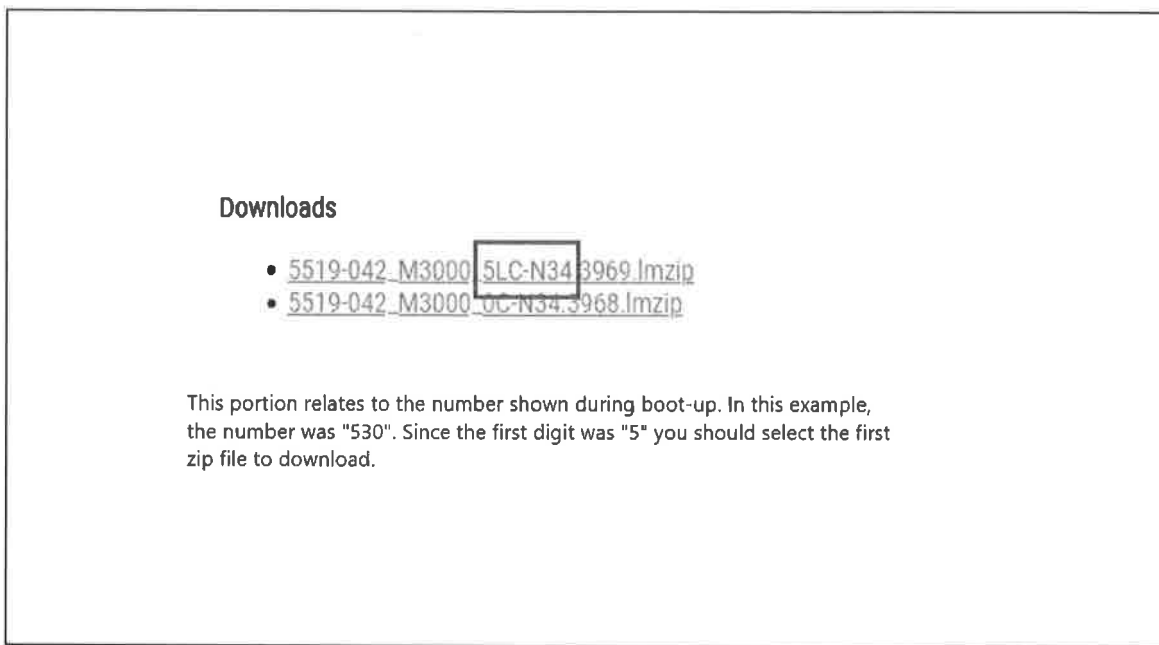>
> 6: Model 3005, 3006, 3019
>
> 7: Model 3001 - w/datalogging

The second and third digits refer to the firmware suffix.

Example:

If the numbers 530 appear it means "Model 3000 w/datalogging" firmware "N30".

Finally, select which firmware version you will need from our website.

Downloads

- 5519-042_M3000_5LC-N34.3969.lmzip
- 5519-042_M3000_0C-N34.3968.lmzip

This portion relates to the number shown during boot-up. In this example, the number was "530". Since the first digit was "5" you should select the first zip file to download.

Updating from N1 - N19 Firmware

When updating firmware prior to 49830N20 (with a suffix of N19 or less), it is recommended to **update the firmware to N34 first** by following, in order, all steps below **before updating the instrument to N40 or newer firmware**. Once the instrument is updated to N34, follow the following procedure to update to N40 or higher.

Updating from N20 and Newer Firmware

For firmware newer than 49830N20, (suffix of N20 or greater), only follow steps 1-8 (step 7 is recommended but may be skipped) and step 19 to convert to N34, N40, or higher.
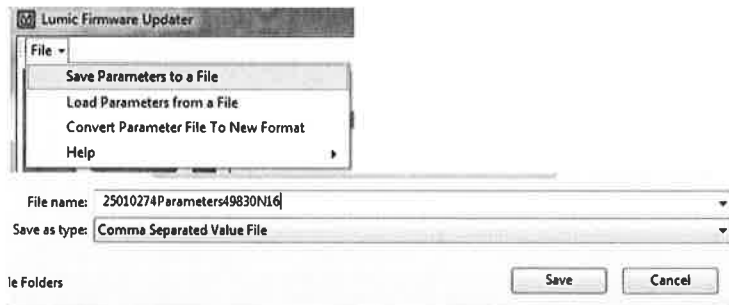
Equipment Required:
- Ludlum Lumic Firmware Updater
  (www.ludlums.com/images/stories/firmware_updates/Lumic_FirmwareUpdater_Installer.msi)
- USB cable A male to A male (LMI p/n 22-9150)
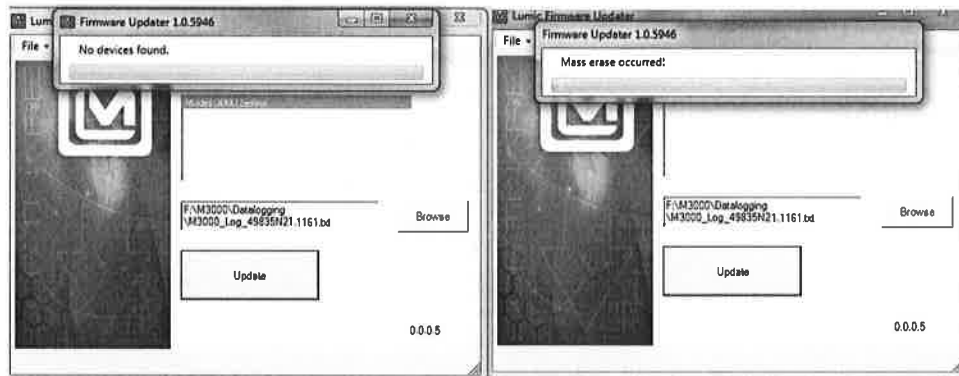
PROCEDURE

(1) Install the latest version of Ludlum Lumic Firmware Updater.

(2) Save the desired new firmware file to your computer.

(3) Turn on the Device to be updated.

(4) Connect the USB cable to Device and Computer.

(5) Wait until the USB driver has been successfully installed. (This may take a short time, or up to 5 minutes.)

(6) Open the Lumic Firmware Updater and select the Model Numberfrom the device selection box.

(7) Select **File ▾, Save Parameters to a File** and be sure to name the parameter file something unique that you will recognize.
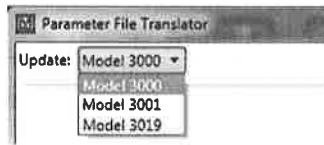

(8) Select **Browse** on the main screen and select the new firmware file to be loaded from step 2. Once the desired firmware is selected, click **Open.**

(9) Select the **Update** button on the main screen.

(10) Once the Device turns back on, select File ▼, Convert parameters to new format.

(11)   The Parameter File Translator window should now be open. Select the Model to be updated.

(12)   Select **Translate**

(13)   Select **Browse** and then select the parameter file name saved in step 7.

(14)   Select **Save to File**. Again, be sure to have a unique name for this translated parameter file.

(15)   Select the "Model 3000 Series" from the device selection box.

(16)   Select **File ▾, Load parameters from a file.**

(17)   Select the parameter file saved in step 14.

(18)   Select **Open.**

Note: Error messages will pop up. These error messages are expected for parameters that are not user changeable. For example, the parameters Device model number, Device Firmware, Device temperature, all stream rates, etc. will generate expected and negligible errors.

(19)   Review parameters and instrument operation, and at least a simple check source test should be performed to confirm instrument operability.