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Model 30/35/79 Series Firmware Update Instructions

This document specifically addresses updating firmware on the Model 30, 35, and 79. If you have any questions, please contact your local sales representative or contact Ludlum Measurements, Inc. at 800-622-0828 before proceeding.

Written by: *[signature]*　　　Date: 07DEC23

Approved by: *[signature]*　　　Date: 7DEC23

GENERAL

The newest generation of Model 30 series instruments (Gen 2) has greater capabilities than its predecessors. With this greater capability comes the need to store more information than ever before. As a result, new procedures are needed to update instrument firmware in the field.

WARNING

The Ludlum Lumic Firmware Updater is free to our customers and may be used to update the firmware on particular instruments to add or change currently available features. It is important to note that the changes may or may not be able to be reversed. While Ludlum Measurements has taken great care to develop firmware updates that will not affect current instrument calibration, it is still recommended that all firmware updates be performed prior to instrument recalibration. As a result, if you have any concerns before proceeding, contact your local sales representative or Ludlum Measurements, Inc at 800-622-0828.

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:

1. Power off the instrument
2. Remove the battery cover and batteries.
3. Remove the four flat-head screws holding the front and back chassis together
4. Carefully separate the chassis to expose the circuit board
   a. Note: The chassis covers are internally connected by a battery and detector cable. Great care should be taken.
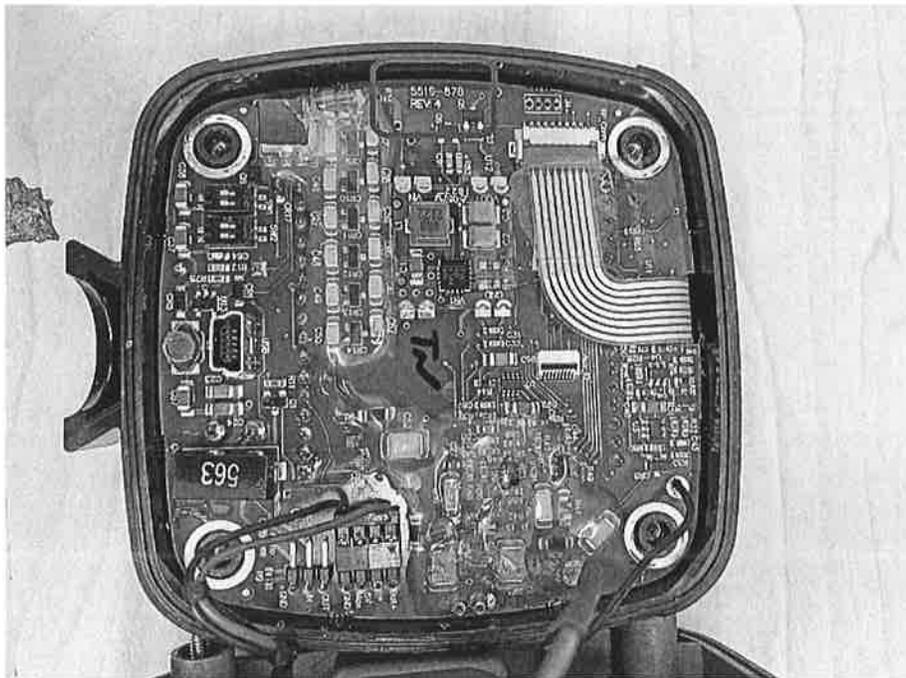5. Locate the part number printed on the circuit board.

Figure 1- Possible part number and number location

6. To obtain the latest version of firmware available for your instrument, please visit our website, select your instrument from the available Model 3000-Series & Model 30 Series Firmware, and select the appropriate printed circuit board number for your instrument.

   Example:

PROCEDURE

Equipment Required:
- Ludlum Lumic Firmware Updater (available for free from the Ludlum Measurements, Inc. website at the link provided below)
    o https://eng.ludlums.com/Lumic_Based_Firmwares/Resources/Lumic_FirmwareUpdater_Installer.msi
- Cable USB A male to Mini B (Ludlum P/N 21-8862)
- Simple Text Editor (similar to Notepad)

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

(2) Turn on the device to be updated.

(3) Connect the USB cable between the device and computer.

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

(5) Open the Lumic Firmware Updater and select the "Model 30 Series" from the *'Connected instrument'* box.

(6) Select **File ▾, Save Parameters to a File** and be sure to name the parameter file something unique. (There will be a pause as it connects and retrieves all of the appropriate information.)
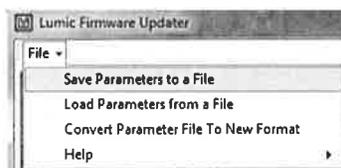

Figure 2 Save Parameters to a File

| File name: | 25010274Parameters49830N16 | ▾ |
| Save as type: | Comma Separated Value File | ▾ |

| le Folders | | Save | Cancel |

Figure 3 Comma Separated Value File Name

(7) Open the comma separated value file, that was just created, using a text editor and search for the following parameter and record the results:
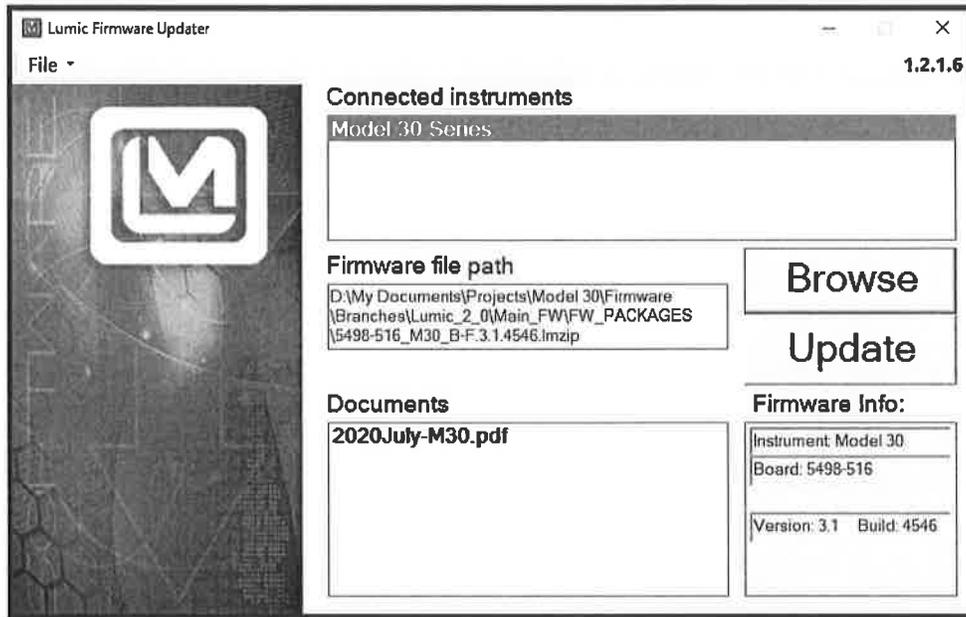
a. *Dev_Fw* (F:2.0.4282, etc.)

Note: This will be needed should you need to call for support.

```
Dev_Aud_Tone_Btn,3502
Dev_Aud_Vol_Clk,3
Dev_Aud_Vol_Alrm,3
Dev_Aud_Vol_Btn,3
Dev_Aud_Mode,Click
Dev_Aud_FltDeltaSensitivity,2
Dev_ActUnit,0
Dev_Ext[0]_Meas_V,485.805
Dev_Ext[0]_Meas_Cur,2.67167E-06
Dev_Fw,F:2.0.4282
Dev_Ext[0]_ActDetMem,0
Dev_CalTmCnt,0
Dev_Ext[0]_Ch[0]_CalRawCnt,0
Dev_Rev,21
Dev_Ch,1
Dev_AmbLight10,85
Dev_AmbLight01,250
Dev_AmbLight21,800
Dev_AmbLight12,1200
DetMem[0]_EnMode_Rate,1
```

Figure 4 Device Firmware Number

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

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

    a. Once the file has finished loading, the instrument will restart and the device will disappear from '*Connected instruments*' on the Lumic Firmware Updater screen.

(10) When "Model 30 Series" reappears on the Lumic Firmware Updater screen, the update is complete.

(11) Review parameters and instrument operation including performing a simple check source test to confirm instrument operability.

    a. New parameters may be available for configuring. Check the latest manual to find out what new parameters are available and can be changed via the setup menu. ex. audio divide.

NOTE: Due to recent firmware changes, some calibration file wire names were changed. As a result, attempts to write old calibration files to instruments with firmware version

F.3.0.x or higher may fail. Please contact Ludlum Measurements, Inc. should it be necessary to recover old calibration file data.