USB-1608FS 1.87 Firmware Update
Measurement Computing Corporation

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1. Description
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Firmware version 1.87

This firmware update resolves a problem seen only with
firmware version 1.86. Quickly executing consecutive AInScan
operations may result in a lost data packet.

If you receive the following message from InstaCal:
"The USB device attached requires resetting." followed by
a freeze of the InstaCal software, you will need to update
the firmware from version 1.85 to the latest.

This firmware update requires InstaCal Revision 6.24 and later.
You can download the latest version of InstaCal as part
of the entire MCC DAQ CD software suite from
http://www.mccdaq.com/software.aspx.

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2. Determine installed firmware version
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If you are receiving the error message listed above, you definitely have
version 1.85 installed.

If you are not receiving the error message, run the InstaCal utility.
Double-click the device to open the Board Configuration dialog. The
currently installed firmware version is displayed in the lower right corner
of the dialog.

Only devices installed with firmware version 1.85 and later can be updated.
Devices installed with firmware versions earlier than 1.85 do not
require this update.

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3. Three ways to update the firmware
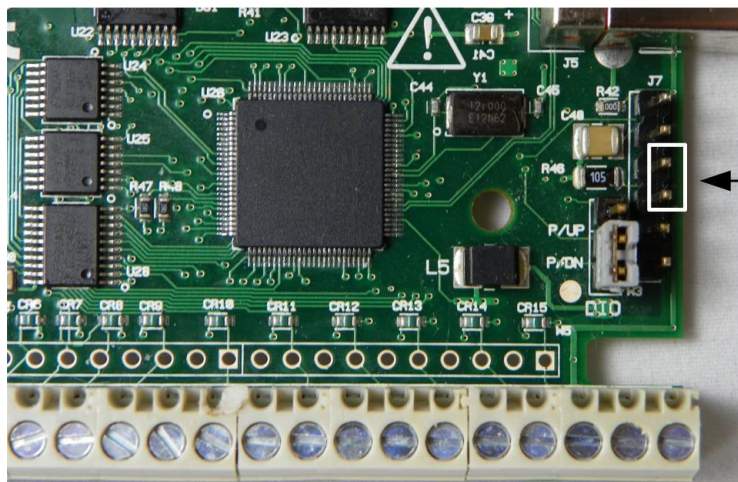==

A) On a PC that properly recognizes the USB-1608FS device in InstaCal, use
the following procedure:

1. Download the 'USB-1608fs.hex' file and copy it to the FirmwareImages
    subdirectory of the DAQ installation directory
    ("Program Files\Measurement Computing\DAQ\FirmwareImages" by default).
2. Connect the USB-1608FS to your computer.

3. Run InstaCal, and click on the USB-1608FS to highlight it.
4. Click the Download Firmware toolbar icon to open the Firmware Loader dialog.
5. Click the Load Firmware button to start installing the firmware.
6. Allow the process to finish. Wait until the Status field displays "Firmware update completed", and the Device firmware version field displays the new firmware version installed on the device. Click the X in the upper right corner to exit the dialog and return to the InstaCal main window.

B) On a PC that displays the error message listed in section 1, use the following procedure:

1. Download the 'USB-1608fs.hex' file and copy it to the FirmwareImages subdirectory of the DAQ installation directory ("Program Files\Measurement Computing\DAQ\FirmwareImages" by default).
2. Disconnect the USB-1608FS from your computer.
3. With a Phillips screw driver, loosen the 3 screws and remove the PCB from the case.
4. Noting the location of the pull up/down DIO jumper (for later re-placement), remove the pull jumper and place it over the middle 2 pins of the 6-pin J7 header (refer to the image below).

5. Connect the USB-1608FS to your computer. Note that the LED continuously blinks.
6. Run InstaCal, and allow the USB-1608FS-BOOT-LOADER device to be added to the board list.
7. With the device highlighted, click the Download Firmware toolbar icon to open the Firmware Loader dialog.
8. Click the Load Firmware button to start installing the firmware.
9. Allow the process to finish. The device will re-enumerate in Windows. After the firmware is installed, the Status field displays "Firmware update completed".
10. Refresh InstaCal and verify that a regular USB-1608FS device is now added.
11. Disconnect the USB-1608FS from your computer.
12. Return the jumper to the original position, place the PCB in the case and secure with the screws.

C) Instead of updating the device yourself, return the device to Measurement
Computing or to your distributor to perform the firmware update for you.


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4. Support policy and how to contact us
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Please contact Measurement Computing or your local distributor for technical
support.

Measurement Computing
10 Commerce Way
Norton, MA 02766
Email: techsupport@mccdaq.com
Phone: (508) 946-5100 x2
Fax: (508) 946-9500
www.mccdaq.com


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5. Previous firmware revisions
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Firmware version 1.86

This firmware update resolves an enumeration/recognition issue
on some newer PCs. The issue only affected units installed
with firmware version 1.85.

Only devices installed with firmware version 1.85 and later can be updated.
Devices installed with firmware versions earlier than 1.85 do not
require this update.

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