

1936-R/2936-R

1936-C/2936-C

Firmware

Version 1.3.4.0

Revision Date: 27-APR-2020

Newport Corp. World Wide Web Server

You can access a variety of Newport Corporation information sources via the Newport Web Server, <http://www.newport.com>.

Technical Support

Please review the User's Manual first if you are experiencing difficulties with the product. The following Technical Support information is listed below if you still need help.

Tel: 1-800-222-6440

Fax: 1-949-253-1479

Email: rma.service@newport.com

Internet: <http://support.newport.com>

1936/2936-C Firmware Upgrade Instructions

To Upgrade Firmware:

1. Extract all the files from Firmware-PM2936-XXX.zip file. "XXX" denotes the version of firmware files present in the zip file.
2. Put new firmware files (PM2935App.exe and XMLFile1.xml) in the root directory of a Win CE compatible USB flash drive (thumb drive).
3. Plug the USB flash drive into the USB port located on the rear panel of the power meter, and turn it ON.
4. After initialization, the new firmware files will be detected and the power meter will ask if you want to download the files.
5. Press the "Yes" softkey to start the upgrade process.
6. The power meter will instruct you to restart once the upgrade is successful.
7. Restart the power meter by turning it OFF and back ON.
8. The power meter will restart with the new firmware installed.

Files in Firmware that can be updated:

PM2935App.exe	Main Firmware file
XMLFile1.xml	XML Screen Layout definitions

What's New

The following is a list of added features and corrections to the 1936/2936-C Optical Power Meter (OPM) firmware:

VERSION 1.3.4.0 (27-APR-2020)

Fixes:

1. Adding debug message. [AmplifierData.cpp]
2. Adding command to write the AM's EEPROM "PM:CAL:WR_ALL_AM_EE" from flash disk file EE1.txt for channel 1 and EE2.txt for channel 2.[version.h, Command.cpp, Command.h, AnalogBoard.cpp, AnalogBoard.h]
3. Fix the function that saves the revision[Command.cpp]

VERSION 1.3.3.1 (21-APR-2020)

Fixes:

1. Cancel last fix: Fix Problem when create a config0 file on Addr & SN & model commands [command.cpp, FlashInterface.cpp, Housekeeping.cpp]
2. Cancel last fix: All commands answer goes to debug port too. [Reply.cpp]

VERSION 1.3..3.0 (05-APR-2020)

Fixes:

1. Add "PM:CAL:RAM_READ?" command to get the analog calibration data by channel [AnalogBoard.c, AnalogBoard.h]
2. Change "static" variable to local variable [Command.cpp]
3. Add "PM:CAL:EE_READ?" command to get the analog EEPROM string content by channel [Command.cpp, CommandExecutive.cpp]
4. Add "APPCS?" command which print out the check sum from the "Checksum.txt" file.
5. Add "PM:FLASH:COPY_TXT_FILES?" or "+?" command [Command.cpp, CommandExecutive.cpp]
6. Add "DIR?" Command to print all files name in //FLASH [Command.cpp, CommandExecutive.cpp]
7. Add "MFG:FLASH:ERASE_DISK" command Erase all \\FLASH\\ area form address 0x1000000 to 0x1A00000 [Command.cpp, CommandExecutive.cpp]

8. Add "MFG:FLASH:SPLASH" command to load new boot splash file from flash disk into device flash[Command.cpp, CommandExecutive.cpp]
9. Add "OP:FPGA:VERSION?" or "FPGA_VER?" Command to get the FPGA Version. [Command.cpp, CommandExecutive.cpp]
10. Add "OP:FLASH:ID?" command to get the Flash chip ID. [Command.cpp, CommandExecutive.cpp]
11. Fix Problem when create a config0 file on Addr & SN & model commands [command.cpp, FlashInterface.cpp, Housekeeping.cpp]
12. All commands answer goes to debug port too. [Reply.cpp]
13. Fix problem in Correction Display [NumericDisplay.cpp, DataManager.cpp]
14. Fix bug with more than 190 WL[AmplifierData.cpp, DetectorData.cpp, FlashInterface.cpp,

VERSION 1.2.6.3 (18-NOV-2019)

Fixes:

1. Release Version for last fixed problem

VERSION 1.2.6.1 (22-SEP-2019)

Fixes:

1. In correction mode the S/W will avoid the "----" in the correction display
2. Fix for PM:PWS? command
3. Define Test Port Pins as output: PWM nCS_4 nCS_5
4. Nagging the selected test Point pin to high level or low level

VERSION 1.2.5.3 (09-SEP-2019)

Fixes:

1. Bug: Detector Saturated on the first channel is accidentally affected by both channels and as a result this flag on the second channel will never be raised.

VERSION 1.2.5.2 (13-SEP-2018)

Fixes:

1. Bug: The PWS command returns only the channels to which the sensor is connected

VERSION 1.2.5.1 (02-OCT-2017)

Fixes:

1. Bug: USB Crashes during data logging to the PC: updated:
Ensure data sent by USB is never a multiple of 64 bytes long ,
because there are crashes when a terminating empty packet is sent.

VERSION 1.2.4.5 Sep 28, 2017

Fixes:

1. Stop occasional loss of data when saving to buffer with sensors with temperature compensation
2. Prevent USB crashes when sending large buffers to PC

Feature Enhancements:

1. New command to enable/disable/query state of temperature measurement
 - PM:TEMPPOLL 0 – Disable the 10s temperature polling
 - PM:TEMPPOLL 1 - Enable the 10s temperature polling
 - PM:TEMPPOLL? – Return the status of the temperature polling (0 Disabled, 1 Enabled)

VERSION 1.2.3.2 August 04, 2015

Fixes:

1. Don't display ----- for an overly long time if the negative reading is due to a large negative offset (Channel B only)

Feature Enhancements: None

VERSION 1.2.3.1 2014

Fixes:

1. Limit previous fix to 919P-003-10 detectors only. The other 919P series sensors performed correctly without this fix.

Feature Enhancements: None

VERSION 1.2.2.2 2014

Fixes:

1. Display measurements lower than 1mW for 919P detectors.

Feature Enhancements: None

VERSION 1.2.2.0 January 16, 2012

Fixes:

1. Updated the Data Store Enable command to set the data buffer size to the number of samples.
2. Display the power measurements with correct resolution when switching between semiconductor and thermopile detectors.
3. Display measurements lower than 1mW for 818P-001-12 detectors.
4. Improved anticipation time for thermopile detectors other than 818P-030-18HP.

Feature Enhancements: None

VERSION 1.2.1.1 June 14, 2011

Fixes:

1. The rate and time calculations on the Statistics screen have been updated to account for the detector family in use and the current measurement mode.
2. Reduced thermopile anticipation time for 818P-030-18H and 818P-030-18HP detectors.

Feature Enhancements:

1. Added progress information to the Statistics screen and modified the soft key to allow data acquisition to be started ("Start Stats") and even stopped ("Stop Stats") during processing. A dropdown control for the rate units and the time units was also added.

VERSION 1.2.0.1 January 7, 2011

Fixes:

1. When the data acquisition is set to Continuous mode, all statistics—max, min, range, mean and standard deviation—computed are representative of data present in the data store buffer, as opposed to data collected since it was last enabled.
2. Communication echo state is saved to non-volatile flash memory if "**SAV" command is issued, and it can be restored following a reset or using "**RCL" command.

Feature Enhancements: None

VERSION 1.1.5.1 February 10, 2010

Fixes:

1. Zero offset is computed in Amps for semiconductor detectors or Volts for thermopile and pyroelectric detectors.
2. "PM:CORR?" query returns the multiplier and offset values in scientific notation.
3. By default, the digital filter with 10000 samples is enabled for semiconductor detector measurements.
4. Display "0.000J" when no pulses are detected in measurement timeout duration
5. Display measurements in "mW" when thermopile measurements are in range 0.
6. The Graph screen was fixed to properly handle changes to the rate, time, or samples.

Feature Enhancements:

1. Reduced thermopile anticipation time for 818P-030-18H and 818P-030-18HP detectors.
2. Display “Saturated” on the main measurement screen when input current/spot size (A/cm^2) exceeds saturation current rating for semiconductor detectors or input voltage/responsivity exceeds maximum power rating for thermopile detectors. “PM:P?” query will return “-3.402823E+038” and “PM:PWS?” command will return this power reading and status bit #1 will be set.
3. Saturation level can be modified using the command “PM:SATLEVEL value”. The units for value are “ A/cm^2 ” for semiconductor detectors and “Watts” for thermopile detectors.
4. Auto LCD backlight intensity reduction mode. By default the LCD will dim after 8 hours of instrument inactivity.

VERSION 1.1.1.1 July 1, 2009

Fixes:

1. The detector responsivity is now properly restored after a power off, standby, or detector change.
2. The spot size can be modified for channel B.

Feature Enhancements: None

VERSION 1.1.0.2 April 28, 2009

Fixes:

1. The attenuator filter ON/OFF status is saved and restored properly; the saved information is detector-specific. This feature is not applicable to detectors having an attenuator switch. For these detectors, the filter status reflects the state of the attenuator switch.
2. Fixed an issue with not being able to detect the presence of detector intermittently.

Feature Enhancements:

1. Added a new measurement display mode called Analog Gauge. This feature is accessible via the Mode key.

2. Added a new softkey called “Standby” on the main measurement view. The instrument can be forced into a standby state by pressing this button.

VERSION 1.0.7 December 4, 2008

Fixes:

1. Clear digital filter only when a range change has occurred.
2. The attenuator filter ON/OFF status is saved and restored properly; the saved information is detector-specific. This feature is not applicable to detectors having an attenuator switch. For these detectors, the filter status reflects the state of the attenuator switch.

Feature Enhancements: None

VERSION 1.0.6 September 5, 2008

Fixes:

1. Any value that is displayed with units in dBm is no longer displayed with a unit prefix. The decimal point is adjusted so that the unit prefix is not needed.
2. Updated Math screen operators “%”, “dB” (if the signs are the same), and “REL” to allow negative numbers.

Feature Enhancements:

1. Added a new unit of measurement called, SUN. This unit can be selected when performing CW Continuous or CW Single measurements using thermopile detectors.
2. Added the Store Ref. soft keys to the Math Function Setup screen. The “Store Ref.

A” soft key stores the latest reading from channel A in the “Ref. A Value”. The “Store Ref. B” soft key stores the latest reading from channel B in the “Ref. B Value”.

VERSION 1.0.5 May 20, 2008 (Sales Release Version)

Fixes: None

Feature Enhancements: None

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