F6000 Family of Power System Simulators Firmware Versions 2.23 and 4.27

Marketing Release Notice
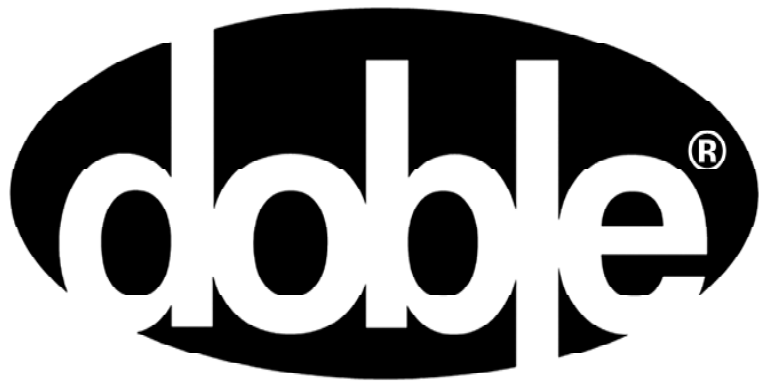
Introduction

F6000 firmware, versions 2.23 and 4.27 corrects problems with the earlier versions and adds new features. Firmware version 2.23 supports the CPU1 F6000 instruments and Firmware version 4.27 supports the CPU2 F6000 instruments. The CPU1 instruments contain a 10Base2 BNC Ethernet connector and CPU2 instruments contain a 10BaseT RJ45 Ethernet connector.

Software QA testing has been performed, per Doble Engineering ISO 9001 procedures. A list of known limitations is included in this notice. Please take time to review it.

F6000 firmware versions 2.23 and 4.27 are required for the following Doble software revisions:

- ProTesT Version 2.07 or higher
- F6TesT Version 2.14 or higher
- F6MeterControlPanel Version 2.10 or higher
- Transwin Version 2.03 or higher
- F6000 Control Panel Version 2.06 or higher

Please note that earlier software versions have compatibility issues and some features may not function properly.

New Features and Fixed Problems in Versions 2.23 & 4.27

Version 2.23:

- The F6510 would not produce any error messages if the satellite or F6050 was disconnected and reconnected while running the control panel or a macro.

- The following new option numbers have been added to the VFD display to show the type of the Logic I/O installed in the F6150(A):
  - Option F6841 - Logic I/O 1
  - Option F6842 - Logic I/O 2
  - Option F6844 - Logic I/O 4
  - Option F6845 - Logic I/O 5

- In some incidents a TOCPLT macro would report "No Op" for valid test points where the relay would operate. In these cases the problem could be cleared by power cycling the F6150 (A).

- In some incidents TOCPLT macro would not run with CPU2 firmware version 4.13, but would with previous versions of CPU2 firmware.

- In the FFRMPT macro the timer would start at the beginning of the ramp, regardless of the timer start frequency set point, if the ramp rate was less then 0.01 hertz.

- The FFRMPT macro reported times too long by 1.3 cycles (at 60Hz).

- The L/R dc offset value would only be applied to left most source when using combined current sources.

New Features and Fixed Problems (Continued)

- The F6150 (A) front panel display did not display the correct message when the F6050 was in line synch mode.

- The F6150 timers would add 2 milliseconds to all recorded times.

- System errors would occur and the messages would not appear to be applicable. For example "Current Monitor. Input line current is too large. Total of all outputs exceeds system specifications. Try reducing the source amplitude or reducing the load" would appear when the control panel or ProTesT is not requiring any current outputs.

- The Logic I/O 4 board's paired inputs were not correctly recognized by the F6150(A).

- The voltage and current source output in DC mode the amplitude could be off by up to 0.14%.

- Timing tests conducted in Control Panel would be 0.3 milliseconds longer then the same tests conducted with ProTesT macros.

- CPU1 instruments would freeze or hang when using more then 8 sources.

- In F6Test when using Ethernet communications some test points along the characteristic in IChar and ZChar modules would not test correctly.

- Using a L2 logic output in SSIMUL would cause the F6150 (A) to reboot.

Version 4.27:

In some cases the frequency could remain at the base frequency even when you enter a harmonic frequency. For example 120 Hz.

- Added a feature that allows multipliers on amplitude actions, the same as phase actions.

- Fixed a problem where in some cases logic inputs GN16 and above were not working.

- Fixed a problem where AIM internally recorded waveforms occasionally have glitches.

- Fixed a problem where Control Panel with F6300 where the Set and Ramp function could cause F6300 sources to shut off.

- Fixed a problem where TRANS macro timers and SSIMUL logic output were not handled properly when using IEC GOOSE.

- This release fixes a number of IEC GOOSE related issues

including, but not necessarily limited to the following: Multiple Byte Bit strings and Bit pairs did not work on GOOSE Output, 'Test Mode' and 'Needs Commissioning' flags were not settable via IED Define message, Equal and Not Equal comparisons for bit strings and bit pairs were inverted, GP outputs using bit strings did not work.

Known Limitations

- Recording Transient source waveforms using the AIM option may appear to be clipped. The current output is correct. It is only the recording that is incorrect.

- The SSIMUL macro does not perform a sense check like the steady state macros. Therefore is a timer stop condition is meet at the start of the starting state the timer reports a "No Op" instead of a sense check.

Contact Us

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