FuelCell Addendum – Installing Multiple 850/890 Fuel Cell Test Systems on a Computer

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Introduction

This addendum describes the installation and operation of two 850/890 Fuel Cell Test Systems on a single computer.

The installation of dual systems requires the standard *FuelCell*® software installer.

Description

When fully installed, the multiple station configuration contains only one copy of the *FuelCell* program. The default location is c:\fuelcell\fuelcell.exe.

Multiple copies of the "FuelCell.ini", "FuelAux.ini", "Reform.ini" and "ReformC.ini" configuration files are created for each of the stations. All configuration files are located in the same directory as the main *FuelCell* program.

For example, the configuration files for the first station are named "FuelCell1.ini", "FuelAux1.ini", "Reform1.ini" and "ReformC1.ini"

The configuration files for the second station are named "FuelCell2.ini", "FuelAux2.ini", *etc*.

Startup icons for each of the stations are created on the desktop using the names "FuelCell-1" and "FuelCell-2".

Each of the startup icons contains different information instructing the *FuelCell* program to use the specified configuration files. For example, right-click on the FuelCell-1 icon. The "Target" will be listed as

> C:\FuelCell\Fuelcell.exe /station 1

The /station 1 option instructs the program to use the configuration files named "FuelCell1.ini" and "Reform1.ini", *etc*.

Installation

First Unit

1. Connect **only** the first 850/890 or other Scribner Fuel Cell Test System to the computer. If 885 PSTATs are available, connect only the 885 PSTAT that is associated with to the first 850/890.

2. Install the *FuelCell* software as described in the *FuelCell* software manual. During installation you will select the instrument type, load size and serial number.

3. Test the system using only the first load.

4. Close the *FuelCell* software.

5. Navigate to the directory where the FuelCell was installed, usually C:\FuelCell\. Rename the following files (FuelAux.ini and ReformC.ini may not be present on all systems):

FuelCell.ini	to	FuelCell1.ini
FuelAux.ini	to	FuelAux1.ini
Reform.ini	to	Reform1.ini
ReformC.ini	to	ReformC1.ini

6. Right-click on the *FuelCell* desktop icon and choose Rename. Rename to icon to "*FuelCell 1*".

   Right-click on the *FuelCell 1* desktop icon and choose properties. Add "*/station 1*" to the end of the "Target" as shown.

   Target: *c:\FuelCell\Fuelcell.exe /station 1*

7. Start the *FuelCell* program using the *FuelCell 1* desktop icon and test operation of the first test system.

Second Unit

8. Connect **only** the second 850/890 or other Scribner Fuel Cell Load Unit. If 885 PSTATs are available, connect only the 885 PSTAT that is associated with to the second 850/890.

9. Run the *FuelCell* installer program again. This will install a second set of configuration files. During installation you will select instrument type, load size and serial number for the second test system.

10. Navigate to the directory where the FuelCell was installed, usually c:\FuelCell\. Rename the following files (FuelAux.ini and ReformC.ini may not be present on all systems):

FuelCell.ini	to	FuelCell2.ini
FuelAux.ini	to	FuelAux2.ini
Reform.ini	to	Reform2.ini
ReformC.ini	to	ReformC2.ini

11. When using a USB connected 850g/890g, skip to step 13.

    Select a new GPIB address for the second unit. GPIB address 10 is recommended. Consult the 850/890 manual for instructions on changing the GPIB address of the test system.

12. Navigate to the directory "C:\FuelCell\" and open the "FuelCell2.ini" file in the Notepad text editor. Change the Address setting in the [Gpib] section to the new address as shown below.

    [Gpib]
    Board=0
    Address=10

    Save and close the file.

13. Right-click on the new *FuelCell* desktop icon and choose Rename. Rename to icon to *FuelCell 2*. **(NOTE: Do NOT rename the *FuelCell 1* icon created in step 6).**

    Right-click on the *FuelCell 2* desktop icon and choose properties. Add "*/station 2"* to the end of the "Target" as shown.

    Target: c*:\FuelCell\Fuelcell.exe /station 2*

14. Start the second test system by using the modified *FuelCell 2* desktop icon and test its operation.

15. Connect both test systems and run both simultaneously. To arrange both *FuelCell* programs to share the computer screen, right-click on the Windows Task Bar and select *Show Windows Side-by-Side.*