4871
Process Controller

Supplemental Operating Instruction Manual



IMPORTANT INFORMATION

This manual supplement contains important operating and safety information. Users should study all of these instructions located here and on the USB Flash Drive which accompanied the controller. The 4871 Process Controller is a complex piece of equipment and will require some time to understand its capabilities. You must carefully read and understand the contents of this manual prior to the use of this equipment. For safe operation, please pay attention to the alert signals throughout the manual.

PC REQUIREMENTS

OPERATING SYSTEM	• Windows 10 (32 bit & 64 bit) • Windows 8, 8.1 (32 bit & 64 bit) • Windows 7 (32 bit & 64 bit) • Windows Vista (32 bit), Vista 64 has shown some instability. • Windows Server 2003, 2008, 2012 (32 bit & 64 bit) • Windows XP (32 bit & 64 bit) *Note: SpecView **does not** work on Windows 8 RT (as found on some Microsoft Surface tablets).*
MINIMUM SYSTEM REQUIREMENTS	• Intel Pentium processor or equivalent AMD • 1GB RAM minimum • (2GB or more recommended, as Windows takes most of this minimum) • 1G hard disk space to install SpecView and related utilities • Additional disk space for data logging (varies depending on how much and how often you log data) • Display adapter capable of operating at 1024 x 768 pixels and at least 16-bit color • 2 USB ports • A wired Ethernet port (4871 Controller only)
IDEAL SYSTEM	• Intel Core i5 (or Celeron / AMD equivalent) 2.6Ghz • 2GB RAM • 500GB hard disk + enough space for Data Logging • Display adapter capable of operating at 1024 x 768 pixels and at least 16-bit color • 2 USB ports • A wired Ethernet port (4871 Controller only)

EXPLANATION OF SYMBOLS

	This **CAUTION** symbol may be present on the Product Instrumentation and literature. If present on the product, the user must consult the appropriate part of the accompanying product literature for more information.
	This **CAUTION** symbol indicates that the surface may be hot.
	**Protective Earth (PE) terminal**. Provided for connection of the Protective Earth (green or green/yellow) supply system conductor.
	**Earth Ground.** Functional earth connection. This connection shall be bonded to Protective earth at the source of supply in accordance with national and local electrical code requirements.

SAFETY INFORMATION

To avoid electrical shock, always:

1. Use a properly grounded electrical outlet of correct voltage and current handling capability.
2. Ensure that the equipment is connected to electrical service according to local national electrical codes. Failure to properly connect may create a fire or shock hazard.
3. For continued protection against possible hazard, replace fuses with same type and rating of fuse.
4. Disconnect from the power supply before maintenance or servicing.

To avoid personal injury:

1. Do not use in the presence of flammable or combustible materials; fire or explosion may result. This device contains components which may ignite such material.
2. Refer servicing to qualified personnel.

GENERAL SPECIFICATIONS

Electrical Ratings

115VAC, 5.0 Amps, 50/60 Hz
230VAC, 5.0 Amps, 50/60 Hz

Before connecting the components of the 4871 Process Controller, the user must be sure that the line, load, and other characteristics of the installation do not exceed the following limits:

Voltage. The line voltage should not differ from the rated voltage shown on the nameplate of the 4871 by more than 10 percent.

Frequency. This system can be operated from either a 50 or 60 Hertz power supply without affecting their operation or calibration.

Current. Loads drawn from the back of the 4871 must not exceed 5 amperes.

Thermocouple. Unless otherwise specified, all 4871 Process Controllers operate with a Type-J (Iron-Constantan) thermocouple. The total resistance of the thermocouple and the lead wires should not exceed 100 ohms. If the resistance of the thermocouple circuit is higher, it will not function properly.

ENVIRONMENTAL CONDITIONS

CAUTION!
Do not use in hazardous atmospheres.

Operating: 15 °C to 30 °C; maximum relative humidity of 80% non-condensing.

Installation Category II (overvoltage) in accordance with IEC 664.

Pollution degree 2 in accordance with IEC 664.

Altitude Limit: 2,000 meters.

Storage: -25 °C to 65 °C; 10% to 85% relative humidity.

PROVISIONS FOR LIFTING & CARRYING

Before moving the instrument, disconnect all connections from the rear of the apparatus. Lift the instrument by grabbing underneath each corner.

INTENDED USAGE

This apparatus is to be used indoors. This system has been designed for use with equipment provided by Company. It has been designed, built, and tested to strict physical and electrical standards. However, it is the user's responsibility to install and operate it in conformance with local pressure and electrical codes. If this equipment is used in a manner beyond its intended usage, the protection provided by the equipment may be impaired.

UNPACK CAREFULLY

Unpack the equipment carefully and check all the parts against the packing list. If shipping damage is discovered, report it immediately to the delivering carriers. Examine the components closely for any loose parts or shipping damage and be sure to check all layers of packing materials thoroughly so as not to overlook any parts which might otherwise be discarded.

CLEANING AND MAINTENANCE

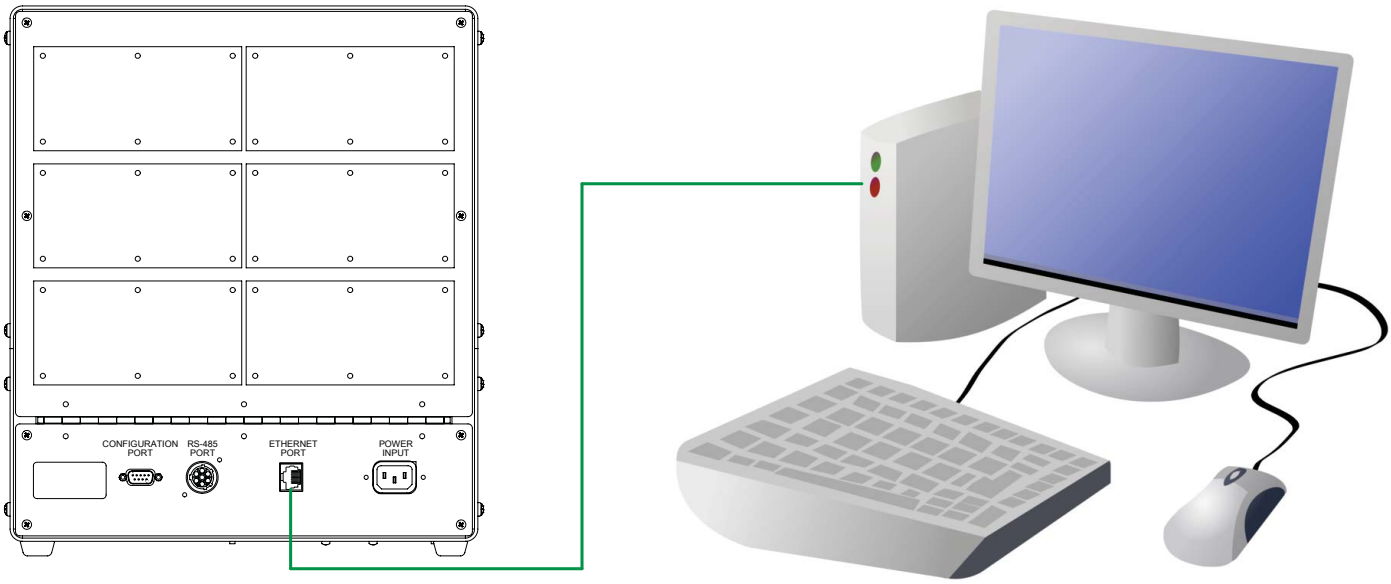
Wipe exterior surfaces with lightly dampened cloth containing mild soap solution. The replacement of protective fuses and backup AA size, 3.6 V battery for the 4871 Controller are the only internal maintenance procedures that should be performed by qualified personnel. Otherwise, there are no user serviceable parts inside the Series 4871 Controller. Advanced troubleshooting instructions can be obtained by calling the Company to determine which parts may need to be replaced or serviced. Proper fuse rating should be discussed with Company Technical Support.

INSTALLATION

The 4871 Process Controller requires a suitable electric outlet and a PC for operation. The instructions for installing and operating the software for the 4871 are located on the USB Flash Drive which accompanied the controller. On the top level, there will be a file entitled "readmefirst_4871.htm".

CONTROLLER SETUP

1. Connect Ethernet cable from 4871 to PC



2. Identify the 6 digit order/project number on the paperwork.

- The last two digits of the project/order number will identify the IP address of the 4871.

  Example: Order/Project Number: 9123**45** = IP address: 10.1.50.**45**

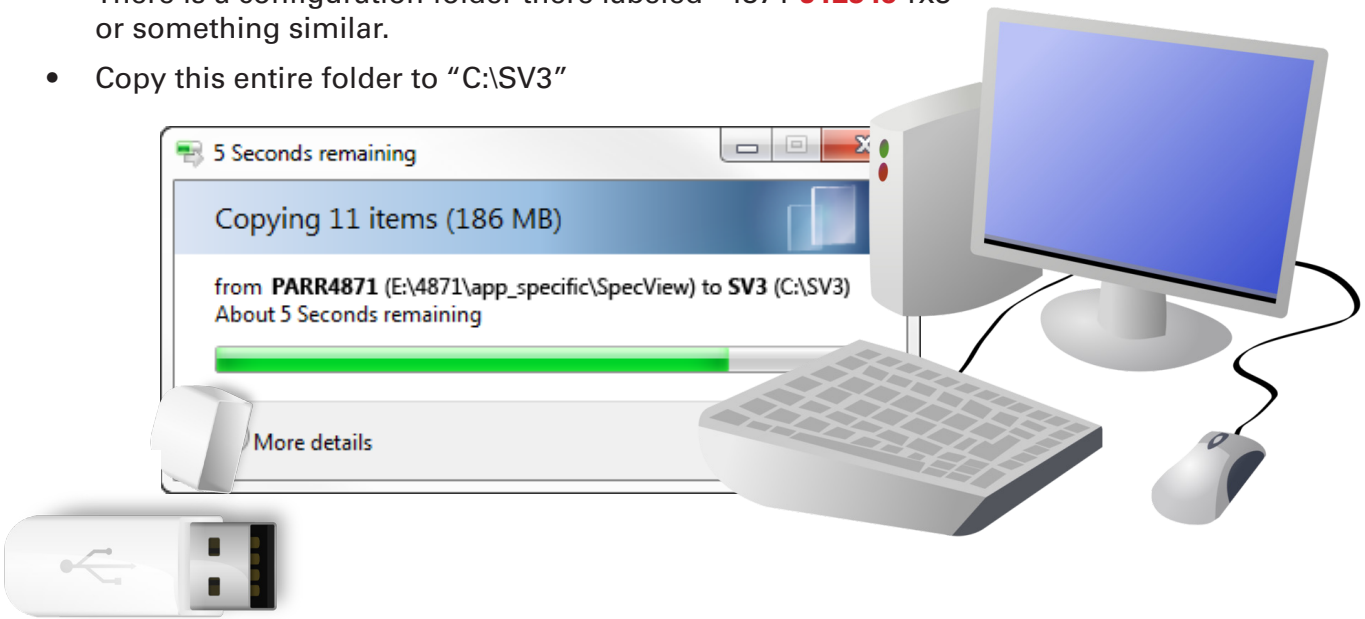
3. Install SpecView onto PC.

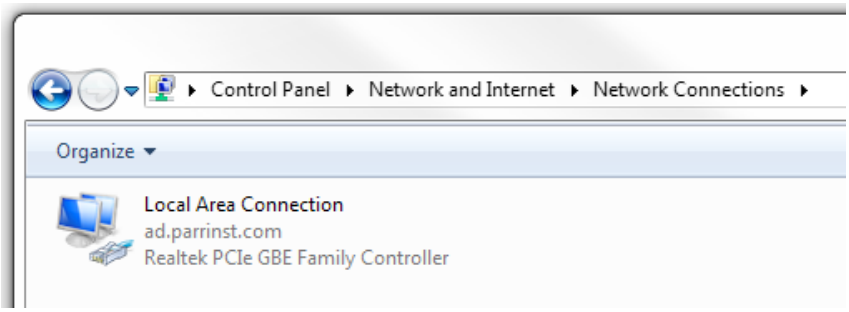


- A USB Flash Drive is located in the SpecView box that accompanied the 4871.
- Go to "/SpecView/SV3"
- Run the setup.exe file and install according to instructions.

4. Copy the configuration file to the C:\SV3 folder.

- On the USB Flash Drive, go to "\app_specific\SpecView"
- There is a configuration folder there labeled "4871-**912345**-rx3" or something similar.
- Copy this entire folder to "C:\SV3"





5. **Set up network to communicate with 4871.**
   - Go to Start > Control Panel > Network and Internet > Network and Sharing Center.
   - In the left-hand column, click Change adapter settings. A new screen will open with a list of network connections.
   - Locate the Local Area Connection that is connected to the 4871.
   - Right click on this icon and go to Properties.
   - Click on "TCP/IPv4" and set the following:

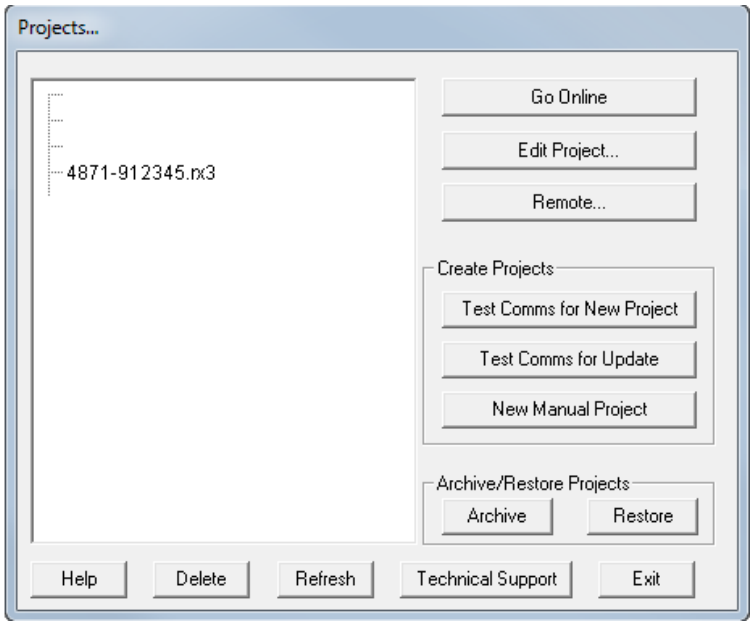
     IP address: 10.1.50.##

     Note: where "##" must be different than the last two digits of the project/order number identified in step 2.
   - Subnet mask: 255.255.0.0
   - Click OK and set changes.



6. **Insert SpecView Dongle.**
   - The SpecView Dongle is located in the SpecView box along with the USB Flash Drive.
   - **DO NOT LOSE THIS DONGLE!** This is the license for the software, and without it SpecView will be limited to 10-minutes of run time.
   - Insert into an open USB slot.
   - The driver for the dongle should auto install.

7. **Open SpecView.**
   - When SpecView opens, select "Select/Create Project".
   - The configuration which was copied in to the C:\SV3 folder in step 4 will appear.
   - Select it and click on "go online".



8. **SpecView main screen**
   - SpecView should show the configured screen with proper values. It is a good idea to connect the reactor to the 4871 at this time to check readings.

