SoftLogix5800 Controller

(catalog number 1789-L10, -L30, -L60)

Before You Begin

These installation instructions describe how to install the SoftLogix5800 controller and how to get it running.

IMPORTANT   Installation instructions ship with the SoftLogix controller. If you want the associated user manual or other Logix-related manuals, you must order them separately. See page 18.

System Requirements

The following table identifies system requirements for the SoftLogix5800 controller.

Category:	Requirement:
personal computer	IBM-compatible Pentium II or Celeron processor 300 MHz minimum[1] recommended IBM-compatible Pentium III 600 MHz (or greater)
operating system	Supported operating systems: • Microsoft Windows NT version 4.0 with Service Pack 6A or greater • Microsoft Windows 2000 with Service Pack 1 (recommended) • Microsoft Windows XP
RAM	**128 Mbytes of RAM minimum**
hard disk space	**50 Mbytes of free hard disk space (or more based on application requirements)**
motion requirements	primary 32-bit PCI slot one slot per 1784-PM02AE motion card maximum of 4 1784-PM02AE motion cards
network requirements	primary or extended 32-bit PCI slot one slot per communication card supports 1784-PCICS for ControlNet supports 1784-PCIDS for DeviceNet
video requirements	16-color VGA graphics adapter 640 x 480 or greater resolution (256-color 800 x 600 minimum for optimal resolution)

[1] The SoftLogix controller has only been tested and qualified on genuine Intel processors.

Pre-installation preparation in Windows

Before you can install the SoftLogix controller you need to:

- Log into Windows under an account that is a member of the Administrators user group on the computer where you are installing the SoftLogix controller.

  To log in as a member of the Administrators group, your user account must be added to the Administrators group on the computer. Ask your system administrator if you need help.

- Install or verify that the following Windows services (required by the SoftLogix controller) are running. These services are automatically installed when you install Windows Networking or RAS:
  – Remote Procedure Call (RPC)
 – Server
  – Workstation

Installing the SoftLogix5800 Controller

IMPORTANT   If you have a previous version of the SoftLogix controller already installed on the computer, use Add/Remove Programs to remove that earlier version before installing the current version.

When you insert the installation CD into your CDROM drive, the CD automatically begins the Setup program for the controller. If your computer meets the hardware and software requirements for the controller, you can install the controller.

1. Select the SoftLogix 5800 button.
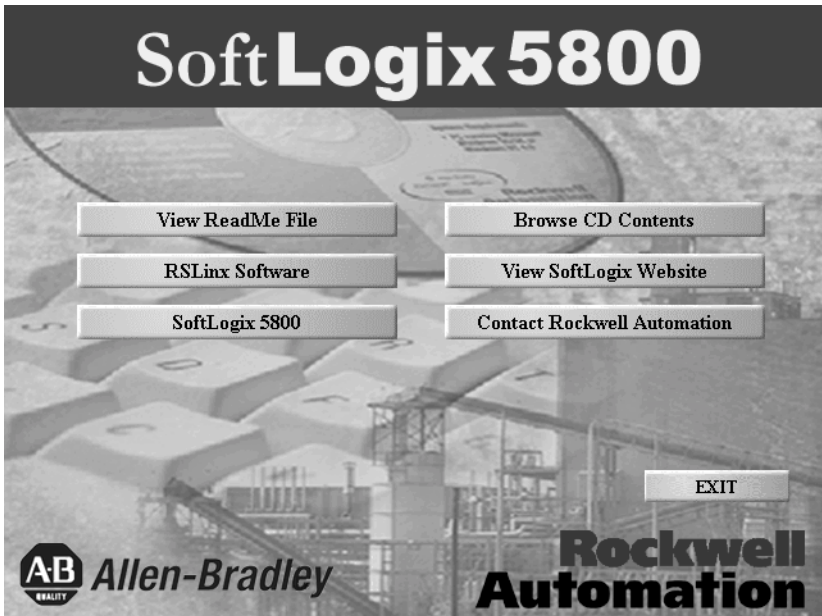
2. Follow setup wizard. Click Next to progress through the wizard's screens.

3. Microsoft recommends that you re-apply the Service Pack after installing other software packages.

Activating the SoftLogix5800 Controller

The activation files on the Activation disk provide copy protection for the SoftLogix5800 controller. You must insert the Activation disk and move an activation key from the activation disk to the hard drive where you are installing the controller.

The Activation disk contains:

- one or more activation keys
- EVMOVE.EXE utility that moves activation keys to and from a computer
- RESET.EXE utility that reactivates a damaged activation key

The EVMOVE.EXE and RESET.EXE files always remain on the Activation disk.

This section describes:

For information about:	See page:
two methods for activating the controller	4
using the Activation disk as an activation key	5
moving activations back to the Activation disk	5
activating the SoftLogix controller after installation	6
protecting you activation files	7
resetting a damaged activation key	7
troubleshooting activation	8

Two methods for activating the controller

Depending on your needs, you can activate the SoftLogix controller from a:

- **Diskette drive.** Use this method if you will typically use the SoftLogix controller on more than one computer.

- **Hard drive.** Use this method if you will typically use the SoftLogix controller on only one computer. To run the SoftLogix controller on a different computer, use EVMOVE.EXE to move the activation key back to the Activation disk, then use EVMOVE.EXE again to move the activation key to the hard drive of the other computer.

Using the Activation disk as an activation key

To use the activation key from a diskette drive, modify the ROCKSOFT.INI file so that the SoftLogix controller searches the diskette drive for the activation key. Once you modify this file you must use the Activation disk each time you start the SoftLogix controller.

To modify the ROCKSOFT.INI file:

1. Install the SoftLogix controller, as described above.

2. When the Activation window opens, click Cancel to bypass the activation procedure.

3. Locate the directory where Windows is installed (for example, C:\WINNT).

4. Open the ROCKSOFT.INI file.

5. Locate the string that says: KEYDISK = FALSE.

6. Edit this string so that is says: KEYDISK = TRUE.

7. Save and close the ROCKSOFT.INI file.

Moving activation keys back to the Activation disk

You can move activation keys from the hard drive back to the Activation disk at any time. For example, you could move activation back to the Activation disk:

- to run the SoftLogix controller on a different computer.
- before installing or using software that could damage the activation files (see "Protecting your activation files" on page 7).
- before sending the computer to be repaired.

To move an activation key back to the Activation disk:

1. Insert the Activation disk in a diskette drive.

2. Run EVMOVE.EXE from the disk.

3. In the From box, select the drive where the activation key is currently stored (such as the hard drive). In the To box, select the drive containing the Activation disk. Click OK.

4. Do one of the following:
   - To move activation keys for all installations on the computer, click Move.
   - To change the number of activations to move, select the SoftLogix controller, and then click the Edit Selected button. In the Move box, type the number of activation keys to move. Click OK, and then click Move.

5. To close the EvMove Summary box, click OK.

Activating the SoftLogix controller after installation

You might need to reactivate the SoftLogix controller after moving activation keys back to the Activation disk or after resetting a damaged activation key. To reactivate the SoftLogix controller, you move the activation key from the Activation disk to the hard drive.

By default, when you move activation to a hard drive, the EVMOVE.EXE program moves only one activation key for the controller. However, when moving to a network drive, the EVMOVE.EXE program moves all activation keys by default. When reactivating the SoftLogix controller, you can accept the default or choose the number of activation keys to move.

To reactivate the SoftLogix controller:

1. Insert the Activation disk in a diskette drive.

2. Run EVMOVE.EXE from the disk.

3. In the From box, select the drive containing the Activation disk. In the To box, select the hard drive. Click OK.

4. Do one of the following:
   - To move activation keys for all installations on the computer, click Move.
   - To change the number of activations to move, select the SoftLogix controller, and then click the Edit Selected button. In the Move box, type the number of activation keys to move. Click OK, and then click Move.

5. To close the EvMove Summary box, click OK.

Protecting your activation files

Performing certain operations on the hard drive of a computer can damage activation files. Always move activation files from the hard drive back to the Activation disk before doing any of the following:

- upgrading or installing the computer's operating system or network software
- compressing or uncompressing the computer's hard drive

Resetting a damaged activation key

If an activation key becomes damaged for any reason, call Technical Support. When you call, be at a computer with the Activation disk available.

The support representative will explain how to find the product ID and system ID from the Activation disk and will assign a reset code for the activation key. After you get the reset code:

1. Insert the Activation disk in a diskette drive.

2. In Windows, run RESET.EXE from the disk.

3. In the Reset Code box, type the reset code, and then click Apply.

4. To close the Reset Summary box, click OK.

Troubleshooting activation

If your activation key was not installed correctly and you start the SoftLogix chassis monitor, the title bar of the monitor displays "Activation File Not Found!" If the activation is not working, make sure:

- you are using the right Activation disk. Check the serial number from the SoftLogix chassis monitor (select Help → About) against the serial number printed on the Activation disk label. The two serial numbers must match.

- the computer does not have a virus. Boot sector viruses can damage the Activation disk. Use a commercial virus protection program to keep your system free of viruses.

- you did not save any other files on the Activation disk. Saving any files to the Activation disk can damage the activation software.

- you did not perform an operation on the hard drive that damaged the activation software. See "Protecting your activation files" on page 7.
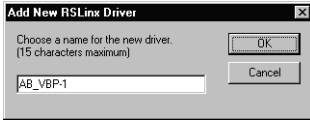
Installing the Virtual Backplane Driver

Use RSLinx to configure the virtual backplane driver. You only need to do this once for the computer. To install the virtual backplane driver:
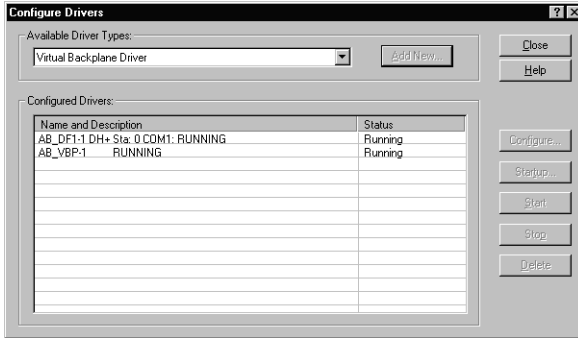
1. In RSLinx software, select Configure Driver. Select the virtual backplane driver and click Add New.
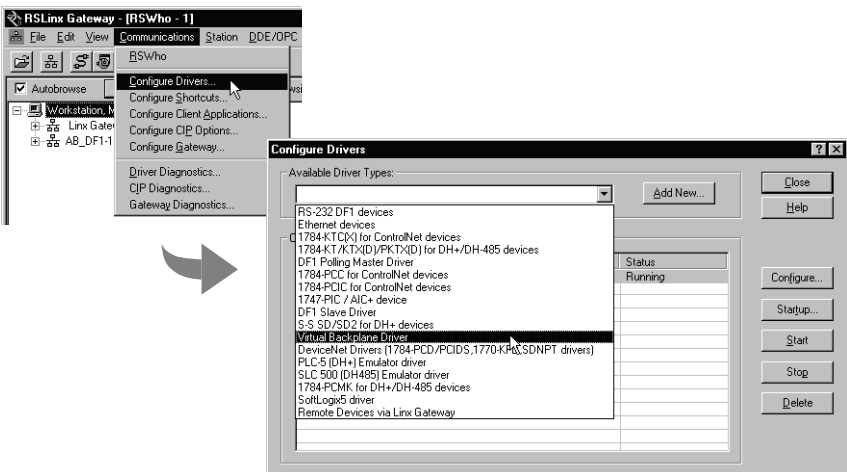
2. Enter the driver name, such as AB_VBP-1 and click OK.

3. There are no characteristics to define. RSLinx software loads the driver.

IMPORTANT	Even if you plan to remotely program the controller over a ControlNet or Ethernet link, you must add the virtual backplane driver via RSLinx software. If you do not, persistent storage will not function and when you reboot the computer, the controller will come up with cleared memory (the program will not get re-loaded).

Installing Communication Device Drivers

The *SoftLogix5800 Controller Release Notes*, publication 1789-RN002, lists the current versions of the drivers you need for your version of the SoftLogix controller to operate correctly with these devices:

- 1784-PCIC, -PCICS ControlNet communication card
- 1784-PCIDS DeviceNet communication card
- 1784-PM02AE motion card

See the documentation for the device or its update kit to make sure you install its communication driver correctly.

Installing the Windows 2000 Driver for the 1784-PM02AE Card

If you are using the 1784-PM02AE card under Windows 2000, you must install the appropriate plug-n-play drivers using the Add New Hardware wizard.

1. Power off the PC and insert the 1784-PM02AE card in the desired PCI slot.

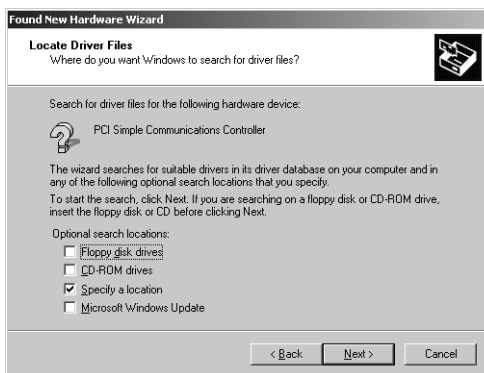2. Boot the computer. The Found New Hardware wizard appears:

Windows 2000 identifies the 1784-PM02AE card as a PCI Simple Communications Controller.

3. Click Next to move through the wizard. Select "Search for a suitable driver for my device (recommended)".

4. When the wizard prompts you for the location of the driver you want to install, select "Specify a location" and specify one of these:

- on the SoftLogix5800 controller distribution CDROM at
  <CD-drive letter>\SoftLogix5800\Drivers\Win2k

  or

- in the SoftLogix5800 product installation target area at
  C:\Program Files\Rockwell Automation\SoftLogix5800\Drivers\Win2k
  (the path will be different if you did not install the controller in the default directory)

Click Next and specify the correct driver location.
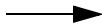
5. Continue to follow the steps in the wizard. When prompted, click Yes to overwrite the newer file.
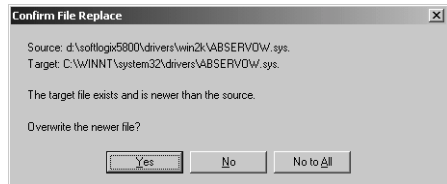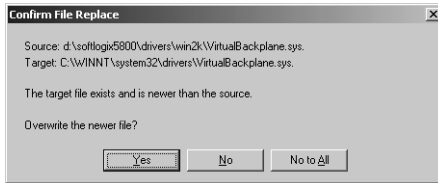
Installing the Windows XP Driver for the 1784-PM02AE Card

If you are using the 1784-PM02AE card under Windows XP, you must install the appropriate plug-n-play drivers using the Add New Hardware wizard.

1. Power off the PC and insert the 1784-PM02AE card in the desired PCI slot.

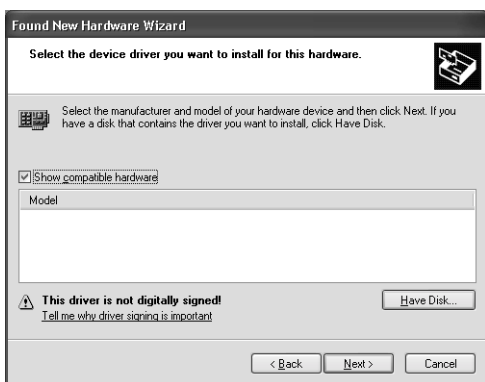2. Boot the computer. The Found New Hardware wizard appears:
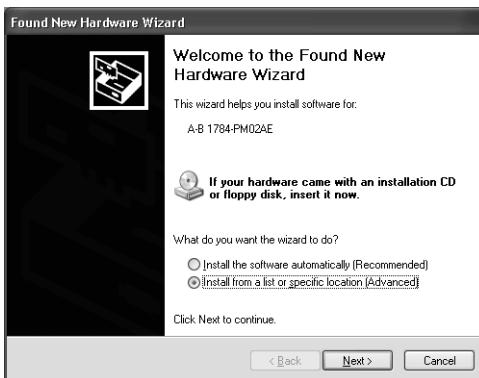
Windows XP identifies the 1784-PM02AE card as A-B 1784-PM02AE.

Select to install the driver from a list or specific location.

3. Click Next to move through the wizard. Select "Don't Search. I will choose the driver to install".

4. Click the Have Disk button.

5. Click the Browse button and locate the A-B 1784-PM02AE driver.
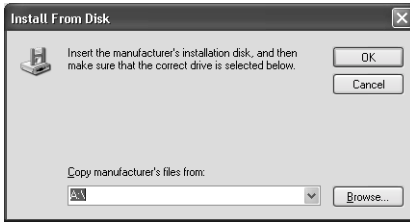
The driver file can be found at:
- on the SoftLogix5800 controller distribution CDROM at
  <CD-drive letter>\SoftLogix5800\Drivers\Win2k

  or
- in the SoftLogix5800 product installation target area at
  C:\Program Files\Rockwell Automation\SoftLogix5800\Drivers\Win2k
  (the path will be different if you did not install the controller in the
  default directory)

6. After you locate the driver, select it to be installed.

7. Click Finish to complete the driver installation.

Communicating Over a ControlNet Network

For the SoftLogix controller to operate on a ControlNet network, you need:

- a ControlNet communication card:
  - if you want to send messages and control I/O, including produced/consumed tags, over ControlNet, use a 1784-PCICS card
  - if you want to only send messages over ControlNet, use a 1784-PCIC card
- the SoftLogix chassis monitor to create the communication card in the virtual chassis and configure communication settings
- RSLinx software to install the virtual backplane driver
- RSLogix 5000 programming software to configure the communication card as part of the controller project
- RSNetWorx for ControlNet software to schedule the SoftLogix system on the network

For more information about using the SoftLogix controller on a ControlNet network, see the *SoftLogix System User Manual*, publication 1789-UM001.

Communicating Over a DeviceNet Network

For the SoftLogix controller to operate on a DeviceNet network, you need:

- a 1784-PCIDS DeviceNet communication card
- the SoftLogix chassis monitor to create the communication card in the virtual chassis and configure communication settings
- RSLinx software to install the DeviceNet communication driver and to install the virtual backplane driver
- RSLogix 5000 programming software to configure the communication card as part of the controller project
- RSNetWorx for DeviceNet software to configure the devices on the network
- IOLinx software must be installed for the SoftLogix controller to be able to read and write I/O data

For more information about using the SoftLogix controller on a DeviceNet network, see the *SoftLogix System User Manual*, publication 1789-UM001.

Monitoring the SoftLogix Controller LEDs

Indicator:	Color:	Description:
RUN	off	The controller is in Program or Test mode.
	green	The controller is in Run mode.
I/O	off	Either: • There are *no* devices in the I/O configuration of the controller. • The controller does *not* contain a project (controller memory is empty).
	green	The controller is communicating with all the devices in its I/O configuration.
	green flashing	One or more devices in the I/O configuration of the controller are *not* responding.
	red flashing	A virtual chassis error was detected. Contact your Rockwell Automation representative or local distributor.
FRC	off	No tags contain force values. Forces are inactive (disabled).
	flashing	At least one tag contains a force value. Force values are inactive (disabled).
	green	Forces are active (enabled). Force values may or may not exist.
RS232[1]	off	No COM port was selected.
	green	The selected COM port was successfully assigned to channel 0 of the controller.
	red	There is a COM port conflict or you selected an invalid COM port number.
BAT[1]	off	Normal operation.
	amber flashing	The controller is in power-up mode.
	red	Persistent storage for the controller has failed.
OK	red flashing	Recoverable fault
	red	Non-recoverable fault. To correct: 1. Remove the controller from the virtual chassis and then re-install the controller. 2. Download the project. 3. Place the controller in Run mode. If the problem continues to occur, contact your Rockwell Automation representative or local distributor.
	green	The controller is OK.

[1] Note that these LEDs function slightly different than the same LEDs on a ControlLogix controller.

Other Publications

This product has the following additional manuals:

- *SoftLogix System User Manual*, publication 1789-UM001
- *Logix5000 Controllers Common Procedures Programming Manual*, publication 1756-PM001
- *Logix5000 Controllers General Instruction Set Reference Manual*, publication 1756-RM003
- *Logix5000 Controllers Process Control and Drives Instruction Set Reference Manual*, publication 1756-RM006
- *Logix5000 Controllers Motion Instruction Set Reference Manual*, publication 1756-RM007

To view these manuals, visit www.ab.com/manuals or www.theautomationbookstore.com

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