



1757-PLX52 ProcessLogix Controller Module

(Cat. No. 1757-PLX52)

This document explains how to install the 1757-PLX52, the ProcessLogix™ Controller Module.

TIP



For instructions, specifications and applications for the power supply, chassis, I/O modules, network cabling, and other related hardware and software, refer to the documentation that was shipped with the hardware and software.

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Important User Information

Because of the variety of uses for the products described in this publication, those responsible for the application and use of this control equipment must satisfy themselves that all necessary steps have been taken to assure that each application and use meets all performance and safety requirements, including any applicable laws, regulations, codes and standards.

The illustrations, charts, sample programs and layout examples shown in this guide are intended solely for purposes of example. Since there are many variables and requirements associated with any particular installation, Allen-Bradley does not assume responsibility or liability (to include intellectual property liability) for actual use based upon the examples shown in this publication.

Allen-Bradley publication SGI-1.1, *Safety Guidelines for the Application, Installation and Maintenance of Solid-State Control* (available from your local Allen-Bradley office), describes some important differences between solid-state equipment and electromechanical devices that should be taken into consideration when applying products such as those described in this publication.

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Throughout this manual we use notes to make you aware of safety considerations.

ATTENTION



Identifies information about practices or circumstances that can lead to personal injury or death, property damage or economic loss

Attention statements help you to:

- identify a hazard
- avoid a hazard
- recognize the consequences

IMPORTANT

Identifies information that is critical for successful application and understanding of the product.

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European Communities (EC) Directive Compliance

If this product has the CE mark it is approved for installation within the European Union and EEA regions. It has been designed and tested to meet the following directives.

EMC Directive

This product is tested to meet the Council Directive 89/336/EC Electromagnetic Compatibility (EMC) by applying the following standards, in whole or in part, documented in a technical construction file:

- EN 50081-2 EMC — Generic Emission Standard, Part 2 — Industrial Environment
- EN 50082-2 EMC — Generic Immunity Standard, Part 2 — Industrial Environment

This product is intended for use in an industrial environment.

Low Voltage Directive

This product is tested to meet Council Directive 73/23/EEC Low Voltage, by applying the safety requirements of EN 61131-2 Programmable Controllers, Part 2 - Equipment Requirements and Tests.

For specific information required by EN 61131-2, see the appropriate sections in this publication and the Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.

Open style devices must be provided with environmental and safety protection by proper mounting in enclosures designed for specific application conditions. See NEMA Standards publication 250 and IEC publication 529, as applicable, for explanations of the degrees of protection provided by different types of enclosure.

Installing the Battery

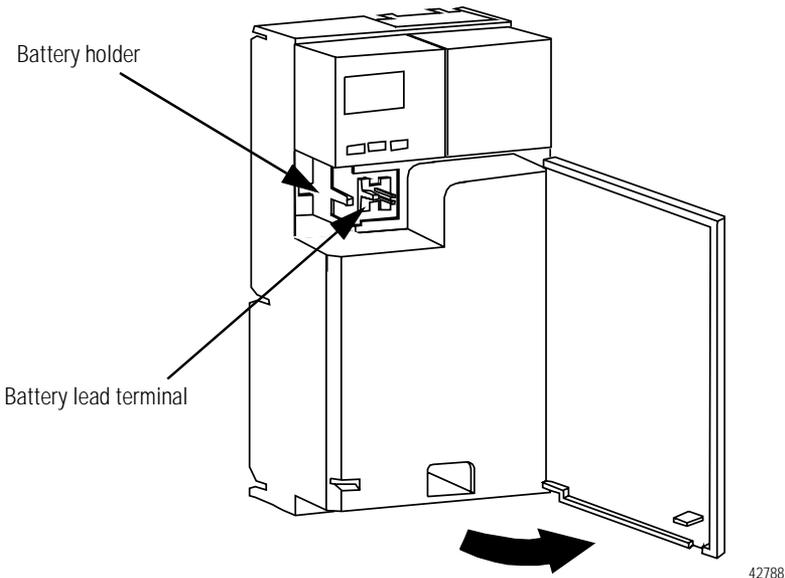
The battery is disconnected during shipping to conserve power. To install the battery:

WARNING

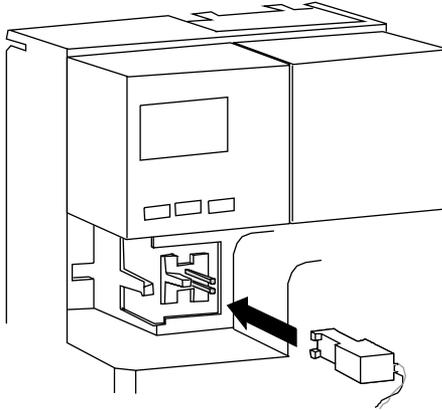


The 1757-PLX52 module contains a non-rechargeable lithium battery. This battery may present a risk of fire or chemical burns if mishandled. Do not recharge, disassemble, heat above 100 °C (212 °F), or incinerate. Always dispose of lithium batteries properly. Refer to publication AG-5.4 for more information.

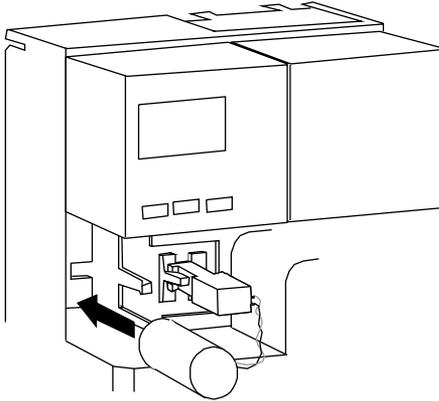
1. Open the front door of the 1757-PLX52 module.
2. Locate the battery connector (a small, white plug at the end of a pair of red and black twisted wires).



3. Align and insert the connector into the battery terminal on the module.
 - a. Turn the plug so that the wires enter the plug from the right.
 - b. Slide the plug over the two-prong male plug in the battery compartment.



4. Insert the end of the battery away from the lead wire into the recessed area in the module. Be certain that the black retaining tab (located next to the battery lead terminal) clicks and secures the battery in its holder.



5. Close the module front door.

Installing the 1757-PLX52 Process Controller Module

Install the 1757-PLX52 module into any odd-numbered slot of the chassis. The default location is slot 1.

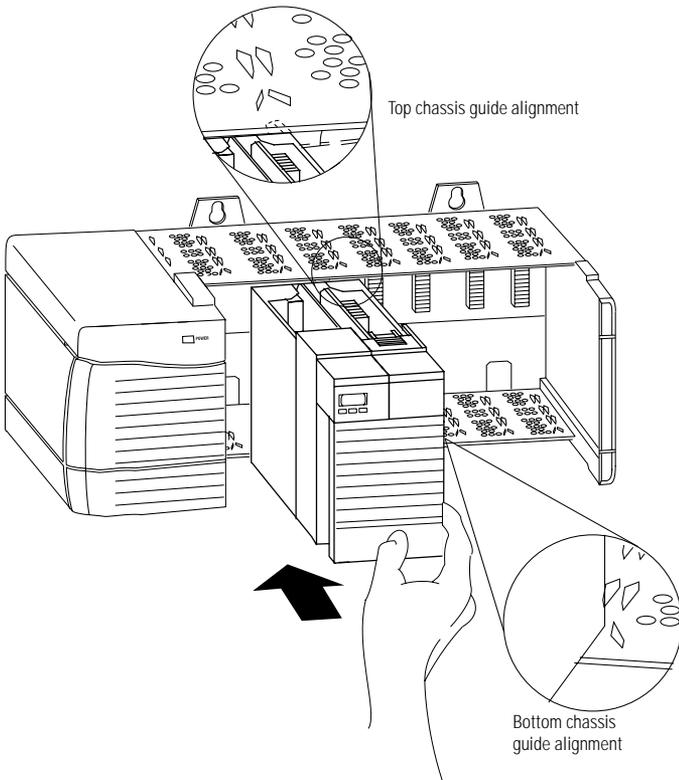
TIP



13-slot chassis (catalog number 1756-A13/A or /B) only:

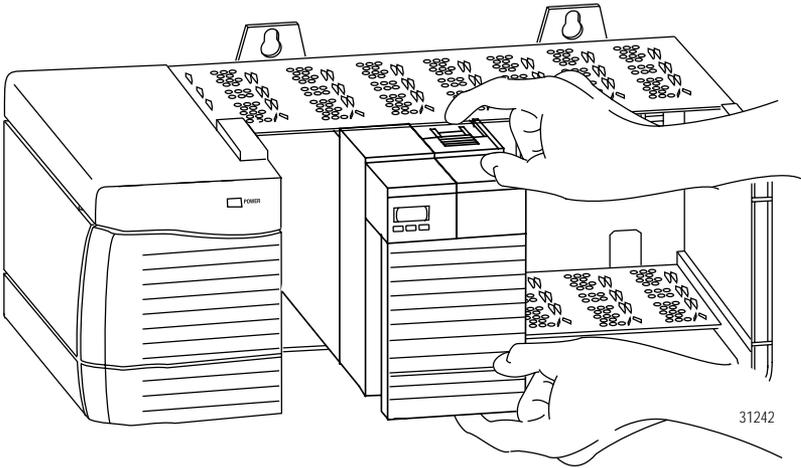
You **cannot** place the 1757-PLX52 module in slot 5. Slot 5 contains a chassis support divider between slots 5 and 6.

1. Align the module circuit board with the top and bottom guides in the chassis.



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2. Slide the module into the chassis in the appropriate slot. Make sure the module properly connects to the chassis backplane.



- The module is fully installed when it is flush with the other installed modules, and the module locking clips click into place.
- To remove the module, push down on the locking clips at the top right and bottom left of each module. Slide the module out of the chassis.

Verify RSLinx Communication Software Configuration

To communicate with the 1757-PLX52 controller, your server must have:

- RSLinx communication software properly configured
- an operating PCIC or Ethernet driver

After you have successfully logged on to your server for the first time, be certain that RSLinx is properly configured and configure the ControlNet 1784-PCIC driver or the Ethernet driver connection. Your server must have a valid address to communicate with network devices. Each network device must also have a unique network address.

Configure the ControlNet 1784-PCIC Communication Card

TIP



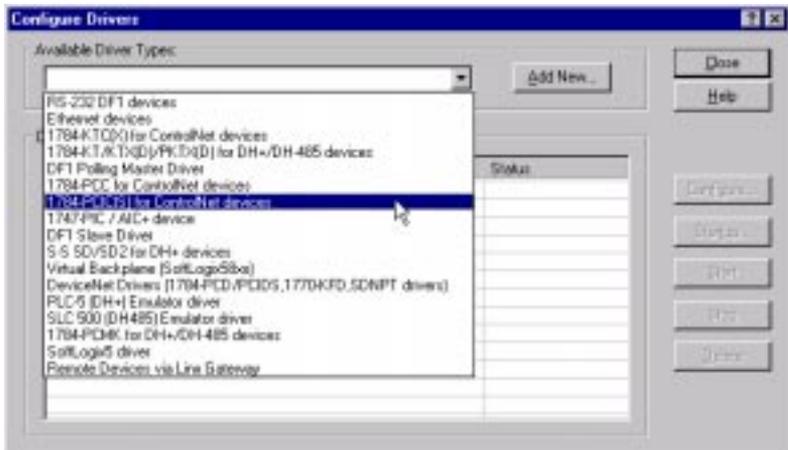
If you are using Ethernet network for your supervisory network, refer to the *Ethernet Implementation Guide* in Knowledge Builder.

1. Select Start⇒Programs⇒Rockwell Software⇒RSLinx⇒RSLinx.

RSLinx appears.

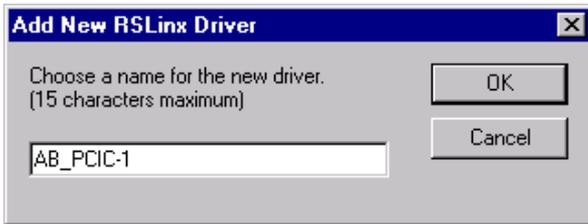
2. Select Communications⇒Configure Drivers.

You see:



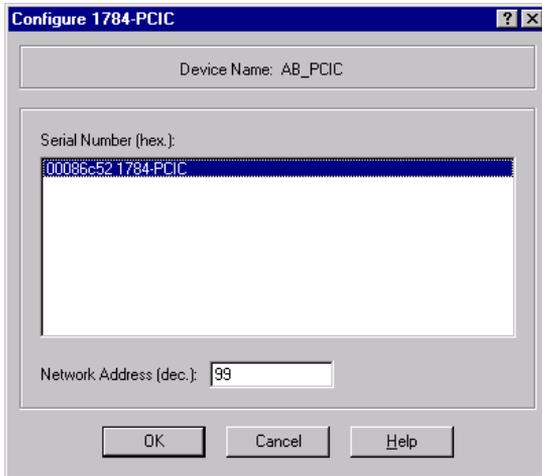
3. Click on 1784-PCIC(S) ControlNet Driver and click Add New.

You see:



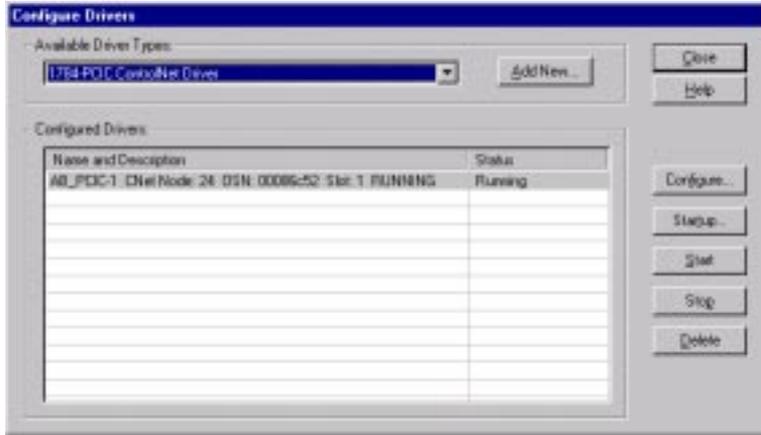
4. Type in AB_PCIC-1 and click OK.

RSLinx takes a moment to look for and configure the driver. You may see:



If you get this screen, then RSLinx is not communicating with the PCIC(S) card. Type Node Address 24 and click OK. You will notice that your card displays as stopped. Connect to your network and Browse. You will see that the card is communicating with RSLinx.

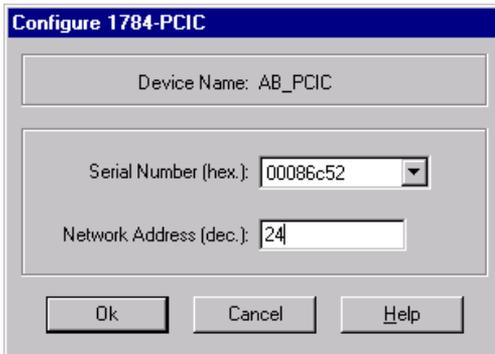
If you don't get this screen, "running or stopped" check your cables, check the installation of the PCIC card, and retry.



If you are still experiencing problems, call Rockwell Automation Technical Support, see Page 13.

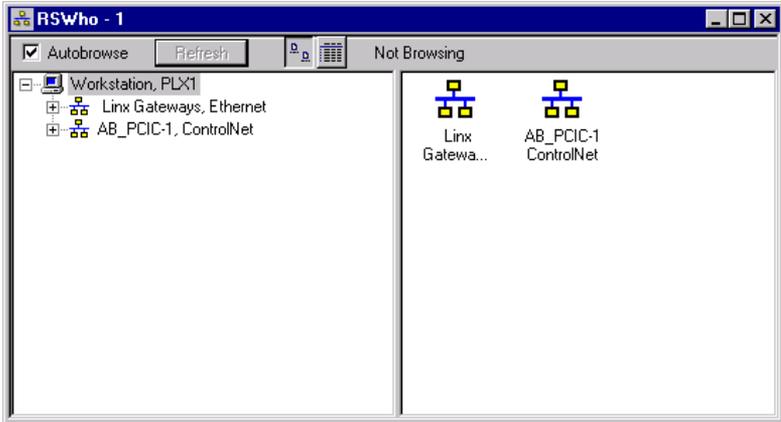
5. Double click on AB_PCIC-1 CNet Node.

You see:



6. The Network Address of the PCIC card should be 24. Change the address if different and click OK.
7. Click Communications⇒RSWho to browse your network.

You see:



The AB_PCIC ControlNet Communication Card is active.

8. Click the + to verify that your 1757-PLX52 module is listed.

IMPORTANT

The 1757-PLX52 Process Controller module is supplied with only the boot code installed. You must configure the module before you can use it in your system.

Refer to the ProcessLogix Software Installation and Upgrade Guide, publication 1757-IN032A-EN-P, shipped with the ProcessLogix Software Kit, 1757-SWKIT3200 for more information.

Specifications

Parameter	Operation and Storage Limits	Transportation Band
Ambient Temp Range	0 to +60°C no fans	-40 to 85°C
Temp. Rate of Change	≤ 1°C/min.	≤ 5°C/min.
Relative Humidity (non-condensing)	5 to 95%	5 to 95%
Vibration (3 axes) Frequency Acceleration Displacement	10 to 60 Hz 0.5 g max. 0.1 inches	10 to 60 Hz 1 g max. 0.1 inches
Mechanical Shock Acceleration Duration	5 g max. 30 ms max.	20 g max. 30 ms max.
Barometric Pressure Altitude	-300 to +2000 m	Any
Corrosives	G2 std, G3 option (ISA S71.04)	G3
Module Power Requirements	+5.1 V _{dc} @ 1.5 A +3.3 V _{dc} @ 1.0 A	N/A
Module Battery Backup Time Lithium Battery (standard, built in) Battery Extension Module, 1757-BEM	144 hours (non-rechargeable) - 6 days: Replacement Battery: 1757-PLXBAT 120 hours (rechargeable) - 5 days Spare Battery: 1757-BEMS	Lithium battery is disconnected during shipment.
Removal/Insertion under power (RIUP)	NOT PERMITTED	
Agency Certifications When product is marked:	 Listed Industrial Control Equipment  Certified Process Control Equipment Certified for use in Class I, Division 2, Groups A, B, C, D or nonhazardous locations  Marked for all applicable directives  C-tick Marked for all applicable acts N314	

Rockwell Automation Support

Rockwell Automation offers support services worldwide, with over 75 sales/support offices, over 500 authorized distributors, and 260 authorized systems integrators located throughout the United States alone, plus Rockwell Automation representatives in every major country around the world. Contact your local Rockwell Automation representative for:

- sales and order support
- product technical training
- warranty support
- support service agreements

Obtain Pre-Sales Product Support

If you need to contact Rockwell Automation for pre-sales product support, call your local Rockwell Automation representative.

Obtain Technical Product Support

If you need to contact Rockwell Automation for technical assistance, try one of the following methods:

Type of technical support:	Access at:
Personalized Service	Call your local Rockwell Automation representative
Post-sales Technical Support	1.440.646.5800
Email your questions to	racleasktheexpert@ra.rockwell.com
Internet site	www.ab.com
Publications	www.theautomationbookstore.com

Hazardous Location Approval

The following information applies when operating this equipment in hazardous locations:

Products marked “CL I, DIV 2, GP A, B, C, D” are suitable for use in Class I Division 2 Groups A, B, C, D, Hazardous Locations and nonhazardous locations only. Each product is supplied with markings on the rating nameplate indicating the hazardous location temperature code. When combining products within a system, the most adverse temperature code (lowest “T” number) may be used to help determine the overall temperature code of the system. Combinations of equipment in your system are subject to investigation by the local authority that has jurisdiction at the time of installation.

WARNING



EXPLOSION HAZARD –

- Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.
- Do not disconnect connections to this equipment unless power has been removed or the area is known to be nonhazardous. Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.
- Substitution of components may impair suitability for Class I, Division 2.
- If this product contains batteries, they must only be changed in an area known to be nonhazardous.

Informations sur l'utilisation de cet équipement en environnements dangereux:

Les produits marqués «CL I, DIV 2, GP A, B, C, D» ne conviennent qu'à une utilisation en environnements de Classe I Division 2 Groupes A, B, C, D dangereux et non dangereux. Chaque produit est livré avec des marquages sur sa plaque d'identification qui indiquent le code de température pour les environnements dangereux. Lorsque plusieurs produits sont combinés dans un système, le code de température le plus défavorable (code de température le plus faible) peut être utilisé pour déterminer le code de température global du système. Les combinaisons d'équipements dans le système sont sujettes à inspection par les autorités locales qualifiées au moment de l'installation.

AVERTISSEMENT



RISQUE D'EXPLOSION –

- Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher l'équipement.
- Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher les connecteurs. Fixer tous les connecteurs externes reliés à cet équipement à l'aide de vis, loquets coulissants, connecteurs filetés ou autres moyens fournis avec ce produit.
- La substitution de composants peut rendre cet équipement inadapté à une utilisation en environnement de Classe I, Division 2.
- S'assurer que l'environnement est classé non dangereux avant de changer les piles.

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