

Application

The WPA-LON Series[®] WorkPlace Communication Adapters are Echelon[®] LONTALK[®] PC adapter cards. A TAC I/A Series WorkPlace Tech PC requires a WPA-LON-x to configure and download applications to TAC I/A Series MicroNet[™] Controllers.

Echelon adapter driver software is included on the WorkPlace Tech Tool 5.0 software CD (WP-TECH-CD-0-50)

Earlier versions of WorkPlace Tech Tool (WorkPlace Tech Tool 3.1, WorkPlace Tech Tool 3.2, WorkPlace Tech Tool 4.0) and Wonderware[®] Software for Intelligent Buildings (WIB) include earlier versions of Echelon adapter software. Refer to F-26338 for information on older versions of WorkPlace Tech Tool.

Model Chart

Table-1 Model Chart.

Model	Description	LON Jack Cable	Adapter Software
WPA-LON-1	Industry Standard Architecture (ISA) LONWORKS [®] PC LonTalk Adapter	Included	Installed with WP-TECH-CD ^a
WPA-LON-2	Type II PC Card (formerly PCMCIA) LONWORKS PC LonTalk Adapter	Included	
WPA-LON-3	PCI LONWORKS PC LonTalk Adapter	Included	

^a Adapter software may also be downloaded from the Echelon website (www.echelon.com). It may be necessary to download the current version of the driver if a WorkPlace Tech Tool 5.0 CD is not available.

Adapter Card Software

The required drivers for the WPA-LON-1, WPA-LON-2, and WPA-LON-3 adapter cards are already included with WorkPlace Tech 5.0 software. It is not necessary to obtain the Echelon drivers from any other source.

Additional information related to the WPA-LON Series WorkPlace Communication Adapter may be found in the Echelon PCLTA-10, PCC-10, or PCLTA-20 User's Guide, which is included with the adapter card.

WPA-LON-1

The WPA-LON-1 includes an Echelon PCLTA-10 PC LONTALK Adapter. The PCLTA-10 is a half-height, half-length, ISA-bus card that requires a 16-bit slot. The adapter card is compatible with Windows[®] 98, Windows NT[®], Windows 2000, and Windows XP.

The card has an integral LONWORKS Free Topology Transceiver (FTT-10), and features a removable two-terminal connector for polarity-insensitive wiring to the LON[™] terminals on a TAC I/A Series MicroNet Controller or to a LONWORKS FTT-based LON. The WPA-LON-1 also includes a cable for plug-in connection to the LON jack on a TAC I/A Series MicroNet Controller or S-link Sensor.

WPA-LON-2

The WPA-LON-2 includes an Echelon PCC-10 LONTALK Network Adapter for a notebook (laptop) type PC. The PCC-10 is a Type II PC Card (formerly PCMCIA) with an integral LONWORKS Free Topology Transceiver (FTT-10). The adapter card is compatible with Windows 98, Windows NT, Windows 2000, and Windows XP.

The WPA-LON-2 includes a detachable cable for plug-in connection to the LON jack on a TAC I/A Series MicroNet Controller or S-link Sensor.

WPA-LON-3

The WPA-LON-3 includes an Echelon PCLTA-20 PCI LONTALK Adapter. The WPA-LON-3 is for a PC with a 32-bit PCI interface and compatible operating system. The adapter card is compatible with Windows 2000 and Windows XP.

The WPA-LON-3 includes a detachable cable for plug-in connection to the LON jack on a TAC I/A Series MicroNet Controller or S-link Sensor.

General Notes

Note:

Install the adapter software included with WP-TECH-CD before installing the card. This allows the “Plug and Play” feature of Windows to recognize the adapter card.

Visit the Echelon website (www.echelon.com) for additional support information related to the Echelon PCLTA-10 (WPA-LON-1), PCC-10 (WPA-LON-2), PCLTA-20 PCI (WPA-LON-3) adapter cards.

Echelon Adapter Driver Installation Under Windows XP

Note: Install the WPA-LON-1 or WPA-LON-3 using an account with Administrator privileges.

1. Close all programs and insert the WorkPlace Tech 5.0 CD into the CD drive. If the system supports Autoplay, the WorkPlace Tech Installation Wizard will appear. If not, proceed to Step 3.
2. Wait for the welcome screen of the WorkPlace Tech Installation Wizard to appear, click **Cancel**, and follow the prompts to exit the WorkPlace Tech installer.
3. Run “pcx10_20Win.exe” in the LON folder of the WorkPlace Tech 5.0 CD as follows: Double click **My Computer** on the Windows desktop. Right click **WPDISC1500** and select **Explore**. Open the LON folder and double click **pcx10_20Win.exe**.
4. The LonWorks PCLTA-20/PCC-10/PCLTA-10 setup program will begin. Follow the prompts to perform the installation.
5. Click **Finish** to view the README file and complete the adapter card software installation.
6. Close the README file. In the Setup Complete window, click “No, I will restart my computer later.” and click **Finish**.
7. Shut down Windows and turn off the PC.
8. Install the adapter card into the PC, following the normal precautions for safety and for preventing static electricity damage.
9. Turn on the PC. On power up, Windows should automatically recognize the adapter card, build a driver database, and configure the hardware settings. If Windows does not automatically recognize the adapter card, see “Re-installing Echelon Drivers Under Windows XP.”
10. In Windows XP, go to the Windows Event Viewer by selecting **Start**, then **Control Panel**, then **Administrative Tools**, then **Event Viewer** then **System**.
11. Review the messages displayed in the Event Viewer under System. When installation is free of errors, only information messages will be listed. These are marked with a blue circle containing a white lower-case “i.” Information messages related to the WPA-LON-1, WPA-LON-2. or WPA-LON-3 installation will show *pnplon* as the source. If desired, you may double-click on the message for details. Review the message list for any errors that show *pnplon* as the source. Error messages are marked with a red icon. Double-click on each error message to open the Event Detail window, for a detailed description of the error. To resolve adapter card installation errors resulting from device conflicts, see “Diagnosing Device Conflicts under Windows XP.”

Caution: Step 12 must be performed. The Echelon software does not write certain required information to the Registry until the LONWORKS Control Panel application has been opened and closed for the first time.

12. Double click the **LonWorks Plug and Play** icon in the Windows Control Panel to select and initialize the driver. Select the appropriate driver in the NI Application box. Choose NSIPCLTA for desktop PCs or NSIPCC for laptop PCs. Then click the **Diagnostics** button. In the Diagnostics window, click the **Test** button. Approximately seven lines of information should appear, with none of these

containing the word "failed." If the adapter card passes the test, click **OK** to close the Diagnostics window, then click **Apply** and **OK** to close the LONWORKS Plug and Play Control Panel. If the card fails the test, log onto the Schneider Electric technical support website at <http://source.invensysibs.com> for additional information related to the installation and troubleshooting of the adapter card, or contact the Schneider Electric Customer Care Center for a possible solution.

Troubleshooting

Diagnosing Device Conflicts under Windows XP

Refer to the section on Diagnostic Commands in *LONWORKS PCLTA-20 PCI LonTalk Adapter User's Guide*, F-26996.

Re-installing Echelon Drivers Under Windows XP

If Windows does not automatically recognize the adapter card on start up, perform the following steps to re-install the Echelon drivers.

1. Open the Device Manager as follows: double-click **System** in the Windows Control Panel, select the **Hardware** tab, and click **Device Manager**.
2. If the adapter card has not been properly recognized by the operating system, the Device Manager will list an "Other devices" item. "Other devices" will have a sub-item with a yellow question mark icon. Double-click the sub-item to open the device's property page.
3. Click Re-install driver, and follow the subsequent prompts. At each step of the re-installation process click **Next** or **OK** to accept the installer's default settings.
4. When re-installation is complete, click **Finish**.
5. Close the device property page, and exit the Device Manager.

Using the LON Jack Cable

WPA-LON-1 and WPA-LON-3

An adapter to LON cable (P/N: WPIA-CBL-1) is included with the WPA-LON-1 and WPA-LON-3 cards. Connect one end of the cable to the two-terminal connector plug of the adapter card. Connect the other end of the cable to the LON connection of a TAC I/A Series MicroNet Controller or LON jack of a TAC I/A Series MicroNet Sensor. This cable connection is not polarity sensitive.

The supplied LON jack-compatible cable has a 1.3 mm I.D. by 3.5 mm O.D. coaxial plug (DC power plug style) on one end, and has pre-stripped leads on the other end. The cable length is 6 feet (1.83 m). To ensure accurate communications, it is recommended that the standard length of the supplied cable not be extended.

Note: If the LON uses a Free Topology, the cable length counts towards the total wiring length for the FTT segment.

WPA-LON-2

The cable provided with the WPA-LON-2 has pre-installed connector ends and a length of 6 feet (1.83 m). Connect the cable between the PCC-10 Card's Hirose Connector and a LON jack on a TAC I/A Series MicroNet Controller or Sensor (a sensor must be wired with a sensor-to-LON cable). (P/N: WPIA-CBL-2)

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