LAVA PayLink-IP/Dial Quick Installation Guide

LAVA™

(1) Getting Started

Congratulations on your purchase of a LAVA PayLink-IP/Dial. PayLink-IP devices securely connect payment terminals to payment processors over an Ethernet/TCP/IP connection. Any payment terminal that can transmit transaction information over a POTS port can send its information to the LAVA PayLink-IP/Dial. The LAVA PayLink-IP/DIal establishes an SSL-secured connection to the payment processor, places the serial data in a TCP/IP wrapper and sends it out its Ethernet port. Data moving the other direction, from the Ethernet side of the LAVA PayLink-IP/DIal to the payment terminal, undergoes the same process in reverse.

With a LAVA PayLink-IP/Dial, you can:

- Securely network payment terminals
- Stop using dial-up modems
- Eliminate long-distance phone-modem charges

Included with your package, you should have the following:

- LAVA PayLink-IP/Dial
- Power supply
- Quick Installation Guide

Before Proceeding: The PayLink-IP is factory preset with an IP address of 192.168.0.35. If this IP address conflicts with a device already installed on the network, follow the procedure described in the "Configuring network settings" section of this manual to set the IP address to a usable address.

② **Hardware Setup**

1. Connect the power supply to the LAVA PayLink-IP/Dial and to AC power. The power (red) LED will light to indicate that the unit is receiving power.

2. Connect an Ethernet cross-over cable to the Ethernet RJ-45 jack of the LAVA PayLink-IP/Dial. Attach the other end of the crossover network cable to a host PC directly.

Network status is indicated by two LEDs on the RJ-45 connector. The left (yellow) LED indicates network activity. It is on by default, turning off when network activity occurs at the PayLink-IP. The right (green) LED indicates a network link. It is off by default, but lights when a network link exists.

Network
Activity and Link
indicators

Network
connector (RJ-45)

Power
indicator

Power
connector
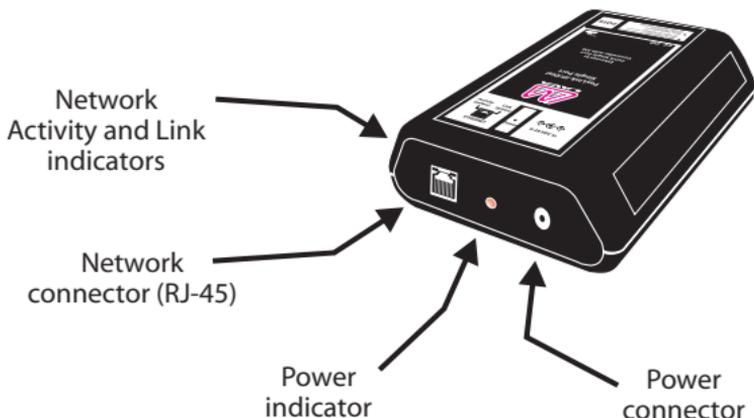
(3)

3. Open a web browser to the IP address of the PayLink-IP and configure the device as described in the "Configuration" section of this manual.

4. After configuring the LAVA PayLink-IPDial, attach it to your network and connect a payment terminal to its serial port.

Serial port activity is indicated by two status LEDs per port. The yellow LED lights when the serial port is transmitting data. The green LED lights when the serial port is receiving data.

POTS Tx indicator

POTS Rx indicator

RJ-11 POTS connector

Single Port PayLink-IP/Dial

④ <u>Configuration</u>

Configuration consists of the following:

A. Configuring network settings
B. Host configuration
C. Protocol configuration
D. Password selection
E. Upgrading software

<u>A. Configuring network settings</u>

PayLink-IP devices installed on your network will need unique IP addresses. These are set by using a web browser.

The factory default network settings for the PayLink-IP are:

IP address:	192.168.0.35
Subnet mask:	255.255.255.0
Gateway address:	0.0.0.0
Name:	[empty]
Workgroup:	[empty]
DHCP detection:	disabled

Configuring PayLink-IP network settings

To set a PayLink-IP's network settings, open a web browser and enter the IP address of the PayLink-IP into the browser's location bar. The embedded web server running on the PayLink-IP will display the opening screen of the PayLink-IP.

Opening screen

Click "Configure" if no password has been set, or enter the password for the PayLink you are configuring, and then click "Configure." The Configuration menu will open.

Configuration Menu

6

Choose the "Configure the LAVA PayLink-IP on my network" link. In the configuration screen that appears, enter the network settings you wish for that PayLink-IP. Once the new values are entered and accepted, the PayLink-IP will reboot to implement the new network settings.

Network Settings

NOTE: Changing the network settings of a PayLink-IP device that is installed on a network may make that device unavailable to other stations that have activated a connection to that device using older network settings.

The following network parameters can be configured for the LAVA PayLink-IP/Dial:

Device name
Use this field to supply a "friendly" name for the LAVA PayLink-IP/Dial device being configured. The friendly name is optional, and can be chosen to provide a conveniently-remembered name for the unit.

IP address
The IP address for the LAVA PayLink-IP/Dial will identify the device on the LAN on which it is located. Any conventional IP address can be used. The LAVA PayLink-IP/Dial ships with its default IP address as 192.168.0.35; ensure that this IP address is available on the LAN onto which the LAVA PayLink-IP/Dial is being installed.

Subnet mask
A subnet mask can be configured for the LAVA PayLink-IP/Dial in this dialog box; by default the LAVA PayLink-IP/Dial has a subnet mask of 255.255.255.0.

Default gateway
Configure the IP address of the default gateway that the LAVA PayLink-IP/Dial will use when communicating with devices outside its network segment. The default gateway is configurable as a 12 digit numeric address.

HTTP port
By default, the LAVA PayLink-IP/Dial communicates on port number 80. A measure of increased security may be obtained by changing this port number to a non-standard TCP port for HTTP communications.

DHCP enabled
When installing the LAVA PayLink-IP/Dial onto a network where IP addresses are assigned by DHCP servers, please ensure that the

"DHCP enabled" checkbox has been set. The LAVA PayLink-IP/Dial will then act as a DHCP client and obtain its IP address from the DHCP server on its LAN that first leases an IP address to the LAVA PayLink-IP/Dial.

Assigned local TCP port
Use this dialog box to change the TCP port number assigned to the serial port of the LAVA PayLink-IP/Dial. By default the LAVA PayLink-IP/Dial assigns TCP port 2300 to its serial port; if another device on the network is already using this TCP port number, reassign the serial port to another TCP address.

After making changes to the network settings, four options exist:

Submit changes and reboot device
This option will register the changes you have entered into the dialog box and reboot the LAVA PayLink-IP/Dial, implementing the changes on reboot.

Restore factory defaults and reboot device
This option will restore factory defaults and reboot the LAVA PayLink-IP/Dial, implementing the changes on reboot.

Exit without changes
This option will discard changes entered into the dialog box and return you to the "Administrator Menu" screen.

Reboot device
This option will reboot the device with the settings currently implemented, and discard changes entered into the dialog box and not submitted.

B. Host configuration

The PayLink-IP/Dial POTS port can be configured through a web browser. The settings for the LAVA PayLink-IP/Dial's host connection should match the requirements of the hosting server used by the payment terminal.

Host Configuration

The Host Side configuration dialog provides settings for a Primary Host, a Secondary host, and two additional user-defined hosts. Each host can be configured or SDLC or asynchronous communications.

Configuring the connection for SDLC communications consists of supplying basic modem communication parameters.

SDLC Configuration

Configuring the connection for asynchronous communications consists of supplying basic modem communication parameters as well as terminal settings that define the data format and message negotiation protocols for the terminal/server connection. Details on these settings can be found in the "PayLink-IP_Dial manual Axx.pdf" file on the installation diskette.

Asynchronous Configuration

C. Protocol configuration

The PayLink-IP/Dial Host Side Configuration screen has options for configuring SDLC or Asynchronous links, and the related message formatting protocols. for a variety of payment processing hosts.

Users will need to supply the addressing information suitable to their specific payment processing hosts.

Each host connection can have a unique protocol configuration.

If the host connection is configured for asynchronous communications, protocol settings for framing data can be selected to meet a variety of message formats: pass-through, DP3000, Merchant Link, VISA 1/2 Standard framing, VISA 1/2 Transparent framing, Length Prefix framing, First Data framing, or Length Prefix framing for VISA II. Details on the framing options and handshaking are available in the "PayLink-IP_Dial manual Axx.pdf" file on the installation diskette.

In addition, SSL 3.0 for the connection can be enabled or disabled.

If the host connection is configured for SDLC communication, SSL 3.0 for the connection can be enabled or disabled. In addition, message header lengths can be specified for the choice of message format employed. Details on the framing options are available in the "PayLink-IP_Dial manual Axx.pdf" file on the installation diskette.
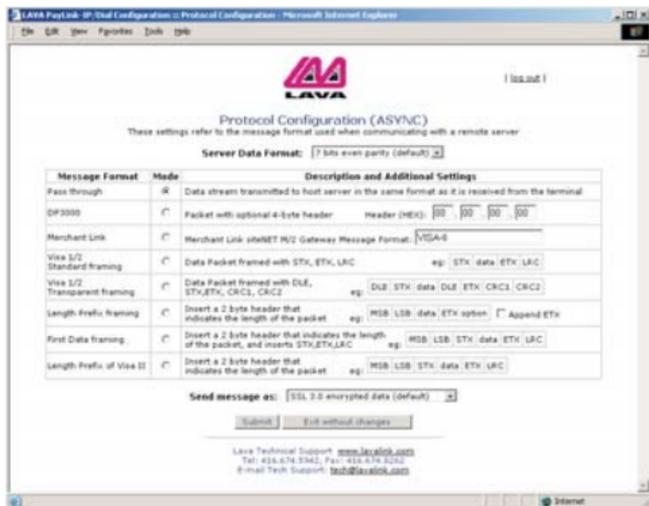
Protocol Configuration (ASYNC)

Protocol Configuration (SDLC)

By default, the LAVA PayLink-IP/Dial's connection to the payment processor is set up using an SSL Ver. 3.0 link. Disabling this setting will set data over an unsecured TCP/IP link.

By default, two host configurations (primary and secondary) are configured to the most common settings. These can be changed to suit specific needs, and additional strings can be defined for other host interfaces.

D. Password selection

The PayLink-IP/Dial password configuration screen can be accessed through a web browser. The password permits securing the PayLink-IP against unauthorized configuration of network settings, port settings, processor gateway settings, and advanced configuration features. The password supplied here is required to access the web browser configuration screens.

By default the PayLink-IP is shipped with no password set. LAVA recommends applying a password immediately to any PayLink-IP devices being deployed.

Password Selection

E. Upgrading Software

New versions of PayLink-IP software and firmware may be found at www.lavalink.com.

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