

VKD4net Virtual Keypad Module

For controlling Intruder Alarm Systems over the Web

1. Introduction

VKD4net is a solution for creating a virtual keypad on a PC/laptop and connecting it over the web to PIMA's Hunter-Pro Series & Captain 8 Intruder Alarm Systems, for the purpose of controlling the alarm system.

VKD4net can also be connected locally, over LAN.

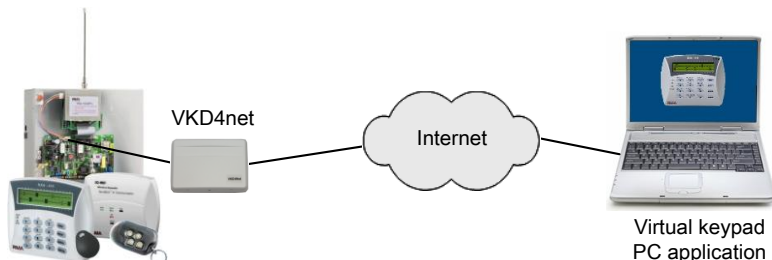


Figure 1. The VKD4net operation diagram

The VKD4net hardware is made of the net4pro-i network module¹ and a BUS connection card. The software part is PIMA's VKD virtual keypad PC/laptop application, which connects to the VKD4net over the internet. The VKD4net module is connected to the control panel's BUS (on the control panel or an expander).

Once connected, the virtual keypad functions as a real LCD keypad, just as if it was physically connected to the control panel on the premises.

1.1. Out of the box

- The VKD4net module installed in a plastic box
- Installation CD including the product guide
- CAT-5 cable, 2m

1.2. Preliminary requirements

- The net4pro-i must be configured to carry a static IP address²;
- PC/laptop with Windows XP[®] OS or newer;
- 4 wire harness.

¹ P/N 6247001

² See limited support notice in the end of this guide.

2. Quick guide

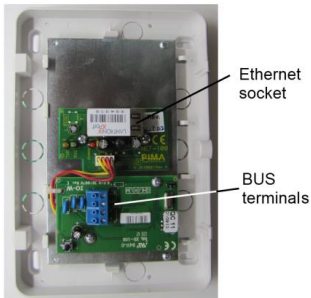


Figure 2. VKD4net opened

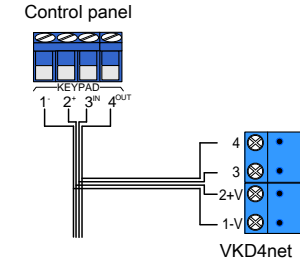


Figure 3. VKD4net wiring diagram

3. Installation




It is recommended to install the VKD4net as close as possible to the BUS.

1. Connect the VKD4net to the BUS, using 4 wires. The connection can be directly to the control panel's KEYPAD terminals, or to a BUS terminal on an expander. Wiring is simple: terminals "1" are connected between each other, terminals "2" are connected between each other, and so on. Note that the overall BUS wires length is limited to 500m.
2. Connect the net4pro-i to the network using the supplied CAT 5 cable.
3. Install the VKD application; see "Installing & Running the VKD Application", on page 6 for instructions.
4. Follow the next link to download and install the Lantronix Device Installer: <http://www.lantronix.com/device-networking/utilities-tools/device-installer.html>
5. Run the device installer. If a windows security message is displayed, Click "Unblock" or "Allow Access".

4. Configuration

4.1. Search for Xport[®] devices

1. In the Device Installer, click the **Search** icon  (top-left). The application will now search for Xport[®] devices on the network, i.e., the net4pro-i. If not found, check the network connection and make sure the net4pro-i is connected to the same network as the Device Installer's PC/laptop. In the next example, the Xport[®] device was identified in the IP address of 192.168.0.206.

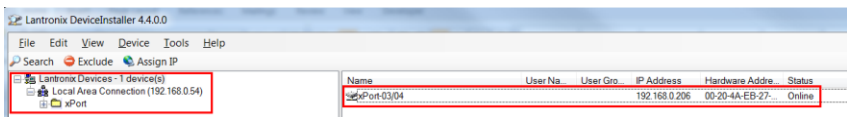


Figure 4. Xport[®] devices found on the local network

- Click the plus sign on the left and click the device's IP address, to display its details.

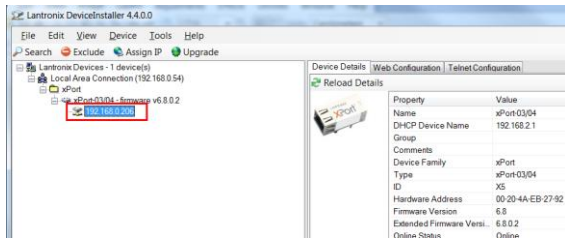


Figure 5. The device details screen

4.2. Web configuration

- Click the Web configuration tab.
- Click the green **Navigate to** button to the right of the address bar; see the next figure.

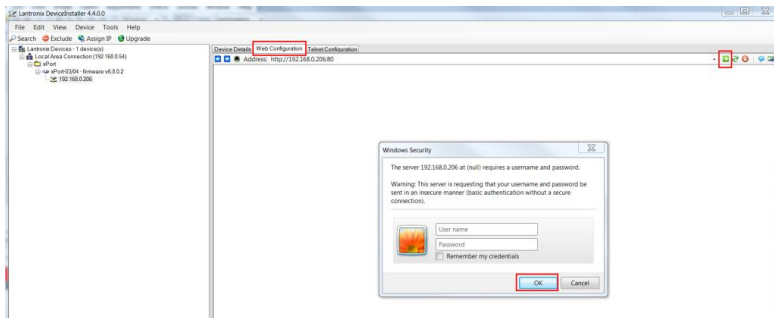


Figure 6. Web configuration screen

- In the window that pops-up, Click **OK**. The Xport[®] Configuration Manager will now be displayed.

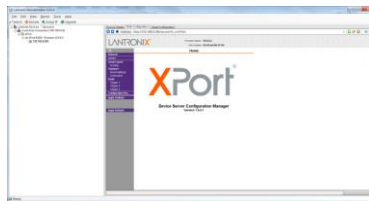


Figure 7. XPort configuration screen

4.3. Network settings

- Click **Network** on the left menu.
- In the **Use the following IP configuration** section, enter the net4pro-i **IP address**, the **Subnet Mask** and the **Default Gateway** (Router) address.
For example: IP address 192.168.0.206; Subnet Mask: 255.255.255.0; Default Gateway: 192.168.0.10.
- Click **OK** to save. The word **Done!** should appear briefly next to the OK button.

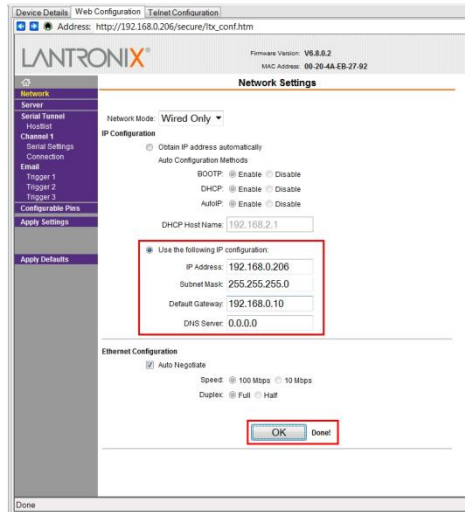


Figure 8. Network settings screen

4.4. Serial setting

1. Click **Serial Setting** on the left menu.
2. Set the **Baud Rate** to 2400.
3. Check the **Enable Packing** checkbox.
4. From the **Idle Gap Time** drop-down list, select 52 msec.
5. Click **OK** to save. The word **Done!** should appear next to the OK button.

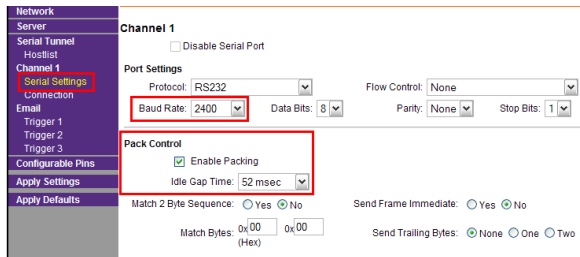


Figure 9. Serial setting screen

6. Click **Connection** on the left menu; see the next figure.
7. From the **Active Connect** drop-down list, select **None**.

4.5. Connection

1. In the **Endpoint Configuration** section, enter the **Local Port** number, i.e., the port that the net4pro-i will listen to¹. In the figure, the local port is set to 10001.
2. Click **OK** to save. The word **Done!** should appear next to the OK button.

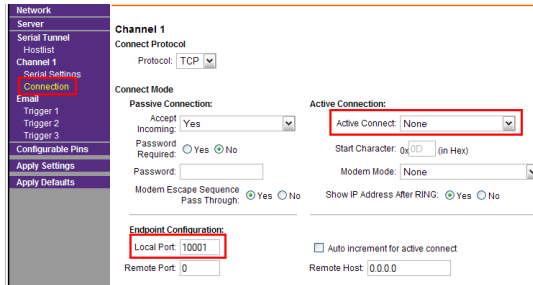


Figure 10. Connection settings screen

3. Click **Apply settings** on the left menu. The net4pro-i will now reboot to apply changes.

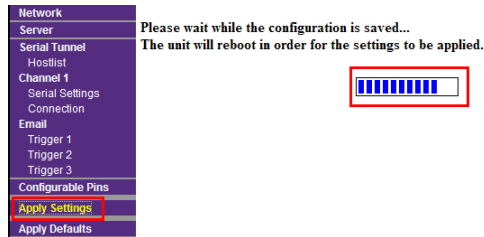


Figure 11. Rebooting the net4pro-i



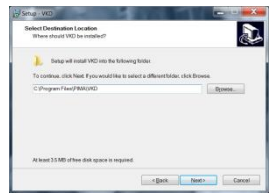
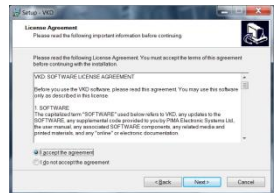
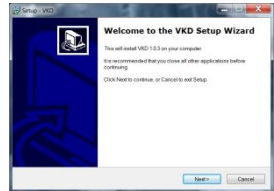
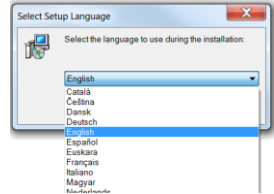
1. It is recommended to also reboot the net4pro-i manually, by disconnecting it from power for a few seconds.
2. To connect the VKD4net over the Internet, you need to configure your Router for "Port Forwarding"; see, for example the following link: <http://portforward.com/>

¹ Make sure the "Auto increment for active connection" checkbox is unchecked.

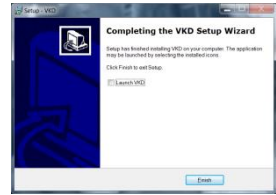
5. Installing & Running the VKD Application

The VKD Virtual Keypad application is supplied on a CD. To install it:

1. Insert the CD and wait for the installation wizard to run. To manually run it, right-click the file VKD.exe, located on the CD, and select **Run as administrator**.
2. From the drop-down list, select your language.
3. Click **OK**.
4. Click **Next** in the welcome screen.
5. Click "I accept the agreement" in the **Software License Agreement** window and **Next**.
6. Click **Next** in the **Select Destination Location** window, to install the VKD in its default location.
7. To install it on a different location, click **Browse** and select a folder.
8. From the drop-down list, select **Network Installation** in the **Select Components** window.
9. Click **Next**.
10. Click **Next** in the following two screens, then click **Install**.



11. Uncheck **Launch VKD** in the wizard's final screen.
12. Click **Finish**.



5.1. Setting the VKD's IP and port

The net4pro-i's IP address and port no. are taken from a text file, located in the ¹ VKD4net's folder:

1. Open a text editor (e.g., "Notepad") and open the text file **VKD_CUST.TXT**.
2. The original file contains a sample module's addresses: "192.168.0.1:10001;Sample". It is structured as follows: "IP:Port²;module's name/description". We advise you not to delete this line, and keep it as a sample.
3. In the same structure enter the address of one or more net4pro-i. If you will use the VKD4net for connecting to several customers, enter each address in a separate line.
4. Save the file and close it. If you have a security issue with saving the file in the default folder, save it on your desktop and replace the original file with it afterwards.

5.2. Running the VKD for the first time

The first time you run the VKD, you need to select the module's configuration from the **VKD_CUST.TXT** text file. To do that:

1. Run the VKD by double clicking its shortcut on the desktop.
2. On the virtual keypad that appears, click the **Settings** icon; see the next figure.



Figure 12. The VKD virtual keypad³

3. From the **Select Address** drop-down menu, select your net4pro-i module. The information here is taken from the text file.
4. Click **OK** and wait for the VKD to establish a connection.

¹ "C:/Program Files/Pima/VKD" by default.

² The port must be enabled by the network admin.

³ If the text on the virtual keypad appears distorted

Limited support notice:

Due to the diverse mix of networks, we are not able to offer support on routers, modems, switches or any other network/ internet related devices or services.

Our support for internet or network related features, that are not directly related to the product are limited.

The following must be completed before calling our support team with network/internet related features:

Your network/internet must be configured and working.

IP address and port number for the product must be pre- configured on the network.

Also have the following information available: default Gateway, Subnet mask, port numbers and all other network information.

PIMA Electronic Systems Ltd. shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function.

Please refer to a separate warranty statement found on PIMA website at:

<http://www.pima-alarms.com/site/Content/t1.asp?pid=472&sid=57>

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Please read this manual in its entirety before attempting to program or operate your system. Should you misunderstand any part of this guide, please contact the supplier or installer of this system.

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P/N 4410317



Version A2, XX en (Dec 2013)