



XAP[®] Net User Manual

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XAP Net User Manual
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Introduction

Thank you for purchasing the ClearOne XAP® Net, an advanced control interface that easily connects to XAP and PSR systems to provide remote system management through local area networks or over the Internet. The XAP Net features an Ethernet port and support for common network control and management protocols for easy integration into your corporate local area network (LAN).

- **Solve problems faster with less downtime.** Remotely access unit status and programming to quickly identify and resolve problems.
- **Increase productivity.** Complete upgrades and system configuration more quickly with increased access speeds for larger systems.
- **Upgrade unit firmware remotely.** Perform firmware upgrades remotely through the network, eliminating the need to connect serially to each unit in the site.
- **Reduce costly on-site visits.** Program or make adjustments to your system without sending a technician on-site by using G-Ware configuration software across the network.

Service and support

If you need additional information on setting up or operating your XAP Net, please contact us. We welcome and encourage your comments so we can continue to improve our products and better meet your needs.

Technical support

tel: 1-800-283-5936 (USA)
1-801-974-3760

fax: 1-801-977-0087

e-mail: tech.support@clearone.com

web: www.clearone.com

Sales and customer service

tel: 1-800-945-7730 (USA)
1-801-975-7200

fax: 1-800-933-5107 (USA)
1-801-977-0087

e-mail: sales@clearone.com

Product returns

All product returns require a return materials authorization (RMA) number. Please contact ClearOne Technical Support before attempting to return your product. Make sure you return all the items that shipped with your product.

Unpacking

Ensure that the following items were received with your shipment.

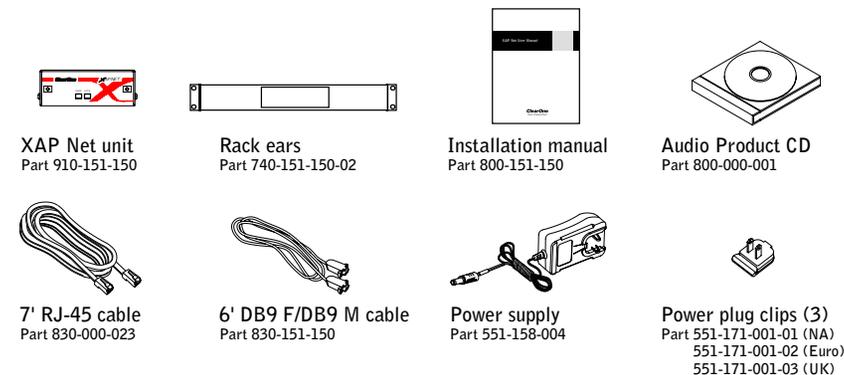


Figure 1. XAP Net packing list

Note: ClearOne is not responsible for product damage incurred during shipment. You must make claims directly with the carrier. Inspect your shipment carefully for obvious signs of damage. If the shipment appears damaged, retain the original boxes and packing material for inspection by the carrier. Contact your carrier immediately.

Product overview

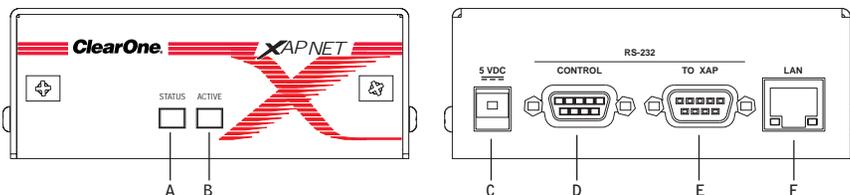


Figure 2. XAP Net front and back panels

- A. **Status.** A green LED indicates that the unit is connected to a XAP system. A red LED indicates that the unit is disconnected. Flashing red indicates there is an error log message.
- B. **Active.** A green LED indicates the XAP Net is actively processing commands.
- C. **5 VDC.** The power connector is only compatible with the provided 5 VDC power supply.
- D. **Control.** This DB-9 serial port has a selectable transfer rate: 9.6, 19.2, 38.4 or 57.6 Kbps. Use this port to connect to a PC or other serial control device.
- E. **To XAP.** This DB-9 serial port is auto-configured to work with XAP units. Use this port to connect to a XAP system.
- F. **LAN.** This 10/100 BaseT auto-detecting Ethernet port features two LEDs.
 - ~ **Link.** A green LED indicates connection to an active network.
 - ~ **Speed.** A yellow LED indicates connection to a 100 Mbps network. If the LED is not lit, the connection speed is 10 Mbps.

Before You Install

Before you connect and configure your XAP Net unit, please review the system requirements, network information and use strategy. You will need to install G-Ware™ 5.0 and upgrade the bootcode and firmware on existing XAP and PSR units before the XAP Net can be used.

System requirements

G-Ware software must be installed on a PC that meets the following minimum requirements.

Component	Minimum Requirements
Operating System and RAM	Windows 95 OSR 2/98/ME 64 MB RAM
	Windows NT 64 MB RAM
	Windows 2000 128 MB RAM
	Windows XP 256 MB RAM
Processor	PII 200 MHz or AMD equivalent
Monitor	1024x768 SVGA (16 bit) high color
Video Card	8 MB video card
Free Hard Disk Space	20 MB
Web Browser	Internet Explorer 5.0, Java Virtual Machine 1.4
RS-232 COM port	1
CD-ROM drive	1

Network information

To use XAP Net over a local area network (LAN), you need to know if the LAN uses Dynamic Host Configuration Protocol (DHCP) or if you need a static IP address.

If the LAN uses DHCP, enable Dynamic DNS if it is available.

If the LAN does not use DHCP, gather the following information prior to LAN setup:

- The IP address to be assigned to the XAP Net
- The subnet mask
- The IP address of the default gateway

Upgrading G-Ware

Before you can use XAP Net, you must install G-Ware 5.0. G-Ware is the configuration software for the XAP and PSR products. While some configuration can be done using the XAP Net web interface, G-Ware is required to complete the custom configuration of your audio conferencing system. Please ensure that you have administrative privileges before attempting to install on computers running Windows 2000 or later.

 **Note:** If you work with multiple XAP systems and need to keep previous versions of G-Ware installed on your PC/laptop, change the directory name where the new version will be installed. Otherwise, you will overwrite the previous version. Use G-Ware Switcher to alternate between versions. See the XAP_G-WARE 109 technical note on the ClearOne web site at www.clearone.com, for more information on G-Ware Switcher.

To install G-Ware 5.0

1. Close all programs or applications running on your PC or laptop and insert the Audio Product CD that shipped with your XAP Net into the CD-ROM drive.
 - If the Autorun feature is enabled on the PC, the CD will run automatically.
 - If the Autorun window does not open, select **Run** from the Start menu. Type `<drive>:\clearone.exe` where `<drive>` is the letter of the CD-ROM drive (e.g., `D:\clearone.exe`).
2. Click the **G-Ware 5.0** link.
3. Click **INSTALL NOW** on the G-Ware page.
4. Follow the onscreen instructions. You must restart your computer once installation is complete. You can start G-Ware by double-clicking the desktop icon. If you did not create a desktop icon during the installation process, you can also start G-Ware from the Start menu.

Upgrading XAP and PSR unit bootcode and firmware

After installing G-Ware 5.0, you must upgrade both the unit bootcode and firmware. These are separate upgrades and require a direct serial connection to each unit. Once the unit bootcode is updated, you can upgrade the unit firmware to the versions shown below.

	XAP 800	XAP 400	XAP TH2	PSR1212
New Firmware	3.0	2.0	3.0	4.0

 **Note:** Turn off your screensaver before beginning the upgrade procedure.

To upgrade unit bootcode

1. Save your site file before beginning the bootcode upload procedure.
2. Turn down amplifiers. The units will be reset to default settings, which may affect output levels and routing.
3. Disconnect from the site in G-Ware and remove all expansion bus connections.
4. Use a 9-pin serial cable to connect your PC to the first unit.

5. Open the G-Ware Firmware Utility by clicking the **G-Firm** button  located on the G-Ware toolbar.
6. Click **Browse** to display the upgrade folders. Select the **Bootcode** folder and click **Open**.



Figure 3. Bootcode folder in Browse window



Figure 4. Bootcode files in Browse window

7. Select the bootcode that corresponds with the unit you are upgrading. Click **Open**.



Figure 5. File verifications



Figure 6. File upload options

8. The selected bootcode file will self-verify and display the message **Verified, OK**. Ensure that you have selected the correct bootcode file and click **Next** to advance to the Communications tab.
9. Select the PC **COM** port you are using to connect to the unit. Confirm that the **Baud Rate** matches the baud rate of the selected unit.
10. Click **Next**. You may be prompted to save site files. If you have saved your site files, click **Yes, Continue** to begin bootcode upload.
-  **Note:** When the bootcode upload is finished, the unit should automatically reboot. If it doesn't, power cycle the unit before continuing with the firmware upgrade procedure.
11. On the Finished screen, click **Start Over**.

You are now ready to upgrade the unit firmware. Refer to the "To upgrade unit firmware" section on the following page.

To upgrade unit firmware

 **Note:** If you closed the G-Ware Firmware Utility, click the G-Firm button on the G-Ware toolbar.

 **Attention:** The firmware upgrade will reset the unit to factory defaults. The only way to restore custom settings after you upgrade the firmware is from site files you have saved. Save a copy of your site files **before** upgrading your current firmware version; otherwise, you will need to reprogram your site files from the default factory settings.

1. Click **Browse** to access a list of available firmware updates. Select the file that matches the type of unit you are upgrading and click **Open**.



Figure 7. Available firmware files



Figure 8. File verification

2. The selected firmware file will self-verify and display the message Verified, OK. Ensure that you have selected the correct firmware file and click **Next** to advance to the Communications tab.



Figure 9. Communication settings



Figure 10. Firmware upgrade status

3. Select the PC COM port you are using to connect to the unit. Confirm that the Baud Rate matches the baud rate of the selected unit.

 **Note:** The upgrade will take approximately 5-15 minutes per unit depending on baud rate. It is important not to interrupt the upgrade process or remove the cable.

4. Click **Next**. You may be prompted to save site files. If you have saved your site files, click **Yes, Continue** to begin the firmware upload.
5. When the upgrade is finished, click **Start Over** and connect the serial cable to the next unit and upgrade bootcode and firmware. If you have no other units to upgrade, click **OK** to close the window.

Connecting and Configuring

The initial XAP Net connection procedure is determined by your network configuration. If you have a DHCP network, you can connect directly to the network. If you have a non-DHCP network, you will need connect to your XAP Net serially to configure network settings.

You will need to assign a static IP address if you will be using the XAP Net on a non-DHCP network, connecting it to a single computer or if you need a fixed IP address on a DHCP network. Your network administrator can provide a static IP address. See page 10 for configuration instructions.

If you are connecting to a single computer using a cross-over cable, please read the XAP_G-Ware 126 technical note on the ClearOne web site at www.clearone.com before proceeding with the installation.

DHCP networks

A DHCP network automatically assigns an IP address to detected devices. If you have a DHCP network, you will need to connect the XAP Net serially to retrieve the IP address or network name and then establish a connection.

To connect the XAP Net

1. Place your unit in a standard 19" rack and attach it securely. Rack ears are included.
2. Connect a 9-pin serial cable from the **To XAP** port on the XAP Net to the **RS-232** port on the XAP or PSR unit. The baud rate on the XAP RS-232 port will automatically be changed to 57,600 bps.

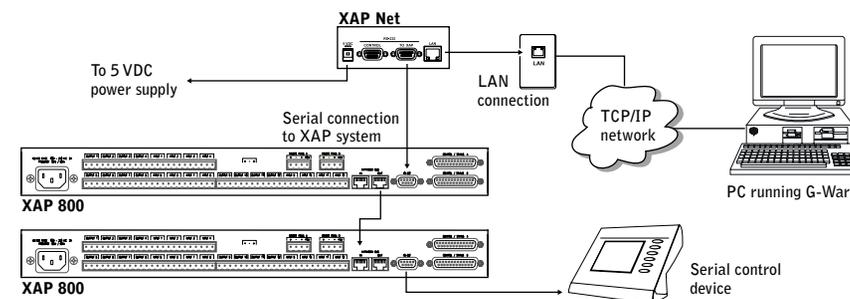


Figure 11. Connecting to the network

3. Connect the XAP Net to your LAN using a Cat. 5 network cable (included).
4. Connect the **5 VDC power supply** to the XAP Net. Use only the provided power supply.

 **Note:** The status light on the XAP Net will illuminate green when the XAP Net is properly connected to a XAP/PSR unit.

To retrieve the XAP Net IP address

1. Connect a 9-pin serial cable from the **Control** port on the XAP Net to the PC COM port.
2. Start G-Ware and create a new site. Verify the **Baud Rate** is set to 38,400 and **Flow** is on.
3. Click the **Connect** button on the G-Ware toolbar to connect to the XAP Net. Upon successful connection, a XAP Net icon will appear in the Site pane.

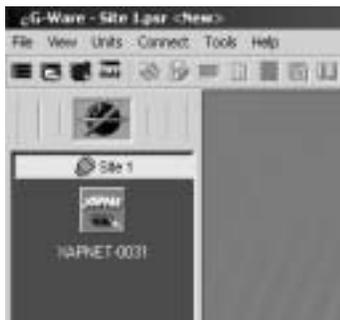


Figure 12. Connected XAP Net unit



Figure 13. XAP Net IP settings

4. Right-click on the XAP Net icon to open the Unit Properties window.
5. Make a note of the **IP address** and default **network name**. If you want to use a different unique network name, enter it in the Network Name field. You will use either the IP address or the network name when you establish a connection through the network.

To connect through the network with G-Ware

1. Click the **New Site** button on the G-Ware toolbar to open the Site Properties window.
2. Click the **Comm** tab.
3. Select **Use Networking**. In the **IP Address** box, type the IP address or the unique network name for the XAP Net.
4. Click **OK** to close the Site Properties window.
5. Click the **Connect** button on the G-Ware toolbar to connect to the XAP Net.
6. You will be prompted to enter a user name and password. The default user name is **clearone** and the password is **xapnet**. The password and user name are not case sensitive.



Figure 14. Site Properties

If the connection is successful, the XAP Net status light will turn green and icons representing the XAP Net and other connected XAP/PSR units will appear in the Site pane. If the connection is not successful, refer to the troubleshooting section on page 20.

Connecting to a non-DHCP network

This procedure requires two 9-pin serial cables (one is included with your XAP Net). Once you have properly configured XAP Net with the correct IP address through a serial connection, you can connect it to your LAN.

To connect serially to XAP Net

1. Place your unit in a standard 19" rack and attach it securely. Rack ears are included.
2. Connect the power supply to the XAP Net. Use only the provided power supply.
3. Connect a 9-pin serial cable from the **To XAP** port to the **RS-232** port on the XAP 800, XAP 400, XAP TH2 or PSR unit. The status light on the XAP Net will turn green when the XAP Net is properly connected to a XAP/PSR unit.

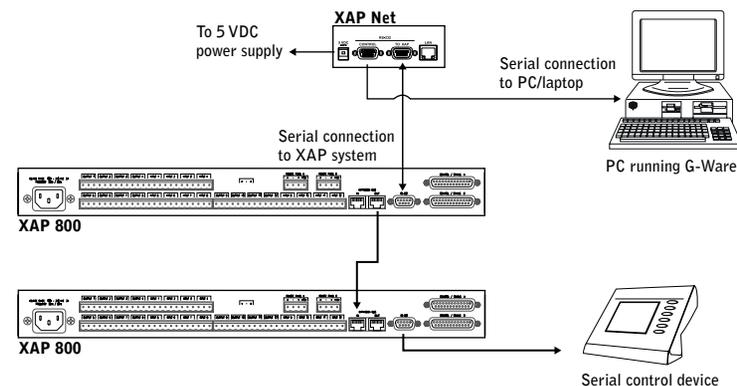


Figure 15. Making the initial serial connection

Note: The XAP Net will change the baud rate on the XAP RS-232 port to 57,600 bps.

4. Connect a 9-pin serial cable from the **Control** port to a **COM** port on the PC or laptop that has G-Ware 5.0 installed.
5. Start G-Ware.
6. Click the **New Site** button on the G-Ware toolbar to open the Site Properties window.
7. Click the **Comm** tab. Select the COM port your PC is using to connect to XAP Net. Ensure the Rate is **38,400** and that Flow is set to **Hardware**.
8. Click **OK** to close the Site Properties window.
9. Click the **Connect** button on the G-Ware toolbar to connect to the XAP Net. Icons representing the XAP Net and other connected XAP/PSR units appear in the Site pane.

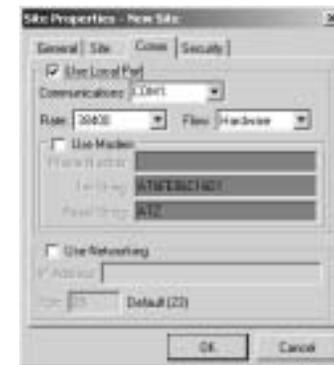


Figure 16. Site Properties, serial settings

To configure settings for network connection

 **Note:** Contact the network administrator for network settings.

1. Open the Unit Properties window by right-clicking on the XAP Net icon in the Site pane and selecting **Unit Properties** from the shortcut menu.
2. Click the **Comm** tab.
3. In the IP Settings section, you will see the default network name. If you want to use a different unique network name, enter it in the **Network Name** field.
4. Enter the static **IP address** for the XAP Net. Your network administrator can provide the IP address.
5. Click **OK** to close the window.



Figure 17. Unit Properties

Connecting through the network with G-Ware

1. Using a Cat. 5 network cable (included), connect the XAP Net to your LAN.
2. Click the **New Site** button on the G-Ware toolbar to open the Site Properties window.
3. Click the **Comm** tab.
4. Select **Use Networking**. In the **IP Address** box, type the IP address or the unique network name for the XAP Net.
5. Click **OK** to close the Site Properties window.
6. Click the **Connect** button on the G-Ware toolbar to connect to the XAP Net.
7. You will be prompted to enter a user name and password. The default user name is **clearone** and the password is **xapnet**. The password and user name are not case sensitive.

If the connection is successful icons representing the XAP Net and other connected XAP/PSR units will appear in the Site pane. If the connection is not successful, refer to the Troubleshooting section on page 20.



Figure 18. Site Properties

XAP Net Locator

G-Ware features a new utility called the XAP Net Locator. This utility enables G-Ware to detect all XAP Net units on the same subnetwork and display their IP addresses. You can select and then connect to any XAP Net unit that appears in the window.

To connect to XAP Net using the XAP Net Locator

1. Click the **XAP Net Locator** button  on the G-Ware toolbar to open the utility.
 2. Click **Refresh** to update the list of detected units.
 3. Select the desired unit. The **Create Site** button and **Use IP Address** check box are now active.
 4. Select **Use IP Address** if your network does not support name recognition and you need to use the IP Address to connect.
 5. Click **Create Site**. The unit network settings are imported into G-Ware and the Site Properties window opens.
 6. Click **OK** to close the Site Properties window.
 7. Click the **Connect** button on the G-Ware toolbar to connect to the XAP Net. Icons representing the XAP Net and units connected to the XAP Net appear in the Site pane.
 8. You will be prompted to enter a user name and password. The default user name is **clearone** and the password is **xapnet**. The password and user name are not case sensitive.
- If the connection is successful, icons representing the XAP Net and other connected XAP/PSR units appear in the Site pane. If the connection is not successful, refer to the Troubleshooting section on page 20.



Figure 19. XAP Net Locator utility

Site Properties

In the Site Properties window, you can configure communication settings, add site descriptions and set the file access and site passwords.

To add a site description

1. Open the Site Properties window by right-clicking on the XAP Net icon in the Site pane and selecting **Site Properties** from the shortcut menu.
2. The General tab displays the site file name, path and creation date. Click the **Site** tab.
3. Enter descriptive information about your site including Company Name, Location and Room. Click **OK** to save and close the window.

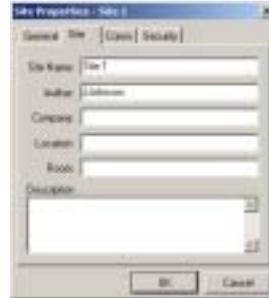


Figure 20. Site description

To configure site communication properties

1. Click the **Comm** tab in the Site Properties window.
2. Select the connection option you will be using.
 - If connecting serially, select **Use Local Port** and specify the baud rate and flow control.

For the initial connection to XAP Net, the Baud Rate must be set to 38,400 bps with Flow set to Hardware.
 - If connecting through the network, select **Use Networking** and enter the IP Address. The default Port is 23, which is the port XAP Net uses for Telnet client.



Figure 21. Comm properties

To set site passwords

1. Click the **Security** tab.
2. Click **File Access Password** to create a password for the site file. Users attempting to open the site file will need to supply this password.
3. Click **OK** to save settings and close the window.



Figure 22. Security settings

Unit Properties

In the Unit Properties window, you can configure the IP settings and communication rates, enter a time server address and access the XAP Net firmware utilities.

To add a unit description

1. Open the Unit Properties window by right-clicking on the XAP Net icon in the Site pane and selecting **Unit Properties** from the shortcut menu.
2. The General tab displays the Unit Identification number, MAC Address and Firmware Version. If you have not connected to the unit, this area is blank. Click the **Site** tab.
3. Enter descriptive information about your unit including Company Name, Location, and Room. Click **OK** to save and close the window.

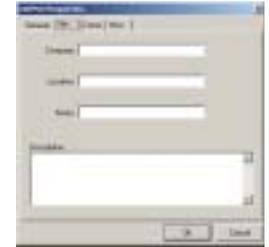


Figure 23. Unit description

To set up IP filters

1. Click the **Comm** tab in the Unit Properties window.
2. In the IP Filters section, enter specific IP addresses that will be allowed to access the XAP Net system.

You can specify a range of IP addresses by using zeros. For example, entering 192.168.105.0 will allow any IP addresses in the 192.168.105.1 to 192.168.105.254 range to access the XAP Net.
3. Click **OK** to save the settings and close the window.



Figure 24. Network settings

To specify a time server

-  **Note:** You should specify a time server to ensure an accurate time stamp on log files.
1. Open the Unit Properties window and click the **Misc** tab.
 2. Enter the **IP address** for the time server. Two addresses can be specified.
 3. Select **Use Daylight Savings** if your region observes daylight savings time.
 4. Select your **Time Zone** and click **OK** to save settings.



Figure 25. Time server

To create a log file

1. Open the Unit Properties window and click the Misc tab.
2. Select the items you want to include in the log.
 - Select **Log user access (security)** to include a list of users who have accessed the XAP Net.
 - Select **Log Expansion Bus output** to include activity on the expansion bus.
 - Select **Log debug tracking** to include error messages.
3. Click **Log File** to create and view the log. You can print, save or clear the log file.



Figure 26. Log files

To change remote access password

1. Open the Unit Properties window and click the Misc tab.
2. Click **User/Password** to open the User Name and Password window.
3. Type in a new password and confirm it. Password is limited to 12 alphanumeric characters.
4. Click **OK** to save the change and close the window.

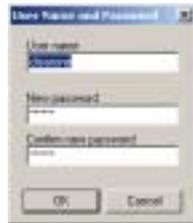


Figure 27. Changing password

Firmware upgrades

The Unit Properties, Misc tab provides two firmware options: XAP Net Firmware and XAP Firmware. XAP Net Firmware allows you to upgrade the firmware on your XAP Net unit, while XAP Firmware allows you to perform firmware upgrades on your XAP and PSR systems through XAP Net.

To upgrade XAP Net firmware

1. Click the **Connect** button on the G-Ware toolbar to connect to the XAP Net.
2. Open the Unit Properties window and click the Misc tab (see Figure 26).
3. Click **XAP Net Firmware** to open the XAP Net Firmware Loader.
4. Click **File** to open the browse window.
5. Select the XAP Net firmware file and click **Open**.
6. Click **Update** to begin the firmware upgrade. The progress bar will show the status of the upgrade.

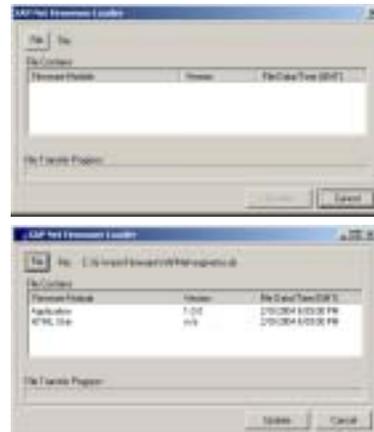


Figure 28. XAP Net firmware screens

To upgrade XAP or PSR firmware through XAP Net

Note: This feature is available only to units that have been upgraded to the firmware versions shown below.

	XAP 800	XAP 400	XAP TH2	PSR1212
Current Firmware	3.0	2.0	3.0	4.0

1. Click the **Connect** button on the G-Ware toolbar to connect to the XAP Net.
2. Right-click on the XAP Net icon and select **Unit Properties**.
3. Click the Misc tab.

4. Click **XAP Firmware** to open the Firmware Uploader. Active units are displayed in the top section of the window.
5. Select the units that you want to upgrade (selected units are shown with a checkmark).
6. Click **Add File** to open the browse window. Select the firmware file and click **Open**.

If you have selected different unit types, repeat this step until all necessary firmware files appear in the Firmware files list.

7. Click **Start Firmware Update**. Units of the same type will be upgraded at the same time. For example, all XAP 800s will be upgraded simultaneously, then XAP TH2s and then XAP 400s. The progress bar will show the status for the unit type being upgraded as well as the entire site.

Note: You cannot cancel the firmware upgrade once it begins. The Close button will close the window but will not end the process.

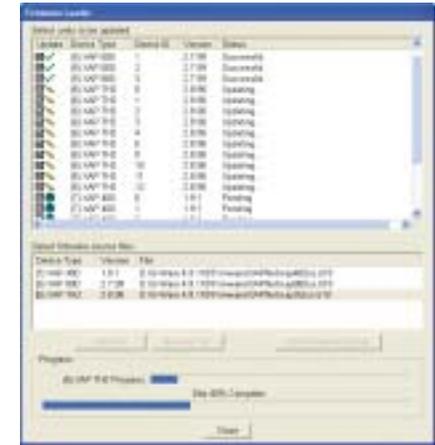


Figure 29. Selecting firmware files

Web Access

The XAP Net has a built-in web server that provides a remote access interface to your XAP Net system. Not all programming and metering functions are available. To use the web interface from outside your network, your firewall must be properly configured. If you are accessing XAP Net from within the network, you may use the network name. The web interface uses port 80.

Connecting through the web interface

Note: If you do not have Java Virtual Machine 1.4 installed on your computer, you will be prompted to download and install it. You will need to do this before you can use the web interface. You can download JVM 1.4 from the Sun Microsystems web site at www.sun.com.

To connect to XAP Net through the web interface

1. Open a web browser and enter the IP address or network name of the XAP Net in the address bar.
2. Enter your user name and password.
3. Connected units are shown in the left channel navigation. Use the unit links to access the unit pages.
4. Use the buttons in the top navigation to access help, log out, or return to the home page.

XAP Net web page

The XAP Net web page displays site information and XAP Net unit information including firmware version, IP address, and time server. From this page, you can run Safety Mute.



Figure 30. XAP Net web page

To enable/disable Safety Mute

- Click **Safety Mute On** to mute and **Safety Mute Off** to unmute.

XAP 800 and PSR1212 web pages

From the XAP 800 and PSR1212 web pages, you can mute or change the input and output gain, view Post Gain and Output meter levels, and run presets and macros.



Figure 31. XAP 800 web page

To run a preset

- Select the desired preset from the list and click **Run**.

To run a macro

- Select the desired macro from the list and click **Run**.

To mute and input or output

- Select the **Mute** checkbox that corresponds with the input or output you want to mute.

To change a gain setting

- Type the new level in the **Gain** box. This will change the fine gain setting on the unit.

To view post-gain meter

- To view the post-gain meter on an input, select the corresponding **Post-Gain Meter** checkbox.

To view output meter

- To view the meter on an output, select the corresponding **Output Meter** checkbox.

XAP 400 web page

From the XAP 400 web page, you can dial out, send a hook flash signal, mute or change input and output gain, view Post Gain and Output meter levels, and run presets and macros.



Figure 32. XAP 400 web page

To run a preset

- Select the desired preset from the list and click **Run**.

To run a macro

- Select the desired macro from the list and click **Run**.

To mute and input or output

- Select the **Mute** checkbox that corresponds with the input or output you want to mute.

To change a gain setting

- Type the new level in the **Gain** box. This will change the fine gain setting on the unit.

To view post-gain meter

- To view the post-gain meter on an input, select the corresponding **Post-Gain Meter** checkbox.

To view output meter

- To view the meter on an output, select the corresponding **Output Meter** checkbox.

To dial out

1. Activate the telephone interface by clicking **Connect**.
2. Enter the number you want dialed, including any dial-out prefixes.
3. Click **Dial**.
4. When you are finished with the call, click **Disconnect** to end the call.

To send a hook flash signal

- Click **Flash** to send a momentary interruption in the line seizure. This allows you to use options such as 3-way calling, call waiting and call hold. This feature is dependent on the services offered by your telephone company.

XAP TH2 web page

From the XAP TH2 web page, you can dial out and send a hook flash signal.



Figure 33. XAP TH2 web page

To dial out

1. Activate the telephone interface by clicking **Connect**.
2. Enter the number you want dialed, including any dial-out prefixes.
3. Click **Dial**.
4. When you are finished with the call, click **Disconnect** to end the call.

To send a hook flash signal

- Click **Flash** to send a momentary interruption in the line seizure. This allows you to use options such as 3-way calling, call waiting and call hold. This feature is dependent on the services offered by your telephone company.

Troubleshooting

Problem	Try this
I can't connect through the network.	<p>Verify that you are using the correct IP address. You can connect serially to check the address. See page 8.</p> <p>Check the network LEDs on the LAN port of the XAP Net. The green LED indicates a good physical connection to an active network.</p> <p>Power cycle your XAP Net. You must connect to the network before powering the unit.</p>
Connection is refused by remote server.	<p>Verify that you are using the correct IP address. You can connect serially to check the address. See page 8.</p> <p>Check IP Filtering settings and ensure your IP address is not blocked.</p>
I can't pull up the web interface.	<p>Make sure you have downloaded Java Virtual Machine 1.4. See page 16.</p> <p>Check the IP address and firewall settings. The web interface runs on port 80.</p>
I'm prompted to log in twice when accessing the web interface.	Make sure cookies are enabled.
The Status and Activity LEDs are red and blinking when I power up.	The log file in G-Ware provides error details. Start G-Ware, access XAP Net Unit Properties, Misc tab and click Log File.

Security

Your XAP Net has been designed to be a secure addition to your network. XAP Net cannot access file systems and does not provide peer-to-peer information. In addition, XAP Net does not have any protocols for file sharing and can only create an outbound connection to a time server.

G-Ware also provides IP Filtering to allow you to limit access to your XAP Net system by entering up to four partial or complete IP addresses. See page 13.

Appendix

Specifications

Dimensions (W x D x H)

4" x 4.25" x 1.5"
(10.2 cm x 10.8 cm x 3.8 cm)

Power

External power supply
100-240VAC; 50/60 Hz; 5 W

RS-232

DB9 Female
BPS selectable
9.6k/19.2k/38.4k/57.6k
CTS/RTS Flow control
DB9 Male
Auto configured for XAP

Ethernet

Type: 10/100 BASE T
Auto sensing
Connector: RJ-45

LAN LEDs

Link: Green when active network
Speed: Yellow when 100 Mb network

LAN Support

Network protocols: TCP/IP, DNS,
UDP, DHCP, ARP, HTTP, ICMP

Front Panel LEDs

Active: Green when active
Status: Green when connected to XAP
Red when no XAP connection

Environmental

Operating Temperature: 32–122° F
(0–50° C)
Humidity: 15%–80%

Compliance

FCC
CSA
CE

Model Number

910-151-150

Pinouts

RS-232 Control port (female)

Pin Number	Control	Pin Number	Control
1	DCD	6	DSR
2	TXD	7	CTS
3	RXD	8	RTS
4	DTR	9	NA
5	Ground		

RS-232 To XAP port (male)

Pin Number	Control	Pin Number	Control
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	NA
5	Ground		

Ethernet RJ-45 connector

Pin Number	Control	Pin Number	Control
1	TX+	5	Not used
2	TX -	6	RX -
3	RX +	7	Not used
4	Not used	8	Not used

Compliance

FCC Part 15/ICES-003 Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules and Industry Canada ICES-003. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by ClearOne Communications could void the user's authority to operate the equipment.

European Compliance

This equipment has been approved in accordance with Council Directive 1999/5/EC "Radio Equipment and Telecommunications Equipment" Compliance of the equipment with the Directive is attested by the application of the CE mark on the equipment.

EC Declaration of Conformity

Application of Council Directive(s):	1999/5/EC Radio equipment and Telecommunications Terminal Equipment (R&TTE) Directive
Manufacturer's Name:	ClearOne Communications
Manufacturer's Address:	1825 West Research Way Salt Lake City, Utah 84119 U.S.A.
Model No.:	XAP Net (910-151-150)

Standard(s) to which Conformity is declared:

89/336/EEC "Electromagnetic Compatibility (EMC) Directive":	
EN 55022: 1994 (Emissions)	Specification for limits and methods of measurement of radio interference characteristics of information technology equipment.
EN 61000-3-2:2000	Part 3: Limits - Section 2: Limits for harmonic current emissions.
EN 61000-3-3:1996	Section 3: Limitation of voltage fluctuations and flicker in low voltage supply systems for equipment with rated current up to and including 16 A.
EN 55024: 1998 (Immunity)	Information technology equipment - Immunity characteristics - Limits and methods of measurement.
EN 61000-4-2: 2001	Electrostatic Discharge
EN 61000-4-3: 2001	Radiated RF Immunity
EN 61000-4-4: 2001	Electrical Fast Transients
EN 61000-4-5: 2001	Lightning Surge
EN 61000-4-6: 2001	Conducted RF Immunity
EN 61000-4-11: 2001	Voltage Dips and Voltage Interruptions
73/23/EEC "Low Voltage Directive (LVD)":	
IEC/EN 60950: 1999	Safety of Information Technology Equipment, Electrical Business Equipment

Warranty

ClearOne Communications, Inc. (Manufacturer) warrants that this product is free of defects in both materials and workmanship. Should any part of this product be defective, the Manufacturer agrees, at its option, to:

- A. Repair or replace any defective part free of charge (except transportation charges) for a period of two years from the date the end user is invoiced for the product, provided the end user returns the product to ClearOne Communications or an authorized ClearOne dealer according to the Product Return and Repair statement set forth below;
- B. Furnish replacement for any defective parts in the product for a period of two years from the date of original purchase. Replacement parts shall be furnished without charge, except labor and transportation.

This warranty excludes assembled products not manufactured by the Manufacturer whether or not they are incorporated in a Manufacturer product or sold under a Manufacturer part or model number.

THIS WARRANTY IS VOID IF:

- A. The product has been damaged by negligence, accident, act of God, or mishandling, or has not been operated in accordance with the procedures described in the operating and technical instructions; or,
- B. The product has been altered or repaired by other than the Manufacturer or an authorized service representative of the Manufacturer; or,
- C. Adaptations or accessories other than those manufactured or provided by the Manufacturer have been made or attached to the product which, in the determination of the Manufacturer, shall have affected the performance, safety or reliability of the product; or,
- D. The product's original serial number has been modified or removed.

NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE, APPLIES TO THE PRODUCT. MANUFACTURER'S MAXIMUM LIABILITY HEREUNDER SHALL BE THE AMOUNT PAID BY THE END USER FOR THE PRODUCT. No person or entity authorized to assume any obligation or other liability in connection with the products. No action, regardless of form, arising out of or relating to the product or this warranty, may be brought by end user more than two (2) years after the cause of action has accrued.

Manufacturer shall not be liable for punitive, consequential, or incidental damages, expenses, or loss of revenue or property, inconvenience, or interruption in operation experienced by the end user due to a malfunction in the purchased product. No warranty service performed on any product shall extend the applicable warranty period.

In case of unsatisfactory operation, the end user shall promptly notify the Manufacturer at the address set forth below in writing, giving full particulars as to the defects or unsatisfactory operation. Upon receipt of such notice, the Manufacturer will give instructions respecting the shipment of the product, or such other matters as it elects to honor this warranty as above provided. This warranty does not cover damage to the product during shipping and the Manufacturer assumes no responsibility for such damage. All shipping costs shall be paid by the customer.

This warranty extends only to the original end user and is not assignable or transferable. This warranty is governed by the laws of the State of Utah, without regard to the conflicts of interests provisions thereof.

ClearOne Communications, Inc.
1825 Research Way
Salt Lake City, Utah 84119

XAP Net commands

 **Note:** The device type for the XAP Net is F0. You will need to reboot XAP Net before the commands will take effect.

ENETADDR - Ethernet port IP address

This command selects/reports the IP address of the Ethernet port on the unit.

ARGUMENT DETAILS

Name	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	

BINARY FORM DETAILS

Command ID:	71
Number of Arguments: 1	
Argument Form:	<Value>

TEXT FORM DETAILS

Command Form:	DEVICE ENETADDR [Value]
---------------	-------------------------

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

ENETSUBN - Ethernet subnet mask

This command selects/reports the Subnet mask of the Ethernet port on the unit.

ARGUMENT DETAILS

Name	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	

BINARY FORM DETAILS

Command ID:	72
Number of Arguments: 1	
Argument Form:	<Value>

TEXT FORM DETAILS

Command Form:	DEVICE ENETSUBN [Value]
---------------	-------------------------

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

ENETDHCP - Ethernet DHCP Selection

This command selects/reports the use of DHCP of the Ethernet port on the unit.

ARGUMENT DETAILS

Name	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = Toggle (Null to query in text)	

BINARY FORM DETAILS

Command ID:	77
Number of Arguments:	1
Argument Form:	<Value>

TEXT FORM DETAILS

Command Form:	DEVICE ENETDHCP [Value]
---------------	-------------------------

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

ENETGATE - Ethernet default Gateway address

This command selects/reports the default gateway of the Ethernet port on the unit.

ARGUMENT DETAILS

Name	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	

BINARY FORM DETAILS

Command ID:	73
Number of Arguments:	1
Argument Form:	<Value>

TEXT FORM DETAILS

Command Form:	DEVICE ENETGATE [Value]
---------------	-------------------------

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

ENETDNSA - Ethernet DNS Server Addresses

This command selects/reports the DNS servers IP addresses of the Ethernet port on the unit.

ARGUMENT DETAILS

Name	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	

BINARY FORM DETAILS

Command ID:	74
Number of Arguments:	1
Argument Form:	<Value>

TEXT FORM DETAILS

Command Form:	DEVICE ENETDNSA [Value]
---------------	-------------------------

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

ENETDNS - Ethernet DNS Selection

This command selects/reports the use of DNS of the Ethernet port on the unit.

ARGUMENT DETAILS

Name	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = Toggle (Null to query in text)	

BINARY FORM DETAILS

Command ID:	78
Number of Arguments:	1
Argument Form:	<Value>

TEXT FORM DETAILS

Command Form:	DEVICE ENETDNS [Value]
---------------	------------------------

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

ENETNAME - Ethernet Host Name

This command selects/reports the host name of the Ethernet port on the unit.

ARGUMENT DETAILS

Name	Type	Size	Values	Units
Value	String	24	CLEAR = clear current value 1 – 24 characters (Null to query in text)	

BINARY FORM DETAILS

Command ID:	75
Number of Arguments:	6
Argument Form:	<Value>

TEXT FORM DETAILS

Command Form:	DEVICE ENETNAME [Value]
---------------	-------------------------

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

