# **Technical Note**

XAP Net 104



# **Firewall Settings for XAP Net**

# Introduction

A firewall is used to block unwanted traffic from your local area network (LAN). If you want XAP Net to be accessible through the Internet, you will need to configure your firewall to allow such communication.

#### **Ports**

In TCP/IP and UDP Networks, a protocol of "ports" is used at the transport layer to manage communication channels between programs. Port numbers range from 0 to 65536. Ports 0 to 1024 are well-known ports and are reserved for privileged services. Firewalls can be configured to block traffic from certain ports and to allow communication from other ports. The XAP Net communicates on the following well-known ports:

Port	Service	XAP Net Function
23	Telnet	Used by G-Ware
37	Time Server	Used for Time and Date stamp of XAP Net log
80	HTTP	Used to access the XAP Net's internal webpage
137	NetBIOS	Used internally to LAN
138	NetBIOS	Used internally to LAN

#### Port 23

Port 23 is used to communicate with and configure units using G-Ware, AMX, Crestron, HyperTerminal and any other terminal emulation software. Serial commands communicate through Port 23. If you want to connect to your XAP Net with G-Ware, you will need to allow communication through Port 23 unless the IT department is using port forwarding. Ask the IT department which port to use if port forwarding is in enabled.

### Port 37

Port 37 is a port used to keep the time and date updated on devices from a Time Server. Normally LAN's will have a Time Server set up so internal devices will not have to communicate to the Internet to update the time and date. The IP address of the timeserver for the XAP Net to use can be configured in the XAP Net properties.

### Port 80

Port 80 is used for HyperText Transfer Protocol (HTTP) communication. This is the standard protocol used for the World Wide Web. If you want to access the XAP Net's internal web page from outside of the LAN you will need to allow communication through this port.

# Port 137 and 138

Port 137 and 138 are used for communication using NetBIOS. These ports are used internally on the LAN and will not need to be opened on the firewall for outside communication.

# Information for the IT department

You will need to tell the IT department which ports you need opened and that will depend on what you want to be able to do with your XAP/PSR units. If you want to use G-Ware or HyperTerminal you will need port 23 opened or IT will have configured for port forwarding. If you want to use the XAP Net's internal web page you will need port 80 opened. These are basically the only two ports used for communicating to the XAP Net over the Internet.

The IT department can also set up a Virtual Private Network which can be used to access the XAP Net.