

This document outlines how to network your DVMRe or DSR (referred to as DVRs in this document) directly over the Internet to a remote PC. To use this document, you must have a basic knowledge of networking principles.

For optimal DVR network functionality, your DSL service must meet the following requirements.

- DSL service type: SDSL
- Data transmission type: PPP, TCP/IP, single socket
- IP address: static, public
- MTU for transmission and modem/router: 1500 bytes is optimal; 1400 or 1200 are acceptable but might not produce desired performance

Note: There must be a DSL connection at the DVR site and at the remote PC site (the remote PC site does not require a static IP address).

For more information regarding these requirements, refer to the DSL Service Requirements for Digital Video Recorders Technical Reference Guide.

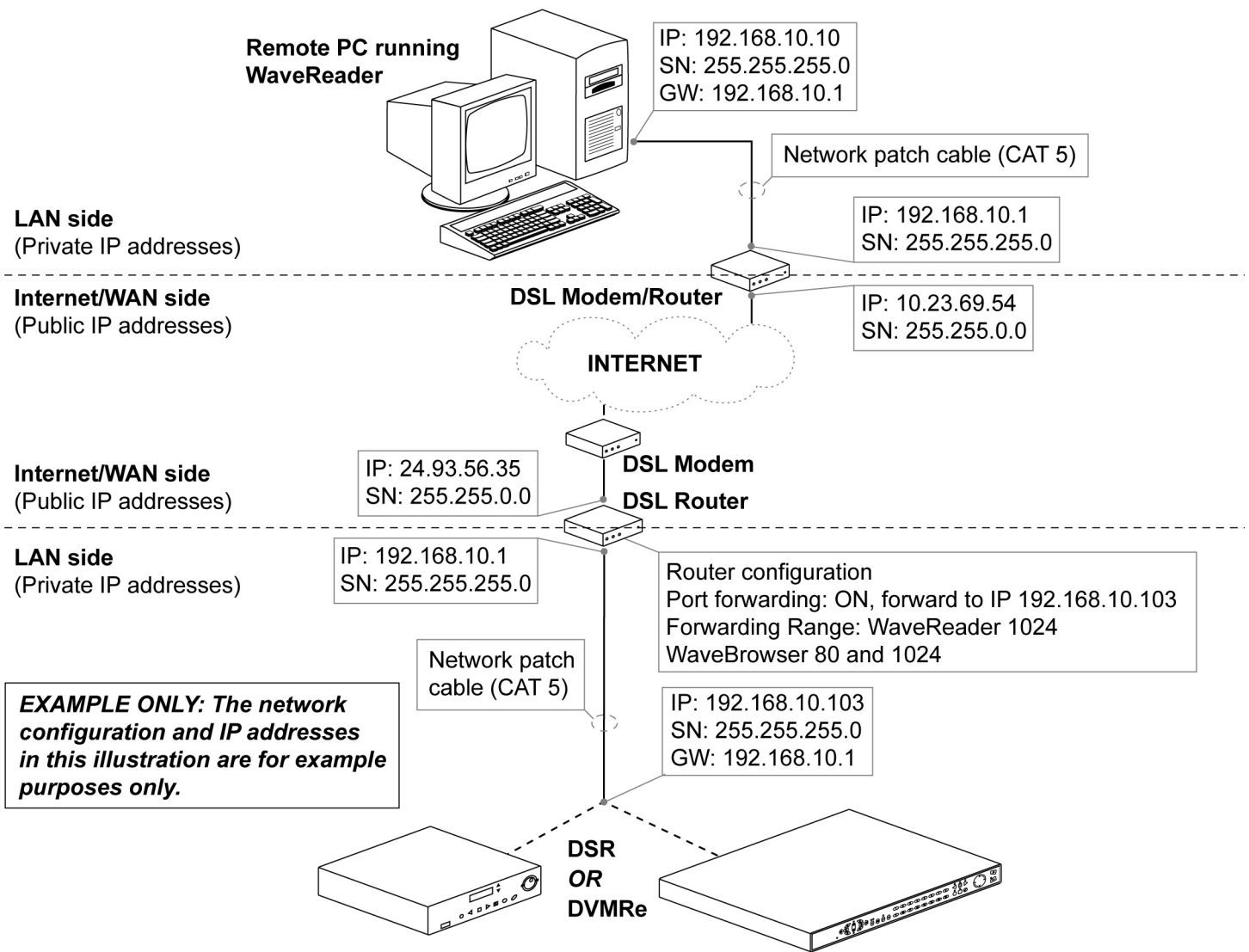


Figure 1. Example configuration of a DVR networked directly over the Internet to a remote PC.

MAKING CABLE CONNECTIONS

Note: For DVR network functionality, your system must include a router between the DVR and the modem.

- 1) Connect from the wall socket to the RJ11 telephone connection on your DSL modem with a telephone cable.
- 2) Connect from the Ethernet connection on the modem to a router with a straight-through network cable (Cat-5, RJ45 to RJ45).
- 3) Connect from the router to the 10/100 Ethernet port on the DVR with a straight-through network cable (Cat-5, RJ45 to RJ45).

CONFIGURING THE DSL MODEM

- MTU setting: disable MTU limits; must allow 1200 to 1500; 1500 is optimal

CONFIGURING THE ROUTER AND DVR

Refer to the manufacturer's instructions to configure the router with the following settings.

- IP Address: Static public IP address assigned by your ISP
- Subnet Mask: Contact your ISP
- Gateway: Contact your ISP
- TCP MTU Size: 1500
- Port forwarding: Forward all incoming data from port 1024 to the DVR static private IP address

To configure the DVR, perform the following.

- 1) Enter the Menus (DVMRe) or Advanced Menus (DSR).

Note: For more information about accessing menus on your DVR, refer to the appropriate DVR user manual.

- 2) Select **Communications / Ethernet Settings**.
- 3) The "Warning – Machine will reset if any values change!" message screen appears. Select **OK**.
- 4) At the **Ethernet Settings** menu, select the following settings:
 - Ethernet: Enable
 - DHCP: Disable
 - IP Address: Any available local, static address; selected by user or network administrator
 - Subnet Mask: Assigned by the router; copy from router setup
 - Gateway: Same as the router
 - TCP MTU Size: Set to correspond with service provider settings (1500 is optimal). Refer to the *Determining Your Service Provider's MTU Settings Technical Reference Guide* for more information.

Note: For information about the other settings on the Ethernet Settings menu, refer to the appropriate DVR user manual.

- 5) Select **OK**. The DVR restarts.

CONFIRMING PC CONNECTIVITY

Before you set up WaveReader software on the PC, ping the DVR to confirm that the PC is communicating properly with the DVR.

- 1) Go to the PC.
- 2) On the taskbar, click **Start**, and then click **Run**. The **Run** dialog appears.
- 3) In the **Open** box, type "COMMAND"
- 4) Click **OK**. A command prompt window appears.
- 5) At the command prompt, type "PING <static public IP address of the router>"
- 6) Press **Enter**. The PC sends four packets to the DVR.
- 7) The command prompt window displays the results of a successful or failed communication.
 - If the communication succeeded, four lines of "Reply from <IP address> and ping statistics appear.
 - If the communication failed, four lines of "Request timed out." and ping statistics appear.
- 8) At the command prompt, type "EXIT" to close the command prompt window.

If the PC does not communicate properly with the DVR, perform the following.

- Check the IP address settings at the PC and the router or DVR.
- If your DVR is on a LAN, check the LAN connections.

If the PC communicates properly with the DVR, set up the WaveReader software on the PC. For more information, refer to the *Setting Up WaveReader Technical Reference Guide*.

The above is general information only. When installing your video and/or access control system, you should consult with your network administrators and/or consultants, who have the required knowledge to fully integrate your network(s) with other systems. GE Security disclaims any express or implied warranty in connection with the above general information, including without limitation, any warranty of merchantability or fitness for a particular purpose.