



## EtherLite/RealPort Setup Guide

### Installation Overview

Following are the tasks required to install an EtherLite module on an Ethernet network.

1. Locate the EtherLite MAC (Media Access Control) address found on the white sticker on the back panel of the module. You will need it when assigning an IP address.
2. Install the RealPort driver.
  - The RealPort driver is on the Access Resource CD.
  - The driver can also be downloaded from the Digi web site at <http://support.digi.com>.
  - Information on installing the driver is available on the Access Resource CD.
3. Assign an IP address to the EtherLite module. The preferred method of assigning an IP address is during the installation of the driver. See the information on assigning an IP address provided on this card and in the online RealPort documentation found on the Access Resource CD.
4. Configure devices on Etherlite ports. See the documentation on the Access Resource CD for more information.

### Assigning an IP Address: Overview

You can assign an IP address, subnet mask and default gateway to the Etherlite module using any of the following methods:

- With a DHCP or bootp server. If you use a DHCP server, make a reservation for each EtherLite module.
- With the dgipserv utility, a bootp implementation, packaged with the RealPort drivers. The utility is part of the driver installation package and is the preferred method of assigning an IP address.

- With Boot Console, a Digi utility that can be accessed from a terminal connected to port 1 of the Etherlite module.

**Note:** Windows users should assign an IP address before or during the RealPort driver installation.

### Using DgIpServ To Assign an IP Address: Windows

On Microsoft Windows NT and Windows 2000 systems, you can use DgIpServ to assign an IP address, subnet mask, and default gateway to an Etherlite module. To assign an IP address, do the following:

- During RealPort driver installation.

To use the DgIpServ utility during the driver installation, do the following:

  1. When the IP address dialog box of the Add Digi Hardware Wizard appears, press the DgIpServ button to access the utility.
  2. Supply the information requested and then follow the prompts.

Use the context-sensitive help for information on how to use the utility.

### Using dgipserv To Assign an IP Address: UNIX

On UNIX systems, you can use the dgipserv utility to assign an IP address, subnet mask, and default gateway to an Etherlite unit after the RealPort driver is installed. During driver installation the utility is copied to a directory in the root path.

To use dgipserv, do the following:

1. Enter the command:  

```
dgipserv
```
2. When the utility appears, enter the following:  

```
dgipserv -store mac-address ip-address
```

where *mac-address* is the MAC (Ethernet) address for the Etherlite unit, and *ip-address* is the IP address to assign to the unit.

#### Example

```
dgipserv -store 00-e0-f7-15-20-8F 143.182.54.90
```

### Assigning an IP Address: Boot Console

Use this procedure to temporarily or permanently store an IP address in an EtherLite module.

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## Procedure

1. Attach a terminal or terminal emulator to Port 1 of the EtherLite module.
2. Attach a 3-wire connection: TxD, RxD, and GND.  
**Note:** EtherLite will not assert DTR or RTS. If your system is expecting these signals, loop them at the terminal side. Boot Console operates at 19200 baud, 8 bits, 1 stop, and no parity.
3. Activate the console by removing the Ethernet cable and unplugging the power cable.
4. Plug the power cable back into the EtherLite module.
5. Repeatedly depress the # key at the terminal until you get a console prompt. It should only take three keystrokes.
6. A prompt will appear with the module model and the firmware version. An example would be:  
-EL-32 V6.8--  
?  
?
7. Enter the IP address by entering the command:  
ip x.x.x.x  
Where x.x.x.x is the actual numerical address.
8. Next enter the command:  
boot (to temporarily store the ip address) or  
store (to permanently store the ip address)  
  
**Note:** The boot command skips the BootP portion of the boot sequence and simply use the assigned IP address. When you temporarily assign an IP address, you do not need to set the gateway or subnet mask.
9. Enter the command:  
boot  
Reconnect the network cable to the EtherLite module.
10. Verify the network connection of the EtherLite module by using the Ping program.

**Note:** For additional configuration information of the EtherLite module, see Boot Console Commands.

## Boot Console Commands

Use this command table to configure an EtherLite module with Boot Console. A thorough reference on Boot Console is available on the Digi web site at <http://support.digi.com>. A simple "boot console" search on the web site will return the desired documentation.

### Notes:

- The commands are case-sensitive. The Ethernet cable must be reattached after the commands are entered to allow the changes to be stored and activated.
- To store commands permanently in flash RAM, such as gw, ip, sm, ahip, ahm, and tftpip, be sure to follow that command with the store command.

Command	Command Description
help	Displays the command list with a brief description
show	Shows all settings
boot	Resumes the boot process with status messages logged to the terminal
ip	Sets the IP address (The default address is 0.0.0.0)
gw	Sets the gateway address (The default address is 0.0.0.0)
sm	Sets the subnet mask address (The default is 0.0.0.0)
ahip	Sets the authorized hosts IP address specifying which DHCP server can assign an IP address to the EtherLite module (The default address is 0.0.0.0)
ahm	Sets the authorized hosts mask address (The default address is 0.0.0.0)
tftpip	Sets the server host for bootfile tftp address (The default address is 0.0.0.0)*
bf	Sets the bootfile name (The default name is elxx.prm)*
store	Stores the settings in flash RAM
erase	Erases the settings in flash RAM and resets all defaults
reset	Resets all defaults
ping	Pings an IP address

\***Note:** These values are not supported by the store command, consequently when the EtherLite module loses power this information will be lost.

## Upgrading Etherlite Firmware with dgipserv

Use this procedure to upgrade the firmware on a Etherlite unit.

1. Download the latest firmware from the Digi web site at the following URL:  
<http://support.digi.com>
2. Create a folder and extract the compressed firmware to it.
3. Start the dgipserv utility.
  - On Windows NT and Windows 2000 systems, execute the utility, which is stored in the system32 directory.
  - On UNIX systems, execute the utility, which is stored in the root path, by entering the following command: dgipserv
4. Follow the prompts and use the associated man pages (UNIX) and online help (Windows) to complete the firmware upgrade.