

## Important Safety Information

To avoid contact with electrical current:

Never install electrical wiring during an electrical storm.

Never install telephone jacks in wet locations unless that jack is specifically designed for wet locations.

Use caution when installing or modifying telephone lines.

Use a screwdriver and other tools with insulated handles.

You and those around you should wear safety glasses or goggles.

Do not place telephone wiring or connections in any conduit, outlet or junction box containing electrical wiring.

### **WARNING**

Do not work on your telephone wiring if you wear a pacemaker. Telephone lines carry electrical current.

Installation of inside wire may bring you close to electrical wire, conduit, terminals and other electrical facilities. Extreme caution must be used to avoid electrical shock from such facilities. You must avoid contact with all such facilities.

Telephone wiring must be at least 6 feet from bare power wiring or lightning rods and associated wires, and at least 6 inches from other wire (antenna wires, doorbell wires, wires from transformers to neon signs), steam or hot water pipes, and heating ducts.

Before working with existing inside wiring, check all electrical outlets for a square telephone dial light transformer and unplug it from the electrical outlet. Failure to unplug all telephone transformers can cause electrical shock.

Do not place a jack where it would allow a person to use the telephone while in a bathtub, shower, swimming pool, or similar hazardous location.

Protectors and grounding wire placed by the service provider must not be connected to, removed, or modified by the customer.



Do not touch uninsulated telephone wiring if lightning is likely!



#### External Wiring

Any *external* communications wiring you may install needs to be constructed to all relevant electrical codes. In the United States this is the National Electrical Code Article 800. Contact a licensed electrician for details.

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Connectware™

## Introduction

The XC-35 is a full functioning remote access server and router that offers one EIA-232 and one EIA-422A/485A serial port. Key features include support for the following:

- RealPort, a COM redirector that emulates the network ports as local system's ports
- Dial-in and dial-out PPP connections with internal modem
- SNMP manager
- Static and RIP-based routing
- RADIUS authentication

## Overview of the Installation Procedure

- Set up the hardware as outlined on this installation card.
- Install the Administrator software package and assign an IP address with Xcell Administrator (necessary for static IP address only).
- Assign a dynamic IP address with DHCP.
- Configure the device as needed.

**Note:** The Quick Install feature always saves configuration changes to flash memory when choosing OK. Other menu features, such as Advanced Configuration, require the user to choose OK > Save to save the configuration to flash memory.

## Set up the Hardware

1. Plug the serial devices into the XC-35 device serial ports.
2. Connect the Digi device to the network using an Ethernet cable.
3. Connect the power supply to an outlet and then to the Digi device.

## Digi XC-35 Setup Card

### Install the Administrator Software

1. Start the Xcell CD.
2. Choose English > Xcell Administrator > Executable Xcell Administrator Installer. The installation program begins installing files.
3. From the Xcell Administrator screen choose OK and follow the prompts.

**Note:** Sun Java VM (virtual machine) is needed by the Xcell software driver. If you do not have Sun Java VM, you will be prompted to install it.

4. Choose Install.
5. Reboot your system if prompted.

### Assign an IP Address with Xcell Administrator

**Note:** The XC-35 is shipped with DHCP enabled. If DHCP server does not exist, then the XC-35 defaults to the static IP address 192.168.1.251.

1. Start the Xcell Administrator software program
2. Choose Explore > Open. The Xcell devices are displayed.
3. Locate the MAC (Media Access Control) address for your Xcell device on the underside of the unit.
4. Locate the MAC address in the Explorer Xcell list and double-click the IP address cell for the device.
5. Enter the IP address in the cell and press the Enter key on the keyboard twice.
6. Ping the device's new IP address to confirm the device is connected to the network.

Additional configuration information is available in the User Manual and Command Reference on the enclosed CD and from sample configuration files found online at <http://support.digi.com>. Use `root` for the login username and `root` for the password when accessing the web interface.

Go to Configure Users from the Web Interface

## Assign a Dynamic IP Address with DHCP

1. Record the XC-35's MAC address located on the bottom of the unit.
2. Update the DHCP table on the server. Reserve a permanent address if you intend to use RealPort.
3. Enter the command below to turn on the DHCP client implementation, however, if you have not changed the default DHCP client setting, go to step 4.  
`dhcp client mode dhcp`
4. Direct DHCP requests to a particular DHCP server with the following command:  
`dhcp client server ip-address`  
(where *ip-address* is the IP address of the DHCP server as in the example below)  
`dhcp client server 192.168.1.250`
5. Save the configuration by issuing the following command:  
`save`
6. Reboot the XC-35 by issuing the following command:  
`system reboot`  
The XC-35 reboots and is automatically configured with the new IP address and netmask.
7. Issue the following commands to turn off DHCP:  
`dhcp client mode none`  
`save`

## Configure Users from the Web Interface

1. Enter the XC-35's IP address in a browser's address bar.
2. Login as `root` with the password `root`.
3. Choose Security > User.
4. Choose Add > then enter a name for the user.
5. Fill in the user form as required. Here are a few tips:
  - In the IP Address section, the IP address and Netmask

fields are for PPP users only.

- The Automatic Connection is for users who automatically connect by Telnet to a server. The IP address is of the server to which you connect. The Telnet Mode is the TCP port number to which you connect. Normally, the default setting works for the TCP port.

6. Choose OK > Save OK.

## Configure Inbound (Dialin) PPP Connections from the Web Interface

1. Enter the XC-35's IP address in a browser's address bar.
2. Login as `root` with the password `root`.
3. Choose Quick Install > Remote Access.
4. Choose Host > Incoming > Next.
5. Select Port 3 > deselect Port 1 > dialin > Next.
6. Choose Next.  
Choosing Next leaves the timeout value at the default setting of zero minutes.
7. Choose a PPP authentication method from the drop down menu and enter an available IP address in the IP address field.  
The default IP address is the IP address of the XC-35 plus 1.
8. Choose Next.
9. Choose Users > Add > enter a username at the User Prompt screen > OK.
10. Enter a password > fill in other fields as needed > OK.  
To add additional users, choose Add and repeat the last two steps.
11. Choose Next > Next.
12. Choose Terminate.  
The XC-35 saves the new configuration and reboots.

Your XC-35 is configured for the network.

## LED Indicator Lights

The table below lists the Digi device's LED indicator lights and their meanings.

LED	Color	Status	Meaning
Power	Green	On Off	Power detected No power detected
Link	Red	On Off	No physical network detected Physical network detected
Setup	Red	On Blinking Off	Setup mode activated Locate function activated Normal mode
TX	Green		Data transmission from the network
RxD	Green		Data reception from the network

## DB9 Pin Settings

DB9 Pin	RS232	RS 422 / RS485 full duplex	RS485 half duplex
2	RxD	RxD+	RxD+
3	TxD	TXD+	TxD+
7	RTS	RTS+	Not used
8	CTS	CTS+	Not used
5	GND	GND	GND
6	DSR	RXD-	RxD-
1	DCD	RTS-	Not used
4	DTR	TxD-	TxD-
9	Not used	CTS-	Not used

## Regulatory Notices

This product complies with the following standards:

### Electromagnetic Emissions

- FCC Part 15 Subpart B Class A
- EN55022 Class A

### Electromagnetic Immunity

- EN55024: 1998

### Power Supply

External 110 - 240 VAC  
47 - 63 Hz @ 15 W