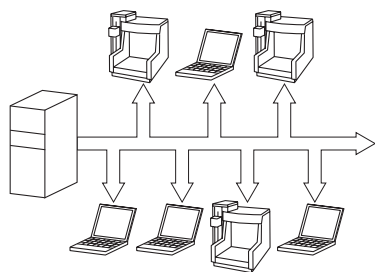


# Connecting with your Companion

## Network Communication Issues

### Introduction

This application note describes how to resolve communication problems that may occur when making a network connection from a Windows computer to the CombiFlash® Companion™ (Figure 1).



**Figure 1: Network Connections**

These instructions assume that the Companion is using the latest software release. Software updates are available from <http://www.isco.com/companion/>. These instructions also assume that the computer from which you intend to control the Companion has been successfully added to the network.

Also, note that the Companion will not communicate with other devices until after the system successfully completes its start-up diagnostic routine. Both green LEDs will illuminate when the Companion is ready to communicate with a controlling device.

Refer to Technical Note 3 if you are experiencing direct connection problems, or Technical Note 5 for difficulties controlling the Companion from an iPAQ running PocketPC 2003.

### System Requirements

Some problems arise because system components do not meet the minimum or recommended system requirements. Network connections require:

- CombiFlash Companion
- Ethernet cable (beige) for network connection (Isco P/N 480-6545-01)
- PC meeting minimum requirements:
  - Pentium class, 266 MHz or faster processor
  - SVGA display, 800 × 600 pixels, minimum
  - Microsoft Windows Operating System (Windows 98, Second Edition; Windows NT4; Windows 2000 with Service Pack 3; Windows XP Professional; or newer)
  - Ethernet port
  - TCP/IP services installed
  - Microsoft Internet Explorer 5.5 or later, with support for ActiveX controls and plug-ins

- The computer must have the minimum recommended RAM for the operating system.

### Troubleshooting

Symptom: Login screen does not appear

**Companion Cable Problems** — Ensure the cable connecting the Companion's Ethernet port is attached correctly to an active RJ-45 socket. The cable should show no signs of damage, especially at the connectors.

**Companion TCP/IP Configuration Problems** — The Companion ships with a default address of 192.168.1.51. This address may conflict with the local network, or not work with the established domain. Consequently, an address must be assigned. Consult your IT department and refer to the CombiFlash Companion Installation Guide to configure the Companion's network address. See also *Companion DHCP Configuration Problems* below.

**Companion DHCP Configuration Problems** — Instead of assigning a static IP address, the Companion may use Dynamic Host Configuration Protocol (DHCP). If DHCP is selected but not working, have your Network Administrator ensure the following:

- The DHCP lease is active (an infinite lease is preferred).
- The correct MAC address is associated with the DHCP name. (A label on the back of the Companion lists the MAC address.)

**Network PC Internet Explorer Configuration Problems** — Refer to the CombiFlash Companion Installation Guide to properly configure the Internet Browser settings according to the PCs operating system.

**Address Problems** — Make sure the address in the browser address bar is the correct one supplied by your Network Administrator. If this address is suspect, verify it by "pinging." Pinging is a procedure that sends a packet burst from your system to test if a device exists at a specified location. To ping the Companion:

1. From the Windows Start button, select Run. In the Run dialog box, type "cmd" and click the OK button. A Command window opens.
2. At the C:\> prompt (or displayed prompt), type: "ping <address>" (where the <address> is replaced by the assigned Companion address, either a "dotted quad" or DHCP name).
3. If you can successfully ping the Companion, the window will display information about the replies from that address. If the ping is unsuccessful, the usual message is that the "Request Timed Out," meaning there is not a live connection.

Note that pinging a Companion that uses DHCP will return a dotted quad address. This address may be used to test the connection, but should not be bookmarked or used to create a shortcut for future connections. Because this address is assigned dynamically, it may change the next time the Companion is powered up.

If an iPAQ is available and communicating with the Companion, start PeakTrak and select the Help>About menu command. The display will reveal the address.

Symptom: After logging in, PeakTrak's Main Window displays, then immediately closes

**Administrator Privileges** — Communication with the Companion requires access to specific files and directories on the Windows computer. On Windows NT, 2000, and XP, logging in with a different user account may restrict access to these files and directories. When this occurs, PeakTrak shuts down because it cannot load all of the components.

To prevent this from occurring, the first time a connection is made with the Companion on these operating systems use an account that has administrator privileges. This may require you to contact your IT department before establishing the connection. Under an account with administrator privileges, PeakTrak is able to install all of the components in locations that are accessible to any user who may log onto the Windows computer.

**Outdated or Corrupted Files** — When first connecting to the Companion, it automatically installs PeakTrak program files. These files at times may become outdated or damaged. Removing the files will force the Companion to re-install the PeakTrak files which may correct the problem.

To remove the files:

1. Open Internet Explorer. From the menu, select "Tools>Internet Options..."
2. In the Internet Options Window, locate the section labeled "Temporary Internet files" and click the "Settings..." button.
3. In the Settings window, click the "View Objects..." button.
4. A window opens, displaying all downloaded program files. Delete all files named "PeakTrak.UserDoc" and "PeakTrak.udcPeakTrak". If you are unable to delete some of the files, restart the computer, then repeat this procedure.
5. After deleting the installed PeakTrak files, Open the Companion's login screen and connect. The Companion restores the files deleted in step 4. If successful, the PeakTrak main window appears.

Symptom: Internet Explorer Window is Blank (white)

This is the result of a conflict with a "proxy" server. This PC has been set up to accept information only from specified addresses. The IT department should either deselect the proxy server or add the Companion's network address to the proxy list.

Internet Explorer Security settings may also cause a blank screen to appear. Refer to the CombiFlash Companion Installation Guide to properly configure the security settings.

Symptom: First Connection Successful, Later Connections Fail

If a previous connection was successful but now every attempt results in a blank screen or the computer stops responding, Internet Explorer may need to use "automatic configuration." To set this:

1. From Internet Explorer's menu, select Tools>Options.
2. Select the Connections tab and click the "LAN Settings..." button.
3. Check the "Automatically detect settings" box and click OK.
4. Click OK to close the Options window. Close Internet Explorer.
5. Restart Internet Explorer and attempt to connect to the Companion.

Symptom: Abnormal Display and Runtime Error Messages

This can occur when the computer's PeakTrak software components are incompatible with the Companion's version of software. Ensure that the Companion is using current software which is available from Isco's web site.

Another cause of this error message may be a missing "temp" folder. Have your IT department create a valid temp environment variable, preferably in folder "C:\Temp."

Symptom: Low Registry Quota Error Message

Windows NT users may experience a "Low Registry Quota" error message when the registry size limit is set too low. Refer to [Microsoft's Knowledge Base Article 176083](#) for corrective measures.

## Assistance Available

If, after going through this troubleshooting list a connection is still not made please contact Isco Technical Service. ☎

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