APPLICATION NOTES

**CLEARONE DOCUMENT 801-000-002
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## TROUBLESHOOTING USB CONNECTIONS WITH CONVERGE PRO UNITS

Description

This document explains how to connect the Converge Console software with a Converge Pro or SR unit using USB. It also describes some basic troubleshooting procedures that can be used when there is a USB connection problem.

Connecting with Converge Console

Use these steps to connect your Converge Pro or SR unit with the Converge Console software:

1. You should have the Converge Console software and USB driver software installed.

2. Connect your USB cable from you computer to your Converge Pro or SR unit

3. Run the Converge Console software

4. Choose the "Connect" drop-down menu and choose **Connect**.
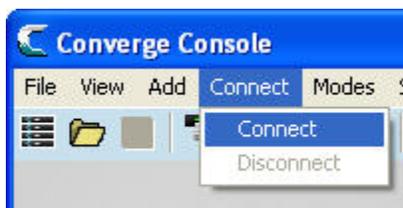
5. This will bring up a connection window.

   A. Select **Create new document and connect to site**. Select **USB Connection**.

B. Click the **Connect** button at the bottom of this window.

3. You will then be prompted to input a user name and password. The default user name is "clearone" and the default password is "converge". (User name and password are not case sensitive.) Click **OK** to continue.

4. Once you click **OK** you will see the message "Connection to Site Successful."

The lights at the bottom of the Console screen (labeled "site data" and "unit data") will switch from yellow to green. Once you have two green lights you are fully connected to the unit. From here, you can examine the current configuration of this and any other connected units and make changes as needed.

Troubleshooting Converge Pro and SR USB Connections

Consult the following if you are having connection issues with your Converge Pro or SR unit using a USB connection.

If you try to connect to your unit and the option "USB Connection" is not available, you will see a window similar to the example below.
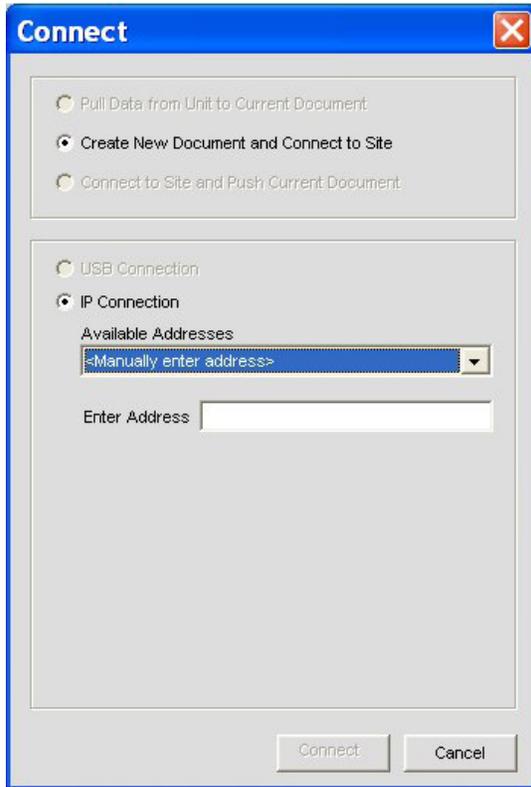

In this example, the **USB Connection** option is grayed out and it is not possible to make a USB connection. Most often, this happens when the USB drivers for this type of Converge Pro or SR unit are not installed. The following steps shows you how to verify the presence of the required drivers.

Verifying the Presence of USB Drivers

1. Make sure there is a USB cable connecting your Converge Pro or SR unit to your computer.

2. Launch the Windows Control Panel. (**Start Menu** / **Control Panel** or **Start Menu** / **Settings** / **Control Panel**.)

3. Click the **System** icon to launch the System Properties window.
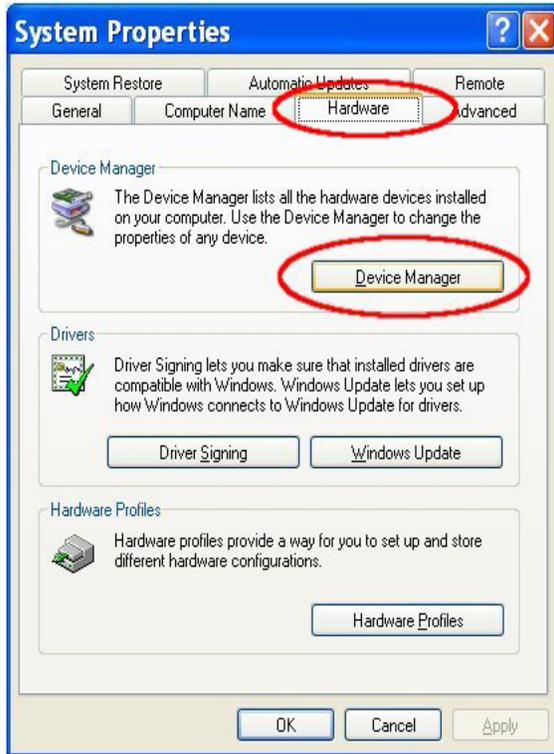
4. In the System Properties window select the **Hardware tab**. On the Hardware tab select **Device Manager**.

5. In Device Manager click **+** to expand the **Network Adapters** view.
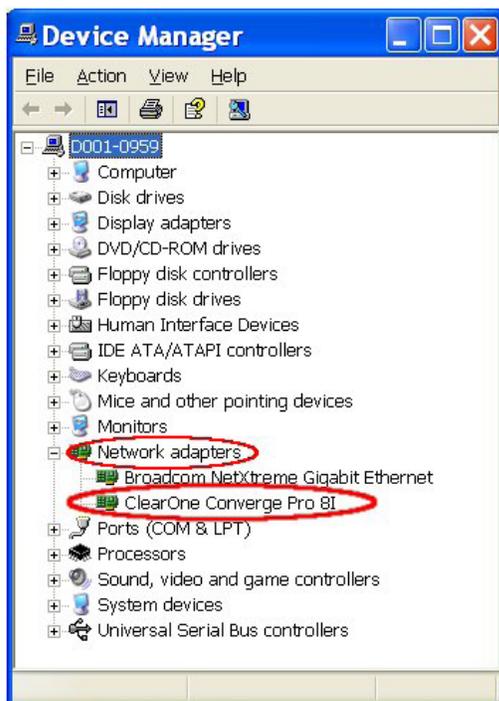
6. Your Converge Pro or SR unit should be listed.

   - If your Converge Pro or SR unit does not appear on this list, then the USB drivers for that unit have not been installed. Refer to the next section, "Installing the USB Drivers", for further instructions.

7. If your unit does appear on this list with an exclamation point (!) beside it, this indicates there is a problem with the USB driver. Right click on the entry and choose **update driver** or **repair driver**.

   - If this brings up the window titled "Welcome to the Hardware Update Wizard" proceed to the next section, entitled: "Installing the USB Drivers".

8. If you cannot install the USB driver for your unit, you need to uninstall and reinstall Converge Console. Please see the Converge Pro Installation and Operation Manual for instructions on installing Converge Console.

9. If your unit appears on this list and no errors are indicated, try rebooting your computer and turning your Converge Pro or SR unit off and back on, then try connecting your unit with Console as describe under .

If, after these steps, you are still not able to connect to your unit with Console using USB, please call ClearOne Technical Support for further assistance.

Installing the USB Drivers

If the USB cable is connected between the unit and PC, and your Converge Pro or SR unit was not listed under "Network Adapters" in the Device Manager, you should install the USB drivers using the following procedure.

1. It is important to allow the Converge Console installer to finish completely. A warning screen will appear during this installation. You must choose **Continue Anyway** for the required installations to complete. If you chose **STOP Installation** at any time during the process then all or part of the software will fail to install. In such a case it is recommended that you uninstall Converge Console (**Control Panel** / **Add/Remove Programs**) and reinstall.
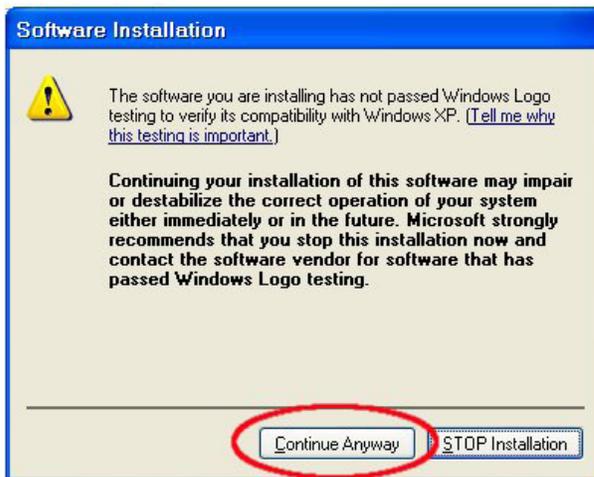
2. The first time you connect your Converge Pro or SR unit (such as an 880) via USB Windows will launch the **Found New Hardware Wizard**.

When Windows asks "**Can Windows connect to Windows Update to search for software?**" answer "**No, not at this time.**"

3. When Windows asks, "**What do you want the wizard to do?**" you should choose "**Install the software automatically (Recommended).**"

4. Windows will display the following warning.

    Click **Continue Anyway**.

5. The Hardware Wizard will now install the driver.

6. Click **Finish** to close the Hardware Installation Wizard.

Installing drivers for other unit types

Once you have installed the USB drivers for one type of unit, such as an 880, that 880 and all other 880's will connect with Console without the need to re-install. However, if you plug in a different type of unit, such as a TH20, then the installation wizard for the TH20 will automatically start. You will then need to complete steps 1 – 5 as described above. Once the drivers for the TH20 are installed, any TH20 can be connected to that computer.

If, after making sure the USB drivers for your Converge Pro or SR unit are installed, you still find that you are unable to make a successful USB connection, the following section provides troubleshooting tips to help you isolate the source of the problem.

Further Troubleshooting of Converge Pro and SR USB Connections

A network firewall can sometimes prevent Converge Console from making a USB connection. This is because the Converge Pro and SR USB connection works like a Local Area Network with IP addressing. A network firewall can block communication across some IP addresses and network ports. This can prevent Converge Console from finding the IP address of a Converge Pro or SR unit.

Here is one way to check your Windows XP system to determine if a firewall is running:

1. Go to **Windows Control Panel**:

2. In Control Panel select **Network Connections**.

The window shows all of the network connections seen by your computer. If you roll over a connection icon Windows will display a note describing that connection. In this example the mouse pointer is on "Local Area Connection 3" and the note says "ClearOne Converge Pro 840T." Although Windows sees this as a network connection it is actually the USB connection between the computer and the 840T.
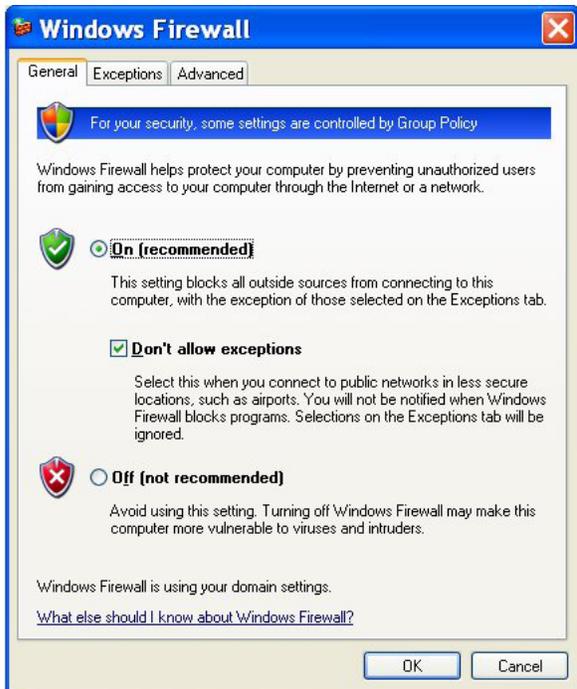
3. Right click on this connection and from the pop up window choose **Properties**.
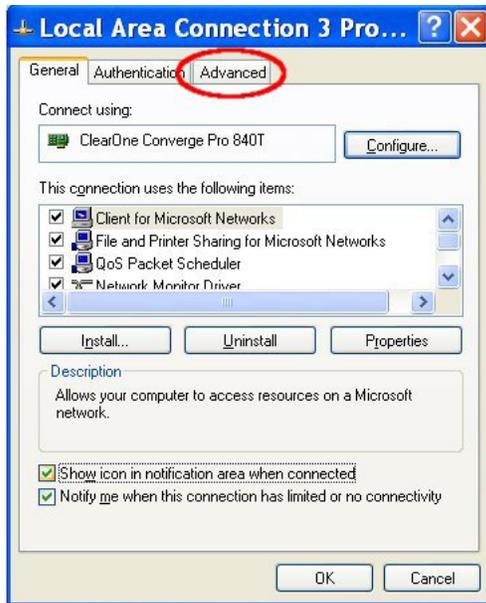
4. In **Local Area Connection Properties** select the **Advanced** tab.

5. In **Windows Firewal**l select **Settings**.

6. If the firewall is "ON", it could prevent the ClearOne USB connection from operating. **ClearOne does NOT recommend deactivating the firewall since this could compromise your network and internet security.** You can try TEMPORARILY turning off the firewall and testing the ClearOne USB connection. If you find the USB connection does work in this situation, we recommend that you turn the firewall back on and consult with your IT department about reconfiguring your firewall to allow this type of USB connection.

   Also bear in mind that, even if the Windows firewall is "OFF", there may be other firewall software installed on your system. You may need to check with your IT department or with the person or company that originally set up your computer.

If you are still unable to make a ClearOne USB connection please call ClearOne Technical support for further assistance.