

# Cyberlogic Knowledge Base

## KB2013-02: USING THE 1784-U2DHP ADAPTER

The 1784-U2DHP adapter connects a computer to a Data Highway Plus network through a USB port. Since Windows assigns a COM port to the adapter, making it look like a serial port to the system, the Cyberlogic Serial DHX Driver can use that adapter to communicate to nodes on a Data Highway Plus network.

### **Applies To:**

Any Windows system with a 1784-U2DHP adapter and running a DHX Suite of version 7.0 or later.

# Installing 1784-U2DHP Adapter Support

### DHX Suites newer than version 8.0 + Update 201303

All DHX Suites newer than version 8.0 + Update 201303 already have built-in support for the 1784-U2DHP adapter.

### DHX Suites 7.0 – DHX Suites 8.0 + Update 201303

Support for the 1784-U2DHP adapter can be installed for these versions of the DHX Suites. Download then run the SerialU2DHPPatch.exe from the Cyberlogic Download page (<u>http://www.cyberlogic.com/download.html</u>).

### DHX Suites older than version 7.0

There is no support for 1784-U2DHP adapters available in DHX Suites earlier than 7.0. Upgrade to the latest version of the appropriate DHX Suite to add support for the 1784-U2DHP adapter.

# **COM Port Assignment**

The first time the 1784-U2DHP is plugged into the system, Windows will install the appropriate low-level driver and then assign a COM port to the device.

To see the COM port Windows assigned to the 1784-U2DHP, right click on My Computer, select Manage, and then choose Device Manager. In the Device Manager, expand the entry named Ports. The COM port for the 1784-U2DHP should now be displayed.

This COM port is required for <u>Configuring the Serial DHX Device</u>.

# **Removing and Reinserting the Adapter**

#### <u>Removing the Adapter</u>

Before the 1784-U2DHP is removed from the system, the Serial DHX Driver must be stopped. If the adapter is unplugged without stopping the Serial DHX Driver, the adapter will not be recognized the next time it is reinserted in the system, and a reboot of the system will be necessary to get things working again.

See Driver Control Tab for information on starting and stopping the Serial DHX Driver.

Removing the adapter from the system also clears the Data Highway Plus station address from the adapter.

#### <u>Reinserting the Adapter</u>

When the 1784-U2DHP adapter is initially inserted into the system, it will have no Data Highway Plus station address, and the DH+ light will be off. Once the first message is sent through the adapter, the station address will be set, and the DH+ light will be solid green.

# **Configuring the Serial DHX Device**

A Serial DHX Device needs to be created and configured to use the 1784-U2DHP. For more information on creating the device, see the <u>Serial DHX Driver Help</u>.

This section describes the configuration required on the Serial DHX Device to make the adapter work properly.

### **Settings Tab**

Serial DHX Configuration	
Settings Driver Control	
Interface Module	
Network Type Station A	ddress
Data Highway Plus (DH+) 🗸 0	~
1784-U2DHP, 1770-KF2, 1785-KE, etc.	
COM Port	ced
Port Settings	
Bits Per Second Parity Error Det	ection
9600 💌 Even 🔽 CRC-16	~
Hardware Flow Control	ect
OK Cancel Apply	Help

#### Network Type

Chooses the type of network to which this device will be connected. Set this to Data Highway Plus (DH+) for the 1784-U2DHP adapter.

#### Station Address

When the 1784-U2DHP adapter is inserted into the system, it has no Data Highway Plus station address (as indicated by the DH+ light on the adapter which will be turned off).

The station address will be set the first time a message is sent through the adapter. A solid green DH+ light indicates the station address is set. The station address is then fixed until the adapter is powered down.

This is the DH+ network node address for the 1784-U2DHP adapter. This station address must be unique on the network.

**Note** Once the DH+ light on the 1784-U2DHP adapter is solid green, its station address is fixed. Changes to the station address will not take effect until the adapter is removed and reinserted into the system. See <u>Removing and Reinserting the Adapter</u> for more information.

#### <u>COM Port</u>

The COM Port setting must match the COM port that Windows assigned to the 1784-U2DHP.

#### Error Detection

The 1784-U2DHP adapter requires this value to be set to CRC-16.

**Note** All other configuration fields, such as bits per second and parity, are not used by the 1784-U2DHP adapter and can be left at their default values.

### **Driver Control Tab**

Startup Type Automatic Manual Disabled Start Stop Driver Status: The Cyberlogic Serial DHX Driver is not running.	ettings Driver Con	ntrol
Start Stop Driver Status: The Cyberlogic Serial DHX Driver is not running.	Startup Type — Automatic Manual Disabled	
Driver Status: The Cyberlogic Serial DHX Driver is not running.	Start Stop	]
	Driver Status: The Cyberlogic Se	erial DHX Driver is not running.

### <u>Start</u>

Starts the Serial DHX Driver if it is not already running.

### <u>Stop</u>

Stops the running Serial DHX Driver.

# **Technical Support**

You can get detailed information on how to install, configure and use the Serial DHX Driver by referring to <u>Serial DHX Driver Help</u>.

Cyberlogic's website, <u>www.cyberlogic.com</u>, has information on related products, news, software downloads and contact information.

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