NetDecoder™ for Data Highway Plus (DH+)
DL3500-DHM Hardware Setup Guide

The enclosed DL3500-DHM (Data Highway Monitor) adapter for use with NetDecoder is a special version of the product that was developed for Frontline Test Equipment, Inc.. It includes firmware that will allow the unit to promiscuously capture the data passing on a Data Highway Plus (DH+) network. The unit supports capturing data at 57.6K, 115.2K or 230.4K bps. The current release captures all the Network Activity including Messages and outputs at 115.2K serially to the NetDecoder.

The DL3500-DHM requires no configuration, the DH+ speed is auto-detected at startup.

There are two basic steps to beginning data capture: 1) connecting the DL3500-DHM hardware to the DH+ circuit and the PC running NetDecoder and 2) configuring the Set I/O Parameters in NetDecoder.

The following items are included with the DL3500-DHM:

* DL3500-DHM hardware
* Power supply
* 9-pin cable
* USB Cable for Power only
* This Hardware Setup Guide

You will need to acquire a Blue Hose 3-wire cable.

CONNECTING THE DL3500-DHM

1. If you have not already done so, install the NetDecoder software and decoder(s) on the PC you will be using to monitor the DH+ network.
2. Obtain a Blue Hose 3-wire cable. Attach one end of the Blue Hose to the DL3500-DHM's CHA Network interface and then attach the other end to the DH+ Port on one of the PLCs located on the DH+ network you wish to monitor.
3. Attach one end of the 9 pin cable supplied with the DL3500-DHM to the CHB/RS-232C interface on the DL3500-DHM and then attach the other end to a serial port on the PC you will be running the NetDecoder software on.
4. Wire-up the power supply to the DL3500-DHM and plug it into a wall outlet or Connect the USB connector to supply power from your PC's USB port. Make sure the Power switch is in the right location.

DL3500-DHM Configuration

Unlike the DL3000-DHM no configuration software is required. On power cycle or RESET the DL3500-DHM auto detects the baud rate of the DH+. This version always captures all DH+ traffic and output the captured data at 115.2K serially. Please check with Frontline Test Equipment for Firmware updates that will incorporate different functionality.

Configuring NetDecoder

1. If you have not already done so, connect the DL3500-DHM hardware.
2. Start NetDecoder. Choose NetDecoder from Start | Programs | NetDecoder.
3. Choose *Set I/O Parameters* from the *Window* menu on the Control window, or click the Set I/O Configuration icon to open the Set I/O Configuration window.
4. In the Baud box, set the rate to match the rate set in the DF1 Serial Parameters in the DHM software. This is the rate at which data will be received from the DL3500-DHM. The default value is 115.2K.
5. In the DH+ Network box, set the rate to match the rate set in the Network Speed item in the DHM software. This is the rate of the DH+ network and is used for calculation of some statistics in NetDecoder. The default value is 57.6K.
6. See the online Help for information on the other settings in the Set I/O Parameters window and how to save the configuration.
7. To successfully capture data, the DL3500-DHM hardware must be connected to the DH+ network before NetDecoder is started.

Now you are ready to capture data with NetDecoder! See the accompanying Quick Start Guide or the online Help to learn how to capture and review data using the NetDecoder software.