



# OPERATING INSTRUCTIONS

## DIGALINK™ 3.0 SOFTWARE



**ATTENTION:** Flow Line Option Corporation is in no way responsible for configuring the end users network. FLO-Corp cannot anticipate Network Security, Firewalls, Anti-Virus Software, or any other network configurations that may not allow DigaTouch and DigaLink products to communicate properly. Please consult with your IT department if you are experiencing problems.

## Introduction

DigaLink™ 3.0 Interactive Software enables users to remotely configure DigaCom™ and/or DigaTouch™ Universal Process Displays through RS485 or Ethernet TCP/IP connections. DigaLink also allows users to remotely monitor numerical data from a PC. The software locates, connects, monitors, and allows configuration of all DigaCom and DigaTouch devices found on the local Ethernet and RS485 network providing a current meter reading for each device. Both DigaCom and DigaTouch devices can be configured to continually store numerical data at varying date and time intervals.

## Installation & Setup

### Software Installation

1. In your internet browser go to <http://flowlineoptions.com/digacorp/dldownload.php> and follow the onscreen installation instructions

### Setting up your Universal Process Display for remote monitoring

1. To open the software program go to the Start Menu > All Programs > Flow Line Options > DigaLink
2. The DigaLink screen appears and automatically begins searching for DigaCom and DigaTouch devices
3. When a DigaCom or DigaTouch device is located, an image of the device with its current meter reading is displayed in the top portion of the screen under the Devices tab and the device information (status, name, IP address, value) is listed and highlighted in the bottom portion of the screen with the selected device highlighted and its image and current meter reading displayed in the top portion of the screen
4. Select the "Discover Devices" button to search for devices

### Status Indicators

Status indicators provide the current status of each device by displaying either a green, red, orange or gray circle in the status column. The status indicators are as follows:

**Green** - Indicates the device is available and meter readings are current

**Orange** - Indicates that the device is in the process of acquiring network connectivity

**Red** - Indicates the device is unavailable and meter readings are not current. This occurs when network connectivity is lost or the device is turned off.

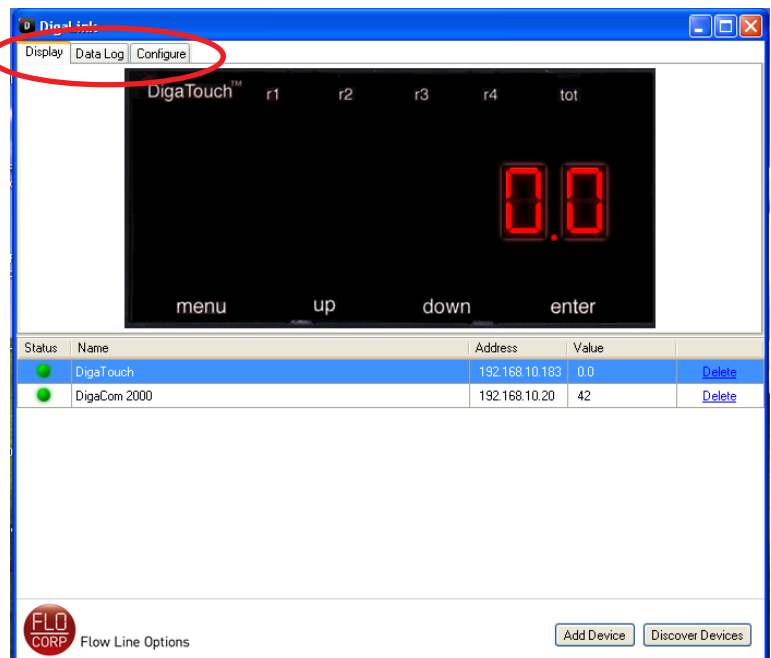
**Grey** - Indicates the device is unavailable and meter readings are not current. This occurs when the device is unavailable at the time the software is opened.

### Display, Datalog & Configure

DigaLink has three primary functions:

1. Display: Display: Used to remotely monitor your application
2. Data Log: Used to record application data
3. Configure: Used to remotely interface and configure directly with the device

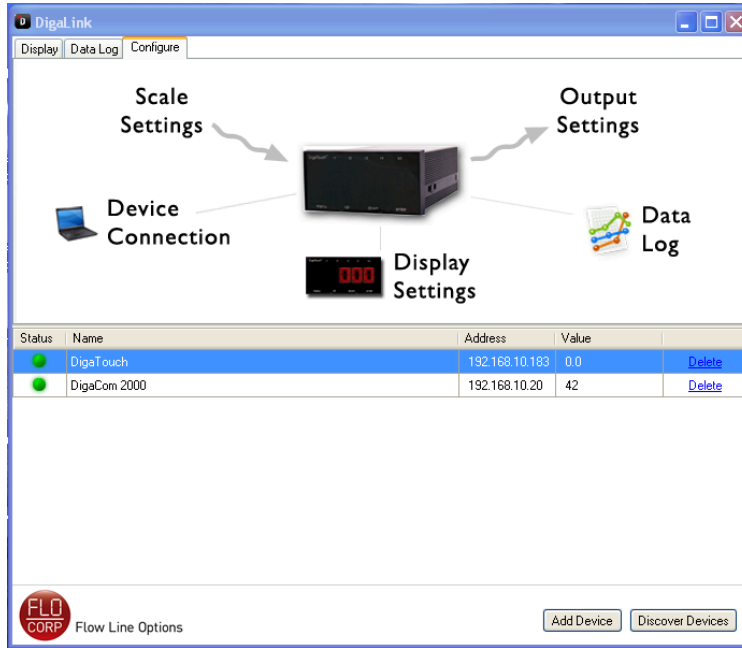
*These three tabs (Display, DataLog and Configure) are located in the top left corner of the DigaLink screen*



## Remote Configuration of Devices

Select the “Configure” tab located at the top left portion of the DigaLink screen (The Configure DevicevSettings will appear)

**Note:** The device must be highlighted in the device screen to allow configuration

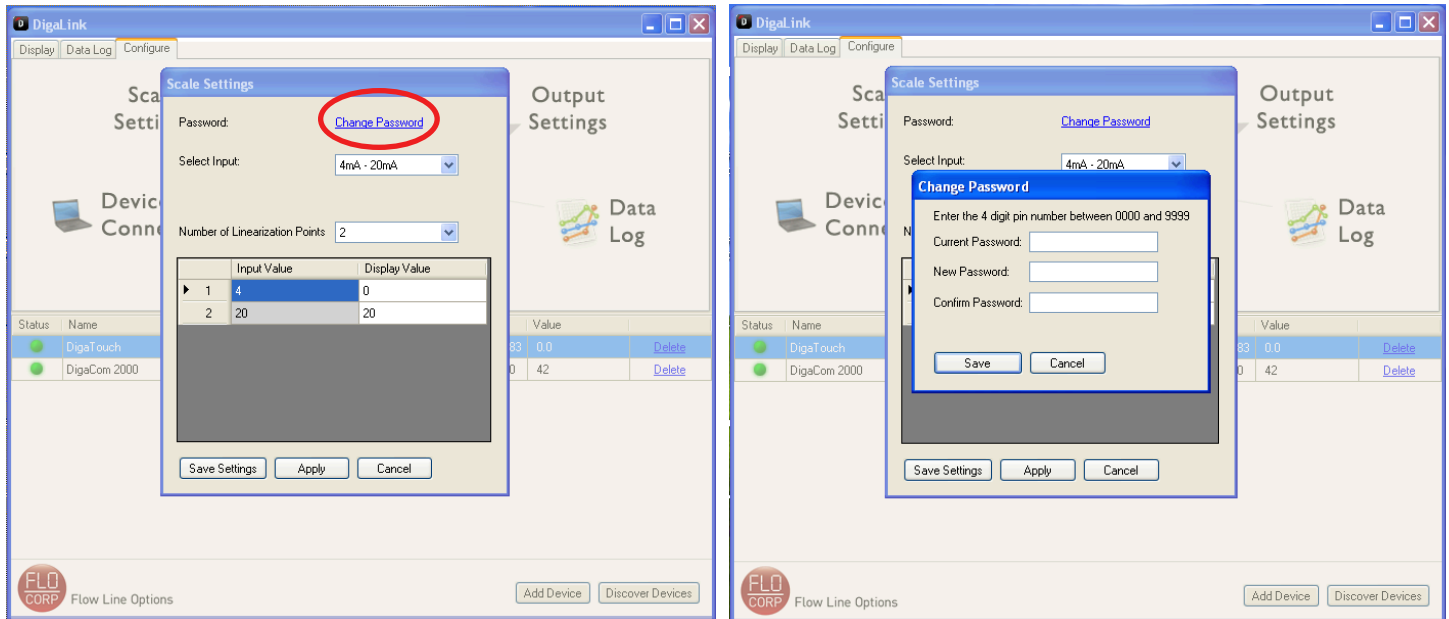


## Configuration of Password, Input, Scale & Linearization Points

DigaLink will allow users to configure the password, input, scale and linearization points. To configure these settings, click on “Scale Settings” located under the configure tab

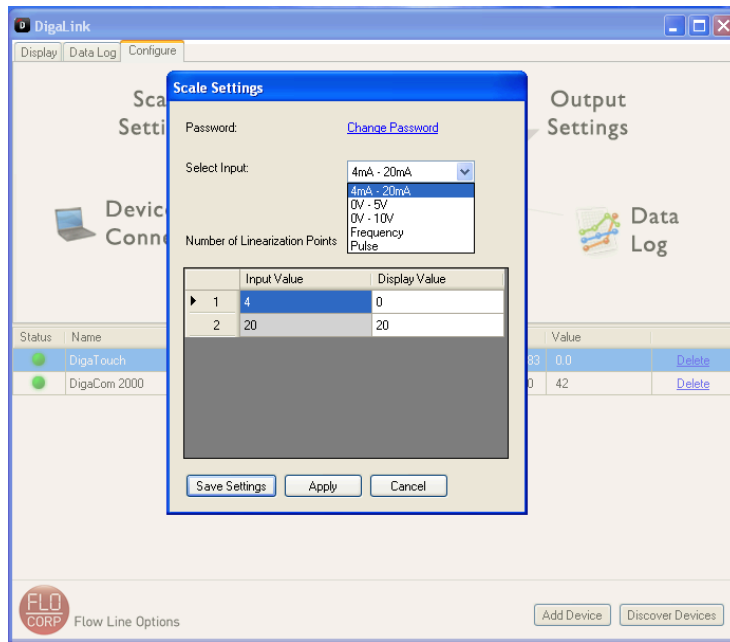
### Password

To configure a DigaCom 2000 or DigaTouch lockout password for both the display and DigaLink Software, select the “Change Password” link



## Select Input (DigaTouch Model Only)

With the DigaTouch Universal Process Display, DigaLink will allow you to configure the appropriate input for your application. This can be done in the Scale Settings Menu under the Select Input drop down menu. Once the menu is exposed, the user can select: 4mA-20mA, 0V-5V, 0V-10V, Frequency or Pulse.



## Linearization Point Configuration

The DigaCom 2000 and DigaTouch can be calibrated to display the process variable in engineering units by applying the maximum signal that equals the maximum process variable.

Example: 4mA = 0 & 20mA = 2890

Example: 20mA = 0 & 4 mA = 2890

Example: 0V = 0 & 5V = 2890

Example: 5V = 0 & 0V = 2890

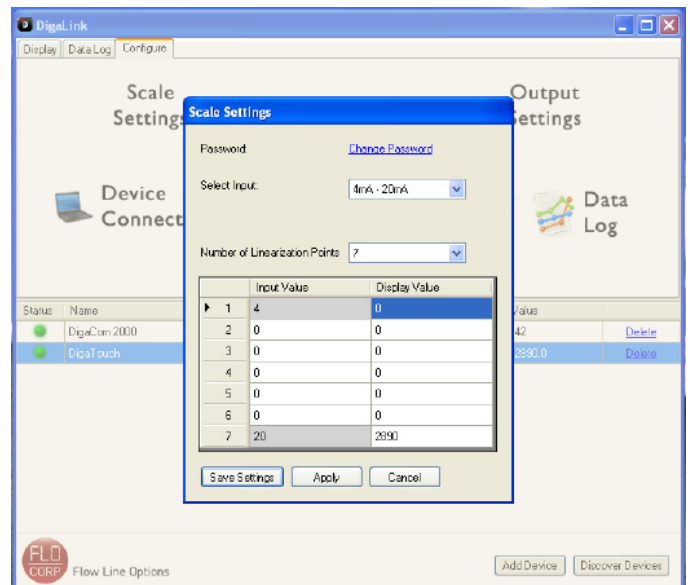
Example: 0V = 0 & 10V = 2890

Example: 10V = 0 & 0V = 2890

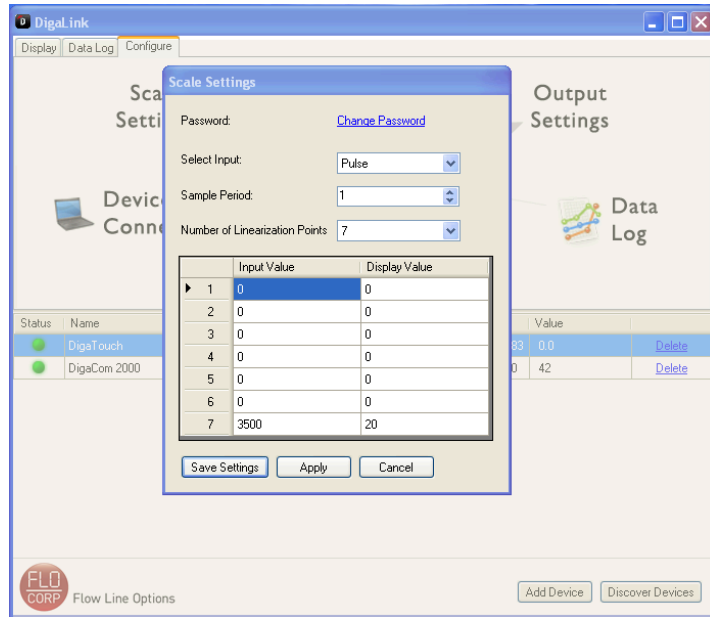
To Configure Linearization Points (16 total possible) select first the Number of Linearization Points through the Drop Down Menu. Once the number of points is selected, the Input Value and Display Value Chart (located below the Number of Linearization Points Drop Down Menu) will expand or contract based on the number of points selected.

Enter the Display Value with the corresponding Input Value.

Once configured, select Apply and then Save Settings. Once saved, DigaLink will return to the Configure screen.



For **Pulse** Input (DigaTouch Only), select the sample period that corresponds with your application (Configurable from 1 to 60 Samples per Second). Once configured, select Apply and then Save Settings. Once saved, DigaLink will return to the Configure Screen. *Note: Input values 4mA, 20mA, 0V, 5V, 10V, 0 and 30000 Frequency Values, 0 and 3500 Pulse Input Values are un-configurable.*



## Device Connection

Select Device Connection to apply unique names, configure the DigaLink refresh interval, configure Device Communication and ModBus address on DigaCom 2000 and DigaTouch Process Displays.

### Assigning a unique name to the devices

Select Device Connection from the Configure Tab. Through the Device Connection Menu, click in the DigaLink Device Name box and enter the desired device name. Select Apply and then select Save Settings. The new name will be applied in the Device List Screen.

### DigaLink Refresh Interval

Refresh Interval – Select a time interval from the drop down list to enable the DigaCom 2000 or DigaTouch to continually update the numerical data displayed on DigaLink at the designated time interval.

## Device Connection

The DigaCom 2000 and DigaTouch can communicate with DigaLink through Ethernet TCP/IP and RS485 ModBus.

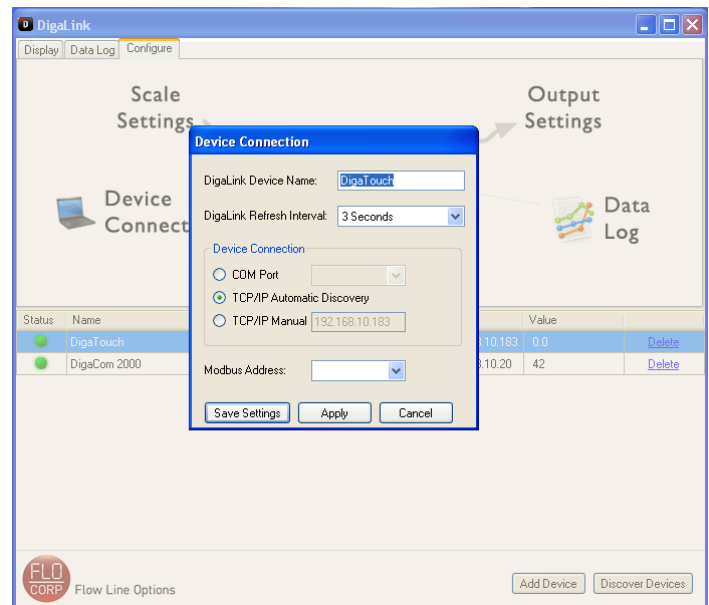
### RS485 Communication

When connecting through the RS485 interface of a DigaCom 2000 or DigaTouch Process Display, select the COM Port Radio Button. The COM Port Drop Down Menu becomes active.

Select the appropriate COM Port the device is connected to from the drop down list and click Apply and then Save Settings

### TCP/IP Automatic Discovery

When connecting through TCP/IP Automatic Discovery (Default), DigaLink will actively go out and search for DigaCom 2000's and DigaTouch Process Displays enabled on your network. Please note that DigaLink will only do this upon opening DigaLink. Once open and the device has not yet been discovered, select the Discover Devices button located in the bottom right corner of DigaLink.



## TCP/IP Manual (Assigning a Static IP)

When connecting to a device through a Static IP to a DigaCom 2000 or DigaTouch Process Display, select the TCP/IP Manual Radio Button. The IP Address text box becomes active. Enter the device IP Address in the text box then click Apply and then Save Settings.

## Modbus Address

The DigaCom 2000 and DigaTouch can communicate to DigaLink through RS485 or Ethernet and simultaneously communicate to other devices via ModBus protocol. To implement this feature, select the ModBus address that you want to assign to the DigaCom 2000 or DigaTouch and click Apply and then Save Settings.

The screenshot shows the 'Device Connection' dialog box. It has a title bar with 'Device Connection'. Inside, there are several fields: 'DigaLink Device Name' with a text box containing 'DigaTouch', 'DigaLink Refresh Interval' with a dropdown menu set to '3 Seconds', a section titled 'Device Connection' containing three radio buttons: 'COM Port' (unselected), 'TCP/IP Automatic Discovery' (selected), and 'TCP/IP Manual' (unselected) with a text box containing '192.168.10.183'. Below this is a 'Modbus Address' dropdown menu. At the bottom are three buttons: 'Save Settings', 'Apply', and 'Cancel'.

## Display Settings

Through the Display Settings Menu, DigaLink users can alter their DigaCom 2000T and DigaTouch display modes between Rate, Total or Both Rate and Total. Users can adjust the Decimal Point Position, Low Flow/Level Cutoff Value, implement a

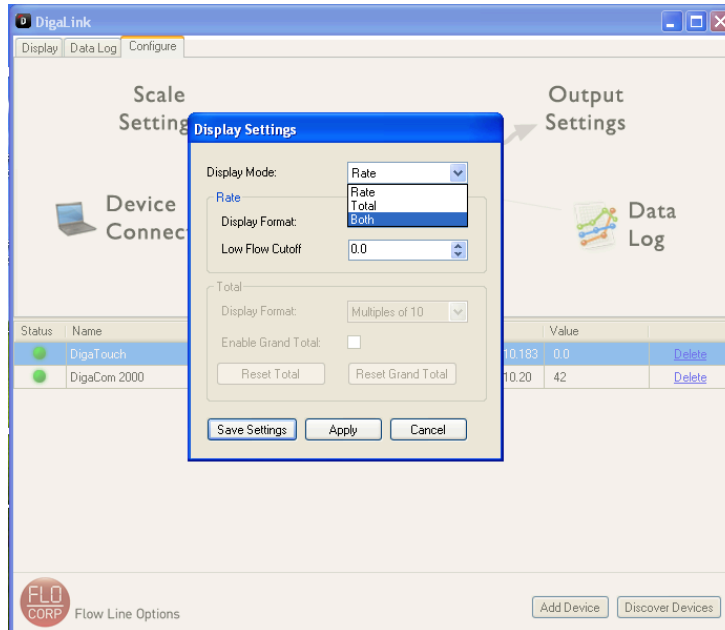
The screenshot shows the main DigaLink software interface with the 'Display Settings' dialog box open. The background interface has tabs for 'Display', 'Data Log', and 'Configure'. It features sections for 'Scale Settings', 'Device Connection', and 'Output Settings'. A 'Data Log' table is visible at the bottom right. The 'Display Settings' dialog box has a title bar and contains the following fields: 'Display Mode' dropdown set to 'Rate', 'Rate' section with 'Display Format' dropdown set to '0.0' and 'Low Flow Cutoff' spinner set to '0.0', 'Total' section with 'Display Format' dropdown set to 'Multiples of 10' and an 'Enable Grand Total' checkbox. There are also 'Reset Total' and 'Reset Grand Total' buttons. At the bottom of the dialog are 'Save Settings', 'Apply', and 'Cancel' buttons. The background interface also has 'Add Device' and 'Discover Devices' buttons at the bottom right.

Status	Name	Value	
●	DigaTouch	10.183	0.0 <a href="#">Delete</a>
●	DigaCom 2000	10.20	42 <a href="#">Delete</a>

Totalizer Exponent Factor, turn ON and OFF the Grand Totalizer and reset both the Totalizer and Grand Totalizer.

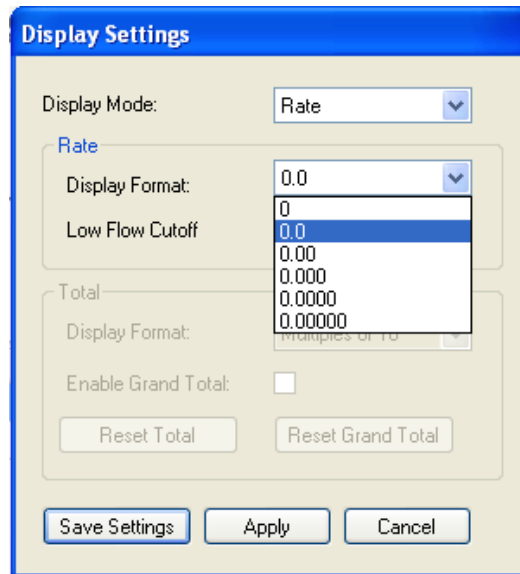
### Display Mode: Adjusting between Rate, Total or Both

To view the Rate, Totalizer or Both Rate and the Total of your process application, Select Display Settings from the Configure Tab. Click the drop down menu for Display Mode. Select the setting you wish to see both on the device and on DigaLink. Click Apply and then Save Settings.



### Decimant Point Position

To adjust the Decimal Point position on the device and on DigaLink select the drop down menu located next to Display Format. Select the Decimal Point Position you wish to use for your process application. Once configured, click Apply and then Save Settings.



### Low Flow/Level Cutoff

DigaCom 2000 & DigaTouch Process Displays can be configured to display a minimum rate. If your process application requires you to read any value over 5; values under 5 are of no importance. The device can be configured to read only values above a preset minimum value. To configure the Low Flow/Level Cutoff select the text box located next to Low Flow Cutoff. Adjust the value either by manually entering a numeric value or by adjusting the up and down arrows. Once

configured, select Apply and then Save Settings.

### Totalizer Exponent Factor

The Totalizer exponent factor can only be adjusted if Totalizer or Both is selected in the Display Mode. To adjust the exponent factor select the drop down menu located next to Display Format in Total Box. Once the desired exponent is selected click Apply and the Save Settings.

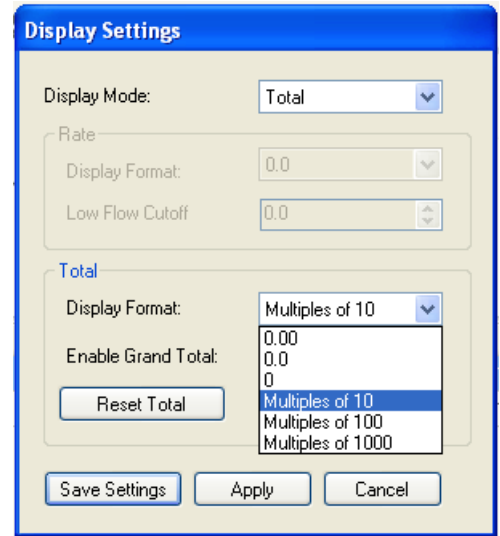
### Grand Totalizer

To activate the Grand Totalizer, select the Enable Grand Total box located next to Enable Grand Total. Click Apply and then Save Settings.

*Note: The Grand Totalizer can only be viewed on the physical DigaCom 2000 or DigaTouch device itself. You will be unable to view this on DigaLink.*

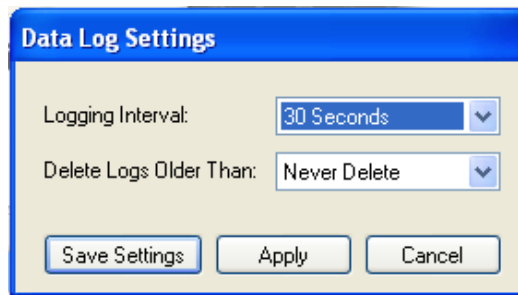
### Reset Total/Grand Total

To reset the Totalizer and/or Grand Totalizer click Reset Total and/or Reset Grand Total located in the Total Box. Once reset, click Apply and then Save Settings.



### Data Log Settings

The DigaLink Data Log Settings allow users to adjust the Logging Interval (how often users choose to record data from their DigaCom 2000 or DigaTouch) and the user can choose when DigaLink should Delete Datalogged events. To configure these settings select Data Log from the Configure Tab.



### Logging Interval

To configure the DigaLink Logging Interval select the drop down menu located next to Logging Interval. Select the desired setting and click Apply and then Save Settings.

### Delete Logs Older Than

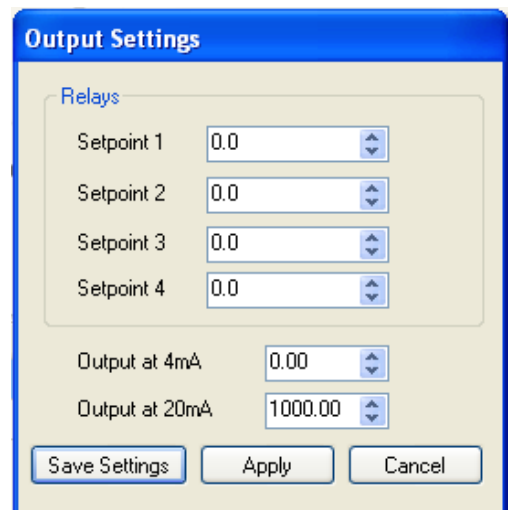
To delete logs after a specific time select the drop down menu located next to Delete Logs Older Than. Select the desired setting and click Apply and then Save Settings.

### Output Settings (Only configurable with the DigaTouch)

DigaLink will allow you to configure both relay settings and output settings for the DigaTouch. To configure these settings select Output from the Configure Tab.

### Relay Setpoint's 1-4

To configure relay setpoint's select one text box located next to Setpoint 1, 2, 3 or 4. Alter the value by manually entering a value or by adjustment of the up and down arrows. Once configured, select Apply and then Save Settings.



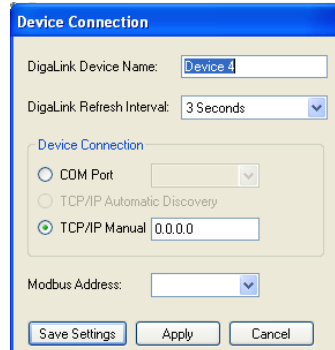


## 4-20mA Output

To adjust the Output at 4mA select the text box located next to Output at 4mA. Either manually enter a numeric value or use the up and down arrows to adjust. Once configured select Apply and repeat steps for Output at 20mA. Click Save Settings to finish.

## Manually Adding Devices

When a device is not found automatically on the local Ethernet network, select the Add Device button (located in the bottom right corner) to manually connect to a device. The Configure Device Settings screen appears with the options to enter a Device Name and select a Refresh Interval and Logging Interval.

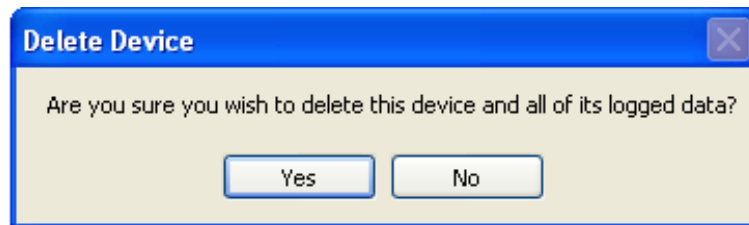


The 'Device Connection' dialog box contains the following fields and controls:

- DigaLink Device Name: Text box containing 'Device 4'
- DigaLink Refresh Interval: Dropdown menu set to '3 Seconds'
- Device Connection section with three radio buttons:
  - COM Port (unselected)
  - TCP/IP Automatic Discovery (unselected)
  - TCP/IP Manual (selected) with a text box containing '0.0.0.0'
- Modbus Address: Dropdown menu
- Buttons: 'Save Settings', 'Apply', and 'Cancel'

## Deleting Devices

To delete a device, click on the device and select the delete button located in the Device List Screen. The following screen will appear:



The 'Delete Device' dialog box contains the following text and controls:

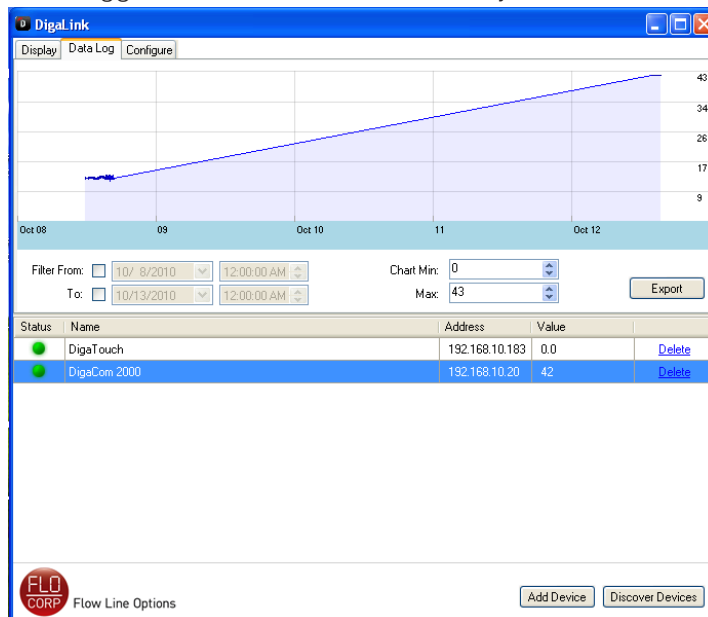
- Title: 'Delete Device' with a close button (X)
- Text: 'Are you sure you wish to delete this device and all of its logged data?'
- Buttons: 'Yes' and 'No'

Select Yes to delete the device or select No to keep the device.

## Data Log Tab

Select the Data Log tab to access the logged numerical data from each device.

**Filter From/To** – Select the Filter From checkbox and To checkbox to change the date and time intervals displayed at the bottom of the history chart. The logged numerical data in the history chart is filtered according to the specified date and time range.

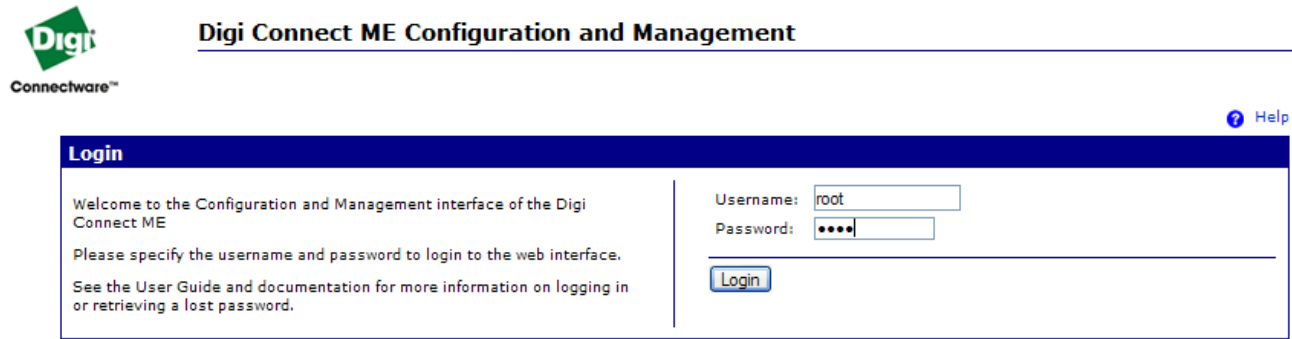


**Chart Min/Max** – Adjust the numbers in the Min and Max boxes to change the minimum and maximum amounts appearing on the right side of the history chart. The minimum and maximum amounts can be set at different intervals for each device and will be saved.

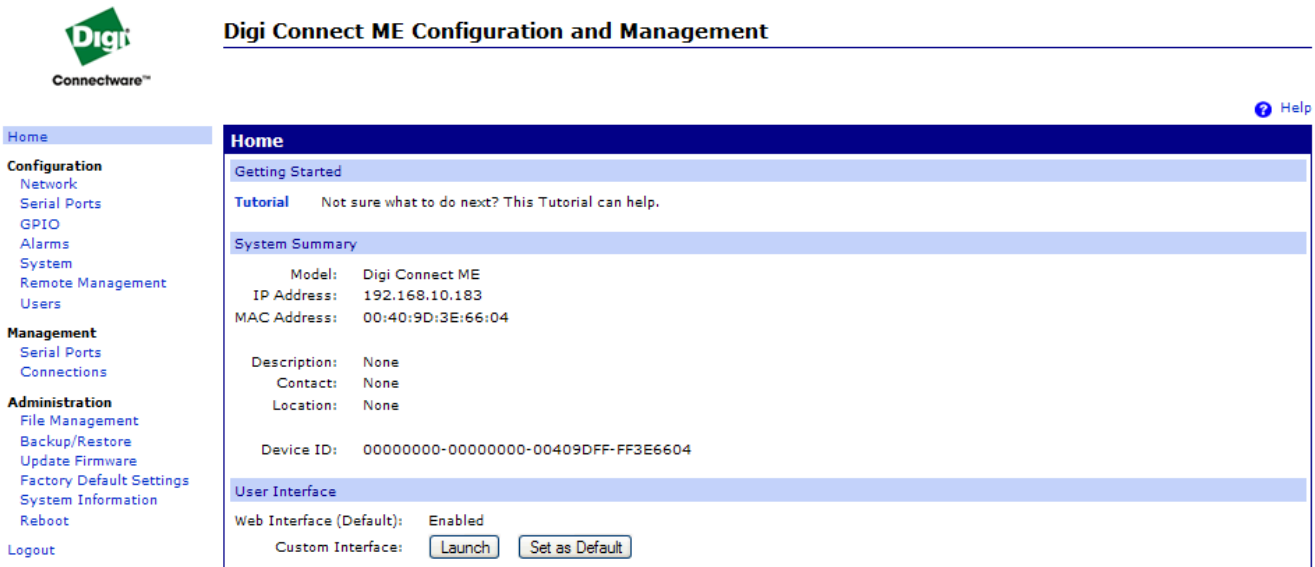
**Export** – Select the Export button to export and save the logged numerical data appearing on the history chart as a Comma Separated Value (CSV) file. If Microsoft Office is installed on the computer, the file can be opened with Microsoft Excel.

### Static IP Address and Gateway Configuration

1. Locate and write down the IP address from DigaLink. Leave DigaLink open.
2. Enter the IP address into your web browser address window in this format: http://xxx.xxx.xxx -with xxx.xxx.xxx as the IP address and NO .com at the end.
3. Press enter
4. Digi Connect ME will open



5. Sign in to Digi Connect with the USERNAME root and PASSWORD dbps.
6. Login



7. Select Network, located under Configuration on the left hand side of the browser window
8. Change the Radio button to: USE THE FOLLOWING IP ADDRESS

**Digi Connect ME Configuration and Management**

Home

**Configuration**

- Network
- Serial Ports
- GPIO
- Alarms
- System
- Remote Management
- Users

**Management**

- Serial Ports
- Connections

**Administration**

- File Management
- Backup/Restore
- Update Firmware
- Factory Default Settings
- System Information
- Reboot

Logout

**Network Configuration**

**IP Settings**

Obtain an IP address automatically using DHCP \*

Use the following IP address:

\* IP Address:

\* Subnet Mask:

Default Gateway:

\* Changes to DHCP, IP address and Subnet Mask require a reboot to take effect.

▶ Network Services Settings

▶ Advanced Network Settings

9. Enter the desired IP address
10. Enter the desired Subnet Mask address
11. Enter the desired Default Gateway address
12. Click Apply
13. Go back to DigaLink and click Refresh List
14. DigaLink will go out and find the new STATIC IP address through the desired Gateway.