PrimeLog+ Basic Programming

Quick Reference Guide – IXD-733-QRG-044/4.1

16 November 2020

This document provides guidance on programming for users of PrimeLog+ with either a flow and/or internal pressure models.
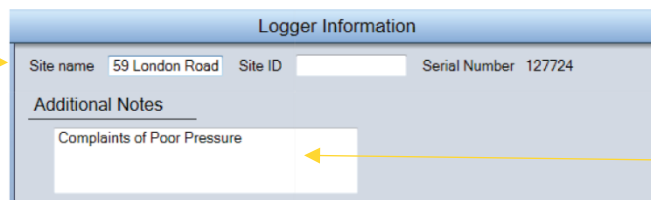
Step One

Open PrimeWorks software and a PrimeLog+ will automatically populate the PrimeLog+ control panel when connected via a communication cable (NXG-881)

Step Two

Expand the Logger Information tray and enter the following information:

Site name identifies the test. It is good practice to name each test with a unique identifier as it avoids data sets merging.

Add site specific note if required.

Step Three

Next stage is to define what is to be measured by expanding the Channels tray. **To log flow**…

Select Digital 1 Flow from the drop down menu and ensure the Enabled box is ticked. This will display a green circle in the drop down menu showing that this channel is enabled.

Select the type of pulse unit/meter being used from the Sensor Profile drop down menu. This will automatically populate Sensor Options with the appropriate settings.

Alternatively, if the pulse unit/meter being used is not predefined in the Sensor Profile list, then selecting Custom will enable the options in Sensor Options for the user to customise accordingly. See below for guidance if Sensor is predefined.

Select how the pulses are measured by the sensor.

Choose preferred units of flow measurement.

Tick if using power hungry sensors
NOTE: This can significantly reduce the battery life

If a bi-directional sensor type is selected then forward and reverse pulses need to be defined. This will depend upon the type of pulse unit being used.

Sensor Options

Sensor Type: Single Bi-directional
Pulse Direction: Forward A, Reverse B
Data Type: Flow   Units: Cubic Metres Per Hour   Power sensor continuously ☐   Voltage Doubler ☐   Logging Interval: 10 Seconds

Calibration

Calibration Factor: 10 Litres per pulse

Meter Reading

Meter Reading: 1589   Meter Units: Cubic Metres

Enter meter manufacturer specific FCAL

Enter meter reading and the units the meter is displayed in.

Choose logging internal.

Step Four

And/or to log pressure…

Select Analogue 1 Pressure from the drop down menu and ensure the Enabled box is ticked (See picture below). This will display a green circle in the drop down menu showing that this channel is enabled.
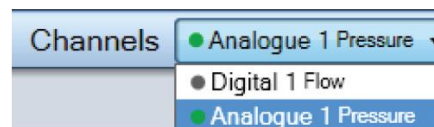
Channels ● Analogue 1 Pressure ▾
● Digital 1 Flow
● Analogue 1 Pressure

Choose preferred units of pressure measurement.

☑ Enabled
Sensor Options
Sensor Rating   10 Bar
Data Type: Pressure   Units: Metres   Custom Offset: 0
Logging Interval: Off

Choose logging interval.

Optional entry of an offset figure, which is added to all readings. For example, if a ground level needs to be added to all pressure values it can be entered in here. If a value needs to be removed from every reading, simply enter the value as a negative.

Step Five

Open the installation window to display real time values to provide a final check after the logger is connected to the flow meter and/or pressure tapping. It also provides an opportunity to check the clock matches the PC time.

Current Logger Time: 17/08/2012 16:02:30   Synchronise with PC clock
☑ Read Current Values

Digital 1   Analogue 1

Value 0.0000 l/s   **Value** 1.2047 m
Meter Reading 0.0000 m³   AutoZero
Updates every 1 Minute

Battery Voltage 3.64V   **External Power Voltage** 5.03V

Note: Before connecting a pressure hose to the pressure pressed to reset the transducer to zero.

Step Six

The logger settings can now be saved by opening the communication tray and either selecting:

1. **Program All** - This option will send the current selected programming settings to the logger, deleting all previous data from the logger (including synchronising with PC clock).
2. **Program Changes Only** - This option will program only the changes made since the programming settings were read from the logger meaning any data in the logger is still available for readback.

The logger is now ready for deployment.

Downloading Data

After retrieving the logger after it has finished logging the site, connect the logger to the PC and open PrimeWorks. Then click Readback to download all logged data into PrimeWorks for analysis.