
Industrial Automation Crimson™ 3 DSP/G3/Graphite® / Tech Note 11 MC/PTV RLC Instrument Driver



Abstract:

This document describes how to use Crimson 3 to configure the Red Lion Controls (RLC) Instrument Driver to support the RLC CR1000 Human Machine Interface (HMI), CR3000 HMI, Data Station Plus (DSP), G3 HMI, G3 Kadet HMI, Graphite® Controller, Graphite HMI, Modular Controller, and ProductVity Station™.

Products:

RLC CR1000 HMI, CR3000 HMI, DSP, G3 HMI, G3 Kadet HMI, Graphite Controller, Graphite HMI, Modular Controller, and ProductVity Station

Use Case:

The panel meter associated with each previously identified RLC product must be correctly configured to ensure proper operation. Crimson 3 is used to configure panel meter communications and protocol settings.

Required Software:

Crimson® 3.0 or 3.1

Required Operating System:

Microsoft Windows 2000, or above

Introduction

This document describes how to use Crimson 3 to configure panel meter communications, protocol, port, and data tag settings.

NOTE 1: Crimson support for Enable Ethernet Port for Download requires Crimson 3.0 or higher and is only available to Windows 2000 or above users. Please update your version of Crimson to the latest; available online at www.redlion.net.

Panel Meter Configuration

Panel meter configuration consists of specifying the communication settings required for communications between the panel meter and Crimson 3, selecting the protocol to be used for the panel meter's serial port, and creating a data tag for the device.

Communication Settings

The available communication settings vary between device types; the black items below are common to all devices:

```
TYPE : rLC
BRUD : 9600 *1
dRAR : 7 *1
PAR : Odd *1
Addr : 1 *2
AbvU : YES
```

*1 setting must be configured to match in Crimson

*2 should be non-zero

Communication Configuration

Protocol Selection

To select the protocol to be used, perform the following:

1. Start Crimson 3 and click on the port to be configured.
2. Click *Pick*, next to the Driver option; the Driver Picker for Serial Port popup shown in Figure 1 appears.
3. Select *Red Lion* as the Manufacturer and *RLC Instrument* as the Driver.

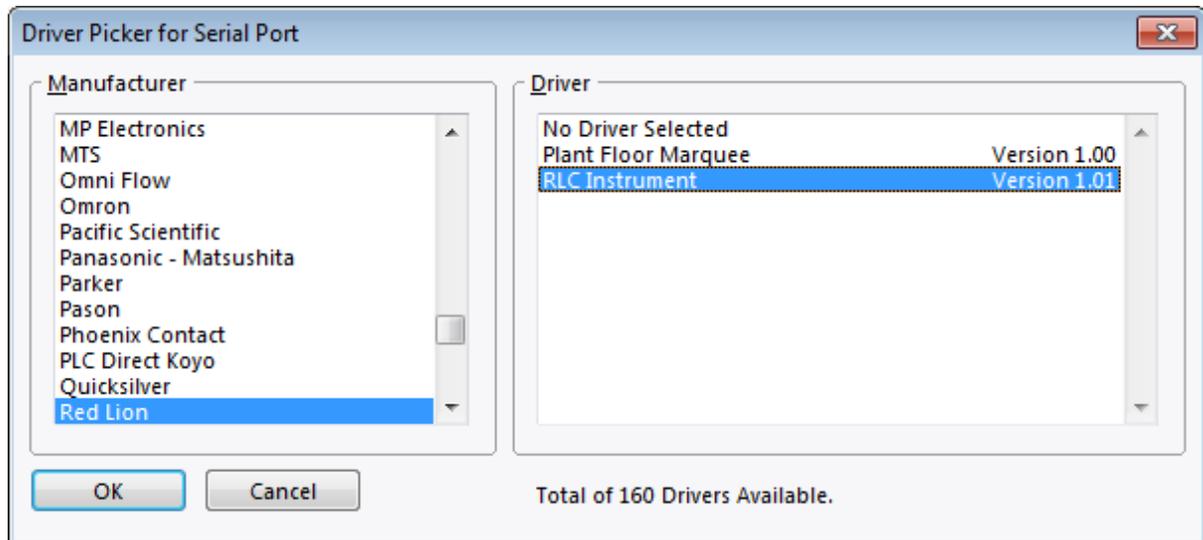


Figure 1.

4. Click *OK*.
5. Configure the remaining Port Settings to match the panel meter.

Device Configuration

Referring to Figure 2, perform the following:

1. From the Navigation Pane, click on the desired device below the port; *DEV1* in this example; the Communications - RS-485 Comms Port - DEV 1 popup appears.
2. Set the Drop Number to match the **Addr** setting of the panel meter; *1* in this example.
3. Select the appropriate Red Lion Device; *PAXI/PAXCK/PAXDP* in this example.
4. Set the Protocol Mode to *Abbreviated*.

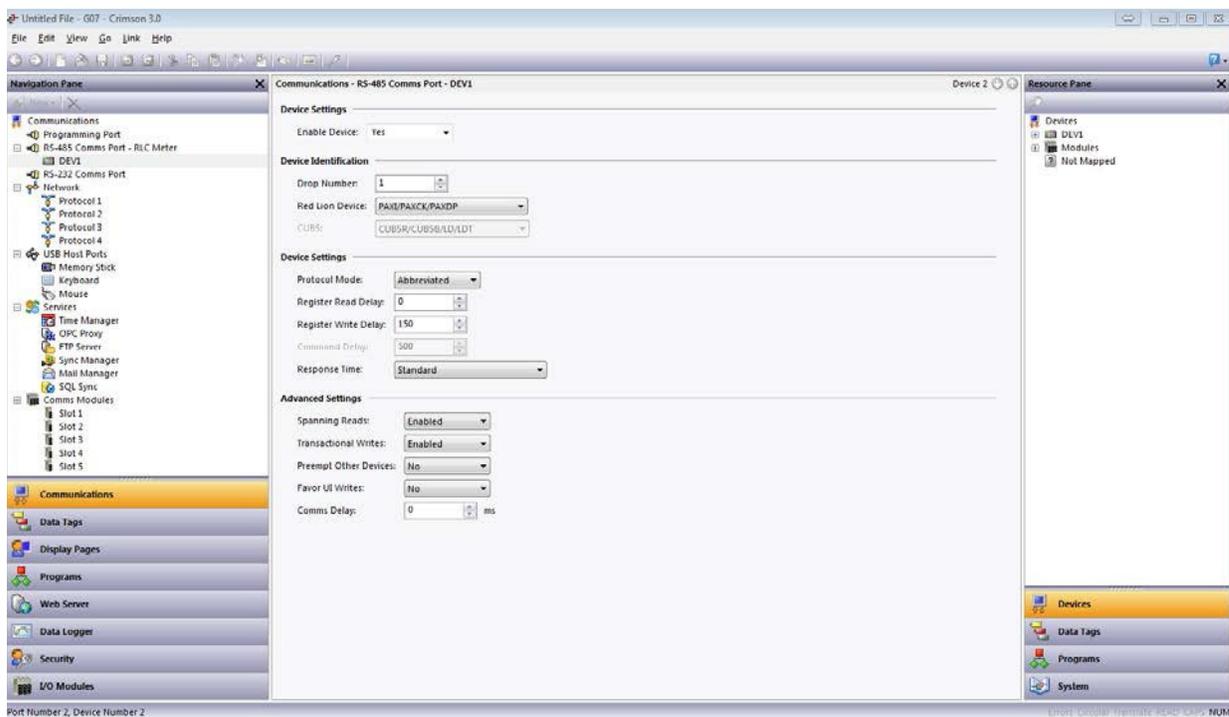


Figure 2.

Data Tag Creation

Create the data tag to be associated with the panel meter by performing the following:

1. Create a new *Numeric* tag.
2. Change the Tag's source to the RLC device; the Select Address popup shown in Figure 3 appears.
3. Enter the Register ID of the parameter to be associated with this tag; A in this example. Refer to the Register Identification Chart in the Communications section of the panel meter's user manual for additional information.
4. Click *OK*.

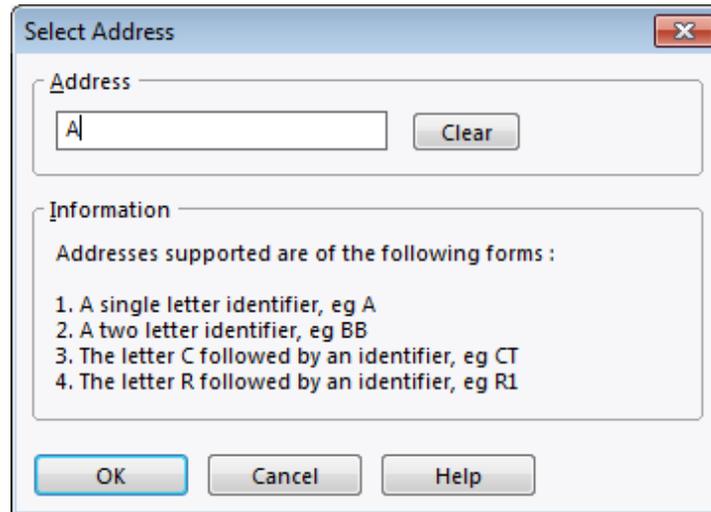


Figure 3.

Disclaimer

It is the customer's responsibility to review the advice provided herein and its applicability to the system. Red Lion makes no representation about specific knowledge of the customer's system or the specific performance of the system. Red Lion is not responsible for any damage to equipment or connected systems. The use of this document is at your own risk. Red Lion standard product warranty applies.

Red Lion Technical Support

If you have any questions or trouble contact Red Lion Technical Support by emailing support@redlion.net or calling 1-877-432-9908.

For more information: <http://www.redlion.net/support/policies-statements/warranty-statement>

