# Industrial Automation Crimson® 3 Honeywell IPC620 Driver Tech Note 41



# Abstract:

This document describes how to set up the Honeywell IPC620 driver for use with Crimson Software.

# **Products:**

Red Lion Controls CR1000 Human Machine Interface (HMI), CR3000 HMI, Data Station Plus, G3 HMI, G3 Kadet HMI, Graphite<sup>®</sup> Controller, Graphite HMI, Modular Controller, and ProducTVity Station™

## Use Case:

Configuring the Honeywell IPC620 Serial Driver in Crimson

## **Required Software:**

Crimson 3.1, Crimson, 3.0, or Crimson 2.0

# **Required Operating System:**

Microsoft Windows 2000, or above

### Introduction

This Technical Note details the procedure for setting up the Honeywell IPC620 driver in Crimson Software. This document consists of three primary parts:

- Getting Started Describes the steps required to perform the initial Crimson setup.
- Configuring The Port Describes the steps required to configure the communications port used to communicate with the IPC620 driver.
- Creating and Mapping Tags Details the steps required to create and map the data tags used for IPC620 driver communications.

#### **Getting Started**

Start the Crimson application. Referring to Figure 1, go to the Navigation Pane and navigate to the Communications section.

- 1. Select the RS-485 Comms Port option.
- 2. Go to Driver Selection and click on the *Pick* button.
- 3. Go to Driver Picker for Serial Port and, under Manufacturer, scroll to and select *Honeywell* from the list of drivers.
- 4. Go to the Driver field, select IPC620, and click on the OK button.





Crimson® 3 Honeywell IPC620 Driver

# **Configuring the Port**

As shown in Figure 2, the Honeywell IPC620 driver is now listed in the Driver field. To configure the communication port parameters to match the Honeywell device, perform the following steps:

- 1. Navigate to Port Selection and specify the Connection; *CIM* in this example.
- 2. Navigate to Port Settings and set:
  - Baud Rate; 9600 in this example
  - Data Bits; *Eight* in this example
  - Stop Bits; One in this example
  - Parity; Odd in this example
  - Port Mode; 4-Wire RS-485 or RS422 in this example

Navigation Pane	×	Communications - RS-485 Comms Port	Port 2 🕐 🕢
🕰 New - 📉		Driver Selection	
Communications	^		
RS-232 Program Port		Driver: Honeywell IPC620 Pick	
🚍 =1) RS-485 Comms Port - Honeywell IPC620			
PLC1		Port Selection	
RS-232 Comms Port			
Postwork		Connection: CIM V	
6 Protocol 1			
Protocol 2		Port Settings	
¥ Protocol 3		Baud Rate: 9600	
Protocol 4			
Geo USB Host Polts		Data Bits: Eight 🗸	
We Memory Stick		Chan Bilty One and a	
Mourse		Stop Bits: One	
E Senires		Parity: Odd V	
Time Manager			
OPC Proxy		Port Mode: 4-Wire RS485 or RS422	
FTP Server			
Sync Manager		Port Sharing	
🚔 Mail Manager		Share Port: No TCP Port: 0	
🚱 SQL Sync	~		

Figure 2.



# **Creating and Mapping Tags**

The last set up step is creating and mapping the tags used for driver data. Referring to Figure 3, go to the Navigation Pane and navigate to the Communications section and perform the following steps:

- 1. Navigate to the Data Tags section.
- 2. Select New; a drop down menu displays.
- 3. Select Numeric Tag.



Figure 3.



- 4. Referring to Figure 4, go to the Navigation Pane and select the newly created Data tag; *Tag1*.
- 5. Go to the Data Tags Tag 1 pane and under the Data tab, change the Source field from Internal to PLC1.
- 6. Go to the Select Address for Honeywell IPC620 popup and select the appropriate Data Item; *D* in this example.
- 7. Still working in the Select Address for Honeywell IPC620 popup, select the appropriate Data Type; *Word as Word* in this example.
- 8. Click on the OK button. The Honeywell IPC620 serial driver is now set up for use with Crimson.

Navigation Pane	X Data Tags - Tag1	Tag 0 🕛 🙆
≪ New      ←      □     □      □    □    □    □    □    □    □    □	Data Format Colors Alarms Triggers Plot Security Data Source	
tag1	Source:       Internal         Extent:       One Item         Manipulation:       None         Treat As:       Signed Integer         Accesss:       Read and Write         Read Mode:       Entire Array         Storage:       Non-Retentive	
	Pata Scaling Select Address for Honeywell IPC620           Data Item         Element           CNORe> No Selection         D           U         VO and Internal Registers	×
Communications Communications Data Tags Disnlay Pages	Details Type: Word Minimum: D4096	
Programs           Web Server	Data Jype Word as Word	
Data Logger	OK Cancel	

Figure 4.

**NOTE:** Consult the controller's documentation for the mapping of individual registers and their functionality.

