

### CTC Interact Software Connectivity to SIXNET

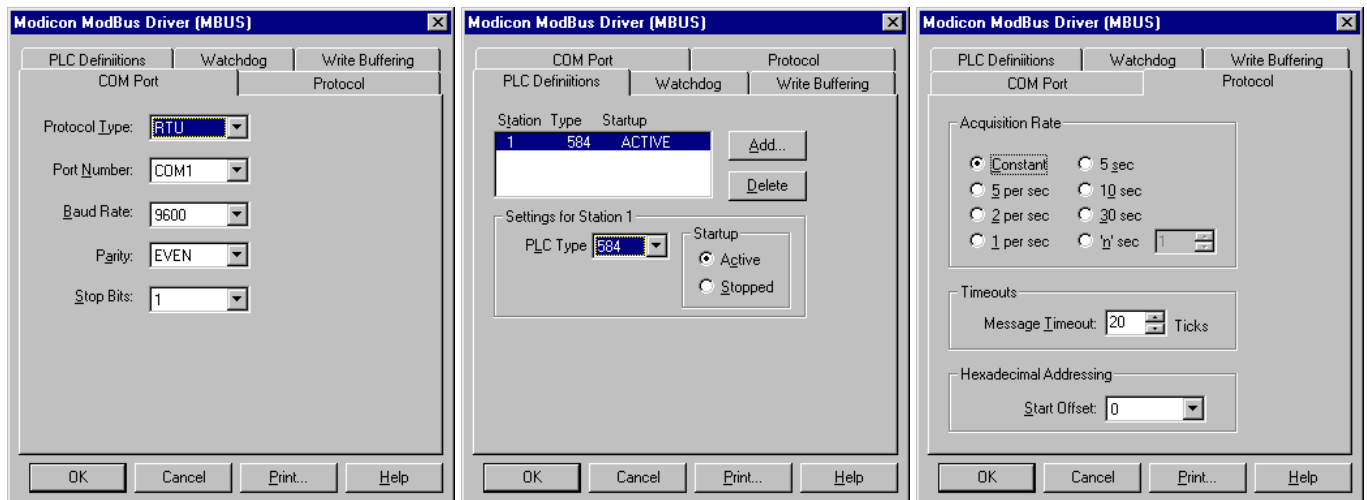
**Abstract:** Instructions and information on interfacing SIXTRAK gateways and VersaTRAK RTUs with CTC interact software to connect with CTC operator interface systems.

Rock Interface, Inc., a distributor and system integrator for SIXNET, has successfully integrated Interact software from CTC with the SIXTRAK Gateway to allow direct interface between SIXTRAK I/O and CTC touch pad display panels. This software interface now allows any CTC programmed panel to communicate with SIXNET I/O without first passing the data through a computer.

### Communications Settings

*In Interact software:*

- 1) Choose the Modicon Modbus Driver.
- 2) Set up the Driver as follows:

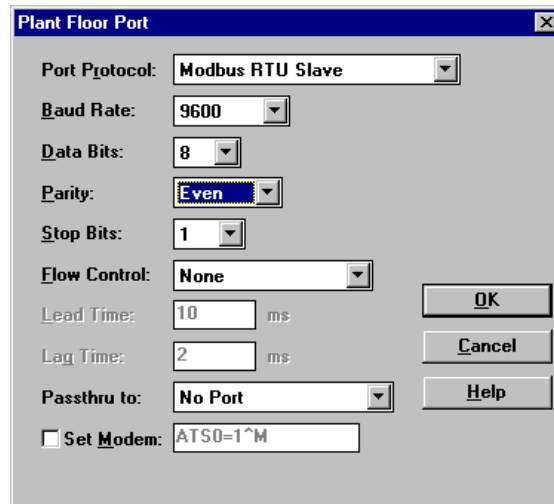


Note: In the *PLC Definitions* press the <tab> key. Any PLC choice can be used.

---

***In the SIXNET Plant Floor software:***

- 1) Before downloading to the gateway, right-click on the gateway and select ***Configure***.
- 2) Select ***PF Port Setup*** (or other serial port at your option).
- 3) Change settings to the following.



Once these changes have been made, you will not be able to communicate with the configured port from Windows (specifically from Plant Floor software) from this reconfigured port. If the Plant Floor Port has been configured to use Modbus protocol (to talk to the CTC unit), you will need to regain control of this port to return it to “configuration mode” by following these steps:

- 1) Select the ***Tools*** option from the Menu bar.
- 2) Select ***Gateway Advanced Tools***.
- 3) Choose ***Reset PF Port***.
- 4) Cycle power to the Gateway, when prompted.
- 5) You will then be asked to save default settings to that station, choose ***NO***.
- 6) You can now make the necessary changes through the serial port.

## **Modbus Command Support**

SIXTRAK and VersaTRAK stations support the following Modbus commands as described in the AEG Modicon document, Modicon Modbus Protocol Reference Guide PI-MBUS-300 Rev. E:

- 01 - Read multiple discrete outputs
- 02 - Read multiple discrete inputs
- 03 - Read multiple analog outputs
- 04 - Read multiple analog inputs
- 05 - Write a single discrete output
- 06 - Write a single analog output
- 15 - Write multiple discrete outputs

---

## 16 - Write multiple analog outputs

Extensions to commands 3 and 16 provide support for long integers and floating point numbers. Two formats are supported: Daniels Extensions and Modicon Protocol. See the *Transfer Longs and Floats as a Pair of Analog Registers* topic on the SIXNET CD on-line help guide. for more information.

Access to I/O of different types is supported by the Modbus messaging protocol via address ranges. Note that Modbus data address 1 provides access to SIXNET data register number 0. To access the following gateway/RTU data types, use these address ranges:

<b>Data Type</b>	<b>Gateway Address</b>	<b>Modbus Data Address</b>
Discrete In:	0 .. 9999	10001 .. 20000
Discrete Out:	0 .. 9999	00001 .. 10000
Analog In:	0 .. 9999	30001 .. 33000
Analog Out:	0 .. 2999	40001 .. 43000
Short Integer In:	0 .. 1999	33001 .. 35000
Long Integer In:	0 .. 1999	35001 .. 37000
Floating Point In:	0 .. 2999	37001 .. 40000
Short Integer Out:	0 .. 1999	43001 .. 45000
Long Integer Out:	0 .. 1999	45001 .. 47000
Floating Point Out:	0 .. 2999	47001 .. 50000

### **Daniel Extension Support:**

Daniel Extension support is provided, by some Modbus devices, as a means of transferring 32-bit registers. These extensions are detailed in the Daniel Industries document, Modbus Communications 2500 Host-Slave Communications Part Number 3-9000-545 Rev. C.

### **SIXNET Modbus Slave Operation:**

Daniel Extension support may be enabled or disabled for each port set to Modbus Slave in a SIXNET station. When Daniel Extension support is disabled, Modbus data is transferred as a pair of analog registers. See the *Transfer Longs And Floats as a Pair of Analog Registers* topic on the SIXNET CD on-line help guide for more information.

### **SIXNET Modbus Master Operation:**

Daniel Extension support may be enabled or disabled on a per-action basis for SIXNET stations acting as Modbus master stations. When Daniel Extension support is disabled, Modbus data is transferred as a pair of analog registers. See the *Transfer Longs And Floats as a Pair of Analog Registers* topic on the SIXNET CD on-line help guide for more information.