

Interfacing RemoteTRAK Directly to Intellution FIX32 via Modbus

Abstract: You can use Intellution's Modbus I/O driver to interface your SCADA software to a combination of RemoteTRAK I/O and other Modbus devices on the same RS485 party-line.

Intellution FIX is often used with SIXNET Control Room software when connecting to RemoteTRAK Modules or other SIXNET hardware. This is recommended for most applications because it provides tag exporting, allows other applications to access I/O at the same time, and is fast and reliable*. However, if the user needs to connect to other Modbus units (which are not manufactured by SIXNET) on the same line as RemoteTRAK, Control Room software cannot be used. Therefore, SIXNET has successfully made a direct connection between a RemoteTRAK module and FIX32 software using Intellution's Modbus (MB1) driver. This gives the user another option when constructing a network of I/O Modules.

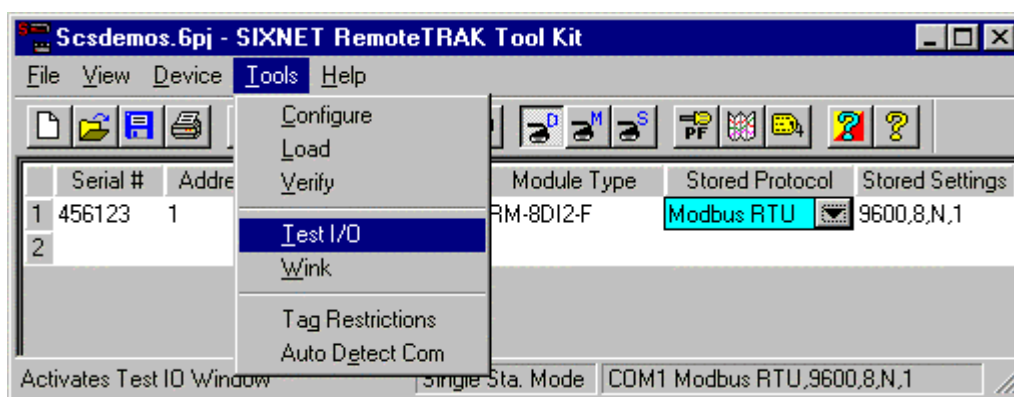
** Note: The Fix to Control Room DLL Driver is free from SIXNET*

Pre-Installation Settings

Using the Remote I/O Utility, set your RemoteTRAK Module to either "Modbus RTU" or "Modbus ASCII." Also make sure that your other settings (baud rate, parity, etc.) are also set correctly.

Go to the **Test I/O** window – which will use Modbus to poll the modules – to verify that you can read and write all of your I/O.

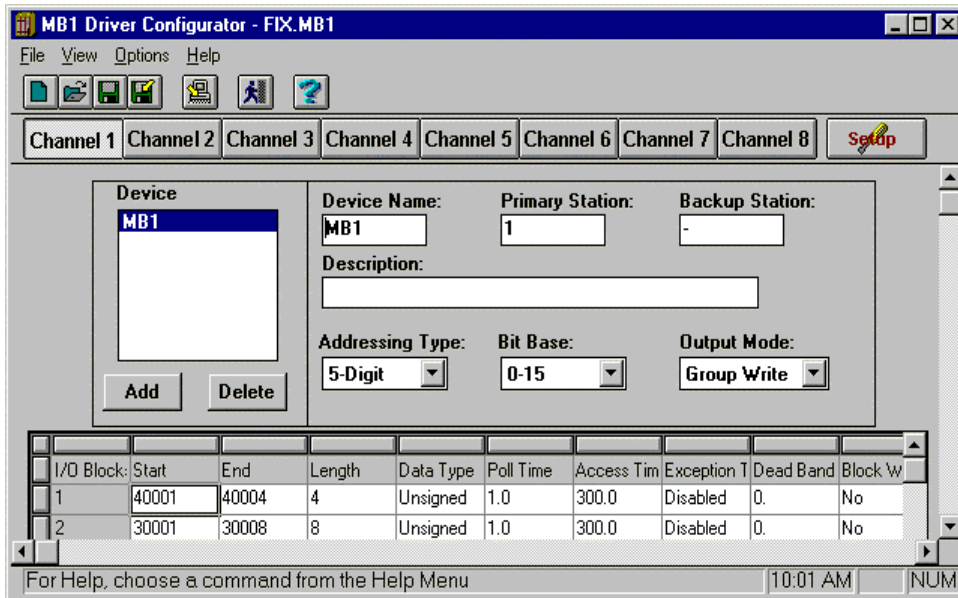
Refer to the Remote I/O Utility on-line help for details on configuring your RemoteTRAK modules.



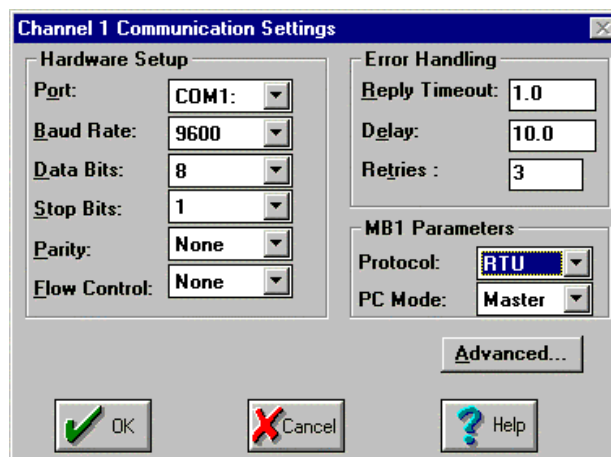
You also need to have the Modbus Drivers installed in Intellution Software. This can be done in the initial installation of the program.

Software Setup

- Step 1:** Open Intellution Software. Go to **Apps – System Configuration** on the toolbar.
- Step 2:** Go to **Configure – SCADA**. Add the MBI Driver. Go to **Configure**.
(if the MBI driver is already installed, simply double click on **MBI**)
- Step 3:** Make sure that you have the correct **Primary Station Number** setting. If so, Click **Setup** on the toolbar.



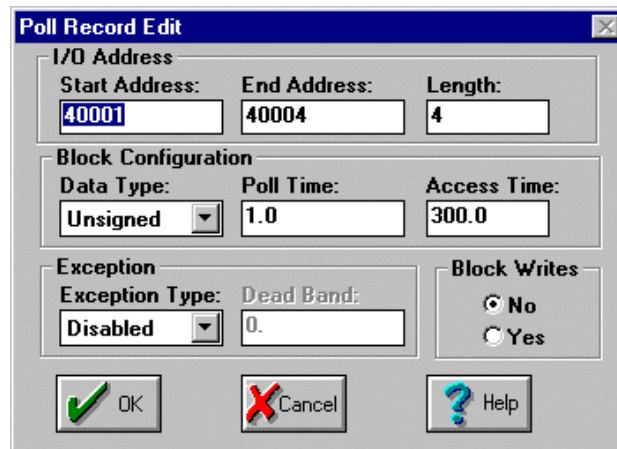
- Step 4:** Make sure the following settings under **Hardware Setup** match those set in your RemoteTRAK module (default RemoteTRAK settings are shown below)



Also, under **MBI Parameter**, make sure that **Protocol** matches your RemoteTRAK setting and that **PC Mode** is set to *Master*.

Click <OK> after the necessary changes are made.

Step5: Now enter the I/O Address for your Modules. Do this by Double-clicking on an empty cell. The following window will appear. The Block Configuration and Exception settings were left at their defaults..



Address Chart for Modbus

Data Type	Gateway Address	Modbus Data Address
Discrete In:	0 .. 9999	10001 .. 20000
Discrete Out:	0 .. 9999	00001 .. 10000
Analog In:	0 .. 9999	30001 .. 40000
Analog Out:	0 .. 2999	40001 .. 43000
Short Integer:	0 .. 1999	43001 .. 45000
Long Integer:	0 .. 1999	45001 .. 47000
Floating Point:	0 .. 2999	47001 .. 50000

When all of your I/O addresses are entered, Save and Load the driver. The Modbus should start “talking” to RemoteTRAK immediately. You can verify this by checking the TD and RD LEDs on the module. Now that communication is established, you can proceed running Intellution software as you normally would.

Note: *This same basic procedure will also work with SIXTRAK Gateways and VersaTRAK RTUs. The only difference is that you would use Plant Floor instead of Remote I/O Utilities.*