This document allows a user to do a quick test to verify the Modbus TCP card is working within the robot controller. The hardware used:

* Hardware:
	+ PCI CARD 🡪 Yaskawa card: PCI BOARD, AB3606, Modbus/TCP Server (Slave)
		- Epicor part #: 157874-5
	+ PCIE CARD 🡪 Yaskawa card: PCIE Board, INPACT EIT, Modbus/TCP Server (Slave)
		- Epicor part #: 182699-1
	+ Either of these part # may be included in other higher level kits for various controllers and versions.
* Free software: CAS Modbus Scanner
	+ <http://www.chipkin.com/products/software/modbus-software/cas-modbus-scanner/>

**The screenshots below are configured for PCI card testing. (DX200 accessory):**

This shows a Read Request:



This shows a Write Request to Multiple Coils:


This is a Write Request to Multiple Registers:



This is a screen grab showing successful communication:


This is text from the Yaskawa manual:



Once we configured the write request with the highlighted point above everything worked as expected.

However we did notice that we had to shut down and re-start the software after changes for it to work.

**Notes on the PCIE Card (YRC1000/YRC1000micro accessory):**

The general testing and validation approach is be the same. However the output coil range is specified differently. Screen captures from the manual are shown below:

