UPC-MB Quick Start

Wiring:

Connect the RS-485 outputs to your Modbus network. A terminal is positive, In the event the UPC-MB is at the end of the network move the jumper to terminate the network.

The UPC-MB comes factory configured with the following specifications:
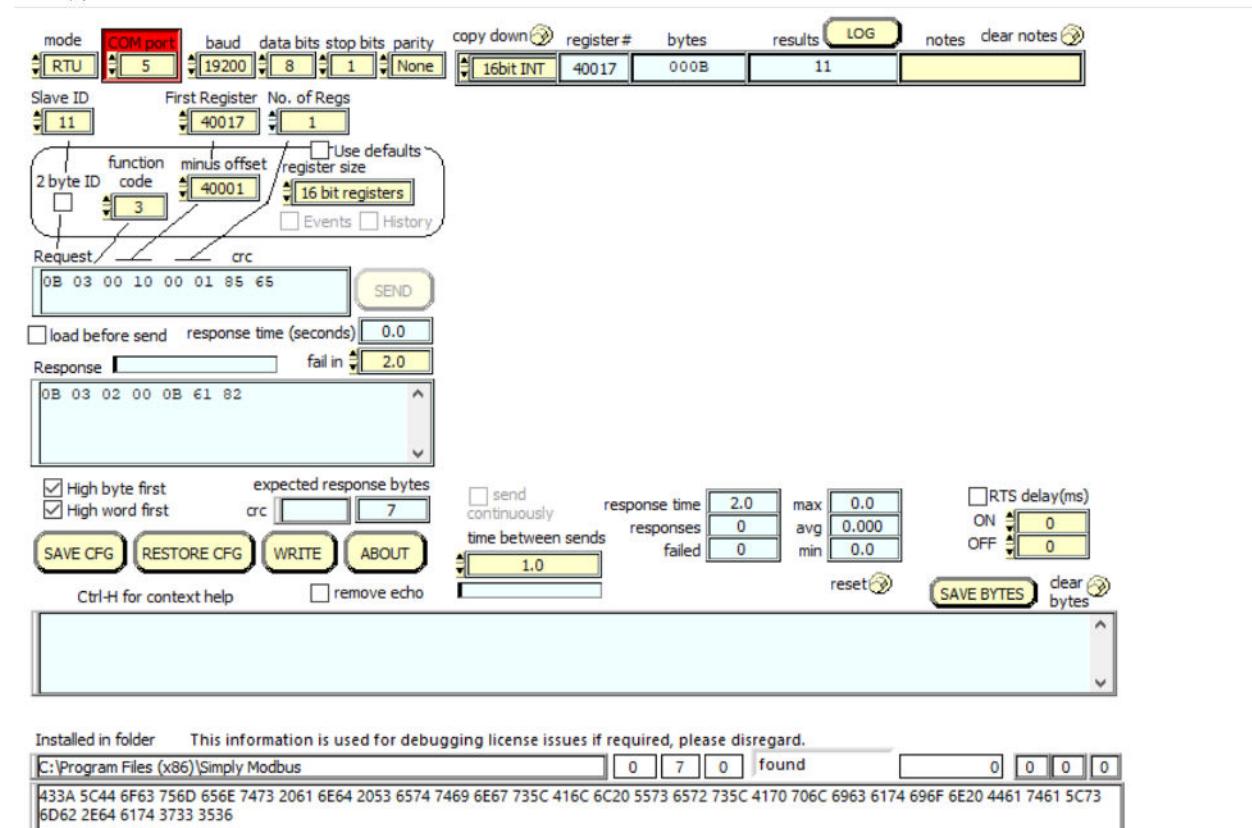
Baud rate: 19.2Kbps

8 Data bits, 1 stop bit, no parity

Modbus device number will be set and printed on a sticker affixed to the sensor. This can be changed to meet specific configuration requirements

HP Full Scale: 90

Configuration from Simply Modbus Master 8.1.2:

Here are the registers the UPC-MB can access. Function code 3 executes a READ, Function code 6 executes a WRITE:

UPC–Modbus Table Assignments

40000 Table   Offset 40001

Register	Read, FC = 03	Write, FC = 06
40002	Default Full Scale	Default Full Scale (power up)
40003	Default Response	Default Response (power up)
40004	Current Full Scale	Current Full Scale
40005	Current Response	Current Response
40006	10 volt Out (4096 counts)	
40007		Current Full Scale, No Echo
40017	Slave Address	Slave Address
40018	Software Version	
40019		Blink ID LED (Non-zero)
40020		Force 10 Volt (Non-zero)
40021		Self-test (Non-zero)
Command Size	Always 8 bytes	Always 8 bytes
Response Size	7 bytes	Echo Command if CRC is OK (Exception– No Echo for 40007!)

- Default Full Scale and Default Response are loaded into memory on power up.
- Defaults are also loaded into Current Full Scale and Current Response on power up.
- 'Current' means the value in effect at any given moment.
- The analog equivalent to register 40006 is reflected on the 10 volt output terminal
- 'Blink ID' is an LED that will blink if the address equals 1 OR if turned on by the master to identify a node on the bus.
- 'Force 10 Volt' allows the user to set any value on the digital AND analog outputs for system testing or calibration.
- 'Self Test' forces the UPC into an internal test mode. Output in register 40006 is 3570 to 3800 counts (3686 nominal). Ten volt analog output is 8.72 to 9.28 volts (9.00 volts nominal).