

MSC

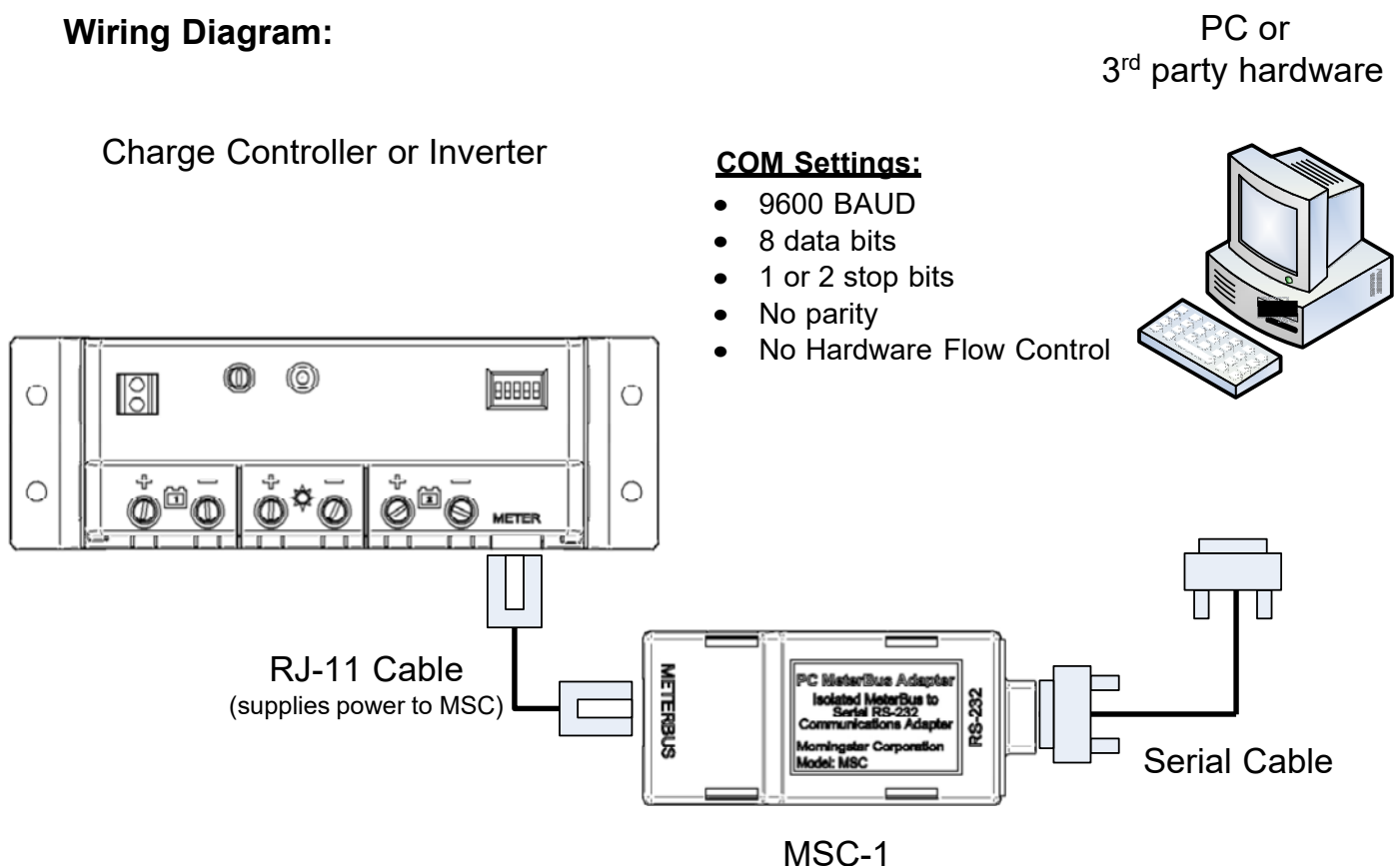
Morningstar PC Meterbus Adapter Instructions

Description:

The PC Meterbus Adapter (model: MSC-1) converts the Morningstar MeterBus RJ-11 electrical interface to a standard RS-232 interface which allows communication between a PC and a Morningstar charge controller or inverter*. The MSC is required for programming custom charging set-points and logging data using Morningstar's MSView PC software. The MSC is also required for serial communications with any 3rd party hardware that supports Modbus communication.

* Controllers or inverters with a Meterbus port, but without a serial port or other communications port

Wiring Diagram:



Operation:

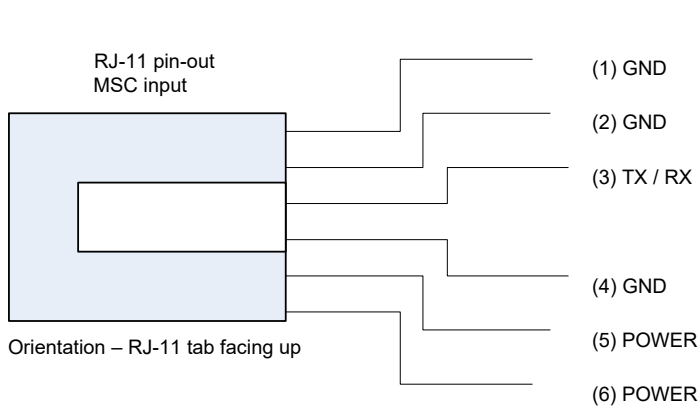
The MSC is externally powered by the Morningstar charge controller or inverter via the RJ-11 connection. A status LED indicates power and communication status. LED indications are as follows:

Green LED – power is applied with correct polarity.

Red/Orange LED flicker – data is successfully being transmitted or received through the adapter.

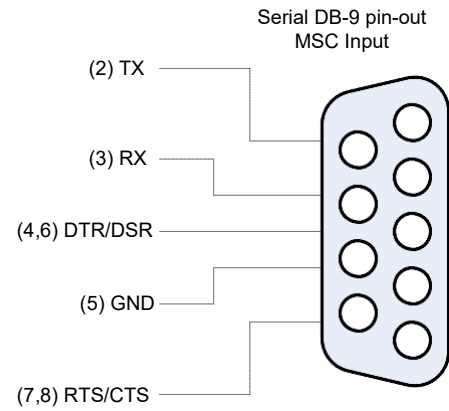
(electrical pin-out diagrams on back)

Electrical Pin-outs:



Notes:

1. POWER = V battery → Valid range: 8V – 15.5Vdc
2. RJ-11 cable wiring is straight through (standard telephone cord)



Notes:

1. RS-232 GND is NOT the same ground as RJ-11! The MSC is fully opto-isolated on all pins.
2. + power must be asserted on DTR/DSR and/or RTS/CTS pins
3. - power must be asserted on RTS/CTS and/or RX pins
4. Pins 4 (DTR) and 6 (DSR) are internally connected
5. Pins 7 (RTS) and 8 (CTS) are internally connected

Modbus documentation including register locations, scaling, and definitions can be found on Morningstar's website at:

www.morningstarcorp.com

support@morningstarcorp.com

