

Application Note

PC Monitoring of Multiple Model 88 Controller/Indicators Using Redington Counters' Redi_Read Multi Software

The Serial Data Option of the Model 88 Controller/Indicator is a powerful feature that allows the user of the Model 88 Controller/Indicator to monitor data from a remote location. By using the RS-485 feature, a PC can monitor data that is being collected by multiple Model 88 Controller/Indicators.

Redington's Redi_Read Multi Software that can be freely downloaded from the Redington Counters website (www.redingtoncounters.com) exploits the RS-485 capability to interface to multiple Model 88 Controller/Indicators. The easy-to-use software allows a PC to monitor multiple data inputs from a single Model 88 Controller/Indicator to single data inputs from up to 32 individual Controller/Indicators. The user specifies the Model 88 Controller/Indicator by entering its Serial Address. Then the user may select which data input to monitor. The data inputs include:

- Counter A
- Counter B
- Rate
- Time – Seconds
- Time – Hours
- Analog Input

Further, a name meaningful to the user can be entered into the display next to the data. All of this can be for up to 32 inputs.

To use the interface, just check the lines that are to be active and enter a meaningful name into the NAME box (see Figure 1). Then, enter the Serial Address for the Model 88 Controller/Indicator. Finally, select the input from the drop-down menu. Do this for up to 32 inputs, press the "Run" button, and the PC starts acquiring data. The software continuously polls each Model 88 and updates the data for each checked line. Should you want to make changes, press the "Stop" button, make the changes, and then restart by clicking the "Run" button.

A recommended interconnection is shown in Figure 2. Redington Counters recommends the B&B Electronics 485COSN RS-232 to RS-485 Converter. Place the 485COSN between the PC Serial Port and the RS-485 bus. Termination resistors should be placed on the RS-485 bus. One should be placed near the 485COSN and the other should be placed near the Model 88 Controller/Indicator that is farthest from the 485COSN Converter. In addition, B&B Electronics recommends 100Ω/1/2 Watt resistors between drops on the Ground (Common) lines.

Each Model 88 Controller/Indicator that is connected to the RS485 bus must have a unique Serial Address. A 2-digit decimal address should be programmed into each Model 88 Controller/Indicator. In addition, the Model 88 must be set to operate in RS485 mode with a 9600 baud data rate.

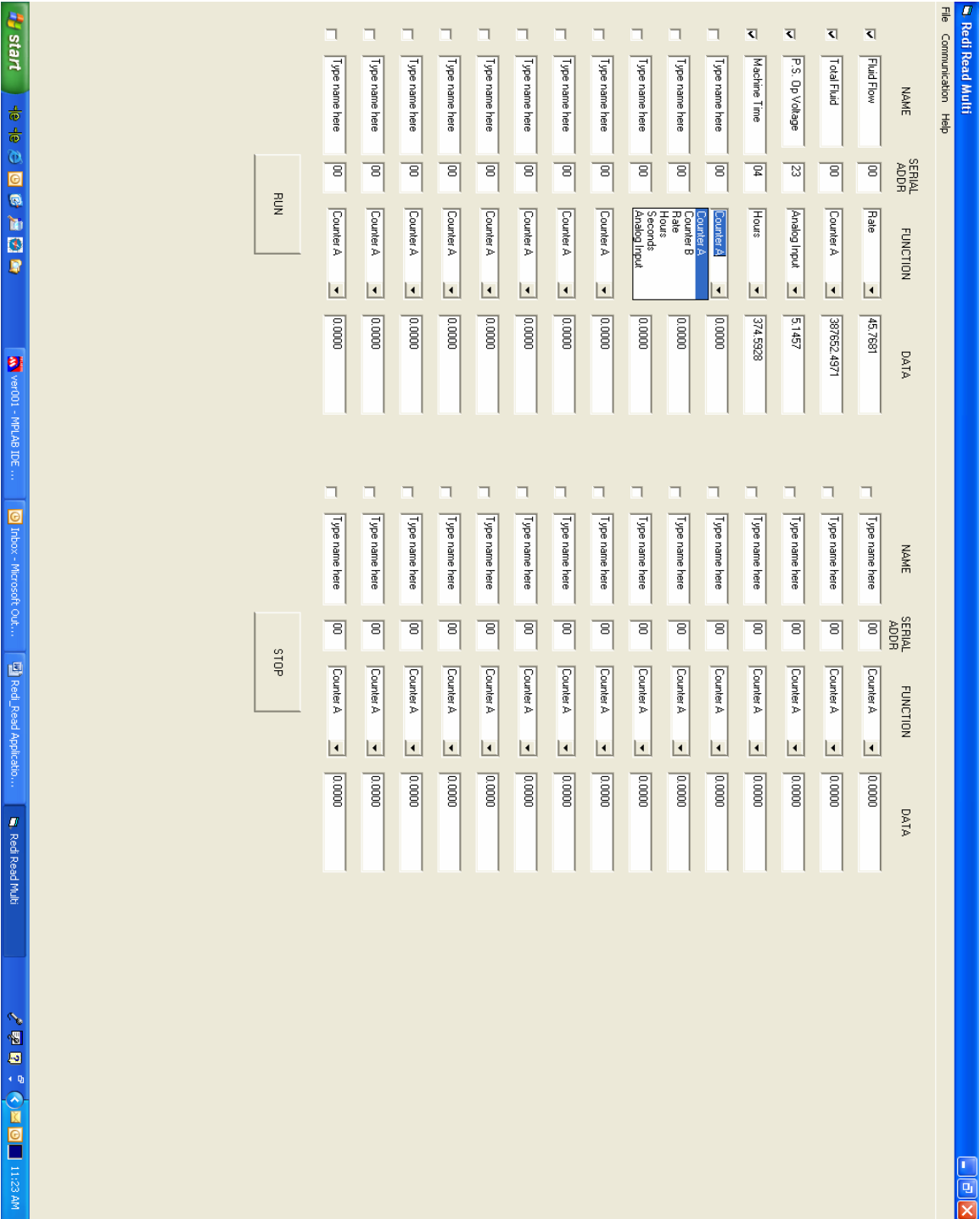


Figure 1
Redi_Read Multi Desktop

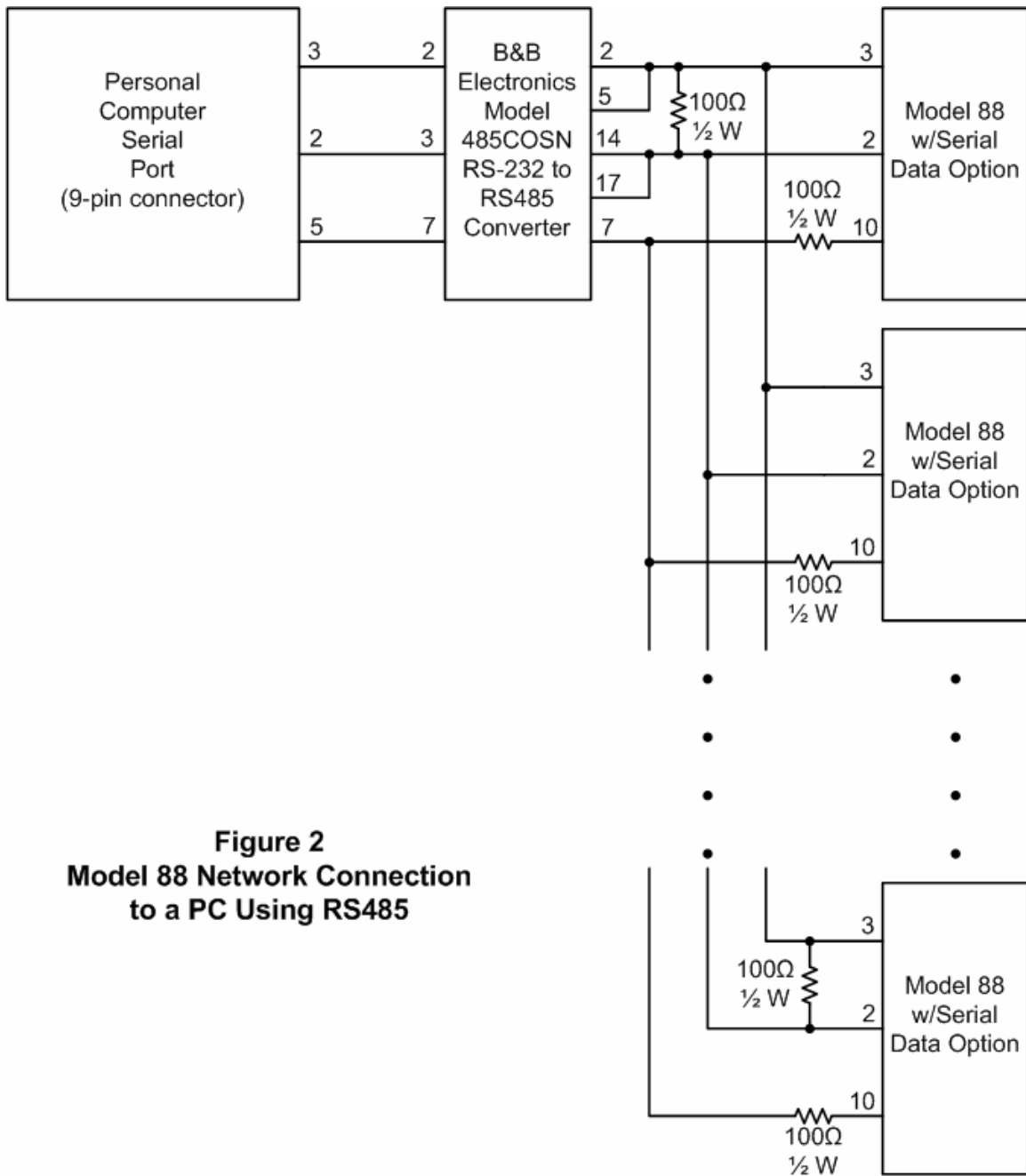


Figure 2
Model 88 Network Connection
to a PC Using RS485