68X343601 Rev 1 05/07

USER GUIDE

RS-232C Adapter (Model 91100-85)











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BEFORE YOU BEGIN...

Devices that can be used with this RS232 Adapter:

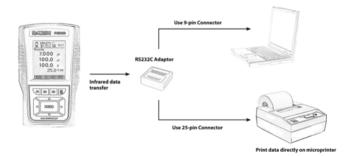
91100-50 DuaLogR Thermocouple Thermometer 93210-50 ThermoLogR Thermister Thermometer 93410-50 ThermoLogR RTD Thermometer 37003-02 HumidityLogR Thermohygrometer

pH/ ORP/ Ion/ Conductivity/ TDS/ Salinity/ Resistivity/ Dissolved Oxygen Handheld Meters:

PCD 650 PC 650 & PD 650 CD 650 pH 620, 610 & 600 COND 610, 600 & DO 600

What this adapter enables you to do:

The RS232 Adapter receives your data via Infrared signals and lets you print directly through a PC or a microprinter.



What you need before using the adapter:

- Your computer must have a serial communications port that can be set at 300, 600,1200, 2400 baud.
- Your computer must have Windows Terminal, Windows Hyperterminal or other compatible RS232 programs. However, it is **NOT** compatible with the Cybercomm software.

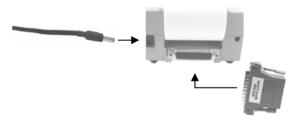
CONNECTING YOUR RS232C ADAPTER

If you are connecting to a Laptop or computer, please use the 9-pin plug.

1) Connect the phone jack cable to your RS232C adapter and the other end to the 9-pin connector plug or 25-pin connector plug.



- 2) If using a PC, ensure that your PC is plugged into a power source or has sufficient battery power.
- 3) If using the microprinter, plug in the power supply adapter to a power source and connect the cable to the microprinter.



*Important: Please ensure that the RS232 adaptor shows a red light.

NOTE: There is no need for a separate power supply for the RS232Cadapter as it will be automatically powered by the PC or the microprinter's main power supply once you connect them.

SETTING UP YOUR DEVICES

For 600 series devices:

PCD 650, PC 650 & PD 650 CD 650, pH 620, 610 & 600 COND 610, 600 & DO 600

In order to start printing on your Microprinter, you must first configure your device to be compatible with it. Please follow these steps:

- 1) Turn your device on.
- With the ◄ or ► arrows, shift the bar till you see SETP on the screen and select it using the corresponding "F" button.
- 3) Then press ENTER to proceed.
- 4) You will see the word SYSTEM. Press ENTER again to select it.
- 5) Using the correct "F" button, select NEXT-P three times until you reach SYSTEM –PAGE 4.
- At this page, select PRINT MODE and change IrDA to LED by using the ▲ or ▼arrows.
- 7) Then hit ENTER to move one step down to DATA FORMAT.
- If you're printing on a PC with the Hyperterminal* software or on the microprinter, change the format to TEXT using the ▲ or ▼ arrows.
- 9) Hit F4 to exit.
- 10) Face the device's infrared window (usually on the left side of device) directly to the RS232 Adapter's infrared window. *Do Not Move These Positions During Printing.
- 11) To print, simply use the ◀ or ► arrows to scroll until you see PRIN.
- 12) Turn on your microprinter and select PRIN using the correct "F" button.

NOTE: Before printing, please refer to manual for microprinter to configure it with a BAUD rate of 2400 BAUD, 8 data bits, parity = none, stop bits =1.

*This adapter only works on Hyperterminal and **NOT** Cybercomm software.

SETTING UP YOUR THERMO DEVICES

For these devices: 91100-50 DuaLogR Thermocouple Thermometer 93210-50 ThermoLogR Thermister Thermometer 93410-50 ThermoLogR RTD Thermometer 37003-02 HumidityLogR Thermohygrometer

91100-50 DuaLogR Set-Up

The interval may be set to any time from once every 3 seconds to once every hour. This example will set the thermometer to print live readings once every 3 seconds.

- 1. Press **SETUP**, then **PRINT**. The display indicates "minutes:seconds" with the last printing interval setup shown. The seconds will be flashing.
- Press MAX (up) or MIN (down), until the flashing digits indicate "03" seconds.
- 3. Press HOLD (enter). The display will show the minutes flashing.
- Press HOLD again. The large upper display will show "HP", "300" or "600".
- 5. Press MAX until "600" shows (use "300" for HYPERTERMINAL) in the upper display.
- 6. Press SETUP to exit.

Aim the top of the unit at the red window of the adapter at a distance of 12 inches or less.

93210-50 and 93410-50 ThermoLogR Set-Up

The interval may be set to any time from once every 3 seconds to once every hour. This example will set the thermometer to print live readings once every 3 seconds.

- 1. Press **SETUP**, then **PRINT**. The display indicates
 - "minutes:seconds" with the
- 2. last printing interval setup shown. The seconds will be flashing.
- Press MAX (up) or MIN (down), until the flashing digits indicate "03" seconds.
- 4. Press HOLD (enter). The display will show the minutes flashing.
- Press HOLD again. The large upper display will show "HP", "300", "600", "1200" or "2400".
- 6. Press **MAX** until "2400" shows in the upper display.
- 7. Press SETUP to exit.

Aim the top of the unit at the red window of the adapter at a distance of 12 inches or less.

37003-02 HumidityLogR Set-Up

The interval may be set to any time from once every 4 seconds to once every hour.

This example will set the thermohygrometer to print live readings once every 4 seconds.

Press **SETUP**, then **PRINT**. The display indicates "minutes:seconds" with the last printing interval setup shown. The seconds will be flashing.

- 1. Press **MAX** (up) or **MIN** (down), until the flashing digits indicate "04" seconds.
- 2. Press HOLD (enter). The display will show the minutes flashing.
- Press HOLD again. The large upper display will show "HP", "300", "600", "1200" or "2400".
- 4. Press MAX until "2400" shows in the upper display.
- 5. Press SETUP to exit.

Aim the top of the unit at the red window of the adapter at a distance of 12 inches or less.

Transferring Live Readings

To begin data transfer, press **PRINT**. Whenever the "PRINT" annunciator is displayed on the unit, and the red light inside the RS-232 adapter is blinking, data should appear on your computer screen.

Transferring Stored Readings

The "STO" annunciator on the unit's display indicates that readings are stored in memory. Press RECALL then PRINT to begin data transfer. "RCL" and "PRINT" annunciators will be on the thermometer display, and the number of readings remaining to be transferred will count down. The red light inside the RS232 adapter should be blinking.

WINDOWS XP Hyperterminal Set-up

- 1. Click on Accessories, select Communications, then Hyperterminal.
- 2. Under NAME: Enter a name for your file and click on **OK**. 3. Under CONNECT USING: Choose COM1.
- 3. Click on **OK**.
- 4. Under COM1 PROPERTIES: Enter 2400, hit Tab, 8, hit Tab, None, hit Tab, and 1.
- 5. Click on **OK**.
- 6. Check that the red light inside the window of the adapter is on.
- 7. Align the infrared windows and select PRIN.

Port Settings for all other models:

Baud Rate Data Bits Parity Flow Control Stop Bits 2400 8 None None 1

1) Click on $\mathbf{OK}.$ A red light should now be visible in the window of the RS-232C adapter.

2) To transfer the data, click on "Transfer". Then "Capture Text".

3) Enter a descriptive file name and click OK.

4) Press PRINT on the DuaLogR (see below). When all of the data has transferred click on "Transfer", "Capture Text", then "Stop".

The next time you run HYPERTERMINAL, you may select DuaLogR.ht. The HYPERTERMINAL program will automatically be configured as above. Then, if the "Connection Description" window pops up, just click on "Cancel".

TROUBLESHOOTING

When incorrect or random characters appear on your screen, move the adaptor away or shield it from other types of light sources such as fluorescent lighting, as they may interfere with the data transfer.

ACCESSORIES

Order Code	Part No.	Description
01X344202	01X344202	RS232 (LED) Interface Adaptor (for Meter to PC/Microprinter Communication)
ECMICROPRNTR01	01X230001	Serial Impact Microprinter (110 VAC)
ECMICROPRNTR02	01X230002	Serial Impact Microprinter (220 VAC)
ECMICROPRNTRO2CL	K 01X230004	Serial Impact Microprinter with Real Time Clock (220 VAC)
ECMICROPRNTRO1CL	K 01X230005	Serial Impact Microprinter (110/120 VAC) power adapter