ADAPTIVE   **TechMemo**   **#00-0002**

PRIORITY:	Normal
DATE:	January 11, 2000
TITLE:	ALPHA Solar RS 232 Connection
ECO REFERENCE:	
PRODUCT(S) AFFECTED:	ALPHA Solar series
SUMMARY:	This document shows how some owners of Solar series signs may choose to configure their signal wire installation through the available RS-232 (serial) port connection. 25- and 50-foot RS232 data cables (available through Adaptive) require a slight modification that allows direct connection between the terminal strip inside the sign's power supply enclosure and a PC's COM (serial) port.

Introduction

Direct connection of a single ALPHA Solar sign through the RS232 (serial) port requires a specially modified data cable. Wherever the maximum 50 foot distance limitation for serial port communication is not exceeded, this configuration remains a practical alternative to the standard RS-485/converter box interface.

NOTE: Because the signal strength of data communication through an RS-232 configuration "drops", or degrades, in direct proportion to increased distance, installed cable length should never exceed 50 feet. You may combine two 25-foot serial cables, or use one 50 foot cable, but please do not disregard the restrictions inherent to this type of installation by attempting to cable together extensions that exceed useful limits.
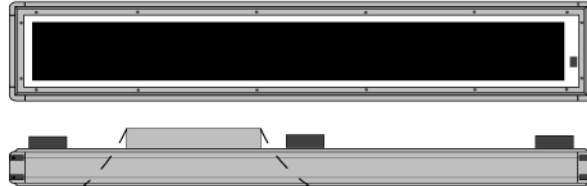
Required materials

Quantity	Description
See NOTE, above	6-conductor RS-232 data cable w/ferrite protector (part # 1088-8625, 25 foot/# 1088-8627, 50 foot.)
1	25 pin sub-D/to 6 position RJ11 adapter (part # 4370-0001C)
	9 pin sub-D/to 6 position RJ11 adapter (part # 1088-9108)

Installation

⚠ WARNING

**Hazardous voltage.
Contact with high voltage may
cause death or serious injury.
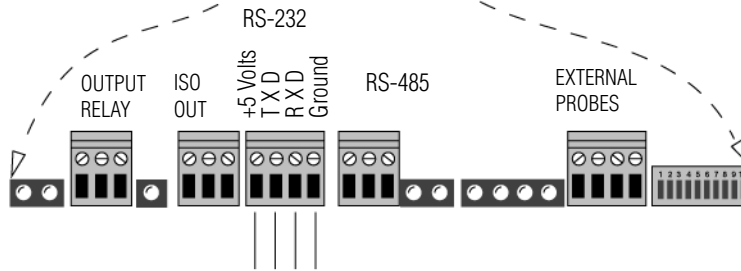Always disconnect power to sign
prior to servicing**

1. Before starting any work, disconnect power from the sign.

2. Unscrew the 8 fasteners at the bottom of the power supply enclosure and remove the access panel.

RS-232

OUTPUT
RELAY   ISO
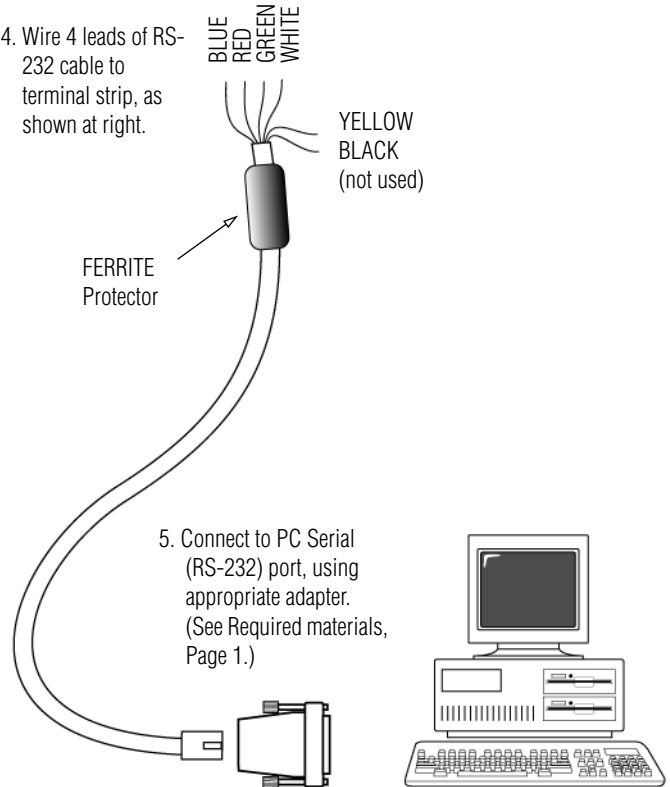OUT   +5 Volts   T X D   R X D   Ground   RS-485   EXTERNAL
PROBES

3. Cut off the jack from the end of the RS-232 cable that has the ferrite protector.

4. Wire 4 leads of RS-232 cable to terminal strip, as shown at right.

BLUE   RED   GREEN   WHITE

YELLOW
BLACK
(not used)

FERRITE
Protector

NOTE: the RS-232 cable may be routed through the coupling at the side of the power supply enclosure (to make a permanent installation), if required.

5. Connect to PC Serial (RS-232) port, using appropriate adapter. (See Required materials, Page 1.)

Further information

For ordering and technical questions, contact Customer Service at 1-800-558-7022.