SETUP MANUAL
FOR ANALOG TO DIGITAL DISPLAYS

INTRODUCTION: This document covers EDI Analog to Digital Display models:

 1. ED206-105-4D-N1
 2. ED406-105-4D-N1
 3. ED600D-105-4D-N1
 4. ED800D-105-4D-N1

I   SYSTEM OF TOOLS

Before starting setting up the sign collect these tools:

1. Desktop or Laptop computer with one of windows operating systems: Windows 98S, Windows 2000, Windows XP
   - CD tray, Comm. Port or USB port with a USB to Serial adapter.

2. Digital Multi Meter

3. One flat head 1/8"x 8" screwdriver and 1 Philips No. 2 screwdriver.

II   OPENING THE BOX AND INSPECTING THE SIGN:

Inside the box you will find these parts:

1. The sign with a 6' long, three conductor line cord installed.

2. RS232 2 conductors; DB9 female data cable installed. (See figure 1)

3. CD ROM containing the customer documentation and software.

Note: If any of above items is missing, or damaged call EDI Tech Support, at: 1-800-367-6056 ext 4.

Figure 1

III CONTENTS OF CD ROM

Insert the CD-ROM labeled "Customer Software & Documentation" in the CD tray of the computer and run it to see the files below:

1. User Manual

2. Wiring Diagram

3. EDI "A2DC Calibrator" software

Note: If any of above items is missing, or damaged call EDI Tech Support, at: 1-800-367-6056 ext 4.

IV INTALLING A2DC CALIBRATOR

Install the EDI "A2DC Calibrator" software from the CD- ROM by right clicking on the icon and copying it to the desired location on your computer.

V SETTING UP THE SIGN

1. Apply power to the sign(120vac):

The sign will powers up, displaying a random number (See figure 2)

Figure 2

If the display does not appear to power up, please call EDI Tech Support at: 1-800-367-6056 ext 4.

2. Open the endplate on the left side to access the terminal block (see figure 3).

3.   Connect 2 wires (Gauge 22 or 18 AVG) to the terminals "SIG +" and "SIG –"in the terminal block. The other end of the wires should terminate in your respective Current/Voltage source terminals (+/-).

4.   The sign will display the output of the Current/Voltage according to the pre calibration made at EDI.

Note: Make sure the polarity of the wires is connected with the "Positive" terminal on the Current/Voltage supply to the "SIG+" terminal and the "Negative" terminal on the Current/Voltage supply to the "SIG-"terminal.
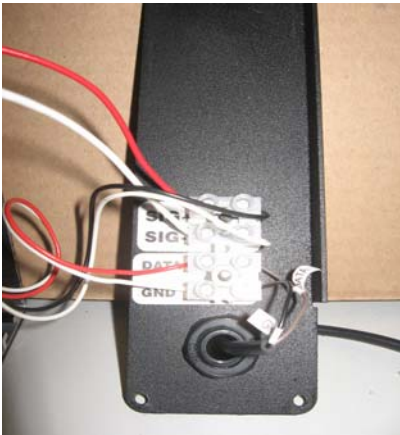

Figure 3

V.   RECALIBRATION

To change the calibration made at EDI, then, start the recalibration procedures below:

Note: An abbreviated version of these directions is available under the "HELP" menu in the A2DC CALIBRATOR software. (See Figure 5)

1.   Attach the female end of the 9 pin SUB-D serial cable provided with sign to a Comm. Ports on your computer. (See figure 4)

Figure 4

2. Open the "A2DC Calibrator" software installed earlier in your computer.
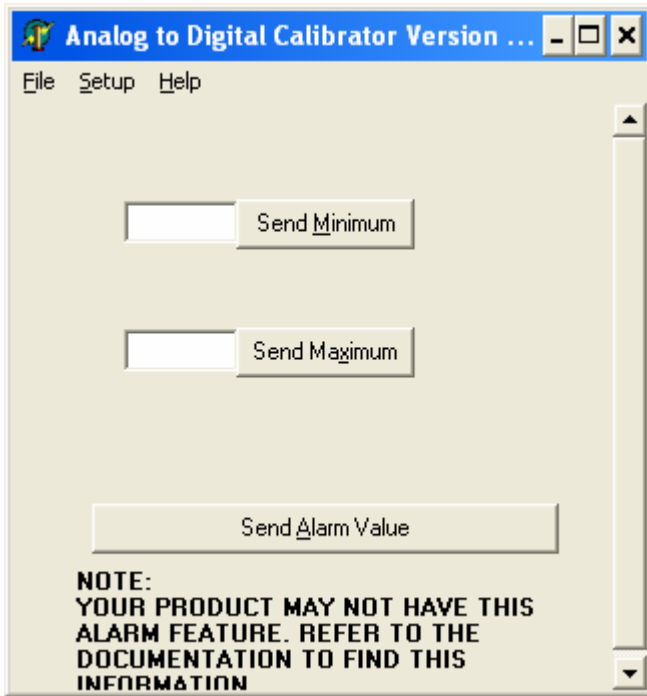   (See figure 5)

Figure 5

3. Set your Digital Multi Meter (DMM) to measure the DC Current from power source to the sign:
    -   Connect the positive probe of DMM to the positive terminal of the power source.
    -   Connect the other probe of DMM to the "SIG +" wire or terminal.
    -   (See figure 6)

    -   Connect the common terminal of the power source to the "SIG-" wire or terminal.

Figure 6

4. Select "Setup/ Communication Setup" in the menu bar to open the "Comport Setup" window. (See figure 7)
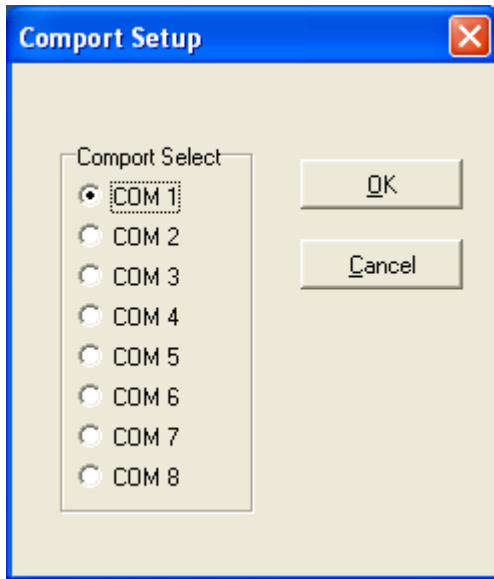
5. Select the Comm. Port you will be using.

Figure 7

6. Click OK to accept the communication settings.

7. Set the current from the power source to 4ma. (see figure 6)

8. Type "0" in the "Send Minimum" field from the computer keyboard and click on the "Send Minimum" button.(See figure 8)
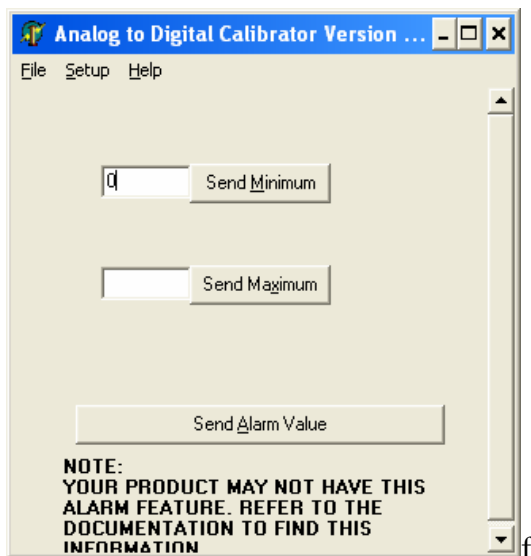

Figure 8

9.   The sign will change to "0". (See figure 6)

10.   Set the current from Current /Voltage source to 20ma. (See figure 9)

11.   Type "1000" into the "Maximum" field from the computer keyboard and then click the "Send Maximum" button. (See figure 10)

The sign will show the maximum value of "1000".
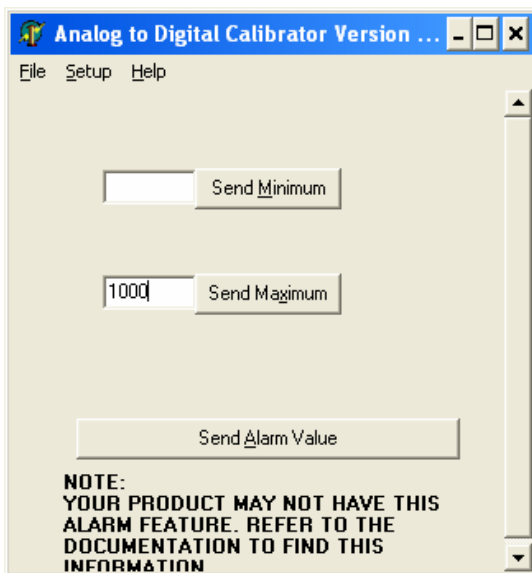

Figure 9

Figure 10

In this example the Analog to Digital sign was calibrated to display the minimum value "0" when the current is at the minimum value of 4ma and to show the maximum value "1000" when the current is at the maximum value of 20ma. The display will vary directly proportionate to the changes in current. The value on the display should change linearly as the current is changes. This means that the minimum value of 0 will be displayed when the current is at the set minimum of 4ma. The maximum value will be displayed when the current is at the set maximum of 20ma. At the halfway point between the minimum and maximum current inputs the display should show the value half way between the minimum and maximum values set. In the example above, "500" will be displayed when the signal input is 8ma.

VI.   BACK LABEL INFORMATION:

1. In the label on the back of the sign find this important information: (See figure 11)

   - Model Name: (example, ED206-105-4D-N1)

   - Job #: YYMMXXXX* (where YYMM = year and month of production,

     XXXX = 4 digit serial number. Example: 09010071
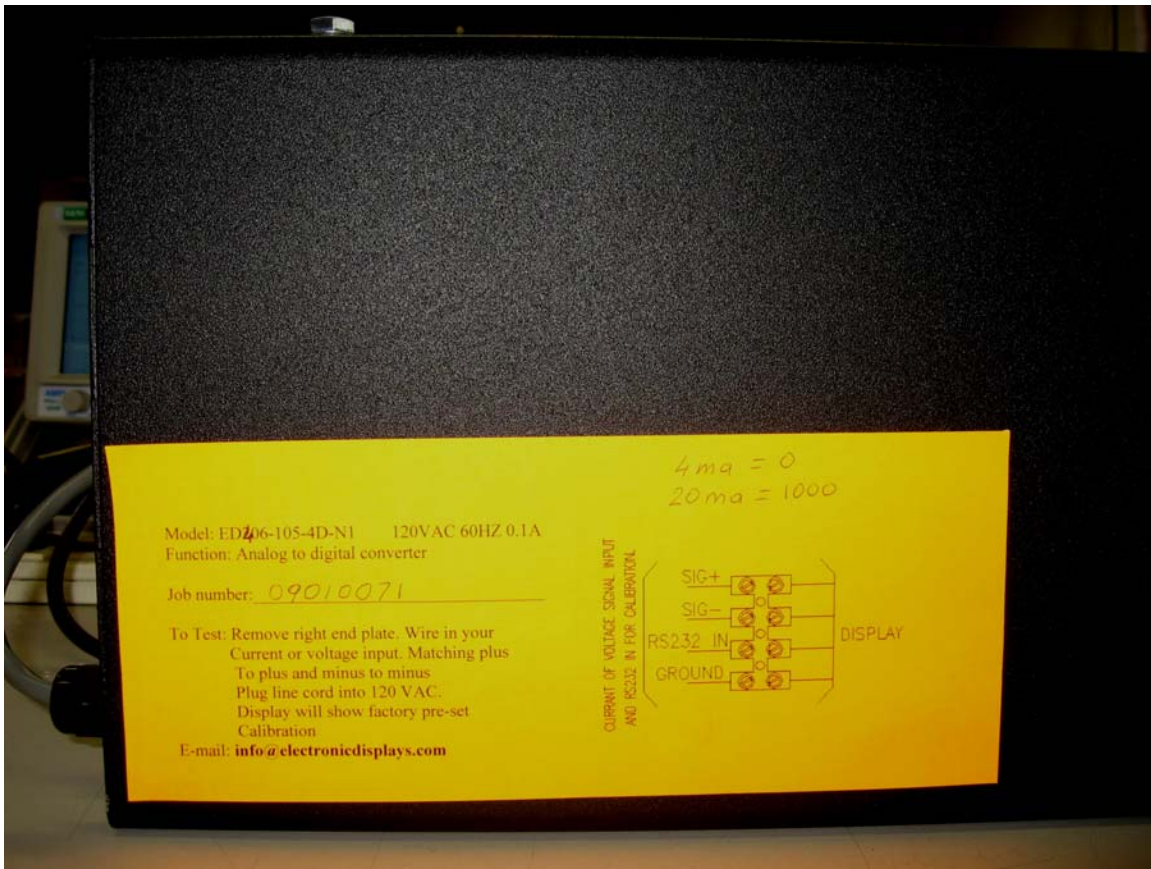
   - EDI set calibration : (example, 4ma = 0; 20ma = 1000)

Figure 11

VI   APPENDIXES

APPENDIX D: USB/COMM. PORT SERIAL ADAPTER.