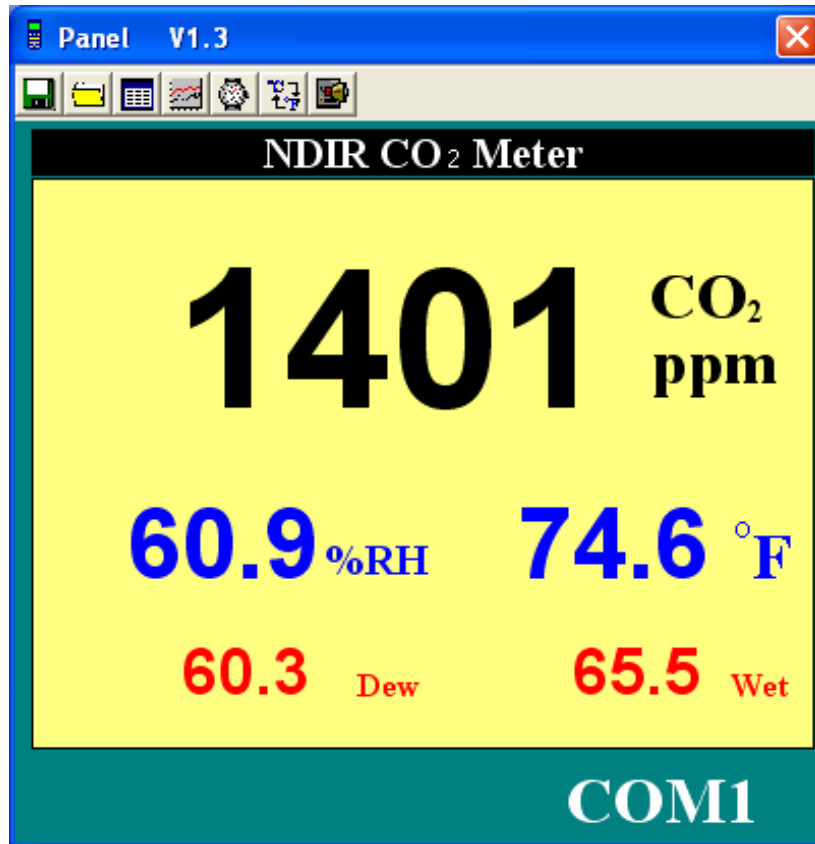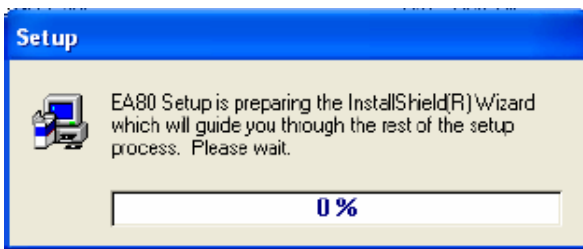# EXTECH INSTRUMENTS

Software User Guide

EA80 Indoor Air Quality Meter Datalogger

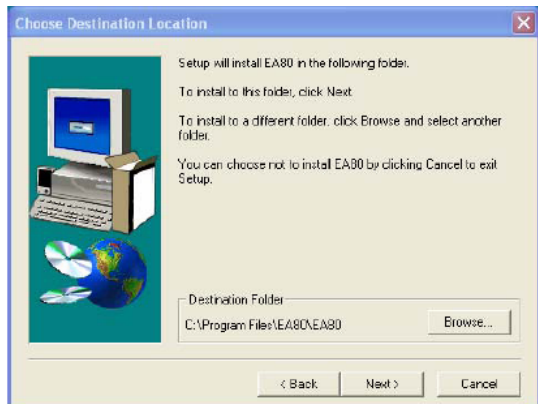# Software Requirements and Setup

- Start Windows^{TM} 95 / 98 / 2000 / or XP operating system
- Close all other applications
- Insert supplied program disk in the PC CD-ROM drive
  Wait for "Autorun" to start and follow the on-screen instructions
  (If "autorun" does not start, click "Start" then "Run". Type the drive letter
  and ": \Disk1\Setup.exe" and click "OK" .)

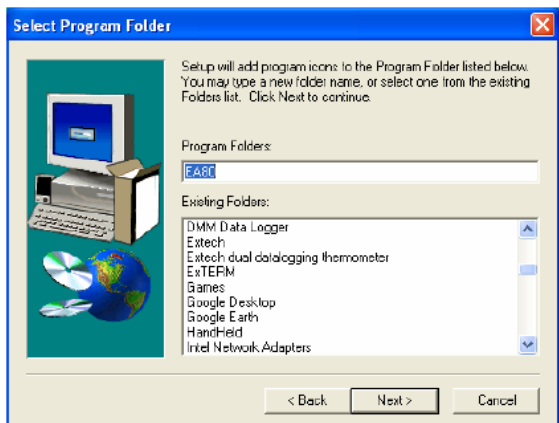 Setup program will run automatically.

Setup

EA80 Setup is preparing the InstallShield(R) Wizard which will guide you through the rest of the setup process. Please wait.

0 %

Click Next> button

Welcome

Welcome to the EA80 Setup program. This program will install EA80 on your computer.

It is strongly recommended that you exit all Windows programs before running this Setup program.

Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.

WARNING: This program is protected by copyright law and international treaties.

Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
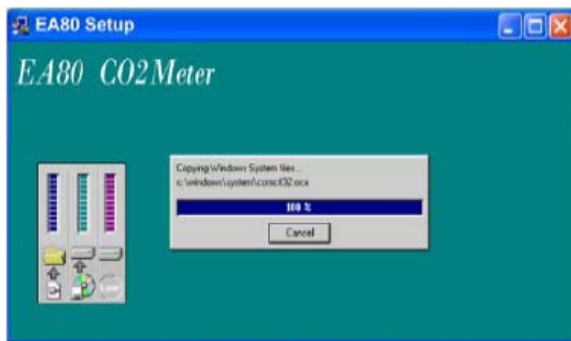
Next >   Cancel

Click Next> to use the default folder or

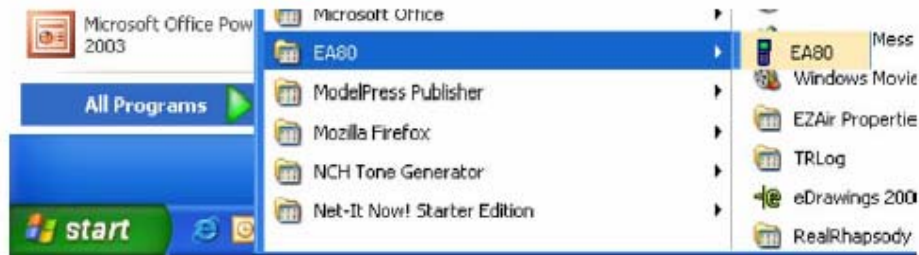Click Browse… to select a different folder

Click Next> button

Setup is complete.

Software Operation
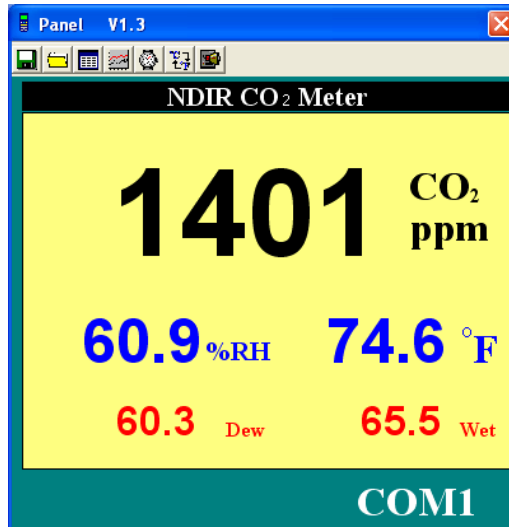
Run the software

Click "Start" from Start menu then move to "All Programs" (or "Programs") then "EA80" and then click the "EA80" icon.
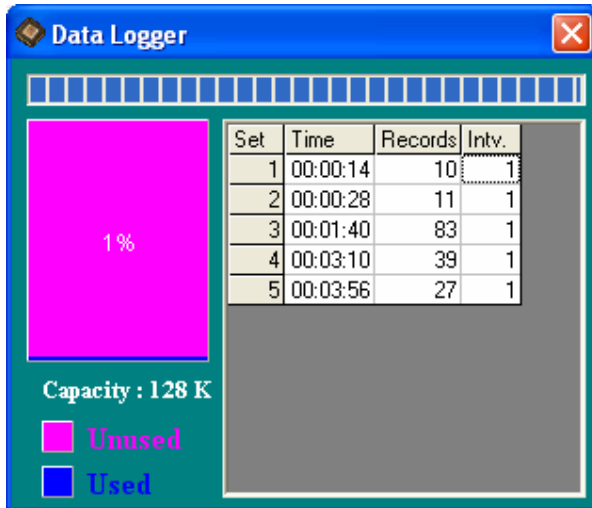

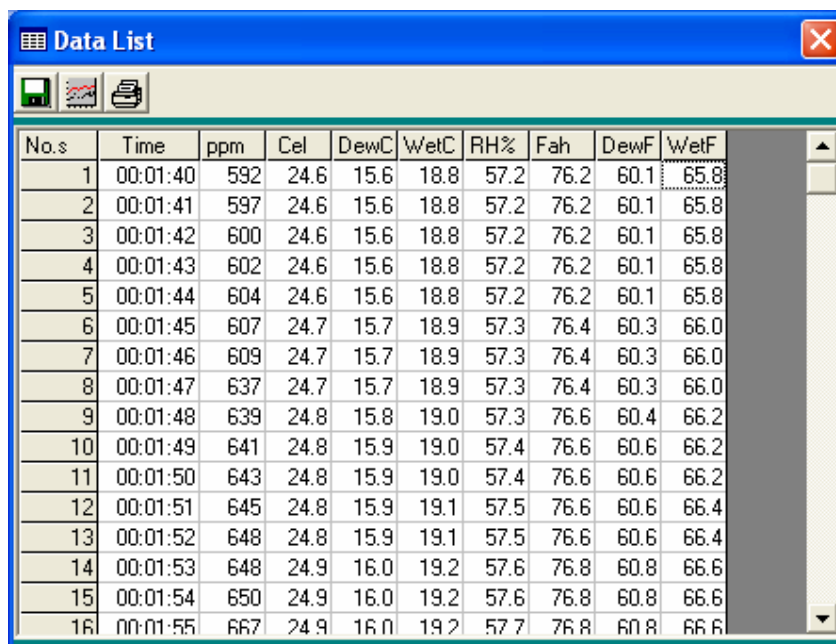Click an available COM port

The main software screen

Downloading Logged Data

Push and hold the WET button on the meter for about 3 seconds. The Data Logger window, shown below, will open.

Click on a SET number to view the logged data. In the window above, there are 4 sets from which to choose. The list below is an example of an opened set.
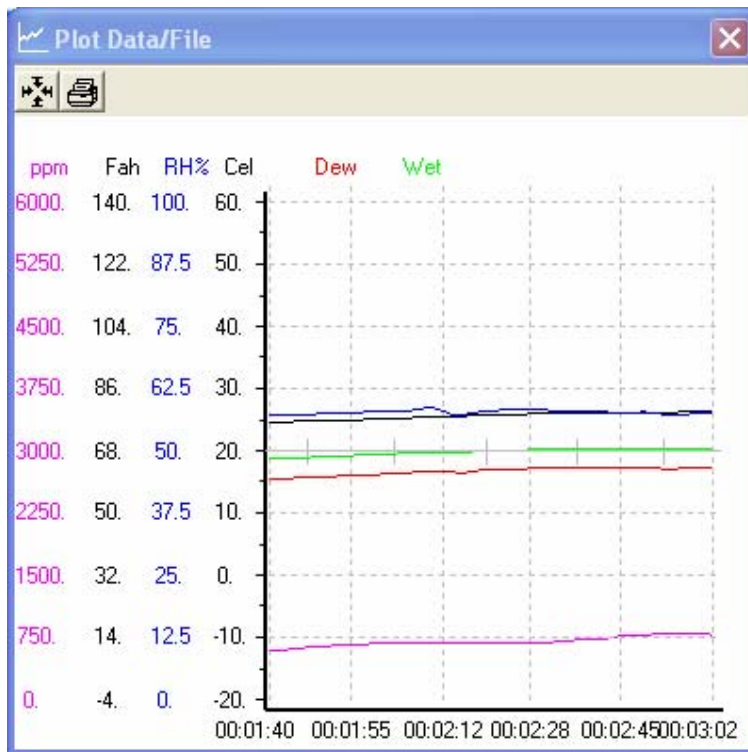

Click 💾 to save.

Graphing Data

Click to graph. The Graph will appear:

Click to edit plot range

Printing Data

Click to print.

Opening a Previously Saved File

Click the [image: folder icon] button. The Open File window will appear:
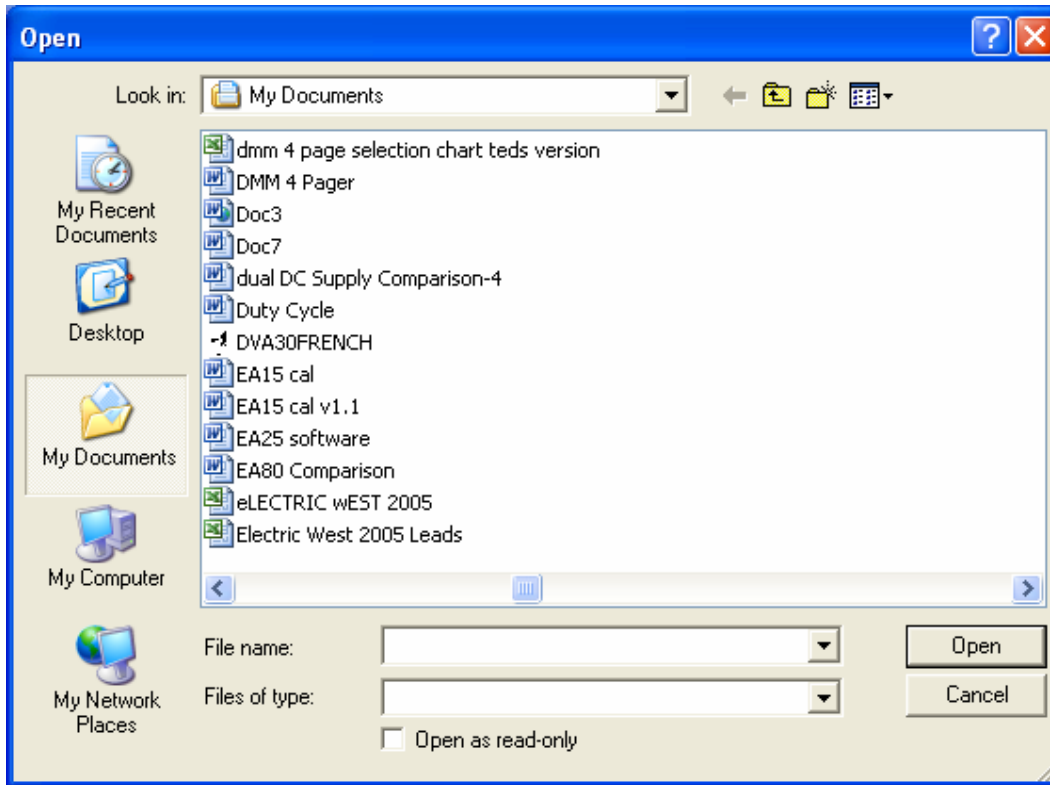
Select the file and then click the Open button.

Data Acquisition

In data acquisition mode the meter is connected to a PC.

Click ⌚ to set the sampling rate.
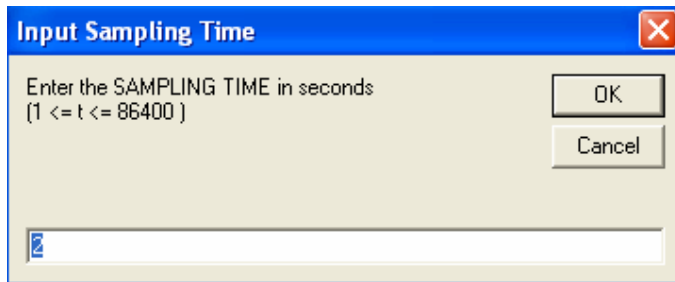
Enter a sampling time and click OK then click on ▦ to view data in table format or ☒ to graph.

Saving A File

Click the 💾 button. The dialog box shown below will appear.
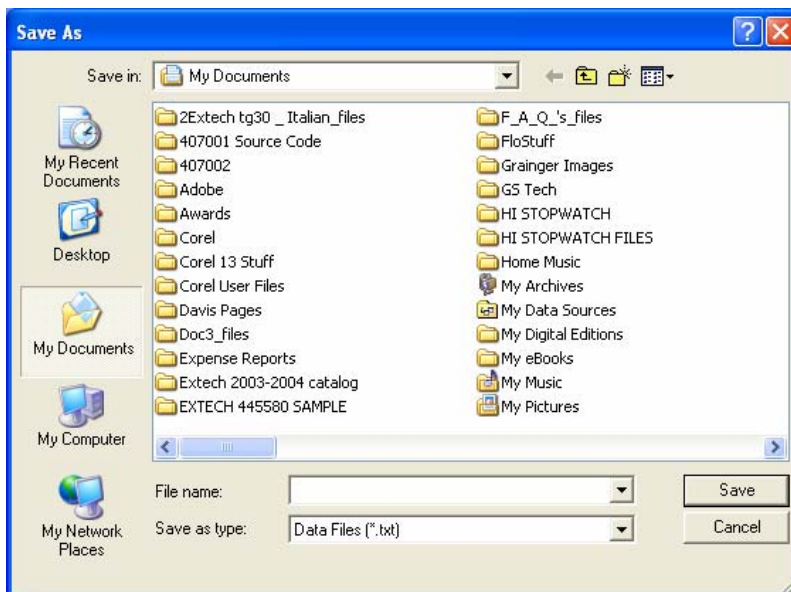
Input a file name and then click "Save" to begin saving data to the file.

Click the 🛑 button to stop recording.

Alarm Function in Data Acquisition

Click the ▣ button to bring up the alarm menu. Select the desired alarm. Fill in the high and low limits and click OK. The PC will sound an audible tone if the levels are exceeded.
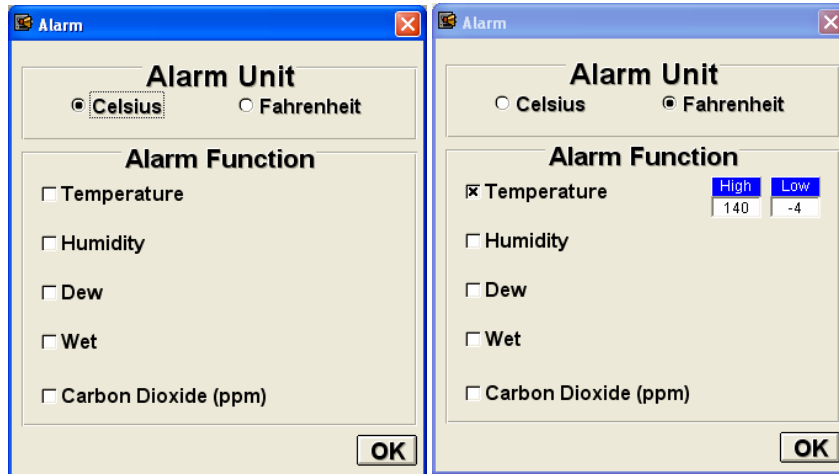
RS232 Wiring Hardware

PC Interface Cable

Meter side of PC Interface Cable

The RS-232 "phono" plug side of the PC Interface Cable connects to the meter's RS-232 phono jack. Refer to the diagram below for wiring information.
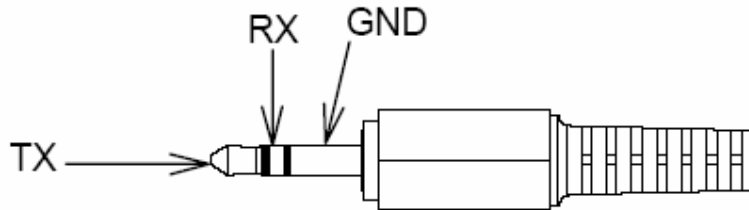
Computer's Serial Port side of Interface Cable

The RS-232 "DB-9" side of the PC Interface Cable connects to the PC's COM port. Refer to the diagram below for wiring information. Note that a SERIAL to USB Adapter may be used.
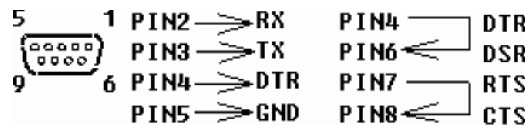
RS232 Settings

28800, N, 8, 1

RS232 Protocol

02	Flag	ppm	H	ppm	L	RH	H	RH	L	Cel	H	Cel	L	03

02：**Starting Byte**

Flag：（**Reserved**）

ppm（**H、L**）：**0~6000**

RH（**H、L**）**: 0~100**

Celsius（**H、L**）**: -20.0~60.0**

03：**LCD Ending Byte**

Calibration Used

0	N2_H	N2_L	AIR_H	AIR_L	FF

0：**Marking Byte**

N2：**SENSER N2 Value**

AIR：**SENSER CO2 Value**

FF：**Marking Byte**

Baud Rate：**28800 (15 bytes data / 0.25 seconds)**

Datalogging：**(Maximum: 99 sets)**

Head: AA 55 AA 55 AA 55 AA 55 AA 55 AA +Total Set+ Last Add+Any command

Record of 1st set+Time+INTV+ Any command…Data…Any command

Record of 2nd set+Time+INTV+ Any command…Data…Any command

After 256 bytes of data have been downloaded, the Meter waits for Any command from PC

The Last Recorded data…waits for Any command from PC

Hardware Requirements and Setup

PC Hardware Requirements:

- 486 PC or above with available COM port and CD-ROM drive

- 4MB available hard-drive space

PC Hardware Setup:

1) Switch off all power related to the PC
2) Connect the DB9 (female) end of the supplied RS-232 cable to available COM port
3) Switch on all related power
4) Connect the phono plug end of the RS232 cable to the meter

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Support line (781) 890-7440
Technical support: Extension 200; E-mail: support@extech.com
Repair & Returns: Extension 210; E-mail: repair@extech.com
Product specifications subject to change without notice
For the latest version of this User Guide, Software updates, and other
up-to-the-minute product information, visit our website: www.extech.com
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