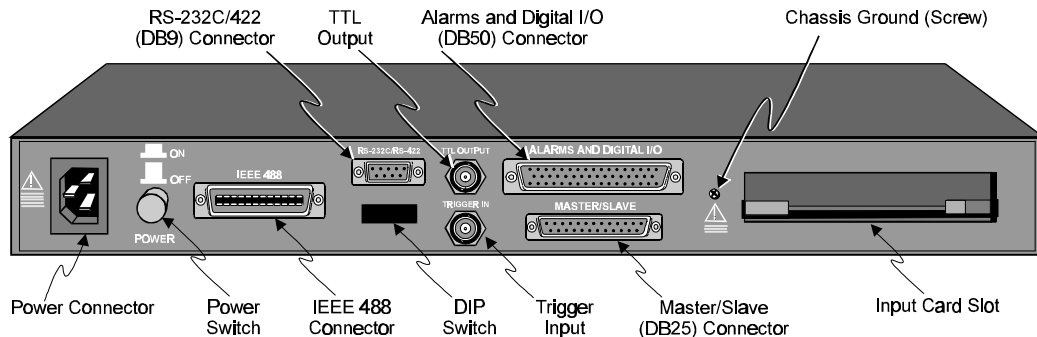# TempScan / MultiScan Quick Start

High-Speed Temperature & Voltage Systems

TempScan/1100 or MultiScan/1200 Rear Panel

Introduction

This *Quick Start* provides the quick steps to connect, configure, power-up, and operate a new TempScan/1100 or MultiScan/1200 unit for simple data collection. You can attempt a quick start under the following conditions:

- You will be connecting your TempScan/1100 or MultiScan/1200 to the RS-232 serial port on your PC, and configuring your TempScan/1100 or MultiScan/1200 for RS-232 serial operation.

- You will be using ChartView software in a Windows environment (no programming required).

For other setups or information not covered in this *Quick Start*, refer to your *TempScan/MultiScan User's Manual*.

Hardware Setup

### Step 1: Check the Voltage Setting on the Unit

Based on your order, your TempScan/1100 or MultiScan/1200 unit was set at the voltage indicated on the sticker located on the rear panel of the unit (near the power switch): 105-125 or 210-250 volts AC. Verify that the voltage value indicated on the sticker matches the voltage of your intended AC power supply. If you need to change the AC power line selection for any reason, refer to the chapter *Power & Assembly* in your user's manual.

Step 2: Check or Configure the DIP Switch Setting on the Unit

Note: TempScan/1100 or MultiScan/1200 is default configured for IEEE 488 port connection to a PC. To configure the unit for the following RS-232 serial operation, change the rear panel DIP switch settings as follows. Otherwise, to configure the unit for RS-422 serial operation or IEEE 488 operation, refer to the chapter *TempScan/1100 & MultiScan/1200* in your user's manual.

The DIP switch is located on the rear panel of your TempScan/1100 or MultiScan/1200 unit. One possible RS-232 serial setting is indicated in the following figure and table. We will use this serial setting for this *Quick Start*. For alternative serial settings, refer to the chapter *TempScan/1100 & MultiScan/1200* in your user's manual.

| Selection	Microswitch	Setting
COMM SELECT	1	1- RS-232
HANDSHAKE (H/S)	2,3	00 - No Handshake
PARITY	4,5	00 - No Parity
BAUD RATE	6,7,8	101 - 9600 Baud
CALIBRATION	9	0 - Disabled
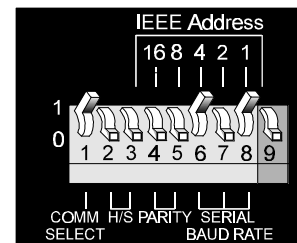
DIP Switch Settings for RS-232 Serial Operation

Step 3: Connect the Unit to Your PC

Note: Prior to serial connection, make sure that a serial (COM) port on your PC is available and properly configured to match the DIP switch settings above in Step 2. Do this by navigating to the Windows *Control Panel > System > Device Manager* tab, then clicking on *Ports (COM & LPT)*.

Use a CA-47 serial communication cable (or equivalent) to connect the TempScan/1100 or MultiScan/1200 RS-232/RS-422 serial port to an available serial port on your PC. The TempScan/1100 or MultiScan/1200 end of the CA-47 cable has a DB9 connector. The PC end has 2 connectors (DB9 and DB25).

PC Serial Port
(Serial
Communication
Board shown)

Serial
Communication
Cable
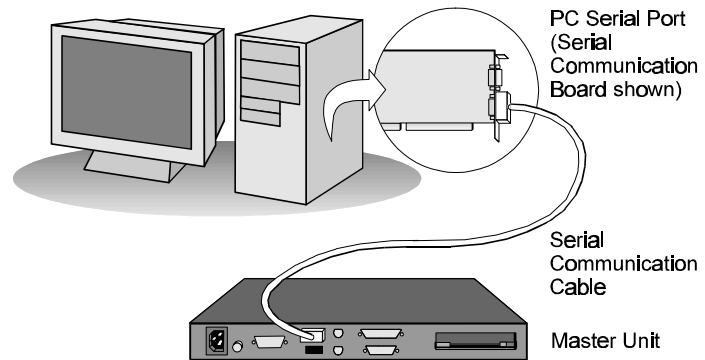
Master Unit

RS-232/RS-422 Serial Connection
(PC to Master Unit)

Step 4: Connect the Channel Inputs on the Scanning Card

CAUTION
Use approved ESD precautions, including static-free work area and grounded wrist strap, when handling circuit boards and electronic components. Failure to do so could cause equipment damage due to electrostatic discharge.

Insert the appropriate wires into the selected screw-terminal sockets of your scanning card to make the channel input connections. Each scanning card contains screw-terminal blocks for quick and easy input connections. Labelling is provided on the card for simple channel identification. If necessary, use the several tie-down holes provided for the tie-wrap strain reliefs. These reliefs are used to keep wires from all the channels organized and manageable before they exit the rear panel of the unit.

Note: When making differential voltage measurements, you should insure that one of the common terminal blocks is connected to the common of the unit being measured.

Step 5: Install the Scanning Card into the Unit

CAUTION
Do not mix TempScan/1100 and MultiScan/1200 scanning cards within the same system. TempScan/1100 scanning cards are designed for and supported only by the TempScan/1100 master unit. Likewise, MultiScan/1200 scanning cards are designed for and supported only by the MultiScan/1200 master unit. Otherwise, operating errors or equipment damage may occur.

When the channel input connections on the scanning card are ready, make sure that the power switch on the TempScan/1100 or MultiScan/1200 unit is in the "Off" (*0*) position. Plug the CA-1 power cable into the unit and then into the proper AC power outlet. *Do not connect the power lines to any devices connected to the scanning card inputs*.

Install the scanning card into the *INPUT CARD* slot of the unit. After the scanning card is installed, connect any power lines to those devices connected to the scanning card inputs. Connect any other cables.

Step 6: Apply Power to the System

At this point, the TempScan/1100 or MultiScan/1200 system can be powered up.

Turn on your PC. Next, turn on the TempScan/1100 or MultiScan/1200 unit by flipping its power switch to the "On" (*1*) position. Then, turn on any applicable devices connected to the scanning card inputs.

The *POWER* LED indicator on the TempScan/1100 or MultiScan/1200 front panel should light up. If the *ERROR* LED indicator starts flashing, refer to the chapter *Power & Assembly* in your user's manual, for details on power-up activation errors.

Software Setup & Startup

## Step 7: Install the ChartView Software in Windows

1. Make a back-up copy of the ChartView Release Disks.

2. Make sure that your PC fulfills the following computer requirements for successful software installation:

    - Windows 3.X or Windows 95

    - For Windows 3.X, a computer system with at least a 4x86 processor, and at least 8 MB of RAM is required; 16 MB of RAM is recommended for overall satisfactory performance.

    - For Windows 95, a computer system with at least a 5x86 or Pentium® processor, and at least 16 MB of RAM is required; 32 MB of RAM is recommended for overall satisfactory performance.

3. If your PC does not fulfill the above requirements, perform the necessary hardware upgrades, or select another PC for software installation.

    If your PC fulfills the requirements, continue to Step 4.

4. Boot up your PC according to the manufacturer's instructions.

5. Place the ChartView Back-Up Release Disk 1 into the floppy drive from which you are installing (typically drive **A:**), and run the **A:\SETUP.EXE** program, or double-click its icon.

6. Follow the directions in the on-screen dialog boxes. When you have successfully completed the software installation, you can navigate to the new *ChartView* program group, and check that all of the programs are present.

Step 8: Startup ChartView & Collect Data

1. From Windows 3.X or Windows 95, double-click on the ChartView icon, or select the ChartView option from the ChartView program group. The *ChartView Startup* dialog box appears. Continue to Step 2.

2. The *ChartView Startup* dialog box presents you with two options: *Select Device* or *Load File*. Choose *Select Device*. The *Select Interface* dialog box appears.
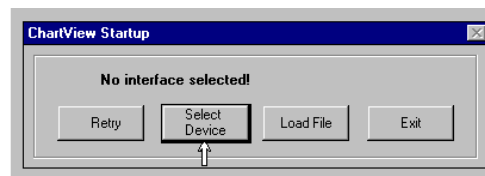
3. The *Select Interface* dialog box presents you with three options: *IEEE 488, RS-232,* or *Simulated Instrument*. Select *RS-232* to match the configuration of your TempScan/1100 or MultiScan/1200 system. Click OK.
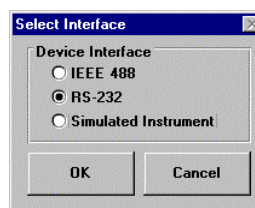
4. When you choose *RS-232*, the *RS-232 Setup* dialog box appears. Provide information regarding *Comm Port, Baud Rate, Parity, Handshaking, and Modem*. Make sure that this information matches the current hardware configuration of the DIP switch settings.

   When the dialog box information is complete, click OK.

    Note: For alternative serial settings, make sure that you provide information for this dialog box matching the hardware configuration of the alternative DIP switch settings.
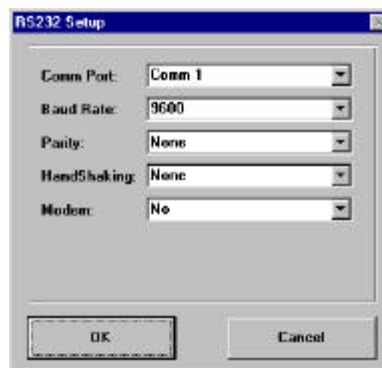
5. At this point, the *Chart Setup Wizard* dialog box opens.

6. In the *Automatic Chart Creation* portion of the *Chart Setup Wizard* dialog box, click on the *Create Charts* button to automatically set up the default chart display. Note that once your chart setup is complete, you can always go back and edit the setup. Next, the *Setup Parameters* dialog box opens.
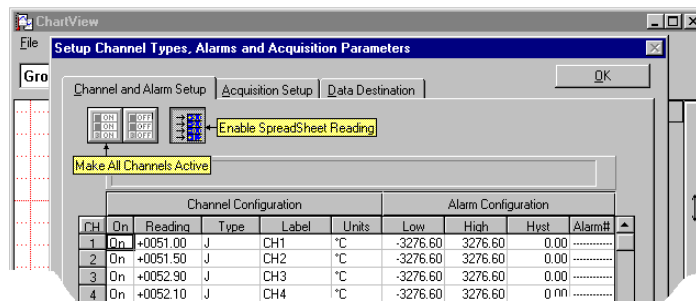
7. Click on the *Make All Channels Active* button to enable all channels. Next, click on the *Enable SpreadSheet Reading* button to activate the display scanned data in the *Reading* column. Then, click OK to accept the settings. Note also that once this parameter setup is complete, you can always go back and edit the setup.

    This time, the *ChartView Main Window* opens. At this point, startup is complete.
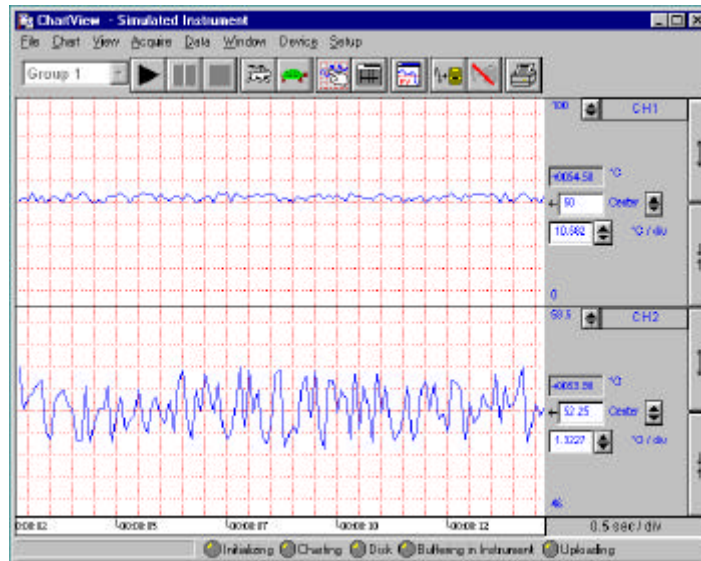
ChartView Main Window

8. To start and stop data collection, click on the *Start Charts* (þ) and *Stop Charts* (à) buttons, respectively.

    Charts will begin and end scrolling, accordingly. Feel free to continue your own navigation and exploration throughout the application to gain familiarity with ChartView.

For more information on ChartView, refer to the chapter *ChartView* in your user's manual.