ChartScan/1400

Quick Start

Portable Data Recorder



Before you get started

verify that you have the following items.

- ChartScan/1400
- Data Acquisition CD (8.1.2 or higher)
- Monitor: SVGA, 1024 x 768 screen resolution
- Windows XP users: PC with Intel[™] Pentium [or equivalent]; 1 GHz 512 MB memory; 10 GB disk space
- <u>Windows Vista users:</u> PC must be *Windows Vista Premium Ready*

IMPORTANT ! Software must be installed first!

Step 1 - Install Software

- 1. Close all running applications on the host PC.
- Insert the Data Acquisition CD (8.1.2 or higher) into your CD-ROM drive and wait for the PC to auto-run. An *Opening Screen* will appear. If AutoRun is disabled: (a) *right click* Windows Start menu, (b) select *Explore*; and (c) *double-click* MasterSetup.exe. As an alternative to using the CD, you can download software from: www.mccdaq.com/software.
- 3. Click the **<ENTER SETUP>** button. Note: If you are downloading software from our website, follow instructions provided there.
- 4. From the hardware selection screen [which follows a licensing agreement], select the **ChartScan/1400**; then follow the on-screen instructions.
- **NOTE**: To enable all *ChartView* features: (a) From *ChartView's* main window, open the File pull-down menu, (b) select Authorization, (c) enter C3523DFA6C0A in the dialog box and apply the code.

Step 2 – Check Hardware

- 1. Verify that the voltage stated on the sticker [near the power switch] matches the voltage of your intended AC power supply. If you need to change the voltage, refer to your user's manual.
- 2. Check the DIP switch, located on the rear panel. It should match the default setting as indicated in the figure. Your user's manual discusses setting options.
- 3. Signal conditioning cards are pre-installed at the factory. However, if you need to remove or install a card, refer to your user's manual.

Step 3 - Connect to the Host PC & Apply Power



ChartScan/1400 is pre-configured for serial port connection to the host PC. For IEEE 488 connection refer to the *Hardware Installation* section of your user's manual. For USB connection refer to the associated Quick Start document (QS RS-232_to_USB_Interface.pdf). The pdf is included on your Data Acquisition CD (rev 8.1.2 and higher). A *RS-232 to USB Interface Adapter Kit* p/n CA-232-USB-KIT (available from Measurement Computing) is required for USB connection.

Use a CA-47 cable (or equivalent) to connect the unit to your computer. The ChartScan-end of the CA-47 cable has a DB-9 connector. The computer end has 2 connectors (DB9 and DB25). Other crossover-type cables can be used if wired as shown in the following figure.

DB25	Computer DB25	ChartScan DB9	DB9	Computer DB9	ChartScan DB9
	TXD 2	2 RXD		RXD 2-	2 RXD
	RXD 3	3 TXD	23 5	TXD 3	^ 3 TXD
000000000000	CTS 5-	/5 GND		GND 5	5 GND
	GND 7	─7 RTS	78	RTS 7-	7 RTS
	RTS 4	8 CTS		CTS 8-	^_ 8 CTS

Interface Wiring Diagram

ChartScan is typically powered from a standard AC outlet. To power the unit:

- 1. Make sure ChartScan's power switch is in the "0" (OFF) position.
- 2. Plug power cord CA-1 into ChartScan's power connector. Plug the other end of the cord into an appropriate AC receptacle.
- 3. Turn ChartScan's power switch to the "1" (ON) position. The *Power* LED should come on.
- **Note**: At initial power-up, the unit performs automatic self-tests to ensure it is fully functional. Rear panel LEDs will indicate errors, should any occur. Error messages are discussed in Chapter 1 of the user's manual, as well as in Appendix G. The self-test takes approximately 5 seconds to complete; after which, ChartScan/1400 is ready for normal operation.

Step 4 – Connect Input Signals

Connect channel inputs to your signal conditioning cards. Depending on the type(s) of cards used, your connections will be made via: terminal strip, mini-plug, BNC, and/or safety jack input connectors.

ChartScan has eight digital input lines and thirty-two digital output lines available on the rear panel DB-50 connector.

Each digital output line will drive five standard TTL loads. All digital input lines are one-eighth (0.125) TTL loads. All inputs are protected against damage from high static voltage. Normal precautions should be taken to limit the input voltages to the range of 0.0 to 5.3 volts. All digital I/O lines are referenced to digital ground.



CAUTION

Do not exceed the 0.0 to 5.3 volts input levels described above. Exceeding these levels may damage the ChartScan/1400 and void the warranty.

Step 5 – Start ChartView, Configure the System, and Collect Data

- 1. From Windows desktop, *double-click* on the *ChartView* icon.
- 2. Choose the <Select Device> button.
- Select RS-232 and click <OK>. Click <OK> again.
 Note: For changes from default, refer to Chapters 4 and 7 of the ChartScan/1400 User's Manual.
- 4. In the *Automatic Chart Creation* portion of the window, click <Create Charts> to automatically create a chart display configuration. Note that a *Channel and Alarm Setup* dialog box will appear above the main window.
- 5. Click the <Make All Channels Active> button to enable all channels.
- 6. Click the <Enable SpreadSheet Reading> button. Click <OK>.
- 7. Push the <Start Charts and Indicators> button. Charts will begin scrolling.



Reference Notes:

Documents are automatically installed onto your PC's hard-drive as a part of product support at the time of software installation. The default location is the **Programs** group. It can be accessed via the *Windows Desktop Start Menu*.



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