CORD-XL™
Dual-Channel Electronic Chart Recorder

Dual Analog Inputs
The CORD-XL is capable of simultaneously monitoring and recording DC or AC voltages on two electrically isolated input channels. Input ranges are user configurable 100 mV, 10V, 100V.

Stray Current Detection
Ideal for detecting and measuring stray currents produced by rail transportation systems.

Real-Time Readings
The CORD-XL can monitor, display, and graph input voltages in real time. The graph can be captured and saved for further analysis.

Programmable Dual-Mode Chart Recording
The CORD-XL can be configured to standard and scheduled recording. In the standard chart-recording mode, the CORD-XL will start recording when enabled by computer or when a momentary switch is pressed. It will record on one or both channels for a programmable duration. In the schedule recording mode, it will start and stop recording at programmable date and time. Recording rates are configurable from 10 readings per second to 1 reading per hour.

Large Memory Capacity
The memory of the CORD-XL can store up to 1,080,000 readings. Memory can be segmented to store data from multiple tests.

Communication
Communication with the CORD-XL is achieved using RS232 serial connection. RS232 communication requires a cable to be connected to the CORD-XL.

Convenient Size and Design
The CORD-XL is small enough to fit inside 3-inch conduits that are often used for test stations.

Environment Proof
The CORD-XL is completely sealed, and has been designed to operate in hostile environments.

CORD-XL Software (Supplied with the CORD-XL)
Key Features:
- Program the CORD-XL recording session
- Prepare and save recording sessions on the PC, then transfer to the CORD-XL
- Transfer data from the CORD-XL to the PC
- Graphing Functions:
  - Superimpose plots from two sites
  - Split graphs
  - Zoom in/out
  - Graph Ch. 1 versus Ch. 2
  - Real time graph/display of the two channels
  - Invert the y-axis
  - Distribution chart
  - Data smoothing
  - Select readings to view
  - Show data
  - Print graphs

Specifications subject to change without notice
Specifications:

Analog Inputs
2 analog inputs
Electrically isolated (400 V)

Recording Speed
Fully programmable
Minimum 1 reading per hour
Maximum 10 readings per second

Input Ranges
Channel 1 and 2
±0.1, ±10, ±100 VDC
Channel 2 only
±0.1, ±10, ±100 VDC and VAC

Input Accuracy (at 25 ºC)
VDC (30 readings/minute or slower): ± 0.05% F.S., 
± 3 counts
VDC (faster than 30 readings/minute up to the 
maximum of 10 readings/second): ±0.2% F.S., 
± 3 counts
VAC (30 readings/minute or slower only): ± 2% F.S., 
± 3 counts

Input Resolution
0.01 mV (0.1 V range)
0.001 V (10 V range)
0.01 V (100 V range)

Input Impedence
22 Mohms (10 V & 100 V ranges)
35 Kohms (0.1 V range)

50/60 Hz AC Rejection (when measuring DC 
inputs)
55 dB, typical, when recording at 30 readings/minute 
or slower
20 dB, typical, when recording at faster than 30 
readings/minute

Memory
Up to 1,080,000 readings
(Data retained when batteries are removed)
CORD-XL software displays percent 
memory used

Power
2 X AA batteries (Alkaline recommended)
Alkaline up to 55 ºC
Lithium up to 70 ºC
NiMh up to 55 ºC (rechargeable)
Battery voltage displayed using 
CORD-XL software

Operating Temperature
-20 to 55 ºC with Alkaline batteries
-20 to 70 ºC with Lithium batteries
-50 to 70 ºC storage

Size
1.75 in. x 12 in. cylinder
4.5cm x 30.5 cm cylinder

Weight
12 oz. (344 g)

Real Time Clock
Setting retained when batteries are removed
Sets to match the computer using CORD-XL 
software

Red/Green Status LED
Provides visual feedback of:
-At power on
-Normal/low battery
-Each minute while recording
-Recording ready to start
-Recording stopped
-Communication active/disconnected

Ordering Information:

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CORD-XL</td>
<td>Dual-Channel Electronic Chart Recorder, analog input &amp; serial cables, CORD-XL PC software, carrying case, RS-232 to USB converter cable, &amp; user manual</td>
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