UDI-8020 / UDO-8020
MULTI-CHANNEL HIGH BIT RATE USB 2.0
PC RECORDERS/REPRODUCERS + DYNAMIC SIGNAL ANALYZERS

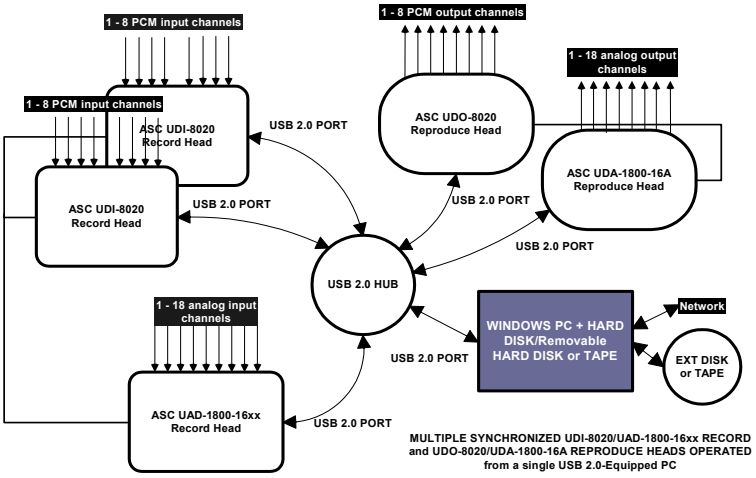
For Ground Station/Test Cell/Telemetry & PCM Sensors:

OVERVIEW

- A Unique Low-Cost, High-Accuracy, Multi-Channel Instrument that Combines 160 Mbps PCM Digital Data Recorder/Reproducer with Real-Time Reconstruction and Dynamic Signal Analyzer
- Utilizes an IBM-compatible Windows PC for All Data Storage, Configuration, and Control.
- UDI-8020: 8-Channel Serial/Parallel PCM Recording PLUS Real-Time Reconstruction, Dynamic Signal Measurement and Analysis
- UDO-8020: 8-Channel Serial/Parallel PCM Reproducing PLUS Real-Time Reconstruction, Dynamic Signal Measurement and Analysis
- Expands from 8 – 32 Asynchronous Serial/Parallel Record/Reproduce Channels on a single USB 2.0 – equipped PC
- Disk-based True Random Access: Fast Locate, Simultaneous Independent Record & Reproduce
- High-Resolution (0.1us) Time Stamping + Event Marking
- Reconstructs numerous word, sync, and frame formats including IRIG 107; IRIG 106 Chapter 10 as option
- Easy Setup and Operation with any USB 2.0-equipped Windows XP PC – Plug & Play
- Full Built-in-Test; Maintenance-Free; Full 3-year International Warranty.

FEATURES: UDI-8020 USB 2.0 Record Head & UDO-8020 USB 2.0 Reproduce Head

- Multi-Channel, Variable Rate, Asynchronous, Serial/Parallel PCM Recording/Reproducing/Data Reconstruction & Real-Time Analysis
- 2 kbps – 20 Mbps x 8, 4Kbps – 40 Mbps x 4, 8 Kbps – 80 Mbps x 2, or 160 Mbps x 1 PLUS 2x IRIG A/B/G Time Code or Voice Channels in a single instrument (Maximum 192 Mbps data rate)
- Serial: NRZ + 0° Clock or biphase, RS-422 Differential, TTL, or LVDS input
- Parallel: 8-bit wide TTL + TTL Clock
- 19" 2U Form Factor
- Expands Easily to 16/24/32 or more Record/Reproduce Channels using Low-Cost USB 2.0 Hubs and/or additional PC USB 2.0 ports
- Easily combined with ASC's Multi-Channel Analog Instrumentation PC Recorders (UAD-1800-16it, UAD-8300-16it) for mixed Analog & Digital Recording and Dynamic Signal Analysis on a single PC!
- Precision 100 ns resolution Time Stamping & unlimited Event Marking on acquired data
- Powerful PC User-Interface: ASC MC-PCR® software, with familiar Windows GUI, is provided for all configuration, monitoring, measurement, analysis, and control. Any Windows-recognized storage device of sufficient bandwidth (internal / external disk(s), RAID, tape cartridge, DVD-RW, etc.) may be utilized for data storage/retrieval. Simultaneous record to BOTH disk and tape (for real-time data backups) is also possible.
- Simple Data Preview/Record/PC-Replay/Reproduce operating modes
- Real-time Time-Series/Histogram/FFT and Bar Magnitude displays on reconstructed data; user-specified recorded channels
- Built-in measurements and analysis include FFT spectrum/cepstrum with selectable windowing, averaging, post-filtering, and resolution BW
- Easy Interface with MatLab, MathCad, and C-programs

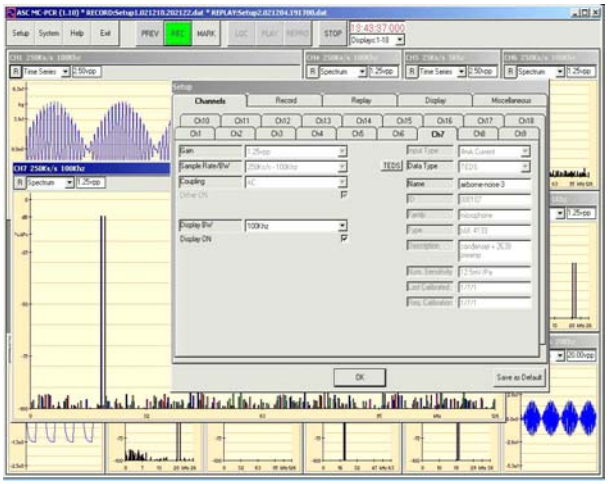


APPLICATIONS

Multi-channel, high bit rate digital data acquisition, recording, reconstruction, reproduction and analysis in automotive, industrial, aerospace, medical, and engineering applications including Noise, Vibration, Acoustics, Force, Strain, Temperature/Pressure, Flow measurement, power distribution, & Environmental Test; Telemetry and Ground Station Recording; Digital and Smart PCM Sensors; Mixed digital/analog systems offering high accuracy, bandwidths, & channel counts.

With the UAD-1800-16/UAD-8300-16/UDA-1800-16 series Multi-Channel Wide-Band 16-bit Analog PC Recorders/Reproducers and UDI-8020/UDO-8020 series Multi-Channel Digital PC Recorders/Reproducers Advanced Systems Concepts offers a wide range of flexible, cost-effective, easily-tailored systems with direct interfacing to the various analog & digital sensor types available, including the latest IEEE 1451.4 2-wire current-powered Smart Sensors, Smart PCM sensors, and Telemetry.

ASC MC-PCR® SOFTWARE



Windows XP-compatible ASC USB 2.0 Multi-Channel PC Recorder® user interface and operating software included with purchase. The ASC MC-PCR® software provides full analog/digital channel configuration, data preview/record, replay/reproduce control, time/event triggering, monitoring (including channel overload indication/alarm), and time-series, histogram, and power spectrum displays, in real-time during data acquisition, in PC-replay (on-screen), or in reproduce. Individual channels can be post-filtered with selectable cutoffs, and differentiated or integrated prior to display. (Additional processing options including cross-power spectrum and correlation are available – please contact ASCI). The MC-PCR® GUI allows user-configuration of number of channel "windows" to display per screen "page" (up to 18), as well as real-time re-sizing of one or all windows, of display type (histogram/time series/spectrum, etc.) and of processing options as requirements dictate.

The ASC MC-PCR® software also provides rapid data location capabilities by user-entered time stamp or event number, generally <1s for random-access disk-based storage, as well time-base modification in replay/reproduce.

On-line help and operating manual included. Telephone installation/operating support available from ASC, or in-country representative.

To learn more about our comprehensive portfolio of high-performance data acquisition products, please contact your Advanced Systems Concepts Representative or call 800 775 0544. Visit our web site at http://www.advanced-systems-concepts.com

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