KROHN-HITE CORPORATION

"Quality" in Test and Measurement Since 1949

MODEL 39000

210-Channel Hydrophone
Signal Conditioning Filter/Amplifier System

- **Mix up to 210 Hydrophone Signal Channels**
- **Remote LAN/RS232/Manual System Control**
- **Response:** 8-Pole Elliptic, 130dB.
- **Customer Defined Fixed Frequency:** 1kHz to 100kHz.
- **Customer Defined Function:** Low-Pass.
- **Input (pre-filter) Gain:** 0dB to 40dB.
- **Output (post-filter) Gain:** -20dB to 0dB.
- **Optional 16 Channel Cross-Point Switch**

DESCRIPTION

The Krohn-Hite Model 39000 Hydrophone Analog Signal Conditioning/Filter System provides up to 210 channels of fully programmable hydrophone signal conditioning. The 39000 15-slot rugged mainframe has a variety of high performance filter/amplifier plug-in cards to choose from with characteristics such as low-pass and band-pass functions, as well as, three traditional filter response types of Butterworth, Bessel and Elliptic. The 39000 System is ideal for conditioning low-level voltage signal inputs in front of high-resolution data acquisition systems.

SC390-EL8 PLUG-IN FILTER CARDS

The SC390-EL8 Plug-In Elliptical Filter/Amplifier Card is a two channel programmable filter/amplifier card that is easily installed into the 39000 chassis. Each card provides two channels with a choice of 4 and 8-pole Butterworth or Bessel filter and 8-pole Elliptic, with programmable/manual gain from -20dB to 40dB in 10 steps. Each filter card fixed cutoff frequency is customer defined between 1kHz to 50kHz.

Three inputs are provided on each channel. Input A, which can be programmed for single-ended or differential operation and Input B which is an auxiliary channel and Input C which is a test input that can be used to test any one or all channels when needed. Inputs and outputs are BNC connection.

PROGRAMMING

All communications to and from the 39000 is performed using printable ASCII characters allowing the information to be processed with string functions common to most high-level languages such as BASIC. The ASCII format makes system debugging easy with a terminal.

CROSS-POINT SWITCH

The Model CPS39016 is an optional 16 channel cross-point switch that can be programmed to output any channel to each or all 16 buffered outputs.

SYSTEM SPECIFICATIONS

Number of Channels: 210.

Maximum Number of Chassis in System: 7, 1 master and 6 salves.

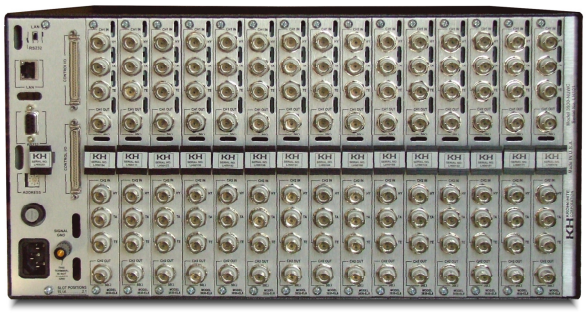
Slots: 15.

Manual Controls: 2 position input selection switch, 10 position gain control switch.

Remote Control: LAN/RS232 selection switch.

Communication Port: LAN, RS232.

Dimensions: 8 ¾" (22.1 cm) high, 17" (43.2 cm) wide, 19 ½" (49.6 cm) deep.



Weight: 31 lbs. (14 kg) plus 1.25 lbs. (0.6kg)/card.

Connectors: Input/Output, BNC.

Power Requirements: 105V to 132V and 210V to 240V ac, a single phase, 50-60Hz ac power source.

Power Consumption: 90 watts, 1 amp typical; Total system, 645 watts, 5.6 amp typical.

OPTIONAL MODEL CPS39016 CROSSPOINT SWITCH

Input Characteristics

Number of Inputs: 16, high density cable.

Input Type: Single-ended.

Input Impedance: 1M ohm.

Input Range: ±10V peak, 20V peak-to-peak.

Output Characteristics

Number of Outputs: 16.

Output Type: Analog BNC, buffered, single-ended.

Output Impedance (DC to 100kHz): 3 ohms; load impedance, >600 ohms.

Output Range: ±10V peak; 20V peak-to-peak.

Inter-Channel Output Crosstalk: >-80dB at 50kHz.

Harmonic Distortion: >-60dB at 50kHz.

General

Power Requirements: Power Requirements: 105V to 132V and 210V to 240V ac, a single phase, 50-60Hz ac power source, 15 watts.

Dimensions: 5 ¼ " (13.3 cm) high, 17" (43.2 cm) wide, 12" (30.5 cm) deep.

Weight: 10 lbs. (25.4 kg).

CONNECTORS: Input/Output BNC on front and rear panels.

Specifications subject to change without notice.