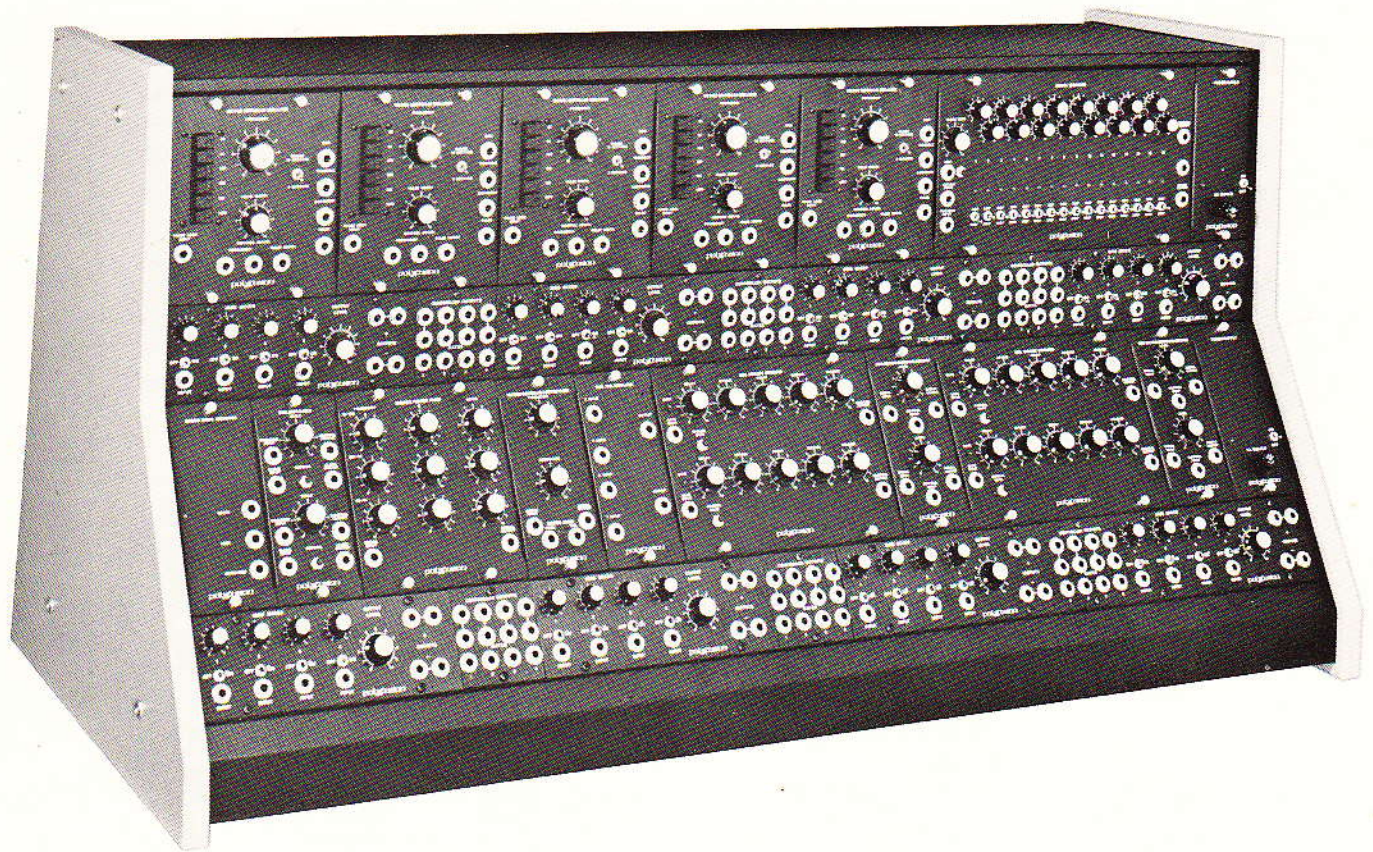


THE SERIES 2000

SYNTHESIZER



by

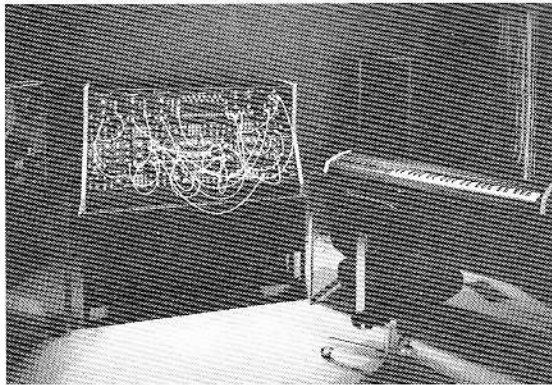
**polyfusion**

# THE SERIES 2000 SYNTHESIZER

## A PRACTICAL REALIZATION OF THE POTENTIAL OF ELECTRONIC MUSIC INSTRUMENTS

The 2000 Series Synthesizer by POLYFUSION is the realization of an advanced and exceptionally usable concept borne of engineering expertise, planning, and meticulous attention to detail never before applied to synthesizer design. Every effort has been made to create a musical instrument which is superior not only in virtually every electronic parameter, but in the areas which make it a musical instrument as well—one to be played! POLYFUSION instruments are characterized by "feeling" right, being responsive, being extremely flexible, and having a clear and consistent logic of control placement which makes them very playable.

Each instrument is assembled from the highest quality components with a good deal of pride and care. Rigid quality control, thorough testing, and many hours of "burn-in" are applied to each module. Finally, each POLYFUSION instrument is given a complete electronic and musical check-out by the people who designed it to insure that each module will function perfectly when delivered to its user and to greatly reduce the possibility of failure at any time.



The 2000 Series Synthesizer is the first truly modular synthesizer; any module can be moved to any location in the system by the performer and without tools. This unique capability enhances the flexibility of the instrument in two important ways: first, different module arrangements may be more practical for particular performance considerations, so by rearranging the modules, any system requirement can be optimized; second, a few extra modules can be kept on hand to serve particular needs and installed only when needed, thus eliminating the need to purchase additional cabinetry to house infrequently used modules.

In addition to this, servicing the instrument is relatively simple as only the defective module need be removed and serviced, allowing the rest of the instrument to be used in normal fashion. Unlike any of the small prepackaged performance synthesizers, the 2000 Series instruments provide the performer with direct access to absolutely every input and output which makes any combination of the modules possible—this is total flexibility!

### SYSTEM HIGHLIGHTS:

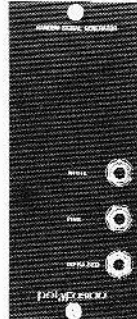
- User Interchangeable Module System
- Guaranteed Performance Specifications
- Total Flexibility
- Beautiful All-metal Cabinetry
- Top Quality Molded Patch Cords
- A Large Number of Strategically Located Controller Output Jacks
- Ample Room For An Adequate Number of Mixers



# 2000 SERIES MODULES AND SOME OF THEIR OUTSTANDING FEATURES:

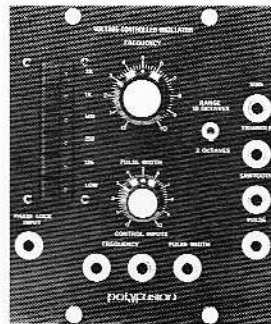
## GENERATORS:

### MODEL 2002 RANDOM SIGNAL GENERATOR



- High Quality, Wide Bandwidth White Noise
- Pink Noise Output
- Infra-red Output (Slowly And Randomly Changing Voltage Source)

### MODEL 2004 VOLTAGE CONTROLLED OSCILLATOR



- 2,500,000 : 1 Frequency Range
- "Micro-Touch" Range Selector
- Wide Range Phase Lock Input
- Ultra-narrow Pulse Width Output
- Extreme Stability

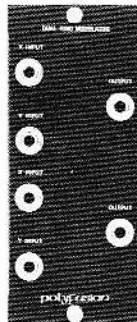
## MODIFIERS:

### MODEL 2010 DUAL VOLTAGE CONTROLLED AMPLIFIER



- Two Independent Amplifiers
- D.C. to 500,000 Hz Frequency Response
- 80 dB Dynamic Range

### MODEL 2012 DUAL RING MODULATOR



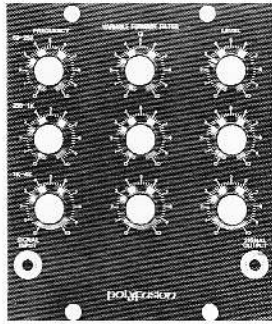
- Two Independent Ring Modulators
- D.C. Coupled Inputs And Outputs
- Excellent Input Suppression

### MODEL 2020 VOLTAGE CONTROLLED LOW PASS FILTER



- 24 dB Per Octave Roll-off
- Full Range Resonance (40-40,000 Hz)
- Voltage Controlled Amount of Resonance
- Exceptionally Low Noise (-75 dB)

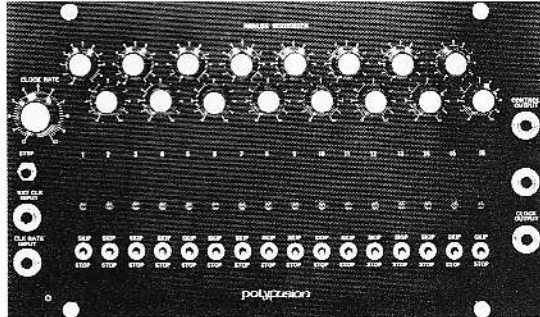
**MODEL 2030  
VARIABLE  
FORMANT  
FILTER**



- Three Flexible Filters
- Variable Center Frequency, "Q", And Level For Each Band
- Exceptionally Low Noise

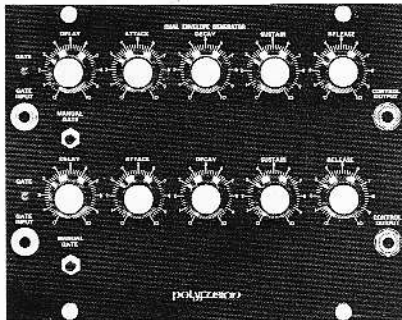
**CONTROLLERS:**

**MODEL 2040  
ANALOG  
SEQUENCER**



- Internal Voltage Controlled Clock
- Sixteen Stages
- Skip/Normal/Stop Selector For Each Stage
- Expandable With Additional Control Voltage Program Modules

**MODEL 2046  
DUAL  
ENVELOPE  
GENERATOR**



- Two Independent Envelope Generators
- Delay Control (Programs Amount of Delay To Occur Before Attack Start-up)
- Manual Gate Switch
- LED Gate Indicator

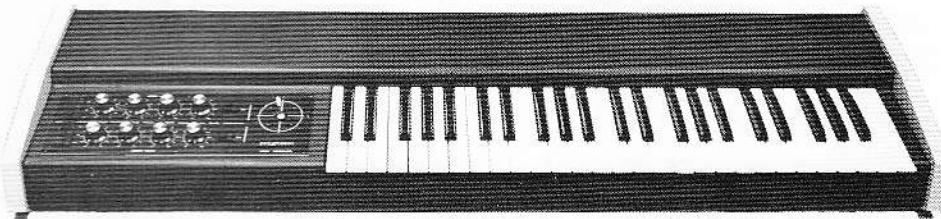
**MODEL 2048  
DUAL  
SAMPLE-  
HOLD**



- Two Independent Sample-Holds
- Exceptional Hold Characteristics (Maximum Drift of 1 mV/60 s)
- Extremely Short Gate Time Allows Sampling of White Noise

In addition to the basic modules featured above, new devices are constantly being developed by POLYFUSION in the same tradition of uncompromised quality and unequalled utility. For information regarding new modules, please contact your dealer or POLYFUSION directly. POLYFUSION also offers the service of developing custom instruments and installations where special requirements are dictated by the customer. In performing this service we have designed and constructed a wide variety of devices ranging from unique synthesizer controllers to a fully voltage controlled mixing console.

THE 2050 SERIES KEYBOARDS:



The 2050 Keyboard family was designed to provide several alternatives with regard to price and sophistication. There is, however, no compromise in the performance of the lower priced units—simply fewer “extras”. Our keyboards are very responsive controllers allowing the performer the widest possible range of dynamics and the most subtle articulations. All the 2050 series keyboards are four octave, C to C, and are housed in aluminum cabinets formed in clean modern lines.

2050 One voice with logarithmic glide.

2051 One voice with logarithmic glide, velocity sensitive control output, and “Micro-Touch” transpose switches which move the keyboard control output up or down one volt.

2052 Two voices, each with glide (switchable for either logarithmic or linear response), velocity sensitive control output, and “Micro-Touch” transpose switches.

An optional X-Y Controller (joystick) can be installed in each of the above keyboards.

2054 One voice with glide (either logarithmic or linear), velocity sensitive control output, pressure sensitive control output, and “Micro-Touch” transpose switches. The X-Y controller is standard.

CABINET SPECIFICATIONS:

2071 Standard duty, aluminum console cabinet. This cabinet is pictured on brochure cover.

2072 Upper module rack for top of 2071.

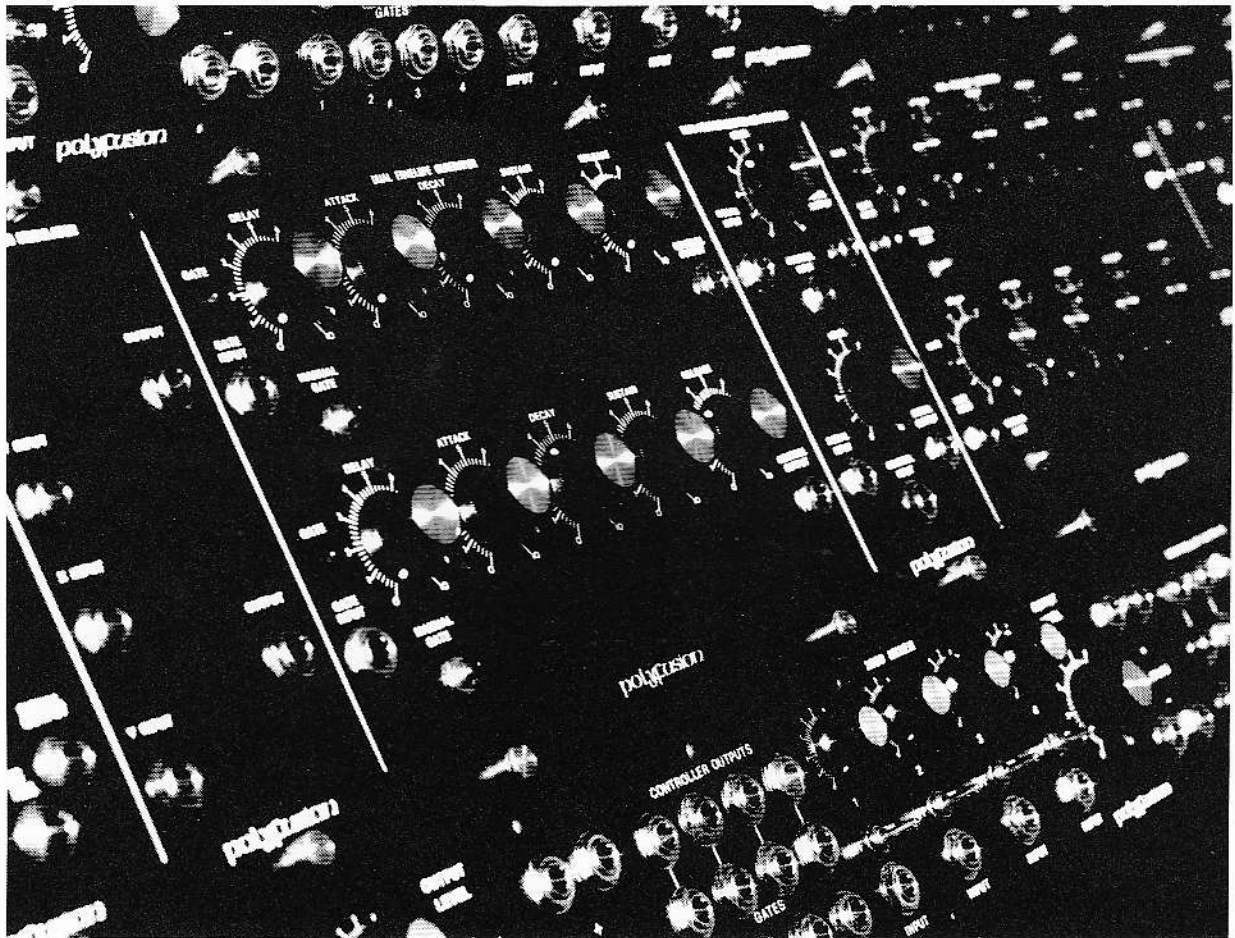
2074 Half size standard duty console cabinet (ideally suited for portable instruments).

2076 Half size upper module rack for top of 2074.

Model	Module Capacity	Mixer Capacity	Controller Output Panels	Dimensions in inches (W×D×H)
2071	30	8	6	47×23×24
2072	15	4	3	47×13×12
2074	16	4	4	26×23×24
2076	8	2	2	26×13×12

ORDERING INFORMATION:

The 2000 Series Synthesizer systems and individual modules are available either directly from POLYFUSION or from a few highly qualified dealers across the United States and Canada. A list of these dealers may be obtained by writing or calling POLYFUSION.



*polyfusion* inc  
160 Sugg Road  
Buffalo, New York 14225