

FAiA Electronics, Inc.

NEW PRODUCTS

THE CHORD COMPUTER

**MODULAR
SYNTHESIZERS**

**SOUND
PROCESSING
CENTER**

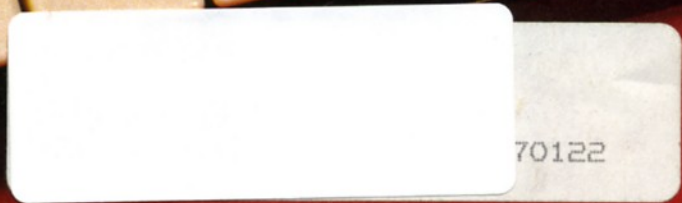


FAiA Electronics, Inc.
1020 W. Wilshire, Oklahoma City, OK 73116 - (405)843-9626

BULK RATE
U.S. POSTAGE
PAID
Oklahoma City, OK
PERMIT NO. 406

**NEW
UNIVERSAL KEYBOARD
CONTROLLERS**

DETAILS INSIDE.....



70122



PROTEUS I

PROGRAMMABLE PRESET LEAD SYNTHESIZER

Proteus I provides wide range precision and quiet, pure performance. 12 Octave Oscillator and Filter range, 30 second long transient generator segments and the exceptionally low noise and clean sound that you need for serious production work.

16 presets let you get the sound you're after at the touch of a single button. Natural programming lets you play with the sound before assigning the setting of every knob and switch to a preset.

Generous patch over hardware points let you integrate external processing elements into Proteus' signal path and interface to a wide variety of analog sequencers and function generators.

The parallel computer port accesses both panel controls and keyboard to set new standards for versatility and ease of use. There's nothing to rewire or remove. To use a computer, just plug it in.

Yet despite its high-tech complexity Proteus I is easy to assemble and service. The 3 book manual set breaks assembly down into small easily digested chunks with simple tests to monitor your progress along the way.

If you're not convinced yet, the Evaluation Package with its complete manual set and Demo tape will really make a believer of you. Order yours today.

I-8750 Evaluation Package \$10.00 ppd.
 No. 8750 Proteus I Kit \$399.00 (13.00)

NEW ADDITIONS TO THE PAIA STUDIO SERIES

RACK POWER SUPPLY

This simple 1 Amp. bipolar power supply is the ideal complement to the PAIA 6700 and 7700 series of studio equipment. Standard double high rack panel features front accessible fuse holder and twin adjustable control voltage outputs, one with a range from 0 to +10 volts, the second with an output from 0 to -10 volts. A combination of PC Board and lead mounted Molex connectors make for quick and easy connect and disconnect from equipment. Bipolar power outputs are adjustable from 9 to 15 volts. No. 7700 Rack Mount Power Supply \$59.95 (2.50)

ROAD RACK CASE

Here's a sturdy, attractive case for your rack mount equipment that's as at home on the road as it is your studio. Thick vinyl covering protects against abuse. Holds up to 8 standard single high (1-3/4") rack panels. 7 inch depth holds all present and planned PAIA equipment as well as most other commercial equipment. Includes 32 large headed screws for equipment mounting.

No. 7760 Road Rack Case \$57.88 (4.50)

When you take your rack on the road, the handiest thing to have is a cover to protect front panels and controls. This one is specially made to match the case above and is deep enough so that you don't have to un-patch to travel. Includes reinforced metal corners, slip hinges and a convenient carrying handle.

No. 7761 Road Rack Case Cover \$18.88 (2.50)

RACK PACK PROCESSING CENTER

PAIA's RACK PACK is a terrific low cost solution to the audio processing needs of the working musician. In one convenient ROAD RACK CASE, this system provides the processing most needed to deliver the cleanest, fullest possible sound. System includes: 1-6790 Dual Limiter, 1-7710 Stereo Mixer, 2-6760 Parametric Equalizers, 1-6750 Hyperflanger & Chorus, and a 7700 Power Supply to run it all. Buy the entire system and we include the Rack Case at half price and throw in the case's travel cover for free. No. 7700/a Rack Pack Processor \$466.95 (11.25)

STEREO MIXER

Home studios and multi-megabuck film/video production facilities have at least one thing in common — neither ever seems to have enough mixers. You always need to bring in just one more signal.....

But, now you can be forever done with that problem with PAIA's cost-effective new 7710 Stereo Mixer. This sturdy, rack-mount unit is physically and electrically compatible with other products in our studio series. Designed for clean, quiet performance in any studio or live mixing gig, the mixer features low-noise op-amps and the shortest possible signal runs for minimum extraneous

signal pickup. Front panel controls include individual level and pan pots for each channel and master gain controls for left and right channels.

And the same features that make this mixer quiet and reliable also make for quick and easy assembly — all controls and jacks mount directly on the circuit board with no flying wires from the guts to the panel. Power: $\pm 15v.$ @15 ma., Input Impedance: 100K ohms, Output Impedance: less than 5K ohms. Freq. Response: 20 Hz. - 30 kHz. No. 7710 Stereo Mixer Kit \$59.95 (3.80)

PARAMETRIC EQ

For either studio or live performance work, a parametric equalizer is the most powerful and versatile tone control available with applications that range from notching out the feed-back howls in an unruly venue to taming that one note in a run that just won't quit pegging the meters. And this PAIA unit is a true parametric that gives you complete and independent control of frequency (40 Hz. — 16 kHz.), bandwidth (resonance .2 — 4 octaves) and continuously variable boost or cut. The 4 separate graphic equalizer sections behind this 1 3/4" rack panel may be used independently or in any combination. Requires ± 9 to 15 volt power supply.

No. 6760 Parametric Equalizer Kit \$59.95 (3.80)



When it comes to small amps

PAIA PERSONALS PERFORM

Nobody needs to tell you what's so hot about personal amps. Portable and light weight, they're great for practicing on the road, jamming with friends, headphone listening while others sleep, stage monitors — you name it! Both of these amps feature efficient operation with 6" acoustic suspension speakers and provide weeks of use from their internal battery packs (8 "AA" penlight batteries — not included). Their roady-proof cases are covered in thick vinyl that will take years of abuse and the detailed step-by-step instructions make for quick and easy assembly. If you've been wondering whether you can really assemble your own equipment, here's a chance to prove to yourself that you can. And you'll love the results.

GEMINI AMP

The Gemini amp is loaded with the kinds of features that cost big bucks in music stores. Twin speakers allow really creative miking. Built-in distortion and three-band boost/cut EQ give you the kind of timbres you'd expect from hundreds of watts thundering through stacks of speakers. Three separate mixable inputs so you can jam with friends or rehearse with recorded material. A variety of pre- and post-EQ effects loops let you add your favorite signal processors. Power rated at 2 watts RMS, up to 14 watts peak. No. 1760 GEMINI AMP KIT\$79.00 (5.55)



PYGMY

This little amp is small enough to hang from a guitar strap (we don't supply the strap, but the buttons to hang it from are there) and delivers a room-filling 1.2 watts RMS — up to 8 watts peak. No. 1750 PYGMY AMP KIT\$39.95 (4.50)

PAIA STOMP BOX EFFECTS DELIVER MAX BANG PER BUCK

Our series of Stomp Effects give the electronic musician the highest quality audio effect at the lowest possible price. Cases are formed of heavy steel and covered with the sturdiest finish available. All feature pop-free long life electronic effect switching. These are all high input/low output impedance, non-inverting devices designed to meet all proposed FX standards for easy trouble free chaining. Each is powered by a single 9v. battery and has automatic power switching when in use.

Sustain

Hot Lyx gives you all the control you need. Continuously variable sustain from just enough to make a Silvertone sound like a Les Paul to "pedal to the metal" controlled feed-back settings that give rock-guitar its "all out" quality. Level control allows for either lower or higher volume settings when you're punched into the effect and can also be used as an over-drive control to give you the sweetest fuzz/sustain sound you've ever heard. No. 5710 HOT LYX Sustain Kit\$34.95 (3.40)

Envelope Follower

You won't believe that so much funk and soul can be squeezed into such a tiny box. Independent Initial Frequency and Sensitivity knobs give you the control you need to realize a wide range of effects and allow the MOTION FILTER to be used with either electric bass or guitar. No. 5720 MOTION FILTER Kit\$29.95 (3.40)

Noise Gate/Envelope Controller

GATOR listens while you play, and when you stop, electronically isolates your effects from amplifier, zapping noise completely. And despite its low cost, GATOR has added features that let you do more than just make other effects sound good — it's an important effect in its own right.

An ATTACK control lets you re-shape the normal percussive envelope of your guitar for bowed string and organ effects with attack times up to 1.5 sec. An AUXILIARY TRIGGER SIGNAL INPUT to be gated by another (drums for example) to impart unique "synchro sonic" rhythmic characteristics to your sound. No. 5730 GATOR Kit\$34.95 (3.40)

Midrange Equalizer

Featured in Craig Anderton's June 1982 Guitar Player column, this special purpose equalizer gives more presence and "punch" by providing continuously variable boosts of up to 12 db. at switch selectable frequencies of 90, 200, 1000, 2000 or 4000 Hz. Useful with guitars, voice, rhythm boxes and keyboards. No. 5740 MIDRANGER Kit\$32.95 (3.40)

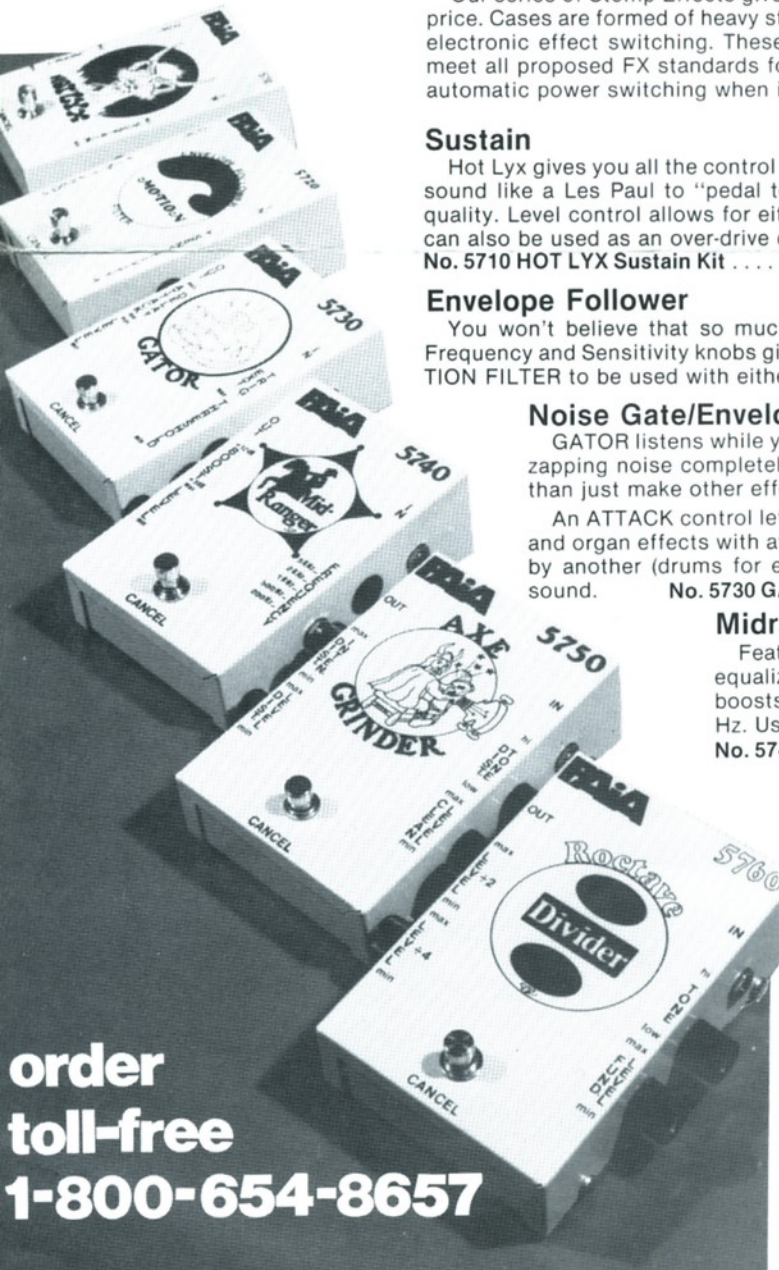
A Classic Fuzz

The AXE GRINDER's Distortion Intensity Knob provides smooth control of clipping from just a hint when you really get it on to pure square waves when you even think of picking. And the Distortion Tone, Distortion Level and Clean Level controls are just like having a built in mixer and EQ, letting you precisely set the amount of distortion and its tone as well as the mix of clean and distorted signal. You probably never realized you could get so many sounds from a "simple" fuzz. No. 5750 AXE GRINDER Kit\$29.95 (3.40)

Rocktave Divider

The ROCKTAVE DIVIDER fills out your sound by adding in wave-forms that are subharmonics of those produced by your axe.

Compander stages are used to stabilize input for reliable trigger of the divider circuitry and to impress the original dynamics of your playing back onto the newly created subharmonics. Independent level controls on the extracted fundamental and first and second suboctaves allow you to produce just the mix you're after and the Master Tone Control lets you round the square wave suboctaves off to near-sinusoidal purity. No. 5760 ROCKTAVE DIVIDER Kit\$39.95 (3.40)



order
toll-free
1-800-654-8657

get the stereo option



at 1/2 price
with your order for
STRINGZ 'N' THINGZ

Over the years, the STRINGZ 'n THINGZ STRING ensemble has been one of our most popular and widely accepted kits. Little wonder, since it offers features that you won't find in other instruments in this price range; Violin, Cello and Piano voices, separate mixable piano output, synthesizer interface, variable chorusing, variable sustain controls, jacks for foot controls, keyboard split, dual violin/cello mixers and many, many more.

And while full, rich string textures are one of the hallmarks of the Stringz 'n Thingz, the stereo option adds a second, separate chorusing circuit that allows violin and cello voices to be generated in synthesized stereo in two switch-selectable modes. Now, for a limited time, when you purchase a Stringz 'n Thingz kit, you can also purchase the Stereo option at 1/2 price — a bargain you can't pass up.

No. 1150 Stringz 'n Thingz String Ensemble Kit . . . \$299.95 (10.50)
No. 1551 Stereo Add-on . . . ~~\$44.95~~ . . . \$22.45 (with 1550 purchase)

BANANA QUARTZ GUITAR TUNER

Accurate, easy to use, unbelievably inexpensive that's our new Banana Quartz guitar tuner. Thru-jacks let you tune electric guitars without unplugging. Acoustic guitars tune with built in condenser mic. Internal speaker produces by-ear tones if you want them.

Two easy-to-use tuning indicators — a meter to indicate pitch deviations up to 1/2 semi-tone and LED go-no go indicators, both with quartz accuracy.

Runs for months on a single AA penlight and one 9v. battery.

Not a kit but completely assembled, tested and ready to use.

No. 9700A Banana Tuner \$39.95 (2.00)

MUSIC TEACHER IN A BOX?

To get ahead in music, you need to know music theory. PAIA's Chord Computer helps you understand both music and keyboards better by cramming the equivalent of pages and pages of music theory into a compact, calculator-style package.

The Chord Computer is easy to use. Simply select a chord letter, and the Chord Computer's LCD 31-key piano keyboard display will show which notes to play for the selected chord. Press another button to choose sharp, flat, major, minor, augmented, diminished, 6th, 7th, or 9th chords — including inversions. The Chord Computer can also display complete scales for all keys. or even transpose them at the touch of a button.

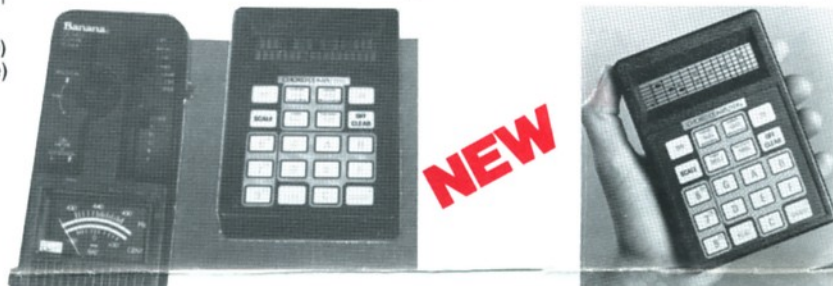
Serious about music? The Chord Computer could be the best investment you'll ever make. Not a kit, but completely assembled and tested. (9v battery not included.)

No. CC-1 Keyboard Computer \$59.95 (2.50)

NEW GUITAR CHORD COMPUTER!

Quick. Think of 3 ways to play a D flat 9th chord. Give up? The GUITAR CHORD COMPUTER shows you all three in less than 10 seconds. Virtually every guitar player can use one of these. Here's what it will do: **CHORDS** Major, Minor, Dominant, Augmented, and Diminished; **SCALES** Major, Harmonic Minor, Melodic Ascending, and Melodic Descending; **ALTERNATES/INVERSIONS** 3 and 4 alternates are shown for most chords (Easiest to play is displayed first); **TRANSPOSE** Up or down by half-steps; **6th, 7th, 9th CHORDS** Displayed at the touch of a button. Play better and easier guitar in minutes. Order yours today!

No. CC-2 Guitar Chord Computer \$59.95 (2.50)



NEW

PAIA Electronics, Inc.

1020 W. Wilshire Blvd., Oklahoma City, OK 73116 - (405)843-9626

ORDER FORM

FOR OFFICE USE ONLY DO NOT WRITE IN THIS SPACE

HAVE YOU ORDERED FROM PAIA WITHIN THE PAST TWO YEARS? YES NO

NAME _____ SIGN YOUR NAME & FILL OUT BELOW FOR CHARGE [\$10 MINIMUM]

ADDRESS _____ VISA MC CARD NO. _____

CITY _____ STATE _____ ZIP _____ SIGNATURE _____ expiration date _____

quantity	catalog no	item description	price each	amount	wt	shipping

FREE SHIPPING IF YOUR ORDER TOTALS \$100 OR MORE

FOR FASTEST SERVICE SEND CASHIER'S CHECK OR MONEY ORDER IN PAYMENT OF ORDER. merchandise total
 Amounts for shipping charges are shown in parenthesis () and listed immediately following the price of the item. 4% tax (Okla only)
ORDER WITH VISA OR MASTERCARD following the price of the item. shipping charges
TOLL FREE 1-800-654-8657 total
 CALL FROM POINTS OUTSIDE OF OKLAHOMA BUT WITHIN THE CONTINENTAL US BETWEEN THE HOURS OF 9AM & 5PM CST MONDAY THRU FRIDAY
TOTAL SHIPPING
 20% deposit required for COD shipment



GNOME MICRO-SYNTHESIZER

Every day more people discover that the GNOME is the most versatile, cost effective special effects device on the market today. The Gnome has two function generators (one with repeat for cyclic effects), VCA, VCF and VCO. Use alone with its built in ribbon controller or modify to interface to guitar, electronic piano, polytonic keyboards, etc.

With the Gnome's normalized controls you'll soon be able to produce those far out electronic sounds even if you've never been near a synthesizer before. The Gnome can make outer space sounds for rock musicians, demonstrate principles of music and acoustics for educators, provide rhythmic pulses for modern dance groups and sound effects for theatre companies and is one of the neatest toys in the world for the audiophile.

Complete kit and well illustrated step-by-step instructions and using manual make the GNOME the perfect introduction to electronic music synthesis. **No. 3740 Gnome Micro-Synthesizer Kit** was ~~\$69.95~~ now \$64.95 (3.80)

PROGRAMMABLE DRUM SET

While most electronic rhythm units offer only a limited choice of pre-determined rhythm patterns, the PAIA Programmable Drum Set allows you to select percussion sounds—Heavy Bass, Light Bass, Snare Drum, Tom-Tom, Conga, Wood Block, Clave - and structure pattern and time signature in any conceivable combination. And touch sensitive electronic controls allow scores to be entered in seconds with no programming knowledge required.

Without question the Programmable Drum Set advances the state-of-the-art in automatic percussion units with features and abilities too extensive to cover completely, including: Score editing, Bridges and Intros, external sync. to sequencers - foot controls, memory save switch and many more.

No. 3750 Programmable Drum Set Kit was ~~\$79.95~~ now \$74.95 (4.60)



COST EFFECTIVE RACK MOUNT EQUIPMENT

DUAL LIMITER

Until now, low noise, low distortion, quality limiters have been priced beyond the reach of budget studios—just the place where they're most useful. Like a safety valve, a limiter does nothing as long as everything's going as planned. But, when that unexpected loud transient tries to sneak in and ruin hours of careful preparation, the 6790 is there to unobtrusively hold the signal at a level that prevents distortion in the rest of the audio channel.

Craig's design features the new Signetics 570 Componder chip in a configuration that allows switch selection of either two independent limiters or a "dual" mode which allows the signal on one channel to limit both channels, thereby preserving stereo imaging. The limit point is controllable from the front panel of this 1 1/4 inch high standard rack panel package over a range of approx. -10 to +3 dB. LED indicator shows when limiting is taking place.

The limiter is also useful as a special effects device for guitar, etc.

SPECIFICATIONS: Power: +12v. @25 ma., -12v. @ 8 ma. nominal (external supply such as 4771 required); Frequency response: ± 1 dB., 20 Hz. -20 kHz.; Attack time: less than 1 ms.; SNR referenced to 0 dB. output: greater than -65 dB.
No. 6790 Dual Limiter Kit \$49.95 (3.00)

HOT SPRINGS REVERB

In general, spring reverbs don't have the best reputation in the world. Their bassy "twang" is only a rough approximation of natural room acoustics. That's a pity because it means that many people will dismiss this exceptional product as "just another spring reverb." And it's not. In this extraordinary design Craig Anderton uses double springs, but much more importantly "hot rod's" the transducers so that the muddy sound typical of most springs is replaced with the bright clarity associated with expensive studio plate systems.

Kit consists of circuit board, instructions, all electronic parts and two reverb spring units. User must provide power (±9 to 15 v.) and mounting (reverb units are typically mounted away from the console).

No. 6740 Reverb Kit \$59.95 (3.40)

MASTER SYNCHRONIZER

Craig Anderton's "Synchro-Sonic" Controller as featured in KEYBOARD MAGAZINE.

Today, a "Master Synchronizer" is not as universal a piece of studio equipment as EQ and Reverb. But for the more progressive electronic musician working in a multi-track

environment it can easily become indispensable because this module takes the concept of a click track the next logical step by providing a means of generating and recovering an electronic clock signal to tape.

When the clock signal is recovered and divided into musically significant intervals from 1/32 to whole notes it can be used to precisely lock newly recorded material to tracks already in place. With the MASTER SYNCHRONIZER you won't hesitate to lay down expanded or improved sequencer or drum set parts—the hassle involved in trying to synchronize manually is gone.

Using the MASTER SYNCHRONIZER to tie the sweep rates of traditional effects to the tempo of music imparts a "Synchro-Sonic" coherence and rhythmic complexity to the sound that is difficult to achieve otherwise.

Other features of the MASTER SYNCHRONIZER include square wave and pulse trigger outputs; Run, Reset and Clock outputs allow easy interfacing and control of a variety of equipment from different manufacturers. Front panel switch selectable +5 and +10 volt logic levels. Accent metronome output with 50 - 750 Beats Per Minute tempo range. Requires +/- 15 volt 35 mA.

6770 Master Synchronizer Kit \$74.95 (3.80)

HYPERFLANGE & CHORUS

Careful design and input/output compansion make this an incredibly quiet analog delay unit useful both in the studio and as a live effect.

But continuing the PAIA trend to quiet quality isn't the only thing that makes the Hyperflange & Chorus an exceptional value. The Hyper-triangular control oscillator based on a Curtis 3340 VCO chip allows both linear time sweeps (the way everybody else does it) and the exponential sweeps (which is the way your ears really prefer) both over a 72:1 range. And an exclusive Resonance Lock Circuit lets you hang regeneration "on the edge" without having to worry about breaking into feed-back howls.

More? OK, how about control features like a pan pot for dry and processed signal, + or - flanging, clipping indicator LED for precise setting of optimum input signal level, separate external control inputs for both LFO and time delay... even a sync input for the control oscillator.

The Hyperflange & Chorus comes in a standard 1 1/4 in. rack mount configuration compatible with other products in the 6700 series of equipment and requires a ± 12 to 15 volt 200 ma. power supply.

No. 6750 Hyperflange & Chorus Kit \$149.95 (4.25)

UNIVERSAL KEYBOARD CONTROLLERS

PAIA's new series V Keyboard controllers offer enough standard features like pitch and modulation wheels, smooth Pratt-Read action, small size and light weight to make you fall in love with them the first time you lay your hands on one. And there are options available to make these controllers compatible with practically any synthesis system from any manufacturer.

Begin by selecting 37 or 61 note actions. In either configuration the basic unit is a scanning matrix encoder that delivers parallel digital outputs — six bits indicating the key being examined and a strobe bit indicating the up/down status of that key. A jumper selectable eighth line serves a hand-shaking function with a computer if needed. The parallel data appears on a standard DB-25 connector on the rear of the case.

If you're going to be using the keyboard to control lv./Oct. exponential response equipment such as PAIA's EKx series of cards or systems manufactured by Roland, Serge, Synton and

others, simply add the low-cost KDAC option. This option provides not only linear control voltage output, but also implements low note priority with retriggering and gives industry standard gate (high logic when any key is down) and trigger (short pulse when new key is pressed) outputs. The digital outputs are not disabled by this addition, in fact they are also expanded because you can now use the 8 digital data lines either as output from the keyboard to a computer or for driving the control voltage output from a computer — completely under software control.

To use the controller with linear response synthesizer modules such as PAIA 4700 or 2700 series equipment, also select the KEX option. This addition generates the exponential control voltage required by this series of equipment



NEW

and still maintains the outputs outlined earlier.

One keyboard can simultaneously control exponential and linear response equipment, and you still have the 8 bit bi-lateral computer port.

K37 37 note digital keyboard controller	\$188.00 (4.50)
K-61 61 note digital keyboard controller	\$289.00 (5.50)
KDAC Digital to Analog Converter Add-on	\$15.95
KEX Exponential Converter Add-on	\$15.95

47D SYNTHESIZER PACKAGES OFFER MODULAR VERSATILITY AT LOWEST POSSIBLE PRICES

There is no better place to begin learning about electronic sound production than with a modular synthesizer. Seeing the physical connections between modules and being able to re-route

signals by plugging the output of one into the input of another makes clear what functions individual processing and control elements perform in a very physical and obvious way. At the same time, modules are frequently the system of choice of the most advanced synthesists because the versatility of modules can never be matched by an "axe-in-a-box".

These 47D packages are a particularly nice place to start not only because of their low cost, but since they feature our new Series V Keyboard Controllers (see description above) they can serve as the foundation of a system which can grow to be as eclectic as you like with digital, linear or exponential equipment from many different manufacturers.

Modules included with the system are: 2-4710 Voltage Controlled Amplifier/Balanced Modulators, 1-4720 Voltage Controlled Oscillator, 1-4730 Multi-Modal Voltage Controlled Filter, 1-4740 ADSR Transient Generator, 1-4750 Control Oscillator/Noise Source, 1-4712 Reverb Module, 1-4771 Power Supply. The modules are housed in a 4761 Wing Cabinet.

Available with either 37 or 61 note keyboard controller, the package prices represent about a 10% savings over separate component prices.

47D37 Synthesizer with 37 note controller	\$429.00 (9.00)
	(467.55 if purchased separately)
47D61 Synthesizer with 61 note controller	\$517.00 (11.00)
	(574.55 if purchased separately)



NEW