THE & ARP, 2500 ELECTRONIC MUSIC SYNTHESIZER





ARP INSTRUMENTS, INC., 320 Needham Street, Newton, Massachusetts 02164

"We used the ARP extensively on our first quadraphonic record for RCA. The sounds that the ARP makes and the ease with which these sounds can be controlled by the performer are fantastic! The ARP is an arranger's dream come true. Whatever sound you want, you get. It's that simple."

HUGO MONTENEGRO



ARP inventor Alan R. Pearlman and Hugo Montenegro



Gerald Shapiro

"At last! A voltage controlled instrument with the quality and flexibility we have been waiting for. The ARP Synthesizer is unquestionably the finest studio instrument that I have seen."

GERALD SHAPIRO BROWN UNIVERSITY

"It is enormously impressive, and seems to me to be an extremely sophisticated, flexible, and practical realization of what has been needed, and only so tentatively and fragmentarily accomplished by others. Such a system, both as a thing in itself and as the real-time element in a 'total' studio with completely digital sound production facilities also availbale, would fill every conceivable function that a composer, researcher, or teacher could envisage."

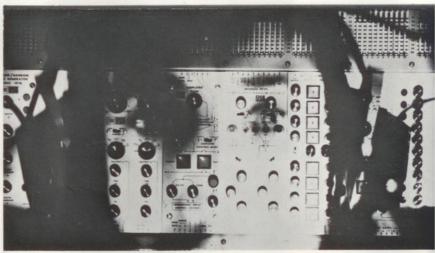
MILTON BABBITT PRINCETON UNIVERSITY

"The ARP is able to produce the most incredibly organic sounds of any synthesizer I've tried. For live performance or studio work, I find that the ARP responds almost intuitively to my ideas. It is consistently a joy to play."

ROGER POWELL



Atlantic Records recording artist Roger Powell.



Peter Townshend of The Who

"Mine plays six notes at once, can have 20 sets of preset control voltages available, six audio signals mixed and instantly usable at various levels, the most incredibly subtle tone colours can be produced using the multimode resonator in conjunction with a normal filter, and the sequencer will provide exhilarating cascades of arpeggios. In fact it is the versatility of the 2500 that makes it eminently suitable for stage work."

PETE TOWNSHEND

"The ARP synthesizer has made it possible for me to work efficiently and creatively in production of electronic music. I have worked with other synthesizers and in other studios, and I find your synthesizer to be the best set-up and thought-out for my needs. I think the matrix switches are easier to set up and trouble shoot than patchcords. I also appreciate the attenuators on each control or audio input to a device. The size and shape of the knobs seems to be just right for me (in terms of kinesthetic feedback) when I wish to manually control any parameter."

ROBERT MORRIS-YALE UNIVERSITY



ARP: The Concert Grand of Synthesizers

A SUPER-SYNTHESIZER

The ARP 2500 is a modular electronic music synthesizer that combines uncompromised flexibility and precision with efficient musician-oriented design. Inside the ARP 2500 is the most advanced, state-of-the-art circuitry ever devised for a musical instrument. On the outside is a panorama of design features based on the cumulative experience of many of the country's foremost composers and performing artists. Every knob, switchand panel indication on the ARP 2500 has been carefully thought out to make your creative process fast, efficient, and rewarding.

TO BEGIN WITH....

Assume that you need a professional synthesizer and that you're shopping around: For starters, although the ARP 2500 offers more features than you are likely to find on any other synthesizer,

its price is competitive. And you order only what you need for the moment. It's modular, so you can choose as many or as few functions as you now require.

When you're ready to expand, so is your ARP 2500. It takes just a few minutes to install additional modules, and you can easily rearrange the modules in your ARP 2500 to suit your personal style.

MATRIX PATCHING

Of all the systems for interconnecting

functions on a synthesizer, the matrix switch system on the 2500 has proved superior to all other patching systems in hundreds of actual studio applications. Matrix switch patch-



ing gives a clear color-coded visual representation of signal flow without obscuring panels with tangles of patchcords.

UNCOMPROMISED CRAFTSMANSHIP

All the ARP Series 1000 modules that go into each ARP 2500 synthesizer are crafted to provide the most logical and efficient communication between man and machine. The hardware is simply the best available. Every single potentiometer, switch, and electrical component has been specifically chosen for quality, durability, and reliability. Glassepoxy printed circuit boards, shocktested semiconductors, and gold plated switch contacts help insure that every ARP 2500 will give years of troublefree operation. Individual modules can be removed and serviced without interfering with the operation of the rest of your synthesizer.

	FUNCTION MODULES
\$ 10	1001 Blank Panel.
	1002 Power Supply. included in price of cabinet
390	1003 Dual Exponential Envelope Generator. High speed, flexible.
450	1004p Voltage Controlled Oscillator. Basic ARP precision VCO offering five simultaneous waveform outputs: sine, triangle, square, sawtooth, and pulse. FM and PWM. Built-in waveform mixer.
490	1004tVoltage Controlled Oscillator. Same as 1004p except inverted waveform outputs available.
590	1005 Modamp. A complex function module con-

- taining a precision balanced modulator, a voltage controlled amplifier, and switching circuitry.
- 420 1006 Filtamp. A compact module containing a mixer, a voltage controlled lowpass filter, and a voltage controlled amplifier.
- 380 1016 Dual Noise/Random Voltage Source. Contains two independent uncorrelated noise sources and filters to derive pink noise and continuous slow random voltages.
- 890 1023 Dual Voltage Controlled Oscillator. Two precision voltage controlled oscillators each similar electrically to the 1004.
- 890 1027 Ten-Position Sequencer. Unusually flexible and reliable sequential voltage generator. Capable of creating highly complex switching patterns with 30 preset voltages.
- 1033 Dual Delayed Exponential Envelope Genera-430 tor. Same as 1003 but includes variable trigger delay.
- 540 1036 Dual Sample & Hold/Random Voltage Generator. Contains two ultra-low-drift sample and hold circuits, two noise sources, and two voltage controlled pulse generators.
- 1150 1045 Voltage Controlled Voice. Combination two Envelope Generators/Voltage Controlled Oscillator /Voltage Controlled Filter/Voltage Controlled Amplifier. Use as preset voice.
- 810 1046 Quad Exponential Envelope Generator. Ultracompact module containing a pair of envelope generators without trigger delay and a pair with delay.
- 540 1047 Multimode Filter/Resonator. Combination highpass, lowpass, bandpass, and band-reject filter. Ultra-high Q. Voltage controlled center frequency and resonance.
- 690 1050 Mix/Sequencer. A combination sequencer. mixer, analog gate. Serves dozens of functions as a utility mixer, sequencer, preset function selector.

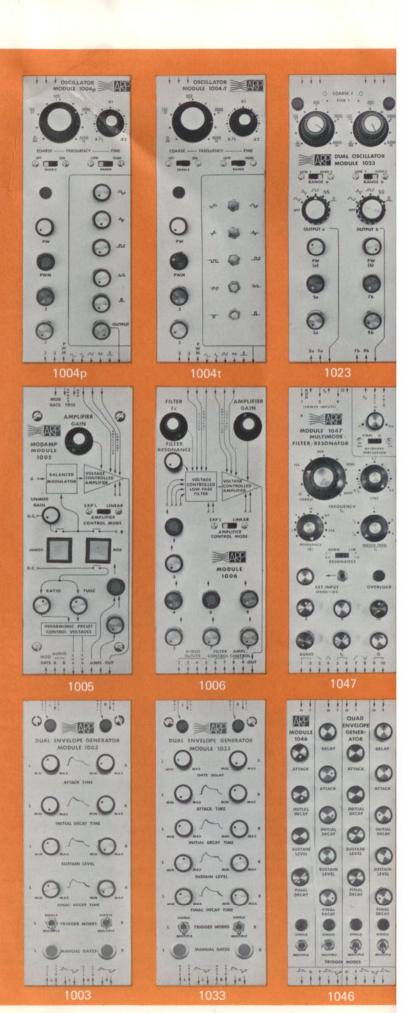
KEYBOARDS

\$ 600	3604 Portable One Voice Keyboard. 4 Octaves.
700	3001 One Voice Keyboard. 5 Octaves.
750	3002 Two Voice Keyboard. 5 Octaves.
850	3212 Three Voice Split Keyboard. 5 Octaves.
950	3222 Four Voice Split Keyboard. 5 Octaves.

All keyboards include variable tuning, variable tone interval, and variable portamento controls.

CABINETS

\$1190	2508 Studio Wing Cabinet. 8 Module Positions.
1990	2515 Studio Cabinet. 15 Module Positions.
1340	2508P Portable Wing Cabinet. 8 Module Positions.





HOW IT WORKS

All synthesizers start with simple electronic tones produced by voltage controlled oscillators. The pitch of these tones is controlled by a keyboard or panel knobs. Noise is also provided as a signal source.

The raw sounds can be processed through filters, which change the overtones of the raw signals to give them the desired timbre. The filters are also controlled from the keyboard or from envelope generators, which produce signals for attack and decay characteristics. Any instrumental or electronic sound can be produced by carefully selecting filter settings, choosing the right raw signals, and programming the envelope generators.

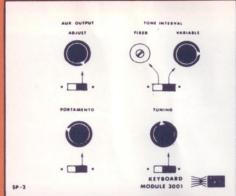
Other devices used to process signals include voltage controlled amplifiers, balanced or ring modulators, and non-linear amplifiers. Sequencers and sample & hold circuits are used to create rhythmic textures by generating programmable patterns of electronic signals.

In the ARP 2500 Synthesizers, all these functions are packaged in circuit modules which plug into spaces provided in the system cabinets. The user can assemble any assortment of functions by ordering a selection of Series 1000 function modules appropriate to his individual requirements. Each ARP 2500 Synthesizer is assembled to the customer's specifications from stock cabinets, keyboards, and Series 1000 function modules.

ARP Instruments offers a wide range of single function and multiple function Series 1000 modules. Complexity ranges from single voltage controlled oscillators to voice modules containing a voltage controlled oscillator, voltage controlled filter, voltage controlled amplifier, and two envelope generators, all in one package.

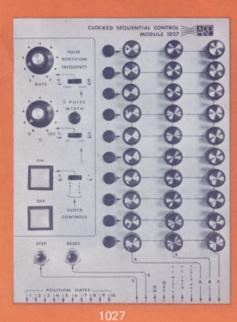
The ARP Applications Engineering department has assisted in the design and installation of over 250 electronic music studios from Jerusalem to Honolulu. Individual consultation and assistance is provided to each customer as a standard service.

ARP modules offer unequalled flexibility and precision.





3222 Keyboard











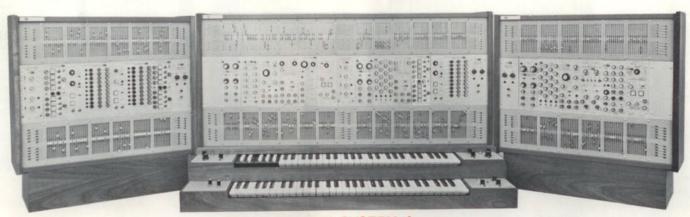
SAMPLE SYSTEM 1



SAMPLE SYSTEM 2



SAMPLE SYSTEM 3



SAMPLE SYSTEM 4



SAMPLE SYSTEM 5

SAMPLE SYSTEM 6

ARP, 2500 Sample Systems

SAMPLE SYSTEM 1

1001 E	Blank Module	\$	10
1023 [Dual Oscillator	8	90
1003 [Dual Env Generator	r 3	90
1047 N	Aultimode Filter	5	40
1006 F	iltamp	4	20
1004t	VCO	4	90
1005 N	Modamp	5	90
1016 N	Noise Generator	3	80
	Dual VCO	8	90
1004t	VCO	4	90
1033	Dual Env Generator	4	30
1036 E	Dual Sample & Hold	d 5	40
1027 S	equencer	8	90
3212 3	Voice Keyboard	8	50
2515 0	Cabinet	19	90

\$9790

SAMPLE SYSTEM 2

1001	Blank	\$	10
1023	Dual VCO	8	390
1036	Dual Sample & Hol	d 5	40
1047	Multimode Filter	5	40
1006	Filtamp	4	120
10041	VCO	4	190
1005	Modamp	5	90
1016	Noise Generator	3	880
1023	Dual VCO	8	390
1046	Quad Env Generate	or 8	310
1050	Mixsequencer	6	690
1045	Voice	11	150
1027	Sequencer	8	390
3212	3 Voice Keyboard	8	350
2515	Cabinet	19	990

\$11,130

SAMPLE SYSTEM 3

1001	Blank	\$	10
1050	Mixsequencer	6	690
1027	Sequencer	8	390
	Sequencer		390
1036	Dual Sample & Hol	d 5	540
2508	Cabinet	11	190
1001	Blank		10
1033	Dual Env Generato	r	130
1047	Multimode Filter	É	540
1006	Filtamp	4	120
1004	t VCO	4	190
1005	Modamp	E	590
1016	Noise Generator	1	380
1023	Dual VCO	8	390
1046	Quad Env Generato	or 8	310
1006	Filtamp	4	420
1045	Voice	1	150
1033	Dual Env Generato	r	430
1047	Multimode Filter	É	540
3212	3 Voice Keyboard	8	350
2515	Cabinet	19	990
	¢1	1 1	150

\$14,150

SAMPLE SYSTEM 4

1001 Blank	\$	10
1023 Dual VCO	8	90
1016 Noise Generator	3	80
1006 Filtamp	4	20
1033 Dual Env Generato	r 4	30
1004t VCO	4	90
1047 Multimode Filter	5	40
2508 Wing Cabinet	11	90
1001 Blank		10
1023 Dual VCO	8	90
1006 Filtamp	4	20
1046 Quad Env Generato	or 8	10
1047 Multimode Filter		40
1045 Voice		50
1004t VCO	4	90
1047 Multimode Filter	5	40
1016 Noise Generator	3	380
1005 Modamp	5	90
1004p VCO		150
1050 Mixsequencer	6	690
1027 Sequencer	8	390
3002 2 Voice Keyboard	7	750
3212 3 Voice Keyboard	8	350
2515 Cabinet	19	90
1001 Blank		10
1036 Sample & Hold	5	540
1027 Sequencer	8	390
1050 Mixsequencer	6	690
1027 Sequencer	8	390
1001 Blank		10
2508 Wing Cabinet (unpowe		990

\$19,820

SAMPLE SYSTEM 5

1001 Blank	\$ 10
1047 Multimode Filter	540
1045 Voice	1150
1036 Dual Sample & Ho	old 540
1050 Mixsequencer	690
1027 Sequencer	890
2508P Portable Wing Ca	binet
	1340
2600 Portable Synthesi	zer
with Keyboard	2790
	\$7950

SAMPLE SYSTEM 6

1016 Noise Generator	380
1023 Dual VCO	890
1045 Voice	1150
1005 Modamp	590
1047 Multimode Filter	540
1036 Dual Sample & F	told 540
1045 Voice	1150
2508P Portable Wing (Cabinet
	1340
3604 Portable Keyboa	rd 600

\$7180

YOUR ARP 2500 SYNTHESIZER CAN BE CUSTOM TAILORED TO YOUR MUSICAL NEEDS AND BUDGET. . . IT CAN BE EXPANDED, MODIFIED, UPDATED, AND SERVICED EASILY, ONE MODULE AT A TIME, ANYTIME.

ARP INSTRUMENTS: TECHNOLOGY FOR MUSICIANS

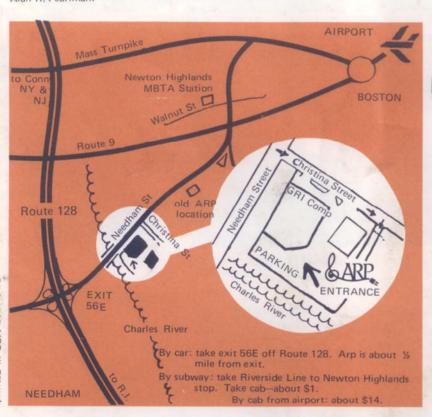
The ARP Instruments Applications Group has uniquely integrated backgrounds in music and engineering to help you establish the best possible electronic music studio for your budget. With the knowledge accumulated over hundreds of electronic music installa-

tions around the world, ARP Instruments and its highly skilled dealers in major cities will not only help you select the right synthesizer, but also advise you on the selection of all your studio equipment, at no additional expense.

Each ARP synthesizer is accompanied by a 138-page textbook written by musicians on the ARP Instruments staff. The text for the ARP 2500 is being widely used in electronic music curricula and provides even a novice with a thorough understanding of synthesizer principles. In addition, the ARP Applications Group is always anxious to assist you in making the best use of your synthesizer long after the initial purchase.



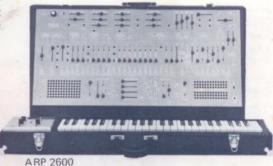
ARP inventor and company founder, Alan R. Pearlman.







ARP Pro Soloist



OTHER ARP SYNTHESIZERS

ARP Odyssey \$ 1295 ARP Soloist Mk II 995 ARP Pro Soloist 1295 ARP 2600 2790

For an in-depth discussion of electronic music principles and operations, read the famous ARP Owner's Manual, available for either the ARP 2500 or



YOUR LOCAL ARP DEALER: