THE ♪ARP 2500 ELECTRONIC MUSIC SYNTHESIZER

"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."
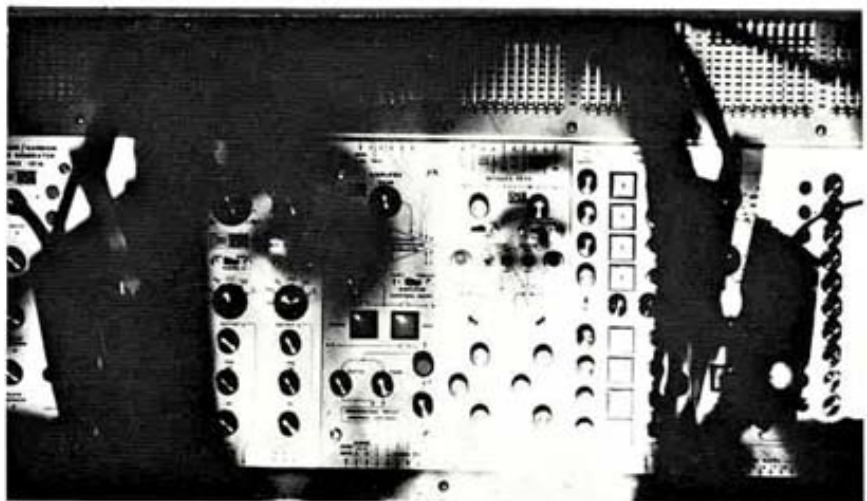
MILTON BABBITT
PRINCETON UNIVERSITY

"The ARP 2500 is a fabulous instrument capable of effortlessly translating literally any sound you hear in your mind into reality. It is a joy to own."

JIMMY PAGE

Led Zeppelin's lead guitar and synthesizer star Jimmy Page.

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, switch and 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. Glass-epoxy printed circuit boards, shock-tested semiconductors, and gold plated switch contacts help insure that every ARP 2500 will give years of trouble-free operation. Individual modules can be removed and serviced without interfering with the operation of the rest of your synthesizer.

FUNCTION MODULES

S 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   *1004t Voltage Controlled Oscillator.* Same as 1004p except inverted waveform outputs available.

590   *1005 Modamp.* A complex function module containing 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.

430   *1033 Dual Delayed Exponential Envelope Generator.* 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.* Ultra-compact 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.
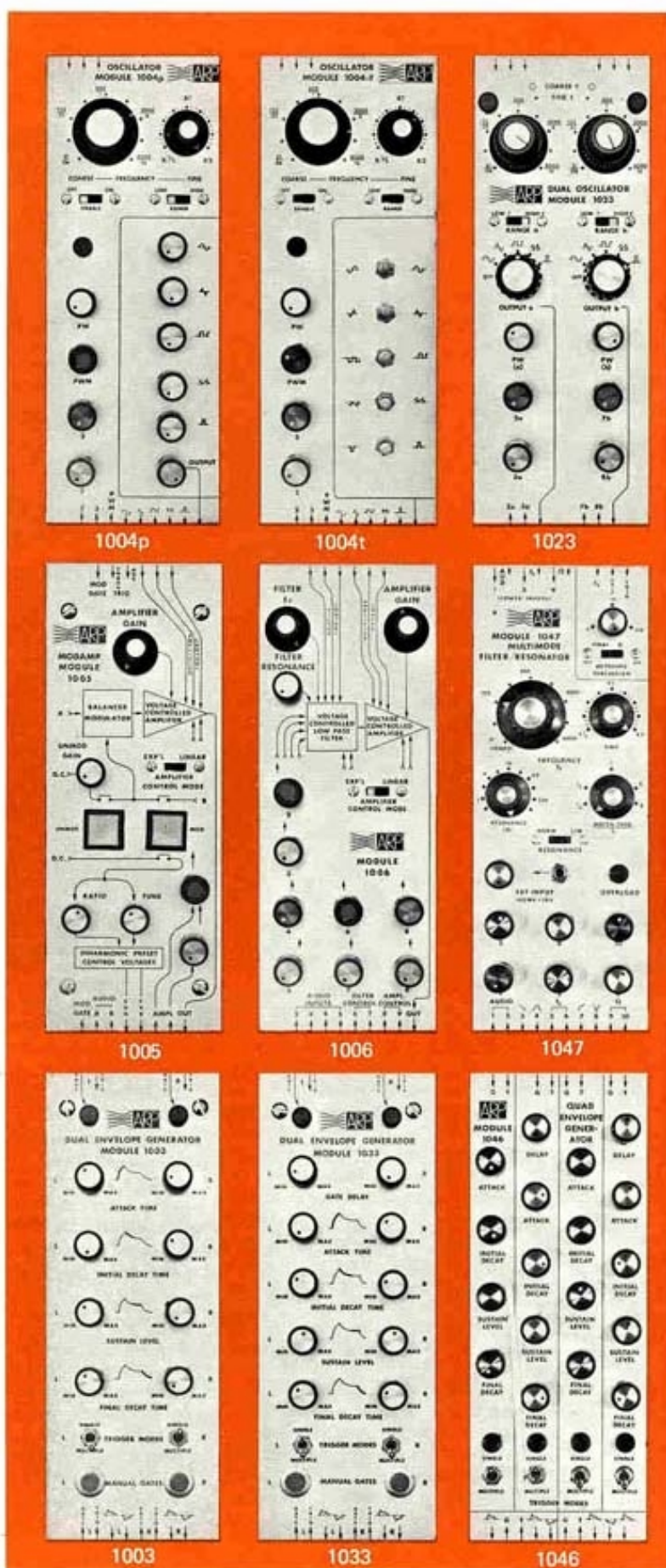
KEYBOARDS

$600   *3604 Portable One Voice Keyboard.* 4 Octaves.
750   *3002 Two Voice 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.

1004p   1004t   1023

1005   1006   1047

1003   1033   1046

1016

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.

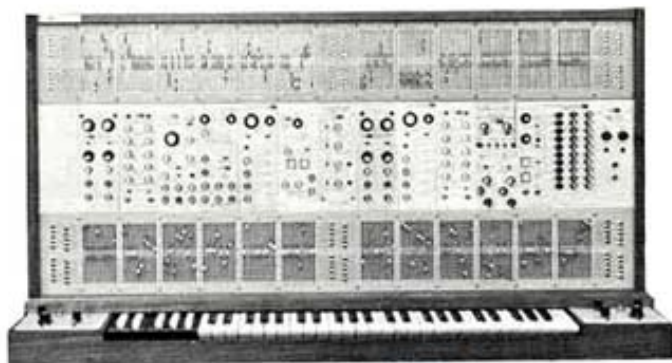# ARP modules offer unequalled flexibility and precision.
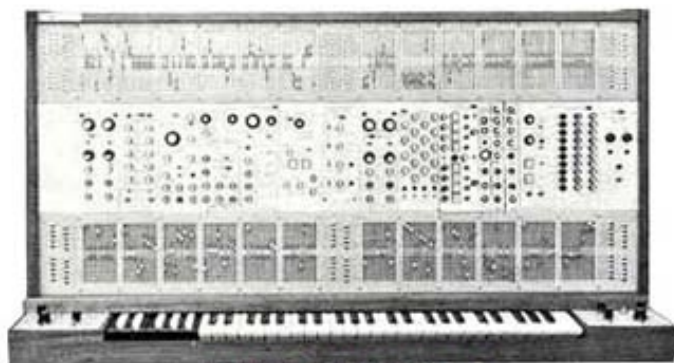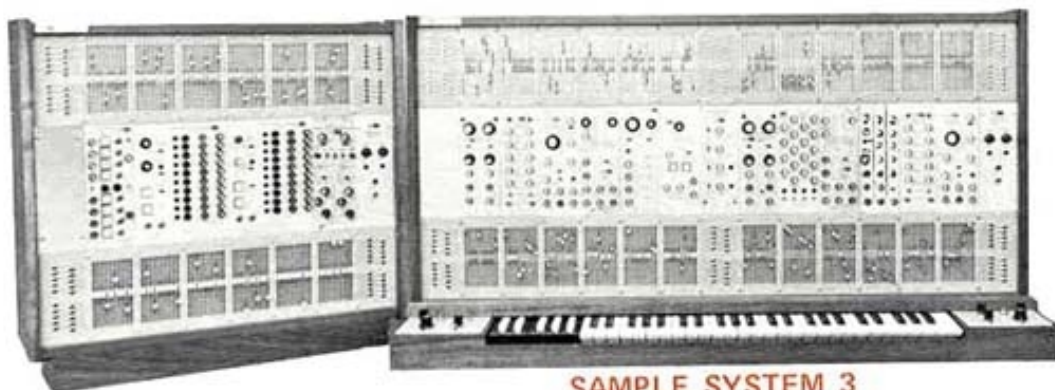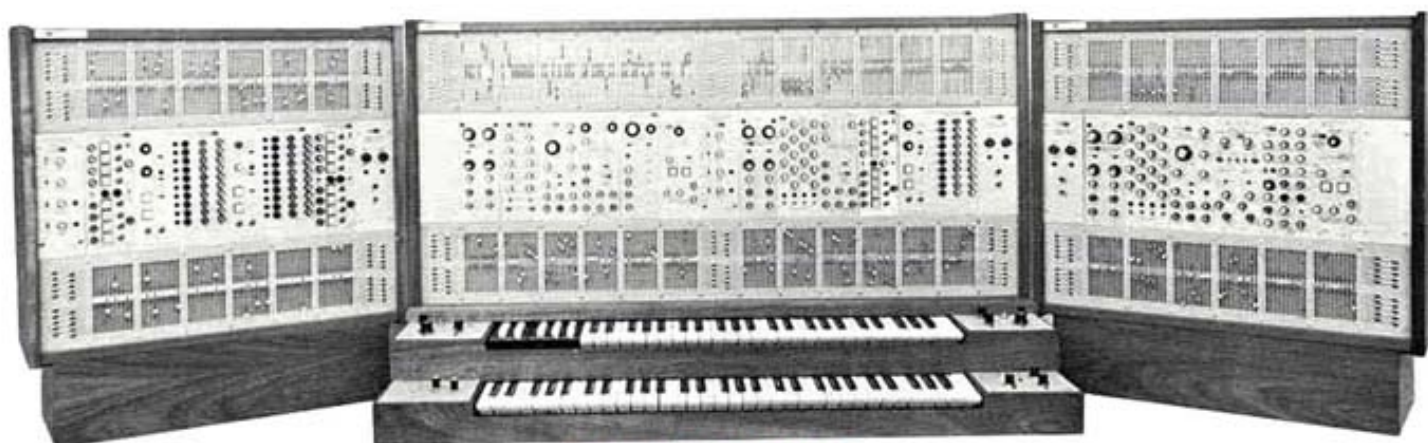

3222 Keyboard
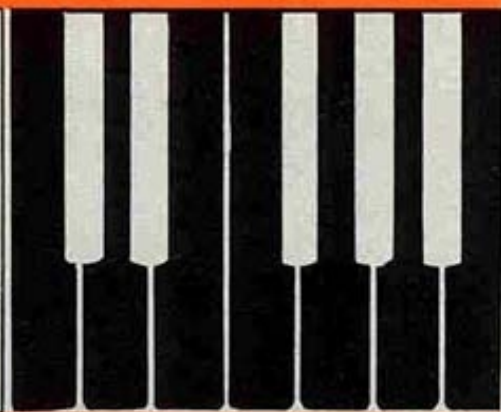
1027

1050

1036

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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 Blank Module	S 10
1023 Dual Oscillator	890
1003 Dual Env Generator	390
1047 Multimode Filter	540
1006 Filtamp	420
1004t VCO	490
1005 Modamp	590
1016 Noise Generator	380
1023 Dual VCO	890
1004t VCO	490
1033 Dual Env Generator	430
1036 Dual Sample & Hold	540
1027 Sequencer	890
3222 4 Voice Keyboard	950
2515 Cabinet	1990
	$9890

SAMPLE SYSTEM 2

1001 Blank	S 10
1023 Dual VCO	890
1036 Dual Sample & Hold	540
1047 Multimode Filter	540
1006 Filtamp	420
1004t VCO	490
1005 Modamp	590
1016 Noise Generator	380
1023 Dual VCO	890
1046 Quad Env Generator	810
1050 Mixsequencer	690
1045 Voice	1150
1027 Sequencer	890
3222 4 Voice Keyboard	950
2515 Cabinet	1990
	$11,230

SAMPLE SYSTEM 3

1001 Blank	S 10
1050 Mixsequencer	690
1027 Sequencer	890
1027 Sequencer	890
1036 Dual Sample & Hold	540
2508 Cabinet	1190
1001 Blank	10
1033 Dual Env Generator	430
1047 Multimode Filter	540
1006 Filtamp	420
1004t VCO	490
1005 Modamp	590
1016 Noise Generator	380
1023 Dual VCO	890
1046 Quad Env Generator	810
1006 Filtamp	420
1045 Voice	1150
1033 Dual Env Generator	430
1047 Multimode Filter	540
3222 4 Voice Keyboard	950
2515 Cabinet	1990
	$14,150

SAMPLE SYSTEM 4

1001 Blank	S 10
1023 Dual VCO	890
1016 Noise Generator	380
1006 Filtamp	420
1033 Dual Env Generator	430
1004t VCO	490
1047 Multimode Filter	540
2508 Wing Cabinet	1190
1001 Blank	10
1023 Dual VCO	890
1006 Filtamp	420
1046 Quad Env Generator	810
1047 Multimode Filter	540
1045 Voice	1150
1004t VCO	490
1047 Multimode Filter	540
1016 Noise Generator	380
1005 Modamp	590
1004p VCO	450
1050 Mixsequencer	690
1027 Sequencer	890
3002 2 Voice Keyboard	750
3222 4 Voice Keyboard	950
2515 Cabinet	1990
1001 Blank	10
1036 Sample & Hold	540
1027 Sequencer	890
1050 Mixsequencer	690
1027 Sequencer	890
1001 Blank	10
2508 Wing Cabinet (unpowered)	990
	$19,920

SAMPLE SYSTEM 5

1001 Blank	S 10
1047 Multimode Filter	540
1045 Voice	1150
1036 Dual Sample & Hold	540
1050 Mixsequencer	690
1027 Sequencer	890
2508P Portable Wing Cabinet	1340
2600 Portable Synthesizer with Keyboard	2990
	$8150

SAMPLE SYSTEM 6

1016 Noise Generator	380
1023 Dual VCO	890
1045 Voice	1150
1005 Modamp	590
1047 Multimode Filter	540
1036 Dual Sample & Hold	540
1045 Voice	1150
2508P Portable Wing Cabinet	1340
3604 Portable Keyboard	600
	S7180

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 installations 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.
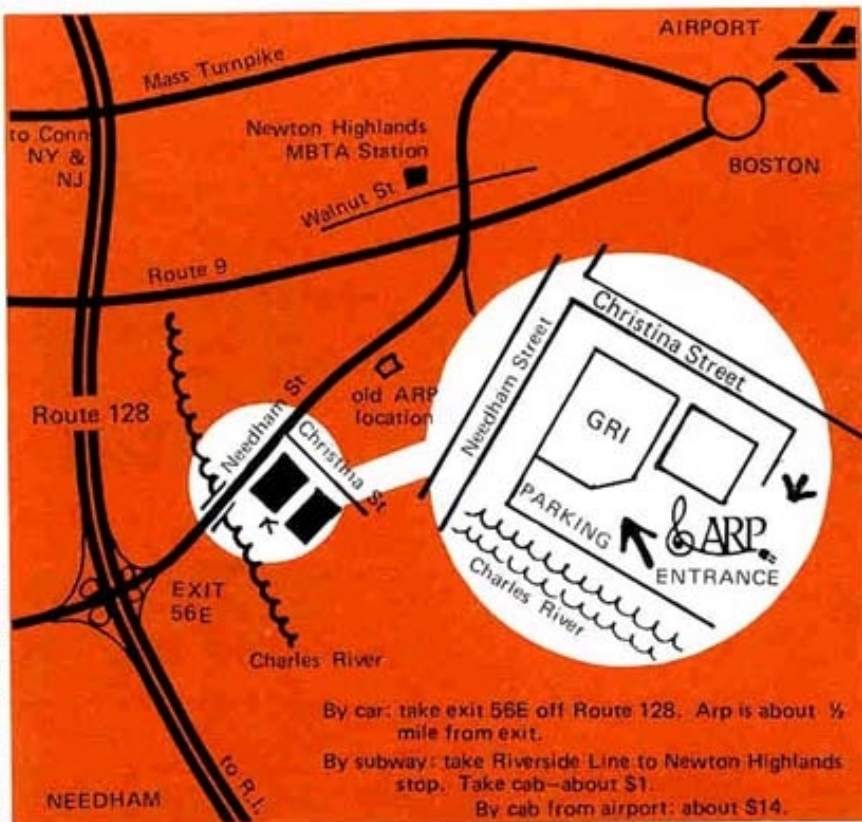

ARP 2600

ARP Odyssey

ARP Pro Soloist

ARP Explorer I

ARP

By car: take exit 56E off Route 128. Arp is about ½ mile from exit.
By subway: take Riverside Line to Newton Highlands stop. Take cab—about $1.
By cab from airport: about $14.

YOUR LOCAL ARP DEALER: