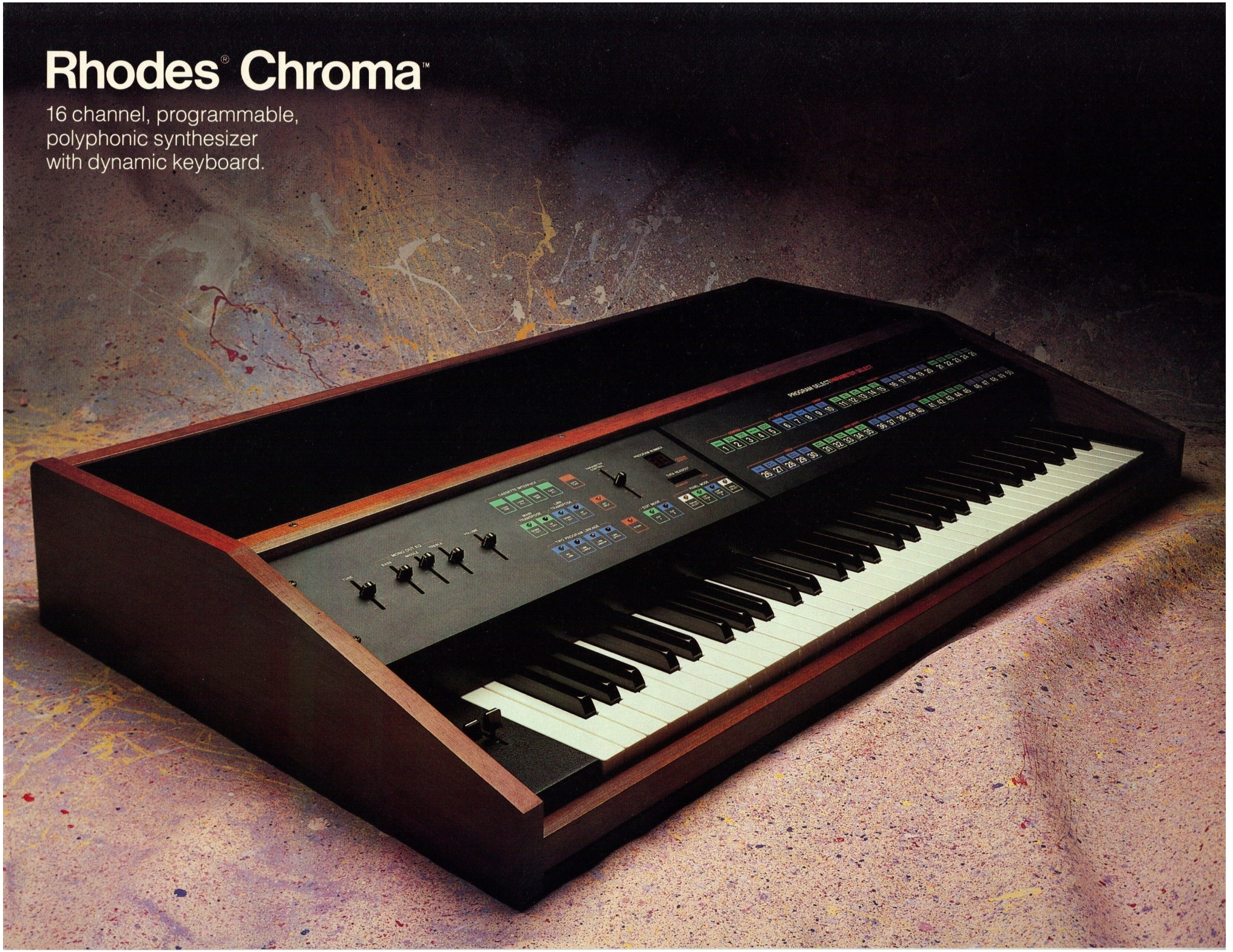
Rhodes® Chroma™

16 channel, programmable,
polyphonic synthesizer
with dynamic keyboard.



CONTROL YOU'VE NEVER FELT BEFORE.

Today's synthesizers are a testament to modern technology. They put an enormous amount of technology at your finger tips. Even though they've had some problems dealing with your finger tips.

Enter Chroma.

It's a synthesizer the likes of which you've only hoped for. A 16-channel programmable polyphonic synthesizer with a truly dynamic keyboard. It lets you play up to 16 different notes simultaneously because each channel has its own oscillator, filter and amplifier. And it's delivered complete with 50 user-programmable pre-sets, 100 more voice programs on cassette tape, standard cassette interface for outboard storage, pedals and ATA case.

Now, if that sounds like familiar territory, stop a minute. Because Chroma is a major breakthrough in computer-based musical instruments.

A keyboard that's really a keyboard.

Most synthesizer keyboards are pushbuttons shaped like piano keys. We all had to get used to that feel.

Until Chroma.

Here's a keyboard that feels like a keyboard. We started with a 14" wood piano key, center-mounted it, then precisely balanced and weighted it. The result gives you the feel of real mechanical action. The way a keyboard should feel.

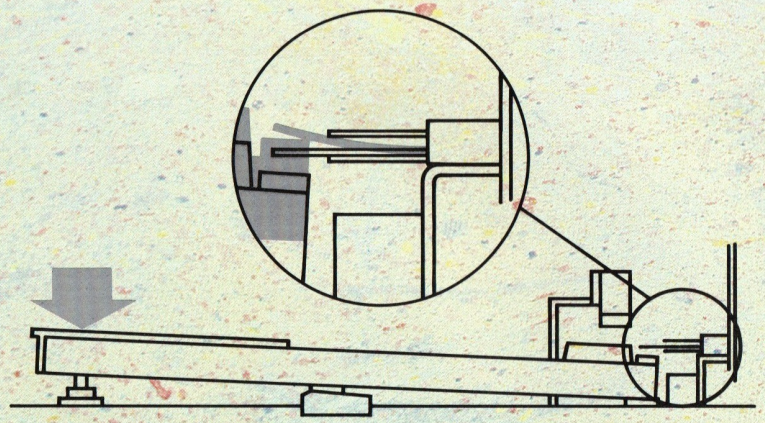
True dynamic control.

Feeling Chroma's keyboard is a delight. Learning what it can do for you is a wonder!

Chroma is the first programmable electronic music synthesizer with a micro-computer that can actually respond to your physical expressions. Giving you true polyphonic touch control.

Chroma's keys are both velocity and pressure sensitive. And programmable for eight different levels of sensitivity. Your physical attack and applied pressure create and control sounds. So your fingers control musical elements like pitch, attack and decay while you're playing. You get touch control that's more natural, more expressive than anything you've ever experienced on a synthesizer.*

Of course, the bottom line is sound. And the control that Chroma puts in your hands gives you a richness you've probably never experienced. It's a depth of tonality and personality that simply must be experienced.



Each key on Chroma's keyboard operates a leaf switch. Basically, when you press a key, it moves a metal blade from the lower post to the upper. The switch, which is controlled by a separate microprocessor, measures the time of flight of the blade and communicates that value to Chroma's microcomputer. The result is true dynamic control over each note.

*optional

COMPLEX PROGRAMMING MADE SIMPLE.

The ARP Model 2600 set the standard for programming depth in studio portable synthesizers. Now, this level of programming is found in Chroma. But it's in the fastest, easiest to use format ever.

You start with 50 pre-sets–voice select switches that double as programming controls (when you switch into the programming mode). Plus, you get another 100 voice programs on the cassette tape included with Chroma.

Because Chroma is digitally-based, all the operating, programming and tone controls are generated in software. So the 16 oscillators, 16 filters and 16 amplifiers–all of which are controlled by Chroma's high speed computer–are completely accessible. In other words, Chroma is the first synthesizer that actually lets you change its basic architecture. For example, you can put filters in series, or run through them in parallel. You just program the architecture you want. This fundamental breakthrough makes owning Chroma like owning 16 different synthesizer brands and models.

An open-ended instrument.

The list of Chroma's programming features is long. The capabilities put into your hands seem endless.

Once you've selected the architecture you want, you can store it. Then you have 50 parameters to work with (the voice selects). Once your program is completed, you can store it behind any of the 50 front panel positions or load it onto a cassette. And every program is instantly accessible. While you're playing!

Built-in housekeeper.

Chroma's built-in diagnostics make day-to-day housekeeping simple and automatic.

Turn Chroma on and it automatically runs through its diagnostic routines. It automatically tunes up. Checks all 16 oscillators, 16 filters and 16 amplifiers. Then performs a board-check that eliminates any board that isn't performing properly. There's even a battery check that lets you know exactly how much voltage the battery is producing–just to keep your programs safe. Best of all, everything is done right from the front panel. You don't have to go digging inside Chroma to take care of things.

Programming enhancements.

Chroma's programming lets you split the keyboard anywhere you like. And the split can be stored in Chroma's memory, to be recalled on command.

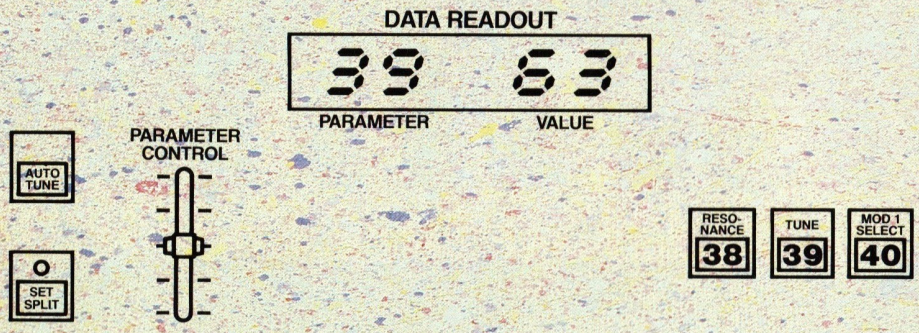
There's also a program link capability that lets you overlay two programs. You'll get two voices on one note or up to four voices on one note when each program already contains two voices. You can even transpose the linked programs separately or together.

Chroma gives you a sequencer-like arpeggiation mode. And you can run it up, down or in a time-ordered mode. Put this function together with Chroma's split keyboard and you've got a new musical world to explore that's quickly programmed and instantly accessed.

Quick operation.

On the front panel, Chroma gives you quick access to all operations. There are complete editing facilities that operate on a "51st" floating program. That means you can hit a switch, edit, enhance and alter your program, then store it or keep the original. Plus, you can generate instant comparisons of the programs to help you decide what you like best.

There's a cassette interface that lets you control a cassette deck (one that has remote capabilities) right from Chroma. Plus, Chroma will combine audio and program information on the tape which, among other things, makes vocal cueing a breeze.



EASY, FLEXIBLE PROGRAMMING.

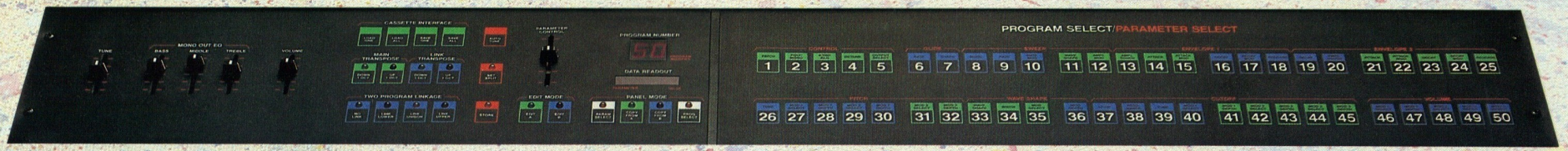
As an example of Chroma's programming ease and wide-ranging flexibility, here's the basic procedure for one programming step. Suppose you wanted to tune a filter. Here's what you'll do:

First, touch switch #39 called TUNE on the PARAMETER SELECT panel. Notice that the number 39 appears in the data readout, above the word PARAMETER.

Next, you'll be adjusting the range of values within that parameter. Just follow along for a moment and you'll see how it works. Above the word VALUE in the data readout, a number will appear. This indicates the value of the parameter. In this case, the value will be between 0 & 63 because there are 63 available adjustments for the Tune Track *parameter.*

The Parameter Control *slider is the control for the value adjustment. When you move it , you change the values from 0 through 63.Each value number that appears in the data readout window refers to a given setting. In this case, you're adjusting the unmodulated tuning of the filter in whole tone increments, starting at 16 Hz.*

Once you've tuned up (that is, selected a value), Chroma remembers it and you can move on.



Chroma™

Touch the music.

GETTING IN AND OUT.

On the back panel, Chroma provides a single footswitch, a dual footswitch, and two volume-type (linear) pedal inputs. Each is fully assignable.

There's also a program lock for added protection. And a 25-pin computer port we'll say more about in a few moments.

Chroma's outputs are all assignable. You get Mono, Stereo and Quad outputs, and when you're not in Quad operation, these outputs double as inputs. Giving you four effects loops built right in. So outboard signal processing gear goes right into Chroma and right into your programs.

Apple core built in.

That simple-looking 25-pin computer port on Chroma is actually several notches above anything else when it comes to operational sophistication, because Chroma is a computer, too. You can connect Chroma to another Chroma and control both from one keyboard. You can create a 32-channel programmable synthesizer. And you'll be able to connect some of the other musical goodies we have coming in the not too distant future.

Chroma's subroutines and data make outboard computer interface incredibly easy and accessible. The software is already designed-in to let Chroma interface with any computer. Apple® II software is ready now. Soon to come is TRS-80 compatibility, with others on the way.

Amazing capabilities at your fingers.

With your Chroma hooked up to an Apple II, you've got many of the capabilities normally seen only on huge digital synthesizers. An expanded memory. Multitracking—eight independently voiced synthesizer channels. Storage and menus galore. Plus, with Chroma's dynamic keyboard, you can store all the subtle nuances and colorations of your performance. Putting the flavor and feel back into your electronic world.

Out of the case. Ready to go.

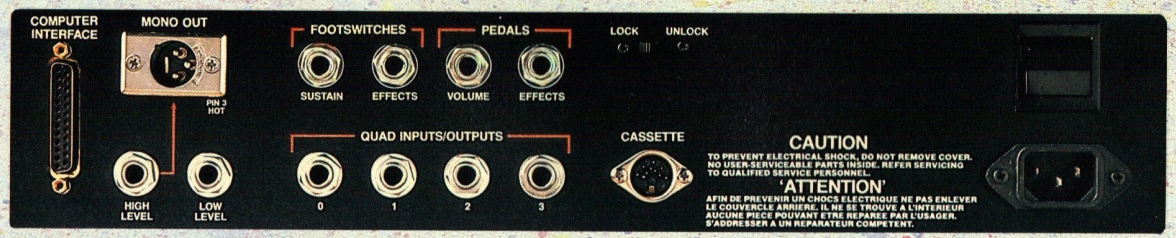
With Chroma, you get two foot-pedals (volume-type and dual-switch-type). A custom designed, heavily padded, ATA Anvil® case with pedal compartment. The standard cassette with 100 voice programs. And two invaluable books.

The Chroma Performance Manual *is designed to get you to work quickly. It's written for the musicians who want to play now and study later. Next, there's the Chroma* Programming Manual. *It's an in-depth technical guide to Chroma's programming and operating systems.*

We'll also have available, as an option, the Chroma Computer Interface Manual. *It describes technical details involved with computer-to-Chroma hook-ups.*

Chroma. An exploration in tomorrow.

It's a major breakthrough in synthesizer technology. A totally new presentation of functions. But perhaps more than anything else Chroma is a beginning. It's the start of a new musical direction. Where synthesizers feel like musical instruments. Where you're



in complete control of every color, every nuance, every shade of your sound. Where you'll be able to control all your equipment from one keyboard.

Chroma. Explore it with feeling.

Touch Chroma. Then put it through its paces. Even we haven't had time to fully explore its creative capabilities. They're that vast.

Let Chroma put you back into the warm world of human-controlled music. Put you back into performance that changes with your feelings.

SPECIFICATIONS

INPUTS

Dual Footswitch (Sustain/latch):
Stereo phone jack; sustain on ring/latch on tip. Operates on standard PTL (LS) with 10k ohms pull up to +5V.

Sequence Footswitch:
Stereo phone jack; return on ring/signal on tip. Operates on standard PTL (LS) with 10k ohms pull up to +5V.

Variable Pedals (2):
Mono phone jack; ground on sleeve/signal on tip. 120k ohms pull up to +12V.

OUTPUTS

Audio (0-3):
Stereo phone jack; signal on tip/return from mono and mix on ring. 100 ohms. Maximum swing ±10V.

Audio Mono (High Level):
Mono phone jacks; signal on tip/ground on sleeve. 100 ohms. Maximum swing ±10V.

Audio Mono (Low Level):
Mono phone jacks; signal on tip/ground on sleeve. 60 ohms. Maximum swing ±.1V.

Audio (Balanced):
2 standard XLR; ground on pin one, signal on pins two and three. 300 ohms, transformer, 12.3V (+24 db) RMS maximum.

Cassette Interface:
5-pin DIN connector. Operates motor drive transistor switch (opto isolated) with .8 amps maximum current. 30V DC maximum voltage.

Computer Interface:
25-pin mini-D. Operates on standard PTL (LS) "totem pole." 100 ohms series resistors.

PROGRAMMING

50 user-programmable pre-sets (3K memory). 1 programming "safe buffer."

KEYBOARD

64-key wood (E to G) dynamic keyboard; velocity and pressure (optional) sensitive.

MEMORY

7K (3K on battery back-up) RAM (16K ROM).

DIMENSIONS

Length: 41½".
Depth: 24".
Height: 6⅛".

POWER REQUIREMENTS

120-130V AC/200-250V AC AT 90 watts, 50-60hz.

WEIGHT

71 lbs.; 130 lbs. (in case)

Rhodes®

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