

MAIL

TO:

Dr. Peter Lewis
Electronic Music Studio
University of Iowa
Iowa City, Iowa 52240

SUBJECT

Shipping Instructions

FROM

Fred R. Locke
Electronic Music Laboratory, Inc.
P. O. Box 33
East Berlin, Conn. 06023

DATE

Jan. 6, 1971

MESSAGE

Dear Dr. Lewis:

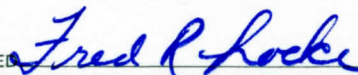
Upon completion of the loan period for the ElectroComp, please ship it to the following, prepaid:

Mr. Tom Hamilton
1450 Bluebird Terrace
Brentwood, Mo. 63144

Enclosed is a postcard which we would ask that you fill in and mail to us as soon as this shipment is made.

Thank you for your cooperation.

SIGNED



Fred R. Locke

REPLY

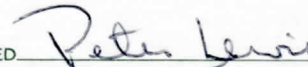
DATE March 8, 1971

Dear Mr. Locke,

At last I located this letter, and I am here advising that, unless I hear differently from you, I will have the ElectroComp picked up for delivery to Mr. Tom Hamilton on or about Friday, March 12. I'm sorry to say I was unable to plan any sort of large demonstration, but many people have visited our studio and seen some of its possibilities.

Thank you kindly for the loan.

SIGNED



Peter Lewis



SNAP-A-PART
47-203
MADE IN U.S.A.

THIS COPY FOR PERSON ADDRESSED



ELECTROPHONICS, INC.

747 GLENAYRE DRIVE • GLENVIEW, ILLINOIS 60025 • PHONE 312/724-5084

January 7, 1971

Chairman of the Music Department
University of Iowa
Iowa City, Iowa 52240

Dear Sir:

For Sale - "Augmented" Moog Synthesizer III.

Enclosed is a photographic reproduction of our "augmented" Moog Synthesizer III which is for sale including a detailed list of all the modules it contains. Our asking price is \$9,500.

The original Moog Synthesizer III was delivered to Electrophonics November 6, 1967. Subsequently, we purchased an additional keyboard controller the following year. December of 1969 we added the Sequencer compliment plus an additional 901-A Oscillator Controller, Low Pass Filter, Envelope Generator and Voltage Controlled Amplifier. The entire instrument has never been removed from our studio. It is in fine condition and we'd welcome physical inspection at any time. The instrument has had normal use with surprizingly little wear and tear physically or electronically.

This is an exceptional value as a new instrument with the facility of this one now exceeds \$15,000. Furthermore, this instrument is virtually two Synthesizers in one unit and can be separated to create two systems if desired. We know from past experience with institutions such as yours, the need and availability is great for as many instruments as practicable for more serious students to participate in electronic music composition and for an expanded teaching program.

If you're interested in establishing an electronic music studio or adding additional equipment to an existing studio, the instrument herein described would make a most valuble asset.

Sincerely,


Harry H. Coon, President

Electronic Music Production • Radio/TV/Film



WISCONSIN STATE UNIVERSITY
EAU CLAIRE, WISCONSIN 54701

January 8, 1971

DEPARTMENT OF MUSIC

Director of the Electronic Music Studio
University of Iowa
Iowa City, Iowa

Dear Sir:

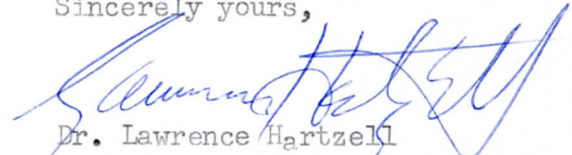
We are presently beginning to plan an Electronic Music Studio for our school and I have found that I would like to see a completed studio in operation before further progress is made.

Would there be any possibility of a visit to your facilities being arranged during the Spring Semester? I would like to make this visit for two reasons, the one mentioned above and because I understand that Dr. Edward Kottick, formerly and teacher of mine, is on your staff.

If such a visit could be arranged I would be most delighted to come and observe the work being done at your school.

Thank you for your kind attention to this letter.

Sincerely yours,



Dr. Lawrence Hartzel
Head, Music Theory-Composition

January 29, 1971

Dr. Lawrence Hartzell
Department of Music
Wisconsin State University
Eau Claire, Wisconsin 54701

Dear Dr. Hartzell:

Received your letter of January 8, sorry about the delay in answering. We would, in principle, be delighted to have you come visit the Electronic Music Studio. There are occasional problems, however, so I would suggest that you give us a call before you intend to come. I'm sure something can be worked out. I look forward to your visit.

Sincerely yours,

Peter Lewis, Director
Electronic Music Studio

PL:mc

Jan. 30, 1971

Mr. Fred R. Locke
Electronic Music Laboratory, Inc.
P.O. Box 1334
Hartford, Connecticut 06101

Dear Mr. Locke,

I have in hand your "quicky-letter" of Jan. 6, containing shipping instructions for an ElectroComp --- which never arrived! I sincerely hope you still intend to let us have a look at your machine. We were quite dismayed to hear of the accident your man had on his way up here. I hope it wasn't serious.

Well, please let us know how things stand.

Sincerely,

Peter Lewis
Director, Electronic Music Studio

Mar. 7, 1971

Mr. Dean Floyd
311 Jessup Hall
453-3350

Dear Mr. Floyd,

Thank you for the call last week. We would indeed appreciate any help you could give us in acquiring surplus or excess electronic audio equipment. Among the items you mentioned, the Tektronix 517 Oscilloscope is a choice one, and we'd be most grateful if you could nail that down for us. The other items are also of interest, though I would like more information on them before making a formal request.

Following is a general list of equipment we are perennially interested in: The list is not necessarily in order of priority.

Tape recorders
Amplifiers, preamps, speakers
Reverberators
Audio generators / oscillators
Harmonic wave-form generators
Wave shapers
Filters (hi-pass, lo-pass, band pass, band reject, etc.)
White noise / Random signal generators
Signal multipliers
Audio mixers, mixing consoles
Microphones
Oscilloscopes
Frequency counters
Small FM transmitter
Portable FM receivers
Battery packs

Well, I look forward to hearing from you.

Sincerely,

Peter Lewis
Director, Electronic Music Studio

February 19, 1971

MR. PETER LEWIS
Director - Electronic Music Studio
% Dept. of Music
The University of Iowa
Iowa City, Iowa 52240

Dear Mr. Lewis:

In regard to our phone conversation of February 12, 1971, on the 4-channel mix console.

In order to keep the price near the original quote of \$1,750.00 and add the modifications of VU Meters and active output amplifiers on the four program channels, we have chosen the Shure M-63 line amp as the output amplifiers, this would give you the necessary amplification metering and the added benefit of equalization on each of the four program channels.

In our conversation you expressed the need for microphone pre-amplifier in one of the channels. Again, we can rely on the Shure Bros. to help out. The M-67 is a four input mic mixer, line out with metering and filtering on each input position.

The price to you for the engineering, construction, and necessary accessories will be \$1,800.00. [^{+\$3000}]

This does not include the price for freight, insurance and handling, of which I am looking for bids now. The average cost of this special handling is in the neighborhood of \$150.00

Enclosed is literature on the mixers mentioned above. If there is any question as to any of these details, feel free to contact me.

Sincerely,



GARY ERICKSON

GE/js

Encl.

March 1, 1971

Electronic Music Labs, Inc.
P. O. Box H
Talcottville, Connecticut 06080

Dear Sirs:

We received the ElectroComp from Southern Illinois University the other day. There was no instruction manual, so we've had to make our way with it by assumption and a little trial and error.

Do you have an instruction booklet you could send? I'm sure I haven't fathomed all the secrets of the Manual Controller.

In addition, what are your instructions regarding further shipment? Shall I return it to you, or elsewhere??

Sincerely,

Peter Lewis
Director, Electronic Music Studio

PL:jl

Merton R. Shaw
222 15th St. N. E.
Cedar Rapids, Iowa
52402

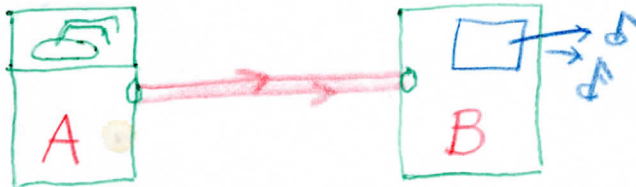
March 2, 1971

Dr. Peter Lewis
Department of Music
University of Iowa
Iowa City, Iowa

Dear Pete:

Since about 1942 while attending anti-aircraft school in Chicago I have been trying to interest someone of your bent for new sound in some already invented equipment which has never been used for that purpose.

In 1942 this equipment was apparently a gift (probably from General Electric?) which the company developed and found no use for - given as a gift to the museum.



There are no electrical or mechanical connections between A and B.

It consisted of two cabinets. Cabinet A had a turn table on which a record was played. Cabinet A transformed the sound from the record (modulated sound?) into light rays (modulated light rays?). This light beam came out a port hole of cabinet A and traveled a few feet through the air and entered cabinet B.

The light beam entered cabinet B through a port hole and in the cabinet B the light beam (modulated light) was transformed into sound. The record played came out as sound from cabinet B. If you placed your hand in front of the light beam between the two cabinets - you of course got no sound from cabinet B. You of course got no sound from cabinet A at any time.

To create new sounds is probably a matter of physics in light, about which a great deal is known.

First start out with placing light filters individually in front of the light beam before it reached cabinet B. Both to eliminate part or all of some particular light wave length. *Or color wheel.*

Exhaust the almost inexhaustable affects that can be made on light through knowledge of physics. Shot-gun method unlimited: spray light with atomized chemicals in liquid form; pass lassar beam through light beam at right angles; bombard with electrons; etc. Test for physical - temperature - freezing etc. chemical phenom.

Sincerely, Merton Shaw

March 3, 1971

Gary Erickson
Sound 80 Inc.
2709 E. 25th Street
Minneapolis, Minnesota 55406

Dear Mr. Erickson:

Thank you for itemizing the additions to the Mixer Console. The Shure components would be quite acceptable-- and the price is right. I don't believe you have mentioned anything about a parts warranty, however. We have incurred numerous small expenditures on the Moog Sequencer Complement B that we purchased from you without warranty. I realize that this is one thing that enabled you to lower the price. But still, would it be possible for you to offer us, say, a 90-day warranty on parts, such that, should a part go bad within that time, we would replace it at your expense?

If so, we run into the next problem: our present studio is so cramped, we would be unable to use the Console until we move into the new Music Building (the Great Move takes place in May-June). This means, in effect, that delivery should be put off until then.

In sum, I am requesting now (at least) a 90-day parts warranty following delivery on June 10. What is your response to this proposal?

Sincerely,

Peter Lewis
Director, Electronic Music Studio

PL:jl

March 3, 1971

R. A. Moog, Inc.
Trumansburg, New York 14886

Dear Sirs:

We are interested in your 1084 Four Channel Mixing Console. Would you kindly send a description and specifications, also price information and warranty details.

In addition, if you are a distributor for MRS tape recorders, kindly send literature on their 4-channel model.

Sincerely,

Peter Lewis
Director, Electronic Music Studio

PL:jl

March 5, 1971

Mr. Peter Lewis
Director, Electronic Music Studio
Department of Music
UNIVERSITY OF IOWA
Iowa City, Iowa 52240

Dear Peter:

In answer to your letter of March 3 regarding warranty and delivery of the quad mix console now presently proposed to your department:

We will give to you the 90-day parts warranty on the basic console, but because it is a custom design, correct parts will probably not be available through your local distributors. We thus have to specify that we provide the necessary replacement part in exchange for the defective unit.

As far as the Shure mixers are concerned, these units will be under full one year warranty. And the repair work will have to be made by either the factory or Sound 80. Any non-authorized repair work will void all warranty of the item in question per the Shure Bros. warranty program...copy enclosed.

A delivery date of June 10 does present a problem inasmuch as there have been other inquiries regarding the purchase of this console. We do expect future inquiries also, so it is going to be difficult to justify holding it for three months without a more firm commitment.

So may I suggest a deposit of at least 25% of the total purchase. This will guarantee you delivery on June 10th.

I hope this clears up all of the questions regarding this proposal.

Sincerely,

SOUND 80 SYSTEMS DIVISION



Gary Erickson

GE/jb

Enclosure

~~Handwritten~~

3500

2100	90 days
warranty	

Department of Music
St. Olaf College
Northfield, Minn. 55057

March 13, 1971

Mr. Peter Tod Lewis
School of Music
University of Iowa
Iowa City, Iowa 52240

Dear Mr. Lewis:

I am planning another Spring concert of electronic music at St. Olaf College for April 13, 1971. Do you have a relatively new tape you could send me for a performance? I could use just about any duration between 5 and 12 minutes. Nothing fancier than 2-channel stereo, though. Tape will be returned promptly.

Is there a possibly available, relatively new, tape by anyone else that you would care to recommend for our concert?

Thank you.

Sincerely,



Arthur M. Campbell

Mar. 22, 71

sent Voces I

2-2-Tonic-4-words

St. Olaf College
Northfield, Minn.
April 29, 1971

Mr. Peter Lewis
School of Music
University of Iowa
Iowa City, Iowa

Dear Peter:

Sorry to be so slow about sending the program of our Electronic Music Concert, but I hope that your tape got back to you before this. Both your tape and Mr. Lisle's were quite effective. I am also enclosing the review in the student newspaper, just to show that your work and the concert got some attention, though I can't be responsible for any views of the reviewer.

Thank you very much for the use of the tapes.

Sincerely,

Arthur Campbell

Arthur Campbell

1(A15)452-4137

June 14, 1971

Buchla Associates
P.O. Box 5051
Berkeley, Calif. 94705

Dear Sirs,

We are presently making plans for studio development as we prepare to move into a new building. I mean, planning a second studio. Would you kindly send me your recent literature -- module descriptions, specs, and price information.

Also, do you make a studio mixer? Say, 8 - 12 channels in, and 4 out? It seems that Moog's announcement of their new studio mixer was somewhat premature -- yet it contained precisely the features most useful in studio operation.

Please send me everything you have regarding your current production and future plans. I will read with great interest.

Sincerely yours,

Peter T. Lewis
Director, Electronic Music Studio

BUCHLA ASSOCIATES
P. O. Box 5051
Berkeley, Calif. 94705

July 2, 1971

Peter T. Lewis, Director
Electronic Music Studio
School of Music
The University of Iowa
Iowa City, Iowa 52240

Dear Dr. Lewis:

Enclosed is our catalog of Electric Music Box components and systems. Engineering specifications (not extensively delineated in the catalog) surpass professional requirements.

We do not make a studio mixer per se, but 4-output mixing consoles can readily be configured from standard modules. The advantages of such an approach include high flexibility, expandability, incorporation of special effects, voltage controlled functions, separate quadraphonic preview and monitoring capability, and economy. The disadvantage of the modular mixer approach is the unorthodox organization. While all the functions (and many more) of standard consoles can be incorporated, their relative location is far from standard. Enclosed is a sketch of an interesting 12 by 4 mixer. It is contained in a Model 200-2A cabinet, 15" high by 32½" wide, uncataloged, but in production.

Regarding future plans -- our 200 series system was designed to be interfaceable with a 16-bit minicomputer, a job which is presently well under way. We have not publicized this feature to avoid inevitable comparison to present computer-synthesizer marriages that have very limited expressive capabilities and overly complex programming requirements. Our system is relatively compact, eminently performable, and converses in a simple, high level, musical language.

If you could let me know more about your studio requirements (present resources, student load, desired configuration -- quadraphonic? digitally controlled? etc.), I could perhaps recommend some specific equipment. Hope you find our system interesting.

Sincerely yours,


Donald F. Buchla

DFB/jr

Encl. (2)



Mastertone Company

Professional Audio - Video Equipment and Supplies

8101 University Blvd.
DES MOINES, IOWA 50311

AC 515 PH. 274-2551

July 16, 1971

Mr. Peter Lewis
Director Electronic Music Studio
UNIVERSITY OF IOWA
Iowa City, Iowa 52240

Dear Mr. Lewis:

We have been informed by the Fairchild Corporation that you have expressed interest in their products.

We note they have already sent you brochures on the products which you were interested in. If we may be of further service to you, please feel free to write us.

Our company is the distributor/dealer for Ampex master professional recorders, Sono-Mag cartridge machines, Fairchild audio, Electro Voice microphones, CBS, Rohn and Utility Towers, Belar, Wilkinson, Jampro and Bauer broadcast products. If you have an interest in any of these products and would like brochures, please contact us.

Very truly yours,

MASTERTONE COMPANY

VIC BLACKETER
Manager

VB/jp

July 23, 1971

Mr. A. G. Burks
Purchasing Department
Jefferson Building
University of Iowa
Iowa City, Iowa 53340

Subject: QMAC - 164PE / Quote No. 412

Dear Mr. Burks:

In reference to my correspondence with the electronic music studio at the University of Iowa and Director Peter Lewis...I have been advised to direct to you the necessary information on one custom quad mix audio control console, for sale by our Company, for purchase approval by your department.

Architectural Spec:

Said console is a free-standing, black suede Formica covered cabinet 67 inches long, 29½ inches deep, 31½ inches high. Contained in the cabinet is a 16 input, 4-channel output resistive matrix mixing network consisting of a total of 144 control potentiometers mounted in a 60-inch by 20-inch red anodized panel. A 52-position patch bay, 19 by 1 3/4 inches, is flush mounted in the upper right hand corner of the cabinet. A turret 11 inches high by 10 inches wide and 8 inches deep, which houses the electronics, will set on the top rear portion of the console next to the patch bay. It, too, is black suede Formica.

Electrical Spec:

Said quad mix audio control console has the ability to accept an input from 16 independent sound sources, mix them in any of 64 proportional levels to individual 4-channel program output controls. In a quad sound application the effect of 360° rotation of sound around one given point could be experienced. Each of the 64 input matrix controls has an accommodating echo send control beneath it. Again any of 64 proportional levels of the existing audio input can be obtained and returned to the 16 echo mix matrix controls located to the right of the console. This is not an echo device. It requires independent units that will echo or delay a signal by either mechanical or electrical means. Each of the 4 control amplifiers has its own equalization and lighted VU meter and will obtain a zero db high level output. The echo send and return lines will be low level audio only.

Mr. Burks

2.

7/23/71

One 4 input mic mixer will also be included with this system. Said mixer will have four independent low impedance microphone input positions with individual level control and filtering. A master output control will attenuate the mixed portions of the levels desired by the operator. This mixer will have its own self-contained lighted VU meter and test oscillator and will be wired to enable independent operation from the main part of the console whenever necessary or convenient. The amplifiers described will be mounted in the turret described in the architectural spec.

The above-described console was designed with vast research, the sources of which were numerous electronic music studios in various parts of the Country, and with a marketing price of \$3,150.00, which is well within reach of these users.

I have extended to the University of Iowa a discount which is given to all music educators who are promoting electronic music, plus an extended discount resulting from a large past purchase by the University. These discounts reduce the total price to \$1,800.00 F.O.B. Minneapolis.

Said console is guaranteed to be free from electrical and mechanical defects for a period of 90 days from the date of receipt. Guarantee is voided if the assembly has been modified other than per recommendations and instructions from Sound 80's engineering department, or if the unit has been subjected to abusive handling.

Because of the need for the special handling of the proposed equipment, either a selected bonded furniture freight handling company or Sound 80 will make delivery, and within 45 days from receipt of your order. Delivery price will not exceed \$150.00.

Hoping that this proposal meets your technical needs and your financial allotment, I remain

Sincerely yours,

SOUND 80 SYSTEMS DIVISION


Gary Erickson
Systems Manager

GE/jb

THE UNIVERSITY OF IOWA

IOWA CITY, IOWA 52240



School of Music

Sept. 27, 1971

Mr. Donald Buchla
P.O. Box 5051
Berkeley, California 94705

Dear Mr. Buchla,

Very best wishes,

In our last communication, I was concerned about a quad mixer. Finally located a custom-built 16-in quad mix console with mike preamps, output amps, and patch bay installed. However, I am still most anxious to see if we can obtain a Series 200 System. We are going rather heavily into quad sound (and beyond), with a Scully 282-4 and Sony TC 854-4 on order, so wish to take advantage of most appropriate modules. Thus, I'm proposing the following system, disposed more or less according to the attached drawing.

1-200-P Cabinet	200
1-204 Quad Spatial Director	950
1-205 Matrix Mixer	480
1-215 Power Supply	200
1-258 Dual Oscillator	450
1-246 Sequential Voltage Source	900
1-264 Quad S & H / Polyphonic Adaptor	620
1-265 Uncertainty Module	420
1-284 V-C Filter Env. Gen.	700
1-291 V-C Filter	800
1-292 Quad Lopass Gate	350
	<u>\$5870</u>

Questions: Are these prices correct?

Will the 204 Quad Spatial Director move four input signals through four separate spatial circuits, or only one, or what?

Is there any chance of my seeing a demonstration of the Electric Music Box in this neck-of-the-woods?

You asked about our installation. We will have 2 studios in operation: one with the Arp 2600, 3 Revoxes, and Sony 854-4, the other with a Moog III synthesizer (with Sequencer Complement B) and, hopefully, an Electric Music Box. Studio 2 has an Ampex AG-350 and 354, Scully 282-2 and 282-4; also on order is a B & K Model 125 1/3-octave spectrum analyzer, Bode Dual Ring Modulator, and an EMT-140 FB-TS Stereo Reverb Unit.

Studio 2 will also be wired to the Master Recording Center, which has an Ampex 440-B, another EMT Reverb, and 6 professional Dolby units. Will have the possibility of remote quad playback in the yet-unfinished Recital Hall.

Lots of possibilities.

Well, please send more details on your modules if you have them, and kindly give me an estimate of a delivery date from time of order.

Very best wishes,

Peter Lewis
Director, Electronic Music Studio

Oct. 10, 1971

Dr. Hubert H. Howe, Jr.
Director, Electronic Music Studio
Queens College
Queens, L.I., New York

Dear Hubert,

I'd like to trouble you about a couple of things, when you get a minute to reply. First is the Electric Music Box. I had a long talk with Don B. about it today. It sounds terrific, to hear him tell it (naturally). But, since I have no opportunity to audition one here, I'd appreciate other views. Do you feel it's a significant improvement over the old stuff? Are the oscillators more stable now, for example? Is it as flexible for quad sound as he says?

We're presently setting-up two studios in a new music building. Studio I with an Arp 2600, 3 Revoxes, and a Sony 854-4; Studio II with Moog, a Scully 282-2, 282-4, and 2 Ampexes, either an EMT or AKG reverb, and a few other things. Like very much to get a Buchla system, but would you know how, for example, Buchla Frequency Shifter/Modulator compares with a Bode Ring Modulator; or how Buchla 10-Channel Filter compares with the B & K 1/3-octave filter?

Second thing I wanted to ask about is the "J. Seawright tape dispenser". I remember you had one. Do you have his present address, or do you know where the dispensers might be available commercially?

Appreciate your attention to these matters, and by the way, have you any new computer or tape pieces we could possibly program?

Best wishes,

Peter Lewis
Director, Electronic Music Studio

EMSA,
460 West Street,
Amherst, Mass.01002

October 12th.1971

Peter Lewis,
Director,
Electronic Music Studio,
School of Music,
The University of Iowa,
Iowa City, Iowa 52240

Dear Dr.Lewis:

Thank you very much for your letter. Indeed it is true that Al Mayer is no longer on the EMS scene, but I have no doubt that he is making a scene elsewhere.

The Synthi A does have similar electronics to the Putney but they have been refined and it is now completely portable and cheaper.

I am enclosing brochures on the EMS equipment in production at the moment and a copy of our price list. When you have had time to read the enclosed literature I hope that we shall be able to discuss in greater detail your equipment requirements.

I look forward to hearing from you.

Yours sincerely,

Janice B. Andres

Janice B.Andres
Artistic Manager/EMSA



October 26th.1971

Mr. Peter Lewis,
Director, E.M. Studio,
School of Music,
The University of Iowa,
Iowa City,
Iowa 52240

Dear Mr. Lewis:

Dr. Hafner has asked me to give you his findings on the sequencers as a result of his visit to Philadelphia this weekend. In his telephone conversation with you he understood you to be interested in the Sequencer 256, but you may at this stage only be interested in the Synthi Sequencer 32.

Everett's findings on the Sequencer 32 are as follows:-

It connects at the intermediary stage between the Synthi A and the keyboard. It has an internal clock, which has an adjustable speed that is driven by an oscillator. Its main operations are, "Erase", "Play" and "Record". In the "Record" position it will start the clock and the memory will accept 32 stereo events, that is both channels of the keyboard. In "Play" position the voltages are read into the Synthi and can be used in the normal way, that is for pitch control etc. The sequencer will cycle indefinitely and the clock rate can be altered at any point.

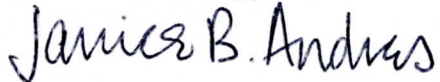
The Sequencer 256 has a maximum of ten outputs with a solid state storage capacity of 10240 bits and it is capable of precisely controlling six different simultaneous parameters over a sequence of 256 successive events. There are several modes of operation and full, easy to operate editing facilities, so that any or all of the 256 stored items and their time relationship maybe changed without difficulty. It can be played backwards and forwards ay any speed and edited to any degree of precision.

Peter Lewis.

We shall be receiving demonstration models from London shortly and once we have their schematics and specifications in hand we shall know of their compatibility with Moog and ARP synthesizers. In this connection, we are certain that either of the sequencers can operate any of your equipment, but we are not yet sure if additional hardware is necessary. If it is, we shall procure or produce it for you.

I shall send you additional information as soon as we receive it from London, but hope that some of your questions have been answered in this letter.

Yours sincerely,

A handwritten signature in cursive script that reads "Janice B. Andres".

Janice B. Andres
Artistic Manager/EMSA

enc.



PRICE LIST

EMS EQUIPMENT WITH EDUCATIONAL DISCOUNT.

COMPLETE COMPUTERISED ELECTRONIC STUDIOS

by negotiation from. \$40000

ELECTRONIC MUSIC SYNTHESIZERS & KEYBOARDS
(complete with cover, plugs, mains control and handbook)

- Synthi 100 Professional Electronic Music Studio (including installation). \$24800
Synthi VCS3 (tuned up version only). \$1150
Synthi AX (tuned up version with battery pack option, programmable matrix & high stability pins). \$1065
Synthi A. \$795
Synthi AK \$900
Synthi DK1 & Synthi A matching Keyboard (with dynamic control). \$530
Synthi DKO & Synthi A matching Keyboard (without dynamic control). \$350

DIGITAL SEQUENCERS

- Synthi Sequencer (in conjunction with DK1 Keyboard) 2 tracks, 32 events, no editing \$630
Synthi Sequencer 256 (for connection to Moog, ARP or other synthesizers) 6 tracks, 256 events, full editing, including five octave keyboard \$4650

EMS PERIPHERALS AND SPARES

- 8-Octave Filter Bank \$300
Pitch to Voltage Converter with Envelope Follower & Envelope Trigger. \$425
2-Voltage Random Generator with Trigger \$425
60 60 Matrix Board \$650
Programmable Patch for Synthi AX \$20
Battery Pack for Synthi AX \$325
Guitar Envelope Trigger Unit \$80
High Stability Pins (for 3) \$4
Normal Resistor Pins (for 4) \$4
Synthi Handbook \$4.50
Dope Sheet Pad \$2
Printed Circuit Board \$200

ADDITIONAL HARDWARE

- Farnsworth Speakers.....Model 12 (per pair) \$400
Model 15 (per pair) \$500

TERMS: F.O.B. Norwalk, Connecticut. 30 days net. (40% deposit on orders over \$1000)

(Price List effective October 25th, 1971. Supersedes all previous price lists.)

2500 Mountain St. Ap. 62
Montreal, PQ 109, Canada
Montreal, November 15, 1971

Dear Peter:

Thanks for your letter. I am really having a good time here. My teaching load is 10 hours per week (I have 3rd, 4th years in composition plus the Composition Seminar for grad. st.) and in the second term I'll have also 3 hours of the Electronic Music Seminar. Since I have only 8 students I have the best ratio ever between teacher/student

The Music Faculty is moving to another (renovated) building in January and also the Electr. Music Studio should move. In the new quarters we will have a classical studio (but involving the Canadian synthesizers, developed several years ago), a second studio with a new synthesizer they are developing now and a third one with a Moog. At present we have only the first and the third of these. We lack a mixing console and reverberation chambers.

Actually we miss each other for a few days because I arrived from Argentina August 26 (in Montreal). *(why I put this here??)*

I will be available almost any time during March or April, as long as I have a few weeks notice in advance as to change a few classes. I will be having the EM Seminar on Wednesdays, and that cuts my week in two, but I could change it. Thursdays and Fridays I have not *a* thing, so that is convenient.

As Mary Spector is not a working agent any longer I am enclosing the brochure, but please, DO NOT contact her.

My knowledge of English is sort of limited, can you clarify if you meant that you pay for my air fare trip and 700 dollars (ca.) in addition to that?

I am having a few concerts here and go to Washington in January, then a short European tour (Germany, Sweden, Denmark, Spain).

I am glad to hear that your electronic studio is so well equipped and also moving to new quarters. Thank you for the invitation. Will also there be performances of my works?

A "huged" hug to both of you. Write soon.

alices

Len

Programme in Music



FACULTY OF FINE ARTS

4700 KEELE ST., DOWNSVIEW, TORONTO, CANADA

Dec 71

Peter Lewis
School of Music
University of Iowa
Iowa City, Iowa 52240

Dear Peter,

I'm sorry to make you wait a month for an answer to your letter but as you might suspect it arrived in the mail just as I was leaving for a trip to California, and I decided that the sun had priority over the letter. I hope that you have a carbon of your letter as I will comment on the specific points of your letter thereby saving myself a great deal of time.

This is indeed the SYNTHI 256 as described in the EMS catalog you have. It has all of the controls you list. There are no additional features.

The unit has standard phone jacks for both inputs and outputs and can be connected directly to the MOOG with patch cords. There is also a multiplug on the back which might be a convenience connector with all of the inputs and outputs but I don't really know. (As you might guess we don't have an operating manual.) You would not need an interface to operate with the MOOG as far as I can determine. The control range of the unit is somewhat different than the -10 to +10 range of the ARP but it appears to be right in the ballpark of the MOOG 0 to -6 range. As with most connections between different systems you may be able to discover some conditions which won't work, but I don't think they will be problems. We have used it with the ARP as inconsistent as it may seem and it does what it is supposed to do. You might find some situation where a pot might only have to be rotated to say 80% of its travel to effect 100% control of some MOOG parameter. Or, in fact, the opposite: 100% of a SYNTHI control function may only provide 75% for MOOG, in which case it would be necessary to interface by providing an amplifier in between the units to proportionally increase the magnitude of all control signals coming from the SYNTHI. This is not as complex as it seems as it would only require your passing the control lines through one of the MOOG mixers or some such. The compatibility is no where near problematical. In fact it is much easier to use the SYNTHI with a MOOG than to use a BUCHLA with a MOOG.

2.

The 256 operates like any sequencer except it has a digital display which advances rather than a stepping indicator lamp. The unit can play retrograde by pushing the retrograde button. Clock rate can be altered dynamically at any time by either manually adjusting clock pot or by remote voltage control. A remote clock pulse can be used rather than the internal clock. The voltage memory is as accurate as either MOOG or BUCHLA or for that matter ARP.

This sequencer is just a very expensive version of the BUCHLA or MOOG or ARP sequencers with a pretty digital clock. After all only BUCHLA really did any thinking about designing a sequencer. All of the others merely copied his idea, some going so far as to actually steal his circuits. In MOOG terminology this unit is a complete as a sequencer complement, the only difference being that it can program up to 256 events and can play backwards. It is the same as ARP sequencer except for the fact that it has the extended capacity of 256 events rather than 10 (or in special cases 30). It is the same as a BUCHLA sequencer plus a BUCHLa pulse generator combined.

The SYNTHI 256 we have is Serial #1 and we have only had it since July 1971. It was purchased directly from the people in England. It has seen essentially no use or at best maybe 4 or 5 hours of very light use. York University can make no guarantees or warrantees and we must sell it AS IS but it is working. Zinoviev (sp?) assured us at time of sale that he would unconditionally guarantee the unit and would actually go so far as to be willing to replace every circuit board at no cost if the case ever arose. I am sure that we could secure from him the same commitment to Iowa if you are interested in purchasing the unit.

(Sterling) \rightarrow We paid ~~\$2500~~ ^{\$1100.00 (old money)} plus shipping and duty for it in July 1971. It is essentially a new unit. I am going to leave a blank in a couple of lines which I will fill in by hand after I have checked the records to see what out actual cost was by the time we got it here to Toronto. All we want to do is recover our investment. Our selling price will be (in Canadian Dollars)

\$2819.63

27.475 COST OF UNIT
70.88 AIR FREIGHT
6.00 LOCAL DELIVERY

I am interested in selling the sequencer because we need money for essential things like mixers and other units. The SYNTHI is no better or no worse than any other sequencer. Like all of them it is a mindless idiot machine. The unit was purchased by someone in the department who had no idea about electronic music requirements and committed the money while he was on a musicological trip. I would like to recover the money because some other idiot purchased half a mixer and we need the money to finish the mixer more than we need another sequencer (we already have two). Besides,

3.

Have you ever heard a real piece of music composed
on a synthesizer??????

Peace.

Jay Grogan

THE UNIVERSITY OF IOWA

IOWA CITY, IOWA 52240



School of Music

Dec. 7, 1971

Anthony J. Gnazzo
Department of Music
York University
Toronto, Ontario

Dear Tony,

I'm writing about the Synthi 256 which Lowell tells me you want to sell. Since I'm definitely interested, I'd like to know more about the machine than the U.S. dealers in Amherst can yet furnish.

According to the EMS catalog, it's a 256 Event, 6 Simultaneous Parameter Digital Sequencer, with 20 controls: 10 to adjust the output voltage amplitudes (3 for each of 3 layers and 1 as a keying voltage recorder), and 10 more to supervise the actual operation (clock rate, note distribution, stop buttons, individual erase, clear memory, reset, start, stop, and "rewrite B, D, F". Is this, then, the machine you have? (Does yours have more, or less, features?)

What is necessary to make connection with a Moog or Arp? Would it mean building an interface or are certain connections provided?

Could you also tell me something about the 256's operation? For example, how does one program up to 256 events? Can the clock rate be altered in mid-sequence? can it be voltage-controlled? How accurate is the voltage memory?

Actually, if you have an Operations Manual, it would be very kind of you to send it along. We have a Moog Sequencer Complement B, as you may recall, and I am familiar with both Arp and Buchla sequencers, but from the sound of it, this is another animal altogether.

I'm interested to know also how long you've had the 256, what kind of use it has seen, and what sort of warrantee or guarantee terms could be arranged.

Once I know your price, I'll see what, if anything, can be done about the blasted surcharge.

Finally, I'd be interested to know why you want to sell the 256. Are you off (or were you never on) sequencers? Have you found this one too limiting, or at all defective?

Seasons greetings,

A handwritten signature in dark ink, appearing to read "Peter".

Peter Lewis

Director, Electronic Music Studio

THE UNIVERSITY OF IOWA

IOWA CITY, IOWA 52240



School of Music

Dec. 17, 1971

Robert A. Moog
Moog Music
Foot Academy
Williamsville, N.Y.

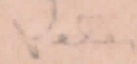
Dear Robert,

Do I remember correctly that you have a "kit" for sale which can be connected as directed to the 901-B Oscillator circuitry for increased stability and performance. If this is true, would you send us details.

Also, have you specs and descriptions for the X-Y Controller and the 1084 Mixer. We're using them, but a bit in the dark about certain details.

A member of our faculty, Lowell Gross, insists he saw you demonstrate how the sequencer can be used as a frequency divider -- without using the control voltage outputs. Said you used voice as the signal. Would you care to describe how this operation is done?

Seasons greetings,


Peter Lewis
Director, Electronic Music Studio

THE UNIVERSITY OF IOWA

IOWA CITY, IOWA 52240



School of Music

Dec. 17, 1971

Engineering Department
Quad-Eight Electronics
11810 Vose Street
North Hollywood, California 91605

Dear Sirs,

We are interested to know more about your RV-10 Reverberation System. Can you tell us, for example, just how the mechanical reverberation is generated? Is it a spring mechanism, a helical device, what?

Have you a dealer near us who could arrange for a demonstration, or have you demonstrator models? I am most interested to be able to evaluate your system. Our large studio presently has a Moog III Synthesizer with assorted additional equipment, 3 2-channel recorders and a Scully 282-4. We have just received an EMT 140st, which we will share with a Master Recording Studio, but I feel the need for an in-studio reverberator, as well.

Finally, what are the terms of sale, the price, warranty period, etc.

Seasons greetings,

Peter Lewis
Peter Lewis
Director, Electronic Music Studio

THE UNIVERSITY OF IOWA

IOWA CITY, IOWA 52240



School of Music

Dec. 27, 71

Allen Strange
Department of Music
San Jose State College
San Jose, California

Dear Mr. Strange,

A colleague of yours, Bill George, dropped in a few days ago to take a look at our facilities, and thus I learned your whereabouts. For I've wanted to write to express my appreciation and admiration for Electronic Music. Even at first glance, I thought, well, at last, somebody's finally done it! then, reading through, I saw how much further the book exceeded my initial expectations. Like most studios, I suppose, we've limped along without a text, relying instead on a personal or the university library for source materials regarding general principles -- and most either outdated or irrelevant to our purpose. Well, now we have a text! my sincere congratulations on it.

Now, request: have you a tape or two you could send (2- or 4-channel) for possible performance. I put on two or three electronic music concerts a year, nothing scheduled too far ahead but usually when I collect sufficient materials. Planning one for early Feb. now which features projections: slides and films.

By the way, Lowell Cross was delighted to see frequent mention of his efforts. He's recently started here, you know.

-- py New Year!

Peter Lewis
Peter Lewis
Director, Electronic Music Studio

REPLY MESSAGE

THIS FORM AVAILABLE FROM GRAYARC CO., INC., 882 THIRD AVE., BROOKLYN, N. Y. 11232

TO Mr. Peter Lewis
Music Department
UNIVERSITY OF IOWA
Iowa City, Iowa 52240

FROM

SOUND 80 INC.
2709 EAST 25th STREET
MINNEAPOLIS, MINNESOTA 55406
(612) 721-6341

SUBJECT: price of audio masters

DATE: 12/27/71

FOLD **MESSAGE**

Dear Peter:

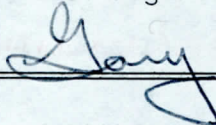
Per your request, prices of audio masters for your echo buss are as follows:

1 - M-63 audio master	\$96.00
2 or more @	\$90.00

Prices are subject to freight charges, and an order will require 30 days for processing.
Best regards,

PLEASE REPLY TO →

SIGNED



Gary Erickson

REPLY

DATE

SIGNED



QUAD-EIGHT ELECTRONICS

11810 VOSE STREET
NORTH HOLLYWOOD, CALIFORNIA 91605
(213) 764-1516

December 28, 1971

Mr. Peter Lewis
University of Iowa
Iowa City, Iowa 52240

Dear Mr. Lewis:

Our distributor in your area is:

Electronic Engineering & Supply Co.
712 North Street
Burlington, Iowa 52601
Attn: Mr. Meford

(319) 762-0981

I am sure if you contact Mr. Meford he can aid you in your RV-10 evaluation. We will be willing to deliver an evaluation demonstrator to you when they request it. In the meantime I can give you some answers to your technical questions.

The RV-10 was prototyped and planned to work with the EMT 140st. Most of our customers own EMT's and have purchased our RV-10 to augment their reverb facilities.

We use a spring system of generating reverb. However, we manufacture and assemble the entire device - therefore, our quality control is completely under our control. Our American competition all buy their basic reverberation systems from the same place and about the only thing different in each is electronics.

\$795 mono

QUAD-EIGHT ELECTRONICS

11810 VOSE STREET
NORTH HOLLYWOOD, CALIFORNIA 91605
(213) 764-1516

Quad-Eight has complete control over the decay and delay times in our system - that is why it has a live room kind of sound.

December 22, 1971
All artificial reverberation systems have short comings and sharp percussive sounds do not sound right in any of them. We have found that the top end of the QE RV-10 is cleaner and more open than competition and therefore does an excellent job on vocal and strings.

We feel it is a good competitor - therefore you should arrange to try it!

Dear Mr. Lewis:

Our distributor in your area is:

Electronic Engineering & Supply Co.
712 North Street
Burlington, Iowa 52601
Meford

Very truly yours,
QUAD-EIGHT ELECTRONICS

(319) 762-0981

Marv Headrick

Marv Headrick
Marketing Manager

cc: Mr. Meford

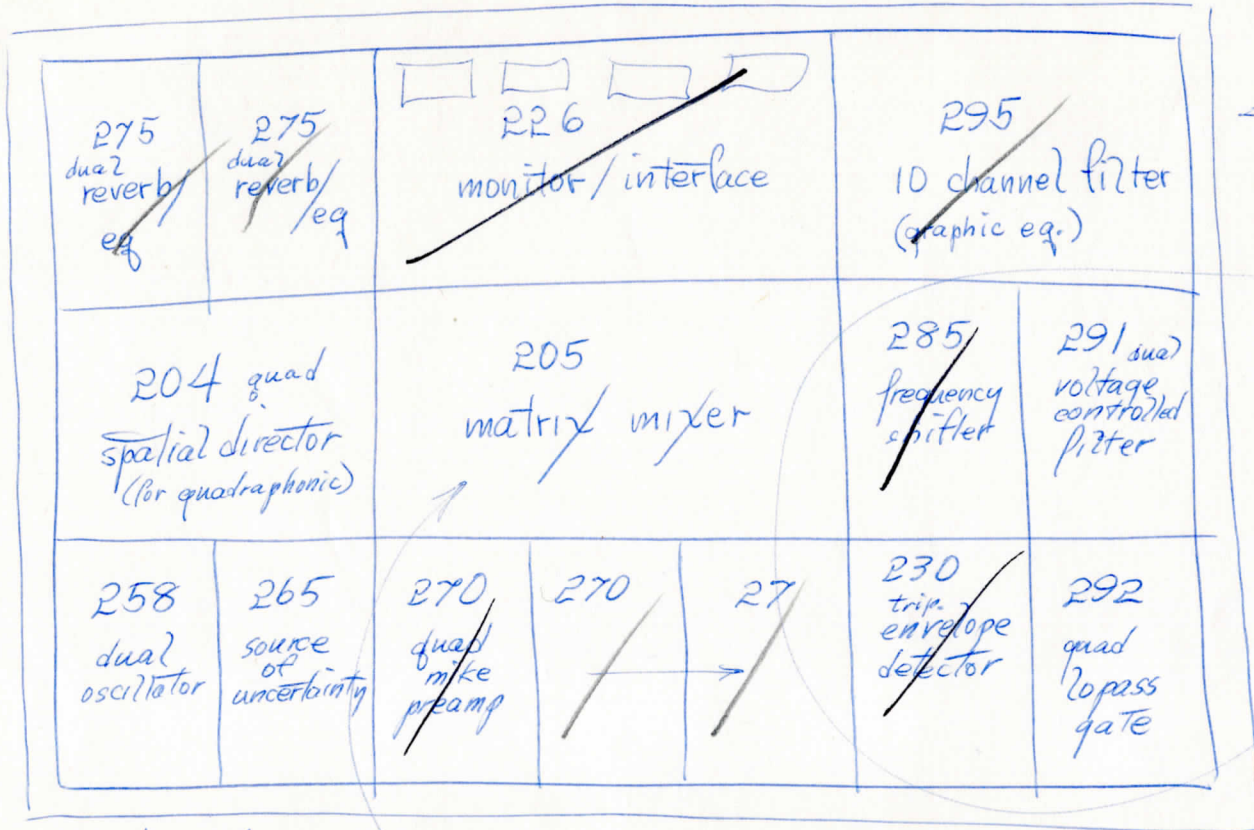
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We use a spring system of generating reverb. However, we manufacture and assemble the entire device - therefore, our quality control is completely under our control. Our American competition all buy their basic reverberation systems from the same place and about the only thing different in each is electronics.

\$795 mono

4 channels of reverb + eq

VU meters
+ complete monitoring facility
and patching facility for up to 3 quad decks



graphic eq.

special effects for modifying sound

use for spatial effects, movement, location (4 channels)

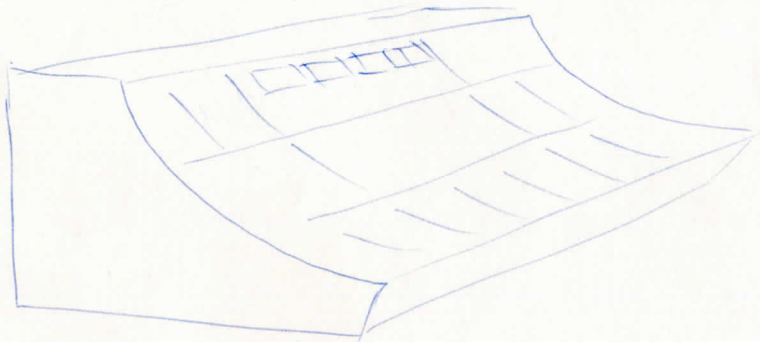
signal sources

preamps (12 chan.)
4 x 10 mixer

204	950
205	480
291	600
258	450
265	420
284	100
292	350
	<u>3950</u>

net price somewhere around \$6800

inc. cabinet + power supply



NOTICE TO SYNTHESIZER OWNERS:

WE ARE LIQUIDATING OUR MOOG SYNTHESIZER INVENTORY

F.O.B. PRICE
MINNEAPOLIS

EXPANDED SYNTHESIZER III

1. Synthesizer III and custom cabinet		\$4,620.00
2. 950 Keyboard		435.00
3. Two-VCA #902	\$170.00 each	340.00
4. Two-envelope generators	\$138.00 each	276.00
5. Dual trigger delay		110.00
		<u>\$5,781.00</u>

If items 1 thru 5 are purchased together the price is \$5,200.00

SEQUENCER COMPLEMENT B

6. Two 960 sequencers
7. 961 interface
8. 962 sequential switch
9. 910 power supply
10. Portable cabinet

Items 6 thru 10 must be purchased together \$1,940.00

PORTABLE SYNTHESIZER

11. Synthesizer 1P \$3,960.00
12. One model 6401 Bode Ring Modulator \$ 500.00

Items 1 thru 10 of the above equipment have been used by the original owner and are in like new condition.

We will forward photographs of the components upon request.

If you are interested in increasing the capability of your electronic music studio you should call me immediately at Sound 80, Inc. 612-920-7781.

Sincerely,



HERB PILHOFER

HERB PILHOFER