

# THE ART OF THE THEREMIN

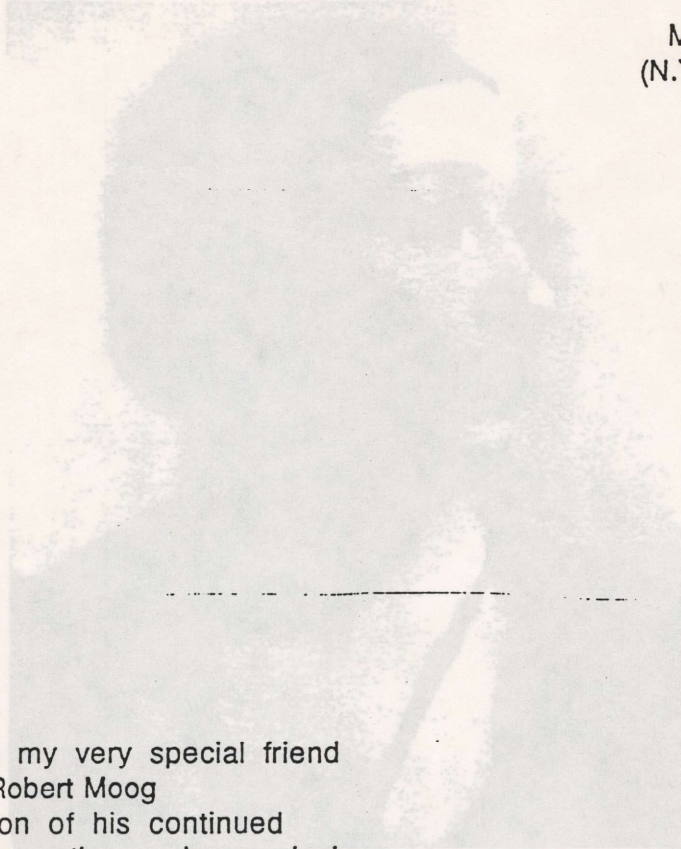


BY CLARA ROCKMORE

THE ART OF THE THEREMIN

"But instruments do not make music: people do."

Max Rudolph  
(N.Y. Times June 21, 1992)



Dedicated to my very special friend  
Dr. Robert Moog  
in appreciation of his continued  
interest in promoting and reproducing  
the space-control theremin.

Clara Rockmore

BY CLARA ROCKMORE

### EXERCISE NO. I

First study in the relative distance between different intervals. To be played slowly - sliding from one note to the other, but with great care taken not to slide beyond the note.

Left hand stationary. To be practiced in different keys. Hand in first position - forefinger resting on thumb.

Handwritten musical score for Exercise No. I, consisting of four staves of music in treble clef with a 3/4 time signature. The notation includes various intervals and slurs, with a 'p' dynamic marking on the first staff.

### EXERCISE NO. II

Important study to prevent the action of one hand affecting that of the other. To be played as slowly as possible - beginning each note pianissimo and slowly raising and then lowering the left hand on each note, at the same time being very careful to retain the correct pitch with the right hand.

Handwritten musical score for Exercise No. II, consisting of a single staff of music in treble clef with a 4/4 time signature. The notation includes various intervals and slurs, with a 'p' dynamic marking at the beginning.

First study in the relative distance between different intervals. To be played slowly - sliding from one note to the other, but with great care taken not to slide beyond the note. Left hand stationary. To be practiced in different keys. Hand in first position - forefinger resting on thumb.

A few suggestions for future "theremenists" - those who approach and welcome it, as yet another voice, with which to interpret real music, not a magic toy for producing strange and eerie sounds.

"Less is more"

The very name of space-controlled ether-wave theremin should guide you. Don't forget your whole body is an electro-conductor, in the electro-magnetic field and it is therefore necessary to control the slightest motion - not only of hands and fingers. Any involuntary motion, such as of the head or shoulders can interfere with pitch and volume.

"You don't need hammers to work with air."

Don't forget that you are dealing with air! Think of your fingers, as delicate butterfly wings, and you will get much further than if you use strength.

Important study to prevent the action of one hand affecting that of the other. To be played as slowly as possible - beginning each note pianissimo and slowly raising and then lowering the left hand on each note, at the same time being very careful to retain the correct pitch with the right hand.

\* \* \*

It is of course advisable - even necessary - to first learn to read music and have at least elementary knowledge of theory - harmony etc., by starting music lessons on the piano - just as all violinists do.

You cannot point to a spot in the air and say "here is middle c!"

Important

Be sure that no one passes by, as you are playing, and enters the electro-magnetic field from the other side, immediately affecting the performance.

### EXERCISE NO. III

Further study to achieve greater freedom - speed and accuracy - in finding intervals of different distances. This exercise to serve as an example - the most beneficial method of having the student follow intervals given at random on the piano. Begin slowly and increase speed as the student becomes more advanced - always returning to slower tempo if the intonation is not pure.



### EXERCISE NO. IV: Study for left hand.

The hand to be raised and dropped sharply on each note - producing staccato effect. To be practiced in different keys.

Use your left hand, as you would use a violin bow. All legato, staccato and various accents can be achieved with different motions of the hand or fingers.

First have a clear idea of what you want to say, and then logic will help you find the best way to achieve it.



EXERCISE NO. V

First study in the use of different positions of the fingers of the right hand.

Instead of moving the whole hand - leave hand in position I (forefinger on thumb). To achieve position II. move only the fingers by stretching them forward. For position III move them still further.

Additional explanation of "positions" as distinct from "fingerings":

Position I - forefinger resting on thumb.

Position II, III, IV - stretching all three fingers forward (arm at rest) toward the vertical antenna and then, as needed, moving the fingers back, not only to original position I, but all the way to the palm of your right hand. When desired for musical effect - the very contact of fingers touching the palm serving as accent.

EXERCISE NO. VI

Exercise no. VI is the same as no. V, but it is to be played staccato. If found difficult - further practice of exercise no. V will prove helpful.

Ex No V + VI to be practiced also

EXERCISE NO. VII

Further study in finger positions going from position I to position III directly.

EXERCISE NO. VIII

Same as exercise no. VII only to be played staccato.

1st. 3rd. etc.

3rd. 1st. etc.

Ex No VII + VIII to be played also

etc. etc.

EXERCISE NO. IX

Study in positions I, II, III and IV also in half position. Half position is obtained by stretching the fingers to a half-tone distance.

In 2<sup>d</sup>. 3<sup>d</sup>. 4<sup>th</sup>.

No 1/2 to be practiced also

etc

etc

etc

EXERCISE NO. X: Octave study

Finger position I to IV first played staccato. Same exercise then practiced legato.

The sound of the slide to be eliminated by opening the left hand while going from one note to another and closing it when the note is reached retaining even volume.

Handwritten musical notation for Exercise No. X: Octave study. The notation is written on nine staves in treble clef, 4/4 time. The first staff has handwritten annotations: "1p." above the first measure, "4p 4" above the second measure, and "1" above the third measure. The notation includes various note values (quarter, eighth, sixteenth notes) and rests, with some notes marked with "+" signs. The music is divided into measures by vertical bar lines.

No 7 to be practiced also

Handwritten musical notation on a single staff in treble clef, 4/4 time. It shows a sequence of notes with "+" signs below them, continuing the exercise from the previous staves. The notation is handwritten and includes various note values and rests.

EXERCISE NO. XI

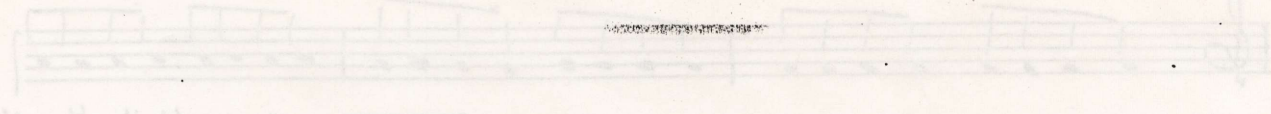
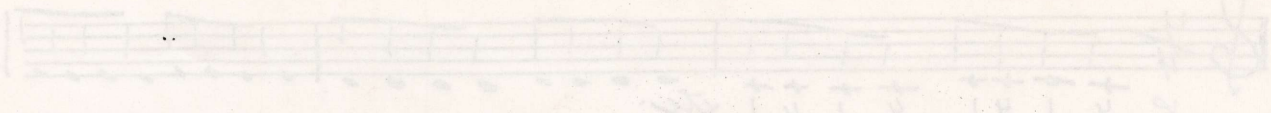
Advanced study in quick changes of position.

Handwritten musical score for Exercise No. XI, consisting of five staves. The music is written in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. The notation includes eighth and sixteenth notes, slurs, and various fingerings. The first staff begins with the instruction "p" (piano) and includes the fingering "4 1 4 1" and "4 1 4 1 etc.". The second staff continues the melodic line. The third staff features a change in fingering to "4 1 4 1" and includes a "u" (accents) marking. The fourth and fifth staves show further melodic development with complex fingering patterns such as "4 1 4 1", "4 1 4 1", "4 1 4 1", and "4 1 4 1".

EXERCISE NO. XII

Daily warm up exercise.

Handwritten musical score for Exercise No. XII, consisting of six staves. The music is written in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. The notation includes eighth and sixteenth notes, slurs, ties, and various fingerings. The first staff begins with the fingering "4 4 1" and "1 2 1 2 1 2 3 4". The second staff continues the melodic line. The third staff features a change in fingering to "4 4 1" and "4 3 2 1 4 3 2 1". The fourth, fifth, and sixth staves show further melodic development with complex fingering patterns such as "4 4 1", "4 4 1", and "4 4 1".

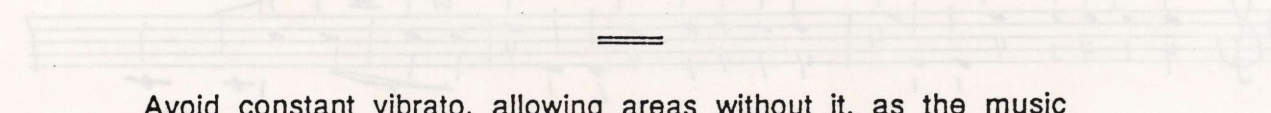


VIBRATO

Very important - to produce the desired tone quality.

Forefinger of the right hand resting on the thumb and please, please not a wide vibrato, but as fast and as much in place as possible - not to be mistaken for a trill.

A trill should not be a wide vibrato, but a very exact, either a half or a whole tone distance.



==

Avoid constant vibrato, allowing areas without it, as the music dictates.

\* \* \*

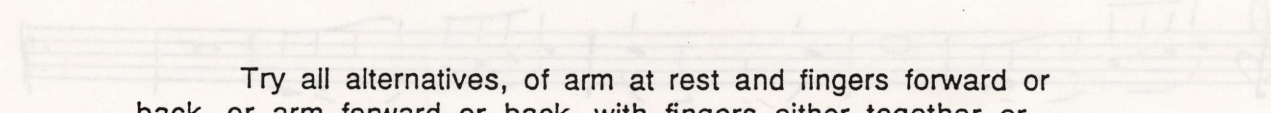
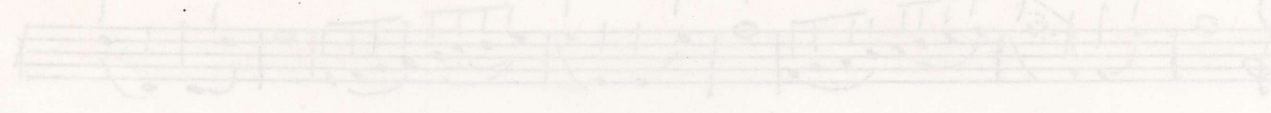
When ready to try to make music start with easy pieces.

Example: The Swan - C. Saint-Saens  
Air on the G String - Bach.

\* \* \*

Now, the quality of the sound is all important - mold it with a beautiful vibrato and beautiful phrasing.

The choice of "positioning" your right arm or fingers, will depend entirely on your musical phrasing, and so as to be always prepared for the direction that the music is going.



Try all alternatives, of arm at rest and fingers forward or back, or arm forward or back, with fingers either together or stretched forward or back as the music dictates.

## PRACTICAL INSTRUCTIONS

Connect the instrument first and let it warm up, about fifteen minutes, before tuning.

Tune to your own body capacity. I found it, for myself, to be the G - below middle C - giving me three + octaves up to the vertical rod and a one + octave down toward myself.

The range of each newly built instrument may be different.

In searching for material, in the vast libraries for voice and other various instruments, suitable for the theremin, remember that in fast passages close intervals are possible, not so for passages easy for the violin, "over the string" ones.

In playing develop the daring of a diver, in reaching wide jumps, without any sliding - always aiming not only for the desired note, but the very center of the note.

A sample of what level of difficulty I was able to perform on the theremin:

Schelomo - Bloch, for cello and orchestra, played with the Philadelphia Symphony Orchestra in Philadelphia.

Sonata for violin and piano - C. Franck, performed with my sister Nadia Reisenberg (all four movements) in recital at Town Hall, New York.

Concerto for theremin and orchestra - in three movements by Anis Fuleihan, performed with the New York Symphony in New York with Leopold Stokowski (who commissioned the work especially for me) conducting. This composition was subsequently performed with the Philadelphia Symphony Orchestra at the Academy of Music in Philadelphia, Alexander Hilsberg conducting and with the New York Philharmonic at the Lewison Stadium, New York.

Now - take it further, with all my blessings, and may the theremin remain - yet another voice - in the world of music.

When performing, as soloist, with a symphony orchestra, make sure, at the rehearsal, that your instrument is placed so, as to insure that neither the bows of the first violins, or the baton of the conductor, can possibly intrude in your magic electro-magnetic circle.