### **ENGLISH**

# **INTRODUCTION**

The Solina String Synthesizer is a combination of the Solina String-Ensemble and the Explorer synthesizer. This combination is very versatile.

#### **STRINGS + SYNTHESIZER**

In this combination the player has at his disposal a complete synthesizer with a maximum of possibilities and at the same time he can use the strings for the accompaning chords. It has been proved that this possibility is very important.

In the Solina String Synthesizer facility of operation is an important factor, as appears from the many preset possibilities. The Rock Jazz bass, which is so very popular, can be achieved by a simple setting. Conventional musical instruments like e.g. clarinet, trumpet, trombone etc. can be imitated perfectly. And all this can be done with or without string chords as an accompaniment.

The advantages of separate manuals are very obvious here. By simply pushing a button the whole manual can either be used for the synthesizer or for the String-Ensemble. Moreover the possibility remains to play the synthesizer and the strings 'unisono' which means that with a clarinet setting the melody will be played by a clarinet and by strings at the same time.

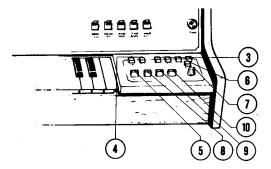
## STRING-ENSEMBLE

When the black key (40) in the area 'synthesizer keying' has been depressed, the String-Ensemble can be played on the whole keyboard.

The push-buttons and the sliders for the String-Ensemble are situated to the far right on the instrument (area String-Ensemble)

#### Volume

With the slider switch 'Volume' (10) the volume of the String-Ensemble can be adjusted.



#### Registration

The String-Ensemble has the following registration possibilities:

Viola, Violin, Trumpet and Horn (3).

With the voices Viola and Violin a string orchestra effect is created. The Viola register produces the sound at an 8' tone level, and the register Violin at an 4' tone level. Sliding control 'Sustain Length' (9) regulates the duration of the sound of tone from maximum till minimum.

Control 'Crescendo' (8) adjusts the expression of the violins. This effect add an extra dimension to the String-Ensemble and can be adjusted from maximum to minimum.

The Trumpet and French Horn registers offer the effects of the brass section in an orchestra.

#### Bass and Cello registration (the lowest oktave (C-G)).

The instrument also has a bass section, consisting of the registers 'Contra Bass' and 'Cello' (4). The volume of the bass registration can be adjusted from minimum till maximum with 'Volume Bass' (5), enabling to adjust it to the total registration of the instrument. Control Crescendo may also be used to obtain an expression effect on the bass registration.

#### Modulation push-button

When the push-button 'Modulation' (6) has been depressed, the bass registers 'Contrabass' and 'Cello' and the registers 'Viola', 'Violin', 'Trumpet' and 'Horn' obtain a stiff character. Furthermore the use of the push-button modulator allows to connect an other synthesizer to this combination for special and polyphonic Sample & Hold effects.

#### **Tuning Control**

With the switch 'Tuning' (7) it is possible to tune the instrument one tone lower or higher.

### **SYNTHESIZER**

In general, synthesizers can be divided in two groups viz. in so-called preset synthesizers and variable synthesizers. The most important characteristics of preset synthesizers are that they are easy to operate and allow a quick change of settings, where as in general the vaiable synthesizers can produce a larger range of sounds. Among the synthesizers the Explorer is unique, because it combines the characteristics of a preset synthesizer and those of a variable synthesizer in one instrument. In this way the requirements for live-performances can be met and at the same time the player may discover new electronic sounds and effects according to his own taste. The Explorer can both imitate traditional instruments (flute, clarinet, trumpet) and produce noise effects (surf, thunder, wind) and countless indefinable electronic sounds. Moreover the Explorer is equipped with a choice of basic waveforms and tone ranges, which can also be combined in order to arrive at the 'heavy sound', which can only be achieved with the Explorer.

The three most important elements of the synthesizer are, in following sequence:

1. The Oscillator (Pitch Range - Waveform)



2. The Filter

ADSR (35): Switch for opening and closing the filter

LFO (36): Vibrato (frequency modulation)

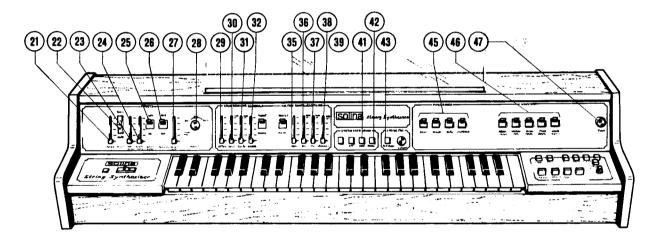
Tremolo (amplitude modulation)

Freq. (37): Control switch frequency

Resonance (38): Selfoscillating filter (or partial oscillating)

3. The ADSR Envelope Generator (determines the attack- and release-time of a tone)

To handle the synthesizer properly, it is recommended that the following actions be taken in the sequence shown:



- 1. Turn upwards the control 'Volume' (21) of the synthesizer.
- 2. Select a 'Waveform' (46) and a 'Pitch Range' (45).
- 3. Open the Filter control 'Freq.' (37) or combined with the ADSR control (35).
- 4. Push the button 'Manual' (42) on the synthesizer; now you can play it.
- 5. Set up the 4 controls of the Envelope Generator as you want (Attack (29), Decay (30), Sustain (31) and Release (32)).

Now there is the possibility of giving a personal character to the sound- compositions. Noise-effects can be obtained by using the Noise-Generator (waveform) (46). The sequence is then:

- 1. Noise Generator
- 2. Voltage Controlled Filter
- 3. ADSR Envelope Generator

The Explorer synthesizer can be used in four different ways:

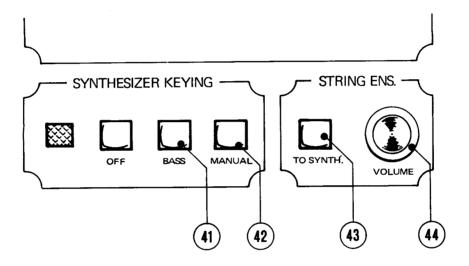
- 1. Manual, as described above
- 2. Preset, (just select a Waveform and a Pitch Range the tone colour can be influenced by the ADSR control of the filter)
- 3. The Voltage Controlled Filter (preset or manual)
- 4. The Envelope Generator

For the four above mentioned possibilities use:

- 1. Auto- and Keyboard- Repeat (22) (repeat-effects)
- 2. LFO Speed control (23) (for Vibrato Speed)
- 3. Vibrato-Depth control (24)
- 4. Vibrato Delay (25) (starts Vibrato about 1 second after pushing a key)
- 5. Bender switch (26) (slide-effect)
- 6. Portamento Speed control (27) ( to lengthen the slide-effect)
- 7. Pitch Bend switch (28) (to raise or lower the tone one octave)

To the extreme right on the synthesizer you will find the 'Tune'-switch (47). This is to tune the synthesizer on the String-Ensemble. The String-Ensemble can also be played on the synthesizer, and also through the Filter and the Envelope Generator. In this case the switch 'To Synth.' (43) has to be pushed down.

Wenn the push-button 'Bass' (41) is depressed, the synthesizer can be played in the lower  $1\frac{1}{2}$  octaves of the manual (C-G), ideal for bass-lines and other effects. At the same time strings can be played on trombone and strings at the same time.



By depressing the push-button 'Manual' (42) it becomes possible to play the synthesizer and the strings 'unisono' i.e. when set for trombone the melody will be played on trombone and strings at the same time.

By depressing the push-button 'To Synth.' (43) the String-Ensemble is conveyed through the filter of the synthesizer. The effect obtained can be further modulated with the ADSR. Here, too, there is a separate volume regulator (turning knob (44)).

When 'Bass' (41) and 'Manual' (42) are depressed, the synthesizer can be played on the whole keyboard. The volume control of the String-Ensemble must then be set on minimum.