

# ***Window***

*for*

***Alto Saxophone and Interactive Electronics***

*by*

***Keith A. Hamel***

*Duration: Approx. 12'*

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*Performing Rights: SOCAN*

***Commissioned by Julia Nolan***

***Premiere Performance at U.B.C. Recital Hall, Vancouver, Canada  
on September 19, 1990  
by Julia Nolan - Alto Saxophone***

# Technical Requirements

## Hardware:

- 1 Macintosh computer with MIDI Interface
- 1 IVL Pitchrider (or comparable device)
- 1 Proteus /1 synthesizer
- 2 MIDI cables
- 1 amplification system - mixer, amp, speakers

## Software:

- Max Patcher Version Alpha-40
- Opcodes Proteus Editor/Librarian

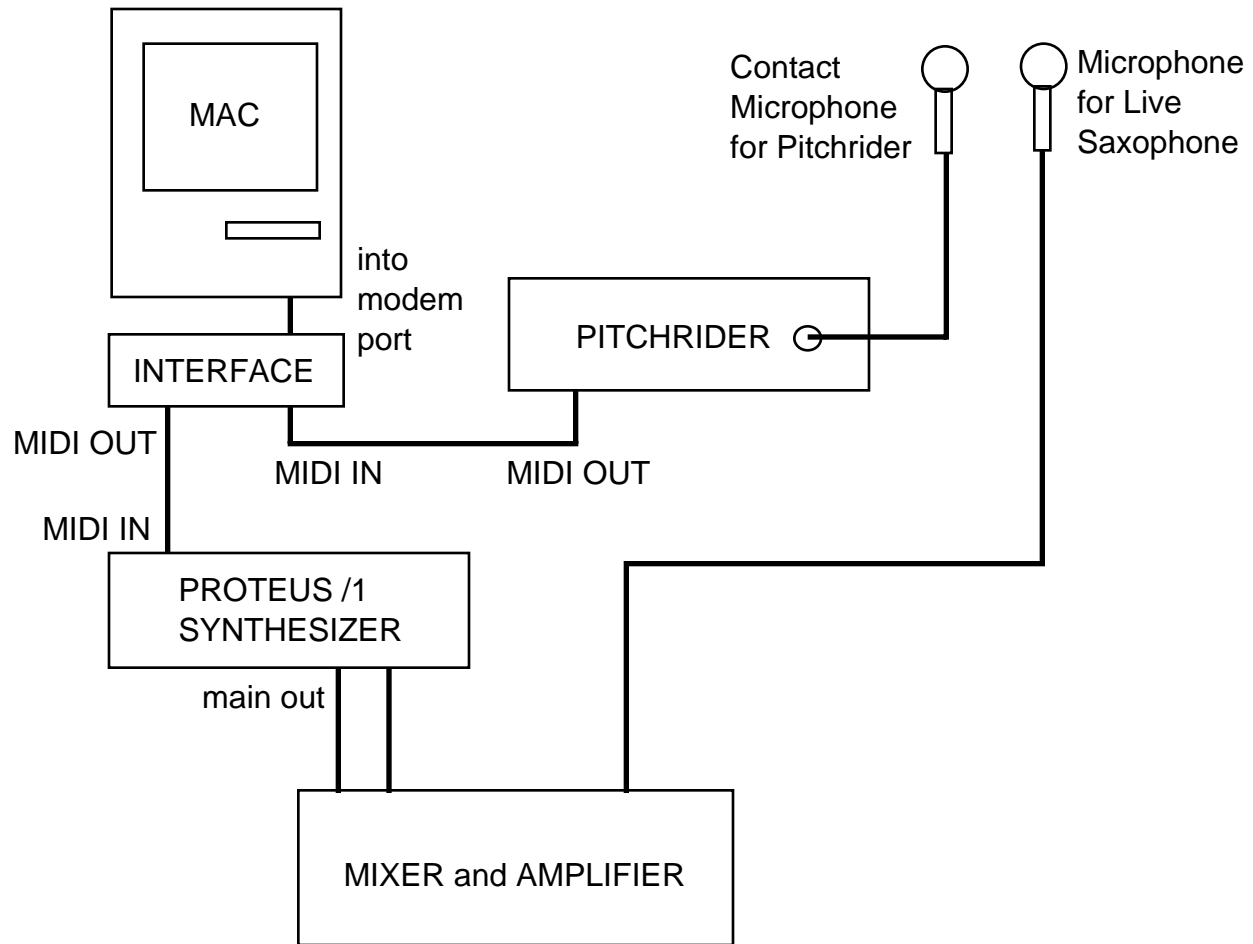
A disk with the Max Patcher program and files and the Proteus Editor/Librarian file is available from the composer. For copyright reasons, this disk remains the property of the composer, and must be returned after performance. The performer must obtain a copy of the Opcodes Editor/Librarian in order to download voices to the Proteus synthesizer.

## Downloading Voices:

The Proteus voices (on disk in a file called WindoW-Voices) must first be downloaded to the Proteus synthesizer. This is done by connecting the MIDI OUT from the Macintosh computer to the MIDI IN of the Proteus, and connecting the MIDI IN from the Macintosh to the MIDI OUT of the Proteus. Launch the Opcodes Editor/Librarian, open the WindoW-Voices file, and send the data to the Proteus by selecting the "Send All Banks" menu item under the "Bundle" menu. All voices used in WindoW are located in patches 100 through 124.

## Performance Setup:

A reed microphone, contact microphone or lapel microphone (in the bell) can be used to as a pickup on the alto saxophone. The microphone is plugged into the IVL Pitchrider and the input levels adjusted appropriately. The MIDI OUT of the Pitchrider is connected to the MIDI IN of the Macintosh MIDI interface. The MIDI OUT of the Macintosh MIDI interface is connected to the MIDI IN of the Proteus. Audio lines connect the Main stereo outputs of the Proteus with the Amplification System. If desired, the saxophone can also be amplified.



**Software Setup:**

Once the equipment has been set up, the "Window-Main" file on the Macintosh disk should be launched. A panel appears on the Macintosh screen - this is the main panel of the Max Patcher program that controls the electroacoustic sounds. The large START button in the centre starts the program running. The numbers in boxes along the top refer to the various sections of the piece as indicated in the score - they can be clicked to start the software at the beginning of that section during rehearsal. The MONITOR button flashes when a cue to move onto the next section has been received by the program. As well, the received pitch and velocity are displayed, as is the current section of the piece. The performer should tune to the Pitchrider, and check that the correct pitches are being received by the program. Written middle C - sounding Eb is pitch number 51. Also, the performer should ensure that the range of velocities (i.e. volume) received from the Pitchrider is sufficiently wide - soft notes should be under 30, loud ones over 100. If not, the dynamic scaling on the Pitchrider can be adjusted.

**Performing the Piece:**

To begin the piece, the performer needs only to click on the START button and begin playing the score. She/he should check the computer screen to see that cues between sections have been "caught". If not, the transition pitch or pitches should be re-articulated. The performer should not need to touch the computer while the piece is performed. All level controls and voices are automatically controlled by the program.

For more information or clarification, the composer can be contacted at:

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(604) 321-1107  
(604) 822-6308

Or through the B.C. regional office of the Canadian Music Centre (604) 734-4622

# Performance Notes

## Electronics



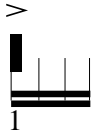
Sections of the composition  
(as displayed on the computer  
monitor)



MIDI Channel ON (2)  
with patch number (8)



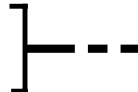
MIDI Channel OFF (2)



Repeated chords  
(chord No. 1)



Sustained chord  
(chord No. 6)



accompaniment continues for the  
remainder of the line



sustained pitch



unsustained pitch

## Saxophone



a breath or short pause



a pause (for at least the  
duration of the rest)



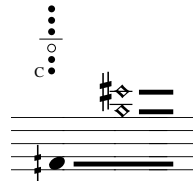
accidentals are in effect for the  
duration of a beamed group



repeat the pattern of notes



notes which cue transitions to new  
sections. The computer monitor  
should flash when the note or  
sequence of notes is played.



multiphonics (with fingering)

**0** *Expressively*

Saxophone

Electronics

cue transition to Section 1

2 3  
3 15

**1** *Forcefully* ♩ = 100

2 9

5 4 7 3  
6 12 8 23

1 ⊗  
⊗

2

3

3 3

5 16

3 8

3 16

3 8  
4  
2 3

Musical score system 1, featuring two staves. The upper staff is in treble clef and the lower in bass clef. The time signature is 2/8. The system includes a 7-measure rest, a triplet of eighth notes, and a *pp* dynamic marking. The system concludes with a 3-measure rest and a triplet of eighth notes.

Musical score system 2, featuring two staves. The upper staff is in treble clef and the lower in bass clef. The system begins with a *p* dynamic marking and includes sixteenth-note runs with sixteenth rests. A 3-measure rest is marked *fff*. The system concludes with a *Freely* instruction, a *sfz p* dynamic marking, and a triplet of eighth notes.

Musical score system 3, featuring two staves. The upper staff is in treble clef and the lower in bass clef. The system begins with a *p* dynamic marking and includes a *f* dynamic marking. The system concludes with a *mp* dynamic marking and the instruction *poco a poco crescendo...*



♩ = 100

ff p mf

6 3 3

5 2 5

Expressively

ppp mfp pp

6 2 3

*Independent of electronics*

ff pp ff pp mf pp

ff mf

3 2 6

*p* *mp* *pp* *mp*  
*pp*

♩ = 100

*fff*  
 5 4 7 9 7 5 4  
 16 16 16 16 16 16 16  
 1 2 4 1 3 4 2 6 1 4 3 2 1 3 6 4 6 4 6 4 2 5

*Energetically*

*mp* *p* *pp* *f*  
 cue transition to Solo (Section 1.5)  
 1.5  
 All channels fade out . . . . .

♩ = 120

*fff* *mf* *ffp* *f* *mf*

*accelerando molto...*

*crescendo...*

*ff* *fff* *p* *mp*

cue fade in to Section 2

2	2
3	1
4	12

**2**

*pp* *ffp* *f* *p* *f* *p*

vary dynamics *pp - mp*

voices change continuously in Section 2...  
 channels 2 and 3 alternate every 12 seconds,  
 channel 4 every 40 seconds

2	2 5 6 17 3 4 8 9
3	1 20 19 1 8 5 17 1
4	12 23 18 22

First system of musical notation. The upper staff features a melodic line with slurs and accents, and a lower staff with a bass line. Dynamic markings include *f p*, *f p*, *f p*, *f*, and *ffp*. A crescendo hairpin is visible between the two staves.

Second system of musical notation. The upper staff continues the melodic line with slurs and accents. Dynamic markings include *fp*, *f*, *ffp*, *fp*, and *f p*. A crescendo hairpin is visible between the two staves.

Third system of musical notation. The upper staff continues the melodic line with slurs and accents. Dynamic markings include *f p*, *f p*, *f p*, *f p*, and *f*. A crescendo hairpin is visible between the two staves.

First system of musical notation. The upper staff features a melodic line with various dynamics: *mf*, *p*, *f*, *p*, *f*, *p*, *mf*, *p*, *f*, *pp*, and *mf*. The lower staff contains a rhythmic accompaniment with a dashed line indicating a continuation or rest.

Second system of musical notation. The upper staff continues the melodic line with a long slur over the latter half. The lower staff continues the rhythmic accompaniment with a dashed line.

Third system of musical notation. The upper staff continues the melodic line with several slurs and accents. The lower staff continues the rhythmic accompaniment with a dashed line.

System 1: Treble clef staff with notes and slurs, dynamic markings *ff*, *ff*, and *p*, and the instruction *legato*. Bass clef staff with notes and rests.

System 2: Treble clef staff with notes, slurs, and dynamic markings *p*, *pp*, *mp*, and *p*. Bass clef staff with notes and rests. Includes a trill marking and a chord diagram for Eb, B, and C.

System 3: Treble clef staff with notes, slurs, and dynamic markings *pp*, *ppp*, *ff*, *mp*, *fp*, *f p*, and *f p*. Bass clef staff with notes and rests.

First system of musical notation. The upper staff features a melodic line with a long slur and a dynamic marking of *ff* (fortissimo) that tapers to *p* (piano). The lower staff contains a rhythmic accompaniment of eighth notes.

Second system of musical notation. The upper staff includes dynamic markings of *pp* (pianissimo), *ppp* (pianississimo), and *mp* (mezzo-piano). The lower staff continues the accompaniment with some rests.

Third system of musical notation. The upper staff features a dynamic marking of *poco a poco cresc. ....* (poco a poco crescendo) followed by *f* (forte) and *ff* (fortissimo). The lower staff continues the accompaniment.

First system of musical notation. The upper staff is in treble clef and contains a complex melodic line with many slurs and accents. The lower staff is in bass clef and contains a rhythmic accompaniment with some rests.

Second system of musical notation. Similar to the first system, but with dynamic markings *fff* and *p* indicating a crescendo and decrescendo. The upper staff continues the melodic line, and the lower staff continues the accompaniment.

**3** *Slowly and expressively* ♩ = 80

Third system of musical notation. It begins with a boxed number '3' and the tempo marking 'Slowly and expressively' with a quarter note equal to 80. Dynamic markings *mp*, *p*, and *pp* are used. A 'cue transition to Part 3' label is present. The system includes a table of register assignments and a small musical diagram.

2	21		
3	21	6	13
4	10	7	15
5	15	8	4

Channels 8,5,6 and 7 respond to the following registers:

Chords sound on Channels 2, 3 and 4



The musical score is presented in three systems, each with a piano part (bottom staff) and a violin part (top staff).  
System 1: The piano part begins with a dynamic marking of *mp*, followed by *p*, *mf*, and *mp*. The violin part includes triplet markings over eighth notes.  
System 2: The piano part starts with a dynamic marking of *p* and ends with *f*. The violin part features a crescendo leading to a forte section.  
System 3: The piano part begins with a dynamic marking of *ff*. The violin part concludes with a double bar line and repeat signs.

4

pp mp p

2	3	5	4	8	23
3	15	6	7		

mf fp p

pp p sfz fff