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**Title**

Vurtruvurt

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**alexander sigman**

# **VURTRUVURT**

for solo violin and live electronics

(2011)

## VURTRUVURT (2011)

### performance notes:

#### general remarks:

**I. Performance context:** This piece may be programmed in the context of an evening-length performance of the *VURT* cycle, as a member of a subset of *VURT* pieces, or as an autonomous work.

**II. VURT sections:** There are four types of sections (labeled accordingly in the score):

**V:** The two **V** sections consist of pre-recorded electronic material. **V** is for **vehicle** and **volume**, but NOT **violin**.

**U:** In the three **U** sections, the violin and electronics interact as “equal partners” throughout. **U** is for **union**.

**R:** The three **R** sections are effectively composed-out fermatas, during which the violin plays against and filters immediately preceding material. **R** is for **resonance, recording, reflection**, etc...

**T:** During the two **T** sections, varying degrees of reverberation are applied to primarily (but not exclusively) impulsive violin sounds. **T** is for **trigger**.

**Pauses** between sections should be avoided, to the extent possible.

#### III. Violin Preparation:

The electronics are to be projected through 2 small **transducers**: 1 attached to the violin (preferably on or near the bridge), the other on the upper left-hand corner of the left-most **music stand**. As such, the distance between transducers increases (slightly) over the course of the piece.

See **TECHNICAL RIDER** for details.

#### IV. Violin/Electronics Interaction Model and Balance:

The electronics are conceived neither as a mirror to the violin, nor as an independent voice/instrument/layer. Rather, all material is projected from the same source, the violin functioning as both active conveyor of content and passive resonating body. The electronics extend the range of violin emissions, without introducing an additional sound-source. As such, all efforts should be made to blend the violin source material and electronic output.

## violin:

### general remarks:


**tempi** should be followed as strictly as possible. although not recommended, if the fastest tempo cannot be attained, the initial tempo relationships should be preserved, and thus scaled down accordingly. Unless otherwise indicated, all tempo changes occur *subito*.

**accidentals** (including quarter-tones, excluding inflections) obtain throughout the measure, except if introduced by a grace-note, trill-note, etc.

**articulations, bow positions**, etc. obtain until cancelled.


**jeté** articulations should be executed evenly over the given beat, as densely and rapidly as possible. N.B.: the number of indicated stems (usually 4) does not refer to an exact quantity of desired *jeté* iterations, but more generally signifies a *jeté* (rather than *balzato*) articulation.


**trills** should be executed as rapidly as possible, and should commence directly at the onset of the beat. the alternation between principal and trill notes need not be regular/periodic, however.

unless the  symbol is indicated (signifying irregular, fluctuating tremolo-speed), all horizontal and vertical **tremoli** should be executed with as evenly as possible.

**glissandi** should occur during exact indicated durations; transitions of **finger-pressure** and/or **interval-span** (if glissandi occur on more than one string) should be as even as possible over the given duration.

### signs and symbols:

 = gradual and continuous transition from one “state” to another

 = transition from full to harmonic finger-pressure

 = transition from harmonic to full finger-pressure

' = *Luftpause* (ca. 0.5-1''): demarcates phrase endings

**m.v.** = molto vibrato

**n.v.** = non-vibrato

**Bow positions:**

**AST** = alto sul tasto

**ORD** = ordinario

**ASP** = alto sul ponticello

**DSP** = dietro sul ponticello: behind, but near to the bridge

**Articulations:**

**c.l.b./c.l.t.** = *col legno battuto/tratto* (absolutely no bow-hair)

**1/2 c.l.b./c.l.t.** = ½ wood, ½ hair

**crini:** with bow hair; cancels *col legno*

**batt.** = *battuto* (*crini* or *col legno*)

**balz.** = *balzato* (controlled “bouncing” of the bow over given number of iterations)

**bow-vibrato:** rotate bow back and forth as rapidly as possible as it is drawn across string(s)

**Bow direction:**

⦿ = circular bowing, to and from initial position (i.e., AST-ASP-AST or ASP-AST-ASP) in clockwise or counterclockwise motion. 1 symbol/rotation.

ASP
-----

 $\equiv$ 

AST
-----

 - - - - , = rapid vertical bowing


**Bow pressure:**

**flaut.** = light, minimal pressure, high bow speed

▮ = slightly exaggerated bow pressure, medium bow speed (unless otherwise indicated)


▮ = over-pressure: high noise-content, maximally-reduced pitch-definition, low bow-speed; approx. the same degree of pressure, relative to changes in position, duration, etc., should be maintained throughout.

**Tremolo speed:**


 = variable bow-speed (vertical or horizontal)


*trem-rit/trem-accel*: uniform decrease or increase in tremolo-speed over given duration

**Finger pressure:**

 = harmonic finger-pressure (does not produce partial, in most cases)

**Microtones:**

 = quarter-tone sharp

 = quarter-tone flat

**Duration:** ca. 8:30-9:00

## VURTRUVURT (2011)

### technical rider:

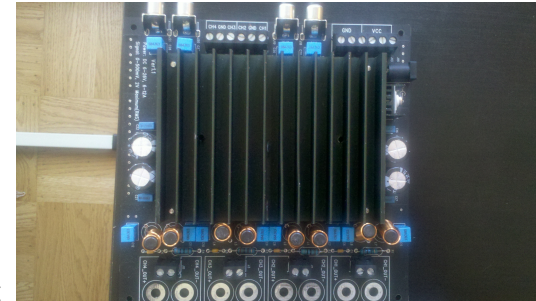
#### I. Hardware:

The following devices are suggested for the performance of this piece:

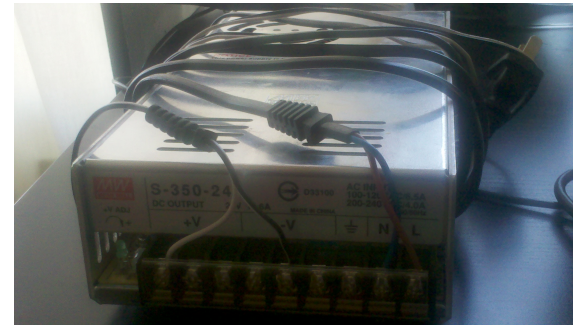
##### A. 1 pair of small **transducers**:



##### B. 1 50-100W 2-channel **power amp**, e.g.:



##### C. 1 **power-supply** , e.g.:



##### D. 1 2-channel **audio interface** (MOTU, Lexicon, etc.)

##### E. 1 **condenser mic** (violin input)

##### F. 1 **laptop** running **pd-0.42.5-extended** or later version.

## **II. Violin Preparation and Transducer Placement:**

- A.** Place **left channel** transducer on **upper left-hand corner** of **left-most** stand; remove adhesive cover. The music stands may be metal or wooden.
- B.** Place **right channel** transducer on/near **bridge** (or at whatever location there will be minimal resonant frequency interference or possible damage to the instrument—experiment with this, USING LOW-SOUND LEVEL OUTPUT!). Remove adhesive cover.
- C.** The **condenser mic** should pick up all violin output. Place at central position with respect to performer/music stands. Angle away from transducers to minimize any possible feedback.



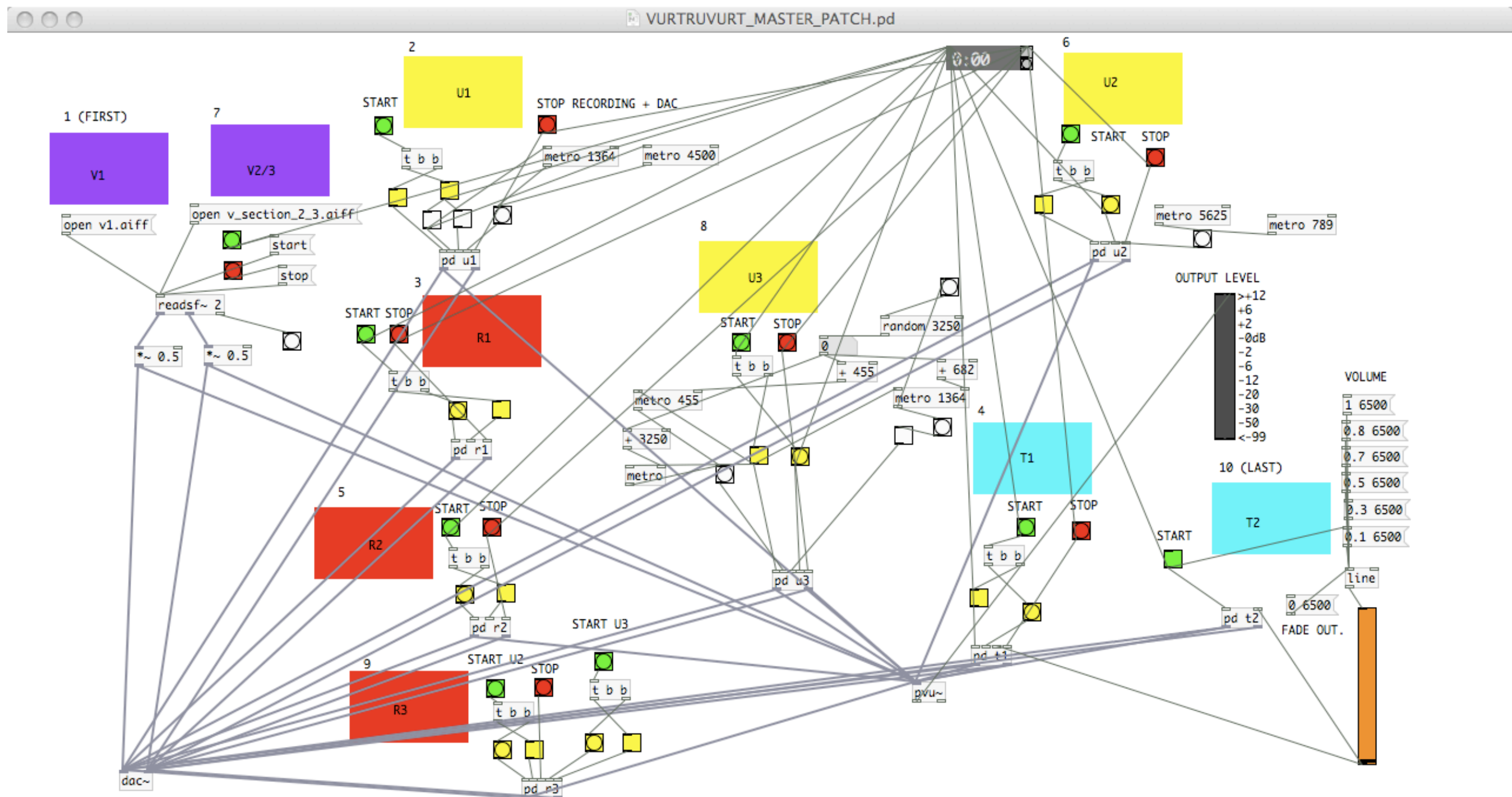


Figure 1: *VURTRUVURT* pd patch.

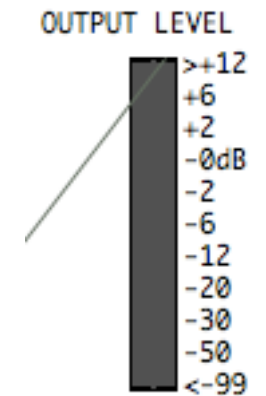
### III. pd Patch Functionality and Operation

**A. Software compatibility:** This patch was created using **pd-0.42.5-extended**. This (or a later) version may be downloaded from: <http://sourceforge.net/projects/pure-data/files/pure-data/> and various other mirror sites.

**B. Directory:** The patch is entitled **VURTRUVURT\_MASTER\_PATCH.pd**. Place this patch in the **VURTRUVURT\_sourcefiles** folder. All soundfiles used in the patch are located in this folder.

**C. Operation:**

**1. START/STOP:** For all **V (violet)**, **U (yellow)**, **R (red)**, and **T (turquoise)** sections: The **GREEN BUTTON** = START ADC/output/recording; the **RED BUTTON** = STOP ADC/output/recording. The **YELLOW BUTTONS** are only to be clicked in “emergency” situations.



**2. Output sound level:** The global sound level is indicated on the **VU meter** in the main patch. Individual I/O levels may be controlled in each section’s **subpatch**.

**3. Execution order:** The 10 sections have been numbered.

**4. Clock:** The timer is automatically started/reset and stopped when the START/STOP buttons for each section are clicked.



**5. File recording and playback:** The **U1, T1, U2, and U3** subpatches output soundfiles. The **R1-R3** subpatches read and process these files. All files are saved to the **VURTRUVURT\_sourcefiles** folder.

**6. Score indications:** the **lower 2-line system** in the score indicates a) generalized descriptions of electronic material/channel (Left and Right, respectively) and b) directions for the laptop performer.

**7. Violin/electronics coordination:** Violin/electronics section onsets and offsets should be as closely coordinated as possible, but need not be exact. With the exception of **U3** and **R3**, all subpatches are to started and stopped at the respective section boundaries indicated in the score.



2

AST → AST → ASP → AST → AST

45"

R1

n.v. flaut. → flaut. → flaut. → flaut. → flaut. → flaut.

12

vln.

ppp → fff → ppp → f → ppp → f → ppp → f

6-7" (simile)

elec.

filtered noises, variable register

T1

52

AST → ASP

jeté crini → 1/2 c.l.b.

crini

jeté

AST → ASP

AST → ASP

balz. → 1/2 c.l.b. → c.l.b. → 1/2 c.l.b. → crini

balz. → 1/2 c.l.b. → c.l.b. (sempre balzato)

ORD → 1/2 c.l.b. → crini

13

vln.

sf → sf → sf → ppp → sff → ppp → p → sf → sf → ppp → sf → sf

16

elec.

reverb (max-> min)

VOLUME: 0.5 6500

0.7 6500

1 6500

(tratto) flaut. (sempre)

AST → ORD

ORD → crini trem-accel.

ORD

1/2 c.l.t. → ASP

ORD

AST → ASP → AST

bow-vibrato

flaut. → flaut. → flaut. → flaut. → flaut. → flaut.

18

vln.

sf → p → ppp → ppp → p → ppp → trem-accel. → trem-accel. → trem-rit. → p → mf → p → ppp → p → ppp → p

0.5 6500

1 6500

0 6500

R2

AST (sempre)

45"

STOP RECORDING!

23

bow-vibrato

flaut. → flaut. → flaut. → flaut. → flaut. → flaut. → flaut. → flaut. → flaut. → flaut.

11-12" (simile)

vln.

ppp → f → ppp → f → ppp → f → ppp → f → fff → p → mf

elec.

filtered noises, variable register





