

Etudes & Vignettes

for the EV (2020)

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Notes on the Score

-Recall notes format:

OCT: (plus or minus octaves)

FM: (divide or multiply and the factor)(FM amount)(Oscillator and PWM levels)

FFT3: (amount sent via bus, output gain)(window size, overlap factor, sampled up or down)(default FFT input or swapped)

CV: (Source > Destination and amount)

MIDI ON (trigger MIDI and set the output accordingly)

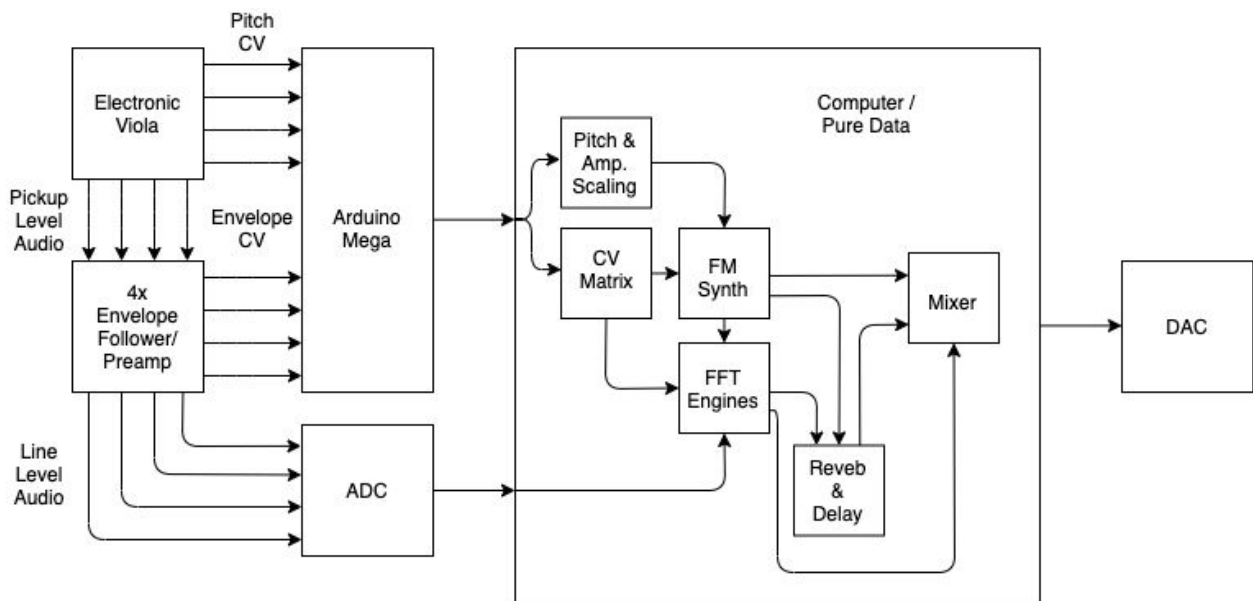
-written pitch does not necessarily correspond with sounding pitch

TECHNICAL REQUIREMENTS

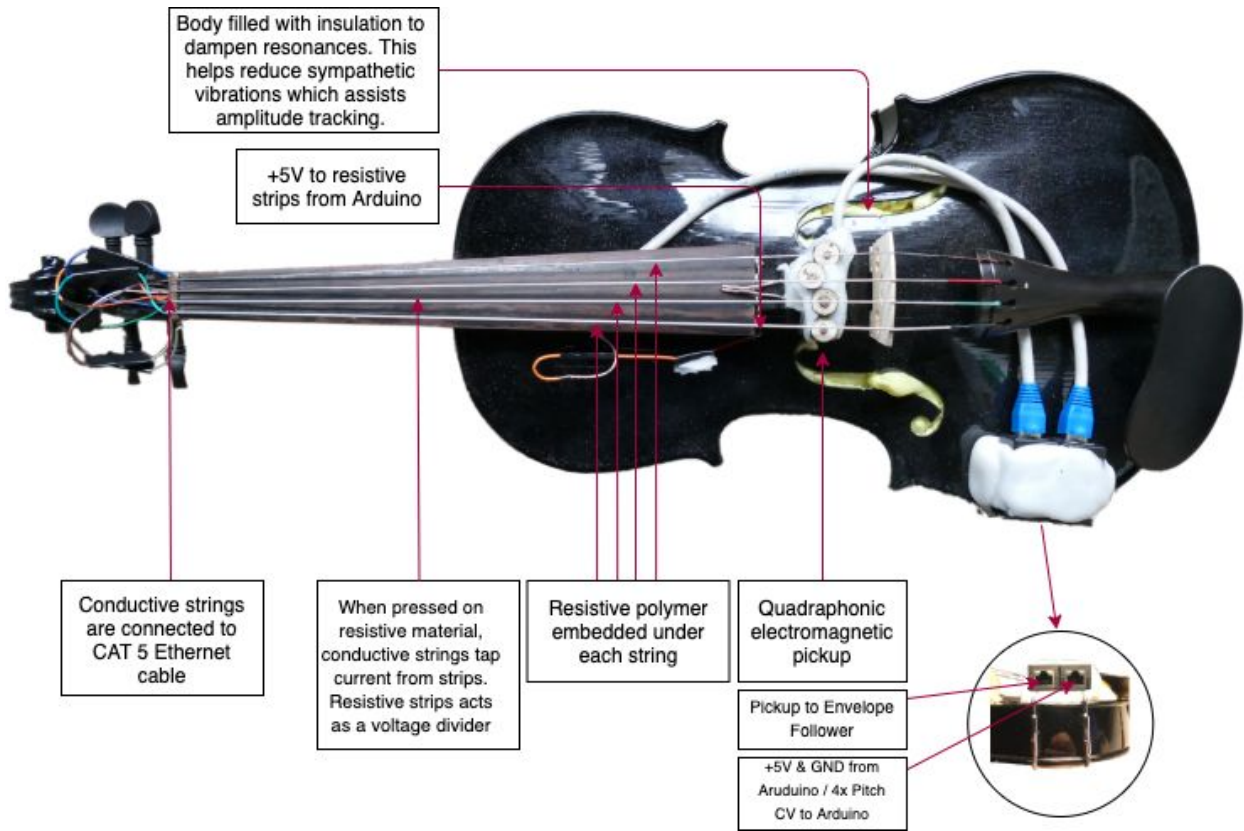
- Four electronic violas
- Four envelope follower boxes & Arduino boxes
- Four computers running PD & and ADC/DAC

ELECTRONIC VIOLA OPERATIONAL DIAGRAMS

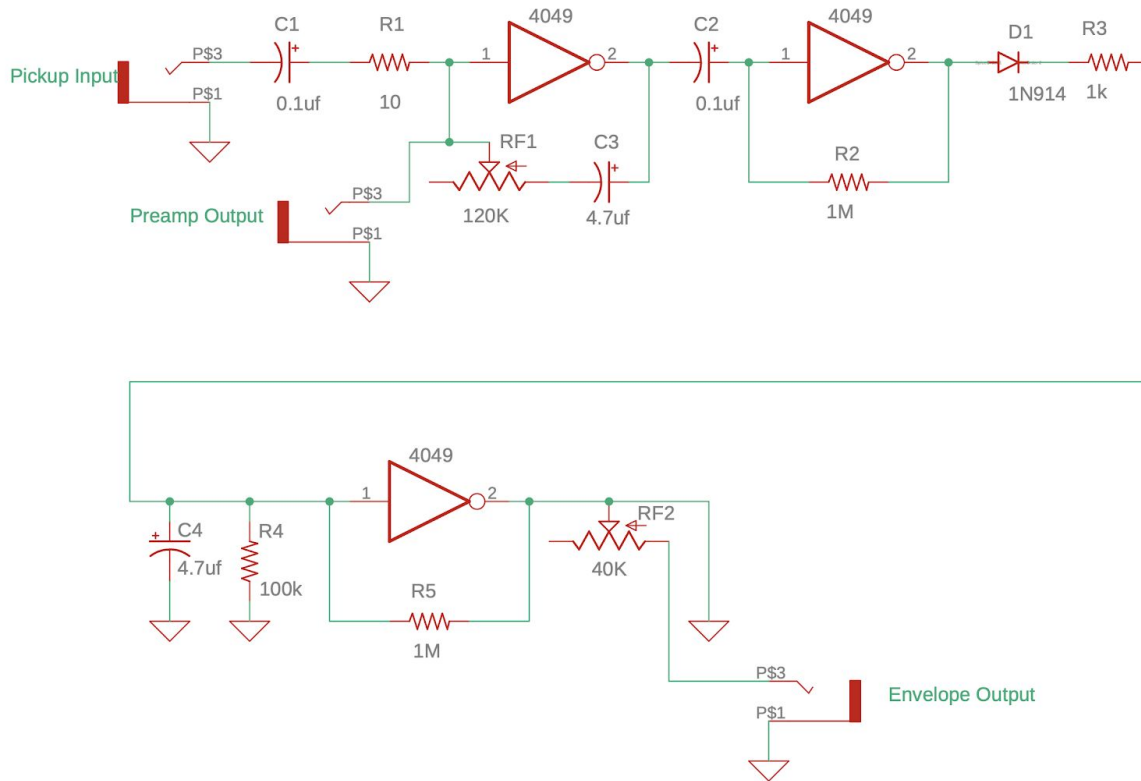
SYSTEM BLOCK DIAGRAM



VIOLA BODY FEATURES



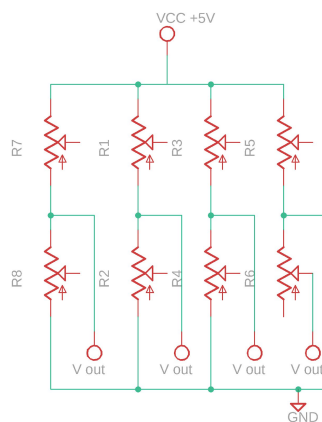
ENVELOPE FOLLOWER / PREAMP CIRCUIT*



*Notes:

- based on a design by Nic Collins: *Handmade Electronic Music*, Routledge, 2009, page. 193
- the envelope follower for the Electronic Viola comprises four of these designs, one for each string

FINGERBOARD CIRCUIT



Etudes & Vignettes for Electronic Violas

(2020)

Brian Lindgren

Etude 4

♩ = 67
pizz

OCT: (-2)
FM: (-)(0)(Sq 75%, Pwm 33%)
FFT2: (100%, 0.2) (2048, 16, 2)(x)
CV: (Env > Pwm 40%)

FM: (-)(0)(Sq 75%, Pwm 33%)
FFT3: (100%, .7) (256, 16, 1)(lll)
CV: (Env > Pwm 40%)

OCT: (+1)
FM: (-)(0)(Sq 75%, Pwm 75%)
FFT2: (100%, 0.2) (512, 16, 2)(x)
CV: (Env > Pwm 40%)

EV 1 *f*

EV 2 *pizz*

EV 3 *mf* *pizz* *mf*

8

EV 1

EV 2

EV 3 *ff*

Vignette 1

♩ = 61

OCT: (+1)
FM: (-)(0)
(Sin 100%, Sq 40%, Pwm 33%)
FFT1: (100%, 0.2) (1024, 8, 1)(lll)
CV: (Env > Pwm 20%)

FM: (-)(0)(Sin 100%)
FM: (0.7)
CV: (Env > Pwn, FM 40%)

OCT: (+2)
FM: (+1)(235)
(Sin 100% Sq 75%, Pwm 60%)
FFT1: (100%, 2) (512, 16, 1)(lll)

EV 1

EV 2 *pizz*

EV 3 *mp* *mp*

11

EV 1

mf

EV 2

EV 3

Etude 2C

OCT: (-2)
 FM: (-)(0)(Sq 80%, PWM 40%)
 FM: (0.3)
 FFT1: (50%, 1.0) (512, 16, 1)(x)

OCT: (-1)
 FM: (-)(0)(Sq 80%, PWM 40%)
 FFT1: (50%, 1.0)
 (256, 16, 0.5)(x)

OCT: (+2)
 FM: (x2)(605)
 (Sin 75%, Sq 80%, Pwm 20%)
 FFT1: (50%, 1.0) (256, 16, 0.5)(||)
 CV: (Env > Pwm 15%)

$\text{♩} = 134$
 pizz

EV 1

mp

pizz

EV 2

mp

pizz

EV 3

mp

10

EV 1

p

f

EV 2

mf

EV 3

mf

18

EV 1

EV 2

EV 3

mf

p

28

EV 1

EV 2

EV 3

mp

f

mp

36

EV 1

EV 2

EV 3

f

42

EV 1

EV 2

EV 3

mp

mp

Vignette 2C

FM: (-)(0)(Sin 100%)
FFT1: (100%, 0.4) (1024, 8, 1)(||)
MIDI OUT: ON (to piano)

FM: (-)(0)(Sin 100%)
FFT1: (100%, 0.4) (512, 16, 1)(||)

FM: (-)(0)(Sin 100%)
FFT1: (100%, 0.4) (512, 16, 1)(||)

♩ = 96

EV 1

EV 2

EV 3

p *f*

p

10

EV 1

EV 2

EV 3

mf

20

EV 1

EV 2

EV 3

mf

Etude 1

OCT: (-2)
 FM: ($\div 3$)(288)(Sq 100%)
 FFT2: (100%, 0.3) (512, 8, 0.5)(||)
 CV: (Env>Pwm 40%)

FM: ($\div 4$)(92)(Sin 65%)
 FM: (0.9)

FM: (-)(0)(Sq 40%, Pwm 30%)
 FFTA: (100%, 0.1)(1024, 16, 1)(||)
 CV: (Env>Pw 10%)

OCT: (-2)
 FM: (-)(0)(Saw 100%)
 FM: (0.8)
 FFTB: (100%, 0.3)(1024, 8, 1)(||)

♩ = 65

pizz

ff

pizz

f

7

pizz

f

pizz

f

13

Vignette 3

FM: (-)(0)(Sq 100%, Pwm 50%)
FFT3: (100%, 0.2)(1024, 4, 2)(|||)
FM: (.6)
CV: (Env>Pw10%)

OCT: (-1)
FM: (-)(0)(Sq 100%, Pwm 25%)
FFT3: (100%, 0.2)(1024, 4, 2)(|||)
CV: (Env>Pw10%)

OCT: (-1)
FM: (-)(0)(Sq 100%, Pwm 30%)
FFT3: (100%, 0.2)(1024, 4, 2)(|||)
CV: (Env>Pw10%)

♩ = 43

EV 1 *pp* *cresc.*

EV 2 pizz

EV 3 *each note swells from nothing*

7

EV 1 *(cresc.)*

EV 2 *cresc.*

EV 3

10

EV 1 *(cresc.)* *ff*

EV 2 *(cresc.)* *f*

EV 3 *cresc.* *mf*