
David Felder

BoxMan

for Solo Horn and Max/Msp Processing

Sample
not for print

BoxMan (1985 – 86; rev. 1999)

for solo horn and Max/Msp processing

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Electronics Information:

Max/Msp patch designed by Erik Oña
 patch redesigned by David Kim-Boyle
 patch tweaked by Brett Masteller

CPU minimum requirements:

Macintosh G4/400 with 254 MB RAM
 Max/MSP 4.0.9
 MOTU PCI-324 i/o audio card (or similar multi-channel ADC/DAC)

Audio equipment and setup:

1 large condenser microphone
 1 small clip microphone, placed on the end of the bell
 NB: If the clip mic interferes when using the mute, the clip mic should be eliminated and the signal from the large condenser mic can be split into two signals before reaching the MOTU interface.
 Mixing console with at least four outputs to correspond to the four dac outputs in MSP
 Four loudspeakers

The dac outputs should be sent as follows:

1. front left
2. front right
3. rear left
4. rear right

The piece is designed for a normal quadraphonic speaker setup (two front, two rear). If the seating for the hall is set up in a way that the quad setup is not ideal, then the speakers can be set up in a half circle (like the face of a clock), as follows:

1. front left (about 11 o'clock)
2. front right (about 1 o'clock)
3. extreme left (about 10 o'clock)
4. extreme right (about 2 o'clock)

Launch the file >>BOXMAN(new).pat<<

Make sure you RESET and INITIALIZE sections before turning on the DAC

Events can be triggered by either clicking the ADVANCE EVENTS button, hitting the space bar, or using a MIDI footswitch controller. This latter option is the least safe mechanism for performance, as the performer will not be able to keep track of event numbers easily.

There is a file called >>Boxman.aiff<< that is useful for rehearsal of event triggering. Just burn a CD and run your CD player into the 2 ADCs that would normally be sending the microphone signal. There is no audio through in the patch, so you will have to monitor the CD player outside of MSP.

One final note: when triggering events for the reverb and hold (e.g., the beginning of section 5), be careful of feedback loops. Someone might have to ride the input faders to MSP.

BoxMan

for solo horn and Max/Msp processing
- for Adam Unsworth -

Sec. 1
Prelude 1 ♩ = 108 [manic]

F Horn

Electronics

Measures 4-6. F Horn part includes dynamics f, sfp, f, mp, f, sf, f, f, ff, f. Includes a 5-measure slur and a 3-measure slur.

Measures 7-9. F Horn part includes dynamics ff, f, mp, p, mf, ff, fp, ff, f, sff, mf, mp, mf, f, sf, fp. Includes a 6-measure slur and a 3-measure slur.

Measures 10-12. F Horn part includes dynamics f, sff, mf, sf, mf, f, sf, f, mf simile, mf, f, sff, f. Includes a 3-measure slur and a 3-measure slur.

Measures 13-15. F Horn part includes dynamics mf, f, sfp, f, mp, f, sf, ff, sff, sff, fp, f, mf, sff, mp. Includes a 3-measure slur and a 6-measure slur. Marking: alt. fingerings.

Measures 16-18. F Horn part includes dynamics sff, mf, sff, p, sff, mf, f, sfp, sff, f, mf, f, sff. Includes a 5-measure slur.

Measures 19-21. F Horn part includes dynamics f, mp, mf, f, sff, ff. Includes a 3-measure slur and a 5-measure slur.

Measures 22-24. F Horn part includes dynamics fmp, sf, p, ff, sff. Includes a 5-measure slur and a 3-measure slur. Markings: hand vibr., alt. fingerings, **.

* All glisses generally done with half valve combinations, only alter tone by moving hand in bell if no smooth combination is available

** Jagged lines denote a hand shake in bell, of medium to violent intensity depending on character.

7 [obsessive]

25 *ff* *mf* < *f* *ff* *sf* < *sf* > *f* *sempre* *fp* *f* *mp* < *f* > *p* *f*

Staff 25-27: Treble clef, 13/8 time signature. Measures 25-27. Dynamics: *ff*, *mf* < *f* *ff*, *sf* < *sf* >, *f* *sempre*, *fp*, *f*, *mp* < *f* >, *p*, *f*. Includes a circled '7' with a downward arrow and the text '[obsessive]'.

8

28 *sff* *f* < *mf* *sff* *p* *f* > < *sff* *fp* < *ff* *sff*

Staff 28-30: Treble clef, 13/8 time signature. Measures 28-30. Dynamics: *sff*, *f* < *mf*, *sff*, *p*, *f* > < *sff*, *fp* < *ff*, *sff*. Includes a circled '8' with a downward arrow.

9 10

31 *ff* *mf* < *sff* *sf* *f* > *mf* *sff* *ff* *sfp* < *ff* < *sff* > *f* *mf* *sf* <

Staff 31-33: Treble clef, 3/4 time signature. Measures 31-33. Dynamics: *ff*, *mf* < *sff*, *sf*, *f* > *mf* *sff*, *ff*, *sfp* < *ff* < *sff* > *f* *mf* *sf* <. Includes circled '9' and '10' with downward arrows.

34 *f* *fff* *mf* < *fff* *mf* *sf* *mp* < *mf* *sff* *sf* <

Staff 34-36: Treble clef, 5/4 time signature. Measures 34-36. Dynamics: *f*, *fff*, *mf* < *fff*, *mf*, *sf*, *mp* < *mf*, *sff*, *sf* <. Includes circled '11' with a downward arrow.

11

37 *f* < *ff* > *mp* *f* < *mf* *f* < *sff* *sf* *f* *ff* *mf*

Staff 37-39: Treble clef, 5/4 time signature. Measures 37-39. Dynamics: *f* < *ff* > *mp*, *f* < *mf*, *f* < *sff*, *sf*, *f*, *ff*, *mf*. Includes circled '11' with a downward arrow.

40 *f* *sf* *sff* *fff* *f* *fff* *f* < *fff* *f* > *mp*

Staff 40-42: Treble clef, 5/4 time signature. Measures 40-42. Dynamics: *f*, *sf*, *sff*, *fff*, *f*, *fff*, *f* < *fff*, *f* > *mp*.

43 *mf* < *f* *sff* *f* < *sf* *mf* < *f* *sff* *sf* *fp* < *ff* *sff* *f* *sfp* < *sff* *fp* < *ff*

Staff 43-45: Treble clef, 4/4 time signature. Measures 43-45. Dynamics: *mf* < *f*, *sff*, *f* < *sf*, *mf* < *f*, *sff*, *sf*, *fp* < *ff*, *sff*, *f*, *sfp* < *sff*, *fp* < *ff*.

12 [binary]

46 *ff* < *sfff* *ff* < *sff* *f* < *sff* *sfff* *f* *sf* *ff* *mf* *fp* < *sf* *f* *mp* < *f*

Staff 46-48: Treble clef, 7/16 time signature. Measures 46-48. Dynamics: *ff* < *sfff*, *ff* < *sff*, *f* < *sff*, *sfff*, *f*, *sf*, *ff*, *mf*, *fp* < *sf*, *f*, *mp* < *f*. Includes circled '12' with a downward arrow and the text '[binary]'.

13 [lyric]

49 *sf* *f* *mf* *sf* *f* *p* <

Staff 49-51: Treble clef, 5/4 time signature. Measures 49-51. Dynamics: *sf*, *f*, *mf*, *sf*, *f*, *p* <. Includes circled '13' with a downward arrow and the text '[lyric]'.

* These individual notes may be taken an octave lower if absolutely necessary.

Sec. 2

14

1

[exuberantly]

2

harmonic gliss.

3

3

shake

[lyric; espr.]

4

[mechanically]

5

6

7

8

9

alt. fingerings

NV

♩ = 132

[manic]

10

[lyric; espr.]

NV

NV

11

Sec. 3

12

[lyric]

13

1

[obsessive]

2

3

4

5

6

♩ = 52-60 freely

7

* Change fingering - enharmonic gliss.

** The first figure is caught in the delays. The subsequent figure begins when the player hears the pitch indicated by a triangle from the loop pass. A continuously evolving ostinatic mass will be built and must be heard through the fermata at measure 67.

77 *mp* *f* *pp* *mf* *mp*

Musical staff 77-80. Measure 77 starts with a triplet of eighth notes. Dynamics range from *mp* to *pp*. A circled number 8 points to a note in measure 79.

80 *mf* *f* *p* *f* *ff* *p* *pp* *mp*

vibr.

Musical staff 80-83. Measure 80 has a triplet and vibrato. Measure 81 has a sextuplet. Measure 82 has a quintuplet. Measure 83 has a triplet. Dynamics range from *mf* to *pp*. A circled number 9 points to measure 80, 10 to measure 82, and 11 to measure 83.

83 *f* *fp* *sff* *p* *f* *ff non dim.*

Musical staff 83-86. Measure 83 has a triplet. Measure 84 has a triplet. Measure 85 has a triplet. Measure 86 has a triplet. Dynamics range from *f* to *pp*. A circled number 12 points to measure 85, and 13 to measure 86.

86 *sfmp* *p* *f* *pp*

f = 52 [distantly introspective] poco a poco accel. and rit. (by phrase)

Musical staff 86-89. Measure 86 has a sextuplet. Measure 87 has a triplet. Measure 88 has a triplet. Measure 89 has a triplet. Dynamics range from *sfmp* to *pp*. A circled number 14 points to measure 87, and 15 to measure 89.

89 *p* *ppp* *pp* *p* *mp* *pp*

[lyric]

Musical staff 89-93. Measure 89 has a triplet. Measure 90 has a triplet. Measure 91 has a triplet. Measure 92 has a triplet. Measure 93 has a triplet. Dynamics range from *p* to *pp*. A circled number 16 points to measure 90, and 17 to measure 93.

Sec. 4

93 *f non dim. marcatis.*

1 *f* = 120 [exuberantly]

Musical staff 93-96. Measure 93 has a sextuplet. Measure 94 has a triplet. Measure 95 has a sextuplet. Measure 96 has a triplet. Dynamics range from *f* to *pp*. A circled number 1 points to measure 93.

96 *fp* *ff* *ff* *sff* *f*

2 *ff* *sff* *f*

3 *f* = 144 [overwhelmed] Freely + ...

Musical staff 96-99. Measure 96 has a triplet. Measure 97 has a triplet. Measure 98 has a triplet. Measure 99 has a triplet. Dynamics range from *fp* to *f*. A circled number 2 points to measure 96, and 3 to measure 97.

99 *ff*

Musical staff 99-102. Measure 99 has a triplet. Measure 100 has a triplet. Measure 101 has a triplet. Measure 102 has a triplet. Dynamics range from *ff* to *fff*. A circled number 4 points to measure 100, and 5 to measure 102.

102 *fff* [End + ...]

Musical staff 102-105. Measure 102 has a triplet. Measure 103 has a triplet. Measure 104 has a triplet. Measure 105 has a triplet. Dynamics range from *fff* to *mf*. A circled number 6 points to measure 102, and 7 to measure 104.

105 *ff* [calming] *rit. to fermata ...*

4 *f* *mp* *mf* *p sf*

Musical staff 105-108. Measure 105 has a triplet. Measure 106 has a triplet. Measure 107 has a triplet. Measure 108 has a triplet. Dynamics range from *ff* to *mf*. A circled number 8 points to measure 106, and 9 to measure 108.

108 *p* *ff* *sff* *f* *sff* *f* *sff*

a tempo [obsessive] optional *8va* Plunger down

Musical staff 108-111. Measure 108 has a triplet. Measure 109 has a triplet. Measure 110 has a triplet. Measure 111 has a triplet. Dynamics range from *p* to *sff*. A circled number 6 points to measure 108, 7 to measure 109, 8 to measure 110, and 9 to measure 111.

* Project an extremely agitated muttering which becomes increasingly directed outwardly; those passages indicated by a dotted line must be characterized by constant motion of the hand - pitch should not be terribly precise in those sections, as also the sense of pulse may be treated more freely. It should get pretty wild!

** Hand shake in bell (see note at measure 24).

10 ♩ = ♩ prev. [exuberantly]

111 *f marcatis.*

♩ = 160 [as fast as possible]

114

slightly slower tempo

117 *ff* *f* *ff* *sim.* *sfff* *sfp*

[mechanistic] *rit.* 12 [binary]

120 *f* *ff* *sffp* *f* *ff* *sffp* *simile*

Entr'acte

123 *sf* *fff* *non dim.*

alt. fingerings alt. fingerings

14 8" 15 long!

elec.* *pp* *poco a poco cresc. . . .* [long pause]

* see instruction pages for specific tape realization performance directions

♩ = 60 Metal Straight Mute In

126 (Performer might opt to use a bass trombone mute with corks scraped down to fit bell, while pulling main tuning slide all the way out)

fp *mf* *f* *sf* *p* *f* *sf* *p*

fp *mf* *fp*

129 *mf* *sf* *mp* *f* *p* *f* *mf* *p* *mf* *sf*

f *p* *sf* *p* *f* *sf* *f* *mp* *p*

132 *mf* *f* *sff* *mf* *sff* *f* *ff* *sff*

mf *f* *ff* *f* *p*

* Slurred, fast, enharmonic gliss. using alternate fingerings

135 *p* *mf* *p* *f* *sf* *mf* *mp*

fl. fl. *sf* *mf* *sf* *mf* *f* *sfp*

** Progressively faster and wider vibrato to B_b above eventually emphasizing a shift from A_♯ to B_b as the center pitch by the end of the following measure. The gesture ends with an abrupt return to A_♯ non vibrato as shown.