

Ben Jameson

Tapping Piece

for any four performers playing electric guitars

Tapping Piece-Performance Notes

Equipment

Each performer is equipped with the following:

- Solid body electric guitar (a cheap Stratocaster copy would be ideal), laid flat on a table.
- Guitar amplifier. The power rating should be chosen to match the size of the venue-the sound of the guitars should fill the space without being uncomfortably loud.
- Volume pedal.
- Instrument cables to plug the guitar into the volume pedal and amplifier.
- Two drumsticks.
- Guitars 1 and 2 also require capos.

Ideally, the four performers should use identical or similar equipment. This is particularly important with the volume pedals, as the audio taper varies significantly between different models. The bridge pickups of the guitars should be used throughout the piece, and their sonorities should be matched as closely as possible through adjusting amplifier settings, etc.

If required, a click track can be provided.

Tunings

Each guitar is tuned to a different subset from the partials of a low fundamental frequency of 33Hz (C₁ rounded to the nearest whole Hz). Higher string gauges will aid tuning stability for the lower pitched guitars. Audio files of the tuning pitches can be provided.

Guitar 1

The open strings should be tuned to:

- String 1 (the highest string)-247.5Hz
- String 2-214.5Hz
- String 3-181.5Hz
- String 4-148.5Hz
- String 5-115.5Hz
- String 6 (the lowest string)-82.5Hz

The capo should then be attached at the 12th fret, resulting in the following pitches (some fine tuning will be required, due to the change in tension caused by the capo):

- String 1-495Hz (15th partial)
- String 2-429Hz (13th partial)
- String 3-363Hz (11th partial)
- String 4-297Hz (9th partial)
- String 5-231Hz (7th partial)
- String 6-165Hz (5th partial)

Guitar 2

The open strings should be tuned to:

- String 1-305.2Hz
- String 2-249.7Hz
- String 3-194.2Hz
- String 4-138.7Hz
- String 5-111Hz
- String 6-83.2Hz

The capo should then be attached at the 3rd fret, resulting in the following pitches (some fine tuning will be required):

- String 1-363Hz (11th partial)
- String 2-297Hz (9th partial)
- String 3-231Hz (7th partial)
- String 4-165Hz (5th partial)
- String 5-132Hz (4th partial)
- String 6-99Hz (3rd partial)

Guitar 3

- String 1-330Hz (10th partial)
- String 2-231Hz (7th partial)
- String 3-198Hz (6th partial)
- String 4-165Hz (5th partial)
- String 5-99Hz (3rd partial)
- String 6-66Hz (2nd partial)

(No capo)

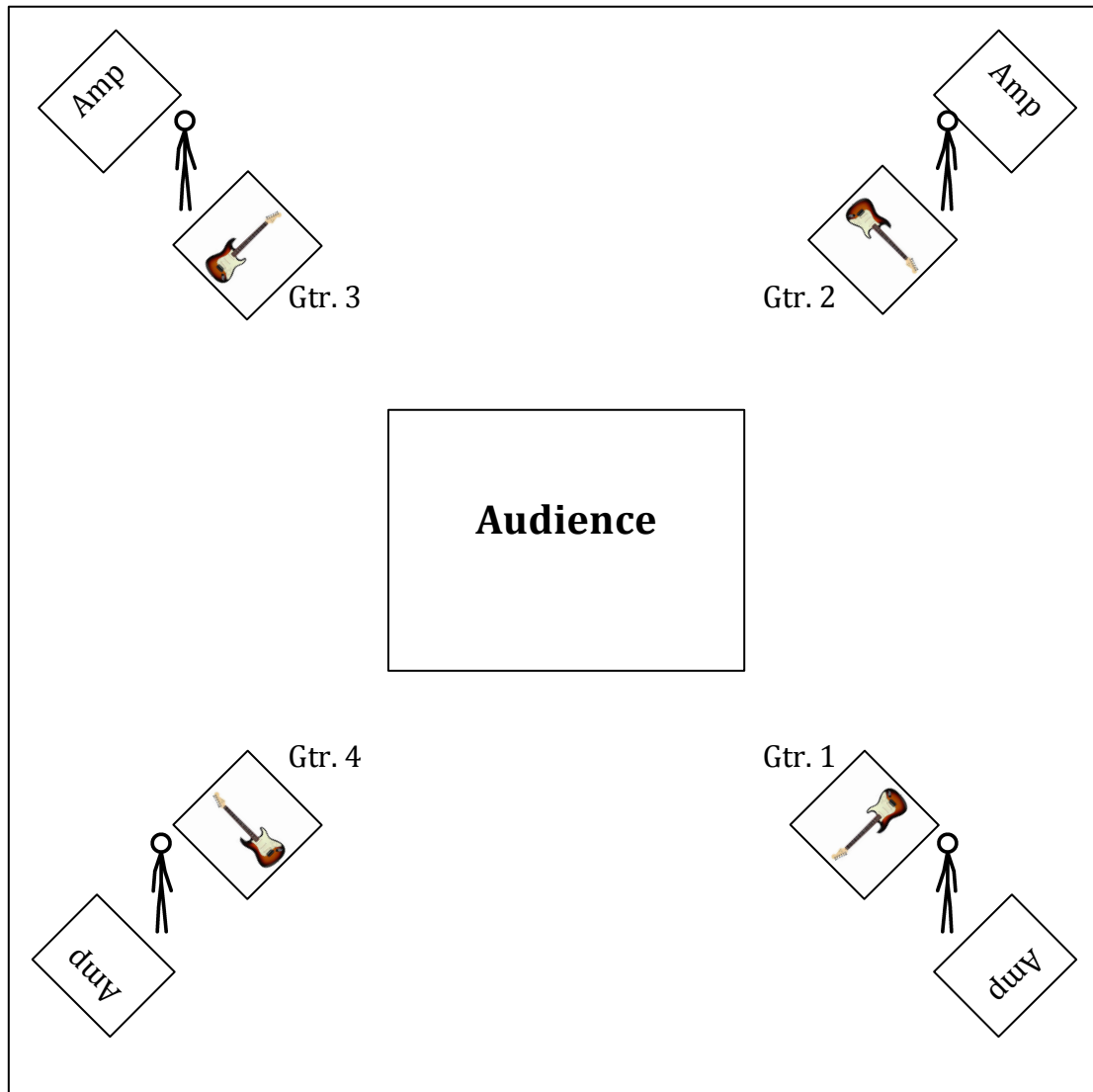
Guitar 4

- String 1 and string 2-264Hz (8th partial)
- String 3-198Hz (6th partial)
- String 4-132Hz (4th partial)
- String 5-99Hz (3rd partial)
- String 6-66Hz (2nd partial)

(No capo)

Disposition of performers

There are two possible arrangements of the performers. In the first (and preferred) arrangement, they are situated in the four corners of a room, with the audience in the middle, creating a 'quadraphonic' sound field. The performers face the audience, with their amplifiers behind them. Going around the room clockwise, the guitars should be in the following order: 4, 3, 2, 1, e.g.:



If the above arrangement is not possible in the given concert space, then the piece can be performed in a 'stereo' version instead, with the performers arranged in a line or semi circle, facing the audience. From left to right (from the audience's perspective), the guitars should be placed in the following order: 4, 3, 2, 1. The guitars and amplifiers should be sufficiently spaced as to create a broad stereo field, and to allow the individual instruments to be more clearly distinguished.

Playing technique/notation

Throughout the majority of the piece all four performers strike the wooden part of the guitars' bodies with the drumsticks, using the thicker end of the sticks. They maintain a constant semiquaver rhythm, which is notated on a one-line stave for each instrument.

The intensity with which the instruments are struck should remain constant throughout (with no emphasis given to downbeats), and equal between the musicians. The unamplified volume of the stick strikes should be *mezzo piano*.

The relative amplified volumes of the resulting 'droning' sounds are controlled using the volume pedals. These dynamics are notated with conventional crescendos and diminuendos and boxed numbers:

- 0 indicates the pedal is fully 'off' (in the heel position)
- 1 indicates it is fully 'on' (in the toe position).

A dotted crescendo or diminuendo indicates that the change in dynamic occurs across the full duration of a set of repeated bars. For example, in the passage below, from the beginning of the piece, guitar 4 plays the first two bars with the volume pedal fully 'off', followed by a 32 bar crescendo, a 14 bar passage with the volume fully 'on', and a 12 bar diminuendo.

The notation shows a 4/4 time signature with a tempo of 120. It begins with a semiquaver rhythm of eighth notes. A boxed '0' is placed below the first bar. This is followed by a 32-bar crescendo, indicated by a dotted line with 'x16' above it. Then, there is a 14-bar passage with the volume pedal fully 'on', indicated by a boxed '1' below the first bar of this section and a dotted line with 'x14' above it. Finally, there is a 12-bar diminuendo, indicated by a dotted line with 'x12' above it.

Last part of the piece

In the final part of the piece, performers 1, 2 and 4 cease playing their own instruments and move, in turn, to guitar 3 (the piece ends with all musicians performing on guitar 3). Each player performs a specific action on the strings of guitar 3, coordinated by counting the number of crotchet beats between each event (the counting should commence from the *start* of each action).

The performers may begin their actions at any time immediately after the point in the score at which they are notated, but once the actions have commenced they continue regularly at the specified time intervals until the end of the piece.

If any performer takes longer than the prescribed number of bars to walk to guitar 3 (particularly if the piece is performed in a larger venue), they should commence their actions as soon as they are in position.

Tapping piece

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$\text{♩} = 120$

Guitar 1 $\frac{4}{4}$ x16 x16 x14 x12

Guitar 2 $\frac{4}{4}$

Guitar 3 $\frac{4}{4}$

Guitar 4 $\frac{4}{4}$ 0

7 x10 x8 x7 x6 x5 x4

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

13

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

21

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

Detailed description: This block contains the musical notation for measures 21 through 28. It features four guitar staves (Gtr. 1 to Gtr. 4). Measure 21 starts with a double bar line and a brace on the left. Fret numbers '1' and '0' are indicated in boxes below the notes in various staves. Slurs and ties connect notes across measures. The notation includes standard guitar symbols like double bar lines, slurs, and ties.

A

30

x3

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

Detailed description: This block contains the musical notation for measures 30 through 38. A section labeled 'A' is marked with a box above measure 30. A repeat sign with 'x3' is placed above measure 34. Fret numbers '1' and '0' are indicated in boxes below the notes. The notation includes double bar lines, slurs, and ties.

39

x2

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

Detailed description: This block contains the musical notation for measures 39 through 46. A section labeled 'x2' is marked with a box above measure 41. Fret numbers '1' and '0' are indicated in boxes below the notes. The notation includes double bar lines, slurs, and ties.

47

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

This system contains measures 47 through 56. It features four guitar staves (Gtr. 1-4) with a 3/4 time signature. Measure 47 starts with a treble clef and a 3/4 time signature. Measure 48 changes to a 4/4 time signature. The notation includes various chord voicings, some with accidentals (sharps and naturals), and fret numbers (0 and 1) in boxes. Slurs and accents are used to indicate phrasing and dynamics.

B

57

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

This system contains measures 57 through 64. It features four guitar staves (Gtr. 1-4). Measure 57 is marked with a large 'B' in a box. The notation includes various chord voicings, fret numbers (0 and 1) in boxes, and slurs. The time signature is 4/4.

65

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

This system contains measures 65 through 72. It features four guitar staves (Gtr. 1-4). The notation includes various chord voicings, fret numbers (0 and 1) in boxes, and slurs. The time signature is 4/4.

73

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

80

x2

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

C

90

x2

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

96

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

4/4

x2

102

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

4/4

108

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

4/4

114

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

121

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

127

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

134

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

4/4

141

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

4/4

l.v.

D

150

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

155

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

160

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

165

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

170

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

175

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

181

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

187

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

193

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

200

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

207

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

x3

215

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

x2

223

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

232

Gtr. 1
Gtr. 2
Gtr. 3
Gtr. 4

241

Gtr. 1
Gtr. 2
Gtr. 3
Gtr. 4

250

Gtr. 1
Gtr. 2
Gtr. 3
Gtr. 4

x4 x5 x6

Walk over to guitar 3

Bounce drumstick on strings as close to the bridge as possible, every 21 crotchet beats (see performance notes). Vary the angle of attack ad lib. to produce different chords.

256

x7

x8

x9

Walk over to guitar 3

x10

x11

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

Walk over to guitar 3

Strike strings with drumsticks behind the nut (like a dulcimer), in short bursts, every 17 crotchet beats (see performance notes). Choose pitches and rhythms at random.

261

x12

x14

x16

x16

Gtr. 1

Gtr. 2

Gtr. 3

Gtr. 4

gliss.

Slow gliss. with a drumstick from the 12th fret to the open string (like a bottle neck slide), every 29 crotchet beats (see performance notes). Do not pluck or otherwise strike the strings.