

Matteo Cenerini

Lo que más quería era un
Pneumatischglückenkatze
(passive income daydream)

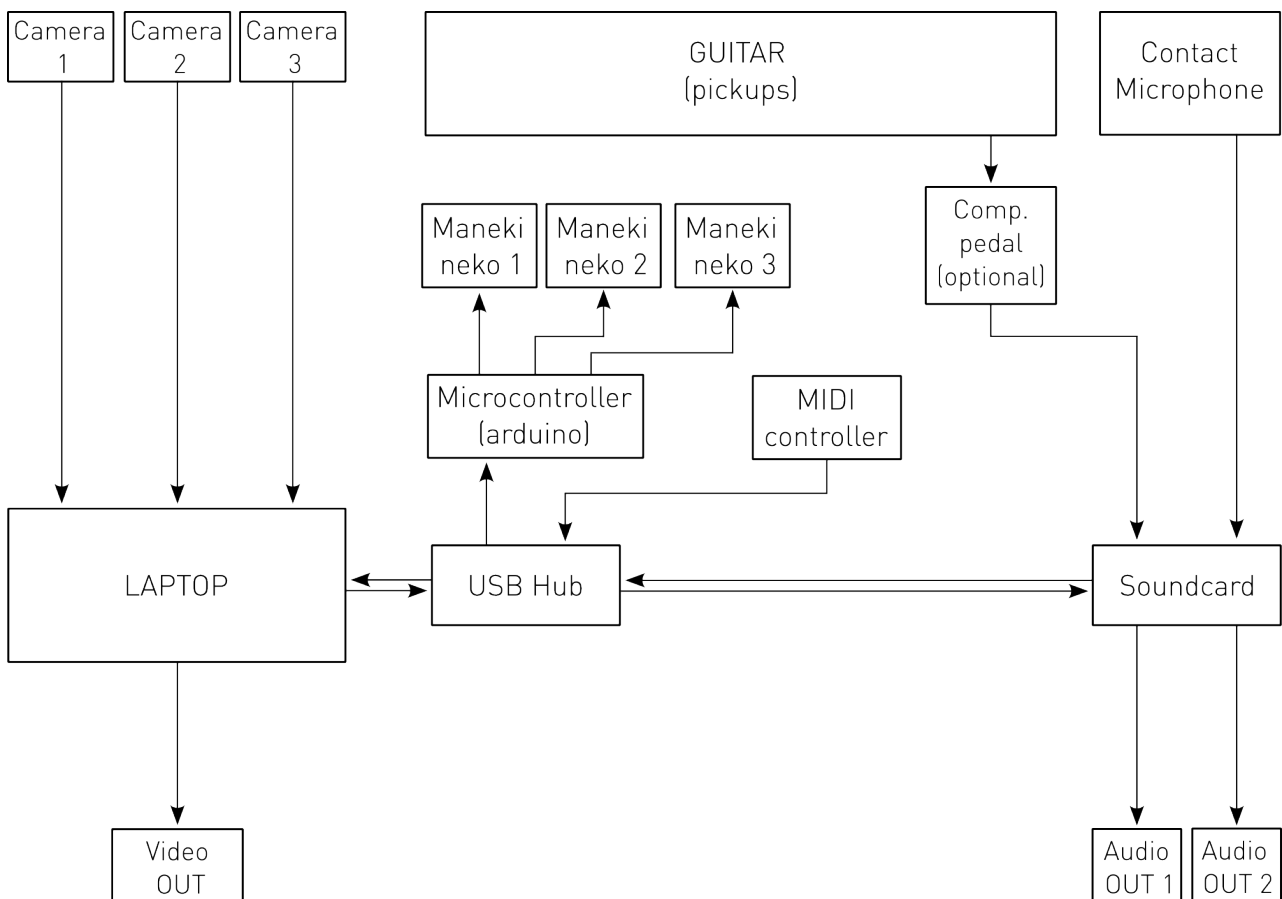
*for guitar, automated maneki neko,
video and electronics*

study score

July 2024

COMPONENTS LIST

- Solid body guitar, preferably with two single-coil pickups (e.g., Fender Telecaster)
- Laptop, Windows or macOS, with Max/MSP 8.0 installed (4 USB 3.0 ports, HDMI)
- USB hub (3 USB 3.0 ports)
- External soundcard (2 in, 2 out)
- MIDI controller (at least 12 pads/keys)
- Programmable microcontroller (e.g., Arduino)
- Electronic circuit connected to Maneki Nekos and microcontroller
- 12V power supply (for electronic circuit)
- 3 Maneki Nekos, motorized via solenoids
- 3 height adjustable stands
- 2 custom guitar stands to place the guitar horizontally with the body perpendicular to the table
- Contact mic
- Large magnet
- Iron nail with customized big flat head
- Mobile guitar capo
- Muting strip
- Rubber strip
- 2 asian chopsticks
- Small cymbal $\varnothing \sim 10$ cm.
- Ball of thread
- Tuna-fish can with 9V DC motor inside, potentiometer, and NC switch
- Compressor pedal (optional)
- 3 camera modules (4K)
- Overhead camera rig
- Tabletop camera holder
- Chest mount for camera
- Table at least 130 x 50 cm preferably black
- Playing score board / scenario



GUITAR PREPARATION

Tuning: Tune guitar 2 tone lower than ordinary (c – F –Bb – Eb – G – C)

This preparation has the sole aim of lowering string tension.

Neck preparation

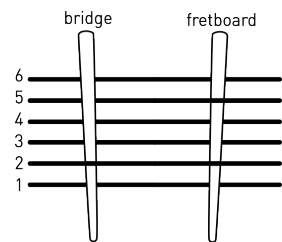
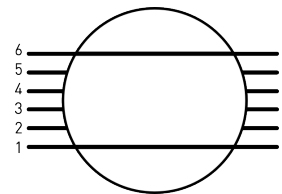
Create a second nut at 5th fret as follows:

- Place a rubber strip on 5th fret under the string, to protect fretboard.
- Insert iron nail between the rubber strip and strings (very close to 4th fret)
- Put a mobile capo on 6th fret, very tightened
- Put a muting strip, also very tightened between the capo and the nail
- Place a contact mic on the head of the nail, secure it with a large magnet.
Ensure that a portion of the contact microphone's edge protrudes a few millimeters forward from the head of the nail.



Pickups area preparation

- Wedge a small metal cymbal (ø ~10 cm) over the neck pickup between the strings as follows.
strings 1 and 6 = above cymbal
strings 2, 3, 4 and 5= under cymbal
- Put 2 asian chopsticks, one close to bridge pickup and one on the fretboard around XV fret. Wedge between the strings as follows.
 - Bridge:
string 2 = above stick
strings 1, 3, 4, 5, 6 = under stick
 - Fretboard:
string 2, 5 = above stick
strings 1, 3, 4, 6 = under stick



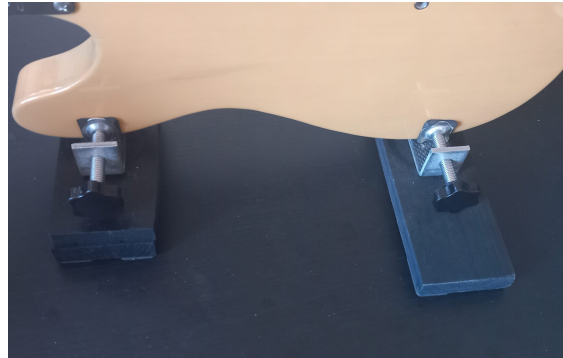
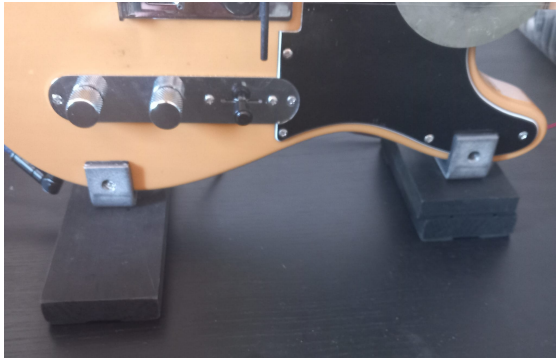
Guitar positioning

Attach guitar body to the customized stands to put it vertically on the table.

The longer one have to be positioned on the bottom of the body, close to cable connector.

The shorter and higher stand have to be positioned on the opposite part of the body.

Guitar must be positioned as the string facing the performer.

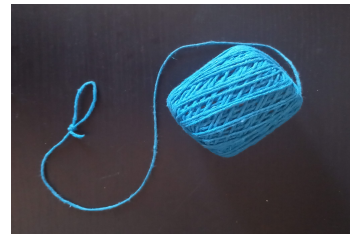


Accessories

- Ball of thread

The thread could be made of various material, like wool, twine, cotton but it should not be too smooth. It should be quite rough to create friction when slid between two fingers.

A bright and vivid color is preferable, such as light blue, pink, red, etc



- Motorized fish-can

A fish can with a DC motor inside, powered by 9V battery. The motor have to be connected to a potentiometer that allow to vary rotation speed, and a NC (normally closed) switch to momentary stop the motor without moving the potentiometer.



AUTOMATION COMPONENTS

Maneki neko

There are required n°3 maneki neko cats, each one customized with a solenoid motor.

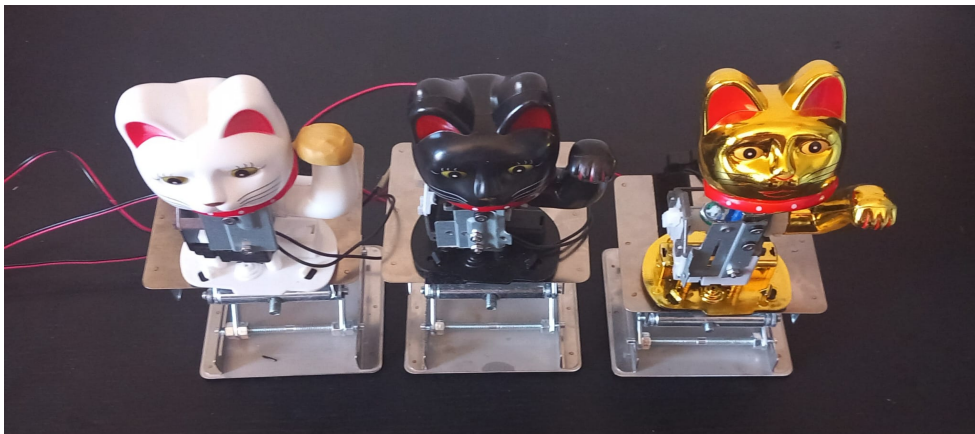
The motors action must activate the arms movement.

The cats will be positioned in front of the guitar, facing the strings. The arm movement must be able to strike the strings. To allow the cats to reach the strings, they need to be placed on three adjustable stands. Velcro, the soft side, should be applied to the surface (or top) of each stand. The rough side of the Velcro should be applied to the bottom of the Maneki Nekos.

The screws for adjusting the height of the stands should be facing away from the guitar. The cats should be positioned at the outer edge of the stand, as close to the strings as possible.

- Head of gold cat must be easily attachable and detachable, for example, by using a magnet.

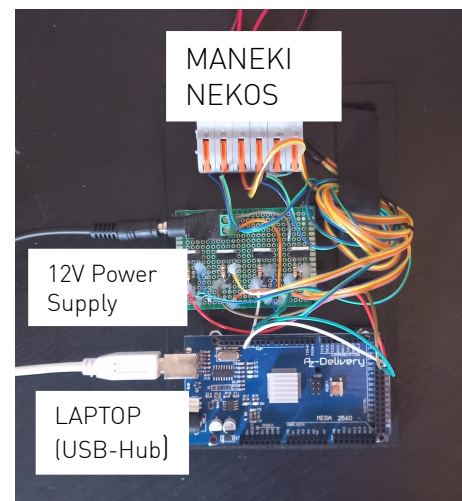
- White cat's paw must be covered with rubber material to soften the sound result of hitting the strings



Microcontroller

Solenoid motor must be connected to an appropriate electrical circuit.

Programmable microcontroller is required to manage motors automation via Max/MSP patch.

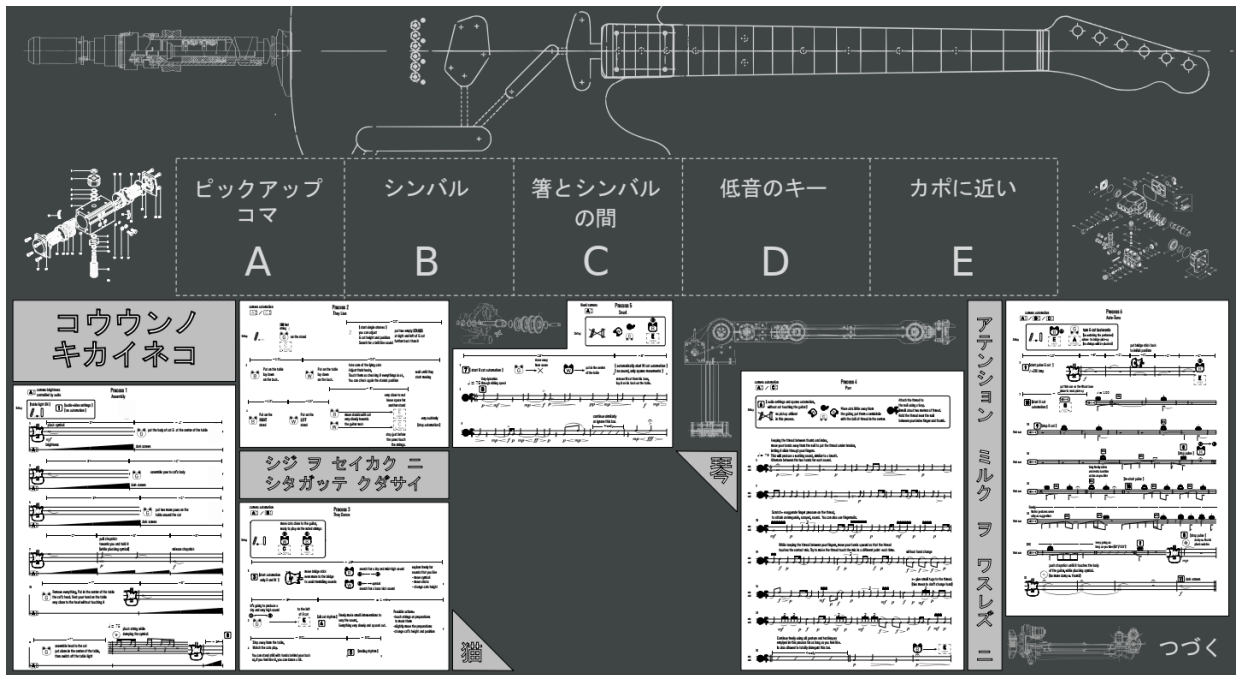


MIDI controller

A midi controller, as keyboard or preferably a pad set, is required to activate audio/video setting and automations. At least 12 keys/pad are necessary. No velocity parameter are used.

Playing score board (scenario)

The performance score is printed on a board (a 110 x 60 cm. sheet of paper). The guitar must be placed on it, aligned with the indicated position. The board also provides instructions for the horizontal positioning of the cats and serves as a backdrop for the camera views.



General instruction

The piece is structured into 6 sections (referred to as processes) to be performed sequentially from 1 to 6. Each process requires a specific setup to be completed before beginning the corresponding section. The setup of each process should be done accurately and calmly. However, there are no additional breaks between sections beyond the time required for setup. (Processes are not movements.)

Each process involves a series of gestures through which the performer interacts with the guitar and the Maneki Neko. The performer is free to vary and interpret the noted gestures and timing as long as they adhere to the general direction of each singular process. Similarly, in the initial setup and in the positioning of the Maneki Neko, the performer has the discretion to make minor adjustments to achieve sounds that are pleasing to the performer.

There are also some repeated measures where the performer is given the opportunity to improvise freely using gestures previously employed in the process. These sections can vary greatly in duration, as decided by the performer. They may last a few minutes or be completely disregarded by moving to the next measure. These improvised sections should only be performed if the performer feels a personal and musical drive to do so. (It's better not to improvise than to do so without conviction!)

NOTATION



Gold cat

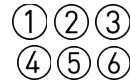
Maneki neko



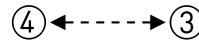
White cat



Black cat



Strings involved
in cat movement



choose freely
between
different strings

Cat horizontal positions



Close to
bridge pickup



Close to
neck pickup
/ cymbal



Between
chopstick
and cymbal



Between
chopstick
and mobile
capo



Close to capo
between
mobile capo
and nut



MIDI controller
pads / key

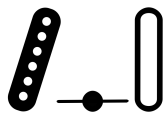


Pad n° 0 is the initial status of the patch
also to use as emergency general stop button

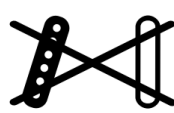
Pickup selectors



Bridge pickup



Bridge and neck
pickup



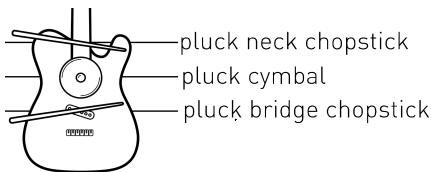
No pickup
involved



Cymbal



Damped cymbal



Play the guitar plucking the noted preparations



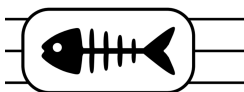
Thread touch also contact mic

Thread touch only the nail

Attach thread to a nail by a loop

Keeping the thread between thumb and index, move your hands away from the nail to put the thread under tension, letting it slide through your fingers.

This will produce a rustling sound, similar to a breath. Alternate between the two hands for each sound.



✕ OFF

Play motorized fish can. Change motor speed by the potentiometer.

OFF means to turn the potentiometer knob all down until it clicks into the off position. Momentary switch is noted through the following symbols.



Cameras



Overhead camera

Camera positioned above the performer's head. It must be able to capture the entire board / scenario



Front camera

Infrared camera positioned on the table in front of the performer.
It must capture the performer's face and upper body.



Point of view – camera

Camera positioned on the performer's chest using a special harness. It should be positioned as high as possible without impeding the natural movements of the head.

Setup



1

(audio-video settings)
(no automation)

1 | pluck cymbal | 3' | ca. 4' |

mf brightness | put the body of cat G at the center of the table

dark screen

3 | 3' | ca. 6' |

| assemble paw to cat's body

dark screen

5 | 3' | ca. 2' |

| put two more paws on the table around the cat

dark screen

7 | ~ 2' | ~ 3' | ~ 3' |

| pull chopstick towards you and hold it (while plucking cymbal) | release chopstick

p | *f*

10 | ~ 7' | ~ 3' |

Remove everything. Put in the center of the table the cat's head. Rest your hand on the table very close to the head without touching it

12 | ~ 7' | ~ 3' |

assemble head to the cat put alone in the center of the table,

|

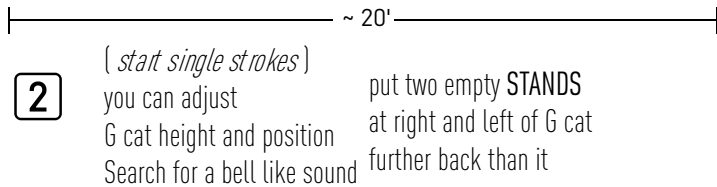
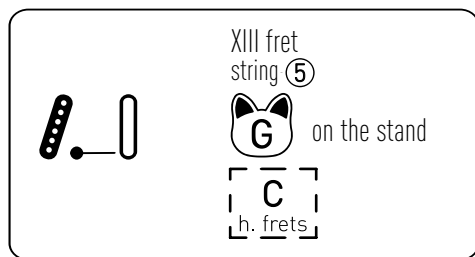
$\text{♩} = 75$ pluck string while damping the cymbal



Process 2

They Live

Setup



2



Put on the table
lay down
on the back.



Put on the table
lay down
on the back.

take care of the lying cats

Adjust their heads.

Touch them as checking if everythings is ok,
You can check again the stands position

wait until they
start moving

4



Put on the
RIGHT
stand



Put on the
LEFT
stand



move stands with cat
very slowly towards
the guitar neck



very close to nut
leave space for
another stand



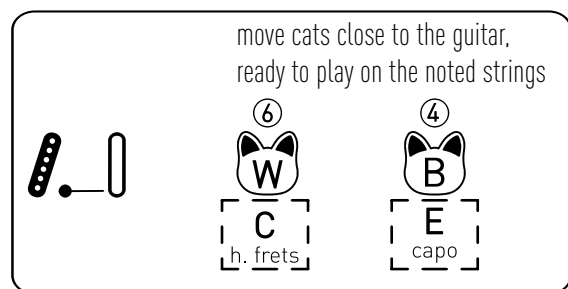
very suddenly
(stop automation)

stop just before
the paws touch
the strings.

Process 3

They Dance

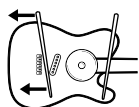
Setup



~ 40'

1

3 (start automation
only B and W)



move bridge stick
even more to the bridge
to avoid trembling sounds



search for a dry and mid-high sound

④ ←-----→ ③



⑥ ←---→ cymbal

search for a bass kick sound

explore freely for
sounds that you like
- move cymbal
- move sticks
- change cats height

~ 5'

> 1 min.

it's going to produce a
dry and very high sound

① ←-----→ ②



to the left
of B cat



(all cat rhythm)

4

Freely make small interventions to
vary the sound,
Everything very slowly and spaced out.

Possible actions:

- touch strings or preparations
to mute them
- slightly move the preparations
- change cat's height and position

~ 30'

~ 30'

Step away from the table,

4 Watch the cats play.

You can stand still with hands behind your back
or, if you feel like it, you can dance a bit.

5

(ending rhythm)

Process 4

Purr

Setup

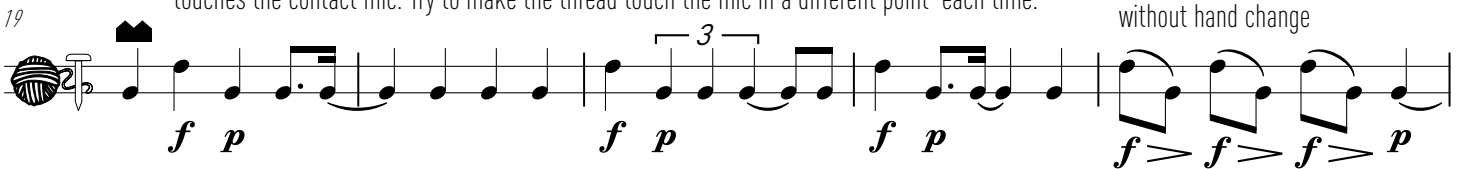
6

(audio settings and sparse automation,
without cat touching the guitar)no pickup utilized
in this process.Move cats little away from
the guitar, put them a semicircle
with the ball of thread in the center.Attach the thread to
the nail using a loop.Unroll about two meters of thread.
Hold the thread near the nail
between your index finger and thumb.Keeping the thread between thumb and index,
move your hands away from the nail to put the thread under tension,
letting it slide through your fingers.

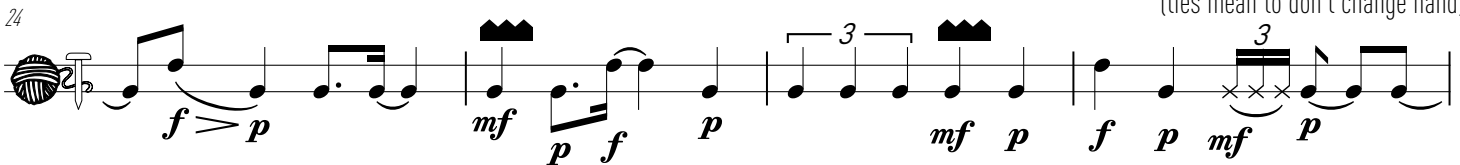
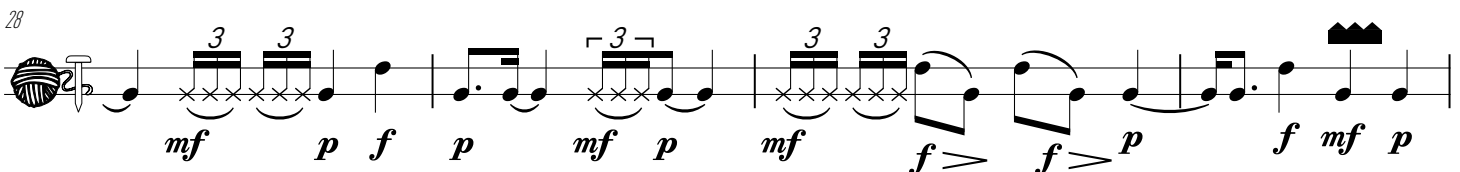
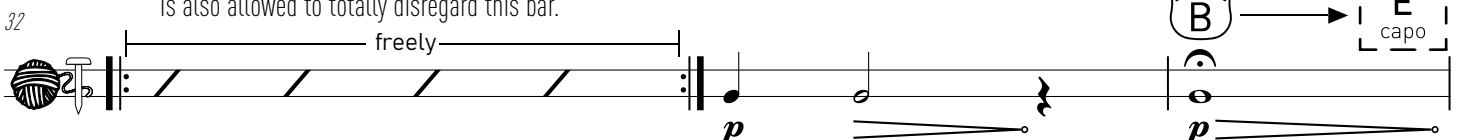
♩ = 75

This will produce a rustling sound, similar to a breath.

Alternate between the two hands for each sound.

mic
nailmic
nailScratch= exaggerate finger pressure on the thread,
to obtain an irregulare, scraped, sound. You can also use fingernails.mic
nailWhile keeping the thread between your fingers, move your hands upward so that the thread
touches the contact mic. Try to make the thread touch the mic in a different point each time.mic
nail

without hand change

mic
nailx= give small tugs to the thread.
(ties mean to don't change hand)mic
nailContinue freely using all gesture and techniques
employed in this process for as long as you feel like.
Is also allowed to totally disregard this bar.mic
nailE
capo

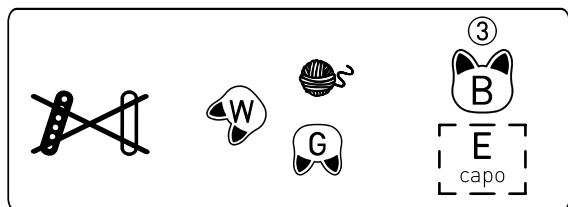
fixed camera



Process 5

Snarl

Setup



18'
move away
from scene

1
7 (start B cat automation)



put in the center
of the table

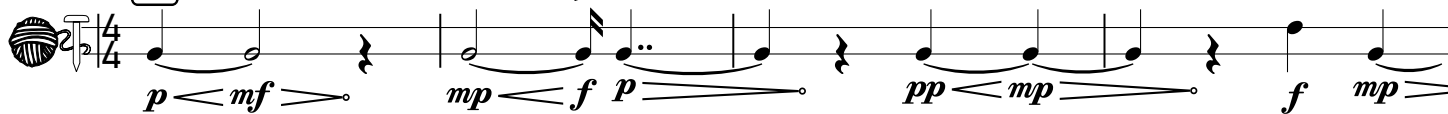
(automatically start W cat automation)
(no sound, only sparse movements)

remove W cat from his base,
lay it on its back on the table.

♩ = 75
Vary dynamics
through sliding speed

3

8



continue similarly
or ignore this bar.

freely

mic
nail



Setup

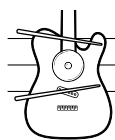
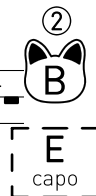


turn G cat backwards
(as watching the performer)
close to bridge pick-up
(no strings will be plucked)

put bridge stick back
to initial position

~ 10' ~ 5' ~ 2' ~ 6' ~ 2' ~ 6'

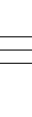
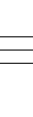
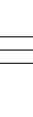
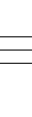
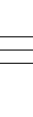
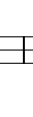
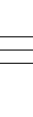
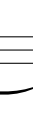
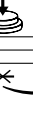
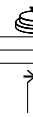
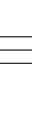
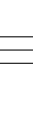
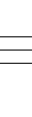
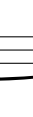
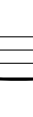
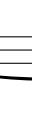
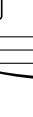
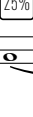
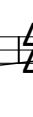
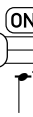
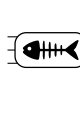
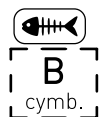
1 9 [start pulse G cat]
♩ = 200 bpm

**f**

7 ~ 6'
put fish can on the W cat base
close to neck pick-up

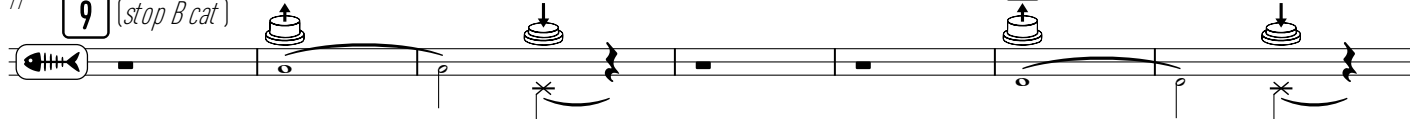
♩ = 100

10 [start B cat
automation]



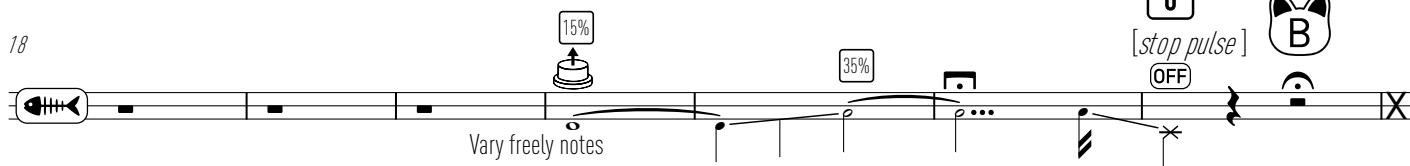
11 9 [stop B cat]

Fish can



18

Fish can

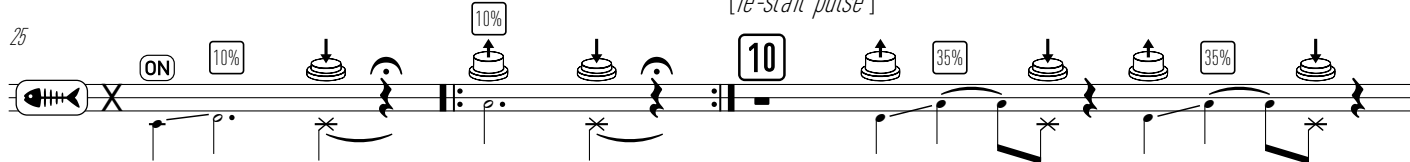


Vary freely notes
and rests duration
as long as you like

[re-start pulse]

25

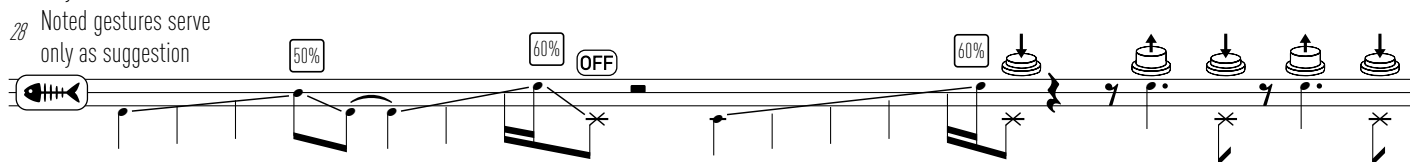
Fish can



Freely—

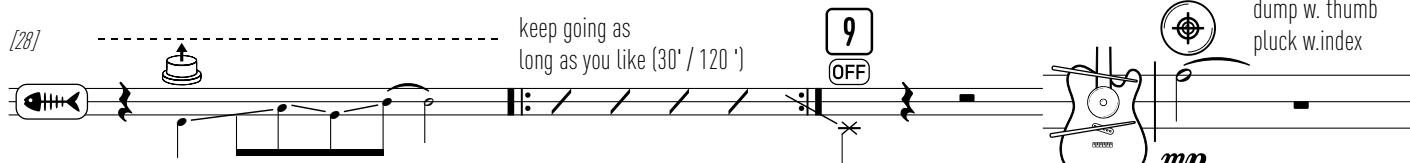
28 Noted gestures serve
only as suggestion

Fish can



[28]

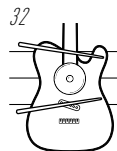
Fish can



keep going as
long as you like (30' / 120')

push chopstick until it touches the body
of the guitar, while plucking cymbal.
(no more dump w. thumb)

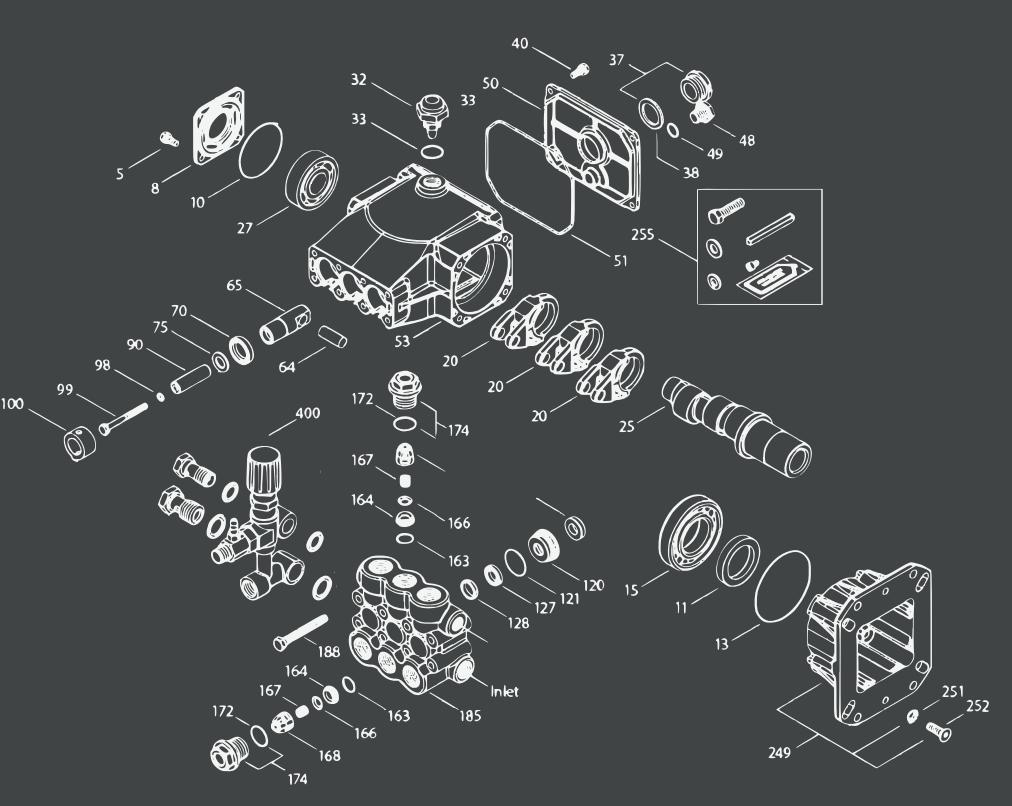
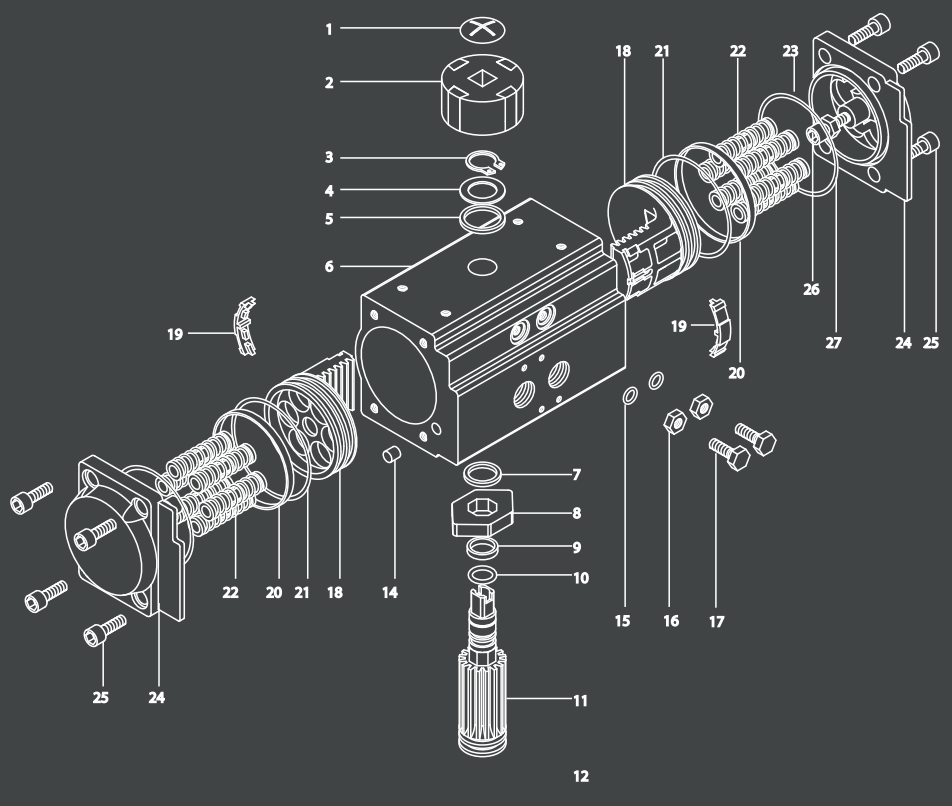
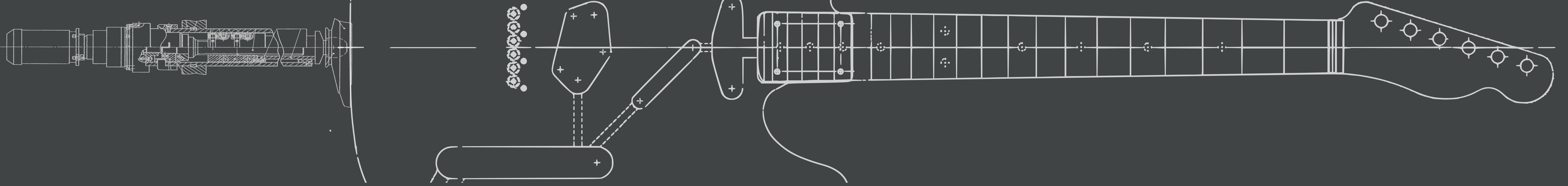
32



11 dark screen

f

move away G cat,
far from pickups



ピックアップ
コマ

シンバル
の間

箸とシンバル
の間

低音のキー

カポに近い

A

B

C

D

E

コウウンノ
キカイネコ

Process 1
Assembly

camera automation
[A1] / [CM]

Setup
[table light ON] 1 [audio-video settings] (no automation)

1 pluck cymbal
mf brightness

2 put the body of cat G at the center of the table
G dark screen

3 assemble paw to cat's body
G dark screen

4 put two more paws on the table around the cat
G dark screen

5 pull chopstick towards you and hold it (while plucking cymbal)
p

6 release chopstick
f

7 Remove everything. Put in the center of the table the cat's head. Rest your hand on the table very close to the head without touching it
G

8 pluck string while damping the cymbal
75

9 assemble head to the cat put alone in the center of the table, then switch off the table light
G

Process 2
They Live

camera automation
[A1] / [CM]

Setup
1. XIII fret string 5 on the stand
G C bridge

2. [start single strokes] you can adjust G cat height and position. Search for a bell like sound

3. Put on the table lay down on the back.
B

4. Put on the table lay down on the back.
W

5. take care of the lying cats. Adjust their heads. Touch them as checking if everything is ok. You can check again the stands position

6. wait until they start moving

7. very close to not leave space for another stand
B W

8. very suddenly [stop automation]

シジヲセイカクニ
シタガッテクダサイ

Process 3
They Dance

camera automation
[A1] / [B1]

Setup
1. move cats close to the guitar, ready to play on the muted strings
W C B

2. search for a dry and mid-high sound
B

3. explore freely for sounds that you like
- move cymbal
- move sticks
- change cats height

4. it's going to produce a dry and very high sound
G

5. to the left of B cat (all cat rhythm)
E

6. Freely make small interventions to vary the sound. Everything very slowly and spaced out.

7. Possible actions:
- touch strings or preparations to mute them
- slightly move the preparations
- change cat's height and position

8. Step away from the table. Watch the cats play.
G

9. You can stand still with hands behind your back or, if you feel like it, you can dance a bit.
5

Process 4
Purr

camera automation
[A1] / [CM]

Setup
1. audio settings and sparse automation, without touching the guitar
G

2. no pickup utilized in this process.

3. Move cats little away from the guitar, put them a semicircle with the ball of thread in the center.

4. Attach the thread to the nail using a loop. Unroll about two meters of thread. Hold the thread near the nail between your index finger and thumb.

5. Keeping the thread between thumb and index, move your hands away from the nail to put the thread under tension, letting it slide through your fingers. This will produce a rustling sound, similar to a breath. Alternate between the two hands for each sound.

6. 75

7. Vary dynamics through sliding speed

8. 100

9. Vary freely notes and rests duration as long as you like

10. [re-start pulse]

11. Freely

12. Nailed gestures serve only as suggestion

13. keep going as long as you like (30' / 120')

14. [stop pulse]

15. push chopstick until it touches the body of the guitar, while plucking cymbal. (no more dump w. thumb)

16. dark screen

Process 5
Snarl

fixed camera
[A1]

Setup
1. start B cat automation
G

2. move away from scene
W

3. put in the center of the table
W

4. automatically start W cat automation (no sound, only sparse movements)
B

5. remove W cat from his base, lay it on its back on the table.

6. continue similarly or ignore this bar, freely

7. 75

8. 100

9. 120

10. 150

11. 180

12. 210

13. 240

14. 270

15. 300

16. 330

17. 360

18. 390

19. 420

20. 450

21. 480

22. 510

23. 540

24. 570

25. 600

26. 630

27. 660

28. 690

29. 720

30. 750

31. 780

32. 810

33. 840

34. 870

35. 900

36. 930

37. 960

38. 990

39. 1020

40. 1050

41. 1080

42. 1110

43. 1140

44. 1170

45. 1200

46. 1230

47. 1260

48. 1290

49. 1320

50. 1350

51. 1380

52. 1410

53. 1440

54. 1470

55. 1500

56. 1530

57. 1560

58. 1590

59. 1620

60. 1650

61. 1680

62. 1710

63. 1740

64. 1770

65. 1800

66. 1830

67. 1860

68. 1890

69. 1920

70. 1950

71. 1980

72. 2010

73. 2040

74. 2070

75. 2100

76. 2130

77. 2160

78. 2190

79. 2220

80. 2250

81. 2280

82. 2310

83. 2340

84. 2370

85. 2400

86. 2430

87. 2460

88. 2490

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90. 2550

91. 2580

92. 2610

93. 2640

94. 2670

95. 2700

96. 2730

97. 2760

98. 2790

99. 2820

100. 2850

101. 2880

102. 2910

103. 2940

104. 2970

105. 3000

106. 3030

107. 3060

108. 3090

109. 3120

110. 3150

111. 3180

112. 3210

113. 3240

114. 3270

115. 3300

116. 3330

117. 3360

118. 3390

119. 3420

120. 3450

121. 3480

122. 3510

123. 3540

124. 3570

125. 3600

126. 3630

127. 3660

128. 3690

129. 3720

130. 3750

131. 3780

132. 3810

133. 3840

134. 3870

135. 3900

136. 3930

137. 3960

138. 3990

139. 4020

140. 4050

141. 4080

142. 4110

143. 4140

144. 4170

145. 4200

146. 4230

147. 4260

148. 4290

149. 4320

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170. 4950

171. 4980

172. 5010

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242. 7110

243. 7140

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