

# Towards the BioFeedback Game

- with Interoception and Rehabilitation -

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Shizuoka University of Art and Culture

# Correct paper PDF



<http://nagasm.org/ASL/paper/VS-Games2016.pdf>



# Topics:

- (1) EMG sensors → Myo
- (2) Nintendo “Gesture Recognition”
- (3) SMH and Interception
- (4) Tactile Sensor → MRTI2015
- (5) BioFeedBack and Mental Health

# Topics:

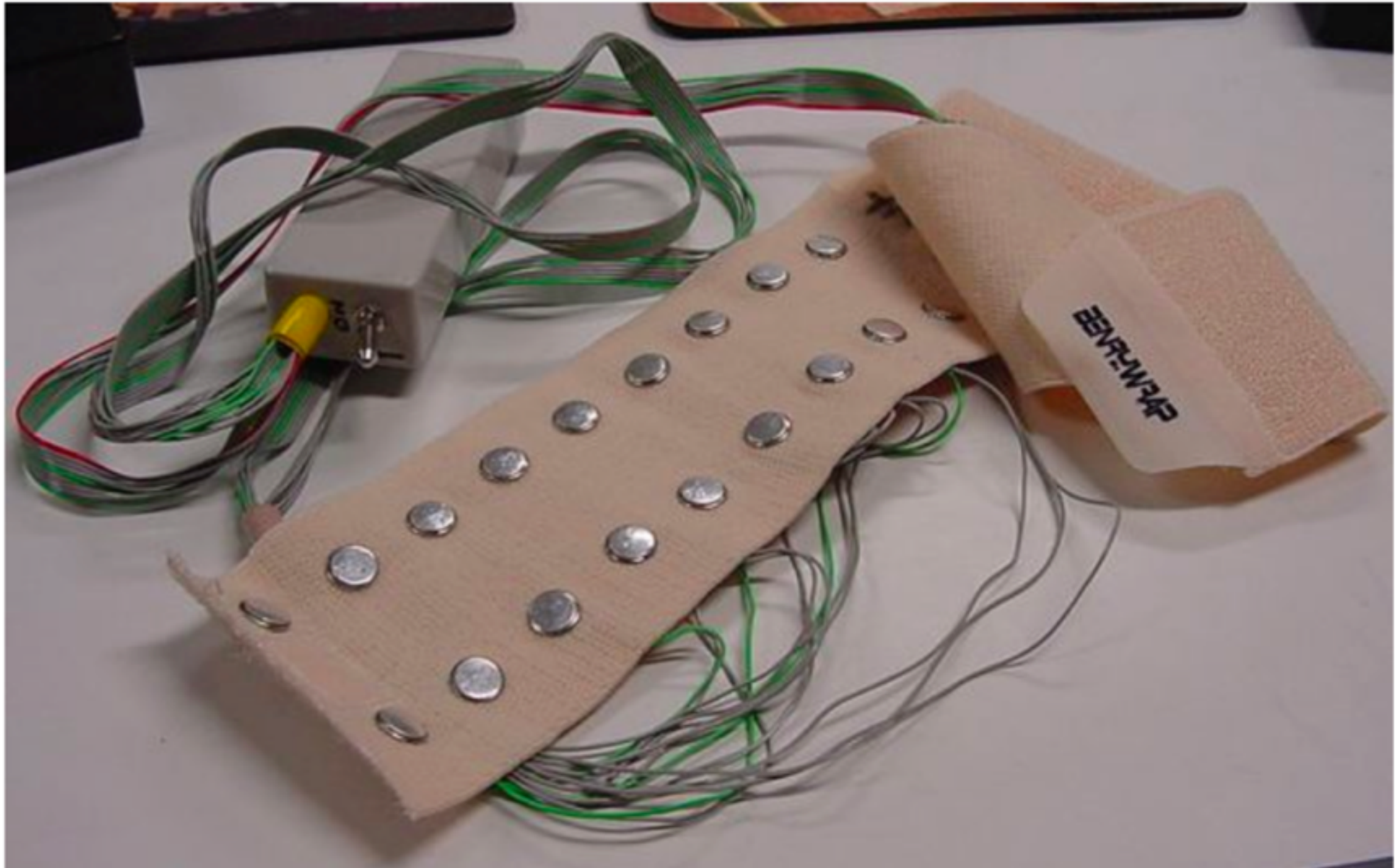
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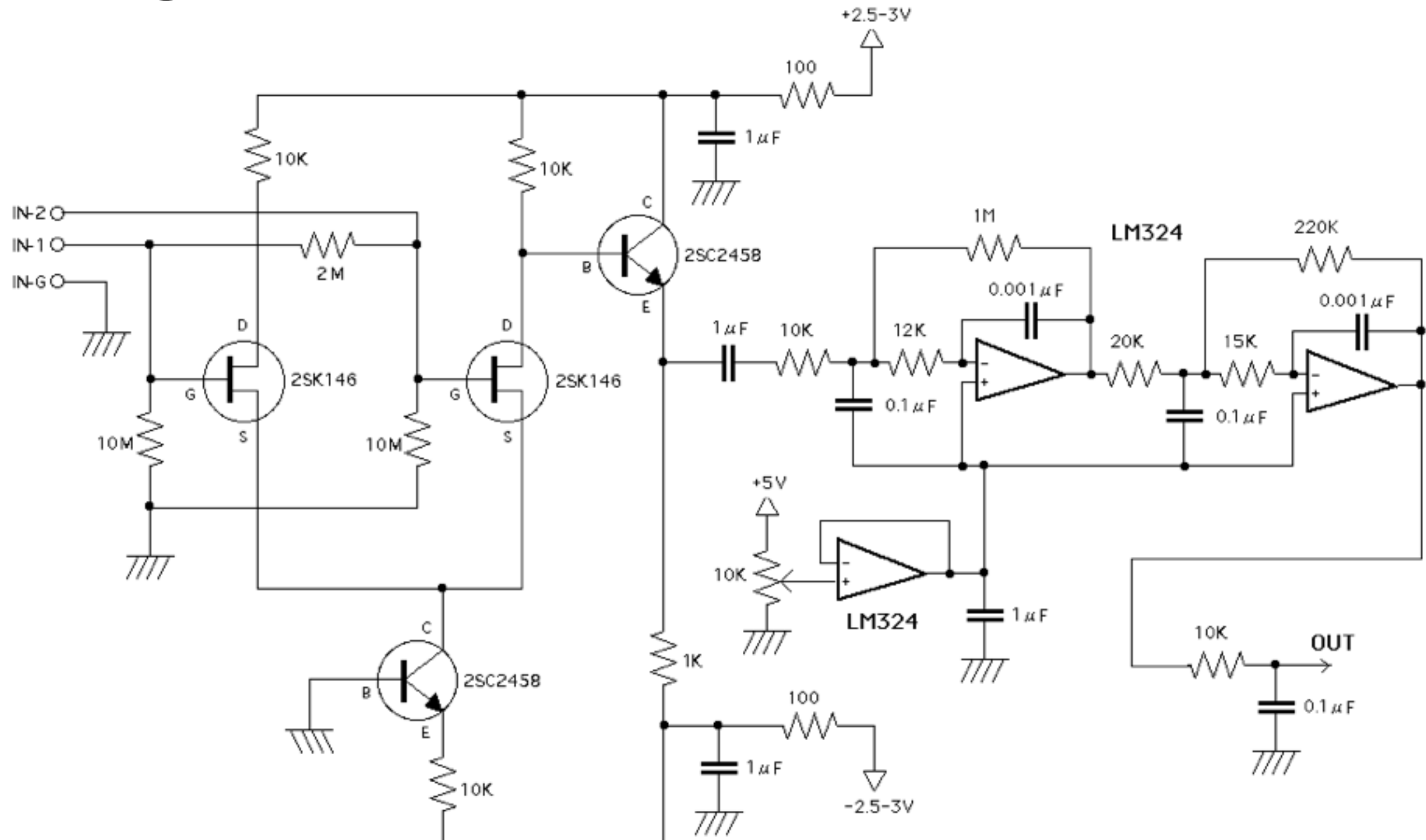
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# Original EMG sensor

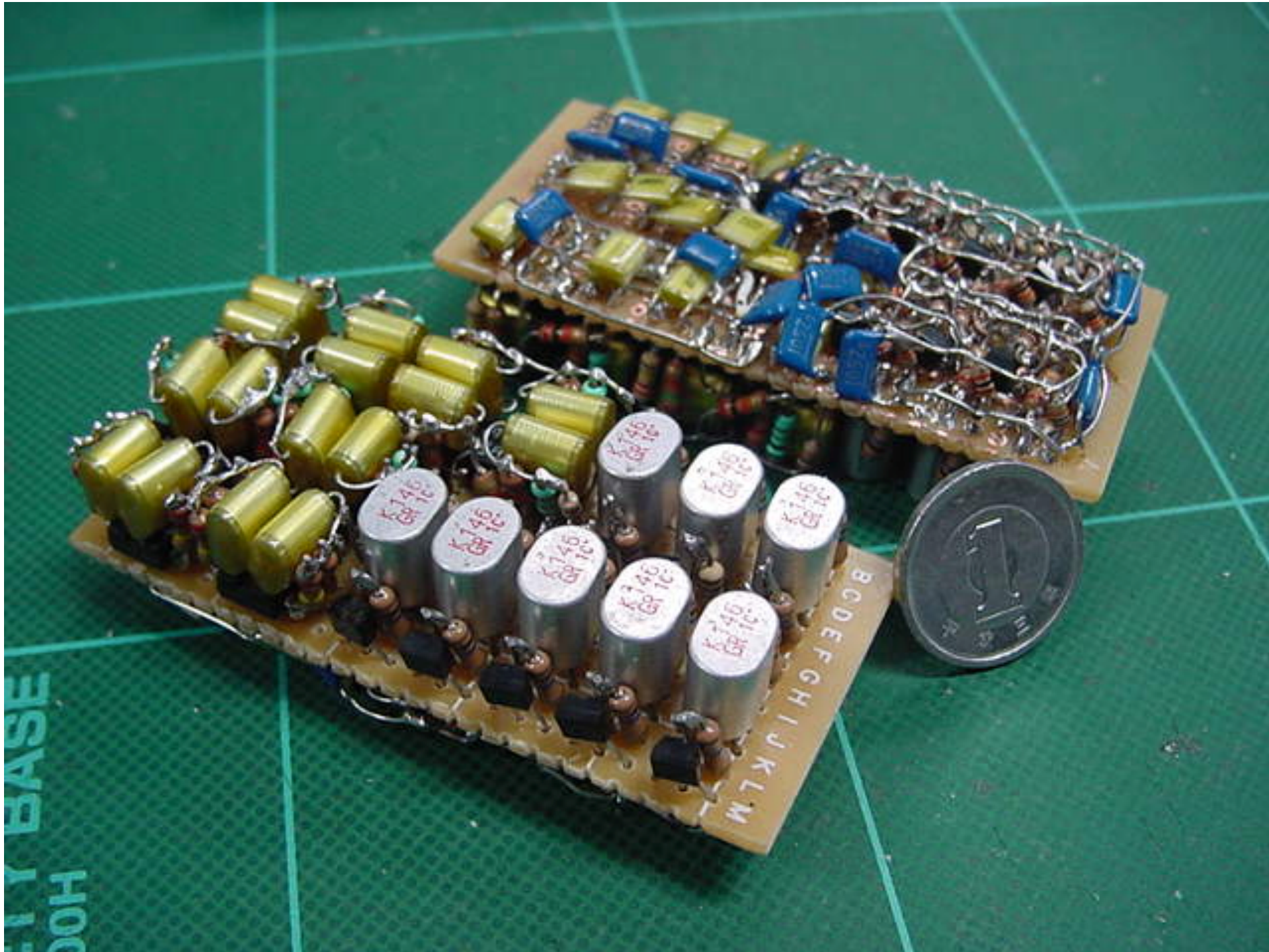


# Original EMG sensor





# Original EMG sensor



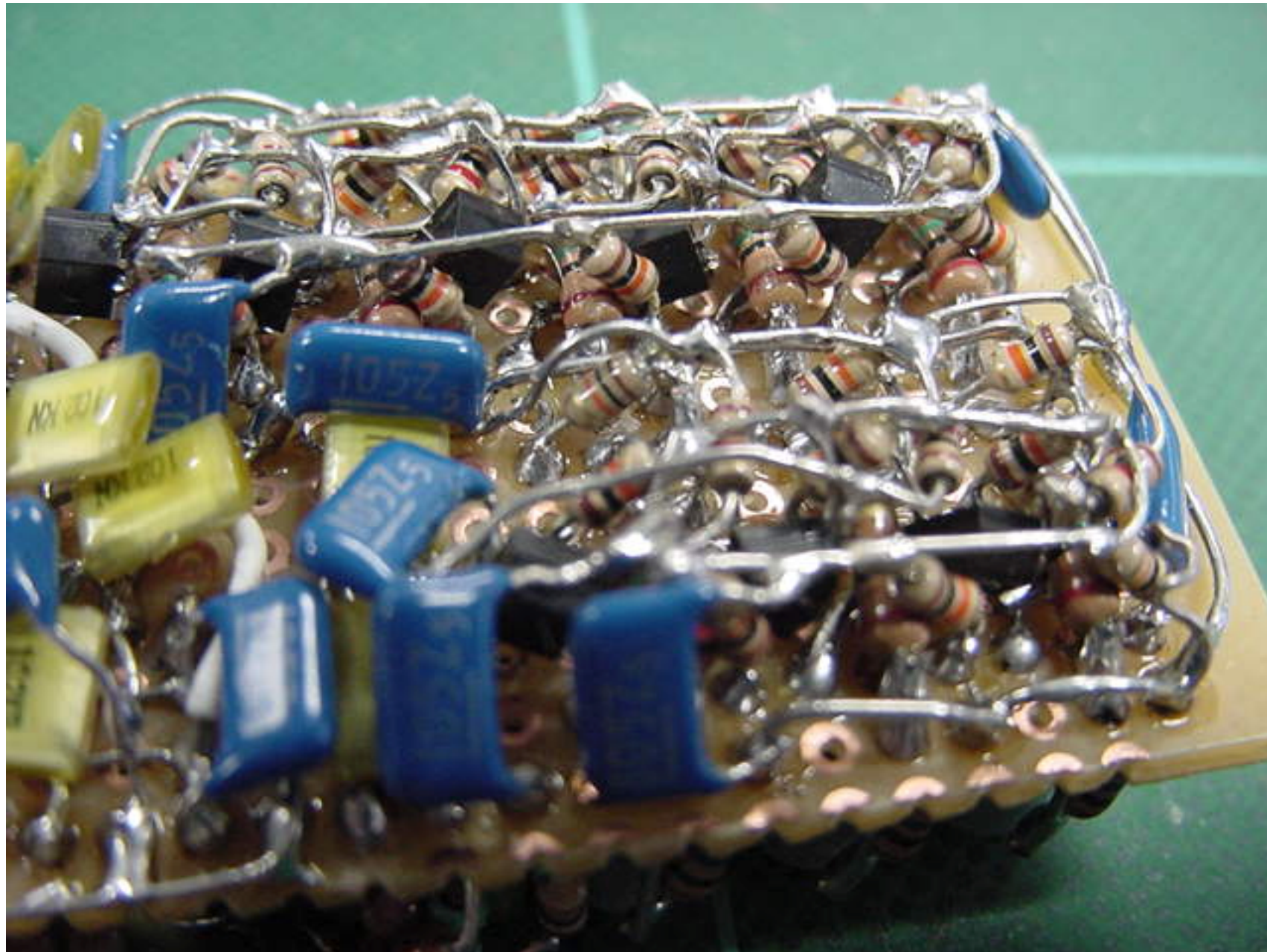


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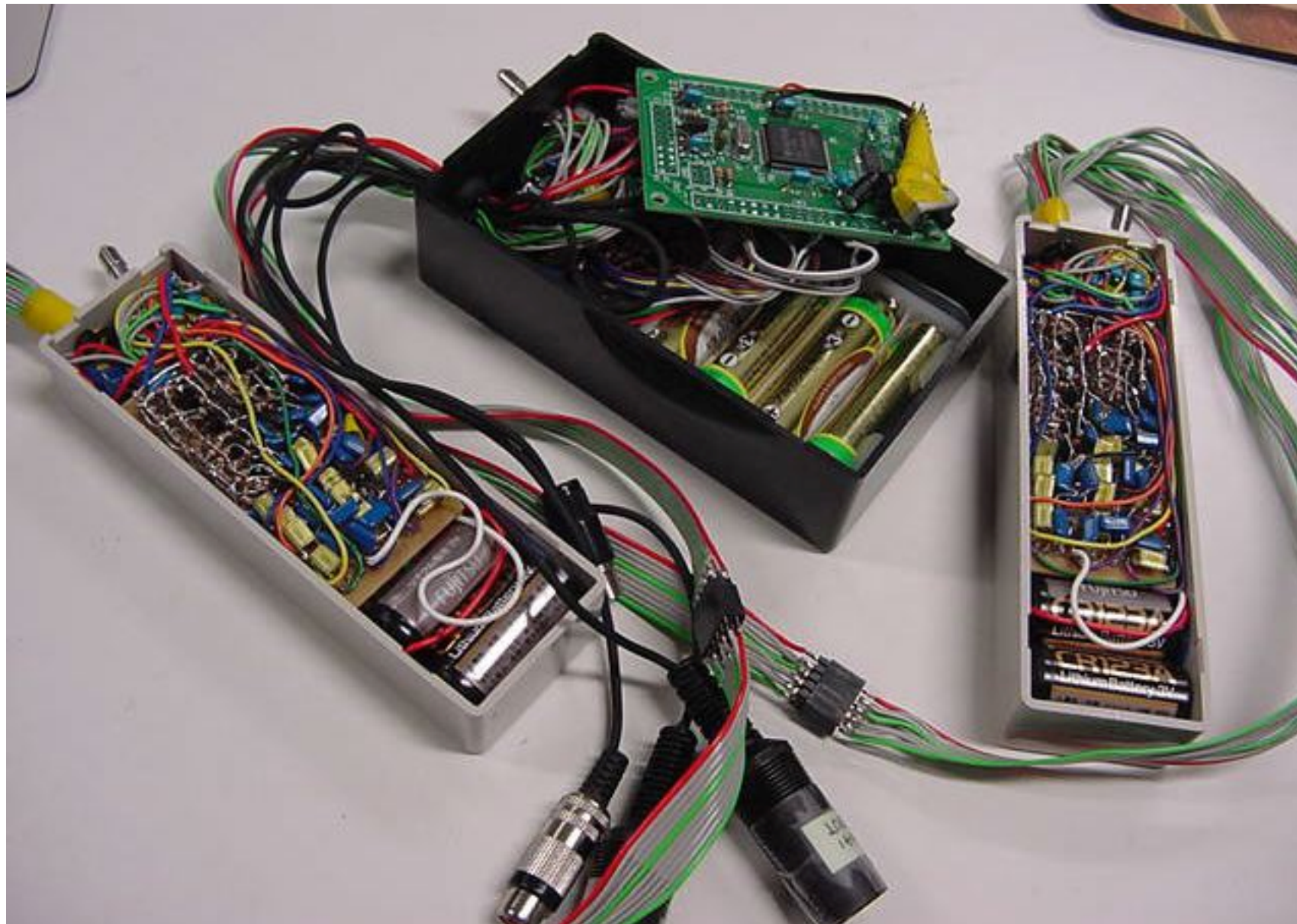


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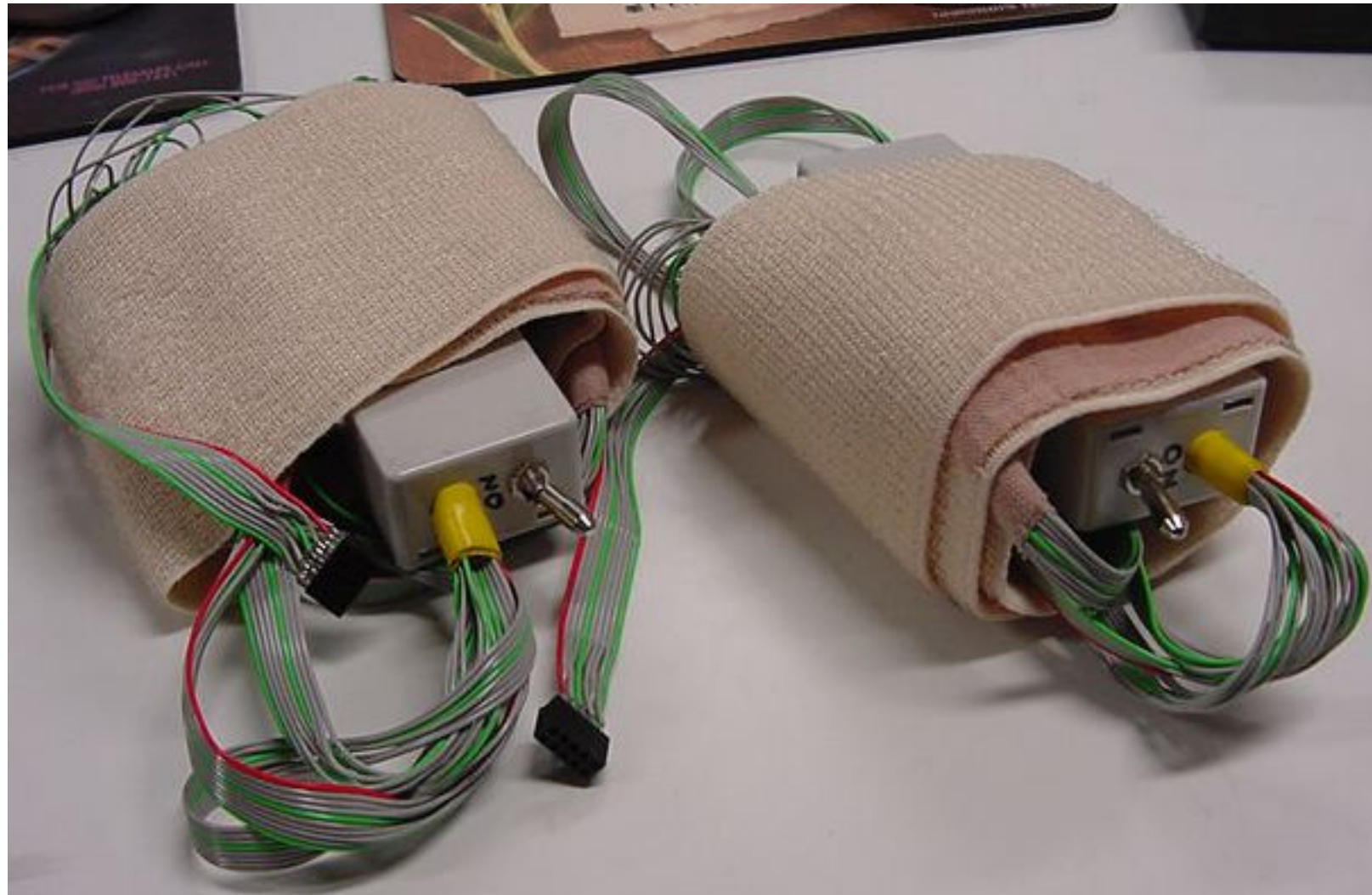




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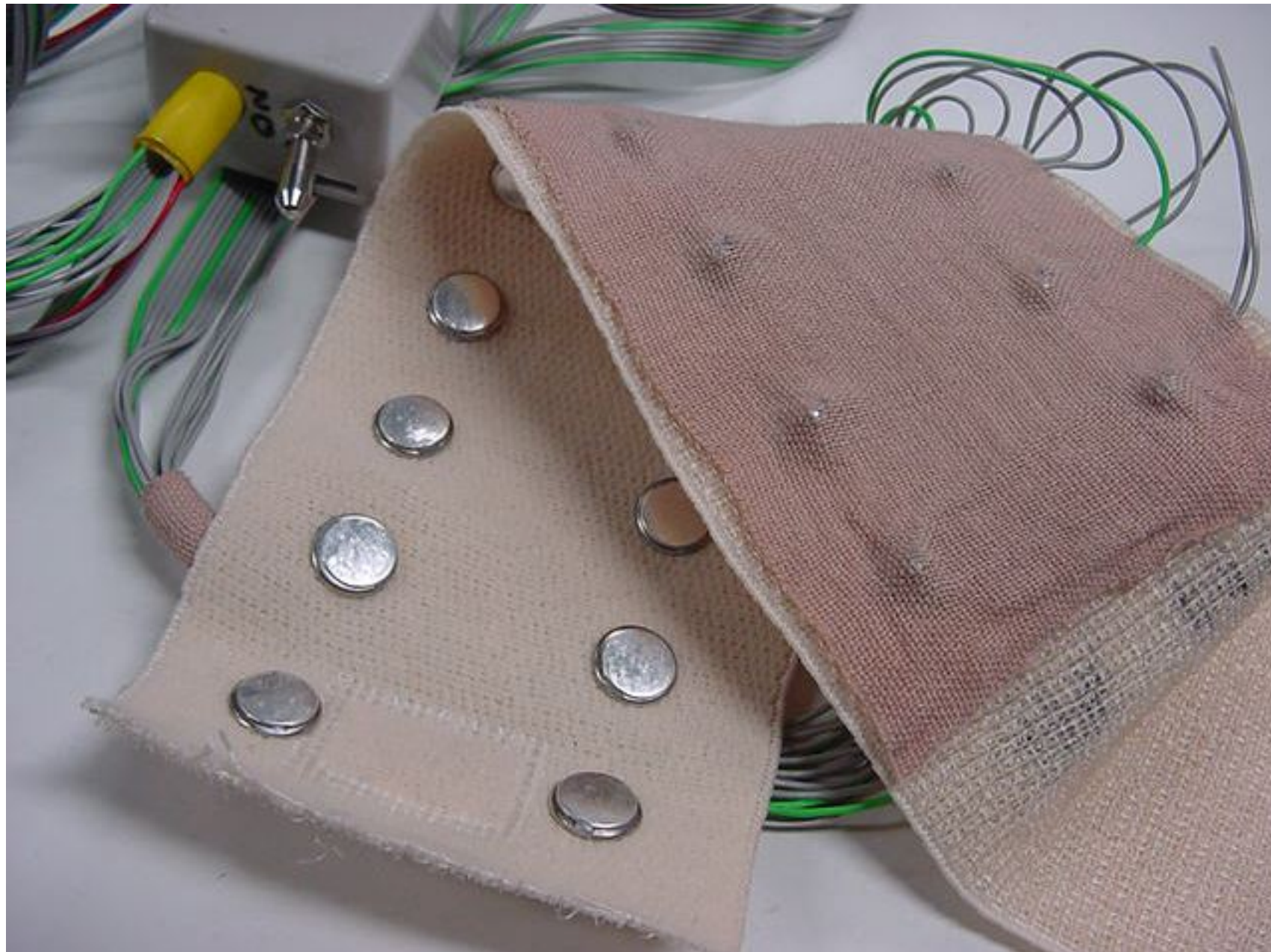


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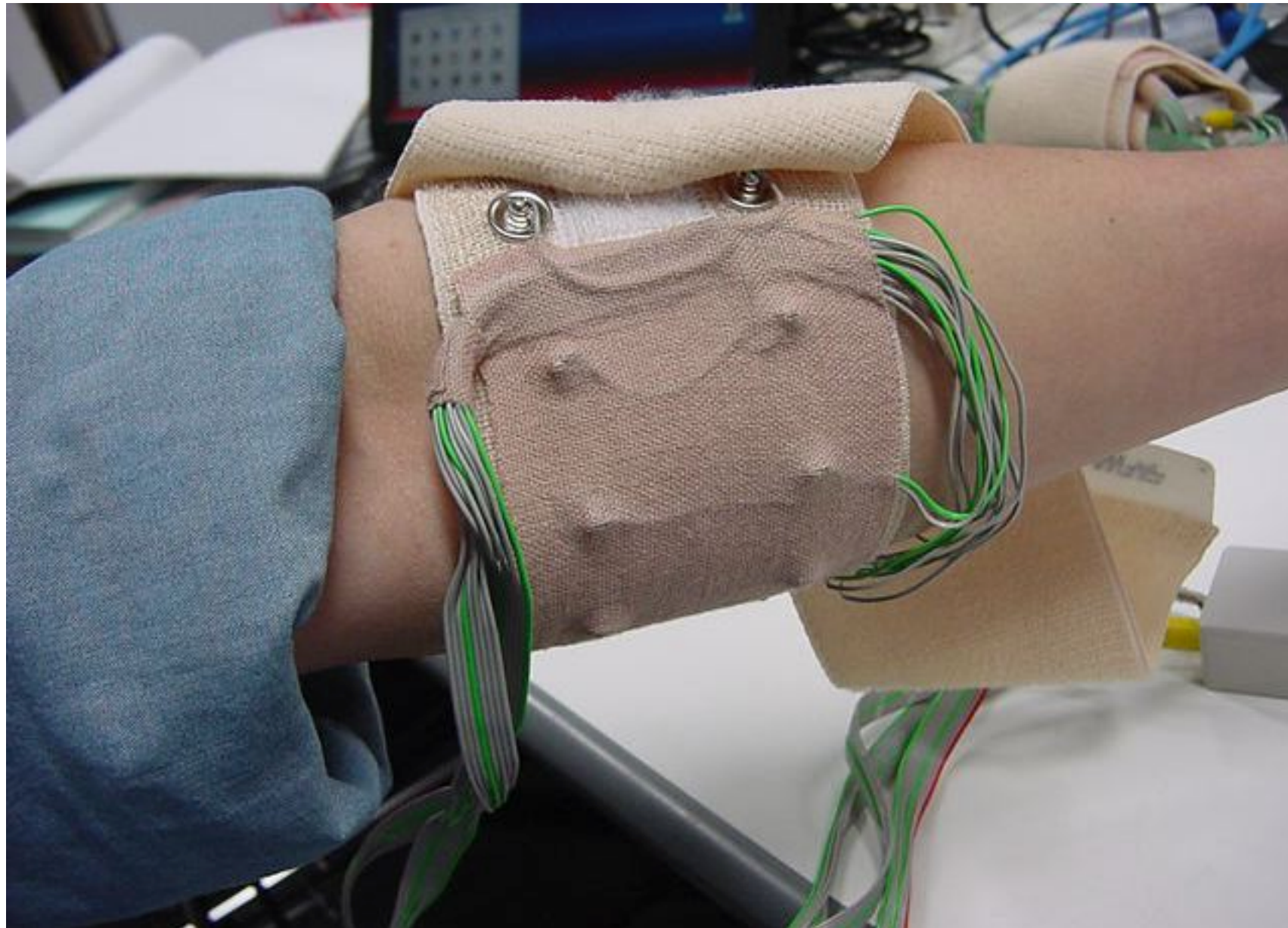




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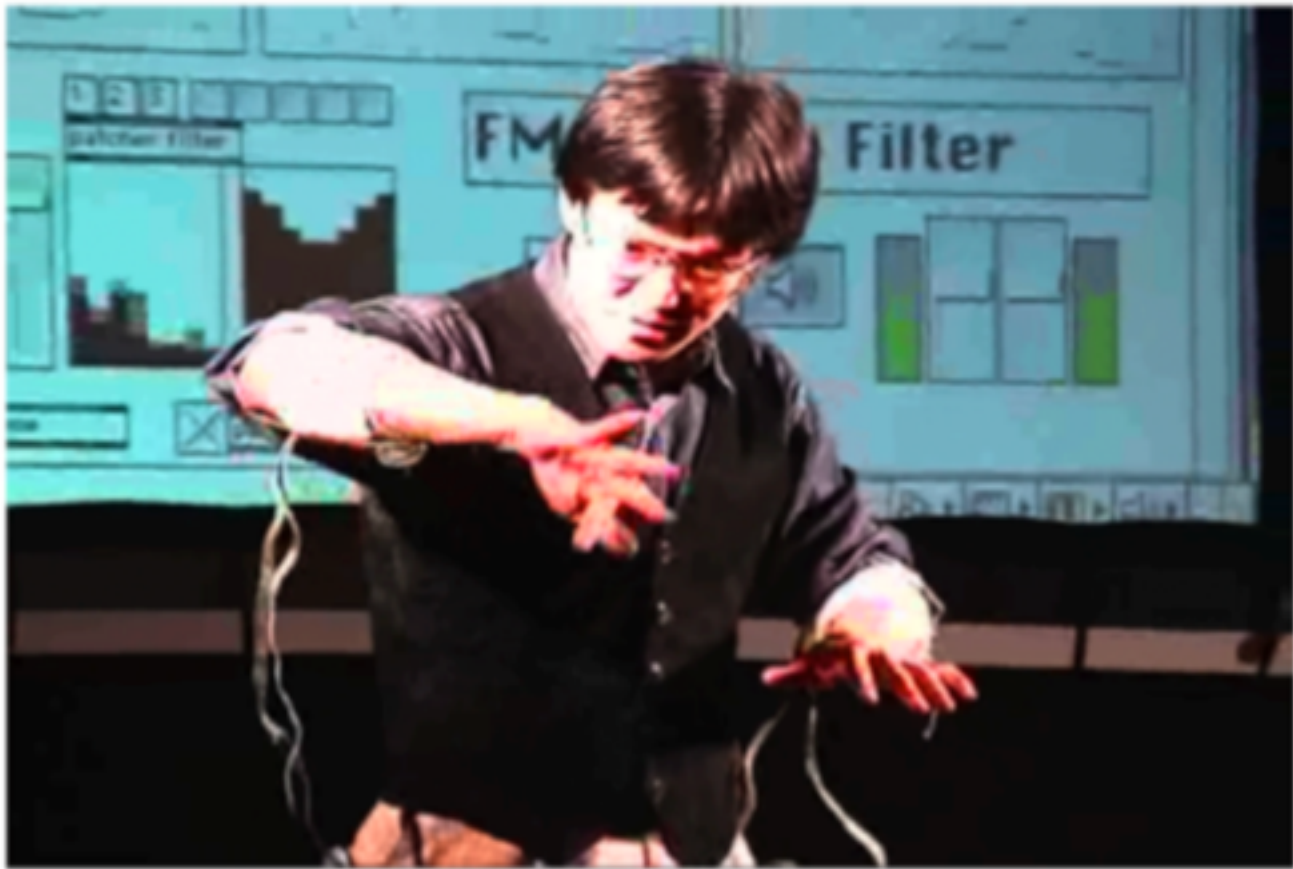
# Original EMG sensor





# Original EMG sensor

Kassel, Germany 2001



Montreal, Canada 2003



# Original EMG sensor

Amsterdam, Netherlands 2004



Paris, France 2004



# Original EMG sensor

Vancouver, Canada 2005



Taipei, Taiwan 2007





# Original EMG sensor

Yekaterinburg, Russia 2010



Oslo, Norway 2011

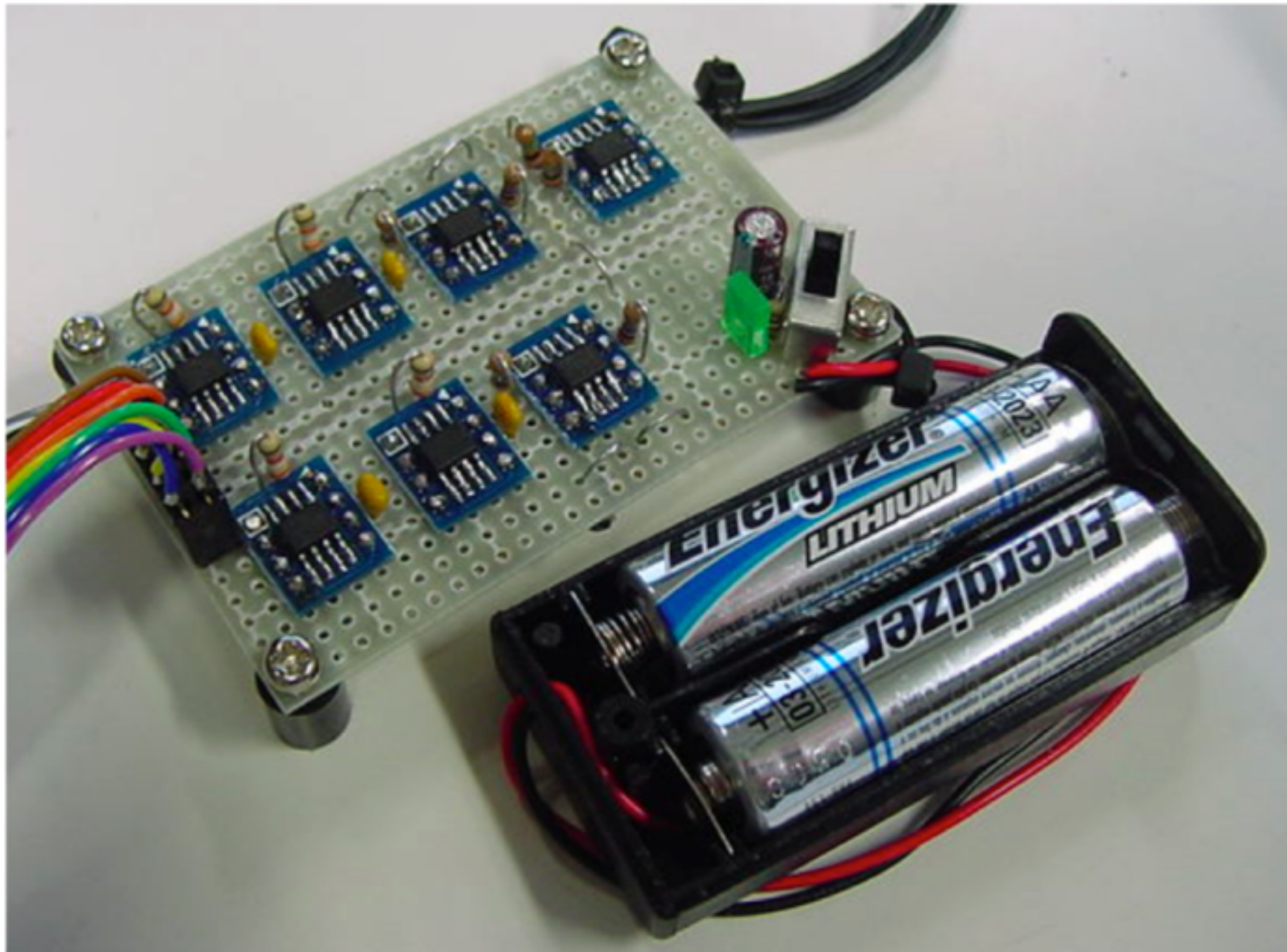


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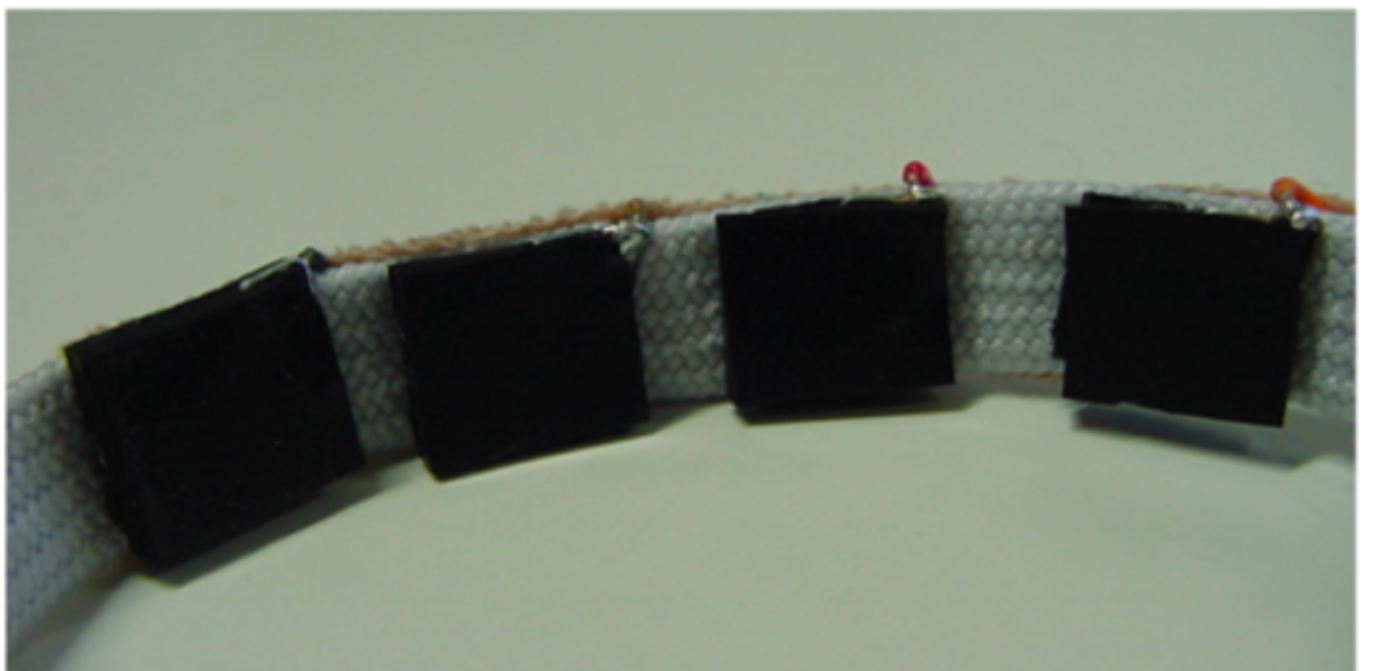
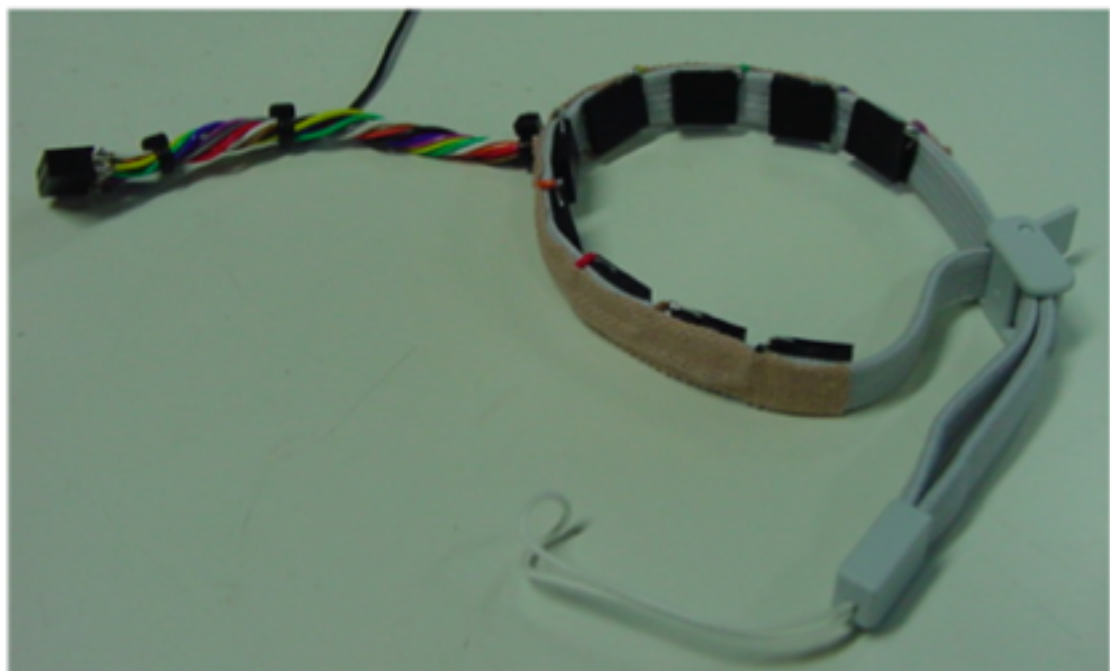
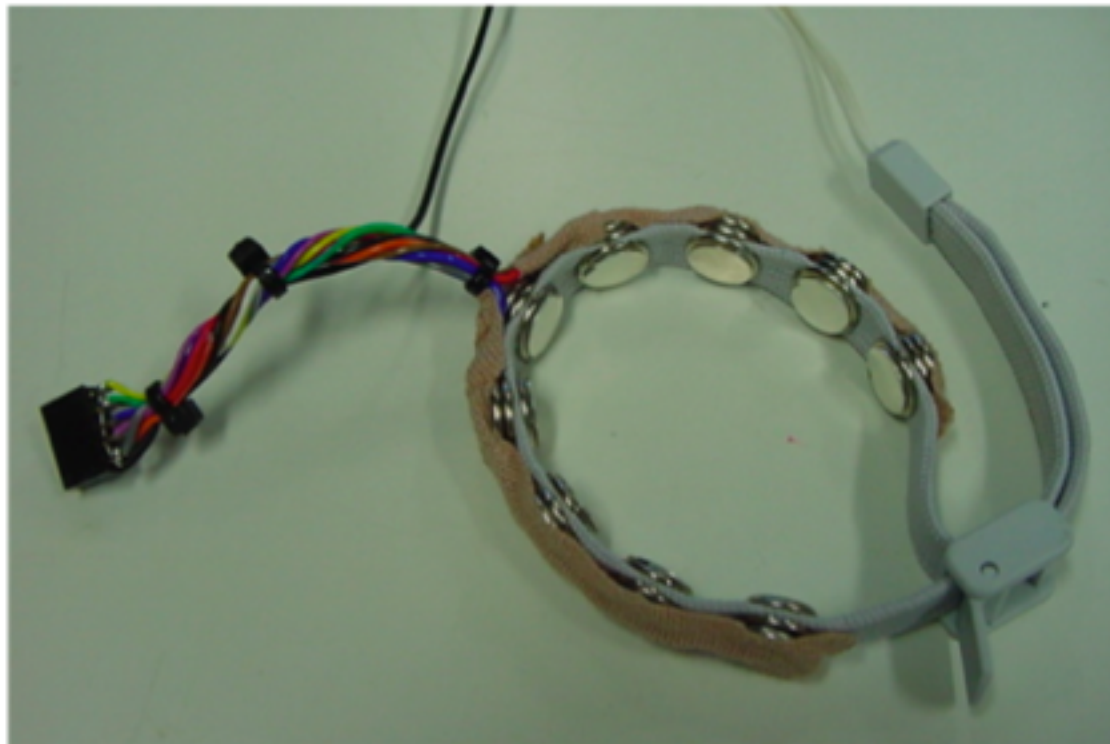
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# EMG sensor for NINTENDO



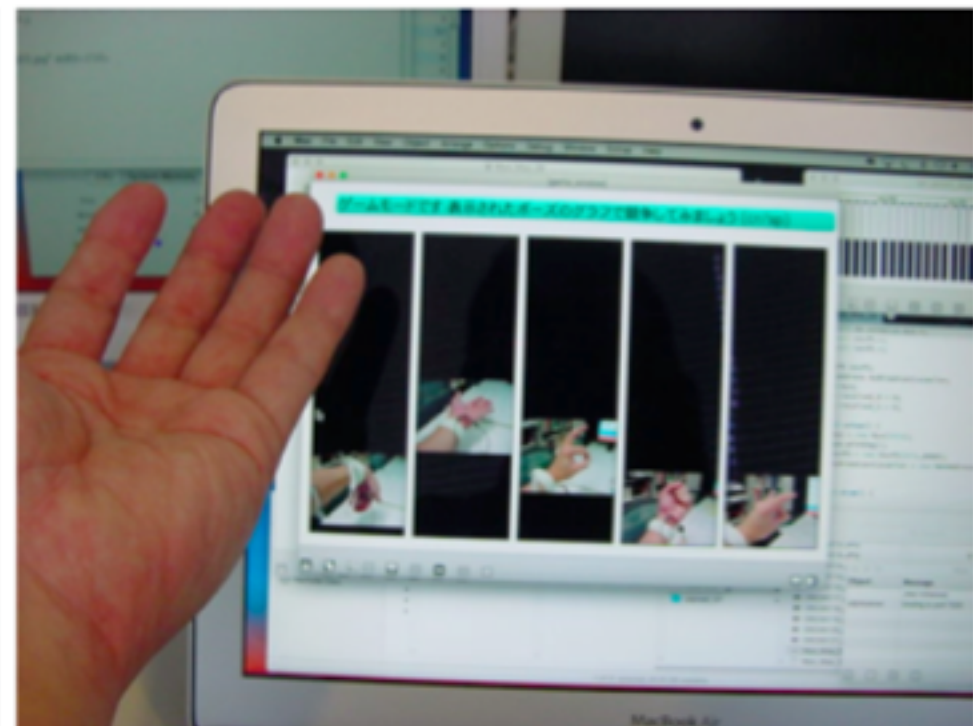


# EMG sensor for NINTENDO



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# EMG sensor for NINTENDO



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Video DEMO

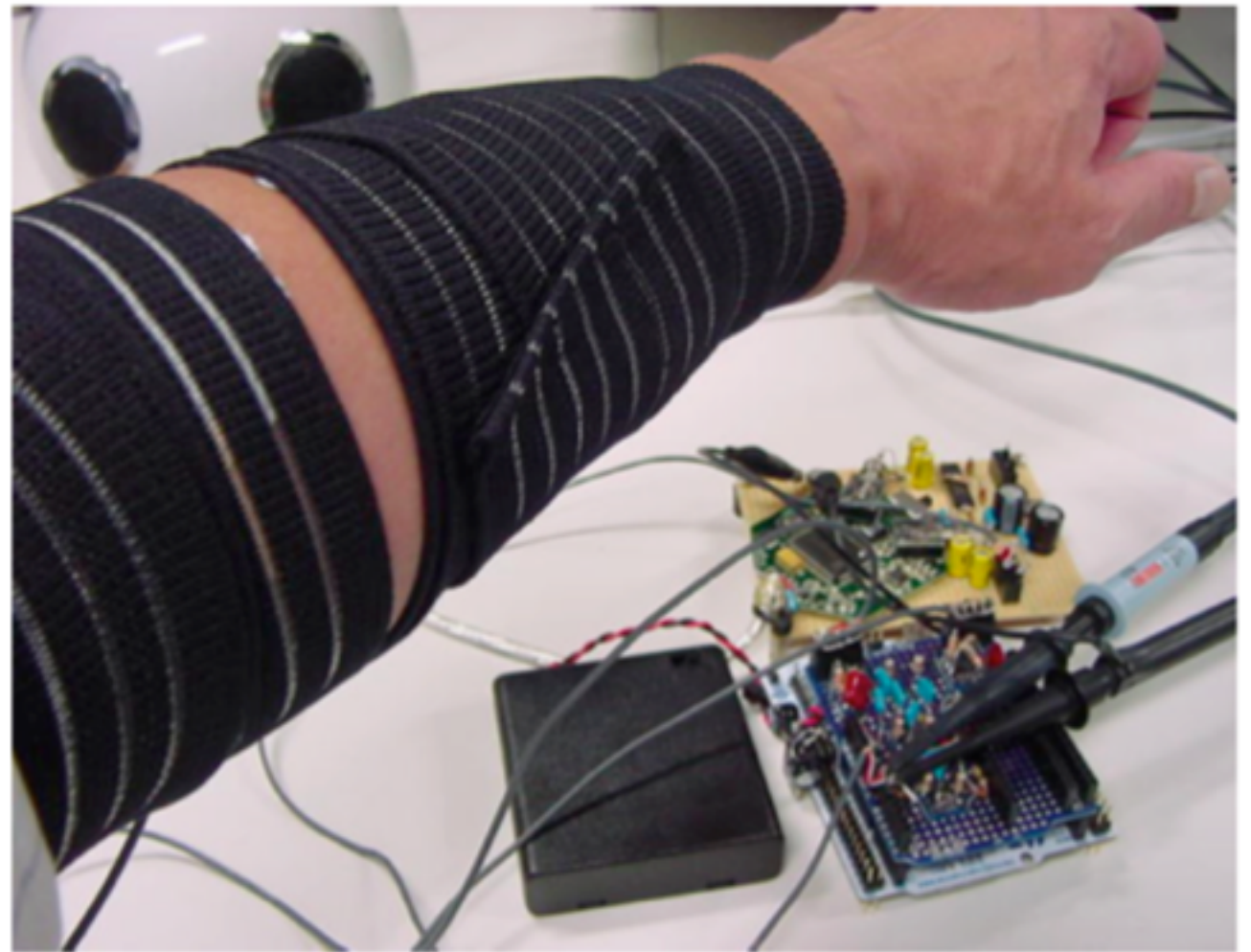
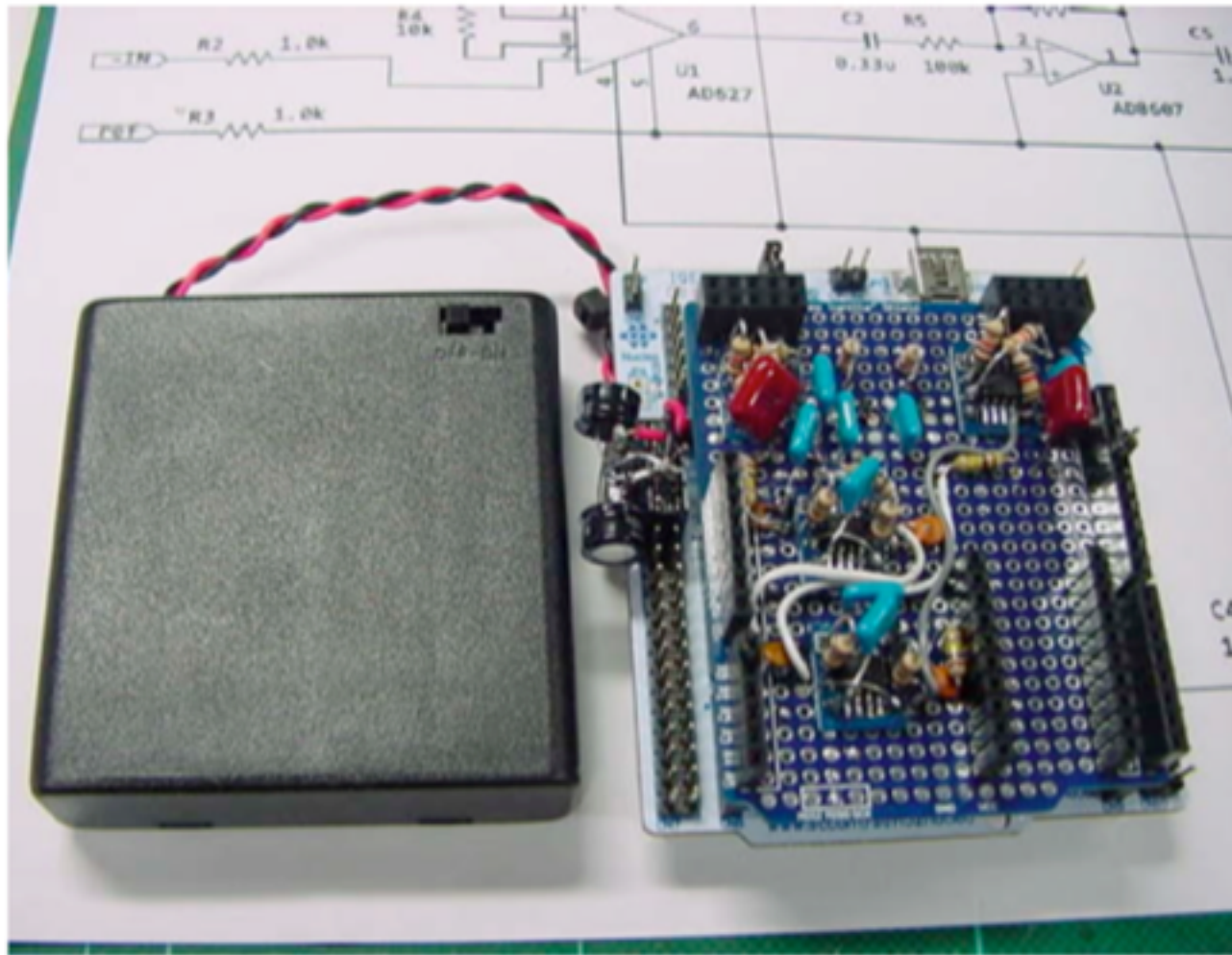
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# Original EMG sensor



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# "Myo" Armband Sensor



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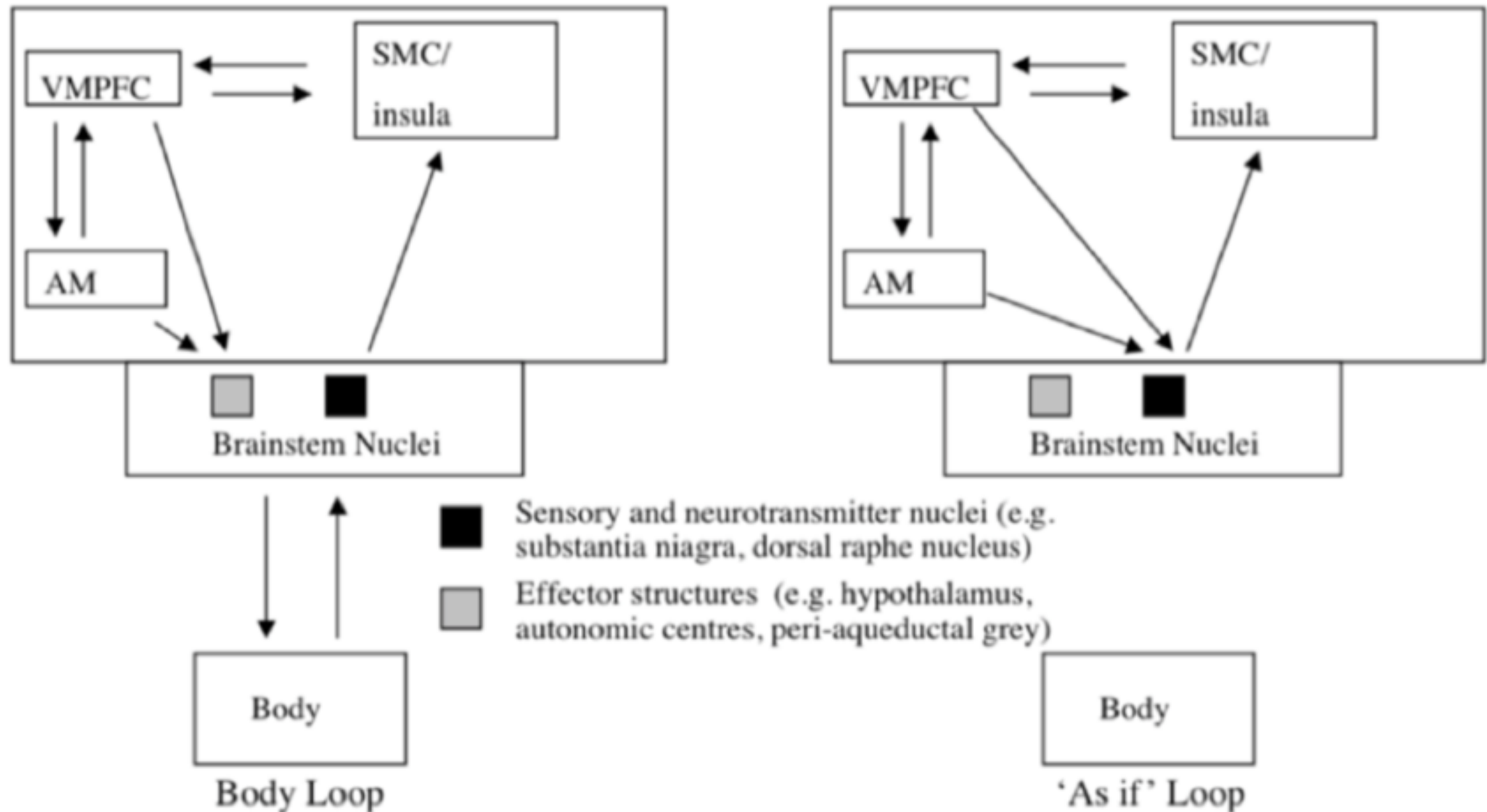
Video DEMO

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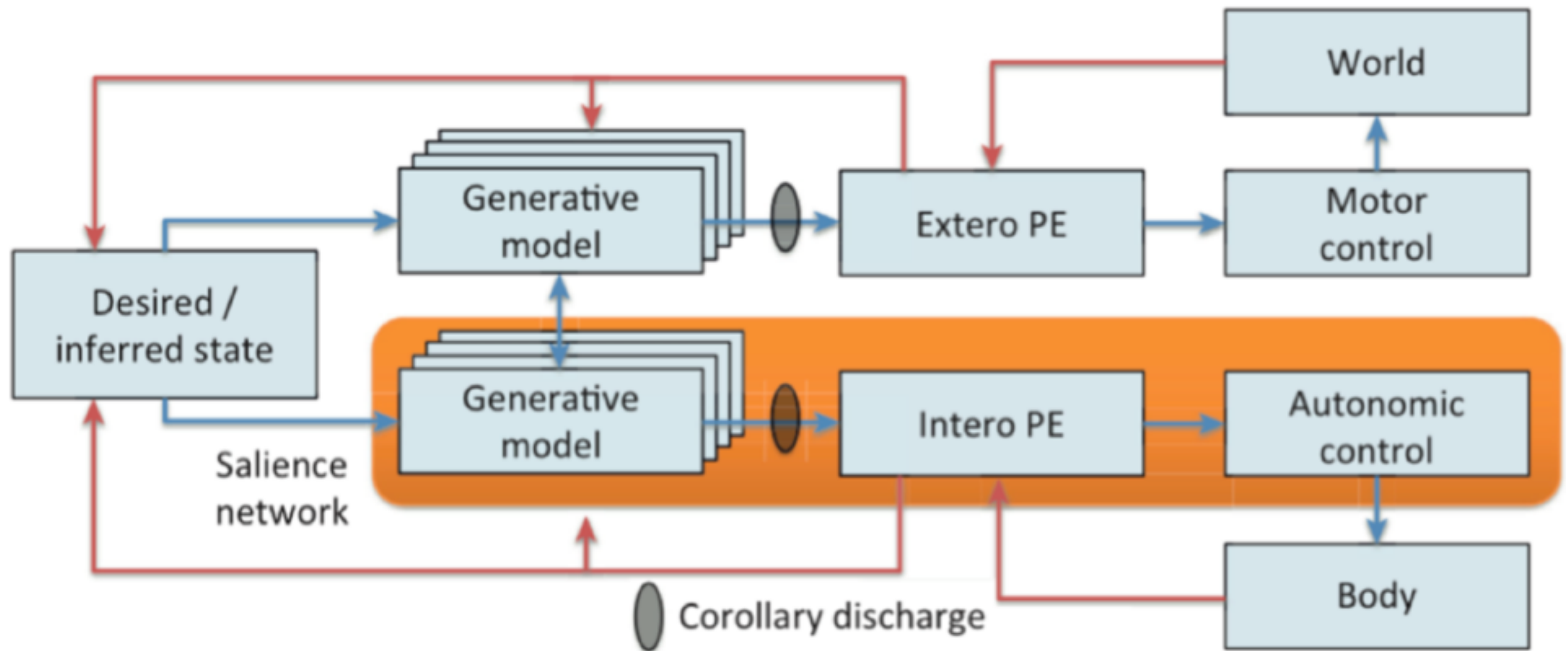


# SMH and Interception



**Somatic Marker Hypothesis.**

# SMH and Interception



**Model of Interceptive Inference.**

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# “PAW” Tactile Sensor

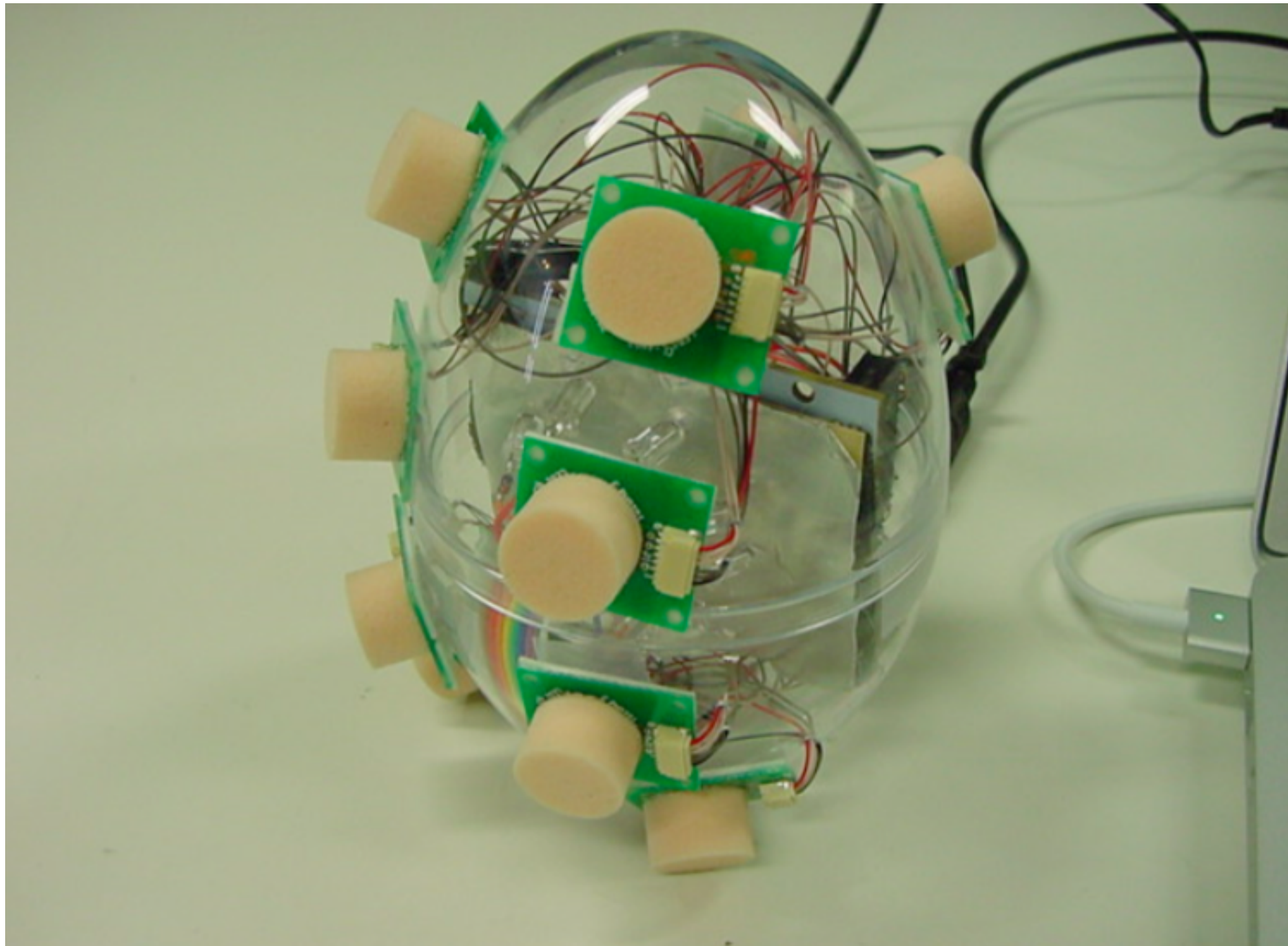


# Video DEMO

## (2 videos)

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# MRTI2015 - 10 “PAW” sensors



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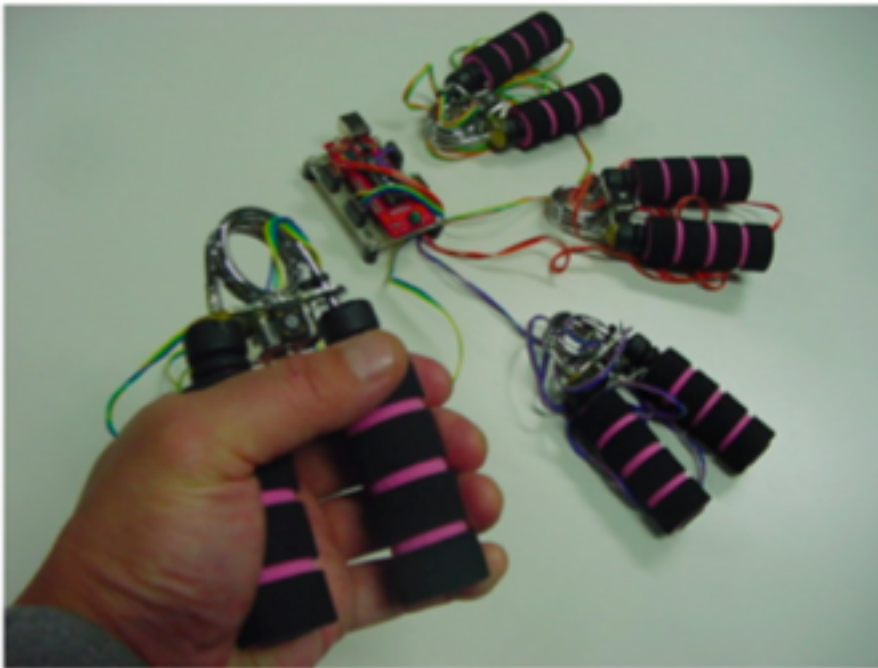
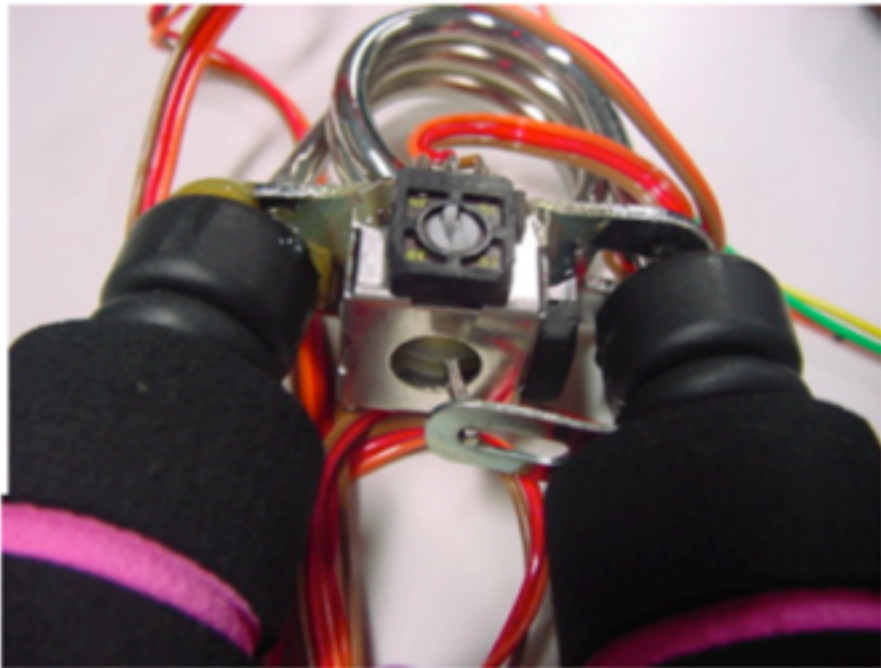
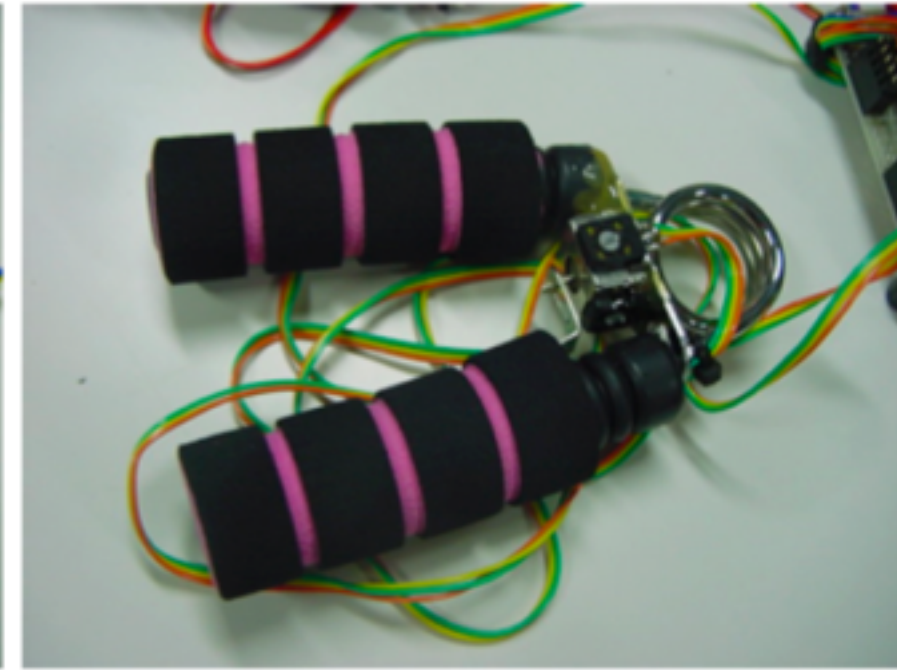
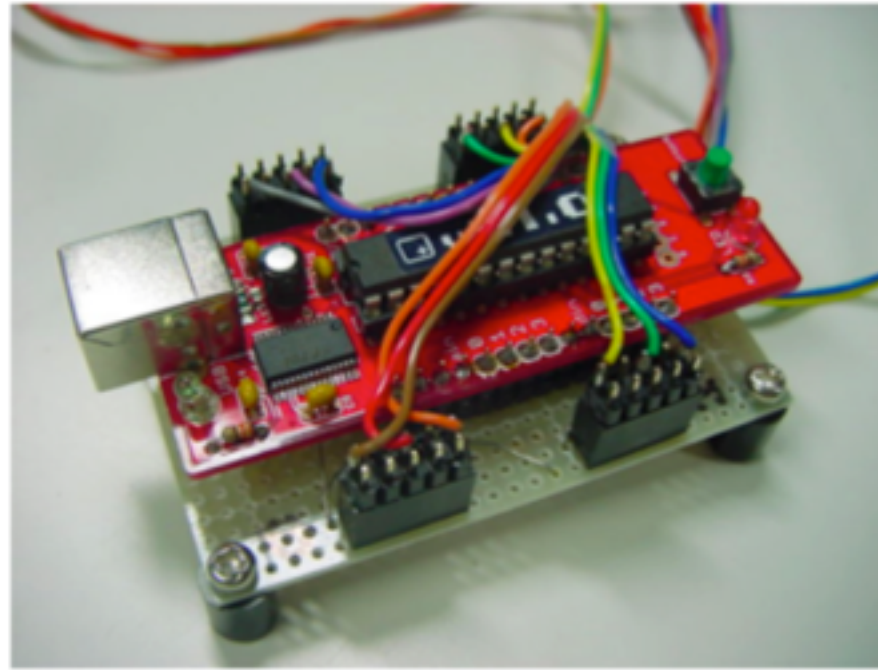
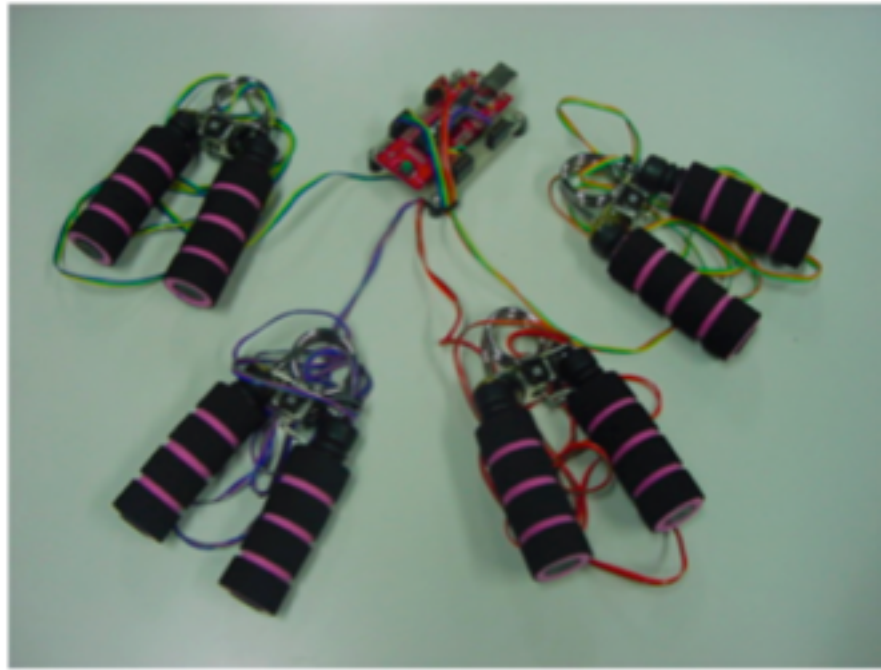
Video DEMO

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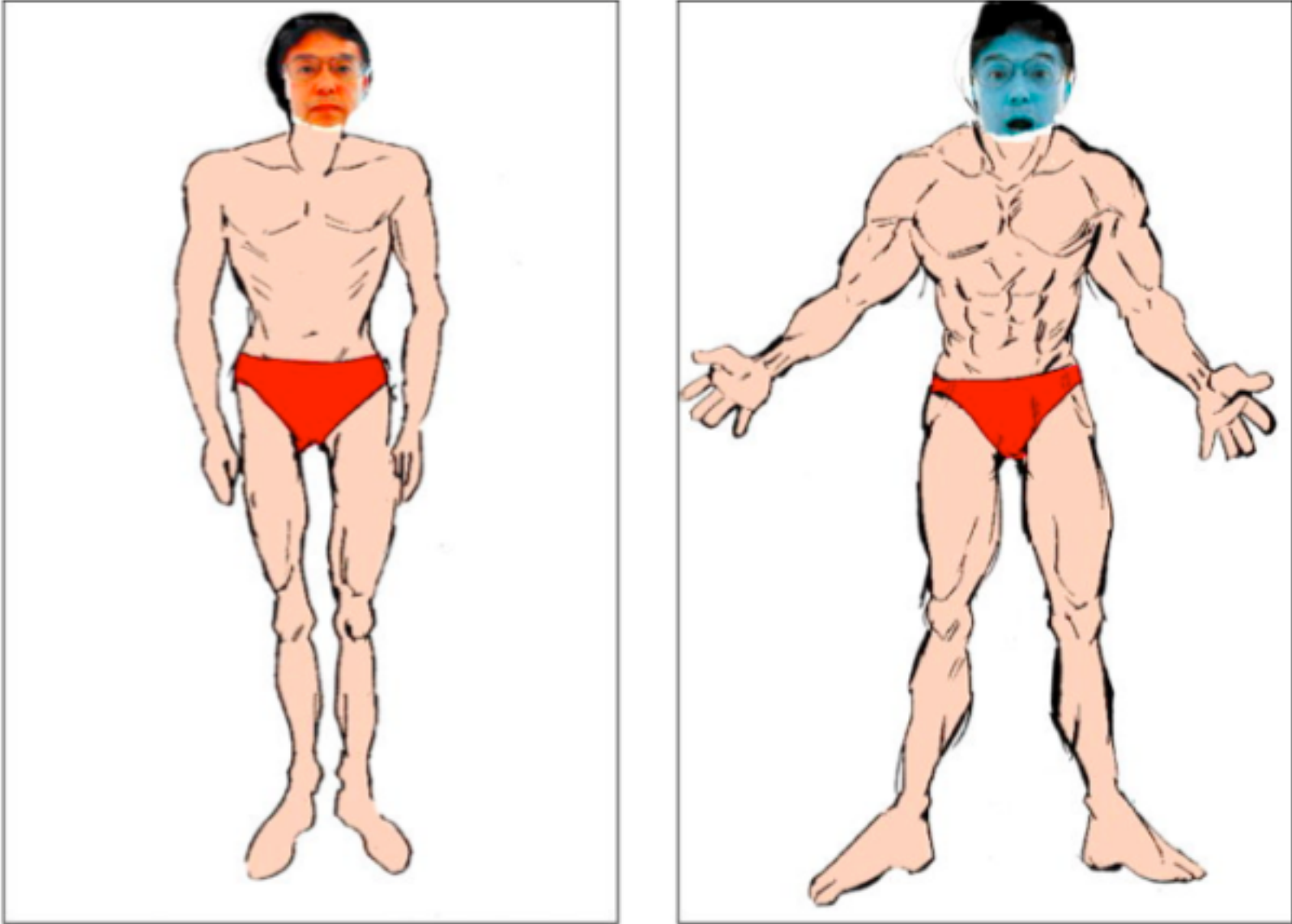
# Towards the BioFeedback Game



# Towards the BioFeedback Game

6

ゲーム開始です。グリップを握ってスペースキー！

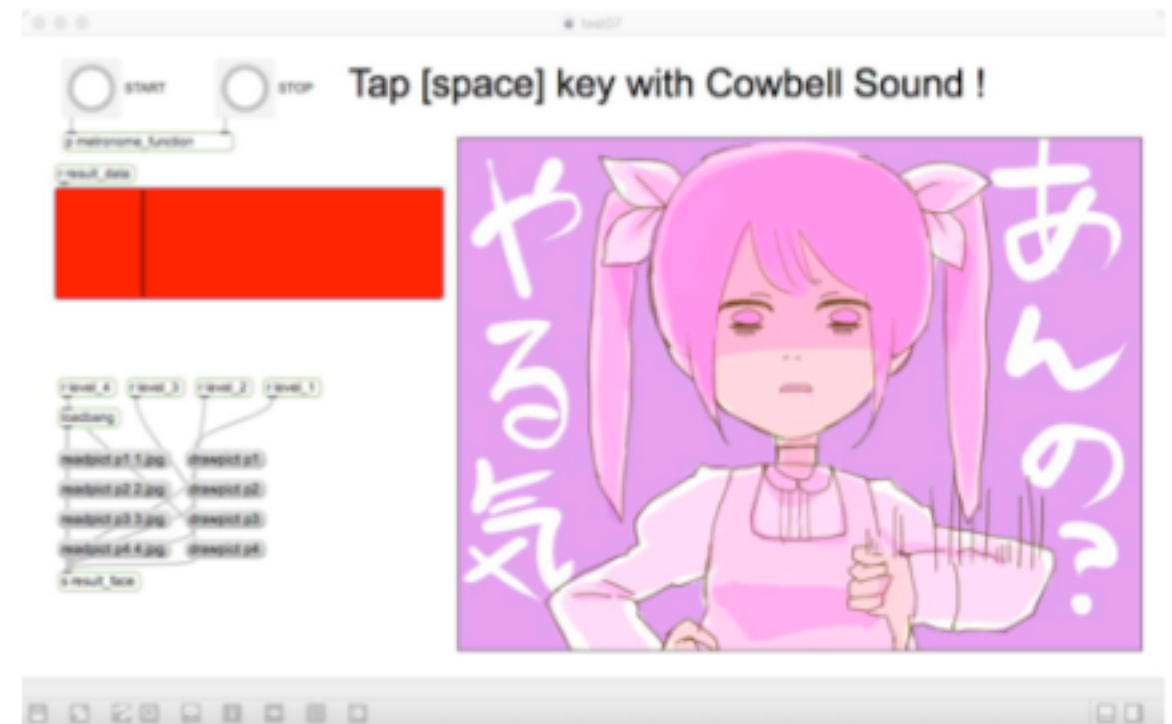
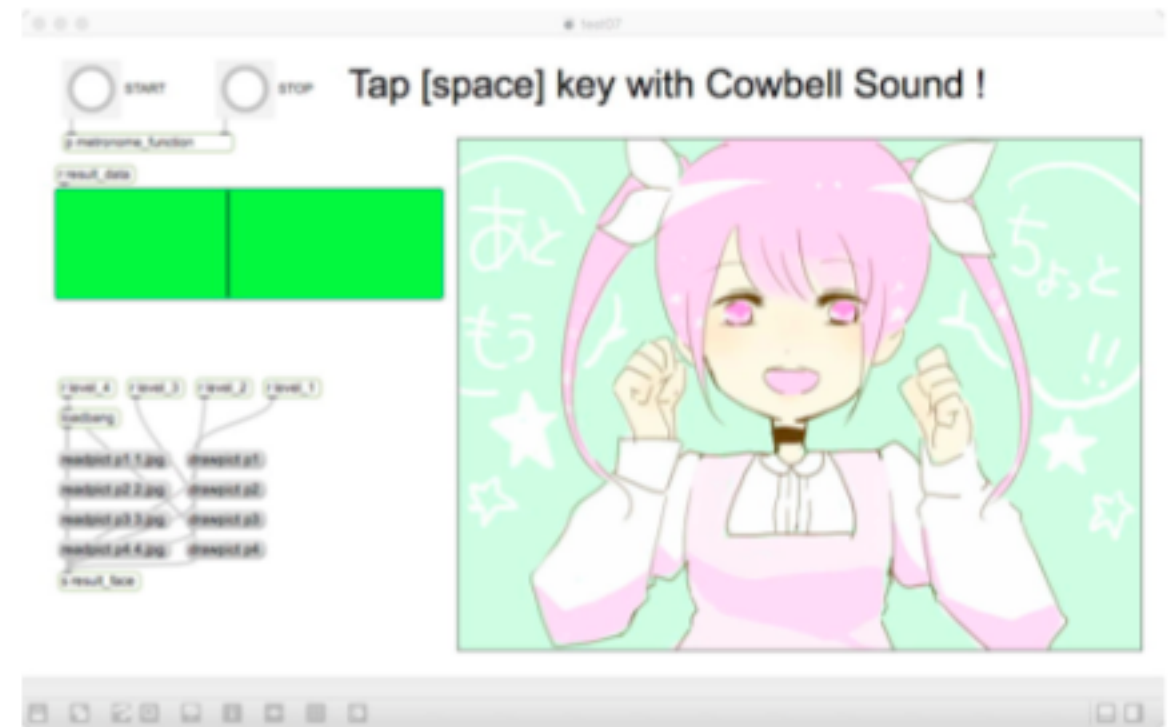


print loadbang p starter  
gamer.io.c1 c  
0 0 0 0  
scale 59 113 0 10  
scale 93 128 0 10  
scale 85 127 0 10  
scale 56 130 0 10  
p data\_check  
p sound\_module p main\_module  
p draw\_lod1 p draw\_lod2 p display  
p message\_selector  
5

slider: Move a slider to output values



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Thank You.