



Twee voorbeelden waarin geluiden en afstand op elkaar reageren.

The image shows a Scratch script on a grid background. The script starts with a blue 'when green flag clicked' block labeled 'de hele tijd'. This is followed by a red 'when green flag clicked' block containing a 'ping trig' block with settings: 'P0', 'P1', and 'cm'. Below this is a blue 'show number' block with 'afstand' selected. Then a white 'wait (ms)' block with '1000'. The main logic is a series of 'if-then-else' blocks. The first is an 'if' block: 'if afstand = 10 then play melody (310 bpm) in the background'. The second is an 'if-else' block: 'if afstand = 20 then play melody (240 bpm) in the background, else do nothing'. The third is another 'if-else' block: 'if afstand = 40 then play melody (170 bpm) in the background, else do nothing'. The fourth is a final 'if-else' block: 'if afstand = 60 then play melody (100 bpm) in the background, else stop all sounds'. A plus sign is visible at the bottom left of the script area.

```
de hele tijd
when green flag clicked
  ping trig P0
  echo P1
  unit cm
  show number afstand
  wait (ms) 1000
  if afstand = 10 then
    play melody (310 bpm) in the background
  if-else afstand = 20 then
    play melody (240 bpm) in the background
  else do nothing
  if-else afstand = 40 then
    play melody (170 bpm) in the background
  else do nothing
  if-else afstand = 60 then
    play melody (100 bpm) in the background
  else stop all sounds
```



The image shows a Scratch script designed to perform a distance-based sound experiment. The script is organized as follows:

- de hele tijd** (forever loop):
 - ping trig** (P0): Sends a ping signal to port P0.
 - stel afstand** (in op): Sets the distance variable.
 - echo** (P1): Receives the echo signal at port P1.
 - unit** (cm): Sets the unit of measurement to centimeters.
 - toon nummer** (afstand): Displays the current distance value.
 - pauzeer (ms)** (1000): Pauses the script for 1000 milliseconds.
 - 1 keer herhalen** (repeat 1 time):
 - doe** (if-then):
 - als** (if): Checks if **afstand** is **<** 200.
 - dan** (then):
 - terwijl** (while): A loop that runs as long as the condition is **onwaar** (false).
 - doe** (repeat 1 time):
 - doe** (repeat 1 time):
 - speel toon (Hz)** (Midden C): Plays the middle C note.