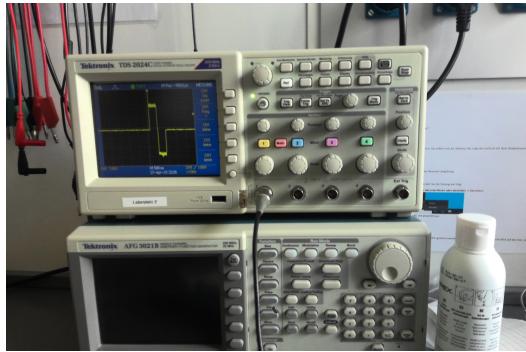


## Work place Cefar



## Checking the signal on the oscilloscope

Configuration of the device:

P28

impuls length: 400 μsec

frequency: 1 Hz

Current: 5 mA

Measured against 470Ω resistance → 2,7 V

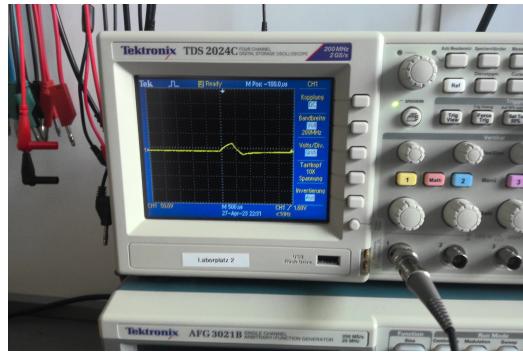
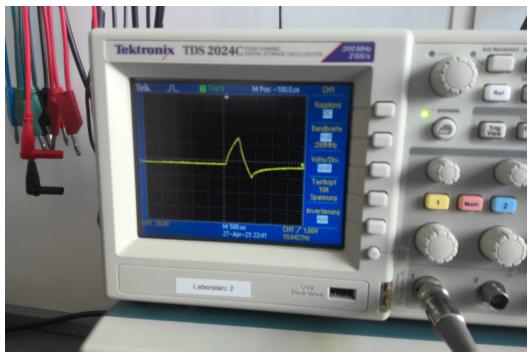
## Applying electrodes to the biceps



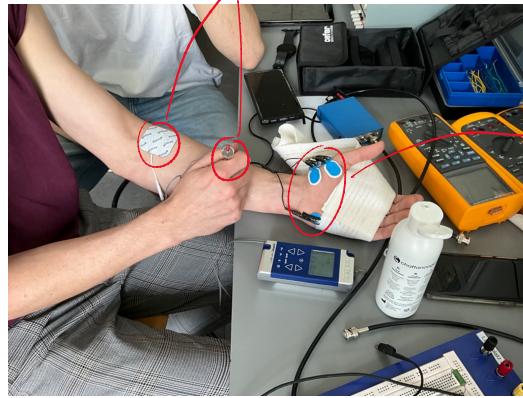
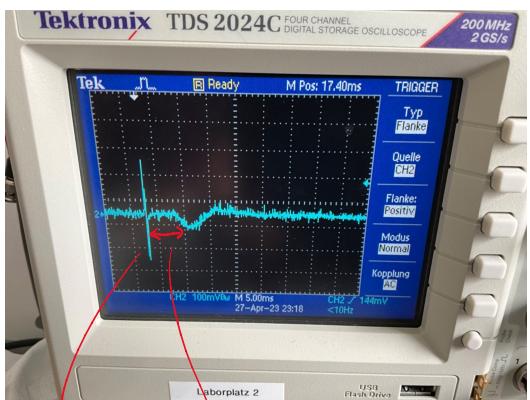
4mA is not felt by the participant  
→ 4,5mA

visible muscle flexes at around 9mA

	afferent	efferent	
400 μsec	4,5 mA	7 mA	
200 μsec	7,5 mA	13 mA	
50 μsec	17 mA	45,5 mA	ground Electrode



## EMG



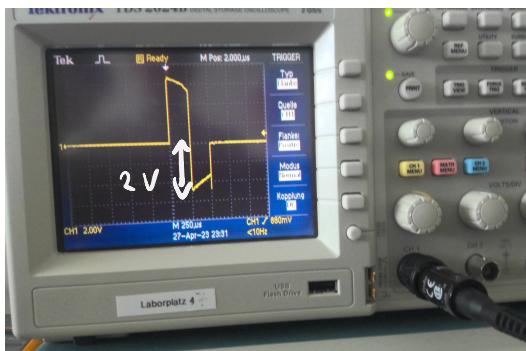
measuring

electrode artifact

delay ... this delay increases as the electrode  
is moved proximally the delay increases

(this way the speed of the signal / Action Potential  
can be measured)

## Workplace „Hofer Device“



$$\begin{aligned} R &= 470 \Omega \\ I &= 5 \text{ mA} \end{aligned} \quad \left. \begin{aligned} &2.4 \text{ V} \\ &\} \end{aligned} \right.$$



fibula head - first electrode

tibialis anterior - second electrode

can also be used for gait cycle correction

→ twitching of the foot can be observed  
(also knee at higher current)