

# NCG-ENGAGE HR

## Measuring and Modulating Brain Activity

for therapeutic application



**Biofeedback system for heart rate determination**



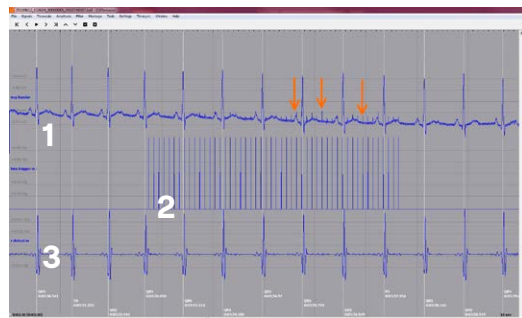
NCG-ENGAGE HR is a biofeedback device which allows the therapist to measure the heart rate during TMS of the DLPFC (dorsolateral prefrontal cortex). The autonomically working NCG-ENGAGE HR device reports analyzed heart beat intervals permanently.

### NCG-ENGAGE HR Features

- Easy-to-use ECG cable for safe recording during TMS
- Touch screen to show data and user interaction
- Stimulation output ECG stored on SD card (EDF+ format)
- Connecting cables for receiving the trigger from different TMS devices

### Technical data:

- R wave detection sensitivity 99.9 %
- R wave specificity 99.1 %
- 24 bit resolution / SNR > 90 dB / noise RTI < 15 pp
- ECG input for neuroConn's ECG cable
- input for medical DC power supply
- TTL input via BNC 5V TTL
- SD card: speed class  $\geq 10$  / memory capacity  $\geq 16$  GB / reading speed  $\geq 90$  MB/s / writing speed  $\geq 45$  MB/s



The NCG-ENGAGE HR provides robust R wave detection.  
1) ECG 2) TMS 3) detected R waves