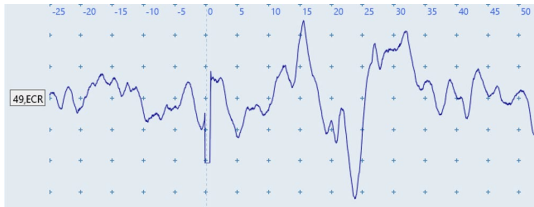
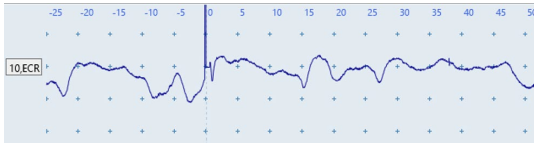
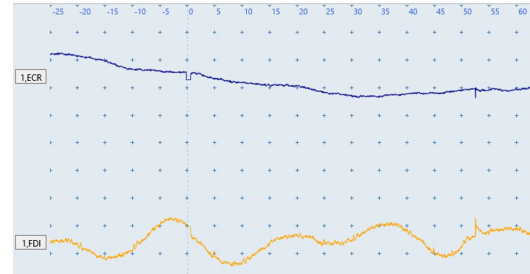
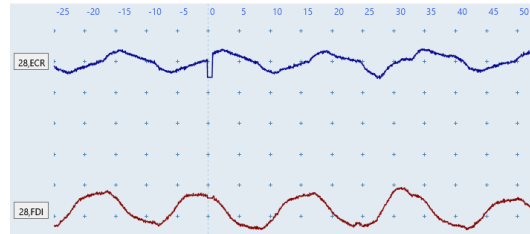


Muscle pre-activation



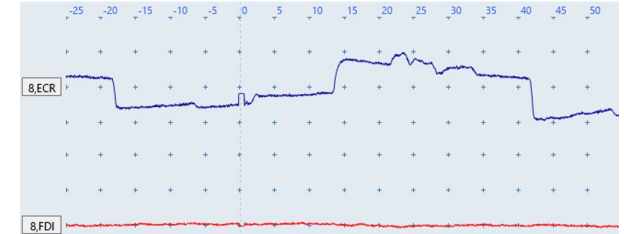
- Rest the participant's hand and arm somewhere low like a pillow on their lap
- Say to the participant: Just take a deep breath, let it out and drop your shoulders.
- Position the patient with the shoulder internally rotated so the forearm is positioned across the front of the body
- Give the participant a short break from TMS

Electrical noise (both channels)



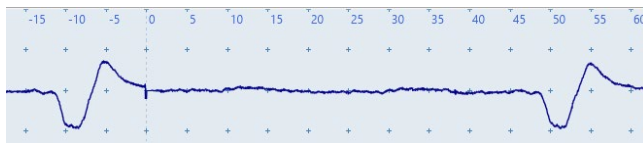
- Check skin preparation was adequate
- Check the grounding strap/electrode has not lost skin contact
- Check cables are firmly attached to patient and EMG unit
- Ensure no one is touching the patient or TMS trolley

Electrical noise (one channel)



- Swap the cable clips between the ECR and FDI electrodes on the participant. Recordings from the ECR muscle now appear on the screen as the red traces labelled FDI, and vice versa.
 - If it is a problem with the cables then the noise will remain on the same channel. In this situation use a different set of cables.
 - If it is a problem with the electrodes the noise will change channels. In this case you will need to re-prep the skin areas and attach new electrodes.

Motor unit firing



- Reposition the participant's hand and arm

Prolonged stimulus artefact



- Follow the above steps for troubleshooting electrical noise depending on whether the prolonged stimulus artefact affects one or both channels