

# ALL DIAGRAMS AS IMAGES to include in poster

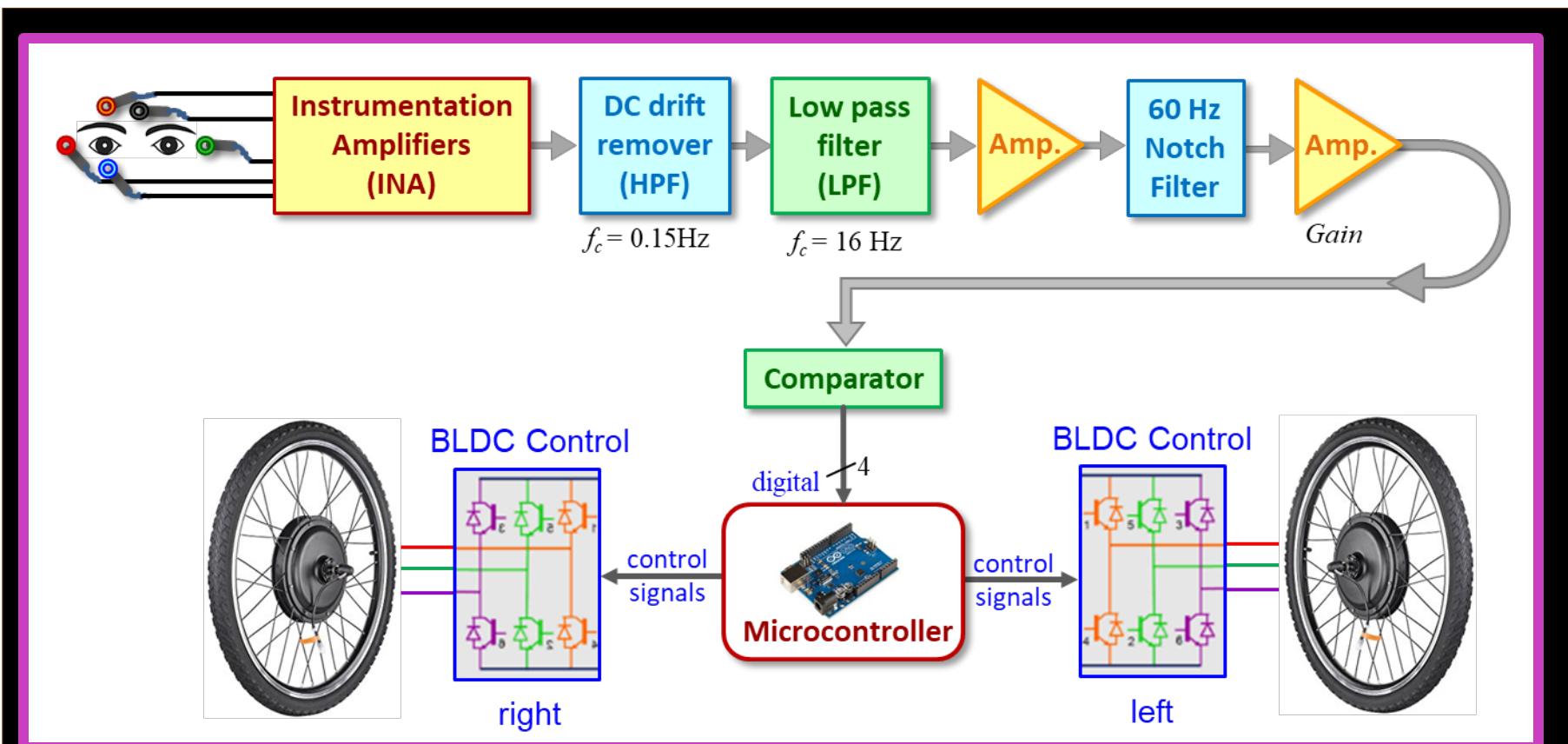
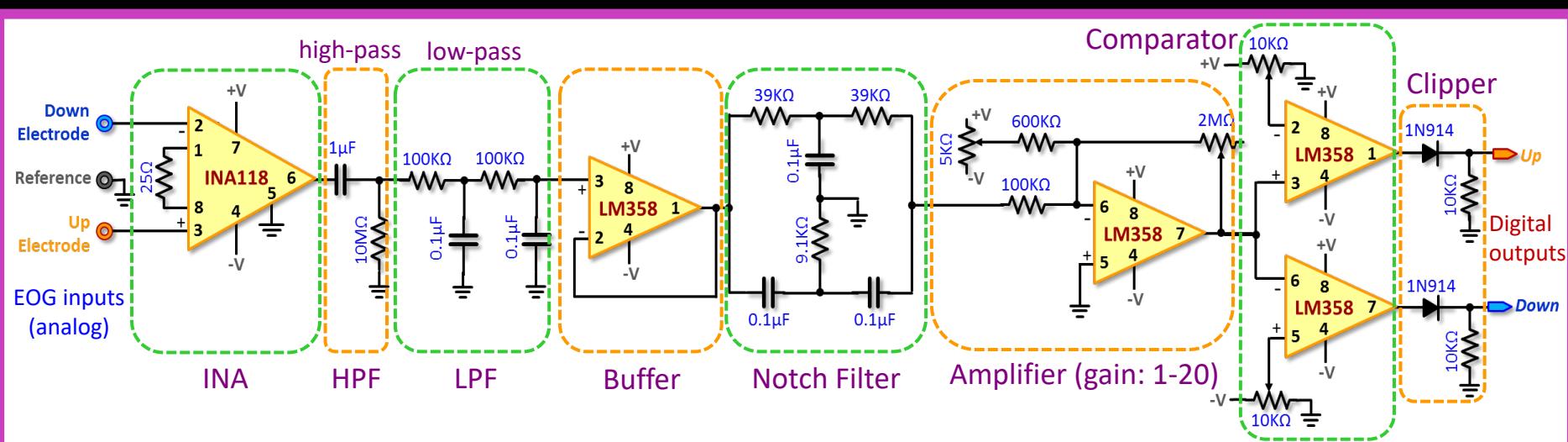
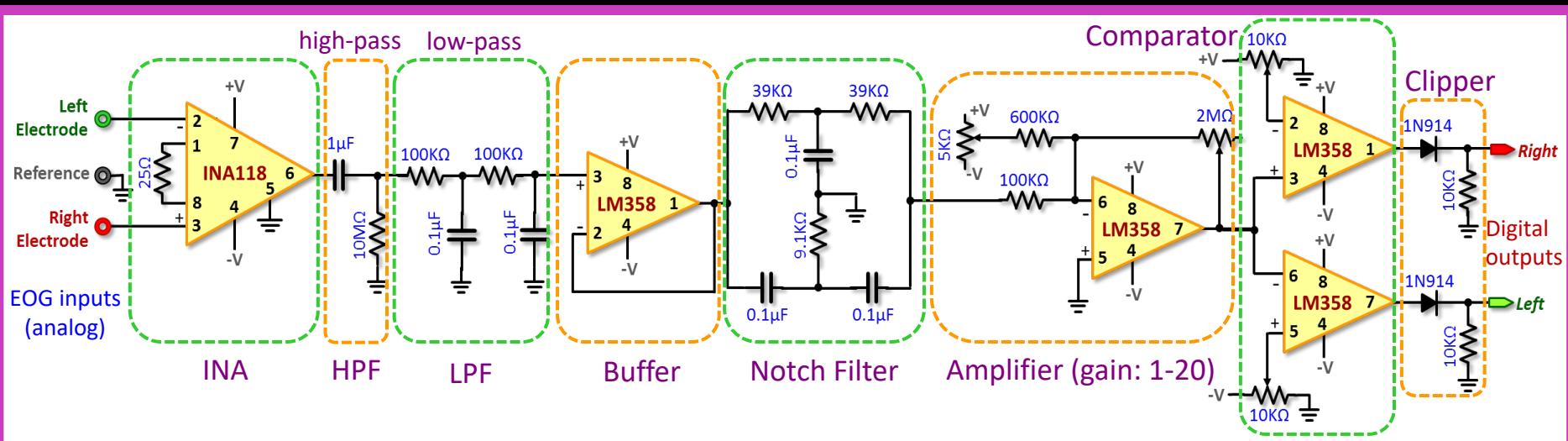


Figure 1: Overall Block Diagram with Details of the EOG Signal Chain



**Figure 3: Complete Vertical Signal Chain**

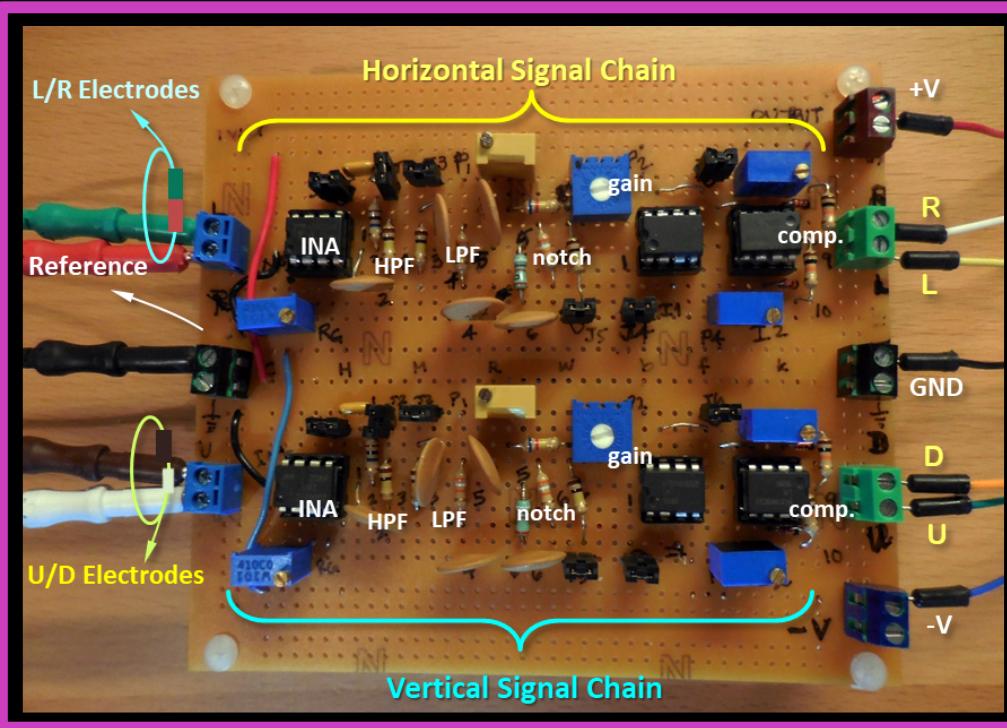


Figure 4: Final signal chain prototype board

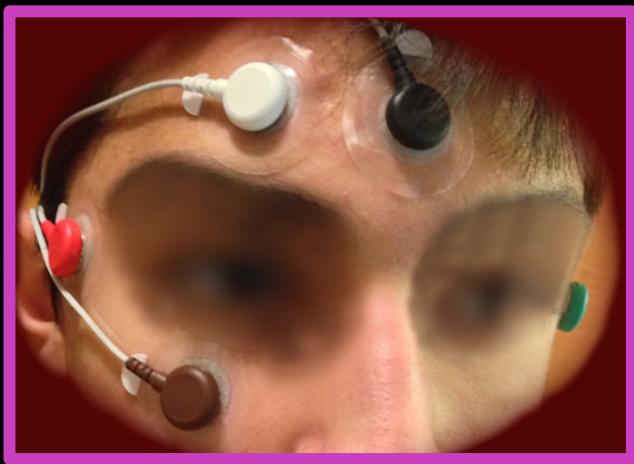


Figure 5: Electrodes placement

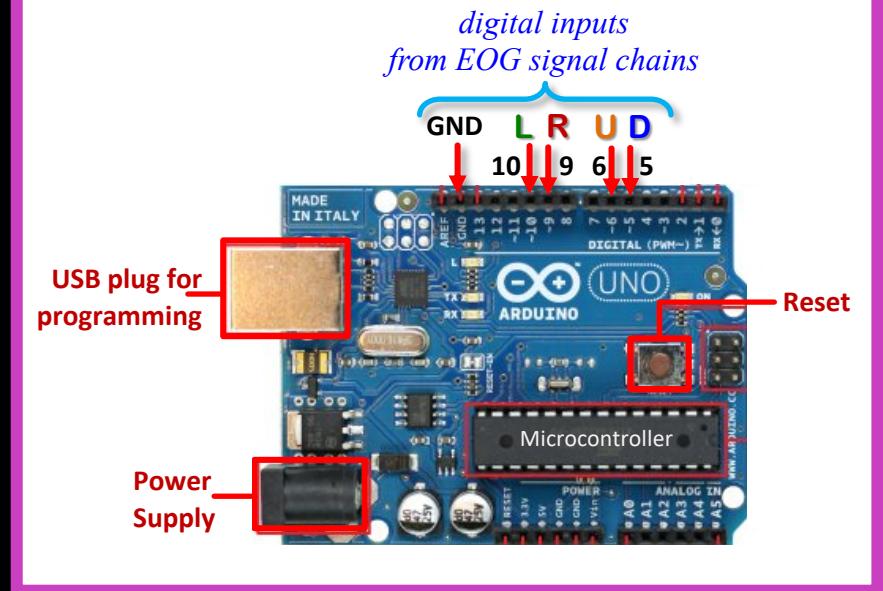


Figure 6: Microcontroller connections

In reverse no left or right is allowed

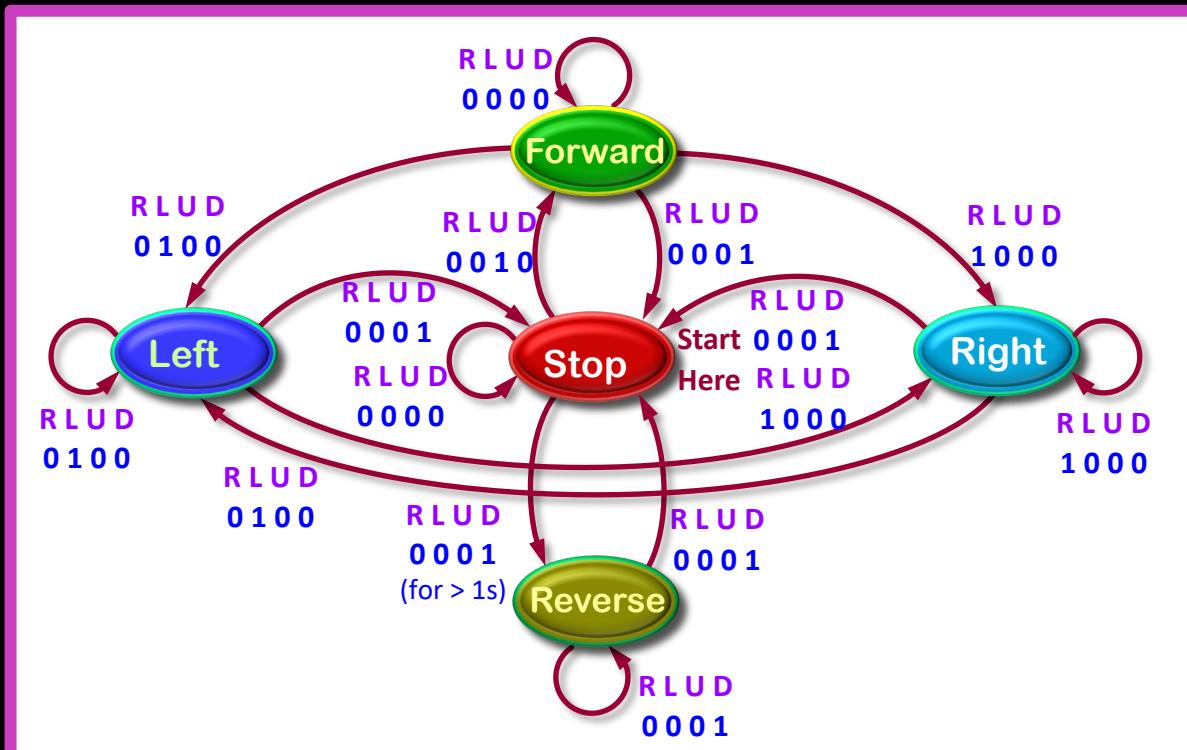


Figure 7: Functional flow diagram for motor control

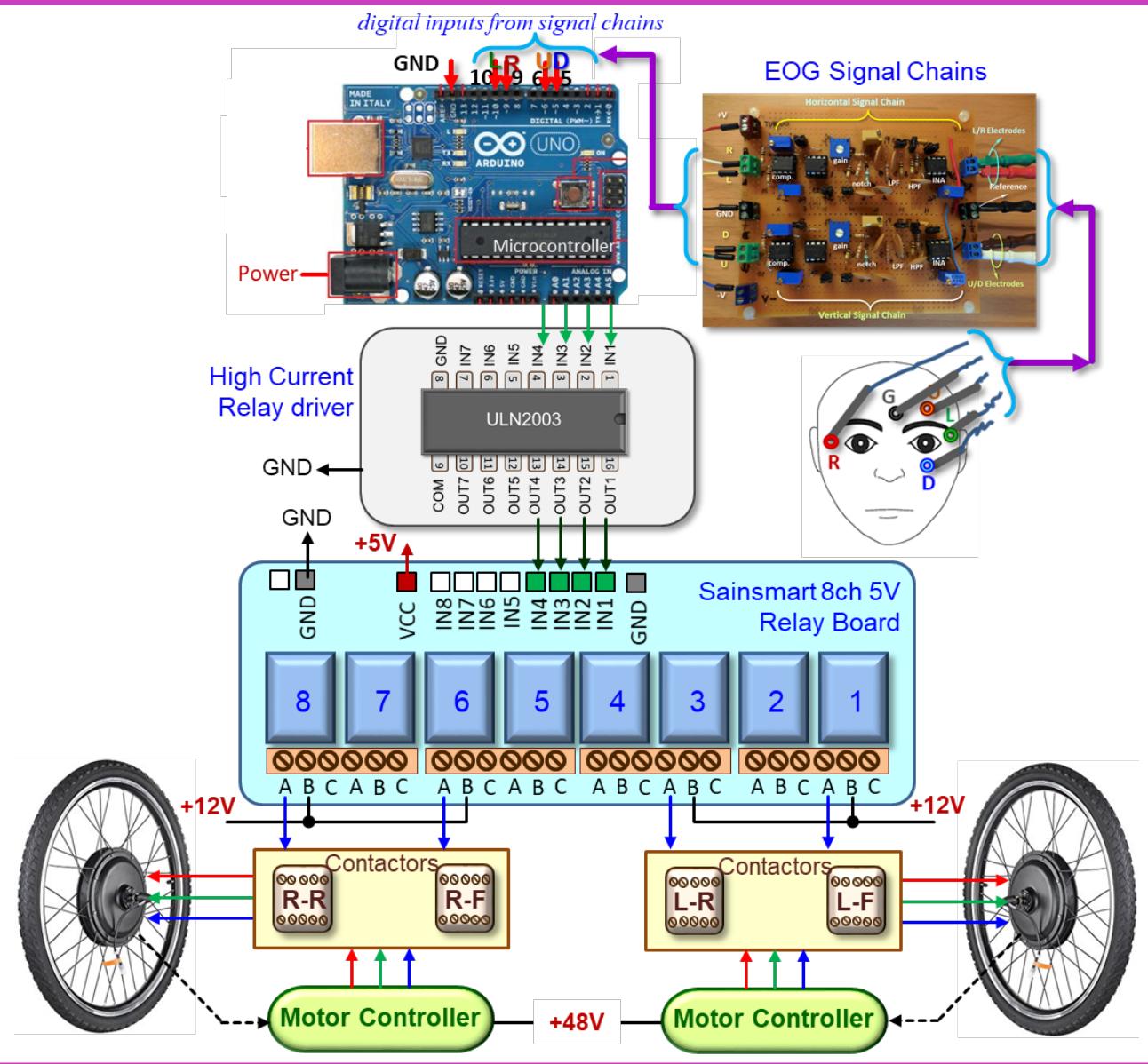


Figure 8: Overall Block Diagram (with Electromechanical System details)

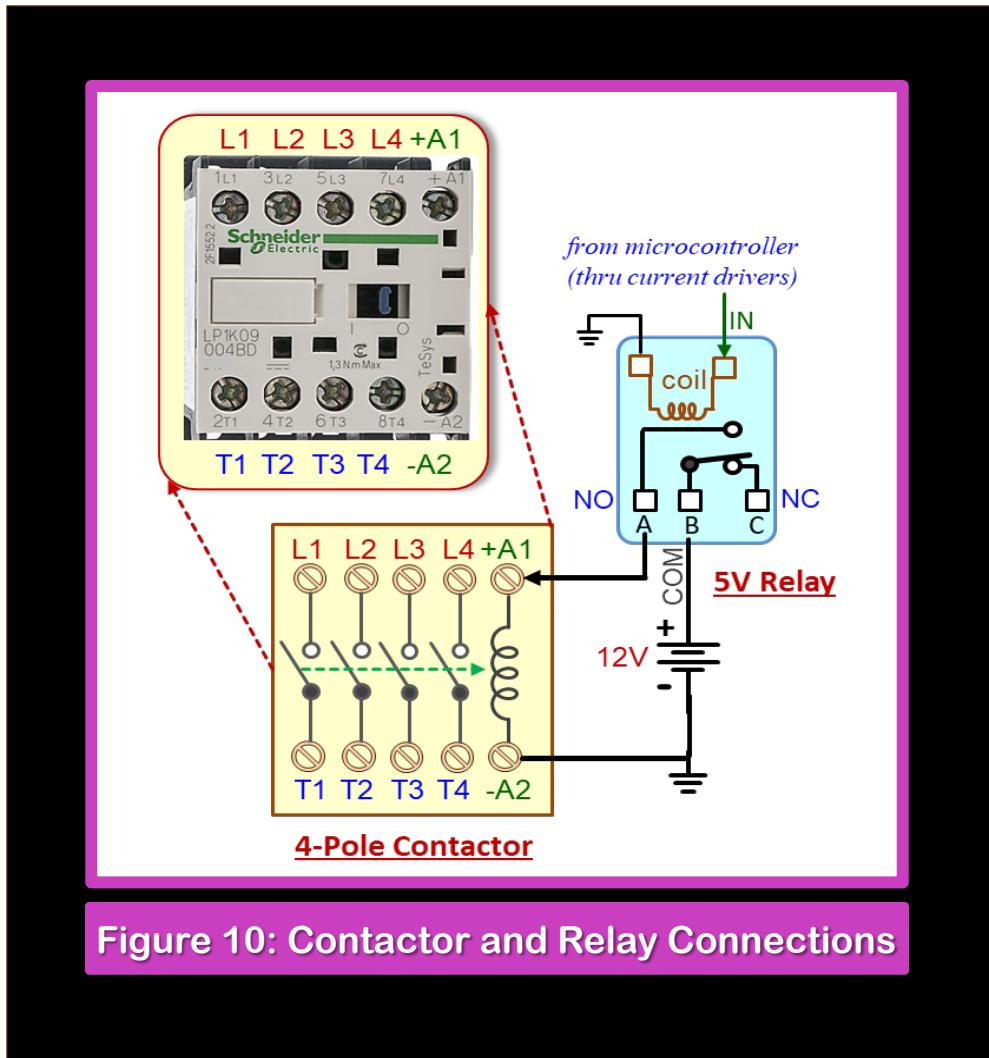


Figure 10: Contactor and Relay Connections

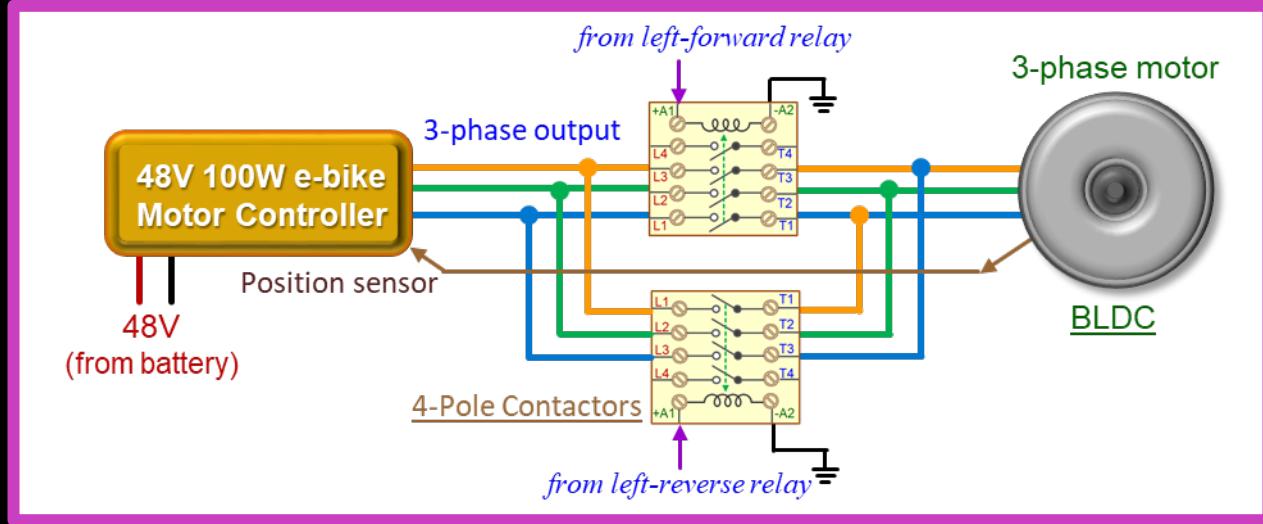


Figure 11: Motor Controller with Contactors for Bidirectional Rotation

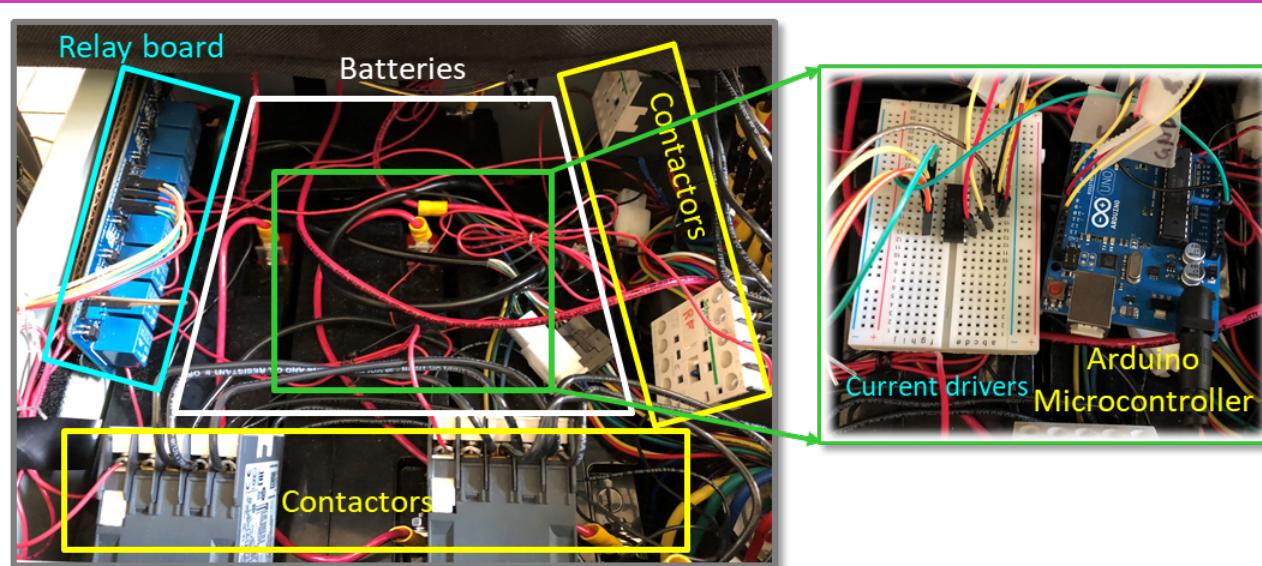


Figure 12: Complete assembled electrical system

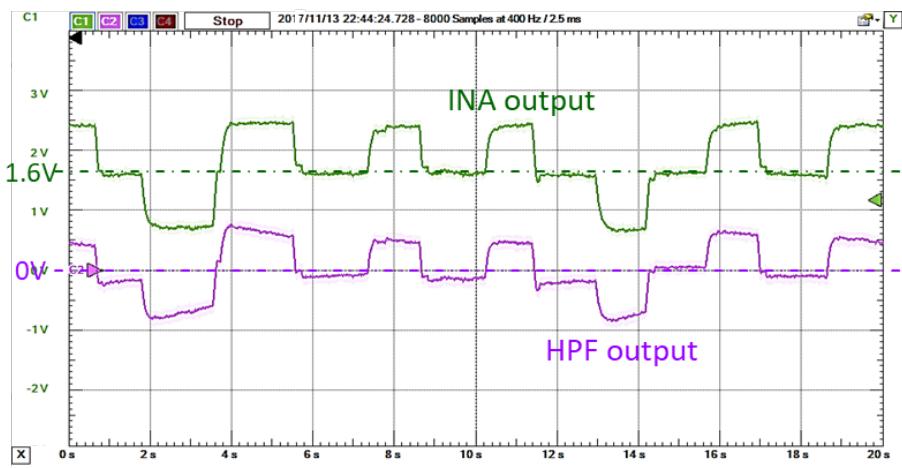


[[www.uniquemedsupply.com/mobility/wheelchairs/medline-k2-basic-wheelchairs-20593.html](http://www.uniquemedsupply.com/mobility/wheelchairs/medline-k2-basic-wheelchairs-20593.html)]

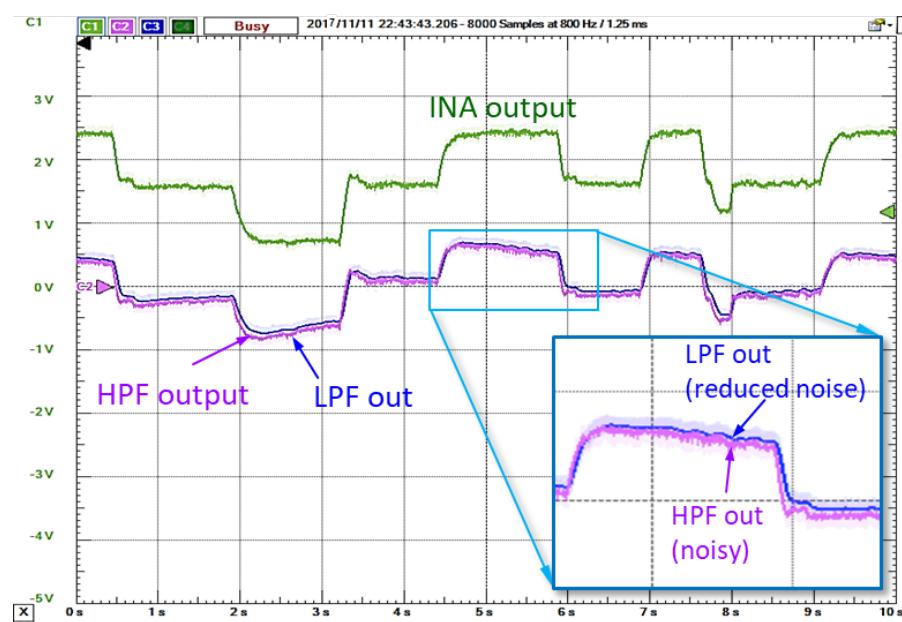
**Figure 13a: Basic Wheelchair**



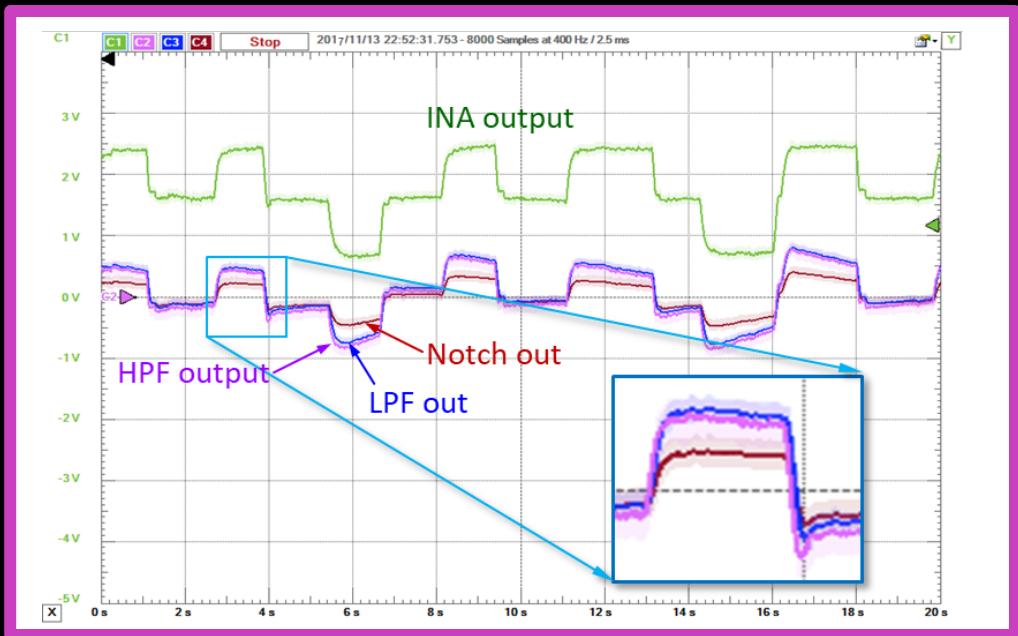
Figure 13: Retrofitted EyeMove Wheelchair



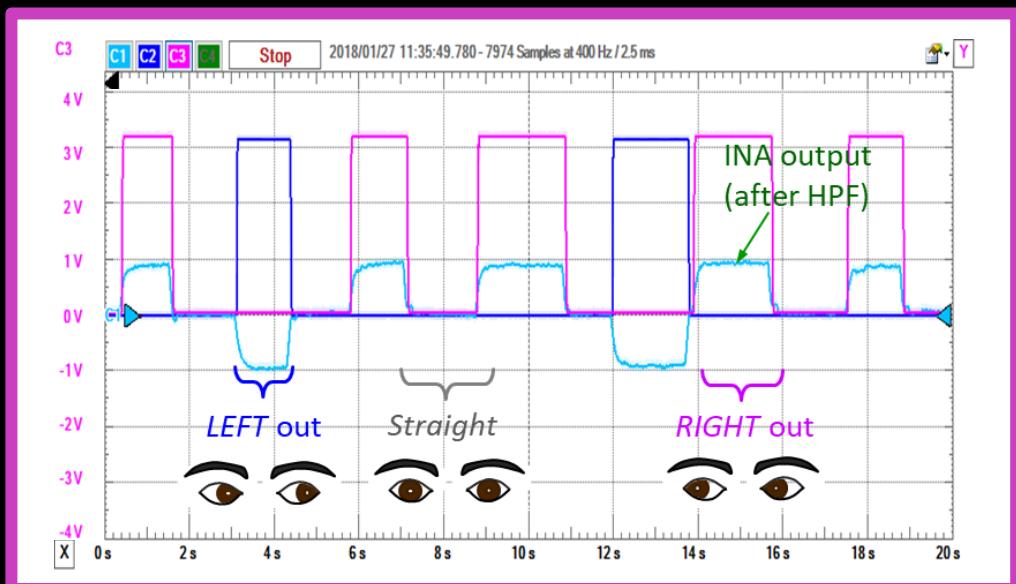
Plot 1: Outputs of the INA118 and DC Remover (HPF)



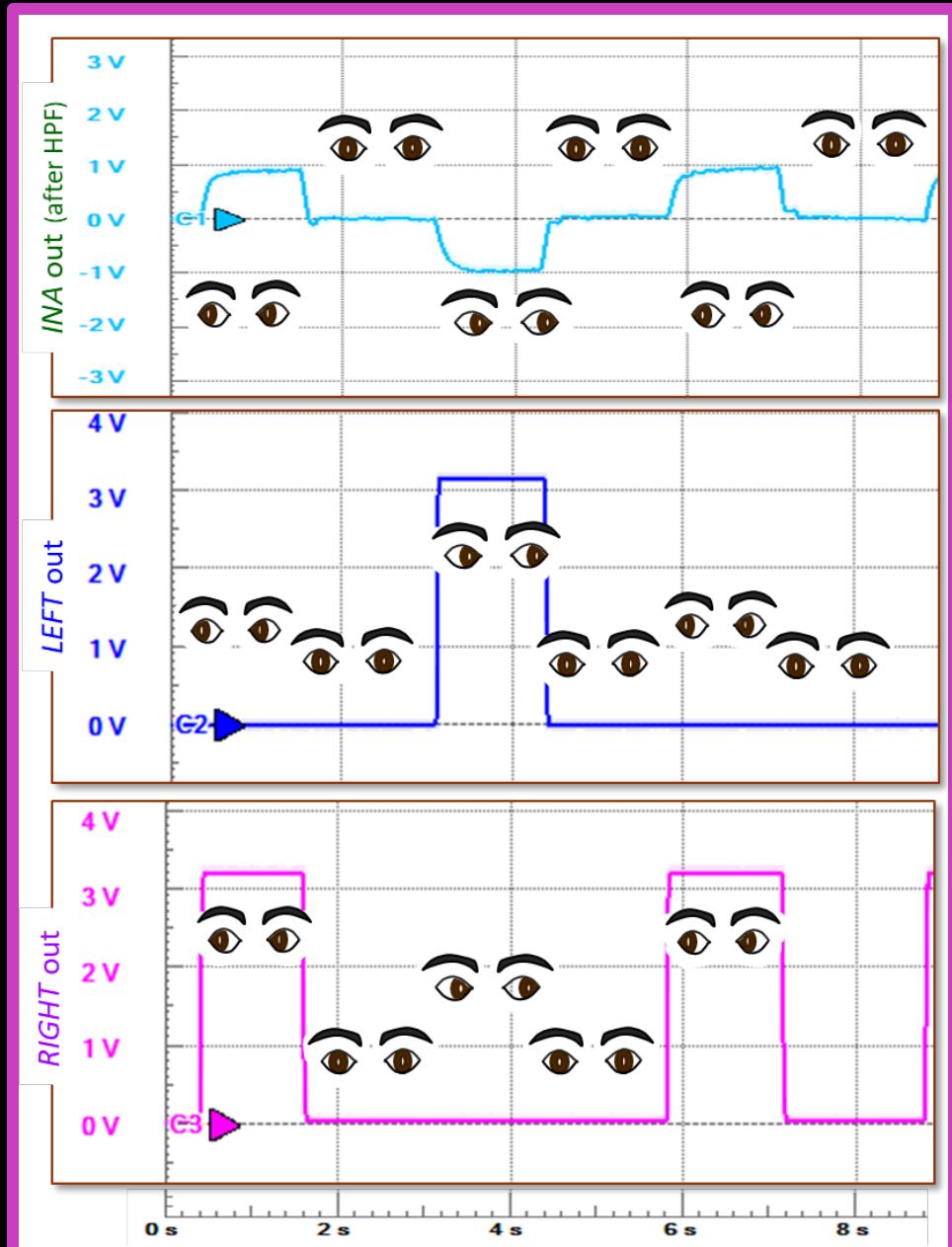
Plot 2: Outputs of the High-Pass and Low-Pass Filters



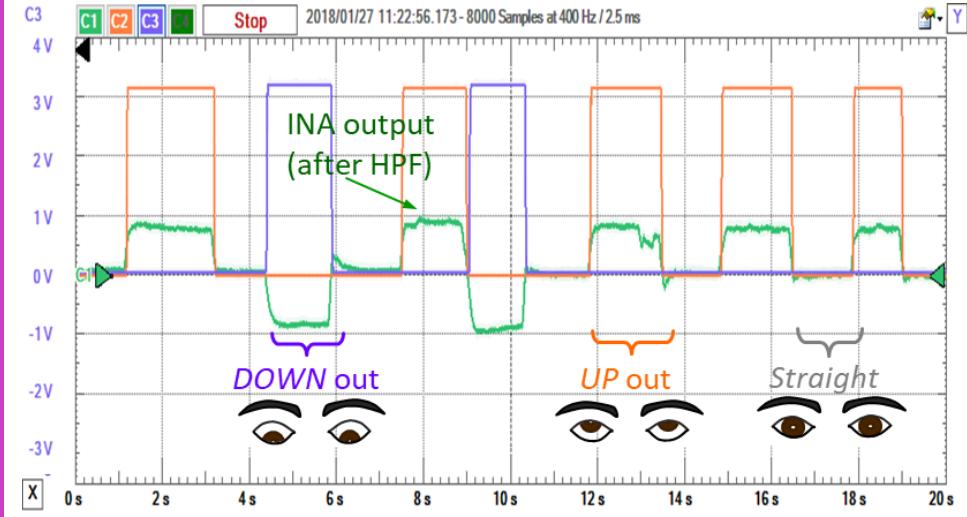
Plot 3: Outputs of the High, Low-Pass and Notch Filters



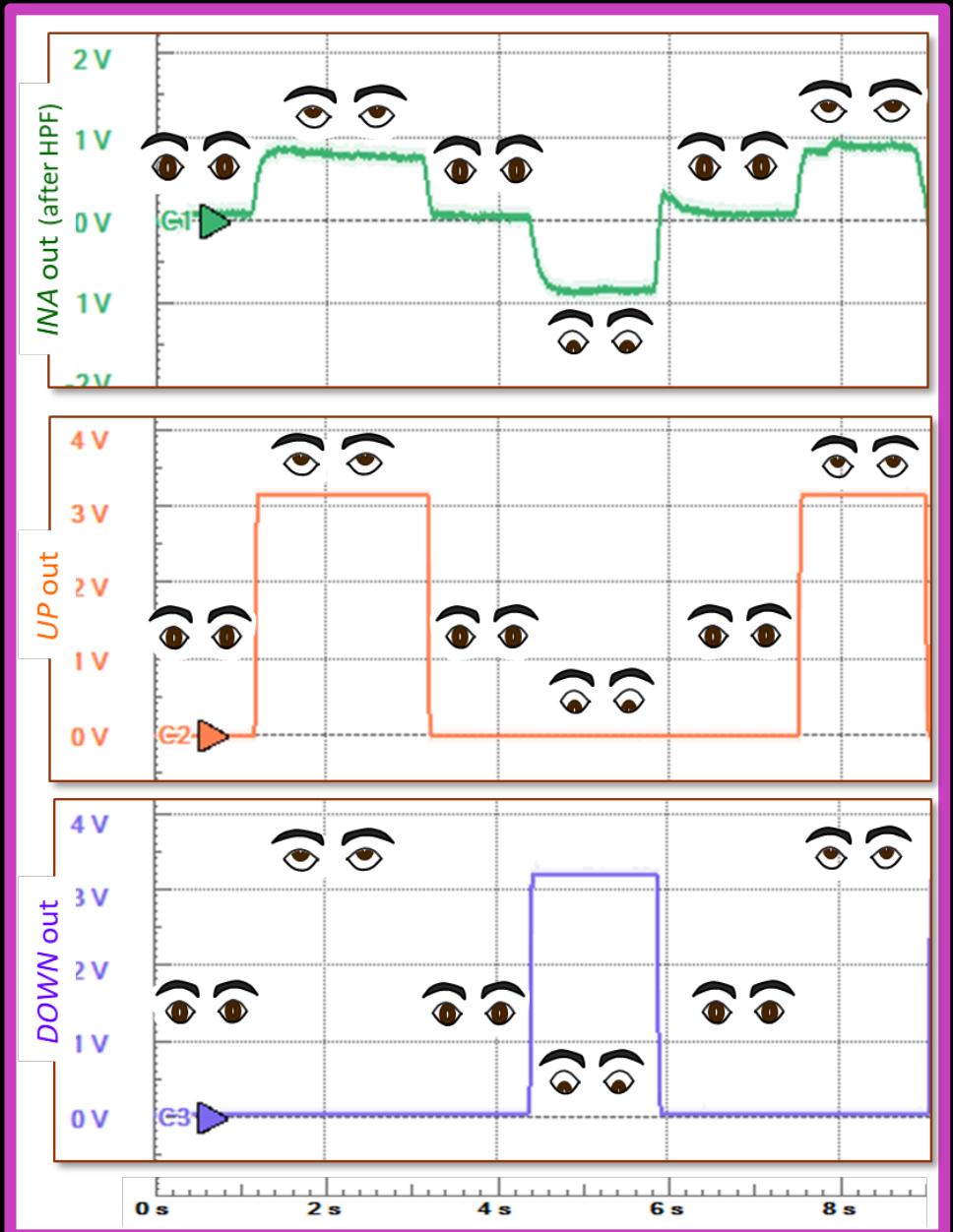
Plot 4: Horizontal Signal Chain Outputs: *Left* and *Right*



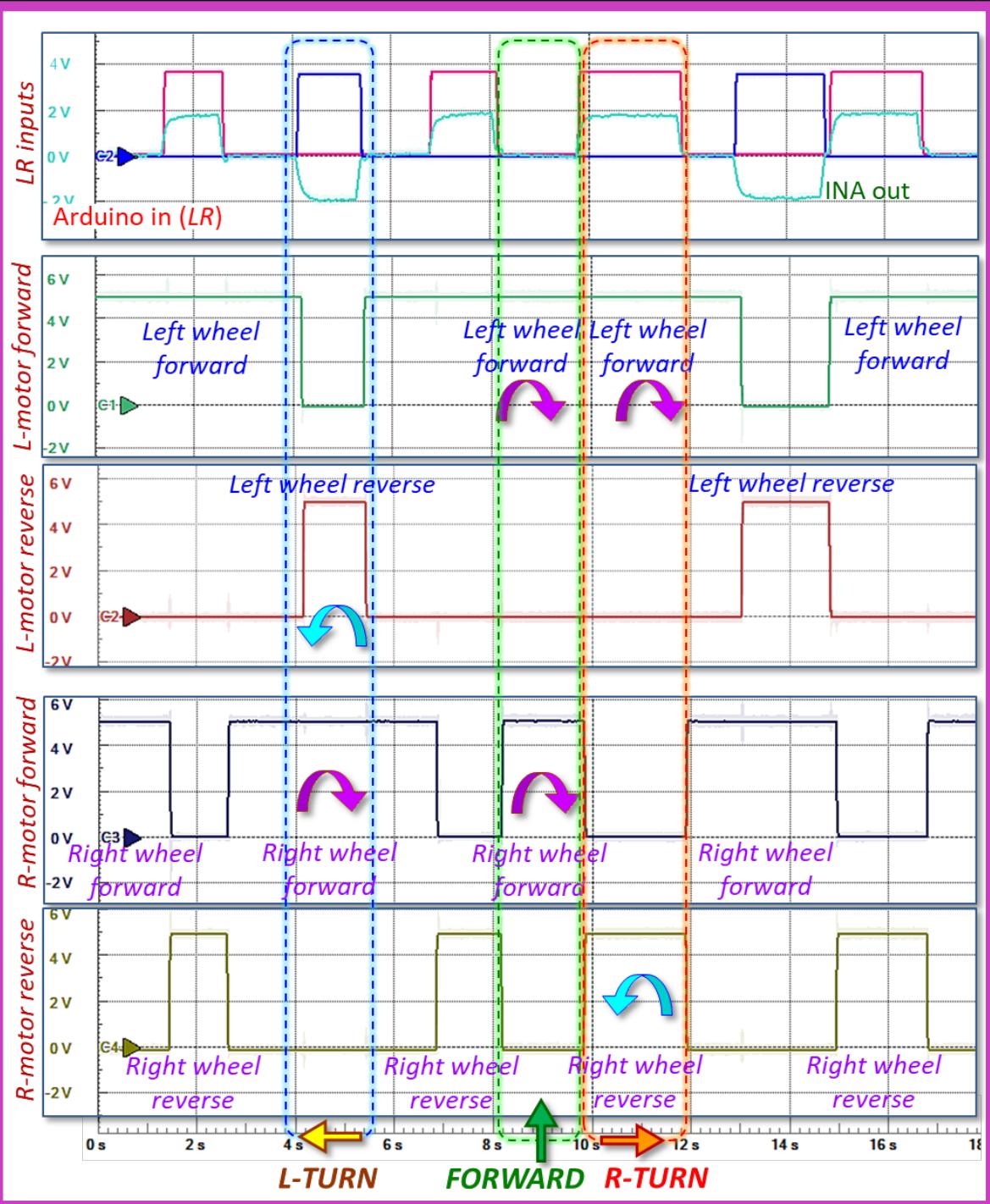
Plot 5: Left / Right Signal Outputs (*zoomed*)



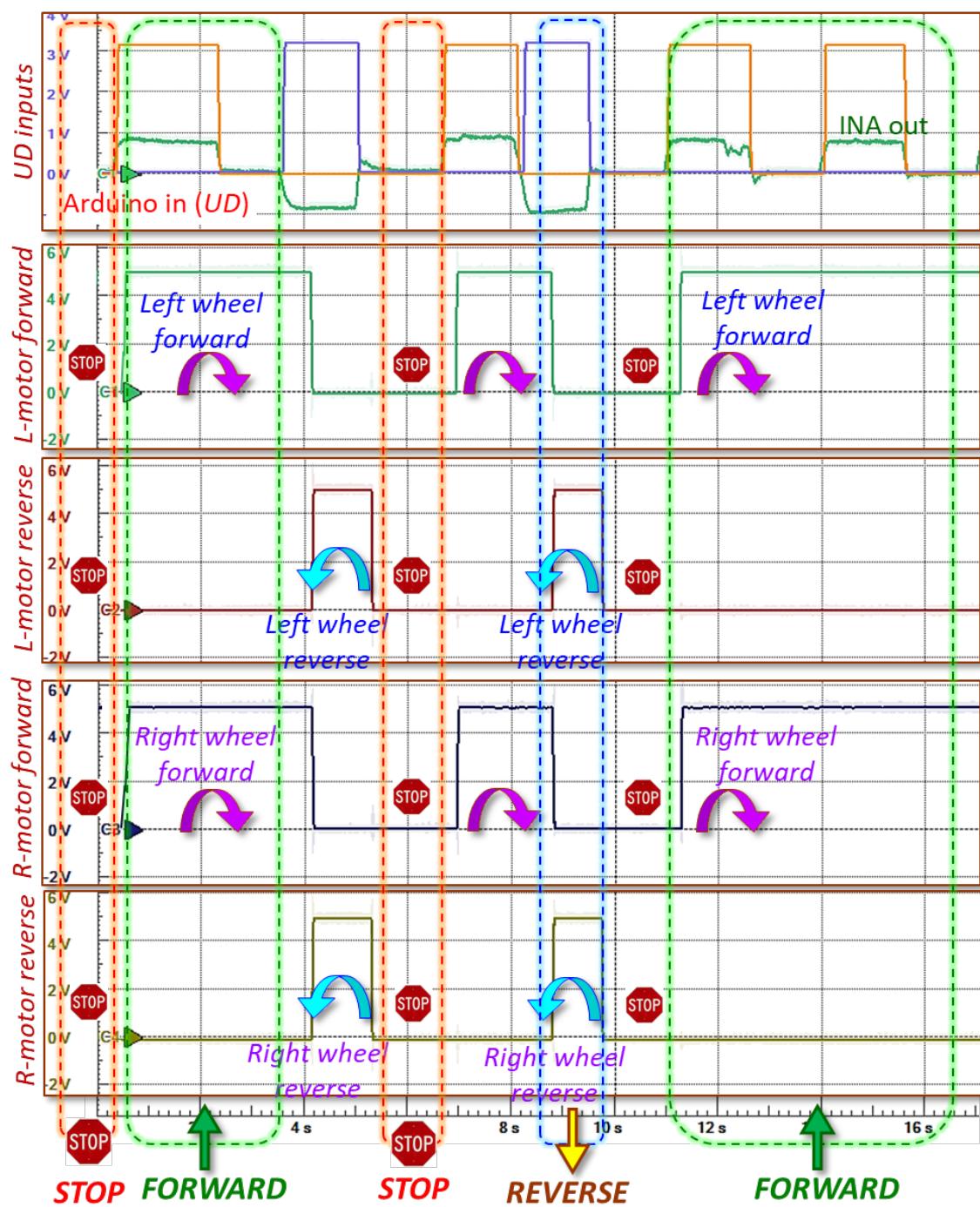
Plot 6: Vertical Signal Chain Outputs: *Up* and *Down*



Plot 7: Up / Down Signal Outputs (*zoomed*)



Plot 8: Motor Control Signals for Left / Right & Forward Motion



Plot 9: Motor Control Signals for Stop, Forward & Reverse Motion