

GRASPING BY ENRICH

ENRICH allows the user to carry out their daily activities by enabling them to perform grasping operation on a range of objects



DEVELOPED BY
Embedded Systems and Robotics Laboratory
Tezpur University



USER MANUAL

Say HELLO to the
FASTEST PROSTHETIC HAND

CONTACT US

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WHY ENRICH?

- Fast as a human hand
- Easy Interface
- Anthropomorphic
- Ergonomic Design
- Powerful Grasp
- Low Cost
- Light Weight

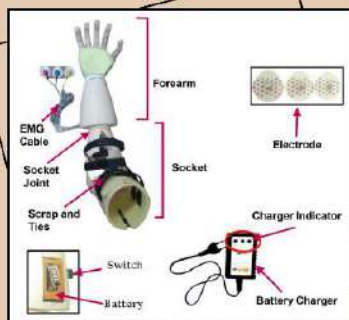
ENRICH

EMG CoNtrolled PRosthetic Hand

INSTALLATION

ENRICH is remarkably easy and convenient to use. The user has to learn only two steps to use this prosthesis viz. attachment of the electrode and charging the prosthesis. Detailed technical guidance is to be provided by the supplier during installation.

WHAT'S IN THE BOX



SAFETY

- Do not drop the ENRICH or attempt to disassemble it
- Ensure EMG cable on the electrode are properly plug in and place on the clean surface of the skin
- Ensure the strap and ties are securely tied on your residual limb to hold the socket

ENRICH is currently under pilot testing with known user. Intermediate steps to commercial production involves cosmetic modifications in it and technology transfer

Under the support of
I Hub Foundation for Robotics IITD
DST, Government of INDIA

TECHNICAL SPECIFICATIONS

Voltage	+5 V
Battery Capacity	3300 mAh
Maximum Current	2 A
Battery Type	7.4 v 2-Cell Lithium-Polymer
Full Closure Time	~250 milliseconds
Running Time	7 hours
Charging Time	2 hours
Number of EMG Channel	1
Number of Actuators	2
Weight of ENRICH	~500 gm

ENRICH can be charged on mains (220V AC) power through the charger provided in the package



Patent I : Application No. 201911045265.
Patent II Application No. 202131022736.
Design Registration I Application No. 363884-001.
Design Registration II Application No. 319557-0033.




CERTIFICATE OF APPRECIATION

This is to certify that **Mr. Subhankar Chakraborty** (Roll No: **ELB 14008**) and **Mr. Srikanth Baruah** (Roll no: **ELB14021**), students of B.Tech 8th Semester, Department of Electronics and Communication Engineering, **Tezpur University**, have successfully designed and implemented an IoT-based Fan Speed Controller for the Solar Dryer at our food industry, **Lahkar Udyog Pvt Ltd, Spring Valley group of Industries**, as a part of their B.Tech Major Project carried out under the guidance of **Dr. Santanu Sharma**, Professor, Department of ECE, Tezpur University.

Their dedication, technical expertise, and innovative approach have significantly contributed to enhancing the efficiency of our food drying process. We sincerely appreciate their efforts commitment to applying engineering principles to real-world industrial applications.

We wish them all the best in their future endeavours.

Date: 24th May 2025
Place: Tezpur


(Hemanta Kumar Lahkar)
Managing Director

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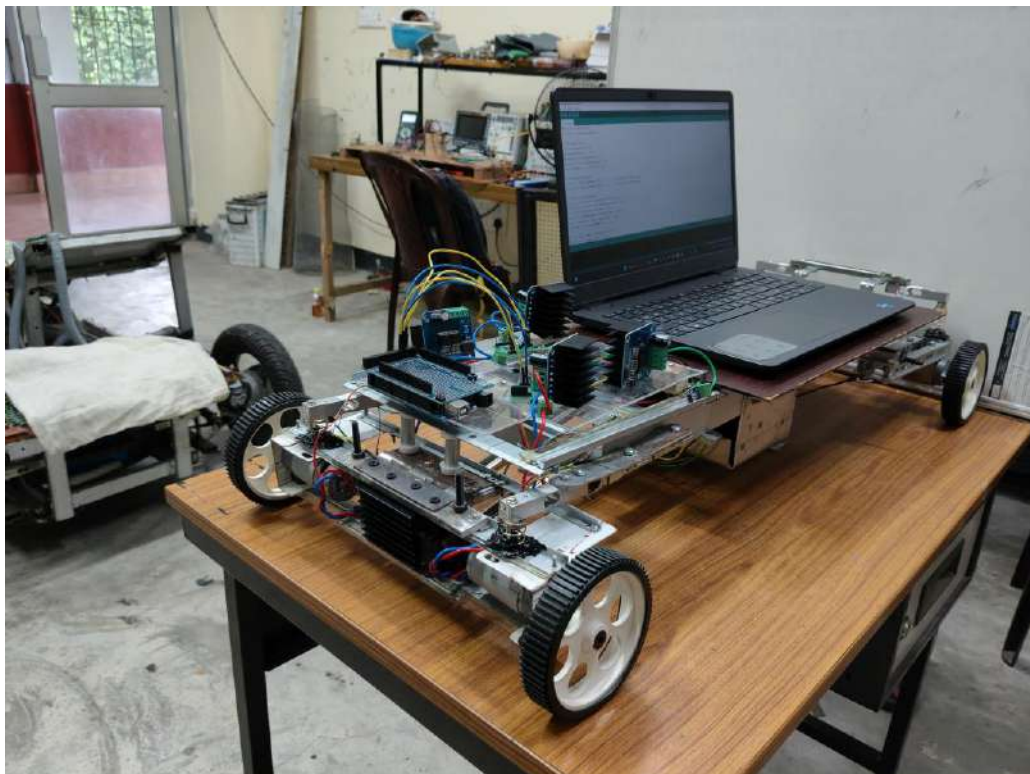
An automatic fabric cutting machine



Quarter car model inspired suspension test bench for analysis of damper dynamics



Battery Electric Vehicle (BEV) for Traction Control experiments integrated with a custom motor driver and sensors for performance monitoring



This prototype is a Battery Electric Vehicle (BEV) for Traction Control experiments and it integrates a motor driver and sensors for performance monitoring.



**Compact laptop Antenna Prototype for WiFi 6E,7,8 Quadruple
Band Applications**