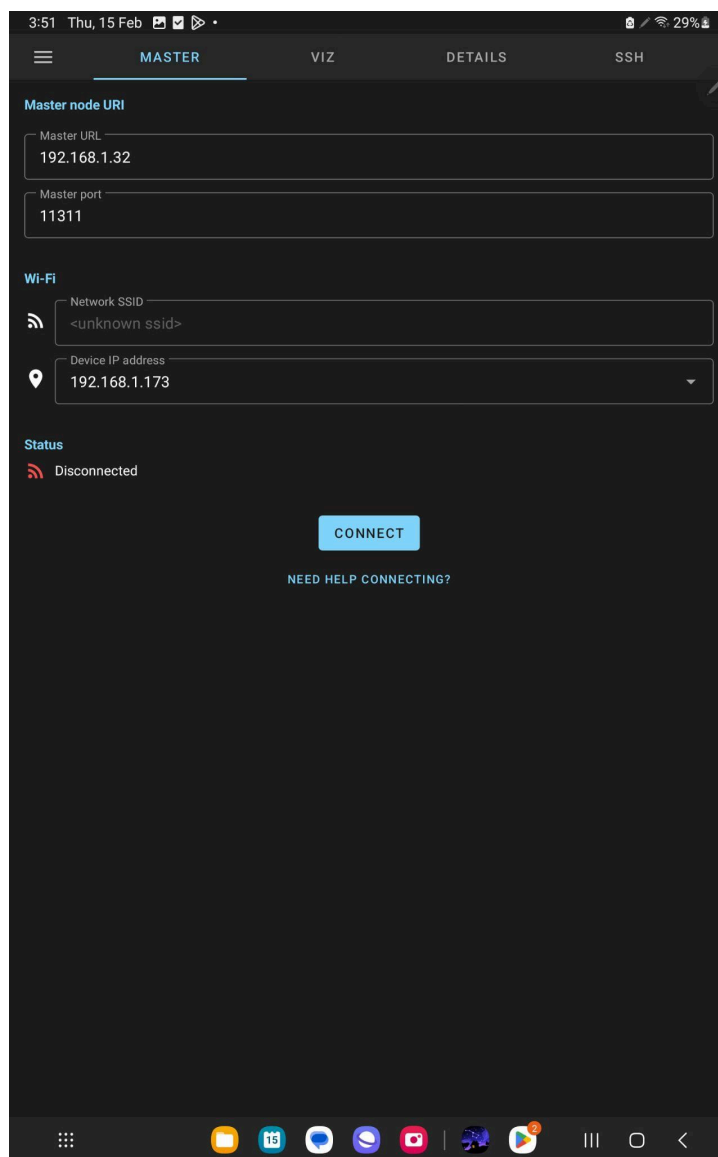


Operating Manual:

Connecting ROS Mobile App:

- 1) Check if the IP shown under Master URL is “**192.168.1.32**” and Master port is “**11311**”. If not, modify accordingly.
- 2) This Master URL is the IP address of the AMR connected to internet via WiFi
- 3) Once the Tab is connected to Wi-Fi, check if the device address is the same as “**192.168.1.173**”. If not, modify accordingly.



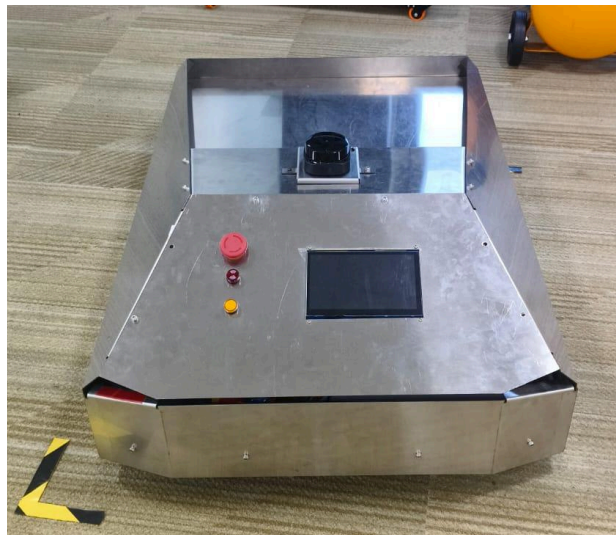
- 4) After cross-checking the IP, press the **Connect** button as shown above.
- 5) The **status** shown above will change to **connected**.

Manual Mode:

- 1) Engage the push button at the back of the AMR to supply power to the whole AMR (Red colour push button as shown in the image below).

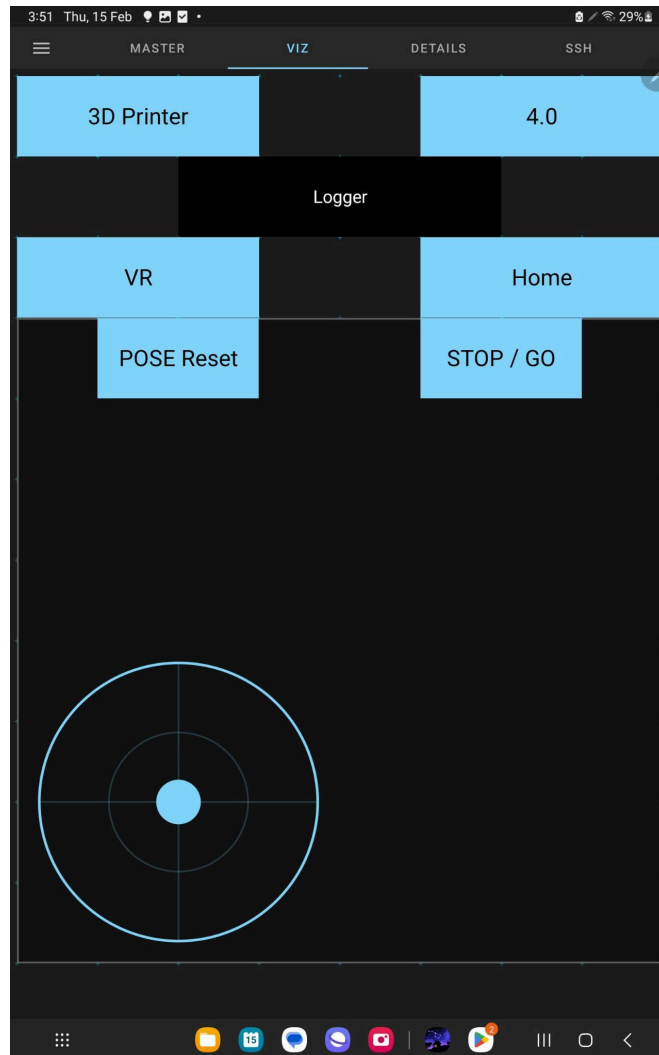


- 2) Check and dis-engage the kill switch (push button located at the front, as shown below).



- 3) Once the AMR is powered, Map of the working environment will be visible in the Rviz window.
- 4) Connect the **ROS Mobile app** with the AMR by clicking on the **connect** button available under the **Master tab** in the app. (as mentioned under ROS Mobile app)

- 5) Switch to the **Viz tab** to control the AMR manually using the Joypad as shown below.



Autonomous Mode:

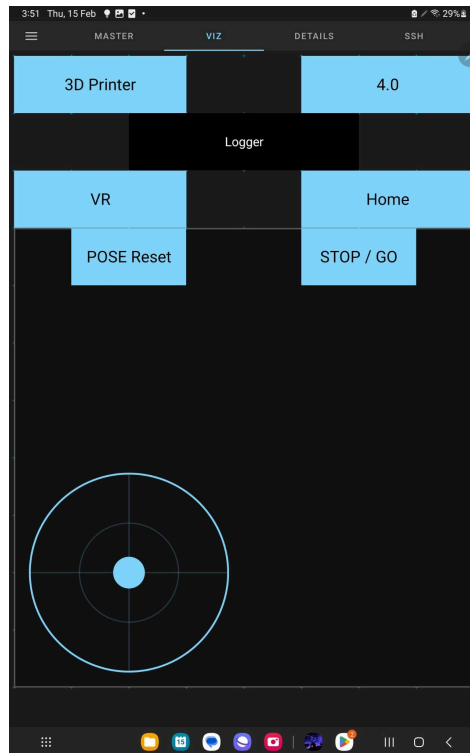
- 1) Engage the push button at the back of the AMR to supply power to the whole AMR.



- 2) Check and dis-engage the kill switch (push button located at the front).



- 3) Once the AMR is powered, Map of the working environment will be visible in the Rviz window.
- 4) Connect the **ROS Mobile app** with the AMR by clicking on the connect button available under the **Master tab** in the app.
- 5) Make sure that the AMR is kept at the **home position** before giving a goal for autonomous navigation.
- 6) Switch to the **Viz tab** to give goal location to the AMR.



- 7) Select any one of the 4 goal locations for the AMR to traverse to, autonomously as shown above.
- 8) Once the goal is given, the status switches from **OFF** to **ON** depicting that the AMR is in autonomous mode.
- 9) To stop the vehicle due to emergency, either manually engage the kill switch or use the kill switch mentioned under the Viz tab.

Emergency Stop:

- 1) To stop the vehicle due to emergency follow either of these steps,
 - a. Engage the kill switch located at the front of the vehicle as shown below.



- b. Press the **Stop / Go** button under the Viz **tab** to stop the AMR remotely.

