

RIT MSD - P17241 (APM)

Autonomous Operation Instructions

- Flip the **switch** under the seat from Tow to **Run**.
- Turn the **key** at the front of the cart.
- Press the **green button** above the key. **APM IS NOW DRIVABLE IN MANUAL!**
- Turn **red switch** (gives power to the whole back of the cart) in the back of the cart on.
- Flip the **steel switch** (power steering and breaking) up under the red switch.
- Press **power button** on the motherboard to turn the computer on.
- Flip the **tiny throttle switch** by the dues to auto.
- Remove the cover over the rooftop LiDAR.
- Login to the computer with the password: **kappa**
- Open a terminal and type in the following commands:
 - **roscore &** (hit enter after the & to type in another command)
 - **roslaunch apm_start apm_start.launch**
- To launch RQT type: **rqt** (I know right? Shocker!).
- To launch RVIZ type: **rviz** (I bet I'm blowing your mind here).
- **Click pose estimate** in RVIZ then click and drag approximately where the APM is located and oriented on the map.
- Drive around some manually until the red cloud of points is small and accurately portrays the APM's location and orientation.
- To give it a navigation goal, press the **2D Nav Goal** button in rviz and click and drag on a location. Dragging will make it want to face a certain direction.