Settings for integration of Marvelmind navigation system with Ardupilot

Version 2024.12.20

Marvelmind indoor "GPS" navigation system can work as a source of navigation data instead of regular GPS receivers for flight controllers like Pixhawk. This possibility is primarily helpful for indoor flights where regular GPS/GNSS is unavailable.

This package includes settings for Marvelmind mobile beacon and Pixhawk, allowing easy integration of the Marvelmind system with Ardupilot software. Successful integration means achieving "GPD: 3D fix" in the Mission planner or Qgroundcontrol software, which means that the flight controller accepts navigation data from the mobile beacon connected to it via UART.

In this package, you can find settings for the following versions of the Ardupilot software:

1. **Arducopter v4.5.7**
   Folder: "Arducopter_v4_5_7_settings".
   Testing date: 2024.12.18
   Tested flight controller: Pixhawk 4.
   The folder includes a "param" file of the flight controller settings and a screenshot of the required mobile beacon settings in the dashboard.

2. **Arducopter v4.2.2**
   Folder: "Arducopter_v4_2_2_settings".
   Testing date: 2022.07.30
   Tested flight controller: Pixhawk 4.
   The folder includes a "param" file of the flight controller settings and a screenshot of the required mobile beacon settings in the dashboard.

Notes:
- Before integrating with the flight controller and drone, ensure the mobile beacon's basic tracking is good. Bad tracking can cause a "No GPS" status even if all settings and wiring connections are correct
- Step-by-step approach – please study, understand, and follow to succeed with autonomous flight in the shortest time. Don't jump over the steps. Please