

## MINIMUM REQUIREMENTS

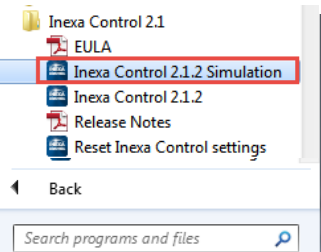
- Windows 7 Professional (64-bit), Service Pack 1; Windows 10 Pro (64-bit)
- Processor: Quad Core, 2.2 GHz, 6MB Cache
- Memory: 4GB DDR3 1600 MHz
- Graphics Card: 1GB GDDR5 Dedicated Memory
- DirectX 11.0
- Storage: 64 GB
- Display Resolution: 1280 x 1024 at 96 DPI

## REQUIRED RESOURCES

- INEXA Control Software Installed and licensed
- ArduCopter Plug-In Software Installed
- ArduCopter Simulation Software Installed
- Online Map Service: Broadband Internet Connection
- Offline Map Service: ESRI ArcMap 10.1; Broadband Internet connection for creation of offline maps from online sources within INEXA Control.

### 1. Launch INEXA™ Control

#### 2.1.2 Simulation



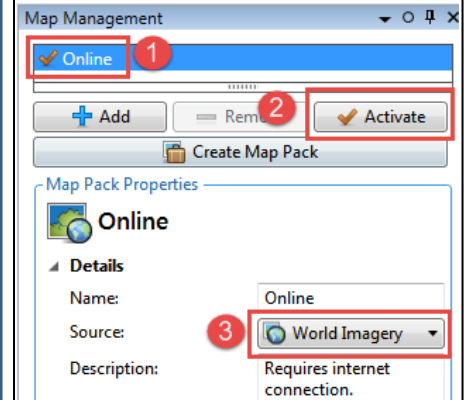
### 2.1 Loading Maps

From INEXA Control, **click** to select the **map tab**, then **click** to select Map Management from the Map Tools tab.

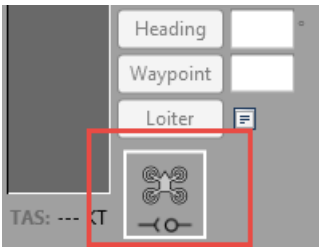


### 2.2 Loading Maps

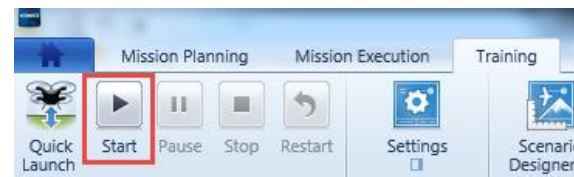
From the Map Management pane, **click** to select the **Online map**, then **click** the **Activate** button. In the **Source** section, **click** to select desired map (such as **World Imagery**) from the drop-down menu.



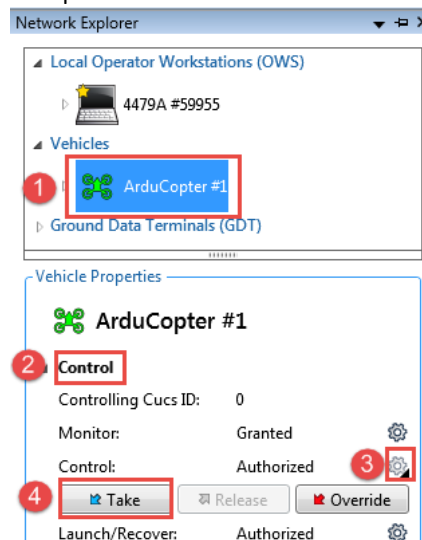
3. On the bottom left, **click** to select the **ArduCopter** icon.



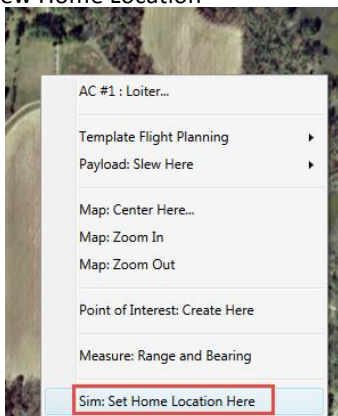
5. From the Training tab, **click** to select the **Start** button to start the simulation.



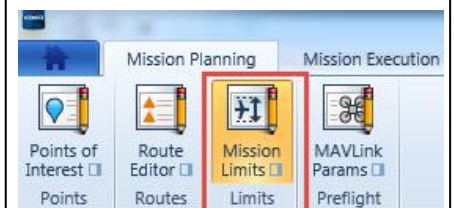
6. From the Network Explorer, **click** to select **Arducopter**, **click** to expand **Control**, **click** cog to expand options, and **click** "Take" to take control of the Arducopter.



4. **Click map** and **zoom** to the desired launch location. **Right click** on the map and select **Sim: Set Home Location Here** to set a new Home Location

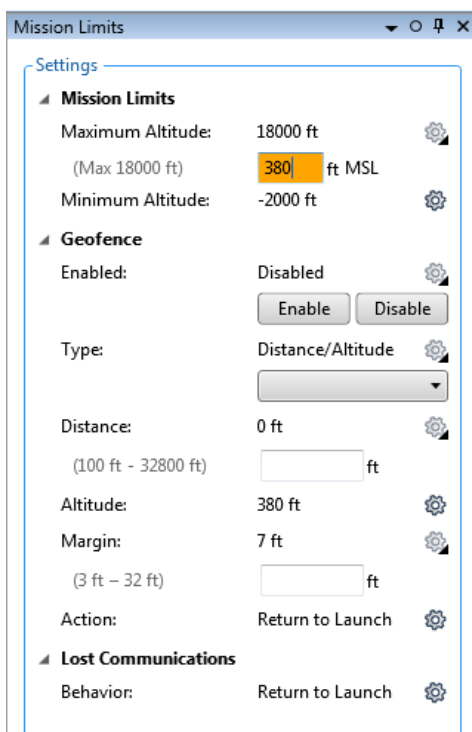


7. From the Mission Planning Tab, **click** to select the **Mission Limits** button



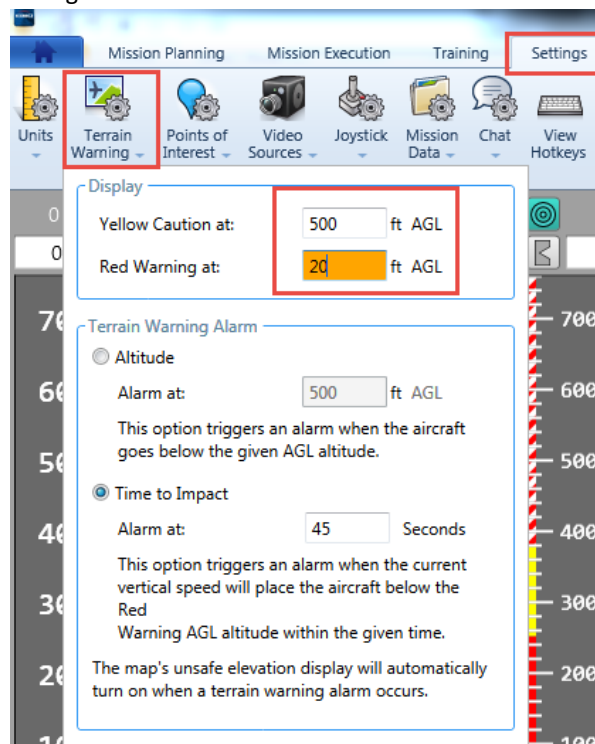
**8.** From the Mission Limits Pane, **click cogs** to set desired values for Mission limits, Geofencing, and Lost Communications.

**IMPORTANT:** Throughout INEXA Control, as new values are entered, the text box changes color to orange. The new value is **NOT applied unless the enter button is pressed on the keyboard** to submit the new value.



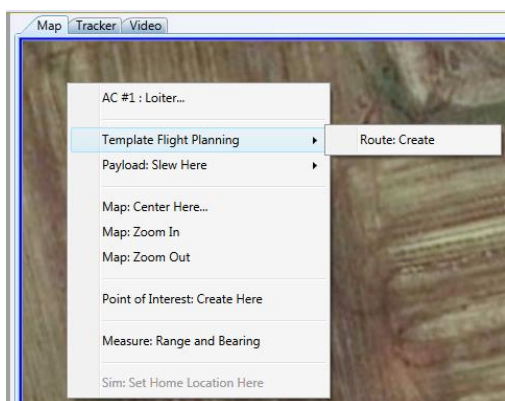
**9.** From the Settings Tab, **click** to select **Terrain Warning** and enter desired terrain warning and alarms.

**IMPORTANT:** Yellow warning must be at least 50 feet greater than the Red Warning.

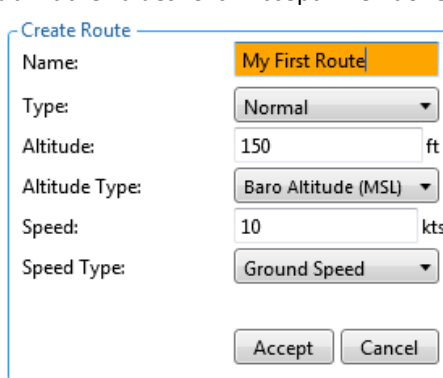


Map will use aircraft's current altitude and DTED in use to display red or yellow overlays on the map to visually represent warning areas. Terrain on map will display red or yellow whenever current

**10.** To create a flight route, **right click** on the **Map** and select **Template Flight Planning > Route: Create**



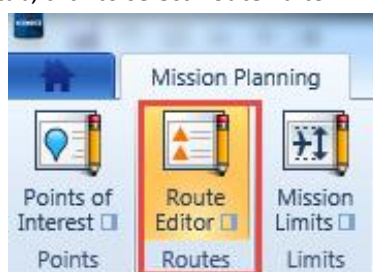
**11.** Enter desired flight parameters and ensure to press the enter button to submit the values. Click Accept when done.



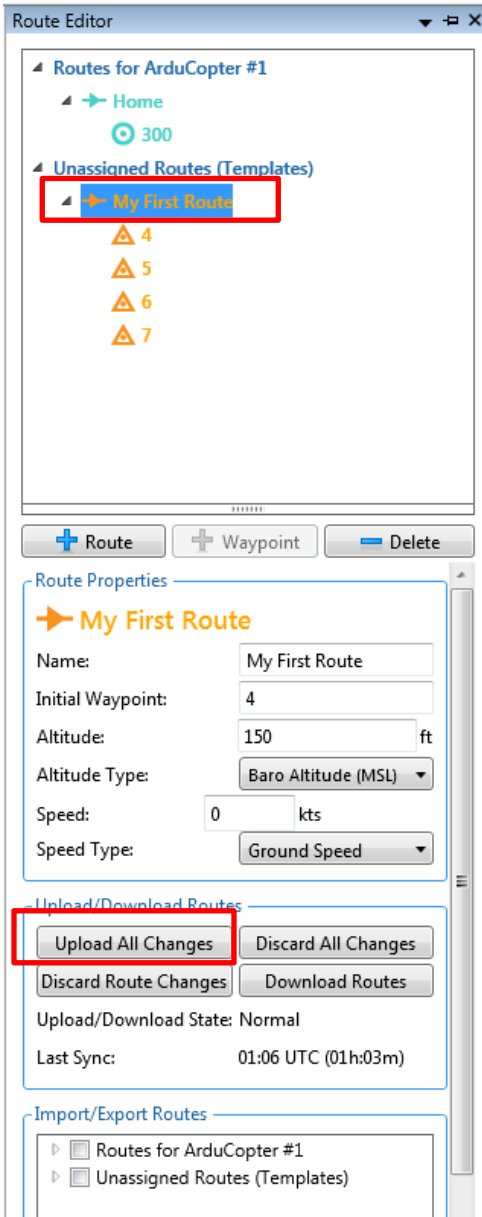
**12.** Mouse cursor switches to a triangle. Left-Click to draw desired route on map. Click the **Esc** button to complete the route.



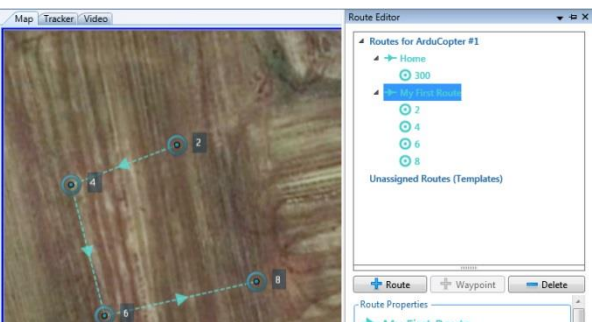
**13.** From the **Mission Planning** tab, click to **select Route Editor**



**14.** From the **Route Editor** pane, notice the route name under Unassigned Routes (Templates). **Upload** this new route to the ArduCopter by **clicking the route name** and then **clicking Upload All Changes**. The new route will change colors from orange to magenta and will change again to cyan when successfully uploaded to the ArduCopter.



**15.** Notice the route is now shown in cyan color on both the map and the Route Editor pane.

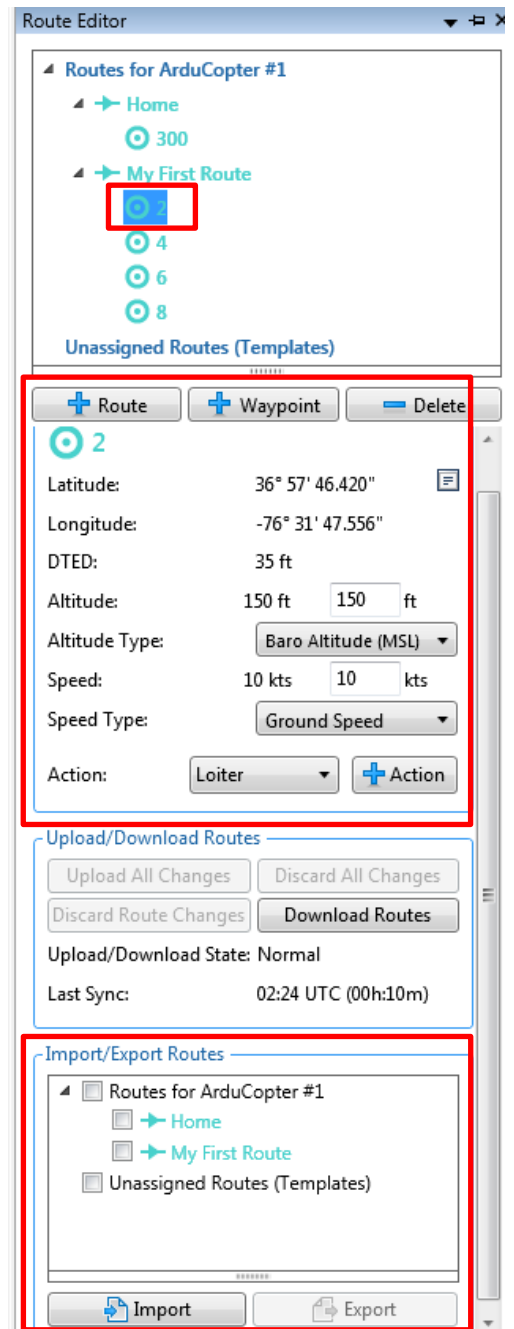


**16.**

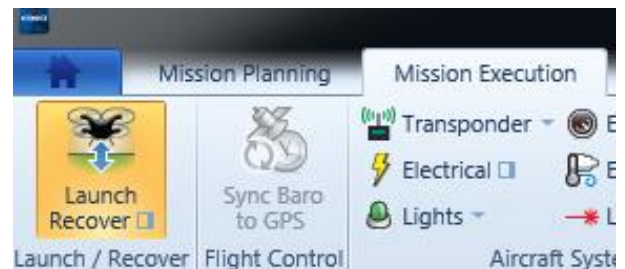
From the Route Editor pane, **click any waypoint** to change the properties or assign actions for the ArduCopter to perform (Loiter, Payload, and Vehicle Specific). Also, add and delete routes and waypoints as desired.

**IMPORTANT:** Ensure all changes that are made are uploaded to the ArduCopter and are reflected by the cyan color.

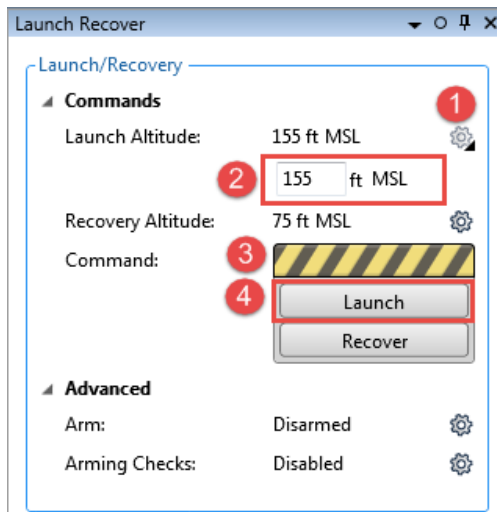
Optionally Import/Export routes for future use as desired.



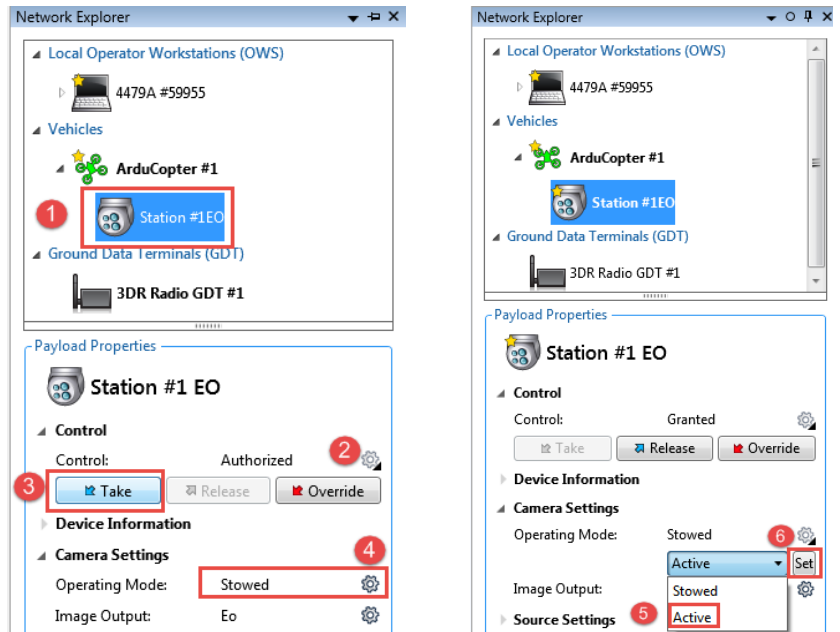
**17.** From the **Mission Execution** tab, click **Launch Recover** to display the Launch Recover pane.



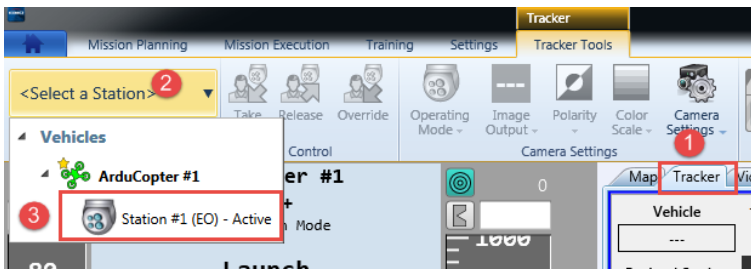
**18.** From the Launch Recover pane, click the cog for **Launch Altitude** and set desired launch altitude. Ensure to press enter to submit the value. Click the yellow and black warning tape to temporarily unlock Launch/Recover controls, and then click **Launch**.



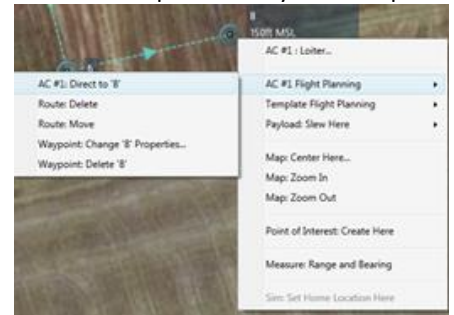
**19.** To view video from the camera: From the **Network Explorer** pane, click to **expand ArduCopter** and click to **select Station #1EO**. Under **Payload Properties**, click to **expand control**, click cog to **expand properties**, and click **Take** to take control of camera. Click to **expand Camera Settings** and click the cog to change **Stowed** to **Active**. Click the **Set** button to set operating mode to Active.



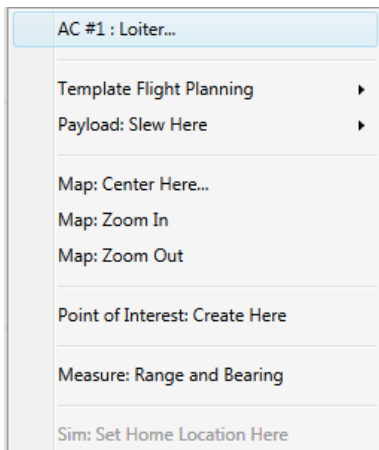
**20.** Click on the **Tracker** display tab, click **Select a Station**, then select **Station #1 (EO) Active**. The video from the camera should now show on the tracker display. In any flight mode except Launch/Recover, **Left-Click** within the tracker to change where the camera is looking.



**21.** To manually direct the Arducopter to the route created earlier, click on the **map tab**, right-click one of the waypoints, and direct the Arducopter to the point. The Arducopter will continue along the route and perform any actions specified along the way.



**22.** Additional options are available by right-clicking on the map, such as specify the Arducopter to Loiter, Slewing the camera payload to focus on a particular point, creating Points of Interest, and Measuring Range and Bearing.



**23.** To recover the Arducopter, click the **yellow and black caution tape**, then click the **Recover** button on the **Launch Recover pane**. The Arducopter will ascend to the specified Recovery Altitude (if currently below recovery altitude), return to the home location, and land on the ground. If Arducopter is already above recovery altitude, it will not descend in altitude until it is back at the home location.

