

Plex Horizon

Technical Specification

Author

Abhijit Gite

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Current Specification (version: 1.0.0)

Item	Description																								
List of Screens	<table border="1"><thead><tr><th>S/N</th><th>Screen</th><th>Description</th></tr></thead><tbody><tr><td>1</td><td>Command</td><td>Combined operations map, remote ID</td></tr><tr><td>2</td><td>Connectivity</td><td>Telecom Signal Map</td></tr><tr><td>3</td><td>Payload</td><td>Video Stream from payload camera</td></tr><tr><td>4</td><td>3D view</td><td>3D flight visualisation</td></tr><tr><td>5</td><td>System</td><td>System status (Network, Cloud services)</td></tr><tr><td>6</td><td>Control</td><td>Pilot console with HUD</td></tr><tr><td>7</td><td>Map</td><td>Flight Plan map</td></tr></tbody></table>	S/N	Screen	Description	1	Command	Combined operations map, remote ID	2	Connectivity	Telecom Signal Map	3	Payload	Video Stream from payload camera	4	3D view	3D flight visualisation	5	System	System status (Network, Cloud services)	6	Control	Pilot console with HUD	7	Map	Flight Plan map
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List of Features	<ol style="list-style-type: none">1. Combined Flight Operations2. Remote ID and flight management3. Telecom signal map4. Real time video analytics5. Deep learning computer vision6. 3D flight visualisation, planning7. 2D flight plan8. Meteorological weather9. UTM and airspace management10. DAA (detect and avoid system)11. Live Telemetry from drone12. Complete remote ground control system13. Network Switching14. Emergency Landing15. Constant system health reporting16. Dynamic Flight approval17. Multiple Pilot support18. Face Detection and Crowd counting																								

List of Flight Modes	<ol style="list-style-type: none"> 1. Auto mission 2. Manual control
List of Failsafe Modes	<ol style="list-style-type: none"> 1. Automatic backtrack to land 2. Selective backtrack to land 3. Land Now
List of Warning Messages	<ol style="list-style-type: none"> 1. Battery Low (50%) 2. Battery Critical (30%) 3. Insufficient Satellites (< 6) 4. Bad HDOP (> 2.0) 5. Error Compass Variance (> 15°) 6. Obstacle within 50m front (separation provision) 7. Obstacle within 15m front / back / side (collision avoidance) 8. Command not authorized (pilot did not sign in)

Recommended and Supported Dependencies

Computer & Peripherals	Pilot Console Desktop Computer		
	Type	Recommended Specifications	Minimum Specifications
	CPU	Intel® Core™ i7 (Gen 7 and above) or equivalent	Intel® Core™ i5 (Gen 4 and above) or equivalent
	RAM	16 GB	8 GB
	Storage	SSD, 20GB free space	SSD, 2GB free space
	Input	Keyboard Mouse	
	Web Cam	USB Camera 1080p	Any camera 1080p
	Graphics Card	Nvidia GeForce RTX 2070 or equivalent At least 3 outputs from graphics card	Nvidia GeForce GTX 1050 or equivalent At least 3 outputs from graphics card
	Accessories	3 cables with display port Power Strips (2(with 5 outputs each)) LAN Cables (1)	
	HOTAS	<i>Not available in this version</i>	
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Operating System	Windows 10, Ubuntu 18.04																									
Programmes	Google Chrome (80.0.3987) Installation provided as a service																									

Internet Connectivity	At least 5 Mbps per video stream (total at least 10 Mbps dedicated)
Power Interface and Consumption	240V / 50 Hz Type G (British) Socket TV Wall Desktop: Stable supply of at least 800W Pilot Console Desktop: Stable supply of at least 600W
UPS	Minimum 1500VA UPS, recommended 3000VA

Future Specification Draft

Version x.y.z

Item	Description	ETA (Date)

Hardware Requirements

Computer & Peripherals	
Monitors & TVs	
HOTAS	https://www.amazon.com/ThrustMaster-2960720-Thrustmaster-Hotas-Warthog/dp/B00371R8P4

Past Specification Archives

Version x.y.z

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