ARTAK
Augmented Reality Tactical Assault Kit

Windows Desktop Version 1.6.1.0

User Manual

eolian

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ARTAK

Basic Controls

Selecting Objects and Icons
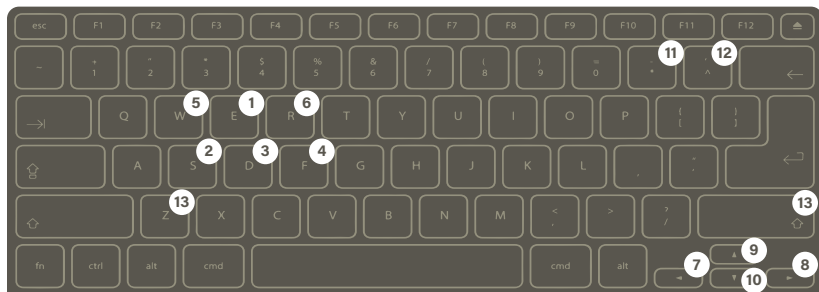
Press/grab/click objects and icons to interact with them

Map Movement

⚠️ HoloLens uses hand gestures for direct manipulation of holograms. For more information visit https://learn.microsoft.com/en-us/windows/mixed-reality/design/direct-manipulation

Key Board

Number	Key	Description
1	W	Move camera orientation forward
2	A	Move camera orientation left
3	S	Move camera orientation backward
4	D	Move camera orientation right
5	Q	Move camera orientation down
6	E	Move camera orientation up
7	►	Orbit left (Double tap to toggle orbit, tap to stop)
8	◄	Orbit right (Double tap to toggle orbit, tap to stop)
9	▲	Orbit up
10	▼	Orbit down
11	-	Decrease Orbit Speed (Decreasing below 1 will stop current orbit action)
12	=	Increase Orbit Speed (Max 5x)
13	Shift	Double camera orientation speed

Mouse

Left Click
Move selected object (Will move live map surface)

Double click and hold to scale object up and down. (For objects that allow scaling)

Left Click + Right Click
Rotate selected object

Left Click + Scroll Wheel
Live Map only - zooms map surface

Scroll Wheel
Move Camera towards and away from map

Right click
Rotate camera

Menus

Open/Close Menus
Click the > button in the bottom left hand corner to open the Home Menu

Click < to close the Home Menu

Click back arrow to return to previous menu or "x" to close out

Scroll a Menu
Click the scroll bar and move up/down or side-to-side

Start Up

ⓘ Ensure that status symbols in the
   top right corner are green

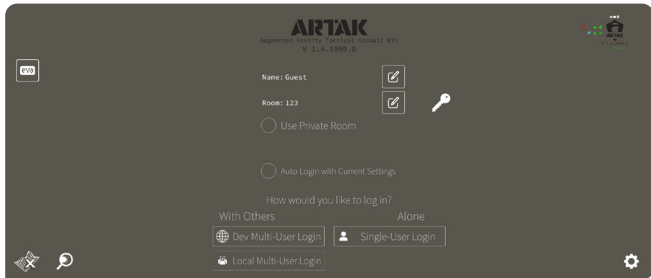| Icon	ToolTip/Function
	Internet Green - Successfully Connected to Internet Red - Could Not Connect to the Internet
	Multi-User Green - Multi-User Active and Connected Yellow - Single-User Mode Active Red - Multi-User Not Connected
	Network Green -Device Connected to a Network Red - Device Not Connected to a Network
	Server Green - Successfully Connected to Server Red - Could Not Connect to Server

Login
Screen

ARTAK
Augmented Reality Tactical Assault Kit
V.1.4.1999.0

Name: Guest

Room: 123

◯ Use Private Room

◯ Auto Login with Current Settings

How would you like to log in?

With Others   Alone

⊕ Dev Multi-User Login   👤 Single-User Login

📷 Local Multi-User Login

ⓘ Check the Use Room Password if you would like your room to be protected by a password
Check Auto Login with Current Settings if you wish to bypass the Login screen next time
How would you like to log in - Click to join a Multi-User or Single-User room

Icon	ToolTip/Function
eva	**Eolian Virtual Assistant (EVA)** Click on the icon in the Login Screen to toggle EVA on/off EVA will walk you through syncing an anchor, becoming main presenter, opening a map, and spawning nodes
✎	**Edit username** This is the name that will appear in the room **Edit room name** Allow others to join using the same room name

Icon	ToolTip/Function
	Open partition key panel Setting partition keys will lock all data created in a room using keys behind those keys.
	Clear Spatial Mesh Clears spatial mesh data
	Open Debug Panel Shows a log of warnings, errors, stack trace, and full debugging Shows Photon Stats
	Network Settings Panel click to open network settings panel

Network Setting Panel

Offline Mode
Operate the application independent of all networking

By toggling on you will no longer have Internet options

Allow Internet
Will allow the app to connect to the Internet

Server Connection Type

Cloud - Connects to Eolian's cloud sever. (Requires Internet)
CANN - Connects to a CANN on this device's LAN
Custom - Connects to the specified IP Address

Single-User Mode

App will operate normally but with no Multi-User Functionality

Multi-User Connection Type

Cloud - Connects to Internet Multi-User service running on a Cloud
CANN - Connects to the Multi-User service running on a CANN
Custom - Connects to the specified IP Address

Refresh

Force Application to recheck current network settings

Home Menu

(i) If there is no map selected, the Map Menu icon will not appear

Icon	ToolTip/Function
	Map Selection Choose from a selection of maps
	Mission Plans Menu for creating, loading, and deleting mission plans

Icon	ToolTip/Function
	Save a Mission Plan Plan a mission, then press create to get to save panel Enter a save name, then save to cloud or save to local file **Load a Mission Plan** Choose from saved mission plans, then press load
	Control Panel Menu for enabling and disabling other users controls Ability to take control over the room so other users aren't able to manipulate anything.

Home Menu

Icon	ToolTip/Function
	HMD Syncer Menu for syncing this devices virtual content to the real world location Choose between spatial anchors or image tacking
	User List List of all users in the multi-user session as well as control over various user settings Toggle mute users/mute all Toggle disable all controls
	App Settings Menu containing basic map settings

Icon	ToolTip/Function
	Map Menu Menu containing settings and controls for the current map

Settings

Icon	ToolTip/Function
	Open debug panel
	Clear spatial mesh

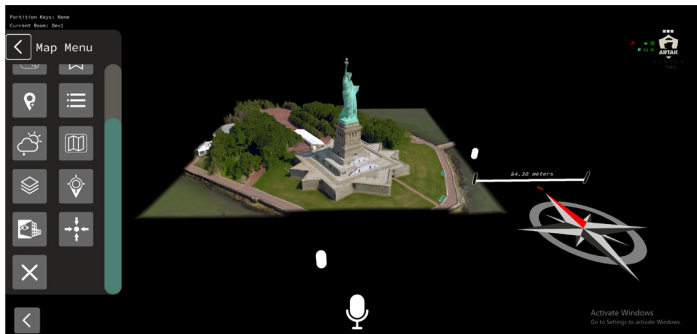| Icon	ToolTip/Function
	Open audio settings panel Mute Self Master Volume SFX Volume AI Voice Volume VOIP Volume
	Recenter visual data to the virtual world center
	Recenter the visual data in front of you
	Exit the room and return to the login screen

Map Menu
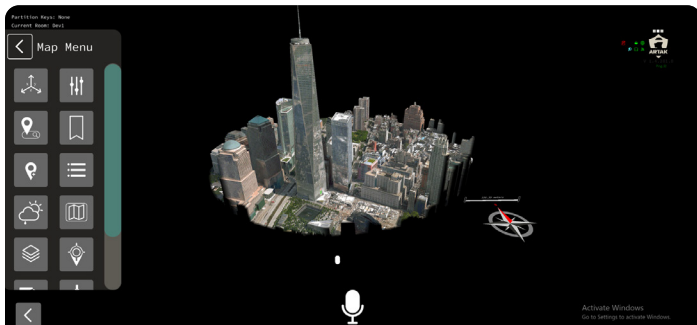
ⓘ Location Search and Bookmark icons will only appear in live maps

Icon	ToolTip/Function
	Map Manipulator **Manipulate map via UI controls**
	Location Search Enter a location to center the map over Use Lat/Lon, MGRS, or type a location to search for a location
	Bookmark Load and create location bookmarks
	Node History Choose a historical time window to view live data

Icon	ToolTip/Function
	Map Settings
	Gives you the right Lat/Lon or MGRS
	Toggle contour lines, node labels, map labels, node directional
	Able to lock/unlock the map
	Able to lock/unlock all (nodes, routes, map)
	Toggle map shape from circular to square
	Adjust zoom level and map radius (shrink or enlarge map)
	Able to change the Node Height
	Node Stem Transparency
	Toggle map shape (i.e. circle, or square)
	Point Select
	Add nodes into the node queue
	Top row shows everything you can ingest (ASSETS, VEHICLES, POINTS, TASKS)
	Second row shows (UNKNOWN, FRIENDLY, NEUTRAL, HOSTILE)
	To spawn the node in the node queue press the plus button next to current selection.

Icon	ToolTip/Function
	Point List
	Enter a location to center the map over
	Use Lat/Lon, MGRS, or type a location to search for a location
	Layer Selection
	Enter a location to center the map over
	Live Nodes
	Can see breadcrumbs (blue lines that show historical records of positioning)
	Analytic
	ex/ NYC Subway Lines
	Overlay
	ex/ population density
	Current Weather
	View weather information of the current map location for a location

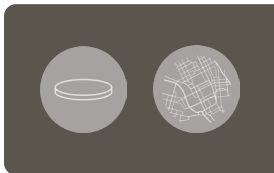| Icon	ToolTip/Function
	Minimap Shows the area that was scanned but from a 2D image Zoom in and out with the pill bar on the bottom after it is opened.
	Show Lat/Lon See the location with latitude and longitude the whole entire time on your laser pointer
	Recenter visual data Click to recenter the current visual data to the virtual world center for a location
	X-Ray Open a willow to clip away parts of the map. Best used for viewing interior scans for a location
	Close Map Click to entirely close out a map including any nodes/routes for a location

Map Manipulator

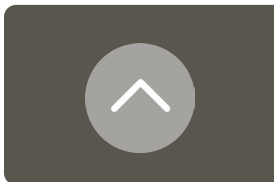| Icon	ToolTip/Function
	Mode Switch between manipulating the placement of the map in the virtual space and manipulating the location and scale of the actual map.
	Nudge Directional nudge

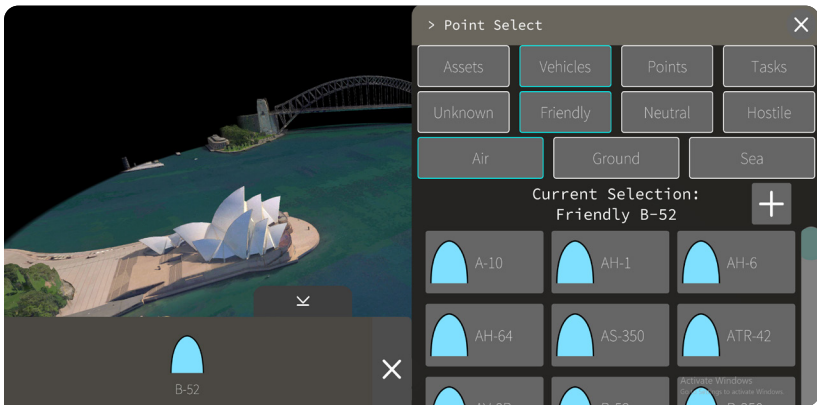| Icon	ToolTip/Function
	Zoom In / Zoom Out
	Rotate Rotate map to the left or right
	Map Boundary Axis Selection **X -** Adjusts the horizontal placement of the map in the virtual space **Y -** Adjusts the vertical placement of the map in the virtual space **Z -** Adjusts the depth of the map in the virtual space
	Zoom & Nudge Increment

Point Select

Click desired node (Assets, Vehicles, Points or Tasks) and then tap the plus button to add to node queue

Click asset in the queue and then place to desired location on map

Point Select Settings

Icon	ToolTip/Function
	Target Lock Focus and follow as if live A green ring will appear around the node
	(Line of Site) LOS Actions Choose between 360, 270, 180, 90, 60 FOV (Field of View) A shaded region will appear representing what the node can see

Icon	ToolTip/Function
	View Inventory Add guns, bombs, radios to the vehicle Shows firing range, blast radius, and service range of inventory
	Manipulate Altitude and Course Grab the green arrow to change node to desired altitude Grab the red circle to rotate the node to desired degree Click the blue arrow to snap node back to ground Click red "x" to exit
	Change Node Status Fully Capable (green bar) Damaged (yellow bar) Destroyed (red bar) Full to Capacity (blue bar)

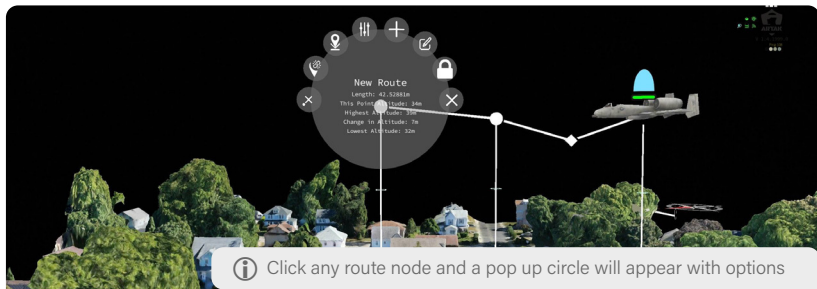| Icon	ToolTip/Function
	Lock Node Shows the area that was scanned but from a 2D image Zoom in and out with the pill bar on the bottom after it is opened.
	Route Options Unlink route points from this node Delete routes from this node Create a route from this node
	More Information Location, Course, Personal offset, Type, COT_Type, UID, Name, Status, Node Type
	Destroy Node Clear node Clear routes connecting to the node

Route Options

ⓘ Click any route node and a pop up circle will appear with options

Icon	ToolTip/Function
	Destroy Point Removes point from the route
	Detach Link Points Choose between 360, 270, 180, 90, 60 FOV (Field of View) A shaded region will appear representing what the node can see
	Snap point to ground Node is pinned to the map, and cannot be moved

Icon	ToolTip/Function
	Change color Change the color of the route by using sliders
	Extend Route Add another point to the route
	Edit Route Label route Basic Route - white Infill Route - light blue Dismount Route - blue
	Lock this route Lock/unlock a route into place
	Destroy this route Clear route from map

Node History

> Node History

Live Data Sources

Target Date:

January ▼   1 ▼   2023 ▼
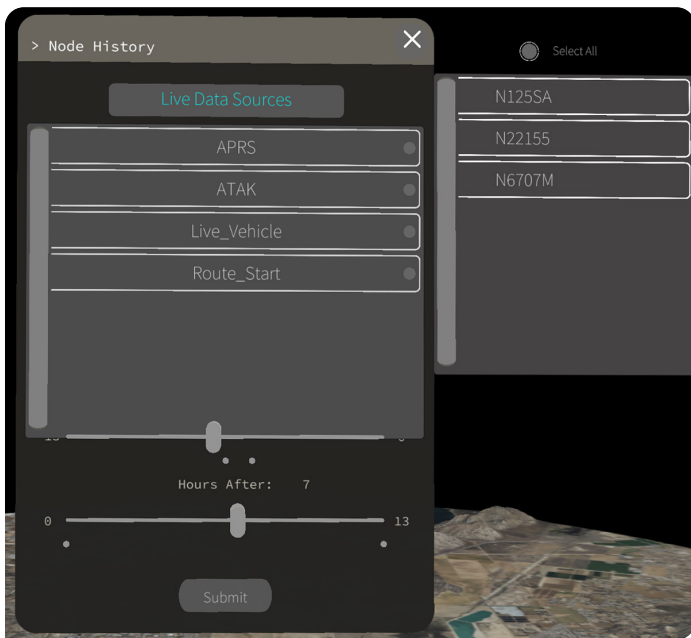
Target Time: ∧

16 ▼   : 00

∨

Hours Before: -13

-13 ●————————————● 0

● ●

Hours After: 13

0 ●————————————● 13

Submit

Live Data Source
Choose from APRS, ATAK, Live_Vehicle, and Route_Start
Then choose a specific call sign

Target Date/Time
Choose a specific date of the node desired
Enter a target time - then use sliders to up to -13 hours before target time or
+13 after target time

Installing ARTAK

1. Download the ARTAK_VX.X.0.0 zip file from your desired source onto the Windows device

2. Click on the zip file once it has downloaded and extract all files

3. Open the file ARTAK_VX.X.0.0, then click on the Windows file, the open the ARTAK Application

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