ARTAK
Augmented Reality Tactical Assault Kit

Oculus Quest 2

User Manual
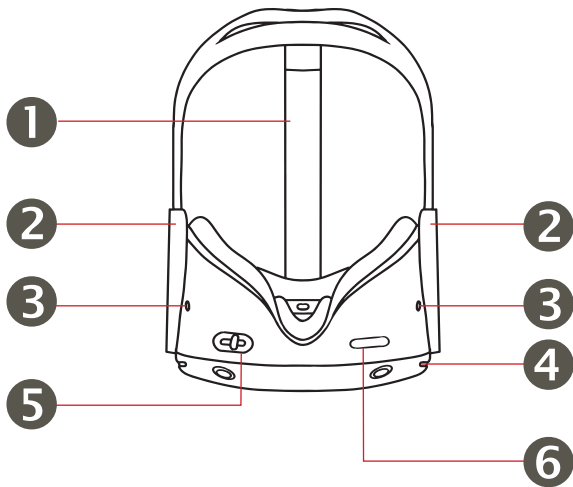
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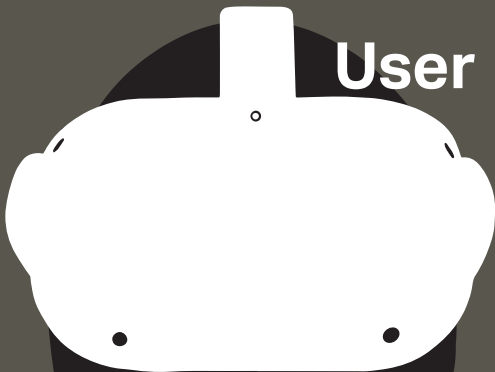
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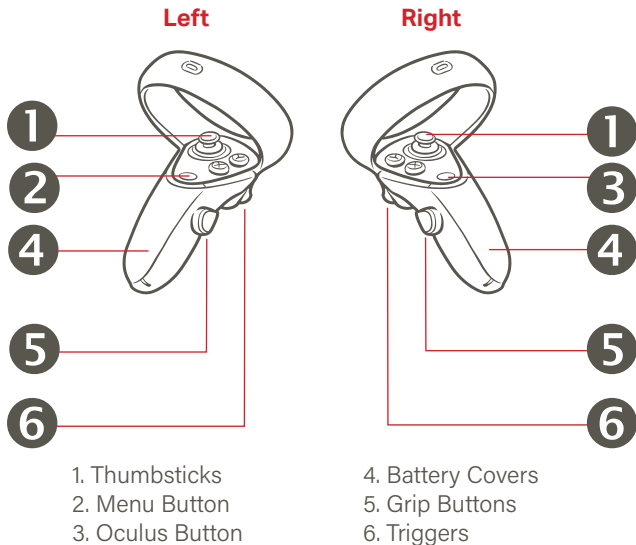
Selecting Objects and Icons

Press/grab/click objects and icons to interact with them, using triggers
(6) and/or "A" button OR by pinching thumb and index finger during Hand
Tracking Mode

A.R.TAK

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Basic Controls

⚠️ Home Menu must be closed to interact with map movement

Maps

Move
Live Map - Click/grab the white pill on side of the map to move to desired location

Static Map - Click/grab anywhere on the map with one hand and move to desired location

Rotate
Press/grab/click objects and icons to interact with them

Scale (Zoom In/Out)
Click/Grab with both hands and move hands apart from or towards each other

Menus

Open/Close Menus
Using your left hand turn palm facing you to open up menu
Drop left hand to close windows or use right hand to click the "x"
Use back arrow to return to previous menu. When using Controllers, raise your left hand and press and HOLD the Menu Button (2) down. The menu will appear over your left hand and disappear once you let go of the button

Scroll a Menu
Press/grab/click objects and icons to interact with them 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

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
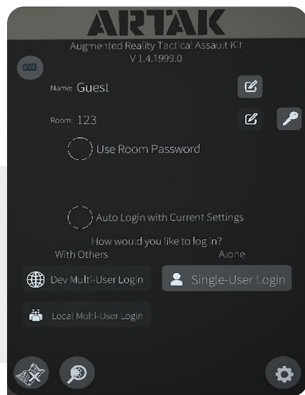
ⓘ Check the Use Room Password if you would like
your room to be protected by a password

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

ⓘ
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
	App Settings Menu containing settings and controls for Virtual Reality aspect
	Map Menu Menu containing settings and controls for the current map

VR Settings

VR Immersion Controls

Left Thumpstick
Travel though as if walking through the building

Right Thumpstick
Hold forward on the thumbstick to "jump to a spot"

Snap to Ground
Snap yourself to the map's ground

Vignette Strength
Control the darkness around the edges

Settings

Icon	ToolTip/Function
	Open debug panel
	Clear spatial mesh

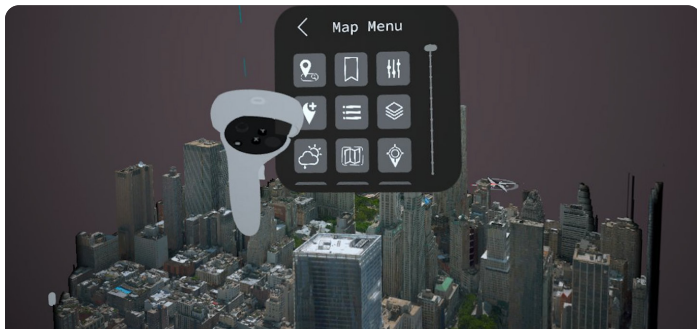| Icon	ToolTip/Function
	Open audio settings panel Mute Self Master Volume SFX Volume AI Voice Volume VOIP Volume
	Recenter visual data to the virtual world center
	Recenter the visual data in front of you
	Exit the room and return to the login screen

Map Menu

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

Icon	ToolTip/Function
	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/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 (ie 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. Node queue will appear at the bottom of your view, waist level. Grab node and place/drag to desired location on the map.

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 **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

| Icon	ToolTip/Function
	Minimap Shows the area that was scanned 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 window 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

Node Queue
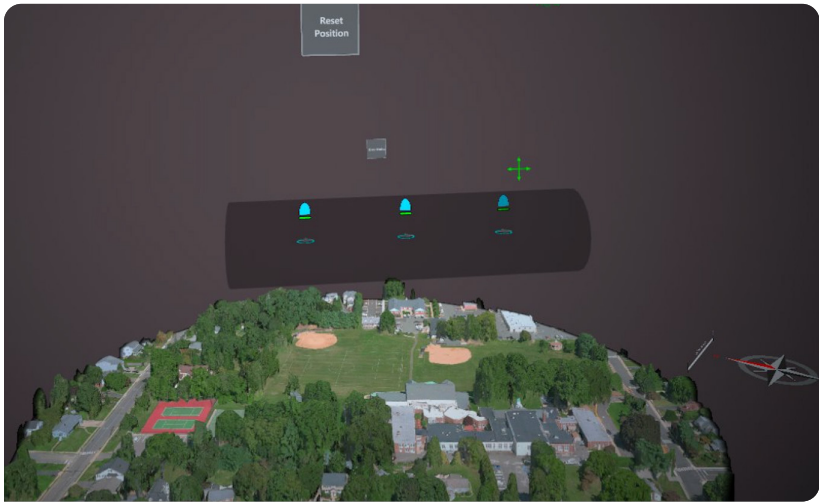
After adding any node to the node queue, a queue will spawn about waist high that will follow you

To move and lock the node queue to a specific spot, grab the directional on the top left corner and drag to desired location

Click 'Reset Position' to bring the node queue back to its original position

Click 'Clear Nodes' if you wish to delete remaining nodes in the queue (Note: this will also remove the node queue from the screen)

Point Select

Click desired node (Assets, Vehicles, Points or Tasks) and then scroll through various options

Click desired allegiance

Click the plus button to add to node queue

Point Select Settings

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

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
	Vehicle Immersion View the map from the perspective of being in the current vehicle
	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

(i) 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

Live Data Sources

Target Date:

January ▼   1 ▼   2023 ▼

Target Time: ∧

16 ▼ : 00

∨

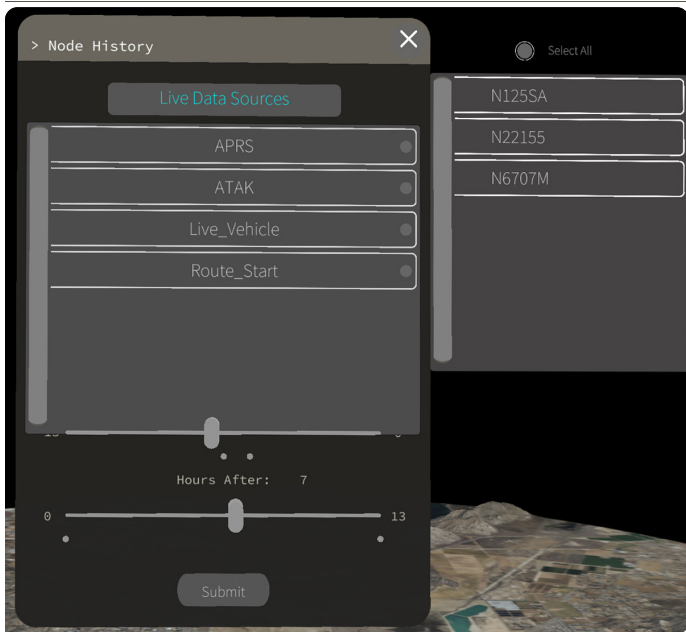Hours Before: -13

-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

Updating & Opening ARTAK

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

2. Ensure the Quest device is in developer mode

3. Ensure SideQuest Advanced Installer is installed and open on the computer which contains the downloaded apk file

4. Connect the Quest device to the computer via USB-C to USB-A cable

5. Enable USB debugging in the Quest device in order to allow new connections to the computer.

6. A visual confirmation in SideQuest will show the device is connected properly in the top left of the header bar, and the IP address of the device will be displayed

7. Navigate to the app install section of SideQuest and select the apk file downloaded in step 1

8. Wait for SideQuest to display that all tasks have been completed, this is a confirmation that the app has successfully installed the quest device

9. In the Quest device, under the apps section, click on the drop-down located on the top right of the window, scroll to the very last section titled "Unknown Sources" and click on it. The ARTAK app will be displayed here

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