RealWear Navigator 500™ User Guide





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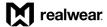
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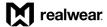
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1 Overview

RealWear Navigator™ 500 is a hands-free, Android™ tablet-class wearable computer for industrial workers. RealWear Navigator provides the foundation for Connected Worker programs.

Use it in wet, dusty, hot, dangerous, and loud industrial environments.

A fully rugged head-mounted device, it optionally snaps into safety helmets or attaches to bump caps and can be used with safety glasses or corrective eyewear.

The high-resolution micro display fits just below your line of sight and views like a 7-inch screen at arm's length. It is an industrial dashboard: there when you need it and out of your way when you don't.

RealWear Navigator works with a vast application ecosystem of over 200 leading apps from our solution partners, each optimized for the micro display and voice-controlled navigation. That means using simple voice commands with no scrolling, swiping, or tapping.

Use it for digital workflow, remote expert guidance, data Internet of Things (IoT) visualization, inspections, audits, acceptance testing, verification, commissioning, training, visual assistance, and document navigation.

1.1 Box Contents

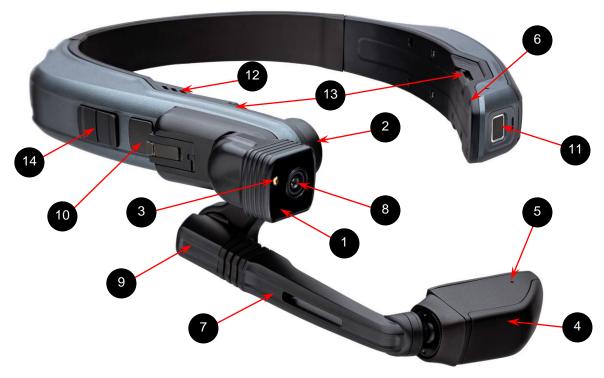
The contents in the RealWear Navigator box are as follows:

- RealWear Navigator device
- USB cable type C
- RealWear Navigator Quick Start Card
- Swappable Battery
- RealWear Workband

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1.2 Know Your Device



Front View

Front View Callout Definitions

Callout	Definition	Callout	Definition
1	Active camera indicator light	8	Camera
2	Shoulder joint	9	Elbow joint
3	Flashlight	10	Action button
4	Display pod	11	Power button / fingerprint sensor
5	Mic A1 (Mic A2 on opposite side)	12	Speaker
6	Mic B1 (Mic B2 on opposite side)	13	Side accessory clipping points
7	Boom arm	14	Action Button +, Action Button

Note: The display pod is upgradeable at an authorized RealWear Service Center.

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Rear View Callout Definitions

Callout	Definition	Callout	Definition
1	Battery pack	6	Rear band
2	Display window	7	Camera module
3	3.5mm audio jack	8	Battery status indicator
4	USB-C charging port	9	Dust cover
5	Micro SD card slot cover		

Note: The camera module is a removable modular component. For camera removal and installation instructions, go to section 1.2.1.4.1 Remove the Camera and section 1.2.1.4.2 Install the Camera, respectively.

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1.2.1 Your Device Details

1.2.1.1 Power Button/Fingerprint Sensor

There is a button/fingerprint sensor on the front of the battery side of the device. This is used to unlock RealWear Navigator, power ON, power OFF, put into sleep mode, or wake from sleep.



Power Button/Fingerprint Sensor

1.2.1.2 Action Button

The Action Button is the large, square button in between the camera and left/right buttons. A single tap serves as a failsafe method of returning you to your home screen. Three quick, consecutive taps on the Action Button will toggle the microphone array between front and back configurations.

1.2.1.2.1 Left and Right Buttons

The left and right buttons next to the Action Button can be used to turn the volume on the RealWear Navigator up or down and can be used by developers for other functions.



Action Button

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1.2.1.3 Micro SD Card Door

The micro SD card door on the inside of the RealWear Navigator band is opened with a 001 Phillips head screwdriver. Insert a FAT32 formatted micro SD card with a maximum capacity of 512 GB for portable storage.



Micro SD Card Door

1.2.1.4 Swappable Camera

The swappable camera is located above the boom arm and can be pivoted up and down. It can capture images/photos up to 12MP photos and videos up to 1080p. It also includes a built-in flashlight that can be controlled with your voice.



Swappable Camera

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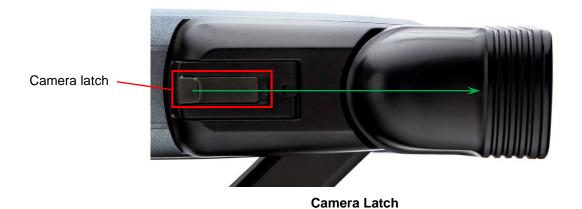


1.2.1.4.1 Remove the Camera



To remove the camera, do the following:

1. Push the camera latch forward.



2. With the camera latch pushed forward, lift up on the camera tab.



3. With the camera tab released, gently pull the camera away from the device.

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1.2.1.4.2 Install the Camera

To install the camera, do the following:

- 1. Align the camera female connector with the device male connector.
- 2. Gently press the camera until the camera is flush with the device.
- 3. Press the camera tab down until it snaps securely into place.

1.2.1.5 Boom Arm

The Boom Arm allows the user to adjust the positioning of the Display Pod and allows for 6 degrees of freedom, which means it can be adjusted up and down, left and right, and forward and back. It is comprised of a Shoulder, Elbow, and Wrist joint (imagine the human arm). Its orientation can be inverted to allow use by left or right eye dominant users.



Boom Arm

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1.2.1.6 Display Pod

The display pod can be rotated and adjusted so the user can see the display clearly. The display is an 854 x 480p 24-bit color LCD display with 20° Field of View (FOV) and 1-meter focal depth.



Display Pod

1.2.1.7 Display Pod Pivot

The display pod can pivot in multiple directions to allow you to view the RealWear Navigator display from the angle you need.



Display Pod Pivot

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1.2.1.7.1 Tighten the Display Pod Pivot

Over time, the display pod pivot can lose tension and the display pod will not stay in a set position at the end of the boom arm.

To tighten the display pod pivot, do the following:

- 1. Pull the pivot cover away from display pod.
- 2. Turn the pivot knob clockwise to tighten.



Pivot Cover Detached

3. Align the pivot cover with the display pod.

Note: The pivot cover can only be installed if it is positioned correctly. Make sure the long edge of the pivot cover is aligned with the long edge of the display pod.

4. Gently press the pivot cover until the pivot cover is flush with the display pod.

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1.2.1.8 Microphone Array

There are two sets of two microphones on RealWear Navigator. The Primary Microphones handle user input, while the reference microphones cancel external noise. The front microphones, active by default, are located on the display pod. The rear microphones are located on the side of the device opposite from the boom arm. These are used when issuing voice commands while the boom arm is out of your field of view.



Microphones

1.2.1.9 Speakers

A 94dBA loudspeaker is located above each ear.



Speakers (on both sides)

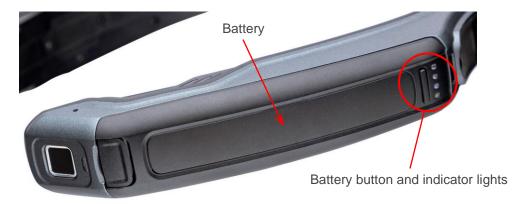
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1.2.1.10 Battery

RealWear Navigator requires a rechargeable battery to function. The device ships with the battery uninstalled. Go to section 4.10.3 Remove and Replace the Battery for battery removal and replacement instructions.

Note: Press the battery button to check the battery charge level. The battery indicator lights illuminate white to show the battery charge level.



Battery

1.2.1.11 USB-C Port

For all charging and data transfer, you must use the USB-C port, which is located next to the battery compartment, beneath the rear flap on the side opposite the boom arm.



USB-C Port

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1.2.1.12 Auxiliary Jack

Headphones can be connected to RealWear Navigator using the 3.5mm headphone jack on the back of the RealWear Navigator, under the flap on the side of RealWear Navigator, on the opposite side from the USB-C charging port. We recommend using RealWear 33 dB noise-reduction earbuds with your RealWear Navigator.



Auxiliary Jack

1.2.1.13 Workband

This is an adjustable Velcro strap that rests across the top front of the wearer's head. If mounting via hard-hat or bump cap, this can be removed.



Workband

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2 Features and Specifications

2.1 Device Features

Device Features

Symbol	Definition	Description
4	100% hands-free	Voice-based operating system with local speech recognition in loud areas.
*	Powerful audio	Integrated speaker and 3.5mm audio jack for use with hearing protection.
P	Unmatched noise cancellation	Four microphones and advanced algorithms to perform noise cancellation prior to voice recognition.
4	PPE compatible	Designed to work with standard hard helmets, bump caps and safety glasses.
	Full-shift internal battery	Field swappable for continuous use.
•	Outdoor display	Viewable in bright sunlight.
	Water resistant	IP66-rated protection against heavy seas or powerful jets of water.
	Dust tight	IP66-rated protection against the ingress of micro particles.
1	Shock resistant	Resistant to 2-meter drops onto concrete from any angle.
涂	Built rugged	Fully operational from -4° F to 122° F / -20° C to 50° C.

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2.2 Device Specifications

Device Specifications

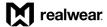
General	Specification
Operating system	Android 11 (AOSP) + WearHF™ hands-free interface + Enterprise features
Chipset	2.0 GHz 8-core Qualcomm® Snapdragon™ 662 with Adreno 610 GPU - OpenGL® ES 3.2 and OpenCL™ 2.0
Memory	64GB internal storage / 4GB RAM / micro SD card slot (max card supported 512GB)
Weight	9.5oz / 270g
Ruggedization	IP66, MIL-STD-810H, 6.5-foot / 2-meter drop
Dedicated buttons	Power button (with integrated fingerprint sensor), programmable Action Button, left button, right button
Ports	1/8-inch. 3.5mm audio, 1 USB Type-C
Boom arm	Adjust six ways for most head sizes, left or right eye compatible, display can be moved out of the way when not in use
Operating temperature, humidity	-4° F to 122° F / -20° C to 50° C to 95% relative humidity (non-condensing)
Included applications	Document navigator, camera with barcode reader, audio recorder, video recorder, webpage viewer, cloud sync, media player, calculator, pedometer, timer
Languages and dialects supported	Chinese (Cantonese, Simplified and Traditional Mandarin), Czech, Dutch, English (American, Australian, British), French, German, Indonesian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Thai
Sign-in options	Companion app, voice keyboard with secure mode
Connectivity and Sensors	Specification
Bluetooth	Bluetooth® 5.1
Wi-Fi	802.11 a/b/g/n/ac – 2.4GHz and 5GHz
GPS, Glonass, BeiDou, Galileo, QZSS, SBAS NavIC support Dual-frequency GNSS (L1 + L5) Qualcomm® sensor-assisted positioning	
IMU – Head movement tracking	Three IMUs (including 3-axis accelerometers, gyroscopes, eCompass)

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Battery	Specification	
Capacity	2600 mAh / 10.0 Wh Li-polymer, rechargeable, hot-swappable	
Security	Specification	
Security	Qualcomm® trusted execution environment, crypto engine, secure boot	
Display	Specification	
Туре	20° field of view, 24-bit color LCD, 0.32-inch diagonal, outdoor visible	
Resolution	WVGA (854 x 480)	
Audio	Specification	
Microphone	 Four digital microphones with active noise cancellation Accurate voice recognition in noise up to 100 dBA 	
Speaker	Internal 94dbA loudspeaker	
Camera	Specification	
Image	48 MP sensor, PDAF with LED flashlight	
Video	 Up to 1080p at 60fps, > 6X zoom in HD, video stabilization Codecs: VP8, VP9, H.264, H.265 HEVC 	
Compatibility	Specification	
PPE	Works with many hardhats, protective eyewear, masks, and more	
Warranty	Specification	
Warranty	1-year warranty	
Extended service and support plans	Available	
Accessories	Specification	
Included	Workband, USB type-C charging cable	
Cloud services	Specification	
Foresight	Accelerates centralized deployment and management of devices	

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2.3 Software Brief

RealWear Navigator™ 500 software is optimized for safe and secure jobs, taking hands-free to new heights of productivity and connectivity.

2.3.1 Android Enterprise Support

All RealWear Navigator devices can be managed by either RealWear Foresight or by an EMM (Enterprise Mobility Management) system. Android Enterprise standards allow for device management of RealWear Navigator by most EMM providers.

Go to http://www.realwear.com/support for information on currently supported EMM providers or contact your provider directly.

Enrolling your device is easy. Use the Configuration app on RealWear Navigator to scan the QR code generated by your EMM system.

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Android Enterprise Standards

Туре	Standard		
Core functions	Operating system	Android 11 AOSP (Android Open-Source Project).	
	Optimized UI	 Head movements and voice commands utilized for intuitive hands-free control. Easy access to core Android capabilities, such as Notifications and device settings. Display automatically orients for left or right eye dominance. 	
Usability	Keyboard	 Fully hands-free keyboard with gestures and voice: Standard keyboard. Secure Entry mode enables hands-free password entry without compromising security. Full dictation for improved productivity. ABC Mode keyboard entry. 	
	My Controls	Commonly used controls accessible from any activity.	
	My Files	 Browse and sort files using clear, simple navigation. Read full filenames. Large thumbnails. Delete files. 	
	Document Viewer	Access PDF files easily with full zoom, pagination controls. Create and use your own bookmarks for quick reference.	
	Media player	Native playback support for audio and video files built into My Files.	
Security	Screen lock	Option to secure your device with a custom PIN or fingerprint scan, required at device wake and power on.	
	Centralized WearHF configuration	OS level and App level customization and configuration. Default values and preferences can be stored in a common configuration space and updated, refreshed, or managed for easier deployment and support.	
Customization and configuration	Cloud services	Fully manageable by RealWear Foresight Cloud or select EMM providers.	
	Language	Software support and voice recognition for 17 languages. Dynamic and individual language strings can be adjusted or improved by administrators or by over the air (OTA) updates.	

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Туре	Standard	
Most advanced camera system for harsh environments	Hands-free for industry	Command and control all features while keeping your hands free for work.
	Barcode reader	Built-in code reading software to handle most barcode formats.
	Preview	Instant preview of photos and videos.
	Smooth transitions	Seamless experience from "MY CAMERA" to "MY PHOTOS" and "MY MEDIA".
	Low light performance	Proven performance in low light settings and situations.
	Field of View (FOV)	 Wide angle range or standard range: Standard: Improves visibility of camera view when used with a baseball cap. Enhanced zoom to provide even more magnification for small or far away subjects. Wide: Full width of camera view is captured.
	Focus and exposure	Switch between Autofocus or Manual Focus at any time. Lock focus and exposure to one of 9 points in the frame for better photos in non-ideal lighting conditions.
	Image and video stabilization	Automatic image and video stabilization allows more accurate remote mentoring, compliance, and inspections. This feature is enabled by default but can be disabled by the end user.
	Flashlight	Flashlight functionality can be controlled directly from the My Camera app or My Controls . Flash settings for photos are On/Off/Auto.
	Camera controls (MORE OPTIONS)	 Exposure level Flashlight controller Aspect ratio 16:9 and 4:3 Image resolution: High and low Video resolution: High and Low Frame rate: 15, 25, 30 Video Stabilization: On or Off Picture preview Manual focus Field of view: narrow and wide Direct access to your photos and video

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2.4 Device Connectivity

2.4.1 Operating Frequency Bands

Wi-Fi operating frequency band details are as follows:

• 802.11a: 14.34dBm

• 802.11b: 13.32dBm

• 802.11g: 12.29dBm

• 802.11n HT20: 11.25dBm

• 802.11n HT40: 11.39dBm

• 802.11ac: 12.26dBm

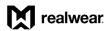
2.4.2 5 Gigahertz Wi-Fi Connection Information

Operations in the 5.15 to 5.35GHz band are restricted to indoor use only.

2.4.3 Bluetooth

The Bluetooth type used is Bluetooth® 5.1.

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3 Device Setup

3.1 Wearing Your Device

This article will walk you through how to wear your RealWear Navigator™ 500 device and ensure the best possible experience.

3.1.1 Determining Eye Dominance

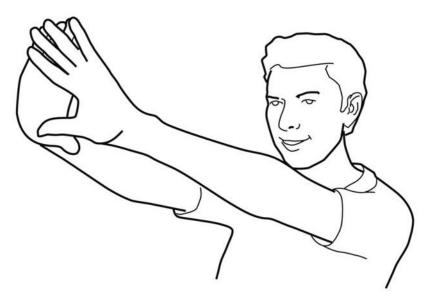
First, it is important to determine your dominant eye. Viewing the RealWear Navigator display with your dominant eye will allow for the most clear and comfortable use of the device.

Eye dominance is the tendency to prefer visual input from one eye to the other. It is best to use your dominant eye when viewing the display.

Note: Eye dominance is not related to right- or left-handedness.

To determine which eye is dominant, do the following:

1. Form a triangle with your hands placed together at arm's length.



Form a Triangle

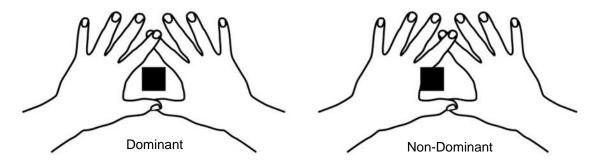
- With both eyes open, focus on a distant object centered in the triangle.
- 3. Maintain focus on the object centered in the triangle and keep your head and both hands stationary.
- Close your right eye. If the object is still in the triangle, you are left-eye dominant.

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Repeat step 3 and close your left eye. If the object is still in the triangle, you are right-eye dominant.

Note: If the object is in the triangle with either eye, then you are dominant eye neutral.



Eye Dominance

3.1.1.1 Your Dominant Eye Configuration

After your dominant eye is determined, set up RealWear Navigator so the display and camera are aligned with the dominant eye side of your head.

If the display and camera are not positioned on your dominant eye side, do the following:

- 1. Place RealWear Navigator on a flat surface.
- 2. Raise the boom arm above the camera and flip RealWear Navigator over.
- 3. Bend the boom arm so the display is positioned below the camera on your dominant eye side.



Bend the Boom Arm

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3.1.2 Attach Head-Mounting Accessories

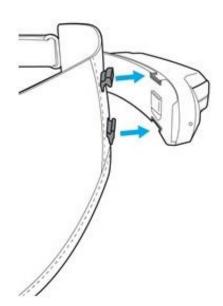
The following accessories can be used with RealWear Navigator, followed by attachment instructions, as required:

- Workband
- Hardhat with clips
- Protective eyewear
- Baseball cap
- Tri strap

3.1.2.1 Attach the Workband

To attach and position the Workband, do the following:

- 1. Place the Workband on your head and adjust the Velcro strap to a comfortable fit.
- 2. Push the Workband clips into the slots on each side of RealWear Navigator.



Attach the Workband

- After the Workband is attached to RealWear Navigator, position it on your head.
- 4. Roughly level the device with ground.
- 5. Position the Workband horizontally across your forehead.

Note: For an optimal experience, it is recommended that the display is close to the center line of your face, in front of and close to your eye.

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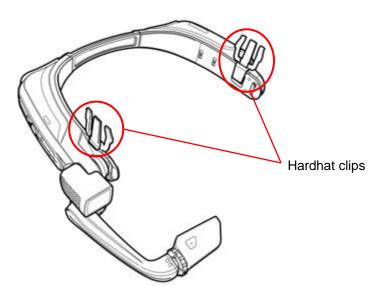
Position the Workband

3.1.2.2 Attach the Hardhat with Clips

To attach RealWear Navigator to a hardhat with clips, do the following:

Note: To purchase hardhat clips for RealWear Navigator, go to shop.realwear.com.

1. Hook the hardhat clips into RealWear Navigator band and snap them into place.



Hardhat Clips Attached

2. Slide the clips into the hardhat accessory slots.

Note: Make sure RealWear Navigator band sits outside of the hardhat harness.

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Clip to Hardhat

- 3. Put on the hardhat and tighten until secured and comfortable, as required.
- 4. To remove RealWear Navigator from the hardhat, pinch the clip fingers and push the clip out of the hardhat accessory slots.

3.1.2.3 Using RealWear Navigator with Eye Protection

RealWear Navigator is designed to work well with or without eyeglasses or eye protection. Continue to wear eyeglasses or eye protection when using RealWear Navigator, as required.

Note: RealWear recommends wearing eye protection when using RealWear Navigator.

3.1.3 Fit Adjustments

Once RealWear Navigator is comfortable and secure using the Workband or other Personal Protective Equipment (PPE), it is time to adjust the fit for optimal use.

To adjust RealWear Navigator for optimal use, do the following:

- 1. Use the boom arm to adjust the display pod so the display pod is positioned close to the centerline of your dominant eye.
- 2. Move the display pod slightly below and 1.5 to 2 inches in front of your dominant eye.

Note: Hold the back of RealWear Navigator when moving the boom arm inward to make sure the device stays in place.

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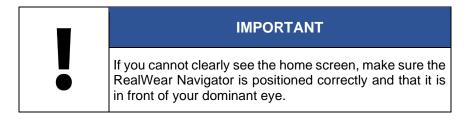




Correct Display Pod Position

- 3. Press and hold the power button for 3 seconds to turn ON RealWear Navigator.
- 4. Wait approximately 15 seconds for startup to complete and the display to turn ON.
- 5. Rotate and tilt the display pod until all four corners of the home screen are visible.

Note: When using the camera, rotate the camera and make sure the view is forward and unobstructed.





Home Screen Corners Visible

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3.2 Remote Web Browser Configuration

The **Configuration** App, located in My Programs on your RealWear Navigator device, scans a QR code that contains information for language, time zone, time, and Wi-Fi connections.

To configure the device remotely from a web browser, do the following:

Note: Before doing this procedure, download the RealWear Companion from the Apple App Store or Google Play.

- 1. Open a web browser from your computer.
- Go to support.realwear.com/knowledge or realwear.setupmyhmt.com/configure.
- Click Configuration.

Note: You can also click the **Configuration** link in the navigation bar at the top of the web page.

- 4. Click First Time Setup.
- 5. Select the language and click Next.
- 6. Select the world region and time zone.
- 7. The **Set Automatically** checkbox is checked by default using the values from your computer or mobile device.

Note: To change the default settings, uncheck the box and make any applicable changes.

8. Set the date and time and click Next.

Note: You can also enter the Wi-Fi network SSID and password to set up the Wi-Fi network for RealWear Navigator. Most networks use WPA/WPA2 security.

- 9. Click Generate Code to create a QR code on the computer or mobile device display.
- 10. Put on RealWear Navigator and turn it ON.

Note: When you turn ON RealWear Navigator for the first time, a remote configuration page opens on the display.

11. Say "NAVIGATE HOME" and then say, "MY PROGRAMS".

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My Programs

- 12. Say "CONFIGURATION". RealWear Navigator will start to beep.
- 13. Point the RealWear Navigator camera at your PC or mobile device to capture the QR code.
- 14. A tone sounds after the QR code is scanned, and you are redirected to the previous screen.

3.3 Bluetooth Setup

Connect RealWear Navigator to other Bluetooth devices, in Bluetooth primary or Bluetooth secondary modes.

- In Primary mode, RealWear Navigator can connect to audio devices such as Bluetooth earpieces and Bluetooth speakers.
- In Secondary mode, RealWear Navigator can connect to mobile phones and act as a Bluetooth microphone/headset for the phone.

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To change the Bluetooth mode, do the following:

Go to My Programs and say "SETTINGS".



"SETTINGS" Command

- 2. Say "PAGE DOWN" until the RealWear setting is listed.
- 3. Say "REALWEAR" or "SELECT ITEM #".



"REALWEAR" Command

4. Bluetooth Mode settings will appear. Secondary is selected by default. Say "BLUETOOTH MODE" to toggle between Primary and Secondary modes.

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3.4 Security Setup

RealWear Navigator uses Android Screen Lock to secure access to your device. When using Screen Lock, you can set up a PIN or use a fingerprint scan to unlock your RealWear Navigator.

Note: When configuring the fingerprint scan, you must choose a PIN to unlock your RealWear Navigator in case the fingerprint scan cannot be used.

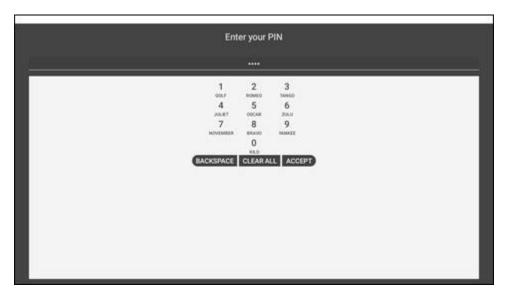
3.4.1 Screen Lock with PIN

To set up screen lock with a Personal Identification Number (PIN), do the following:

- From the RealWear Navigator home page, say "MY PROGRAMS".
- Say "SETTINGS".
- 3. Say "SECURITY" or say, "SELECT ITEM 6".

Note: Some options can be selected by saying either the name of the option, or the number that is displayed next to the name.

- 4. Say "SCREEN LOCK", and then say "PIN".
- 5. In the Enter Your PIN page, say the word shown under each number to select the respective number.



Enter Your PIN

- 6. Say "ACCEPT".
- 7. Say the words for your PIN again to confirm the selection, and then say "ACCEPT".

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- 8. Review the display options and say the option you prefer for your lock page notifications.
- 9. Say "DONE".

3.4.2 Screen Lock with Fingerprint and PIN

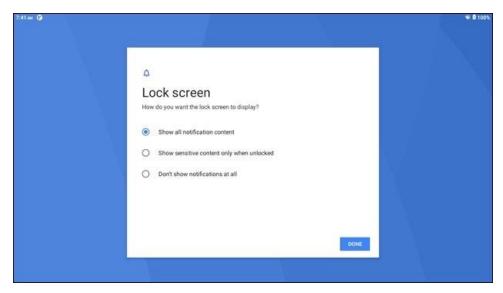
Note: A PIN is required to scan your fingerprint.

To set up a PIN and scan your fingerprint, do the following:

- 1. From the RealWear Navigator home page, say "MY PROGRAMS".
- Say "SETTINGS".
- 3. Say "SECURITY" or say, "SELECT ITEM 6".

Note: Some options can be selected by saying either the name of the option, or the number that is displayed next to the name.

- 4. Say "FINGERPRINT".
- 5. Say "FINGERPRINT AND PIN".
- 6. Repeat steps 5 through 7 in the Screen Lock with PIN Only section to set your PIN.
- 7. Say one of the lock screen display options listed.
- 8. Say "DONE".

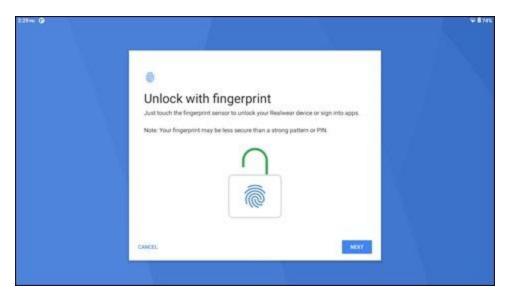


Lock Screen Display Options

The "Unlock with fingerprint" user message appears. Say "NEXT".

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Unlock with Fingerprint

10. Lightly touch the fingerprint sensor to scan your fingerprint.

Note: The fingerprint sensor is on the surface of the power button. To scan your fingerprint, lightly touch the power button. Do not press the button.

11. Follow the instructions on the screen to lift your finger and touch the fingerprint sensor again.

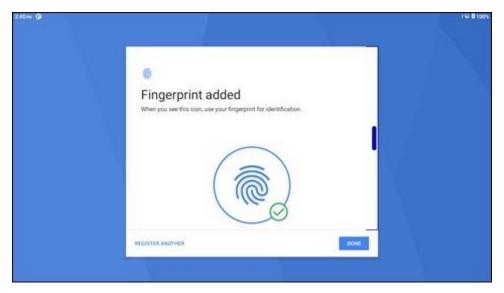


Lift, Then Touch Again

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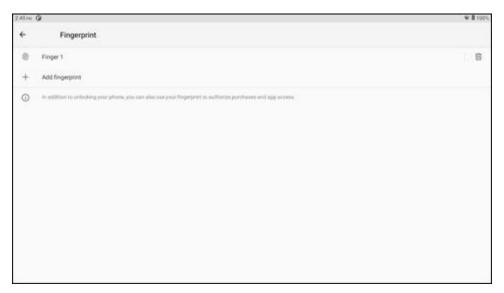


12. Repeat step 9 until the "Fingerprint added" user message appears. Say "DONE".



Fingerprint Added

13. To add another fingerprint for a different user, say "ADD FINGERPRINT".



Fingerprint Window

14. Repeat steps 7 through 10 to scan another fingerprint.

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3.4.3 Screen Unlock with PIN

To unlock RealWear Navigator with a PIN, do the following:

- 1. Say "UNLOCK".
- 2. Say the word shown under each number of your PIN.
- 3. Say "ACCEPT".

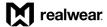
3.4.4 Screen Unlock with Fingerprint Scan

To unlock RealWear Navigator with a fingerprint scan, lightly touch the power button from the lock screen with the fingerprint saved on the device.



Lock Screen

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3.5 Interface Languages

RealWear Navigator supports the following languages:

- Chinese (Cantonese)
- Chinese (Mandarin)
- Chinese (Traditional)
- Czech
- Dutch
- English
- French
- German
- Indonesian
- Italian
- Japanese
- Korean
- Polish
- Portuguese
- Russian
- Spanish
- Thai

To select the user interface language, do the following:

- 1. Press and hold the Action Button.
- 2. The Language Menu appears.
- 3. Press the Action Button again to select your language.

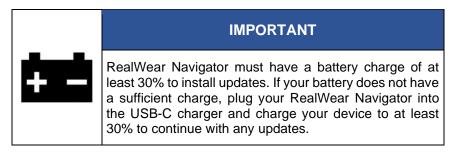
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3.6 Wireless Firmware Update

Your device is configured to keep its Operating System (OS) up to date via Over-the-Air (OTA) updates distributed by RealWear. The RealWear Navigator will not update automatically.





To download and install a wireless firmware update, do the following:

- 1. Make sure RealWear Navigator is connected to a Wi-Fi network.
- 2. From the home page, say "MY PROGRAMS".
- 3. Say "WIRELESS UPDATE".

Note: If the user message "Your device's software is currently up to date" appears, you have the latest update. If the user message does not appear, go to step 4.

4. Say "CHECK FOR UPDATES".

Note: If a firmware update is available, the update details appear on the display.

- 5. Say "DOWNLOAD".
- 6. Wait for the download to complete.

Note: When the download is complete, you can choose to install the firmware update now or schedule the update later.

7. To install the update now, say "INSTALL NOW".

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- 8. To install the update later, do the following:
 - a. Say "INSTALL LATER to schedule the update later.
 - b. A popup message appears.
 - c. Say one of the following commands to select the update time:
 - "ONE HOUR LATER"
 - "FOUR HOURS LATER"
 - "EIGHT HOURS LATER"

3.7 Micro SD Card

The micro SD card provides additional RealWear Navigator storage for media files and documents.

3.7.1 Insert a Micro SD Card

To insert a micro SD card into RealWear Navigator, do the following:

- Use a Philips #00 screwdriver to loosen the two screws that secure the micro SD card slot cover.
- 2. Remove the micro SD slot cover.
- 3. Gently push down on the micro SD slot to release the slot.



Micro SD Slot Cover

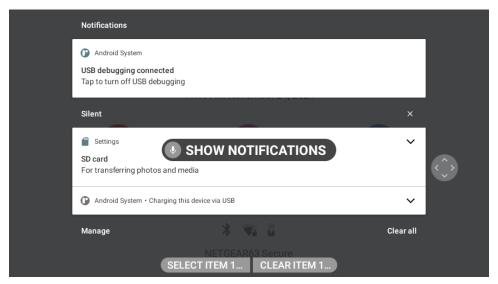
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- 4. Swing out the micro SD slot.
- 5. Insert the micro SD card into the slot.
- 6. Close the micro SD card slot and slide it into place.
- 7. Replace the micro SD slot cover.
- 8. Use a Philips #00 screwdriver to secure cover with screws.

3.7.2 Micro SD Card Setup

When a new micro SD card is inserted into RealWear Navigator, it is ready for use and does not require formatting. To make sure that RealWear Navigator sees the micro SD card, say "SHOW NOTIFICATIONS".



"SHOW NOTIFICATIONS" Command

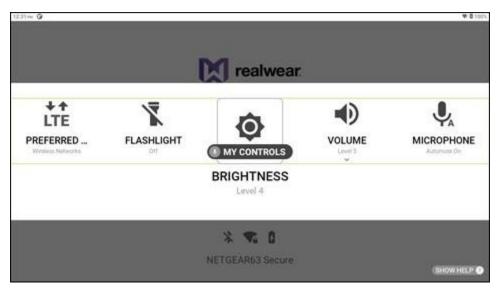
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3.7.2.1 Set Micro SD Card as Default Storage

To set the micro SD card as the default storage device, do the following:

1. Say "MY CONTROLS".



"MY CONTROLS" Command

2. Say "MORE SETTINGS".



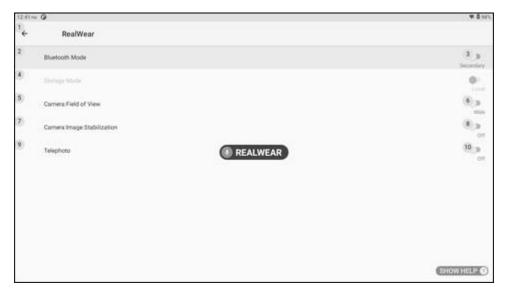
"MORE SETTINGS" Command

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3. Say "REALWEAR".

Note: Say "PAGE DOWN" to scroll the page down until "RealWear" is shown on the display, as required.



"REALWEAR" Command

4. Say "STORAGE MODE" to toggle between **Local Storage** and **SD Card** until the **SD Card** toggle is ON.



"STORAGE MODE" Command

5. The default storage is now set to the micro SD card.

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4 Interacting with Your Device

4.1 WearHF™ Voice Control

WearHF[™] is an innovative software solution that allows you to use your RealWear Navigator[™] 500 as a hands-free device. It is easy to use and loaded with intuitive functions.

4.1.1 "Say What You See" Speech Recognition

RealWear Navigator devices operate based on speech recognition. Instead of pressing or tapping a control button on the screen, all you need to do is speak the name of the respective control. RealWear Navigator devices use the latest technology for advanced noise cancellation and speech recognition which work even in the harshest noisy environments. It can recognize many different languages and accents and can detect the command even if you speak in a low voice.

All the commands associated with the specific screen should be displayed clearly on the screen, usually in ALL CAPITAL LETTERS. You can operate the device by speaking the name of any control. For example, the Home Screen has large icons with respective names such as "MY PROGRAMS" or "MY FILES". To access these applications, you can say the application name and the corresponding screen is launched.



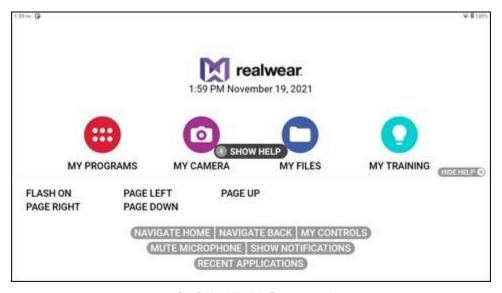
Home Screen

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4.1.2 Anytime Access Help

You can access the help information regarding the commands associated with a particular screen using the "SHOW HELP" command. The "SHOW HELP" command is displayed on all the screens. The help screen is displayed as a pop-up window. You can either say the command you desire or say "HIDE HELP" to close the pop-up window. Even when the help window is closed, RealWear Navigator will continue to listen for and respond to those commands.



"SHOW HELP" Command

4.1.3 Alternate Speech Recognition

Sometimes, the control on the screen has no name, is a scroll button without a label, or is a file with an unpronounceable filename such as *3454-x.pdf*. WearHF™ automatically proposes an alternative speech command and assigns a number. This number is displayed next to the respective control on the screen. To recall the specific control numbers for that screen, say "SHOW HELP". To select a specific control, use the number assigned to it. For example, you can say "SELECT ITEM 1" to select the item associated with number 1.

Note: Some command numbers might be hidden by a "SHOW HELP" command. It may bring up both the command label popup and the alternative speech command numbers. When you say, "HIDE HELP", the command numbers will remain on the screen for a moment in order to see those items behind the pop-up window.

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Command Numbers

4.1.4 Mute Microphone

To stop the speech recognizer, say "MUTE MICROPHONE". The device will not respond to your voice commands while the microphone is muted, and the user message "Press ACTION button to reactivate microphones" appears in red.



"MUTE MICROPHONE" Command

To restart the speech recognizer, press the Action button on the side of the device. The user message "Start listening" appears in green.

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Microphones Active

4.2 Microphone Settings

The front microphones are built into the display pod and provide optimal noise-cancellation. If using RealWear Navigator with the display moved out of your line of sight, you can use rear microphones built into the frame of RealWear Navigator.

To toggle between front and rear microphones, press the Action Button three times quickly. When the rear microphones are active, an audio notification is played, and a message is displayed on the screen. When the front microphones are active, another audio notification is played the message is removed.



Using Rear Microphones

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"SHOW HELP"

4.3 Page Scrolling

RealWear Navigator can scroll pages both horizontally and vertically. Turn your head left or right to scroll pages horizontally. See the following table for page scrolling voice commands.

Note: Head movement is not available for vertical page scrolling.

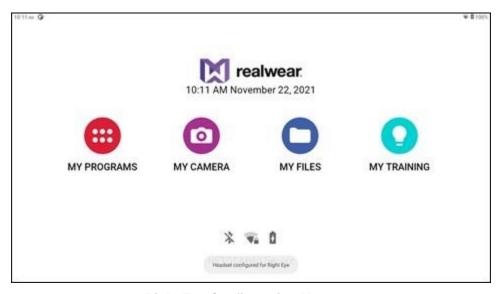
Voice Command	Action
"PAGE UP"	Navigates one page up.
"PAGE DOWN"	Navigates one page down.
"PAGE LEFT"	Navigates one page left.
"PAGE RIGHT"	Navigates one page right.

Displays a pop-up window with help commands.

Page Scrolling Voice Commands

4.4 Screen Orientation

When RealWear Navigator rotates, the display will automatically rotate by default. This ensures your ability to use RealWear Navigator with either eye.

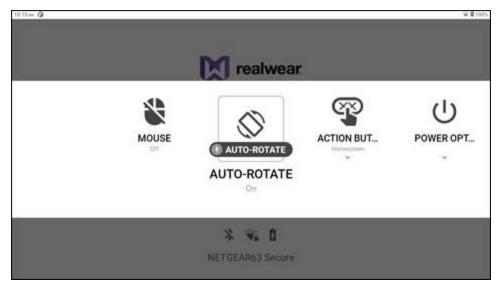


Right Eye Configuration Message

Auto-rotate can be toggled on or off in My Controls. Say "AUTO ROTATE" to toggle the setting ON or OFF.

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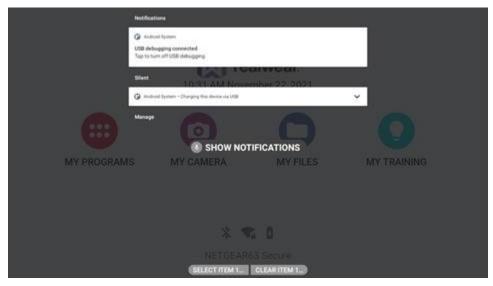




"AUTO ROTATE" Command

4.5 Notifications

Notifications are actionable messages sent from the operating system and applications. To access notifications, say "SHOW NOTIFICATIONS". The Notifications panel will display above the current screen. To close the Notifications panel, say "HIDE NOTIFICATIONS". Recent notifications are presented as items in a list.



"SHOW NOTIFICATION" Command

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Each notification in the list will include the following:

- Item number
- Notification details
- Notification source
- Notification title/headline

You can open a notification by first selecting it, say "SELECT ITEM #". When selected, say "OPEN" to view. When a notification is opened, a more detailed view is displayed. From this view, specific actions can be taken. As a reminder and quick reference - when on the RealWear Navigator Home Screen, the number of notifications will be displayed in the top left corner.

Notifications Voice Commands

Voice Command	Action
"SELECT ITEM #"	View a specific notification.
"SHOW NOTIFICATIONS"	Opens the list of notifications.

4.6 Action and Volume Buttons

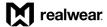
RealWear Navigator has an Action Button and two volume buttons. See section

Action Button controls, found in the My Controls menu, allows a RealWear Navigator user to change the result of a single press of the Action Button. The Action Button control is present in My Controls and set to Home Screen mode. Saying "ACTION BUTTON" while in My Controls will activate a selection for the RealWear Navigator user. "HOMESCREEN" and "NOISE CAPTURE" are the two options and the text below the ACTION BUTTON command shows the current setting. In the example above, the current state is HOMESCREEN and the command "NOISE CAPTURE" may be selected.

When set to Noise Capture mode pressing the Action Button will alternatively disable or enable the noise cancellation ability of the RealWear Navigator, allowing external noise to be captured in video/audio transmission and recordings. A single press of the Action Button enters Noise Capture mode (and disables noise cancellation); this displays a warning on the screen while active and voice commands will not be recognized. Another single press of the button reinstates noise cancellation and restores voice command ability. Voice commands are disabled because non-noise captured sound will usually launch unwanted commands.

Use the Volume Buttons to adjust the volume on RealWear Navigator.

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4.7 Speech Keyboard

Speech Keyboard is the default method by which text may be entered into a text field using RealWear Navigator. When a text entry screen is brought into focus or selected, the hands-free keyboard is displayed overlaying part of the application.

Speech keyboard provides various input methods:

- Remote Keyboard
- Dictation
- Secure Keyboard
- Voice Keyboard
- Barcode Reader



Speech Keyboard

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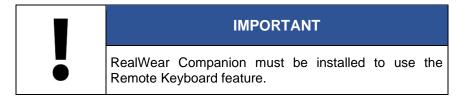
Speech Keyboard Commands

Voice Command	Action
"ACCEPT"	Accepts the entered information and navigates to the next page in sequence.
"BARCODE READER"	Allow users to scan QR code for text entry.
"CANCEL DICTATION"	Close the Dictation window.
"CANCEL EDIT"	Close the text edit window.
"CLEAR TEXT"	Clear the text in the input box.
"CLOSE DASHBOARD"	Close the keyboard options.
"DELETE"	Delete the last text character entry.
"DICTATION"	Activates dictation and allows user to enter text based on speech recognition.
"LETTER"	Toggles to the Letter Keyboard.
"LOWERCASE"	Toggles to lower case letters.
"NUMBER"	Toggles to the Number Keyboard.
"REMOTE KEYBOARD"	Toggles to Remote Keyboard mode.
"SECURE KEYBOARD"	Toggles to Secure Keyboard mode.
"SELECT"	Selects the highlighted character in Secure Keyboard mode.
"SHOW HELP"	Displays pop-up window with the help for commands associated with the current screen.
"SPACE"	Insert a single space.
"SYMBOL"	Toggles to the Symbol Keyboard.
"UPPERCASE"	Toggles to upper case letters.
"VOICE KEYBOARD"	Toggles to Voice Keyboard mode.

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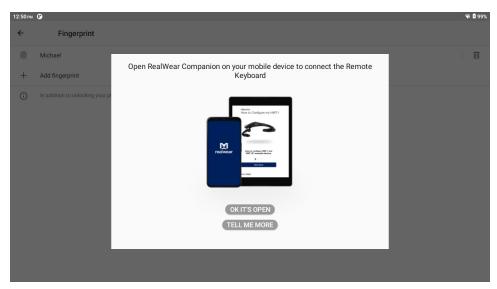
4.7.1 Remote Keyboard



The Remote Keyboard allows you to enter text using your mobile device.

To use the Remote Keyboard, do the following:

- 1. Say "REMOTE KEYBOARD".
- 2. Make sure RealWear Companion is open and say, "OK IT'S OPEN".



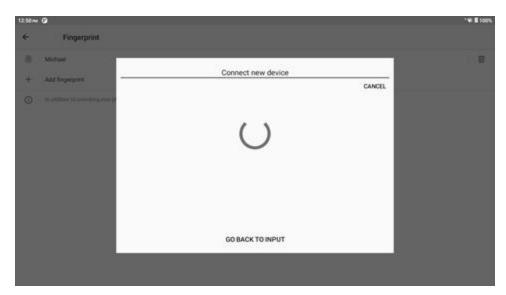
"OK IT'S OPEN" Command

The Connect new device window opens while RealWear Navigator searches for your mobile device.

Note: RealWear Navigator uses Bluetooth to pair with your mobile device. Make sure RealWear Navigator and your mobile device both have Bluetooth ON.

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Pairing with Your Mobile Device

4. After Bluetooth pairing is complete, you can use your mobile device's keyboard with RealWear Navigator.

4.7.1.1 Barcode Reader for Remote Keyboard

The Barcode Reader allows you to enter text using a barcode generated by the RealWear Companion mobile app.

To use the barcode reader as a remote keyboard, do the following:

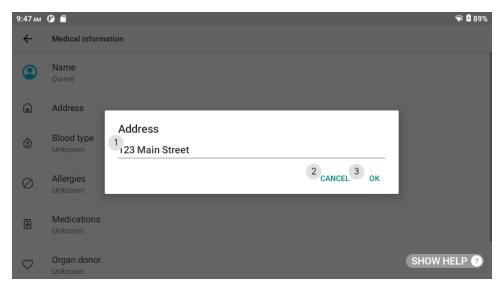
- 1. Open the RealWear Companion app on your mobile device.
- 2. Tap Remote Keyboard in the RealWear Companion app.
- 3. Enter the desired text into the text field
- 4. Say "BARCODE READER" and point the camera at the QR code. Make sure the entire QR code is within the white rectangle on the display.

Note: Use the flashlight, zoom, and telephoto commands to better read the QR code, as required.

5. When the QR code is scanned successfully, a chime sounds, and the text entered into the RealWear Companion app appears in the RealWear Navigator display.

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QR Code Scan Successful

4.7.2 Dictation

Dictation is cloud-based for all languages, so an internet connection may be required. Some languages support local dictation as well. To toggle local and cloud-based dictation, say "MY CONTROLS" and then say "DICTATION". Go to www.realwear.com/support for more information.

Note: If the keyboard becomes hidden or accidentally closed, use the "SELECT ITEM #" command to select the text field again and the speech keyboard will reappear.

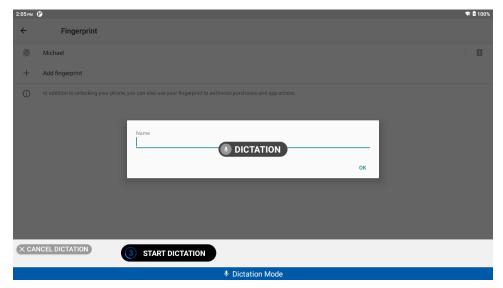
Note: If entering a password for Wi-Fi authentication, simply say "PASSWORD" to activate the speech keyboard.

To use Dictation, do the following:

 Say "DICTATION". The START DICTATION countdown timer appears at the bottom of the display.

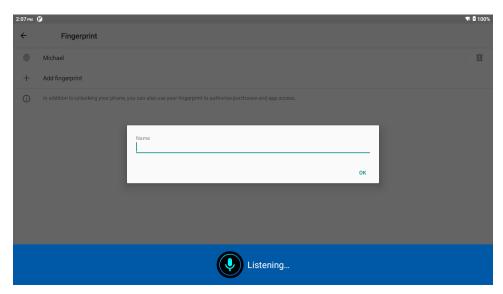
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"DICTATION COMMAND"

2. After the countdown timer finishes, RealWear Navigator listens for text. Speak quickly and clearly.

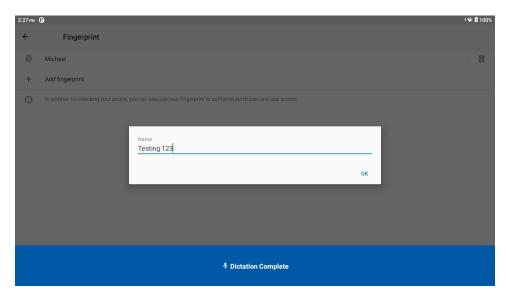


Listening for Text

3. The text appears in the text field and the user message "Dictation Complete" appears at the bottom of the display.

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Dictation Complete

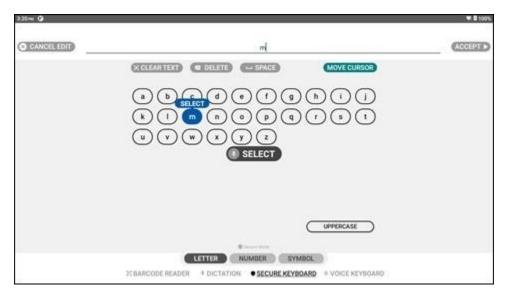
4. Say "OK" to accept the entry and close the text window.

4.7.3 Secure Keyboard

The Secure Keyboard allows only vertical and horizontal head movement to select letters, numbers, and symbols.

To use the Secure Keyboard, do the following:

- 1. Say "SECURE KEYBOARD".
- Move your head to highlight the desired character and say "SELECT".

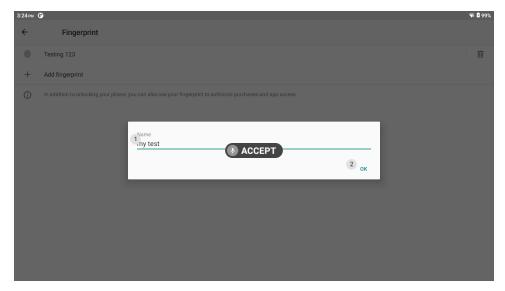


"SELECT" Command

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3. After the text has been entered, say "ACCEPT" to accept the changes.



"ACCEPT" Command

4.7.4 Voice Keyboard

The Voice Keyboard allows you to select letters, numbers, and symbols by saying the word associated with each character. Say "SPACE" at any time to add a space between characters.

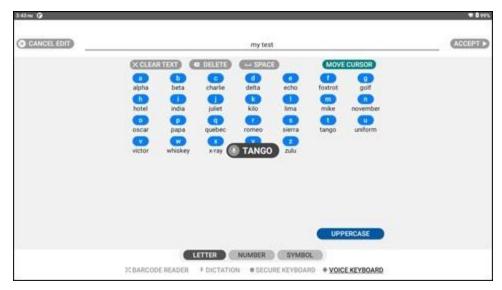
Note: Only English is currently supported in this mode. Other languages may work to varying degrees but are not optimized for this mode and could cause user issues.

To use the Voice Keyboard, do the following:

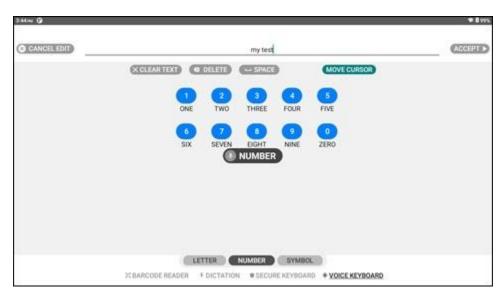
- Say "VOICE KEYBOARD".
- 2. Say the word associated with the desired character.

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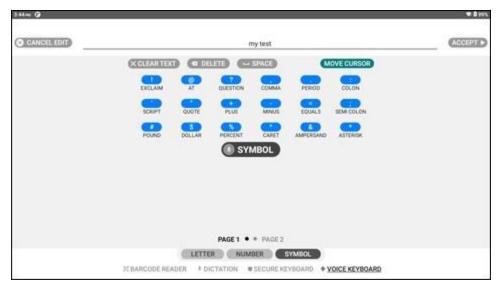
"LETTER" Command (Default)



"NUMBER" Command

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"SYMBOL" Command

3. After the text is entered, say "ACCEPT" to accept the changes.

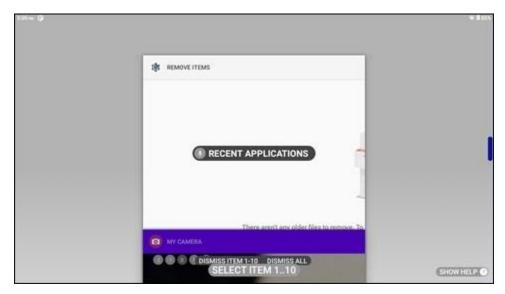
4.8 Recent Applications

Say "RECENT APPLICATIONS" to browse recent applications from any screen. After a moment, numbers appear in the upper right corner of each open app.

Use the "PAGE DOWN" and "PAGE UP" commands to scroll through open applications.

Select an app to open by speaking the name of the application, or use the "SELECT ITEM #" command, referencing the number in the upper right corner.

To dismiss an app from the list, say, "DISMISS ITEM #". To dismiss all, say "DISMISS ALL".



Recent Applications

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Recent Applications Voice Commands

Voice Command	Action
"DISMISS ALL"	Stops all currently running applications.
"DISMISS ITEM #"	Stops the application corresponding to the specified item number.
"PAGE DOWN"	Scrolls to the next page of recent applications list.
"PAGE UP"	Scrolls to the previous page of recent applications list.
"RECENT APPLICATIONS"	Displays the list of all applications running in the background with the item number associated with each application.
"SELECT ITEM #"	Opens the application associated with the specified item number.
"SHOW HELP"	Displays extra commands.

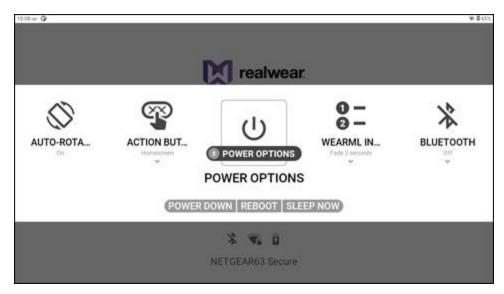
4.9 Device Power

4.9.1 Power Options

Power options allow you to access power management functions using voice commands.

To access power options, do the following:

- 1. From any screen say, "MY CONTROLS".
- 2. Say "POWER OPTIONS".



"POWER OPTIONS" Command

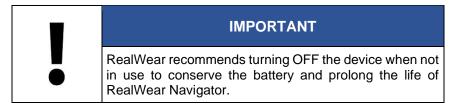
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Power Options Voice Commands

Voice Command	Action
"HOT SWAP"	Puts RealWear Navigator device in hot swap mode.
"POWER DOWN"	Turns OFF RealWear Navigator.
"REBOOT"	Reboots RealWear Navigator.
"SLEEP NOW"	Puts RealWear Navigator into sleep mode.

4.9.2 Turn OFF RealWear Navigator



You can turn OFF RealWear Navigator either manually or hands-free.

4.9.2.1 Turn OFF Manually

To turn OFF RealWear Navigator manually, do the following:

- 1. Press and hold the power button for 3 seconds.
- 2. Release the power button after you hear the tone.
- 3. A shutdown screen appears on the display momentarily during the power down sequence.
- 4. The device turns OFF.

4.9.2.2 Turn OFF Hands-Free

To turn OFF RealWear Navigator using hands-free, do the following:

- 1. Say "MY CONTROLS".
- 2. Say "POWER OPTIONS".
- 3. Say "POWER DOWN".
- 4. A shutdown screen appears on the display momentarily during the power down sequence.
- 5. The device turns OFF.

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4.9.3 Reboot Device

You can reboot RealWear Navigator either manually or hands-free.

4.9.3.1 Reboot Manually

To reboot RealWear Navigator manually, do the following:

- 1. Press and hold the power button for 3 seconds.
- 2. Release the power button after you hear the tone.
- 3. A shutdown screen appears on the display momentarily during the power down sequence.
- 4. The device turns OFF.
- 5. Press and hold the power button for 3 seconds.
- 6. The device turns ON.

4.9.3.2 Reboot Hands-Free

To reboot RealWear Navigator using hands-free, do the following:

- 1. Say "MY CONTROLS".
- 2. Say "POWER OPTIONS".
- 3. Say "REBOOT".
- 4. The device restarts.

4.9.4 Sleeping and Waking

You can sleep and wake RealWear Navigator either manually or hands-free.

4.9.4.1 Sleep and Wake Manually

To sleep and wake RealWear Navigator™ manually, do the following:

- 1. Press the power button briefly (less than 1 second).
- 2. Release the power button to sleep or wake the device.

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4.9.4.2 Sleep and Wake Hands-Free

To sleep and wake RealWear Navigator using hands-free, do the following:

- 1. Say "MY CONTROLS".
- 2. Say "POWER OPTIONS".
- 3. Say "SLEEP NOW".
- 4. When asleep, press the power button briefly (less than 1 second) to wake the device.

4.10 Battery Use

4.10.1 Direct Charging

The RealWear Navigator battery is charged with the included wall charger and USB-C cable.

To charge the battery, do the following:

1. Connect the USB-C cable to the RealWear Navigator USB-C port.

Note: Go to section 1.2.1.11 USB C Port for the USB-C port location.

- 2. Connect the charging cable to the wall charger.
- 3. Plug the wall charger into an electrical outlet.
- 4. The LED next to the power button flashes during the charging cycle.
- 5. The LED illuminates solid when charging is complete.

Battery Status Indicators

LED Color	Definition
Red	Battery charge is less than 10%
Yellow	Battery charge is less than 60%
Green	Battery charge is more than 60%
Blue	Bluetooth pairing is active

Note: The battery charge status is also shown on the RealWear Navigator display.

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Battery Status on Display

4.10.2 Low Battery

RealWear Navigator will monitor the battery charge and display a warning when the battery charge is 15%, 10%, and 5%. Each battery charge warning is a different color.

Say "DISMISS" to dismiss the warning. Say "START SWAP" to begin hot swapping the battery. See the Battery Hot Swap section for more information.

4.10.3 Remove and Replace the Battery

RealWear Navigator ships with a rechargeable battery and requires the battery to power ON.

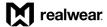
To remove the rechargeable battery, do the following:

- 1. Press the tab on the forward edge of the battery, next to the power button.
- Pull the battery away from RealWear Navigator.

To replace the rechargeable battery, do the following:

- Align the connections between the rechargeable battery and the RealWear Navigator battery compartment.
- 2. Press down on the battery until it clicks into place.

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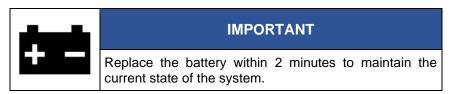




4.10.4 Battery Hot Swap

The battery hot swap feature puts RealWear Navigator into a low power consumption mode and allows you to swap out the battery.

To do a battery hot swap, do the following:



1. Remove the battery.

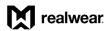
Note: See section 4.10.3 Remove and Replace the Battery for battery removal instructions.

- 2. The display stays ON and the power button blinks red.
- 3. Replace the battery.

Note: See section 4.10.3 Remove and Replace the Battery for battery replacement instructions.

Resume normal RealWear Navigator operation.

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5 Home Screen

The Home screen is the primary user interface view and dashboard for RealWear Navigator™ 500 and is where you start when you power ON the RealWear Navigator.

The Home screen allows RealWear Navigator users to quickly access files and key applications while providing useful information such as time, date, Wi-Fi, and battery status.

To launch applications from the Home screen, say the following commands:

- My Programs (go to chapter 6 My Programs App for more information)
- My Camera (go to chapter 7 My Camera App for more information)
- My Files (go to chapter 8 My Files App for more information)
- My Training (go to chapter 9 My Training App for more information)



Home Screen

Note: Some launch icons may be added or removed, depending on the preferences of your organization.

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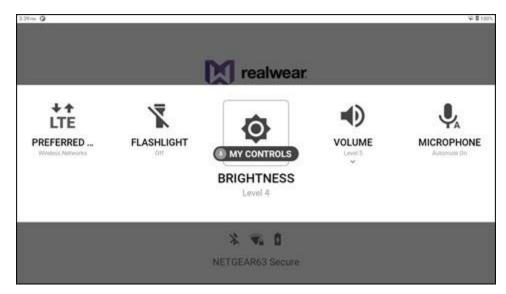
5.1 Home Screen Navigation

You can control various applications by saying the voice commands in the table below from the Home screen.

Note: Say "NAVIGATE HOME" or press the Action Button to return to the Home screen at any time.

Home Screen Voice Commands

Voice Command	Action
"HIDE HELP"	Hides the Help Panel.
"MY CAMERA"	Opens the My Camera app.
"MY CONTROLS"	Opens the Control Panel for easy access to commonly used settings.
"MY FILES"	Opens the My Files app to access documents, videos, and photos.
"MY PROGRAMS"	Opens the My Programs app to access the installed applications.
"MY TRAINING"	Opens the My Training app better familiarize the user with the device.
"SHOW HELP"	Opens the help panel.
"SHOW NOTIFICATIONS"	Displays all recent notifications.



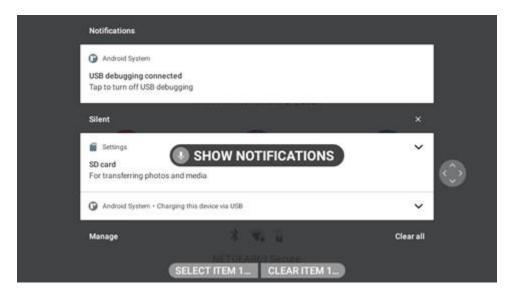
"MY CONTROLS" Command

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"SHOW HELP" Command



"SHOW NOTIFICATIONS" Command

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6 My Programs

My Programs allows RealWear Navigator™ 500 users to access installed applications. Say "MY PROGRAMS" from the Home screen to open the **My Programs** app.



My Programs App

The following default applications are in My Programs:

- About Device
- Audio Recorder
- Barcode Reader
- Calculator
- Clock
- Cloud Sync
- Configuration
- My Camera

- My Controls
- My Files
- My Training
- Pedometer
- Settings
- Tetrominos
- Web Apps
- Wireless Update

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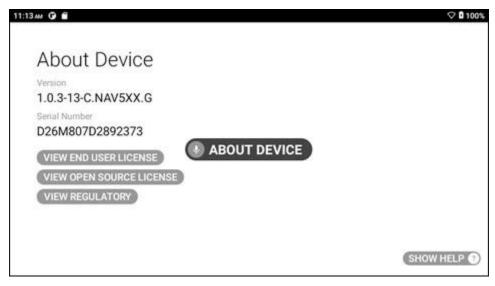
To choose an application, say the application name as shown in **My Programs**, or say the number displayed in the upper right corner of the icon. For example, say, "CLOCK" or say, "SELECT ITEM FIVE".



My Programs

6.1 About Device App

The **About Device** app displays information about your RealWear Navigator device. Say "ABOUT DEVICE" or "SELECT ITEM ONE" to open the app.



"ABOUT DEVICE" Command

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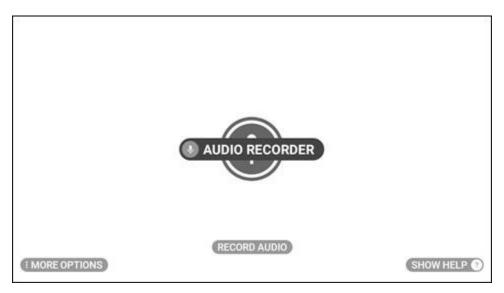


About Device Voice Commands

Voice Command	Action
"SHOW HELP"	Opens the help menu.
"VIEW END USER LICENSE"	Opens the software license agreement.
"VIEW OPEN SOURCE LICENSE"	Opens the open source license.
"VIEW REGULATORY"	Opens the international regulatory information.

6.2 Audio Recorder App

The **Audio Recorder** app allows you to record and save audio files to your device. Say "AUDIO RECORDER" or "SELECT ITEM TWO" to open the app.



"AUDIO RECORDER" Command

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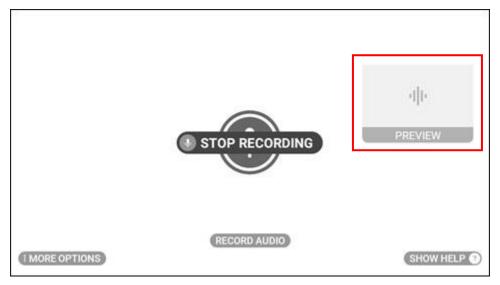
6.2.1 Recording Audio

To record an audio file, say "RECORD AUDIO". To stop recording, say "STOP RECORDING". To pause and then resume recording, say "PAUSE RECORDING" and then say, "RESUME RECORDING", respectively.



Recording Audio

After you stop recording, a **Preview** window opens on the right side of the display. Say "PREVIEW" to play back the recorded audio. See the table below for audio playback commands.

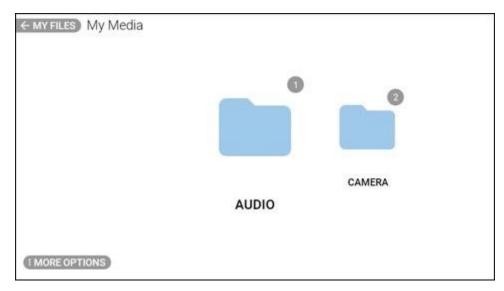


Audio Preview Window

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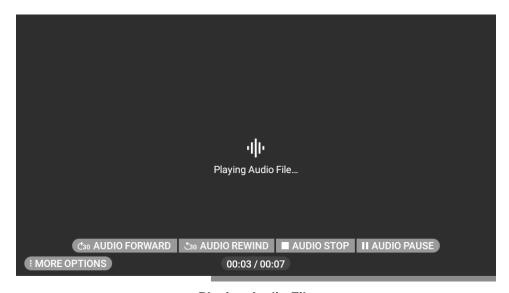
Recorded audio files are automatically saved to the **Audio** folder, located in the **My Media** folder in the **My Files** app.



Audio Folder

6.2.2 Audio Playback

Say "SELECT ITEM #" to play an audio file. See the table below for audio playback commands.



Playing Audio File

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Audio Playback Voice Commands

Voice Command	Action
"AUDIO FORWARD"	Fast forwards the audio 30 seconds.
"AUDIO PAUSE"	Pauses audio while playing.
"AUDIO PLAY"	Plays paused audio.
"AUDIO REWIND"	Rewinds the audio 30 seconds.
"AUDIO STOP"	Stops the audio and returns to the Audio folder.
"MORE OPTIONS"	Displays the "VIEW PREVIOUS" and "VIEW NEXT" commands.
"SELECT VOLUME [1 to 10]"	Sets the default volume level of the device. For example, to set the volume to 3, say "SELECT VOLUME 3".
"SHOW HELP"	Opens the help menu.
"VIEW NEXT"	Plays the next audio file.
"VIEW PREVIOUS"	Plays the previous audio file.

6.2.3 More Options

Note: Say "MORE OPTIONS" in the **Audio** folder to access the **Sort Files** and **Edit Mode** options. Go to section 8.3.1 More Options for more information.

With the Audio Recorder app open, say "MORE OPTIONS" to change the following settings:

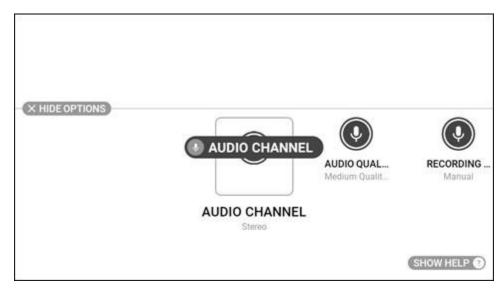
- Audio channel
- Audio quality
- Recording time

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6.2.3.1 Audio Channel

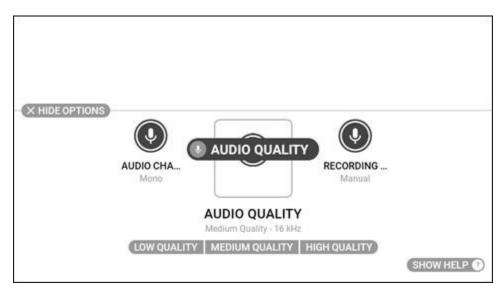
Say "AUDIO CHANNEL" to toggle between mono and stereo.



"AUDIO CHANNEL" Command

6.2.3.2 Audio Quality

Say "AUDIO QUALITY" to view the audio quality options. Say "LOW QUALITY", "MEDIUM QUALITY", or "HIGH QUALITY" to change the quality of the playback audio.



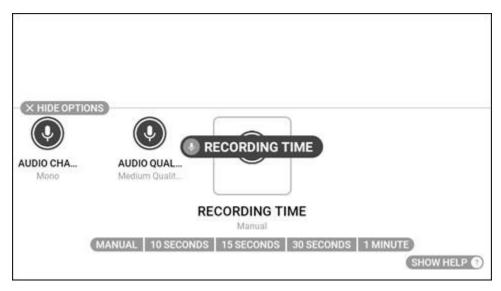
"AUDIO QUALITY" Command

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6.2.3.3 Recording Time

Say "RECORDING TIME" to view the recording time options. To stop audio recordings manually, say "MANUAL". To set a time limit on audio recordings, say "TEN SECONDS", "FIFTEEN SECONDS", "THIRTY SECONDS", or "ONE MINUTE", as required.



"RECORDING TIME" Command

6.3 Barcode Reader App

The **Barcode Reader** app allows you to scan barcodes. Say "BARCODE READER" or "SELECT ITEM THREE" to open the app.

The app can scan the following types of barcodes:

- Code 39
- Code 128
- Data matrix
- EAN 8
- EAN 13
- QR code
- UPC A
- UPC E

You can also scan QR codes that contain RealWear bookmarks, URLs, and application codes.

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To scan a barcode, do the following:

 Point the camera at the barcode. Make sure the entire barcode is within the white rectangle on the display.

Note: Use the flashlight, zoom, and telephoto commands to better read barcodes, as required.

2. When the barcode is scanned successfully, a chime sounds, and the barcode details are shown at the bottom of the display.

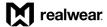


Barcode Scanned Successfully

Barcode Voice Commands

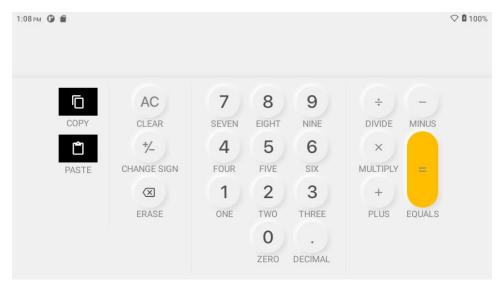
Voice Command	Action
"ZOOM LEVEL [1 to 5]"	Zooms the camera by setting the level to specific value.
"FLASHLIGHT OFF"	Turns OFF the flashlight.
"FLASHLIGHT ON"	Turns ON the flashlight.
"TELEPHOTO"	Single zoom with greater precision and accuracy.

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6.4 Calculator App

The **Calculator** app is a basic calculator with copy and paste functionality. Say "CALCULATOR" or "SELECT ITEM FOUR" to open the app. Say the word under the corresponding number, character, or function to use the calculator.



Calculator App

6.5 Clock App

The **Clock** app contains an alarm clock, countdown timer, and stopwatch. Say "CLOCK" or "SELECT ITEM FIVE" to open the app.

6.5.1 Alarm Clock

Say "ALARM CLOCK" to open the alarm clock. Say "# HOURS" and "# MINUTES" to set the alarm.

For example, to set the alarm to 8:30 PM, do the following:

- 1. Say "EIGHT HOURS".
- 2. Say "THIRTY MINUTES".
- 3. Say "HOUR MODE" until "PM" is displayed.

Note: The "HOUR MODE" command cycles through AM, PM, 12-hour, and 24-hour clock options.

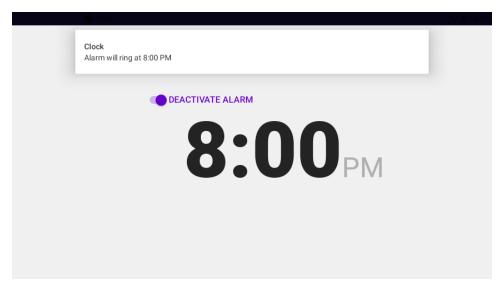
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4. Say "ACTIVATE ALARM" to toggle the Activate Alarm button.

Note: The device will chime and display an alarm notification.

To turn OFF the alarm, say "DEACTIVATE ALARM".



Alarm Clock Example

6.5.2 Timer

Say "TIMER" to open the countdown timer. Say "# HOURS", "# MINUTES", and "# SECONDS" to set the timer.

For example, to set the timer to 2:00:30, do the following:

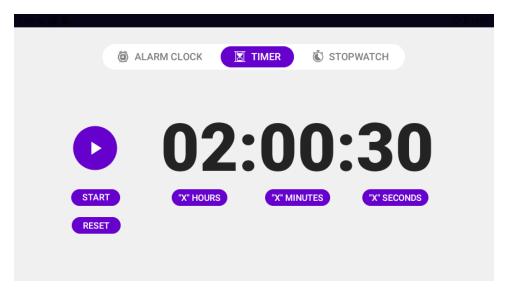
- 1. Say "TWO HOURS".
- Say "ZERO MINUTES".
- 3. Say "THIRTY SECONDS".
- 4. Say "START" to start the timer.

Note: The device will chime and display a timer notification.

- 5. With the timer running, you can use the following commands:
 - Say "PAUSE" at any time to pause the timer.
 - Say "RESUME" to resume the timer.
 - Say "RESET" to reset the timer to 00:00:00.

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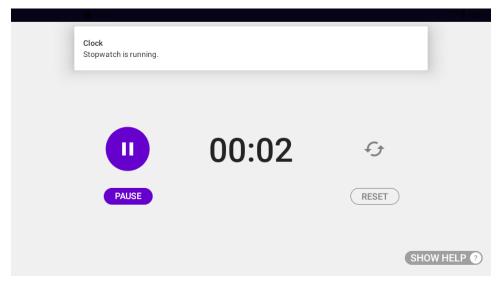


Timer Example

6.5.3 Stopwatch

Say "STOPWATCH" to open the stopwatch. Say "START" to start the stopwatch. Say "PAUSE" at any time to pause and say "RESUME" to resume the stopwatch. Say "RESET to stop the stopwatch.

Note: When the stopwatch starts, the device will chime and display a stopwatch notification.



Running Stopwatch

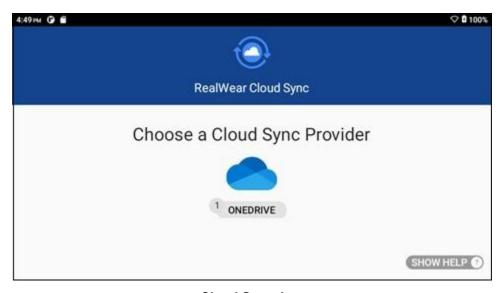
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6.6 Cloud Sync App

The **Cloud Sync** app allows you to sync RealWear Navigator with the cloud. Say "CLOUD SYNC" or "SELECT ITEM SIX" to open the app.

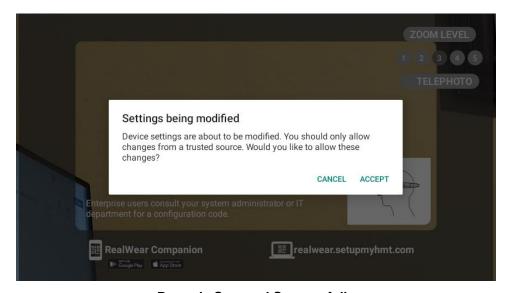
Note: For more information, go to https://support.realwear.com/knowledge.



Cloud Sync App

6.7 Configuration App

The **Configuration** app allows you to configure RealWear Navigator by scanning a barcode generated in the RealWear Companion mobile app. Say "CONFIGURATION" or "SELECT ITEM SEVEN" to open the app.



Barcode Scanned Successfully

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6.8 My Camera App

Go to chapter 7 My Camera App for more information.

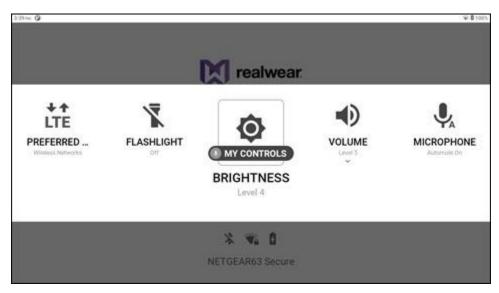
6.9 My Controls App

The **My Controls** app allows you to change basic RealWear Navigator settings. Say "MY CONTROLS" or "SELECT ITEM NINE" to open the app.



Turn your head left or right to browse the controls, and then say the name of the desired control to open it.

Note: Items are active and can be selected even when not in the viewable area.



"MY CONTROLS" Command

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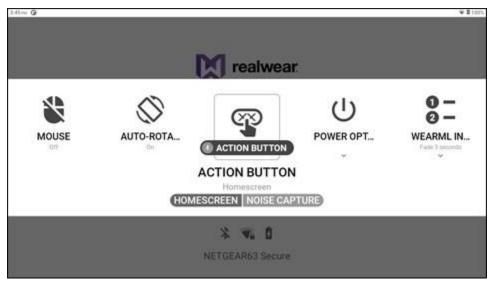


My Controls Voice Commands

Voice Command	Action
"ACTION BUTTON"	Toggle between home screen and noise capture modes.
"AUTO ROTATE"	Toggles screen rotation ON and OFF.
"BLUETOOTH"	Enables or disables Bluetooth.
"BRIGHTNESS"	Changes the system brightness settings.
"COLOR MODE"	Toggles between light and dark screen modes.
"DICTATION"	Toggles between local and cloud-based dictation.
"FLASHLIGHT"	Toggles the built-in flashlight ON and OFF.
"HELP COMMAND"	Toggles visibility of the SHOW HELP icon ON and OFF.
"MICROPHONE"	Toggles the auto mute function ON and OFF.
"MOUSE"	Toggle the head-tracked mouse ON and OFF.
"POWER OPTIONS"	Opens the power management options.
"VOLUME"	Changes the system volume setting.
"WIRELESS NETWORK"	Enables or disables Wi-Fi.

6.9.1 Action Button

Say "ACTION BUTTON" to change the Action Button function. Say "HOME SCREEN" to return to the home screen or say "NOISE CAPTURE" to toggle noise capture ON and OFF.



"ACTION BUTTON" Command

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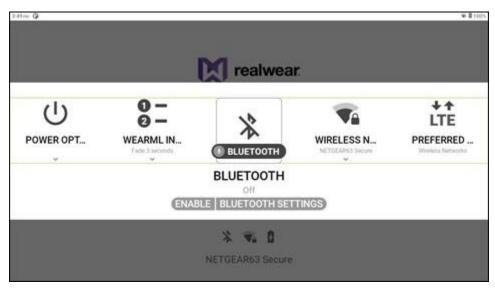
6.9.2 Auto Rotate

Go to section 4.4 Screen Orientation for more information.

6.9.3 Bluetooth

Say "BLUETOOTH" to view the Bluetooth options. Say "ENABLE" or "DISABLE" to turn Bluetooth ON or OFF, respectively.

Say "BLUETOOTH SETTINGS" view and change Bluetooth settings. Go to section 6.13.2 Connected Devices App for more information.



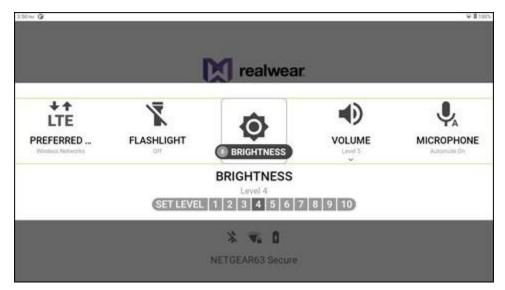
"BLUETOOTH" Command

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6.9.4 Brightness

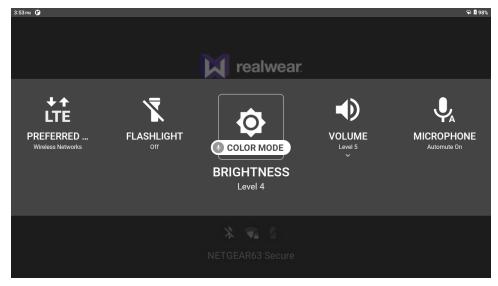
Say "BRIGHTNESS" to view the display brightness options. Say "SET LEVEL [1 to 10]" to change the brightness level.



"BRIGHTNESS" Command

6.9.5 Color Mode

Say "COLOR MODE" to toggle the display between light and dark.



"COLOR MODE" Command to Dark

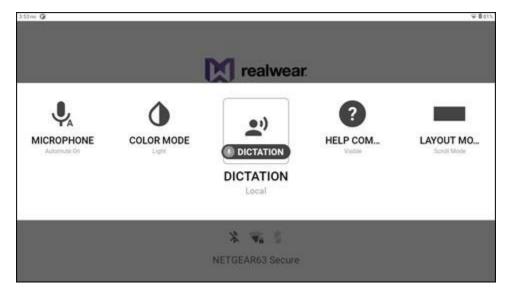
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6.9.6 Dictation

Say "DICTATION" to toggle dictation between local and cloud.

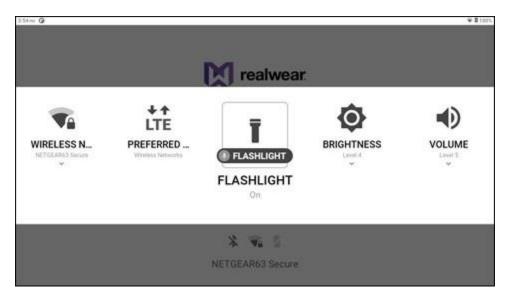
Note: Local dictation is not available for all system languages. Wi-Fi may be required.



"DICTATION" Command

6.9.7 Flashlight

Say "FLASHLIGHT" to toggle the flashlight ON or OFF.



"FLASHLIGHT" Command

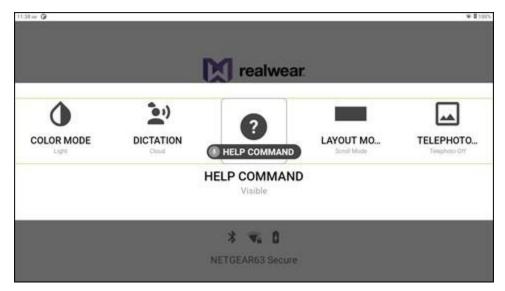
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6.9.8 Help Command

Say "HELP COMMAND" to toggle the "SHOW HELP" command visible or hidden.

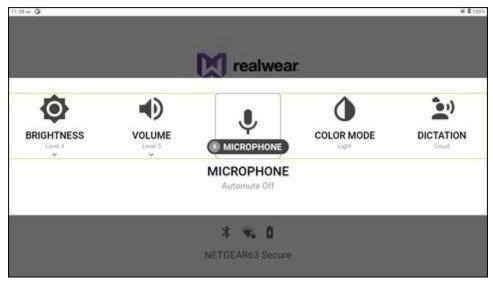
Note: The "SHOW HELP" command is always active.



"HELP COMMAND" Command

6.9.9 Microphone

Say "MICROPHONE" to toggle the auto mute function ON or OFF. When ON, the microphone stops listening for voice commands if the device is idle for 30 seconds.



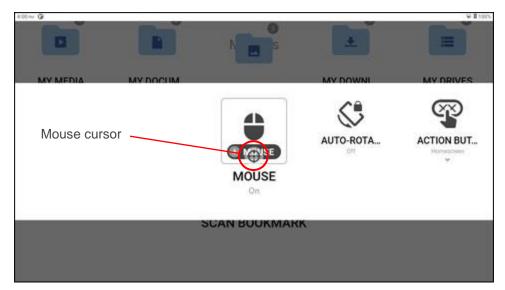
"MICROPHONE" Command

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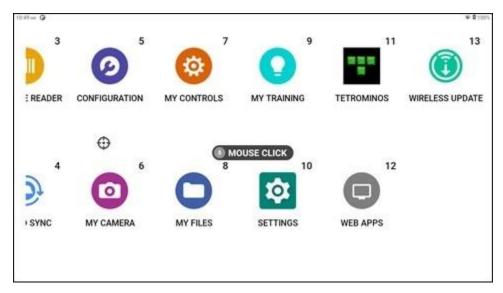


6.9.10 Mouse

Say "MOUSE" to toggle the mouse ON or OFF. When ON, move the mouse cursor over an item with head movement and say "MOUSE CLICK" to select the item.



"MOUSE" Command



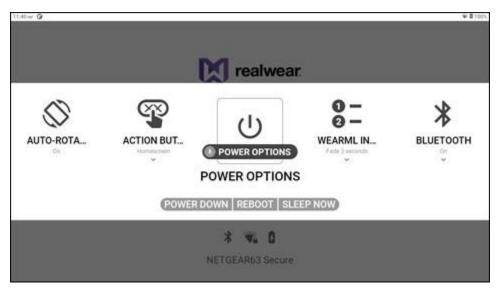
"MOUSE CLICK" Command

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6.9.11 Power Options

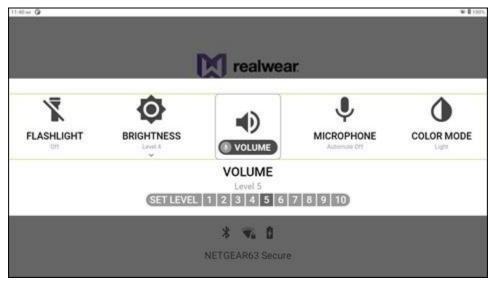
Say "POWER OPTIONS" to view the device power options. Say "POWER DOWN" to turn OFF the device, say "REBOOT" to restart the device, and say "SLEEP NOW" to put the device in rest mode.



"POWER OPTIONS" Command

6.9.12 Volume

Say "VOLUME" to view the device volume options. Say "SET LEVEL [1 to 10]" to change the volume level.



"VOLUME" Command

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6.9.13 Wireless Network

Say "WIRELESS NETWORK" to view the wireless network options. Say "ENABLE" or "DISABLE" to turn Wi-Fi ON or OFF, respectively.

Say "WIRELESS NETWORK SETTINGS" view and change Bluetooth settings. Go to section 6.13.1 Network and Internet App for more information.



"WIRELESS NETWORK" Command

6.10 My Files App

Go to chapter 8 My Files App for more information.

6.11 My Training App

Go to chapter 9 My Training App for more information.

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6.12 Pedometer App

The **Pedometer** app allows you to track and view your steps taken with RealWear Navigator on a daily or weekly basis. Say "PEDOMETER" or "SELECT ITEM TWELVE" to open the app.



Pedometer App

6.13 Settings App

The **Settings** app allows you to view and change settings on your device. Say "SETTINGS" or "SELECT ITEM THIRTEEN" to open the app.

The following default applications are in the **Settings** app:

- About device
- Accessibility
- Apps and notifications
- Battery
- Connected devices
- Display
- Location

- Network and internet
- Privacy
- RealWear
- Security
- Sound
- Storage
- System

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To choose an application, say the application name or say the number displayed in the upper right corner of the icon. For example, say, "BATTERY" or say, "SELECT ITEM FOUR". Say "PAGE UP" and "PAGE DOWN" to scroll the list of settings.

Note: The number for each setting changes when you scroll. For example, Battery is item 4 in the figure below, but if you scrolled down and Battery was now at the top of the page, it would become item 1.



Settings

6.13.1 Network and Internet Settings

Network and internet settings allow you to configure your Wi-Fi settings. Say "NETWORK AND INTERNET" or "SELECT ITEM #" to open the app.



Network and Internet Settings

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6.13.2 Connected Devices Settings

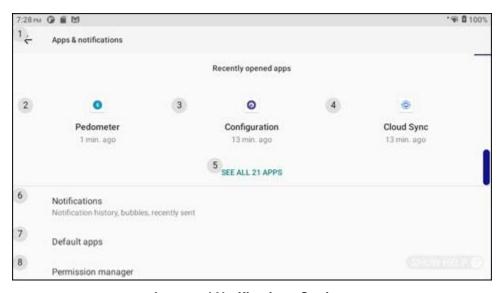
Connected devices settings allow you to connect devices to RealWear Navigator. Say "CONNECTED DEVICES" or "SELECT ITEM #" to open the app.



Connected Devices Settings

6.13.3 Apps and Notifications Settings

Apps and notifications settings allow you to view installed apps and device notifications. Say "APPS AND NOTIFICATIONS" or "SELECT ITEM #" to open the app.



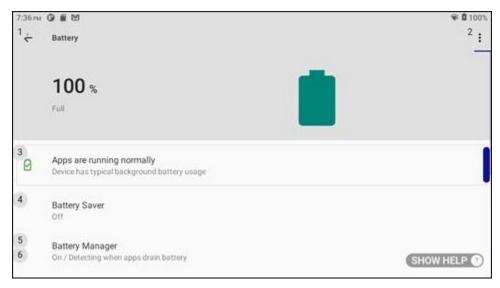
Apps and Notifications Settings

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6.13.4 Battery Settings

Battery settings allow you to view and change battery settings. Say "BATTERY" or "SELECT ITEM #" to open the app.



Battery Settings

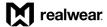
6.13.5 Display Settings

Display settings allow you to change display and font settings. Say "DISPLAY" or "SELECT ITEM #" to open the app.



Display Settings

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6.13.6 Sound Settings

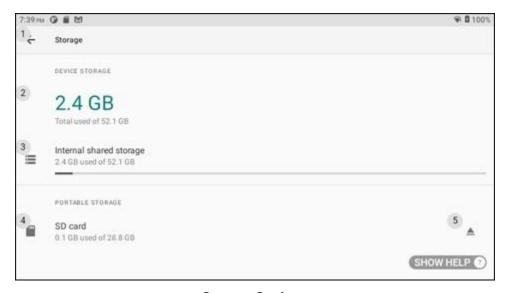
Sound settings allow you to change volume levels and sound notifications. Say "SOUND" or "SELECT ITEM #" to open the app.



Sound Settings

6.13.7 Storage Settings

Storage settings allow you to view internal (on-device) and external (micro SD card) storage usage and capacity. Say "STORAGE" or "SELECT ITEM #" to open the app.



Storage Settings

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6.13.8 Privacy Settings

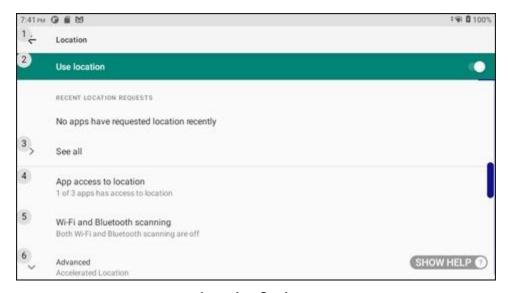
Privacy settings allow you to change permissions, password settings, and lock screen notifications. Say "PRIVACY" or "SELECT ITEM #" to open the app.



Privacy Settings

6.13.9 Location Settings

Location settings allow you to view app location information, and to enable Wi-Fi and Bluetooth scanning. Say "LOCATION" or "SELECT ITEM #" to open the app.



Location Settings

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6.13.10 Security Settings

Security settings allow you to configure your device security settings. Say "SECURITY" or "SELECT ITEM #" to open the app.



Security Settings

6.13.11 Accessibility Settings

Accessibility settings allow you to change the device accessibility settings. Say "ACCESSIBILITY" or "SELECT ITEM #" to open the app.



Accessibility Settings

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6.13.12 RealWear Settings

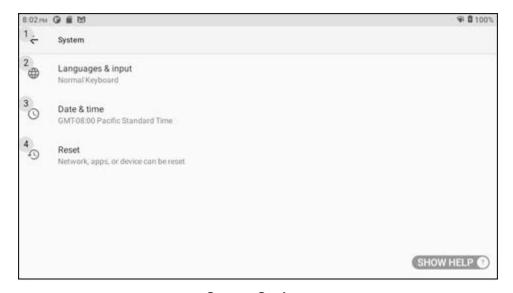
RealWear settings allow you to toggle settings for Bluetooth, storage, and some camera features. Say "REALWEAR" or "SELECT ITEM #" to open the app.



RealWear Settings

6.13.13 System Settings

System settings allow you to change languages, date, or time, or to reset your device. Say "SYSTEM" or "SELECT ITEM #" to open the app.



System Settings

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6.13.14 About Device

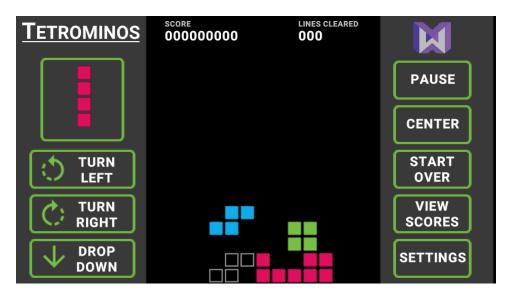
About Device displays device information and emergency contact information. Say "ABOUT DEVICE" or "SELECT ITEM #" to open the app.



About Device

6.14 Tetrominos App

The **Tetrominos** app is a fun block puzzle game played with horizontal head movement and voice commands. Say "TETROMINOS" or "SELECT ITEM FOURTEEN" to open the app.



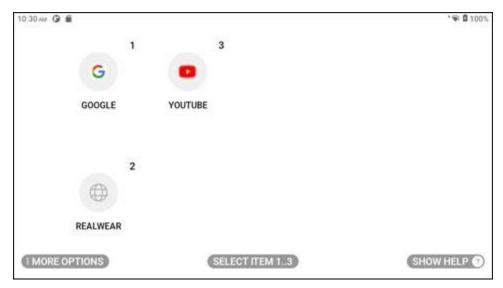
Tetrominos App

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6.15 Web Apps App

The **Web Apps** app allows you to view web applications stored on your device. Say "WEB APPS" or "SELECT ITEM FIFTEEN" to open the app.

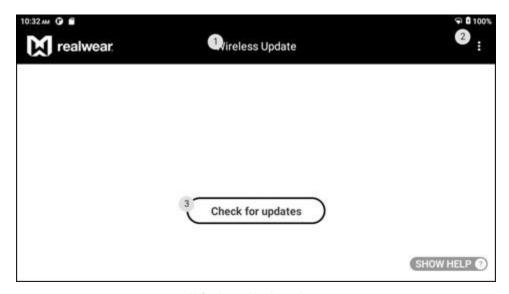


Web Apps App

6.16 Wireless Update App

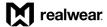
The **Wireless Update** app allows you to check for device updates over Wi-Fi. Say "WIRELESS UPDATE" or "SELECT ITEM SIXTEEN" to open the app.

Note: For more information, go to https://support.realwear.com/knowledge.



Wireless Update App

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7 My Camera

My Camera is a hands-free application for taking photographs and videos. From the Home Screen or from the My Programs screen, say "MY CAMERA" to launch the My Camera application. When My Camera is launched, a live view of the RealWear Navigator™ 500 camera optical input will be visible in the RealWear Navigator display pod.

The camera Heads-Up Display (HUD) provides the following camera controls and settings:

- Exposure level
- My files
- Preview
- Record video
- Take photo
- Telephoto
- Zoom level

7.1 Take a Photo

Say "TAKE PHOTO" to take a photo.

Note: The photo is automatically saved to the **Camera** folder in **My Photos**.



Photo HUD

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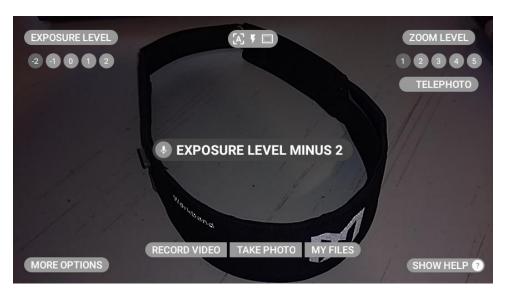


7.1.1 Exposure Level

Say "EXPOSURE LEVEL [-2 to +2]" to adjust the camera exposure level. Exposure levels help the camera adapt to different environmental situations.



"EXPOSURE LEVEL 2" Command



"EXPOSURE LEVEL MINUS 2" Command

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Photo Voice Commands

Voice Command	Action	
"EXPOSURE LEVEL [-2 to +2]"	Adjusts exposure level. The screen will immediately show the results of the exposure level change. The default exposure level is 0.	
"MY FILES"	Opens the My Files location.	
"PREVIEW"	Opens the recent photo or video shown in the preview thumbnail.	
"TAKE PHOTO"	Captures a photo.	
"TELEPHOTO"	Single zoom with greater precision and accuracy.	
"ZOOM LEVEL [1 to 5]"	Adjusts the zoom level.	

7.2 Record a Video

To record a video, do the following:

Note: The video is automatically saved to the Camera folder in My Media.

- 1. Say "RECORD VIDEO" to begin recording a video.
- 2. Say "STOP RECORDING" to stop recording the video.



Video HUD

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Video Voice Commands

Voice Command	Action	
"PREVIEW"	Opens the recent video shown in the preview thumbnail.	
"RECORD VIDEO"	Starts recording video.	
"STOP RECORDING"	Stops recording video.	
"ZOOM LEVEL [1 to 5]"	Adjusts the zoom level.	

7.3 Photo and Video Preview

When a video or photo is captured, an image preview window appears on the right side of the display. While the preview image is visible, say "PREVIEW" to open the image.

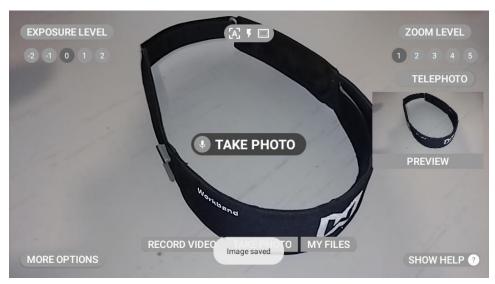
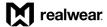


Image Preview Window

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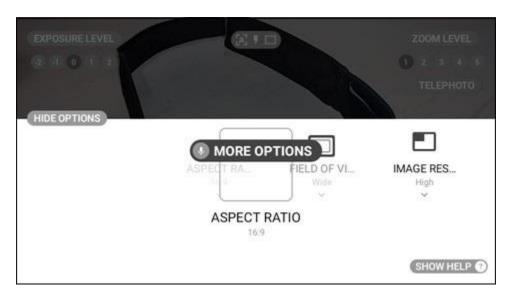


7.4 More Options

Say "MORE OPTIONS" to display additional camera adjustment settings.

The following additional camera options are available:

- Aspect ratio
- Field of View (FOV)
- Frame rate
- Image resolution
- Video resolution
- Video stabilization



"MORE OPTIONS" Command

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More Options Voice Commands

Voice Command	Action	
"ASPECT RATIO"	Opens the settings menu for aspect ratio.	
"FIELD OF VIEW"	Opens the settings menu for FOV.	
"FRAME RATE"	Opens the settings menu for frame rate.	
"IMAGE RESOLUTION"	Opens the settings menu for image resolution.	
"MORE OPTIONS"	Opens the Camera Options panel.	
"VIDEO RESOLUTION"	Opens the settings menu for video resolution.	
"VIDEO STABILIZATION"	Opens the settings menu for video stabilization.	

7.4.1 Aspect Ratio

Say "ASPECT RATIO" to view the aspect ratio options. To change the aspect ratio, say "SIXTEEN BY NINE" or "FOUR BY THREE".



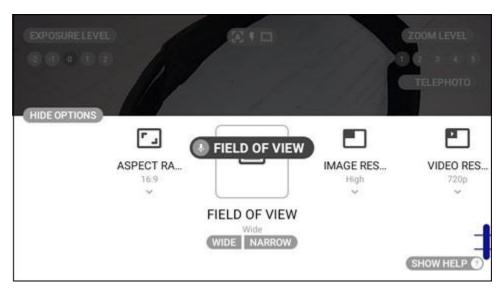
"ASPECT RATIO" Command

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7.4.2 Field of View

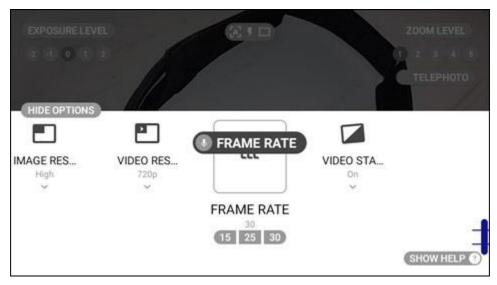
Say "FIELD OF VIEW" to view the FOV options. To change the FOV, say "WIDE" or "NARROW".



"FIELD OF VIEW" Command

7.4.3 Frame Rate

Say "FRAME RATE" to view the frame rate options. To change the frame rate, say "FIFTEEN", "TWENTY FIVE", or "THIRTY".



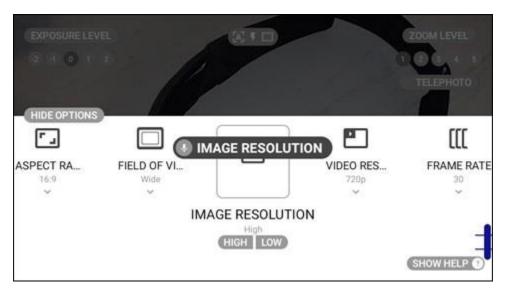
"FRAME RATE" Command

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7.4.4 Image Resolution

Say "IMAGE RESOLUTION" to view the image resolution options. To change the image resolution, say "HIGH" or "LOW".



"IMAGE RESOLUTION" Command

7.4.5 Video Resolution

Say "VIDEO RESOLUTION" to view the video resolution options. To change the video resolution, say "FOUR EIGHTY P", "SEVEN TWENTY P", or "TEN EIGHTY P".



"VIDEO RESOLUTION" Command

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7.4.6 Video Stabilization

Say "VIDEO STABILIZATION" to view the video stabilization options. To turn video stabilization ON or OFF, say "ON" or "OFF", respectively.

Note: Video stabilization provides compensation for movement for smoother video recording.



"VIDEO STABILIZATION" Command

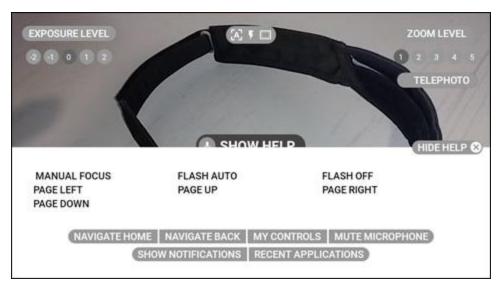
7.5 Additional Camera Commands

Say "SHOW HELP" to display the following additional camera commands:

- Auto focus
- Flash auto
- Flash OFF
- Flash ON
- Manual focus

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"SHOW HELP" Command

Additional Camera Voice Commands

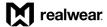
Voice Command	Action
"AUTO FOCUS"	Switches focus mode to auto.
"FLASH AUTO"	Switches flash mode to auto.
"FLASH OFF"	Turns flash OFF.
"FLASH ON"	Turns flash ON.
"HIDE HELP"	Hides the help menu.
"MANUAL FOCUS"	Switches focus mode to manual.
"SHOW HELP"	Displays the help menu.

7.5.1 Camera Flash

To turn ON the camera flash, say "FLASH ON". To turn OFF the camera flash, say "FLASH OFF". To use the camera light sensor to detect if a flash is required, say "FLASH AUTO".

Note: The default setting for the camera flash is OFF.

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7.5.2 Manual Focus

To turn ON manual focus, say "MANUAL FOCUS".

Note: Say "AUTO FOCUS" to return to automatically focus the camera. Auto focus is the default camera setting.



"MANUAL FOCUS" Command

With manual focus turned ON, say "FOCUS POINT [1 to 9]" to set the camera focus point.



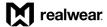
"FOCUS POINT [1 to 9]" Command

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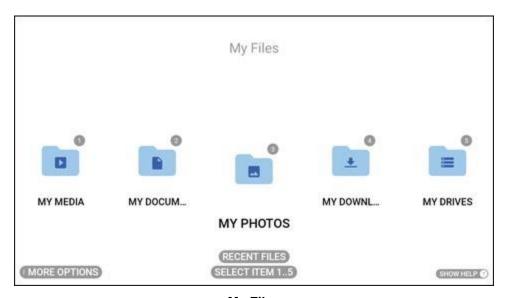
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8 My Files

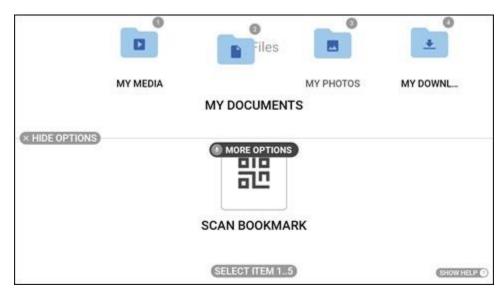
View documents, photos, and video files locally stored or stored on an installed micro SD card using the **My Files** app.

Launch My Files from the Home Screen or My Programs. The My Files screen shows the My Media, My Documents, and My Photos folders.



My Files

Say "MORE OPTIONS" to open the options panel and access the Scan Bookmark tool. Say "RECENT FILES" for quick access to any recently opened file.



"MORE OPTIONS" Command

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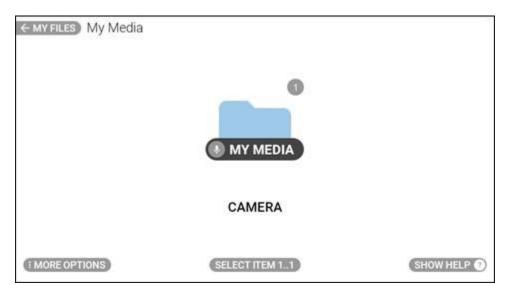


File Browser Voice Commands

Voice Command	Action	
"BACK ONE LEVEL"	Navigates to the previous folder in the folder tree.	
"MORE OPTIONS"	Displays contextual options for each view.	
"MY DOCUMENTS"	Displays files stored in the My Documents folder.	
"MY MEDIA"	Displays files stored in the videos folder and videos recorded using the RealWear Navigator™ 500 camera and stored in DCIM folder.	
"MY PHOTOS"	Displays files stored in the photos folder and still images captured using the RealWear Navigator camera.	
"RECENT FILES"	Displays recent files.	
"SHOW HELP"	Displays extra commands.	

8.1 My Media Folder

The Camera folder, located in the My Media folder, contains a list of video and audio files taken with RealWear Navigator™ 500. Say "MY MEDIA" to open the My Media folder.



"MY MEDIA" Command

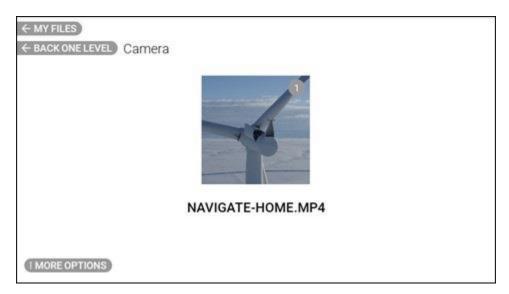
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8.1.1 Media Player

An audio or video file from My Media is played using the media player. Say "SELECT ITEM #" to select a file. For example. to select the first item, say "SELECT ITEM ONE".

8.1.1.1 Video Playback



Video File



Video Playback

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Video P	Playback	Voice	Commands
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Voice Command	Action	
"SELECT VOLUME [1 to 10]"	Sets the default volume level of the device. For example, to set the volume to 3, say "SELECT VOLUME 3".	
"SHOW HELP"	Displays extra commands.	
"VIDEO FORWARD"	Fast forwards the video 30 seconds.	
"VIDEO PAUSE"	Pauses video while playing.	
"VIDEO PLAY"	Plays paused video.	
"VIDEO REWIND"	Rewinds the video 30 seconds.	
"VIDEO STOP"	Stops the video and returns to the My Media screen	

8.2 My Documents Folder

The **My Documents** folder contains PDF and image files stored on RealWear Navigator. Say "MY DOCUMENTS" to open the **My Documents** folder. Say "SELECT ITEM #" to select a file.



"MY DOCUMENTS" Command

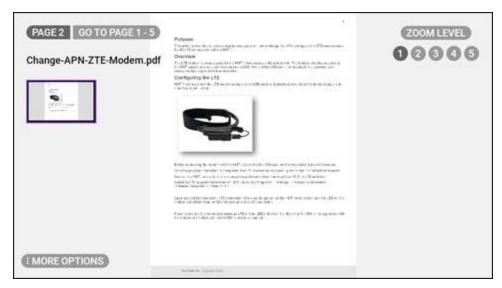
8.2.1 Document Viewer

Open PDF files and image files using document viewer with hands-free control. If you select a PDF or image file from **My Documents** or **My Photos**, it is opened with Document Viewer.

Open a file by using the "SELECT ITEM #" command or by saying the name of the document without the file extension.

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Document Viewer

Document Viewer Voice Commands

Voice Command	Action	
"GO TO PAGE #"	Scrolls to the specified page.	
"MY BOOKMARKS"	Displays the bookmarks saved in the device for the open document.	
"NEXT PAGE"	Scrolls to the next page.	
"PREVIOUS PAGE":	Scrolls to the previous page	
"SHOW HELP"	Displays extra commands.	
"VIEW NEXT"	Switches to the next document.	
"VIEW PREVIOUS"	Switches to the previous document.	

8.2.1.1 Zooming and Panning

To zoom in say "ZOOM LEVEL #", selecting a level from 1 to 5. When a document is zoomed in at any level past level 1, you can move your head to view different areas of the document.

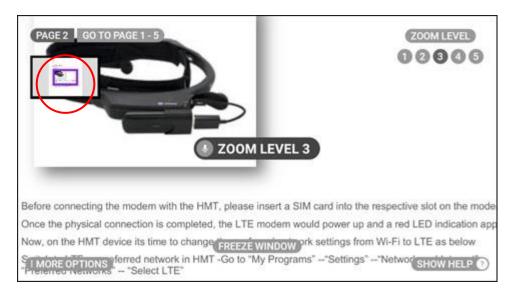
A small thumbnail will appear in the upper left part of the screen with a purple rectangle representing the current view.

If you want to lock the location of the document, say, "FREEZE WINDOW". You can then move your head while the view is frozen.

To return to panning say, "CONTROL WINDOW". Even when frozen, the view can be zoomed in or out. To return a zoomed in window to the exact center say, "RESET WINDOW".

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Zoomed View with Thumbnail

Zooming and Panning Voice Commands

Voice Command	Action	
"CONTROL WINDOW"	Unfreezes the document and enables document scrolling in response to head gestures.	
"FREEZE WINDOW"	Prevents the document from scrolling in response to head gestures.	
"RESET WINDOW"	Moves the zoomed in window to the center of the full size document.	
"ZOOM LEVEL [1 to 5]"	Zooms the document view size by setting the level to specific value.	

8.3 My Photos Folder

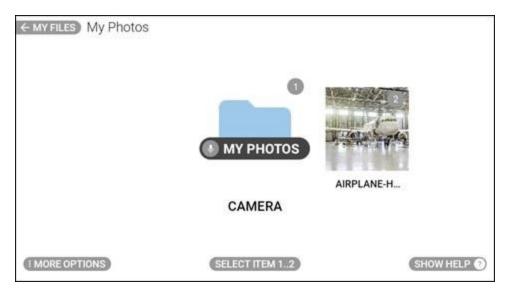
The **My Photos** folder contains all still image files organized into folders in supported formats. Say "MY PHOTOS" to open the **My Photos** folder. By default, the **Camera** folder appears.

Note: Images copied to the SD card are stored outside the **Camera** folder. Images taken with the **My Camera** app are stored inside the **Camera** folder.

Browse images by looking left or right, then say "SELECT ITEM #" to open the applicable file. Say "CAMERA" to open the Camera folder.

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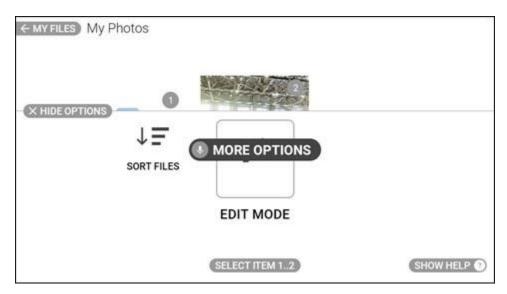




"MY PHOTOS" Command

8.3.1 More Options

Say "MORE OPTIONS" to edit or sort the files.

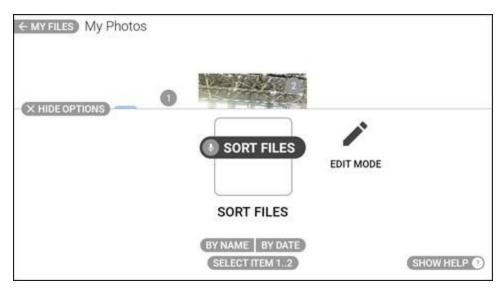


"MORE OPTIONS" Command

Say "SORT FILES" to sort the image files by name or by date. For Edit Mode instructions, go to section 8.6 Deleting Files.

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"SORT FILES" Command

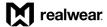
More Options Voice Commands

Voice Command	Action	
"EDIT MODE"	Open the file editing menu.	
"SORT FILES"	Open the file sorting menu.	

8.4 My Downloads Folder

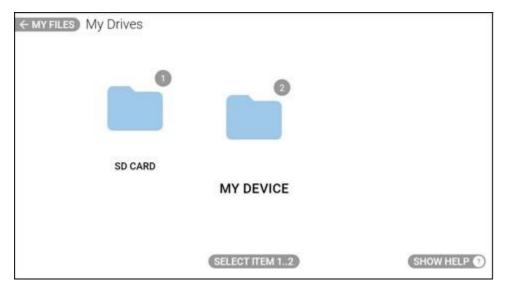
The **My Downloads** folder contains all the downloads made to your device. Say "MY DOWNLOADS" to open the **My Downloads** folder.

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8.5 My Drives Folder

The **My Drives** folder contains all the drives saved, both locally to your device and externally to your micro SD card. Say "MY DRIVES" to open the **My Drives** folder.



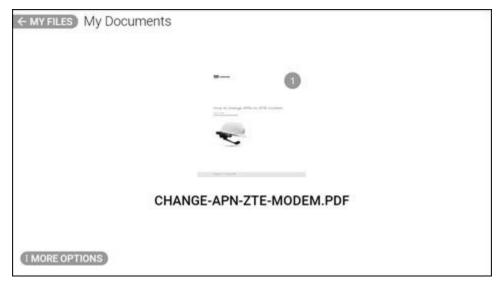
My Drives Folder Contents

8.6 Deleting Files

Use Edit Mode to delete files from the My Media, My Documents, and My Photos folders.

To use Edit Mode to delete files, do the following:

1. Go to the applicable folder.

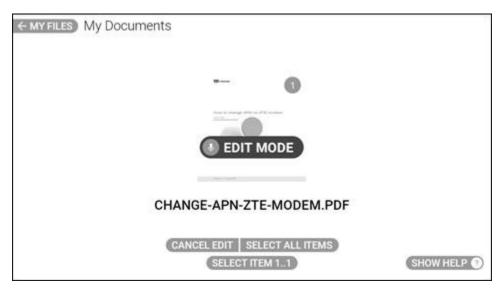


My Documents Example

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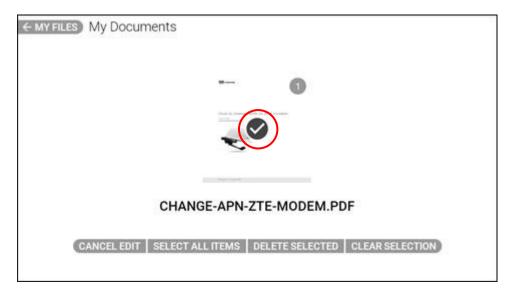
- 2. Say "MORE OPTIONS".
- 3. Say "EDIT MODE" to select one or more of the files shown.



"EDIT MODE" Command

4. Say "SELECT ITEM #" to select the applicable file. A checkmark indicates the file is selected.

Note: To select all files in the folder, say "SELECT ALL ITEMS".

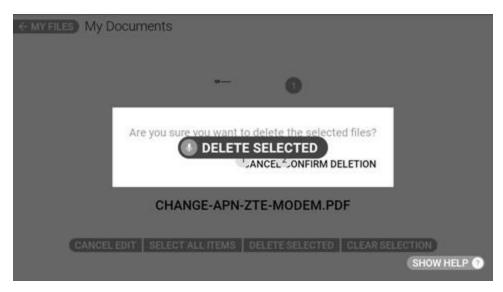


Document Selected Example

- 5. Say "SELECT ITEM #" again to select additional files, as required.
- 6. To delete the selected files, say "DELETE SELECTED".

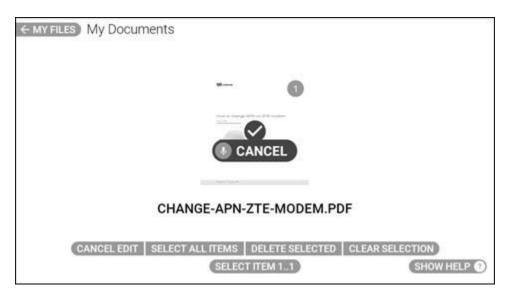
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"DELETE SELECTED" Command

- 7. Say "CONFIRM DELETION" to permanently delete the selected files.
- 8. To cancel deleting the selected files, say "CANCEL".



"CANCEL" Command

9. Say "CANCEL EDIT" to exit Edit Mode.

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Edit Mode Voice Commands

Voice Command	Action	
"CANCEL"	Cancels deletion of the selected file.	
"CANCEL EDIT"	Exit Edit Mode.	
"CLEAR SELECTION"	Deselects the selected files.	
"CONFIRM DELETION"	Confirm deletion of the selected file.	
"DELETE SELECTED"	Delete selected item.	
"MORE OPTIONS"	Open the Options panel.	
"SELECT ALL ITEMS"	Select all items in the opened folder.	
"SELECT ITEM #"	Select an item by the corresponding number.	

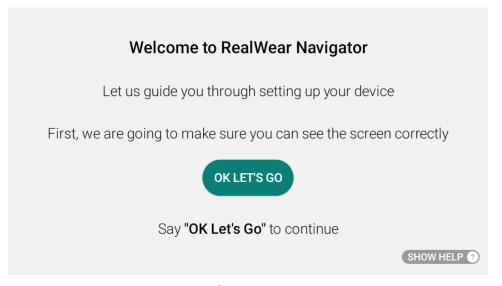
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9 My Training

My Training walks new users through simple and easy to use step-by-step instructions on how to configure RealWear Navigator™ 500. Say "MY TRAINING" from the Home screen to open the My Training app.

To use the My Training app, follow the instructions that appear on the screen.



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10 Safety and Usage Guidelines



WARNING

Do not use RealWear Navigator™ 500 while driving.



WARNING

Always wear eye protection with the RealWear Navigator.



IMPORTANT

Always use your dominant eye for comfortable viewing. See the Determining Eye Dominance section for more information.

Safety Symbols

Symbol	Definition	Description
	Disposal of Old Electrical and Electronic Equipment	The symbol of the crossed-out wheeled bin indicates that within the countries in the European Union, this product, and any enhancements marked with this symbol, cannot be disposed as unsorted waste but must be taken to separate collection at their end-of-life.
	Disposal of Battery	Please check local regulations for disposal of batteries. The battery should never be placed in municipal waste. Use a battery disposal facility if available.
49	Guideline for Headphone and Earphone	To prevent possible hearing damage, do not listen at high volume levels for long periods.

10.1 Health and Safety Warnings

Stop using RealWear Navigator™ 500 or its display immediately if you experience a headache, vertigo, dizziness, or nausea. Do not use RealWear Navigator display while operating any vehicle. Move the boom arm completely out of your line of sight when not using the display. Maintain situational awareness of your surroundings while using RealWear Navigator.

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10.2 Child Safety

Do not allow children to play with your device or its accessories. Keep it out of their reach. They could hurt themselves or others or could accidentally damage the device or accessories. Your device and its accessories may contain small parts, which could be detached and create a choking hazard.

10.3 Battery and Charger Safety

10.3.1 Battery Performance



WARNING

Always use the correct battery model. There is a risk of explosion while charging if a battery other than the specified model is used.



IMPORTANT

If you purchase a power adapter to charge your device, make sure the power adapter meets the standard requirements.

A rechargeable battery powers your device. Always use only the original type of RealWear battery that came with the device. Use the battery only for its intended purpose. Never use any charger or battery that is damaged. If the battery is completely discharged, it may take a few minutes before the charging indicator appears on the display or before the device can be used. The full performance of a new battery is achieved only after 3 to 4 complete charge and discharge cycles. The battery can be charged and discharged for multiple cycles, but it will eventually wear out. Unplug the charger from the electrical plug and the device when not in use. Ensure that you do not leave the fully charged battery connected to the charger. If left unused, a fully charged battery will lose its charge over time.

10.3.2 Battery Replacement

If the RealWear Navigator battery is not charging properly, replace the battery with an original RealWear battery. If a replacement battery is being used for the first time or if the battery has not been used for a prolonged period, it may be necessary to connect the charger and then disconnect and reconnect it to begin charging the battery.

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10.3.3 Battery Disposal

Do not dispose of batteries in a fire as they may explode. Batteries may also explode if damaged. Dispose of batteries according to local regulations and recycle when possible. Do not dispose as household waste. Do not dismantle, open or shred cells or batteries. In the event of a battery leak, do not allow the liquid to contact the skin or eyes. In the event of leak or a hazard seek medical help immediately.

10.3.4 Avoid Short Circuit

Do not short-circuit the battery. An accidental short-circuit can occur when a metallic object such as a coin, clip, or pen causes direct connection of the positive (+) and negative (-) terminals of the battery. This might happen, for example, when you carry a spare battery in your pocket or toolbox. A short-circuit at the terminals may damage the battery or the connecting object.

10.3.5 Avoid High Temperatures

Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. For the best results, try to keep the battery between -10°C and +50°C (+14°F and 122°F). A device with a hot or cold battery may not work temporarily, even when the battery is fully charged. Battery performance is particularly limited in temperatures well below freezing.

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10.3.6 Charger Use Safety Instructions

WARNING

The charger can cause electrical shock when used incorrectly. To correctly use the charger, do the following:

- Make sure that the cable plug is properly connected.
- Keep the charger away from liquids.
- In case of any strange smell or noise from the charger, disconnect it and contact support.
- Before cleaning the cable or charger, disconnect from power supply.



- When using an extension cable, check the integrity of the ground conductor.
- Disconnect the charger from RealWear Navigator once the battery is fully charged.
- Do not use this charger in wet areas This charger is for indoor use only.
- Do not insert or remove the plug with wet hands.
- Do not open the charger. For any issues, contact support.
- Do not cut, break, or bend the cable in a knot.
- Do not put any objects on the cable that may let it overheat. It may damage the cable and cause fire or electrocution.
- Do not use any cable other than the original cable as it may cause short circuit or electrocution.

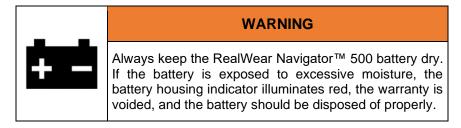
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11 Device Care

11.1 Device Cleaning

11.1.1 Battery Cleaning



Use any of the following to wipe down the RealWear Navigator™ 500 battery:

- Damp cloth and mild soap
- Isopropyl alcohol wipes
- Dry cloth
- Cotton swabs
- Toothbrush

11.1.2 Hard Surface Cleaning



Use any of the following to wipe down the RealWear Navigator hard surfaces:

- Damp cloth and mild soap
- Isopropyl alcohol wipes

11.1.2.1 Display and Camera Cleaning

Use any of the following to wipe down the RealWear Navigator display and camera:

- Microfiber cloth
- Dry cloth and screen cleaner solution

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11.1.3 Fabric Cleaning

Clean the Workband with isopropyl alcohol wipes, as required. The Workband will require replacement with normal wear over time. Go to https://shop.realwear.com to order a replacement Workband, as required.

11.1.4 Accessories Cleaning

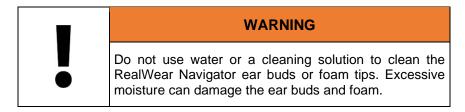
Go to https://shop.realwear.com to order replacement parts, as required.

11.1.4.1 Hardhat Clips

Clean hardhat clips with isopropyl alcohol wipes or water, as required.

Note: Use toothpicks to remove dirt from the hardhat clips.

11.1.4.2 Hearing Protection Ear Buds



Polish the ear buds with a dry or slightly damp cloth, as required.

11.1.4.2.1 Foam Tips

Clean the ear bud foam tips with a dry cloth, as required. The ear bud foam tips are made of memory foam and will eventually require replacement with normal use over time.

11.2 Device Storage

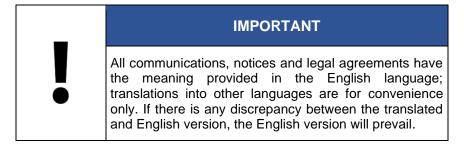
To properly store RealWear Navigator, do the following:

- Store the device in a cool, dry place.
- Store the device on a level surface or hang it securely on a wall.
 - You can keep the device attached to a hardhat or bump cap, as required.

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12 Ownership Information



12.1 Models Covered

The information contained herein covers RealWear Navigator™ 500 model T21G.

You can find the RealWear Navigator model on one of the two device labels on the rear inner band. You must take off the removable pad to see the label. Serial numbers are 15 characters in length.

12.2 Regulatory and Compliance Statements



12.2.1 FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures: • Reorient or relocate the receiving antenna. • Increase the separation between the equipment and receiver. • Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help.

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12.2.2 FCC Caution

- 10. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- 11. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. 3. Operations in the 5.15-5.25GHz band are restricted to indoor use only.

12.2.3 English IC Statement

- 1. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
 - a. This device may not cause interference.
 - b. This device must accept any interference, including interference that may cause undesired operation of the device.
- 2. This Class B digital apparatus complies with Canadian ICES-003(B) / NMB-003(B).
- 3. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.
- 4. The Country Code Selection feature is disabled for products marketed in the US/Canada.

12.2.4 Français IC Statement

- 1. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
 - a. l'appareil ne doit pas produire de brouillage, et 90.
 - b. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
- 2. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
- Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.
- 4. La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

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12.2.5 English IC Statement for WLAN 5GHz Device

- 1. Operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.
- 2. The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the EIRP limit.
- The maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the EIRP limits specified for point-to-point and non-point-to-point operation as appropriate.
- 4. The worst-case tilt angle(s) necessary to remain compliant with the EIRP elevation mask requirement set forth in Section 6.2.2(3) shall be clearly indicated.
- 5. Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could 91 cause interference and/or damage to LE-LAN devices.

12.2.6 Français IC Statement for WLAN 5GHz Device

- 1. Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.
- 2. le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.
- 3. le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
- 4. les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, et énoncée à la section 6.2.2 3), doivent être clairement indiqués.
- 5. De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

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12.3 Declarations of Conformity

12.3.1 EU Regulatory Conformance

We. RealWear, Inc., declare under our sole responsibility that the radio equipment model T21G is in conformity with Directive 2014/53/EU.

EU Declaration of Conformity

Manufacturer:

Name: RealWear, Inc.

Address: 600 Hatheway Road, Vancouver, WA, 98661

Radio Equipment:

Model: T21G

Description: Head Mounted Tablet Radio-related Hardtware Version: A

Radio-related Software Version: 1.0.3-08-T.NAV5XX.G

Supplied Accessories and Components: USB cable, Battery

		Specification of Acc	essory	
Battery	Brand Name	realwear	Model Name	B21G
	Power Rating	3.87Vdc, 2600mAh	Type	Li-ion
USB Cable	Brand Name	KeLi	Model Name	KLC-3877
	Signal Line Type	1.5 meter, shielded cable, without ferrite core		

We, RealWear, Inc., declare under our sole responsibility that the product described above is in conformity with the relevant Union harmonization legislations:

RE Directive (2014/53/EU)

The following harmonized standards and/or other relevant standards have been applied:

- 1. Health and Safety (Article 3.1(a) of the RE Directive)
 - EN 50360:2017
 - EN 50566:2017
 - EN IEC 62311:2020
 - EN 62209-1:2016
 - EN 62209-2 :2010 ■ EN 50665:2017
 - EN 62368-1:2014+A11:2017
 - EN 50332-2:2013
- 2. Electromagnetic compatibility (Article 3.1 (b) of the RE Directive)
 - ETSI EN301489-1 V2.2.3
 - Draft ETSI EN 301 489-3 V2.1.2
 - ETSI EN301489-17 V3.2.4
 - Draft ETSI EN 301 489-19 V2.2.0
- 3. Radio frequency spectrum usage (Article 3.2 of the RE Directive)
 - ETSI EN 300 328 V2.2.2
 - ETSI EN 301 893 V2.1.1
 - ETSI EN 300 440 V2.2.1
 - ETSI EN 303 413 V1.2.1

The notified body (Name: Sporton, ID: 2907) performed the conformity assessment according to Annex III of the RE Directive and issued the EU-type examination certificate (Ref. No.: SN21C0001_EU-TEC).

Signed for and on behalf of: RealWear, Inc.

Place: 600 Hatheway Road, Vancouver, WA, 98661, Date: October 20, 2021

Name: Helen Li, Function: Sr. Type Approval Manager, Signature: Helen Li

EU Declaration of Conformity

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12.3.2 UK Regulatory Conformance

We, RealWear, Inc., declare under our sole responsibility that the radio equipment model T21G is in conformity with statutory requirement RER 2017 (SE 2017/1206).

UK Declaration of Conformity

Manufacturer:

Name: RealWear, Inc.

Address: 600 Hatheway Road, Vancouver, WA, 98661

Radio Equipment:

Model: T21G

Description: Head Mounted Tablet Radio-related Hardtware Version: A

Radio-related Software Version: 1.0.3-08-T.NAV5XX.G Supplied Accessories and Components: USB cable. Battery

		Specification of Acc	essory	
Battery	Brand Name	realwear	Model Name	B21G
	Power Rating	3.87Vdc, 2600mAh	Type	Li-ion
USB Cable	Brand Name	KeLi	Model Name	KLC-3877
	Signal Line Type	1.5 meter, shielded cable, without ferrite core		

We, RealWear, Inc., declare under our sole responsibility that the above product is in conformity with the relevant statutory requirements: RER 2017 (SI 2017/1206).

The following harmonized standards and/or other relevant standards have been applied:

- 1. Health and Safety (Regulation 6.1a)
 - EN 50360:2017
 - EN 50566:2017
 - EN IEC 62311:2020
 - EN 62209-1:2016
 - EN 62209-2 :2010
 - EN 50665:2017
 - EN 62368-1:2014+A11:2017
 - EN 50332-2:2013
- 2. Electromagnetic compatibility (Regulation 6.1b)
 - ETSI EN301489-1 V2.2.3
 - Draft ETSI EN 301 489-3 V2.1.2
 - ETSI EN301489-17 V3.2.4
 - Draft ETSI EN 301 489-19 V2.2.0
- 3. Radio frequency spectrum usage (Regulation 6.2)
 - ETSI EN 300 328 V2.2.2
 - ETSI EN 301 893 V2.1.1
 - ETSI EN 300 440 V2.2.1
 - ETSI EN 303 413 V1.2.1

Sporton USA, with number 2907 has performed a conformity assessment in accordance with the procedures in Schedule

3 Module B against the essential requirements Regulation 6.1a, 6.1b, and 6.2 of the RER 2017 (SI 2017/1206), and issued the Type examination certificate: SN21A0001

Signed for and on behalf of: RealWear, Inc.

Place: 600 Hatheway Road, Vancouver, WA, 98661

Date: October 20, 2021

Name: Helen Li, Function: Sr. Type Approval Manager, Signature: Helen Li

UK Declaration of Conformity

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12.4 Specific Absorption Rate Information

12.4.1 United States Radiation Exposure Statement

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to Radio Frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6 W/2.2 lbs. (1.6 W/kg). Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. No minimum separation distance needs to be maintained between the user's body and the device, including the antenna, during body-worn operation to comply with the RF exposure requirements in the United States and Canada. The limit recommended by FCC and IC is 1.6 W/2.2 lbs. (1.6 W/kg) averaged over 0.04 oz. (1 g) of tissue.

The highest SAR value of the RealWear Navigator for use by ear is 0.95 W/2.2 lbs. (0.95 W/kg) averaged over 0.04 oz. (1 g) of tissue.

12.4.2 Europe Radiation Exposure Statement

No minimum separation distance needs to be maintained between the user's body and the device, including the antenna during body-worn operation to comply with the RF Exposure requirements in Europe. The limit recommended by RED is 2 W/kg (2 W/2.2 lbs.) average over 10 g (0.4 oz.) of tissue.

The highest SAR value of the RealWear Navigator for use by the ear is 0.267 W/kg (0.267 W/2.2 lbs. average over 10 g (4 oz.) of tissue.

12.4.3 Canada Radiation Exposure Statement

The product complies with the Canada portable RF exposure limit set forth for an uncontrolled environment and is safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

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12.4.4 Déclaration d'exposition aux radiations

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé. Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

12.5 Limited Warranty and Software License

Please visit https://www.realwear.com/legal/terms-of-sale/ for full limited warranty and software license information.

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