

hmt-1Z1™

User Guide

Version 2 20180427

Copyright Information

Copyright © 2018 RealWear, Inc.

RealWear and the RealWear logo are trademarks of RealWear, Inc.

Other company and product names may be trademarks or registered trademarks of the respective owners with whom they are associated.

RealWear may update this guide from time to time. You should ensure you are using the most current version which can be found at <https://realwear.com>.

Revision History

Revision	Date	Description



Table of Contents

- Safety Usage Warnings ----- 4
- Disposal of Old Electrical and Electronic Equipment ----- 4
- Disposal of Battery ----- 4
- Guideline for Headphone and Earphone ----- 4
- i.Safe Safety Instructions ----- 5**
 - Introduction ----- 5
 - Application ----- 5
 - Ex-relevant Safety Regulations ----- 5
- General Information ----- 6**
 - Head Mounted Tablet Models Covered ----- 6
 - Operating Frequency Bands ----- 6
 - 5G Wi-Fi Connection Information ----- 6
 - RealWear Support Information ----- 6
- Safety Guidelines ----- 7**
 - Battery Performance ----- 7
 - Avoid Short Circuit ----- 7
 - Avoid High Temperatures ----- 7
 - Battery Disposal ----- 7
 - Child Safety ----- 7
 - Health and Safety Warnings ----- 7
- SAR Information ----- 8**
 - Charger Use Safety Instructions ----- 8
- Introduction ----- 9**
 - About the RealWear HMT-1Z1 ----- 9
 - HMT-1Z1 Parts and Functions – Front View ----- 9
 - HMT-1Z1- Parts Representation – Front View ----- 9
 - HMT-1Z1 – Parts Representation – Side View ----- 10
 - HMT-1Z1 – Parts Representation – Side View with Micro USB Port ----- 10
 - Wearing RealWear HMT-1Z1 ----- 11
 - Adjusting Display Pod ----- 11
 - Fitting HMT with Optional Accessory Mounts ----- 12
 - Charging HMT-1Z1 ----- 12
 - Inserting and Setting Up MicroSD Card ----- 12
- Using Voice Commands ----- 16**
 - Speech Recognition – Say What You See ----- 16
- Global Commands ----- 16**
 - Echo Cancellation ----- 16
 - Auto Mute/Auto-Unmute ----- 16


- Anytime Access Help ----- 16
- Alternate Speech Recognition ----- 17
- Mute Microphone ----- 17
- Scroll Up and Down ----- 17
- Head Gesture ----- 17
- Virtual Hands-free Keyboard ----- 18
- Alphabet Keyboard ----- 19
- Symbol Keyboard ----- 19
- Number Keyboard ----- 20
- Dictation Service ----- 20
- About Notifications ----- 21
- Setting Up HMT-1Z1 ----- 22**
 - Setting Up HMT-1Z1 Using Remote Configuration ----- 22
 - Using Control Panel ----- 22
 - HMT-1Z1 Settings ----- 23
 - Setting Up Screen Lock Using Android Settings ----- 24
 - Warning Messages to Note During Software Update ----- 26
 - Setting Up Bluetooth Master/Slave Switch ----- 26
 - Connecting HMT-1Z1 to Computer ----- 26
 - Updating HMT-1Z1 Software ----- 27
- Using -HMT-1Z1 ----- 27**
 - Switching ON ----- 27
 - Home Screen ----- 27
 - Control Buttons in Home Screen ----- 28
 - Selecting HMT-1Z1 Interface Language ----- 28
 - Accessing Application Launcher ----- 28
 - Accessing Recent Applications ----- 29
 - Accessing Power Management Functions ----- 29
 - Accessing My Camera ----- 30
 - Camera Functions ----- 30
 - Accessing File Browser ----- 30
 - File Manager Functions ----- 31
 - Using Media Player ----- 31
 - Media Player Functions ----- 31
 - Playing Audio Files ----- 31
 - Microphone Left Eye/Right Eye Indication ----- 31
 - Front/Back Microphone Switch ----- 32
 - Using Document Viewer ----- 32
 - Document Viewer Functions ----- 32
 - Using Document Viewer – Multi Page Document ----- 32
 - Deleting Files from File Manager ----- 33

- Using Barcode Scanner ----- 33
- Supported Barcode Types ----- 33
- Limited Warranty and Software License ----- 34**
 - Definitions ----- 34
 - Software and Documentation ----- 34
 - Limited Hardware Warranty ----- 34
 - Exclusion of Certain Damages, Limitation of Liability ----- 35
 - Governing Law, Dispute Resolution ----- 36
 - Exclusion of Certain Damages, Limitation of Liability ----- 36
 - Governing Law, Dispute Resolution ----- 36
 - Exclusion of Certain Damages, Limitation of Liability ----- 37
 - Governing Law, Dispute Resolution ----- 37
- Regulatory Statements ----- 38**
 - FCC Statement ----- 38
 - FCC Caution ----- 38
 - IC Statement – English ----- 38
 - IC Statement – Français ----- 38
 - IC Statement – FOR WLAN 5GHZ DEVICE ----- 38
- Declaration of Conformity ----- 39**
 - EU Regulatory Conformance ----- 39
 - Declaration of Conformity ----- 39

Safety Usage Warnings

-  – Do not use HMT-1Z1 while driving
-  – Always use your dominant eye for comfortable viewing

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, can not 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.
---	--

 **The symbol indicates DC voltage** 

Guideline for Headphone and Earphone

	To prevent possible hearing damage, do not listen at high volume levels for long periods. A pleine puissance, l'écoute prolongée du baladeur peut endommager l'oreille de l'utilisateur.
---	---

i.Safe Safety Instructions

Introduction

This chapter contains information and safety regulations which are to be observed without fail for safe operation of the device under the described conditions. Non-observance of this information and instructions can have serious consequences and / or may violate regulations.

Please read the manual and these safety instructions before using the device. In case of any doubt (in form of translation or printing errors), the English version shall apply.

Application

ATEX & IECEX

The HMT-1Z1 model T1100S is approved for use in zone 1, zone 2, zone 21 and zone 22 in accordance with directives 2014/34/EU (ATEX) and the IECEX System.

NEC & CEC

The HMT-1Z1 model T1100S is approved for use in Division 1 and 2 Class I, II, III.

Manufacturer

i.Safe MOBILE GmbH
i_Park Tauberfranken 10
97922 Lauda-Koenigshofen; Germany

Faults and Damages

Before entering ex-hazardous areas, the safety of the device must be checked.

If there is any reason to suspect that the safety of the device has been compromised, it must be withdrawn from use and removed from any ex-hazardous areas immediately.

Measures must be taken to prevent any accidental restarting of the device.

The safety of the device may be compromised, if, for example:

- Malfunctions occur
- The housing of the device shows damage
- The device has been exposed to excessive loads
- The device has been stored improperly
- Markings or labels on the device are illegible
- Permitted limit values have been exceeded

We recommend that a device displaying errors or which an error is suspected be sent back to authorized service center to be checked.

Ex-relevant Safety Regulations

Use of this device assumes that the operator observes the conventional safety regulations and has read and understood manual, safety instructions and certificate.

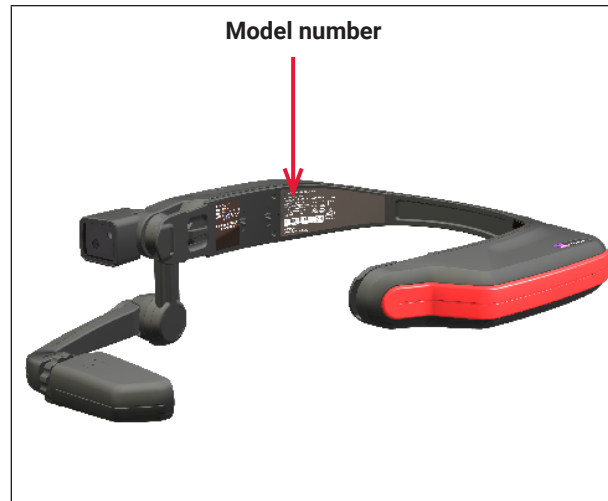
- Inside ex-hazardous areas the covers of all interfaces must be closed
- Exception is the audio jack cover. The audio jack can be used for approved headsets also inside ex-hazardous areas
- To ensure the IP-protection, it has to be ensured that all gaskets are present and functional
- Physical connections to other equipment are only allowed outside ex-hazardous areas using the i.safe PROTECTOR 1.0 USB-cable or other equipment approved by i.safe MOBILE GmbH
- During charging any headset or accessory must be unplugged from the audio jack
- The device may only be charged outside ex-hazardous areas using the i.safe PROTECTOR 1.0 USB-cable or other equipment approved by i.safe MOBILE GmbH
- The device may only be charged at temperatures between 5°C ... 40°C
- The battery is not removable by the user
- The device may not be exposed to any aggressive acids or alkalis
- The device may not be taken into zones 0 or 20
- The device must be protected from impacts with high impact energy, against excessive UV light emission and high electrostatic charge processes
- The permitted ambient temperature range is -20°C to +60°C
- Only accessories approved by i.safe MOBILE GmbH may be used
- It is not allowed to do the adjustment of the head strap in ex-hazardous areas

General Information

RealWear HMT-1Z1 is intrinsically safe and is designed for skilled technicians and engineers employed in field service, equipment inspection, maintenance and complex manufacturing.

Head Mounted Tablet Models Covered

This user guide covers the following RealWear HMT-1Z1 model: **T1100S**. You can find the model name on the HMT-1Z1 device label on the rear side of the tablet.



Operating Frequency Bands


Wi-Fi operating frequency band(s) details and EIRP are as follows:

- 2412-2472: 15.89dBm
- 5180-5320: 17.09dBm
- 5500-5700: 17.37dBm
- 5745-5825: 12.98dBm

Bluetooth operating frequency band and EIRP is:
2402-2480: 12.16dBm

5G Wi-Fi Connection Information

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

	AT	BE	BG	CH	CY	CZ	DE
	DK	EE	EL	ES	H	FR	HR
	HU	IE	IS	IT	U	LT	LU
	LV	MT	NL	PL	PT	RO	SE
	SI	SK	TR	UK			

RealWear Support Information

For additional product and support information, use the following information:

- **E-mail:** support@realwear.com
- **Website:** <http://www.realwear.com>
- **Postal address:** 600 Hatheway Road, Vancouver, WA – 98661

Safety Guidelines

Battery Performance

A rechargeable battery powers your device. The device comes with an inbuilt battery which is not replaceable. Never use any uncertified charger. 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.



There is a risk of explosion while charging if an incorrect battery other than the specified model is used.

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.

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 -20°C and +60°C (-4°F and 140°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.

Battery Disposal

Do not dispose of the device in fire as it contains an inbuilt battery which may explode. Dispose of the device 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 come in contact with the skin or eyes. In the event of leak or a hazard seek medical help immediately.

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.

Health and Safety Warnings

Stop using RealWear HMT-1Z1 or its display immediately if you experience a headache, vertigo, dizziness or nausea. Do not use the HMT-1Z1 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 the HMT-1Z1.

SAR Information

Radiation Exposure Statement – The United States and Canada

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, or SAR. The SAR limit set by the FCC is 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/kg averaged over one (1) gram of tissue.

The highest SAR value of the HMT-1Z1 for use:

- By the ear is 1.31 W/kg (1g)

Radiation Exposure Statement – Europe

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 averaged over ten (10) gram of tissue.

The highest SAR value of the HMT-1Z1 for use:

- By the ear is 0.34 W/kg (10g)

Radiation Exposure Statement – Canada













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.

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.

Charger Use Safety Instructions

To use the charger follow these instructions:

-  -The device may only be charged outside ex-hazardous areas using the i.safe PROTECTOR 1.0 USB-cable or other equipment approved by i.safe MOBILE GmbH
-  – 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 HMT-1Z1, once the battery is fully charged
-  – Do not use this charger in wet areas
-  – 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

Introduction

This section provides information on using your RealWear HMT-1Z1.

The list of items in the RealWear HMT-1Z1 box are:

- HMT-1Z1
- I.safe PROTECTOR 1.0 USB-cable
- Overhead strap
- Rear pad (detachable)

About the RealWear HMT-1Z1

RealWear HMT-1Z1 is the first-generation intrinsically safe head mounted rugged tablet. You can operate the tablet completely hands-free using only voice commands and head gestures. This hands-free operation is done using WearHF™ software, built into every RealWear device. The HMT-1Z1 runs on Android 6.0.

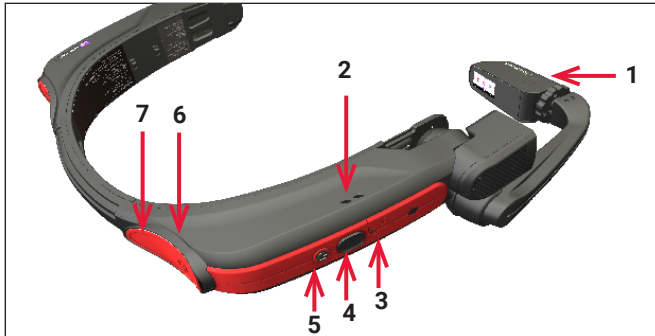
HMT-1Z1 Parts and Functions – Front View

Part Name	Action
1 – Overhead strap	Supports HMT-1Z1 on the head
2 – Camera pod	Holds a camera to take photos and videos
3 – Mic A2 – located on the upper portion of the display pod	Auxiliary microphone for voice commands
4 – Mic A1 – located on the lower portion of the display pod (not visible in the image)	Primary microphone for voice commands
5 – Wrist joint locking ring	Supports and helps to reposition the display pod
6 – Boom arm	Supports and helps to reposition the display pod
7 – Elbow joint	Supports and helps to reposition the display pod
8 – Rear head pad	Supports the device on the rear and side of the head

HMT-1Z1- Parts Representation – Front View



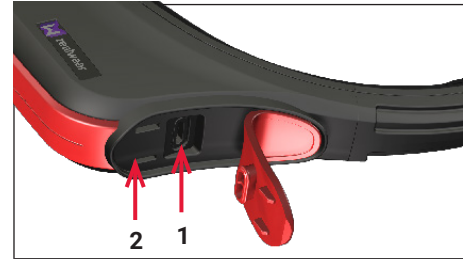
HMT-1Z1 – Parts Representation – Side View



Part Name	Action
1 – Display pod	Holds the main LCD display to operate the HMT-1Z1
2 – Speaker	Outputs audio from the HMT-1Z1
3 – Micro SD card slot	Holds the microSD card
4 – Action button	Functions as Home button to return to the Home screen from any screen
5 – Power ON button	'Places the device in sleep mode and wakes up the device. When pressed for a few seconds, this Powers the device on and off
6 – Audio jack	Connects to audio device using 3.5 mm audio jack

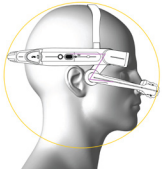

Regional USB charger shipped in separate box.


HMT-1Z1 – Parts Representation – Side View with Micro USB Port





Part Name	Action
1 – Micro USB	Connects HMT-1Z1 to a computer – for data transfer and ADB interface
2 – Battery housing with rubber lid	Fixed Battery

Wearing RealWear HMT-1Z1


	<ol style="list-style-type: none">1. Position the HMT-1Z1 such that main unit is positioned on the side of the head forming a Z shape and the display pod is aligned in front of your left or right eye.
	<ol style="list-style-type: none">2. Move the head strap in/out and collapse the hinged main unit inwards, to fix the HMT-1Z1 tightly. Adjust the back strap and the top band located on the top of the head, to fix HMT-1Z1 at a comfortable position.

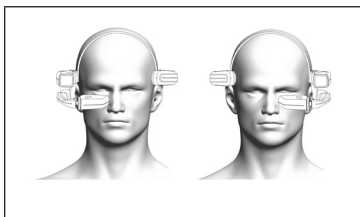
	<p>If you wear eye-glasses to operate a computer, or eye protection for your work, continue to wear the same glasses or eye protection while using HMT-1Z1. While the HMT-1Z1 is designed to work well with or without eye-glasses or eye protection. RealWear recommends wearing eye protection while using the HMT-1Z1.</p>
---	---

Adjusting Display Pod

	<ol style="list-style-type: none">1. After positioning HMT-1Z1, adjust the display pod about 1-2 inches from the eye.2. Position the display pod below the line of sight for viewing the display screen clearly.
	<ol style="list-style-type: none">3. Move the display pod forward or backward, to view the entire display screen. When set correctly the screen will be bright and crisp, and you can even read the smallest text.

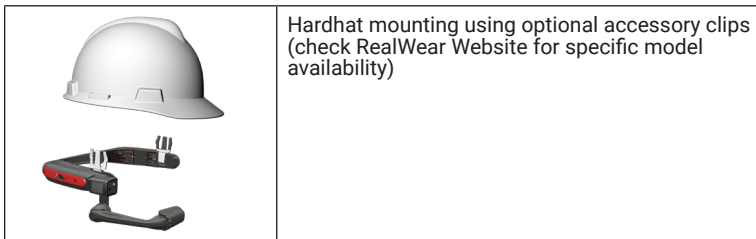
Sometimes, to get the complete view of the display pod, you might have to adjust the whole unit on the head either left or right when part of the screen is not visible on the left or right side.

	<p>Position the display pod just below your dominant eye. You can switch the HMT-1Z1 from left-eye to right-eye.</p>
--	--



Fitting HMT with Optional Accessory Mounts

You can wear your safety goggles and hard hat with the HMT-1Z1.



Charging HMT-1Z1

To recharge the battery:

1. Connect the i.safe PROTECTOR 1.0 USB-cable to the USB port located on the rear side of the main housing under the rubber lid.
2. Connect the charging cable to the wall charger.
3. Plug the wall charger into an electrical outlet. The power button will be lit throughout the charging cycle, changing color from **red** to **yellow** to **green** depending on the amount the battery has charged. **Green** signifies a full charge



Inserting and Setting Up MicroSD Card

You can insert a microSD card into the specified slot and store media files and documents.

1. Locate the SD Card section (Below the Action button on the Right-Hand side of the HMT-1Z1).



2. Unscrew to open the door using a Philips #00 screwdriver.
3. Bend the top end of the Flap.
4. Locate the SD insertion plate (silver colour flap).
5. Slightly press and slide the plate down.

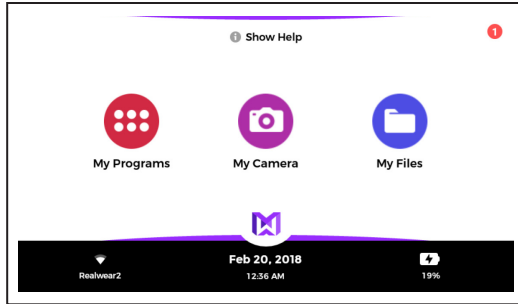


6. Insert the SD card fully and close the Silver Flip, slightly press and move it upward.
7. Slightly tilt the HMT-1Z1 to ensure that the SD card is placed right and doesn't fall off.

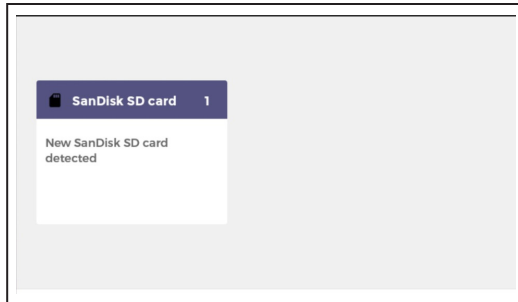


Formatting the MicroSD card

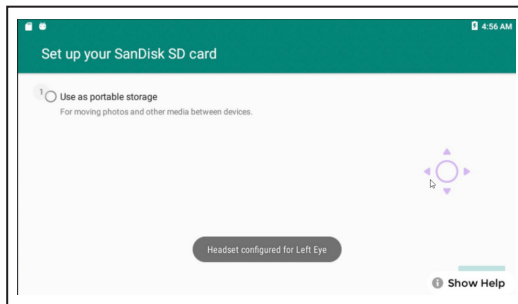
- When the microSD card is inserted and recognized by HMT-1Z1, a notification is displayed in the top right corner of the screen.



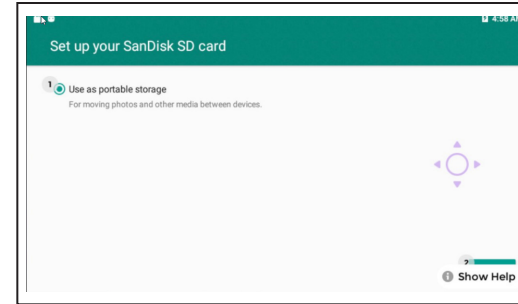
- Say "My Notification".



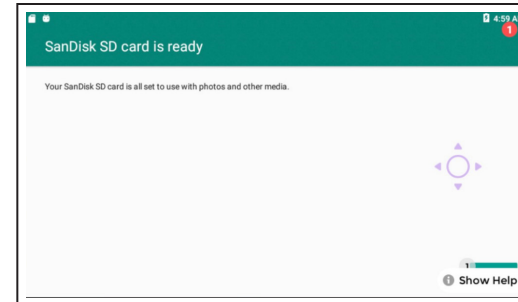
- Say "Select Item 1" or SanDisk SD card. Setup SD card page is displayed.



- Say command "Use as portable storage" or "Select item 1". "Use Portable Storage" is selected.

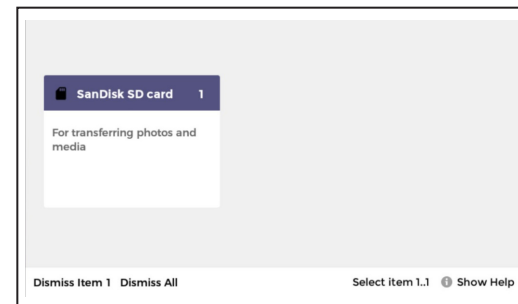


- Say "Select Item 2" to confirm the microSD card formatting process.

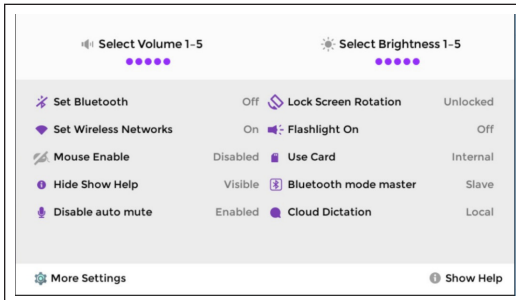


The microSD card formatting progress is displayed.

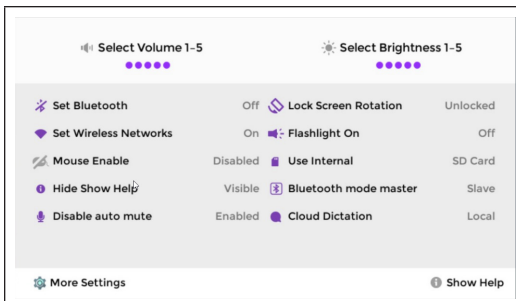
- After microSD card formatting is completed, say "Select Item 1" to view the "My Notifications" screen.



- Say **"My Controls"**. The HMT-1Z1 settings page is displayed.



- Say **"Use Card"** to set microSD card as the default storage device.

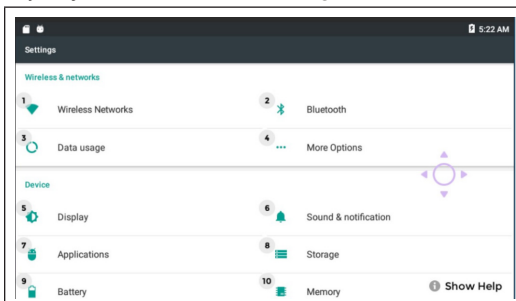


MicroSD card is set as the default storage device and all the media files will be stored in the microSD card.

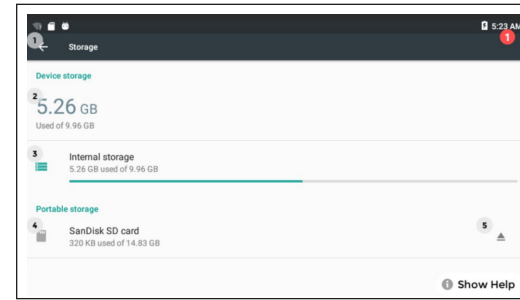
Ejecting MicroSD Card

Complete the following procedure the eject and remove the microSD card from HMT-1Z1.

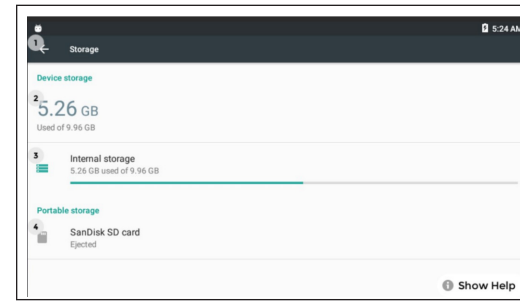
- Say **"My Controls"** > **"More Settings"**. Advanced Settings page is displayed.



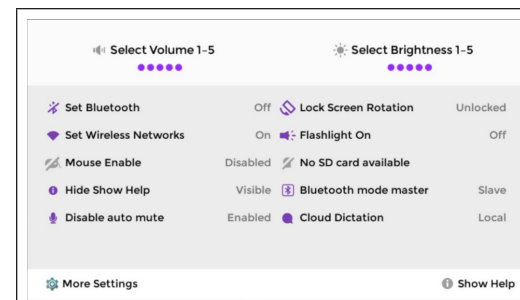
- Say **"Storage"**. Storage settings page is displayed.



- Say **"Eject"** or **"Select Item 5"**.



- Say **"My Controls"**. The Settings page is displayed and microSD card status is displayed as **"No SD card available"**.



Transferring Data From microSD card to PC

Complete the following procedure to transfer files from microSD card to your computer.

1. Connect your HMT-1Z1 to the computer using i.safe PROTECTOR 1.0 USB-cable.
2. Locate the HMT directory in your computer.
3. Select the SD card in the HMT directory. You can view all the files and folders stored in the microSD card.
4. Select and copy the folder to be transferred. For example, to transfer music files, select and copy the music folder.
5. Copy the folder and paste it in the desired location.

When microSD Card is Set as the Portable Storage

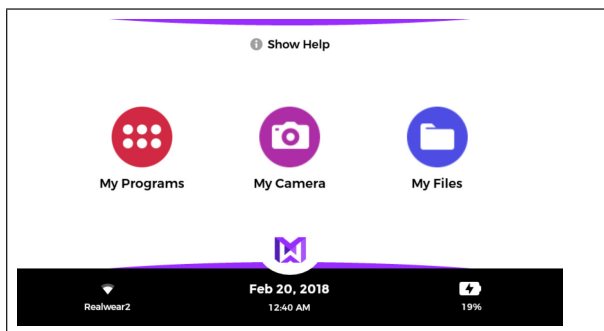
- DCIM folder will be auto created when a photo is captured using HMT-1Z1 camera
- Movies folder will be auto created when a video is recorded using HMT-1Z1 camera
- Create Music folder manually on the microSD card before copying audio files
- Create Documents folder manually on the microSD card before copying any pdf files

Using Voice Commands

WearHF™ is an innovative software solution that enables you to use the RealWear HMT-1Z1 as a hands-free device. It is easy to use and loaded with intuitive functions.

Speech Recognition – Say What You See

HMT-1Z1 operates 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. All the commands associated with the specific screen are displayed clearly on the screen. HMT-1Z1 uses the latest technology for advanced noise cancellation and speech recognition and works 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. You can activate the device by speaking the name of any control. For example, the Home Screen has 3 large icons with respective feature names. To access these applications, you can say the application name and the corresponding screen is launched.



Global Commands

HMT-1Z1 can also recognize certain voice commands that can be activated from any screen. These are known as global commands. The following is a list of global commands in English. For global commands in other languages, refer to the respective user guide.

Voice Command	Action
“Navigate Home”	Navigates to Home Screen
“Navigate Back”	Navigates to previous screen
“My Controls”	Navigates to system control panel
“Mute Microphone”	Mutes the microphone temporarily
“My Notifications”	Opens Notification section
“Recent Applications”	Opens Applications running in background
“Show Help”	Displays pop-up window with the help for commands associated with the current screen

Echo Cancellation

HMT-1Z1 comes with echo cancellation feature to reduce any audio feedback that may be picked by the microphone while the speaker is used.

Auto Mute/Auto-Unmute

When the HMT-1Z1 is left idle without any physical movement, either on a desk or on a hardhat, auto-mute feature will get activated after 30 seconds, the speech recognition is disabled automatically. A red warning symbol is displayed on the screen. Once the HMT-1Z1 movement is detected, the speech recognition will resume automatically, and the warning symbol will disappear.

You can enable or disable auto mute from “My Controls”.

Anytime Access Help

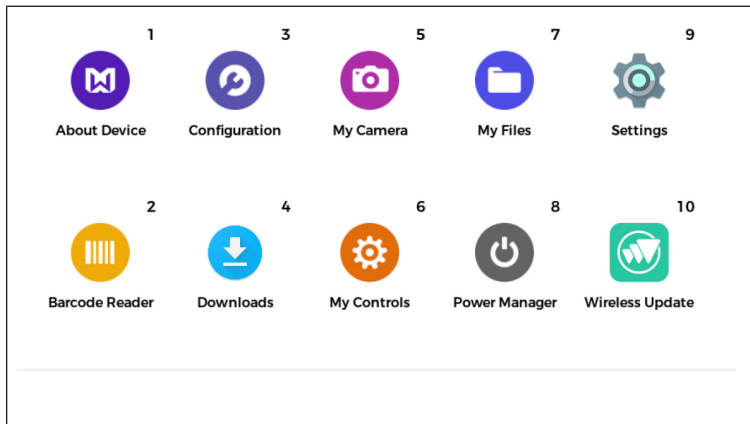
You can access the help information regarding the commands associated with a particular screen, with “Show Help” command. The “Show Help” command is displayed on all the screens. The help screen is displayed as a pop-up window. This pop-up window is displayed for 2 Seconds.

Alternate Speech Recognition

Sometimes, the control on the screen has no name, scroll button without a label, or a file button with filename such as **3454-x.pdf**, set as the label.

In such scenarios, 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”**.

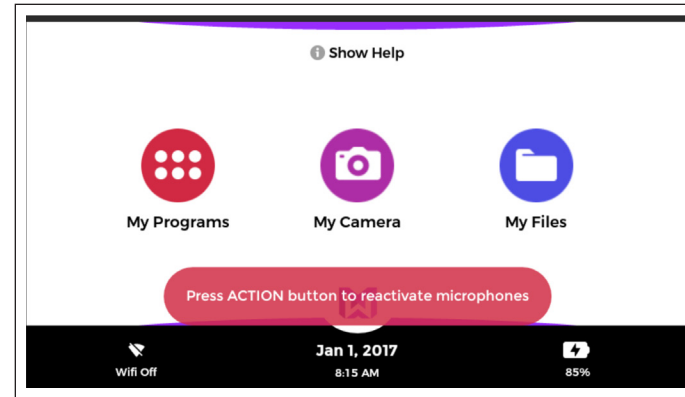
To select a specific control, you need to use the number assigned to it. For example, you can say **“Select item 1”** to select the first unpronounceable button, or **“Select item 2”**, to select the second unpronounceable button.



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 a red warning sign is displayed on the screen.

To restart the speech recognizer, tap the **Action button** on the side of the device, located next to the **Power button**.



Scroll Up and Down

You can scroll and view different portions displayed on the screen, using the following voice commands.

Voice Command	Action
“Page Up”	Navigates to 1 page up
“Page Down”	Navigates to 1 page down
“Page Left”	Navigates to 1 page left
“Page Right”	Navigates to 1 page right
“Show Help”	Displays pop-up window with the help for commands associated with the current screen

Head Gesture

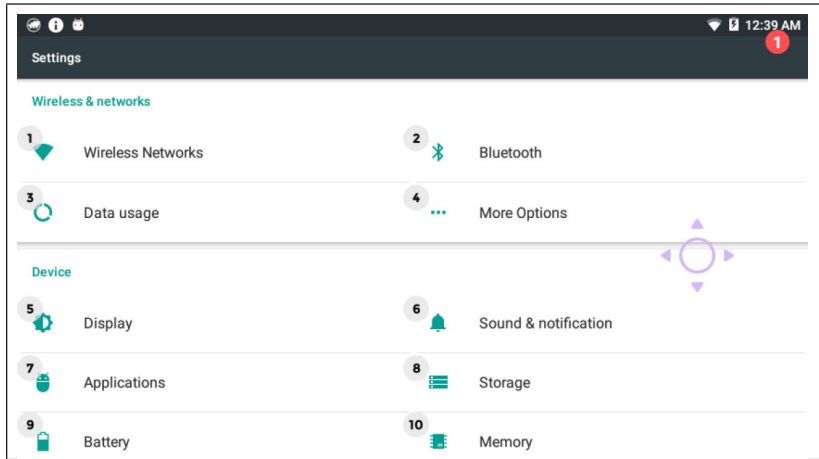
The following features do not support page up/down and left/right –

- My programs
- My files
- Document viewer

For example, In Settings page, we can use voice command “Page down” to scroll down and “Page Up” to scroll up.

At any point of time if you want to use head gestures instead of voice commands, say “**scroll enable**” and we can use head gestures to scroll up and down.

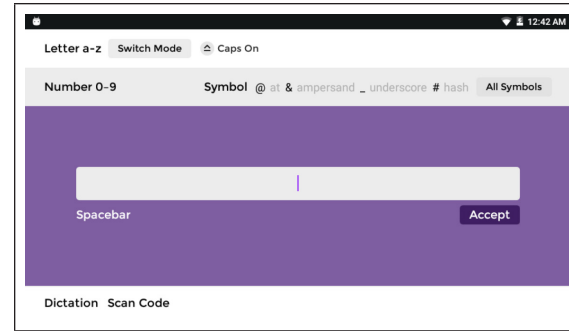
To disable head gestures, say “**scroll disable**”.



Virtual Hands-free Keyboard

HMT-1Z1 has a virtual hands-free keyboard to enter text. This keyboard works based on voice recognition. Whenever a text entry screen appears, the hands-free keyboard is displayed automatically. The various virtual keyboards are,

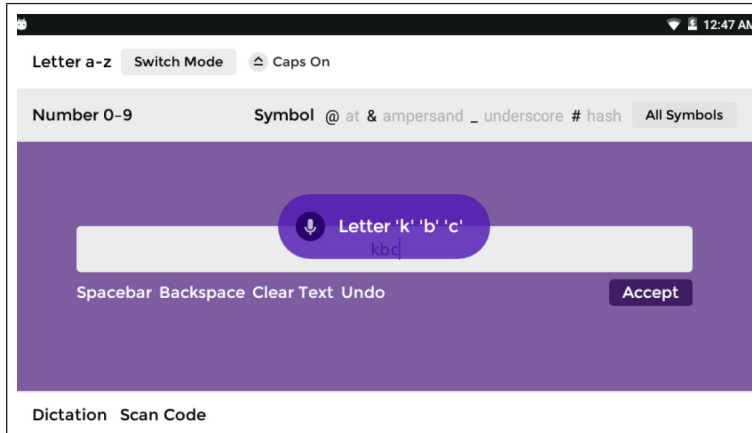
- Alphabet keyboard – to enter alphabets
- Symbol keyboard – to enter symbols
- Number keyboard – to enter numbers
- Dictation – to dictate and enter text. You can perform dictation in English, German and Chinese, without Wi-Fi connection. All the other languages require Wi-Fi connection, to dictate text.



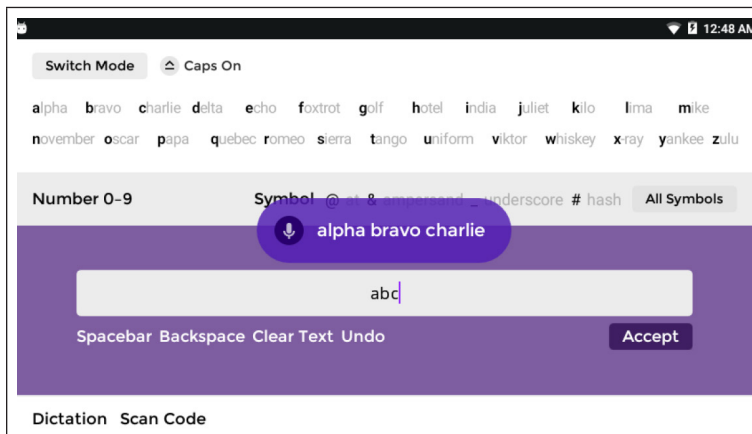
Voice Command	Action
“Accept”	Accepts the entered information and navigates to the next screen in sequence.
“Spacebar”	Inserts a single space.
“Backspace”	Deletes the last character
“Clear Text”	Clears the text in the Input box
“Caps On”	Uses capital letter
“Caps Off”	Uses lowercase letter
“Dictation”	Activates dictation and enters text based on speech recognition
“Scan Code”	Scans QR code To set the zoom level for clear scanning say “ Zoom level 1-5 ”. For example, to set the zoom level to 3, say “ Zoom level 3 ”.
“All Symbols”	Switches to Symbol keyboard
“Switch Mode”	Toggles between single alphabet entry and multiple alphabets entry input mode For more information refer to “ Alphabet Keyboard ” on page 18.
“Show Help”	Displays pop-up window with the help for commands associated with the current screen

Alphabet Keyboard

To type a letter say **“Letter [followed by the letter you want to use]”**. For example, to type **kbc**, say **“Lette**

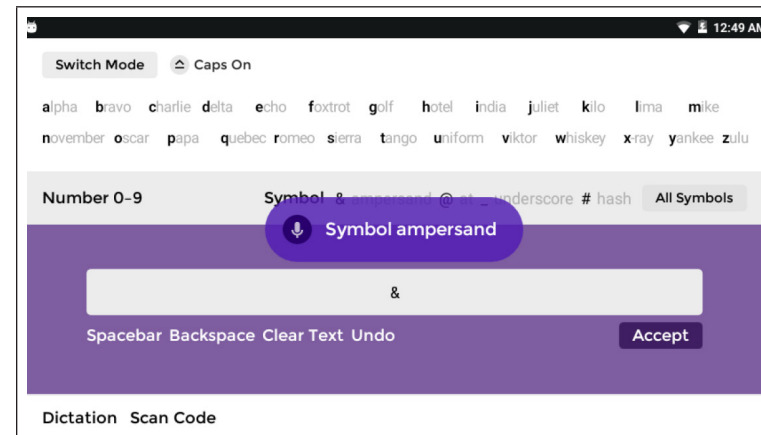


Say **“Switch Mode”**, to switch to the keyboard that recognizes one alphabet at a time and works based on the international radio alphabet codes. For example, if you want to type **“a”**, you must say **“Alpha”**.



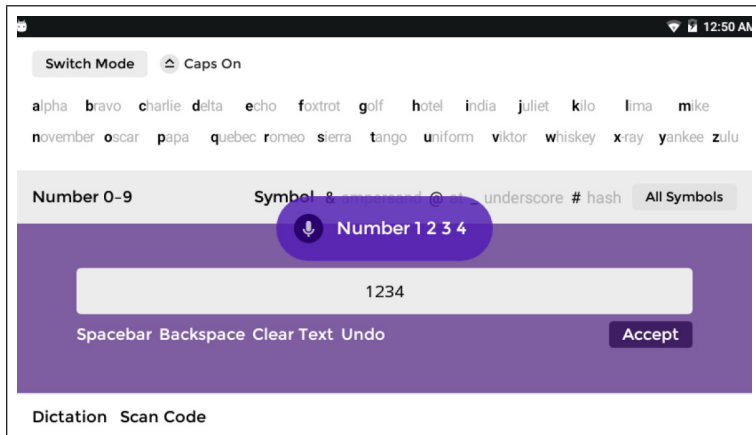
Symbol Keyboard

To view Symbol keyboard, say **“All Symbols”**. To type a specific symbol, say the **“Symbol <symbol name>”** provided corresponding to the symbol.



Number Keyboard

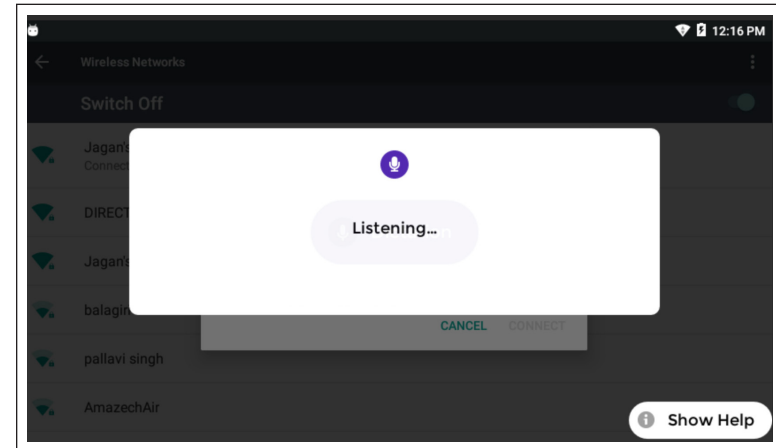
To type a number say **“Number [followed by the numeral you want to use]”**.
For example, to type 1234, say **“Number 1234”**.



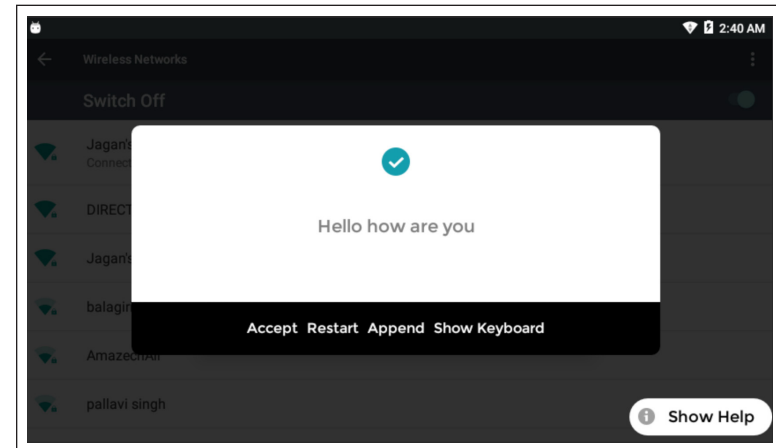
Dictation Service

You can perform dictation in English, German and Chinese, without Wi-Fi connection. All the other languages require Wi-Fi connection, to dictate text.

1. To activate dictation service, say **“Dictation”** in virtual keyboard screen. The screen will change to **“Listening”** mode.



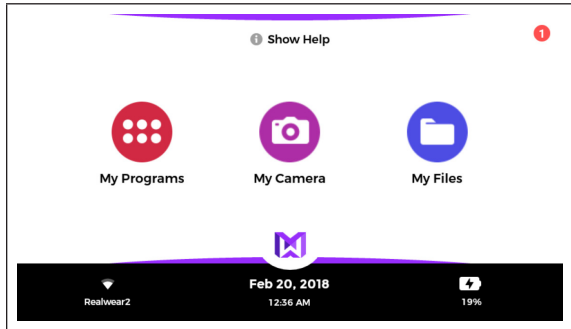
2. Speak/dictate the text to be entered.



3. To enter more text, say **“Append”**.
4. To restart the dictation, say **“Restart”**.
5. To complete the dictation and proceed to the next screen, say **“Accept”**.
6. To switch to keyboard mode for entering text/symbols/numbers, say **“Show Keyboard”**.

About Notifications

When you have any notifications in your HMT-1Z1, the number of notifications is displayed in the top right corner of the display.



Say **My Notifications** to open the list of notifications.

Say **Open item <notification number>**, to view a specific notification.

Setting Up HMT-1Z1

You can use the HMT-1Z1 control panel to access the common device configuration settings. You can also use it to access Android system settings.

Setting Up HMT-1Z1 Using Remote Configuration

When you switch ON the HMT-1Z1 for the first time a remote configuration screen is displayed. Visit <https://www.realwear.com/configure> and complete the following procedure.

To skip the remote configuration and perform later, press the **Action** button.

1. Open a Web browser in your computer
1. Visit <https://www.realwear.com/configure>
2. Click **Configure your HMT-1Z1**
3. Select the communication language and click **Continue**
4. Select your local time zone and click **Continue**.
5. Enter the **Access point** and **password** to setup the Wi-Fi network for your HMT-1Z1 (optional).
6. Click **Create Configuration QR code**.

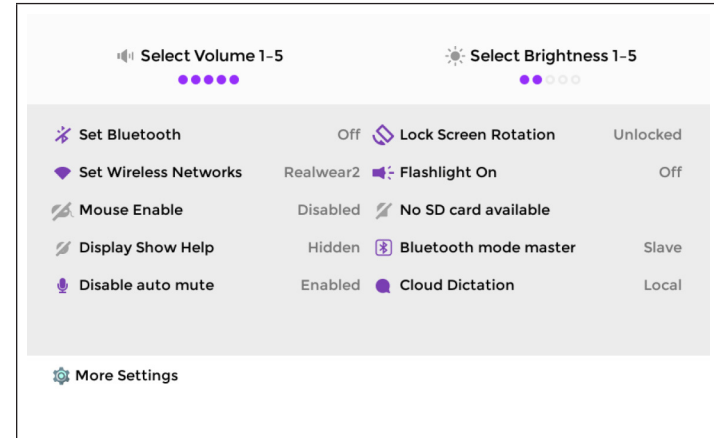
The QR code is generated and displayed on the computer screen.

7. Scan the QR code using the **“Configuration”** application in the **“My Programs”** menu.



Using Control Panel

You can access the control panel from any screen. To access the control panel, say **“My Controls”**. The **Settings** screen is displayed.



HMT-1Z1 Settings

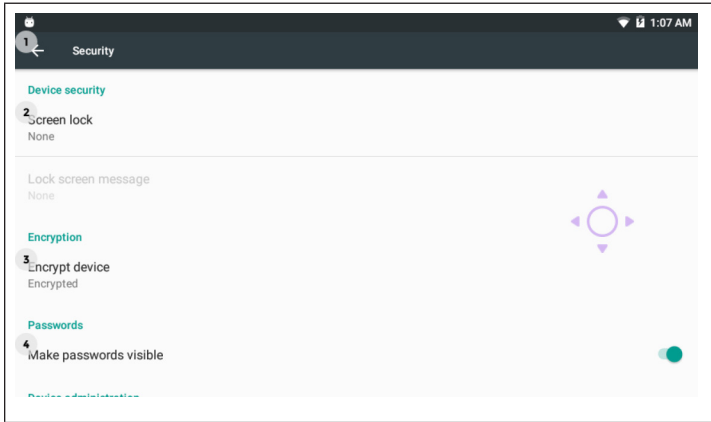
Voice Command	Action
"Select Volume 1, Select Volume 2, ... Select Volume 5"	Sets the default volume level of the device to specific value – 1 to 5 For example, to set volume to 4 say "Select volume 4" .
"Select Brightness 1, Select Brightness 2, ... Select Brightness 5"	Sets the default brightness of the device display to specific value – 1 to 5 For example, to set the brightness to 2, say "Select brightness 2" .
"Set Bluetooth"	Displays the Bluetooth status
"Lock/Unlock Screen Rotation"	Enables/disables screen rotation when headset is flipped upside down
"Set Wireless Networks"	Displays the Wi-Fi status and the name of Wi-Fi network connected to the device To access Android Wi-Fi settings, say "Set Wireless Networks" . HMT-1Z1 can connect to wireless networks with hidden SSID.
"Flashlight On / Flashlight Off"	Switches On/Off flashlight.
"Mouse Enable/ Disable"	Enables/disables virtual mouse that can be controlled using head gesture When mouse is enabled, a mouse pointer is displayed to track the operation.
"Use Card/Internal"	Sets microSD card or internal memory as the default storage
"Hide/display Show Help"	Hides or displays Show Help option displayed in all the screens
"Bluetooth Mode Master/Slave"	Sets the Bluetooth connection mode to master or slave In Master mode, HMT-1Z1 can connect to audio devices such as Bluetooth earpieces and Bluetooth speakers. In Slave mode, HMT-1Z1 can connect to mobile phones.
"Enable/Disable Auto mute"	Enables/disables automute/ auto-unmute option in microphone settings When automute is enabled and HMT-1Z1 is inactive for 30 seconds, the speech recognition is disabled automatically. A red warning symbol is displayed on the screen. Once the HMT-1Z1 movement is detected, the speech recognition will resume automatically, and the warning symbol will disappear.

Voice Command	Action
"Local/Cloud Dictation"	Sets the dictation service mode to Cloud or local To use dictation service in English, German and Chinese, you can set the dictation service mode to Local. To use dictation service for all the other languages you require Wi-Fi connection. Set the dictation service mode to Cloud.
"More Settings"	Displays standard Android settings

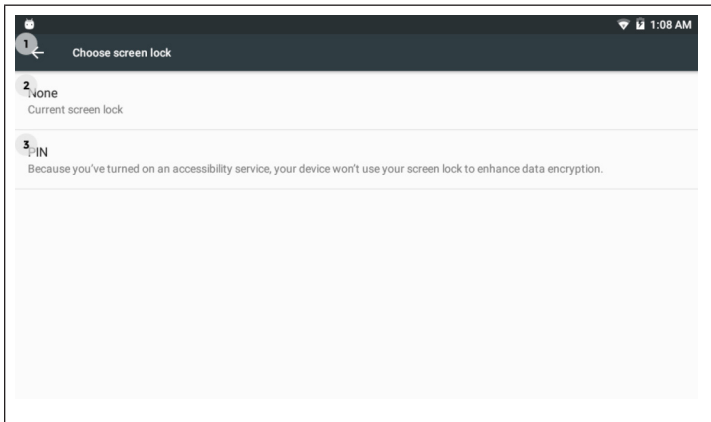
Setting Up Screen Lock Using Android Settings

Screen lock protects your HMT-1Z1 from unauthorized access. To setup the screen lock, complete the following procedure.

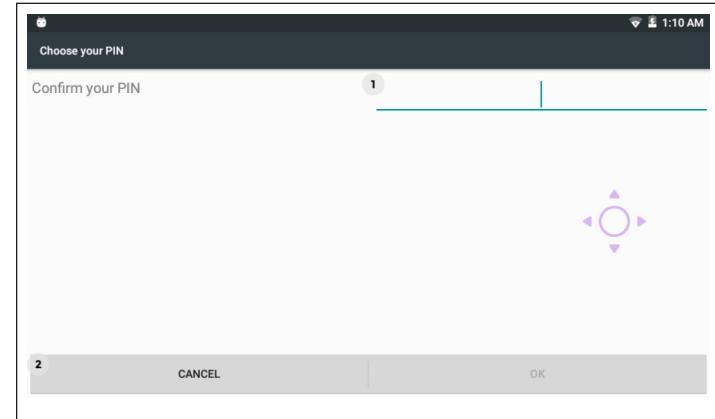
1. Go to control panel. To access the control panel say **"My Controls"**. The Settings screen is displayed.
2. Go to Android Settings. To access Android settings, say **"More settings"**. The Android settings screen is displayed.
3. Go to **Android settings > Security**.
4. Select **Screen Lock**.



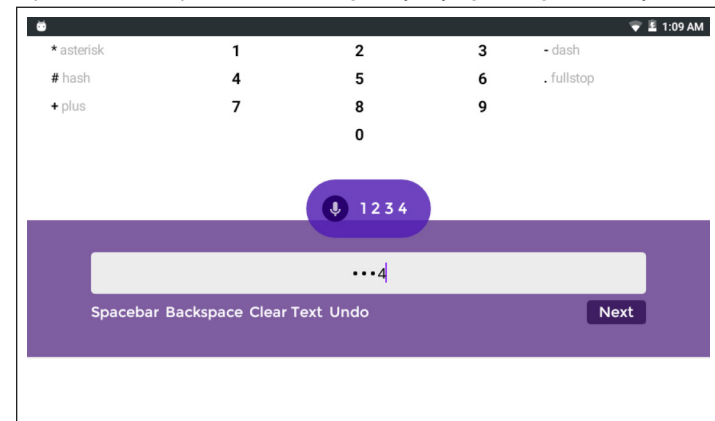
5. Select PIN to setup the screen lock.



Enter PIN screen is displayed.

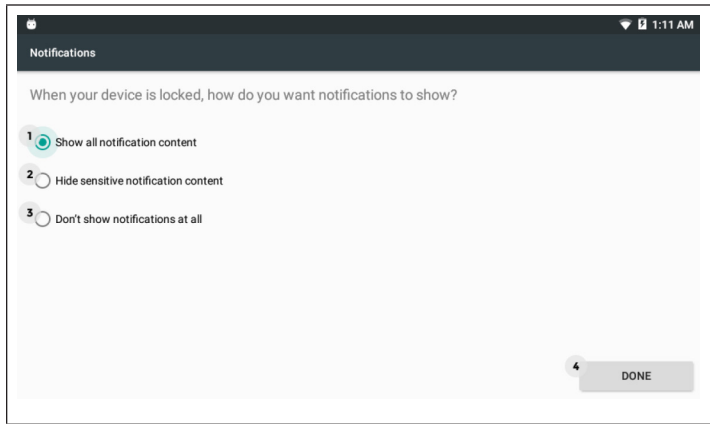


6. Input the desired pin with 4 to 15 digits, by saying the digits and say **Next**.



7. Re-enter the PIN for confirmation.

- Select the option to display the notifications on the Home screen, when the device is locked. You can opt to view all the notifications or hide specific notifications. You can also opt to hide all the notifications.

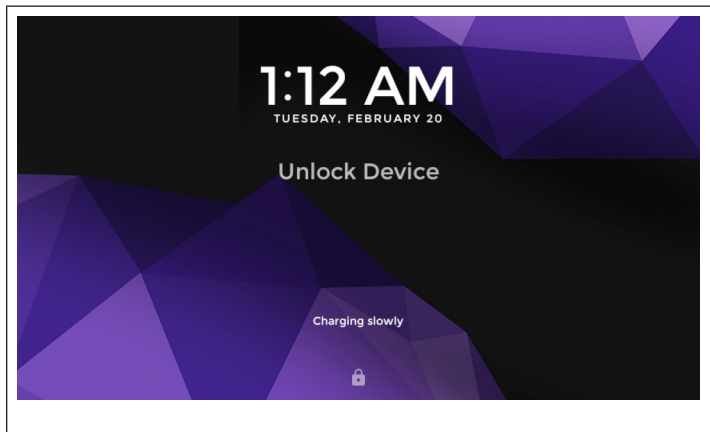


The Screen Lock is enabled.

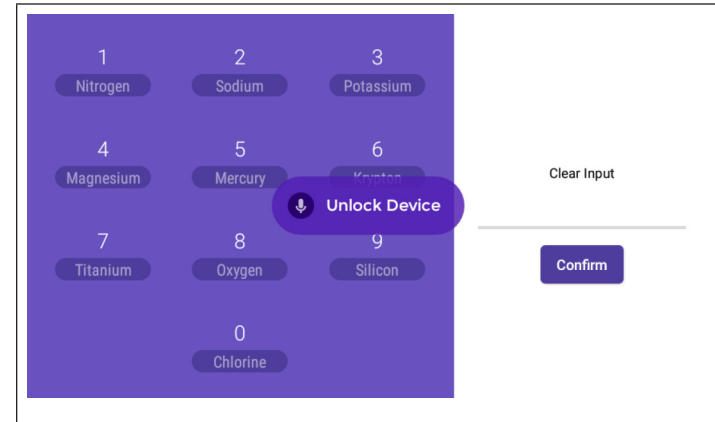
Unlocking your Device Using Screen Lock

When screen lock is enabled, the device gets locked when it goes to sleep or when you press the Power ON button. To unlock the device,

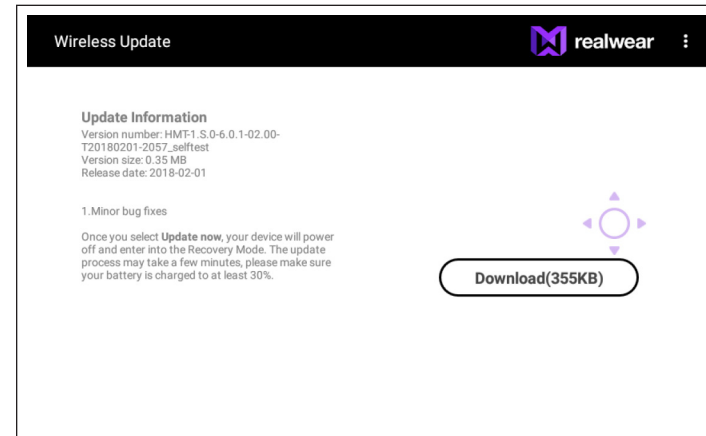
- Press the Power ON button and say “**Unlock device**”.



- Input your PIN. Say the periodic element name corresponding to each digit of the PIN number.



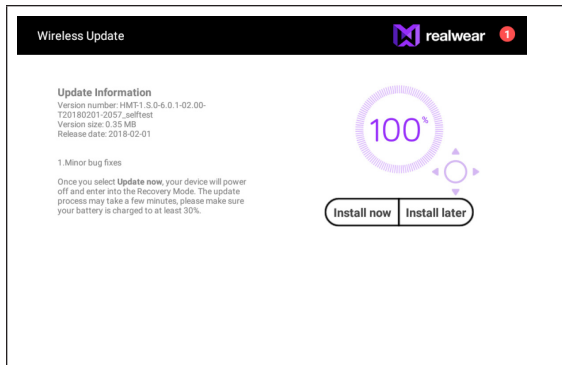
For example, to enter a PIN 1234, you must say “**Nitrogen Sodium Pottasium Magnesium**”.



- Say “**Download**” followed by the size in KB/MB or say “**Select item (followed by the item number)**”.

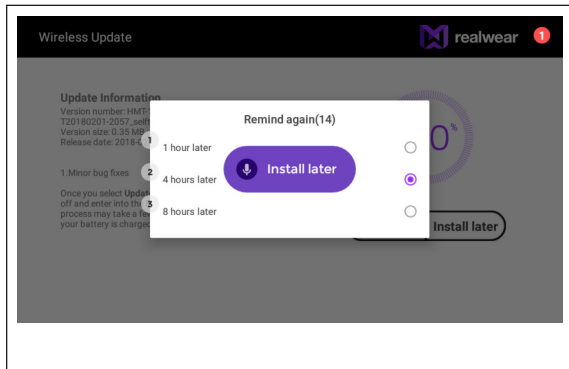
The software update download will start. The download time depends on the size of the package and the network connectivity.

Once the download is completed, an option to **Install now or later** is displayed.



Select **“install Now”** to install and update the HMT-1Z1 software.

If you say **“Install later”**, a pop-up to set the installation delay time is displayed for about 15 seconds. You can set the installation delay time to by 1, 4 or 8 hours. If the delay time is not set within the given time, the default delay timer is set to 4 hours.



Warning Messages to Note During Software Update

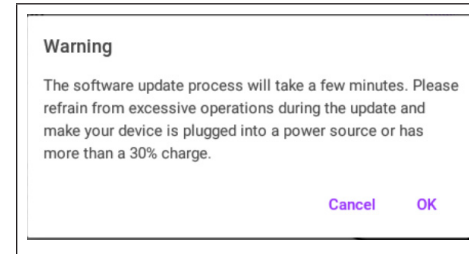
Be sure to read the following warning messages before proceeding with the software update.

Battery Alert

We recommend not to use HMT-1Z1 during the software update. Also ensure that there is at least 30 % charge.

Software Update Warning

When the software update begins, the following warning is displayed.



Setting Up Bluetooth Master/Slave Switch

You can connect HMT-1Z1 to other Bluetooth devices, as a master or slave.

In Master mode, HMT-1Z1 can connect to audio devices such as Bluetooth earpieces and Bluetooth speakers.

In Slave mode, HMT-1Z1 can connect to mobile phones.

Connecting HMT-1Z1 to Computer

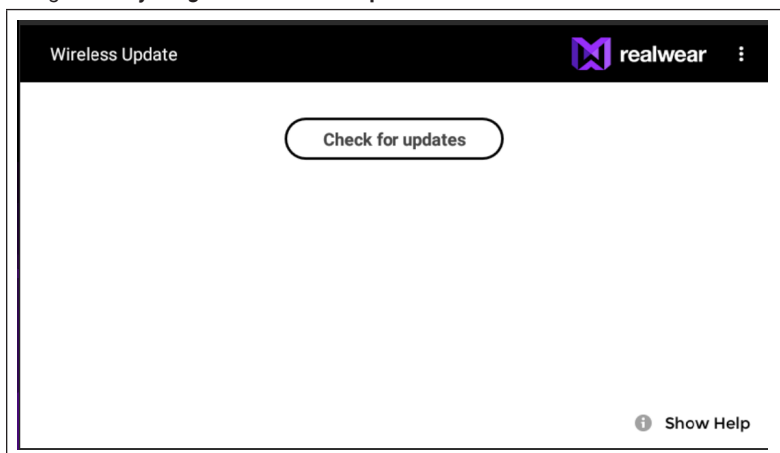
You can connect your HMT-1Z1 to a computer to perform file transfer and ADB interface.

Connect your HMT-1Z1 to the computer using a i.safe PROTECTOR 1.0 USB-cable. You can transfer files from/to the computer and also access the HMT-1Z1 using an ADB interface.

Updating HMT-1Z1 Software

Complete the following procedure to check and install software updates.

1. Power ON the HMT-1Z1 and connect to a Wi-Fi network.
2. Navigate to **My Programs > Wireless update**.



3. Say **"Check for updates"**.

An option to download the package is displayed if there is an update available.

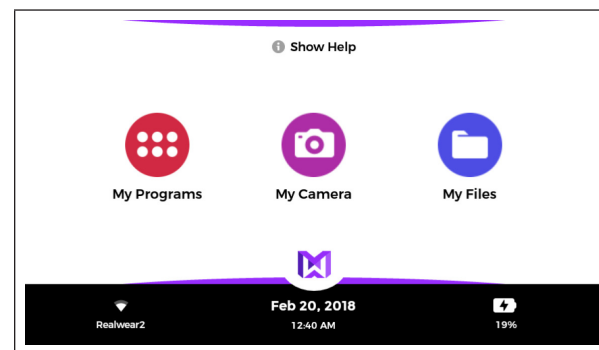
Using -HMT-1Z1

Switching ON

Press and hold the Power ON button for 2 seconds to Power ON the HMT-1Z1.

Home Screen

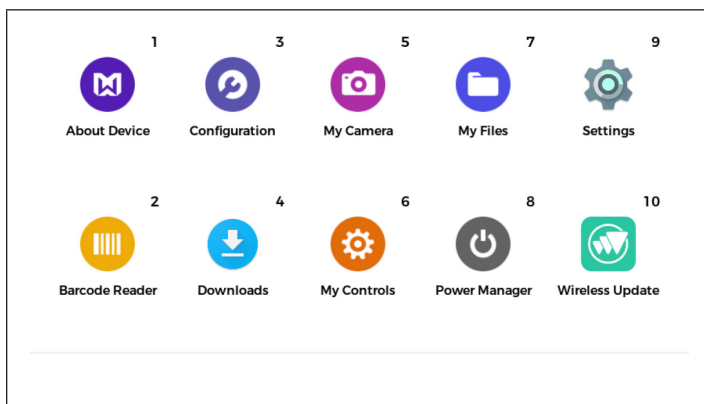
The Home screen is the main screen for performing all activities on the HMT-1Z1. It allows the user to quickly access files, key applications and at the same time provides useful information such as the time, date and battery status.



Control Buttons in Home Screen

You can access the various applications by activating the following controls provided in the Home Screen.

Voice Command	Action
"My Programs"	Launches application launcher to see and access all the applications installed in the device
"My Camera"	Launches camera
"My Files"	Launches files manager to easily access documents, videos, photos and other files

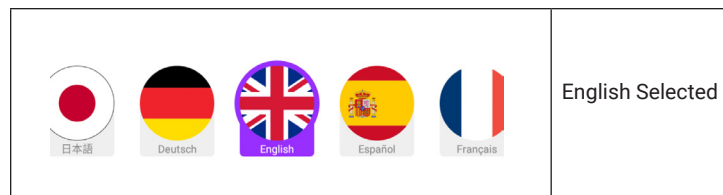


Selecting HMT-1Z1 Interface Language

To select the user interface language,

1. Press and hold the **Action button**.
2. All the supported languages are displayed as preview, using their respective Country flags.

The device automatically scrolls down the language list and highlights one language at a time, for one second.



3. When the desired language is highlighted, release the **Action button** and the highlighted language is set as the user interface language.

Accessing Home Screen

To access the Home Screen, say "**Navigate Home**" from any application screen.

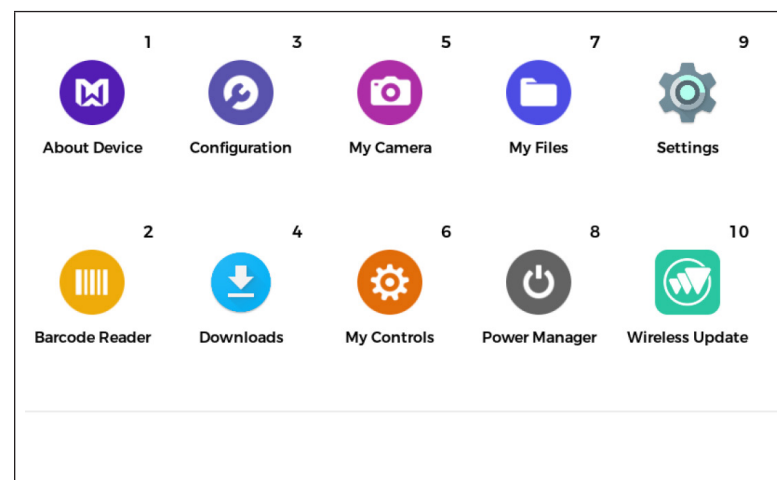
Accessing Application Launcher

You can use application launcher to view and access the applications installed in the HMT-1Z1.

You can activate any application by just saying the application name as written underneath the application icon even if the icon is not visible due to scrolling. For example, to start the camera, say "**My Camera**".

You can also launch an application by saying the number associated with the application. For example, to launch an application with item number 8, you must say "**Select Item 8**".

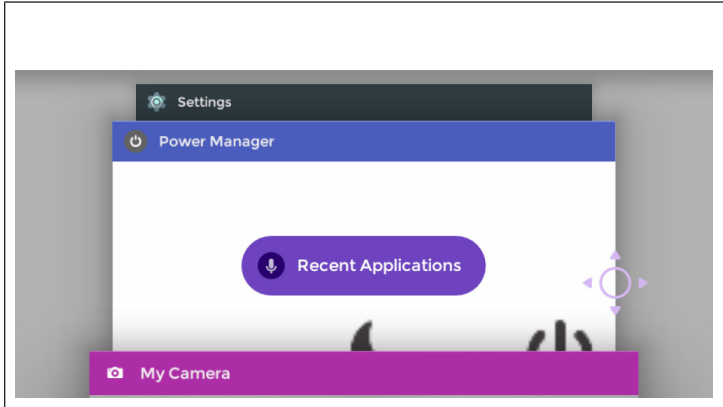
You can see up to 10 applications in a single screen. To scroll and view other applications, move you head to your left or right.



Accessing Recent Applications

You can view the list of all the applications running in the background, using the global command **“Recent Applications”**.

To open the applications say **“Select [number associated with desired item]”** or the name of the application.

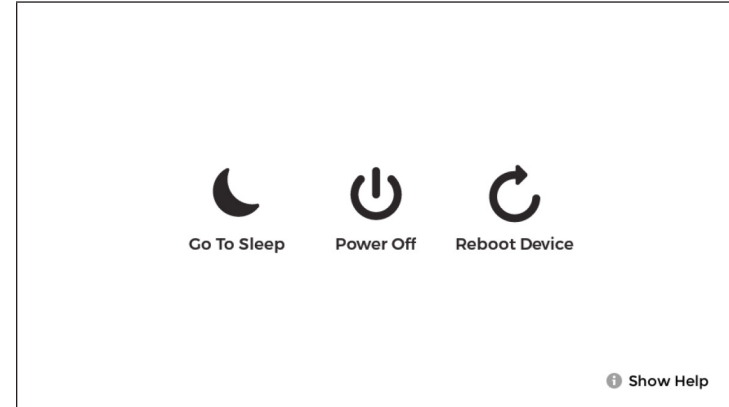


Voice Command	Action
“Recent Applications”	Displays the list of all the applications running in the background, along with the item number associated with each application
“Page Up”	Scrolls to the previous page of recent applications list
“Page Down”	Scrolls to the next page of recent applications list
“Select Item 1, Select Item 2, Select Item 3, ...”	Opens the application associated with the specified item number
“Dismiss Item 1, Dismiss Item 2, Dismiss Item 3, ...”	Stops the application corresponding to the specified item number For example, to stop the application associated with item number 5, say “Dismiss Item 5.”
“Show Help”	Displays extra commands

Accessing Power Management Functions

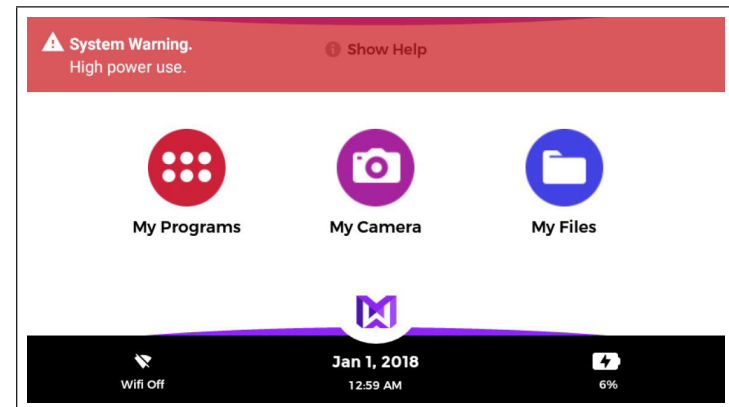
Power manager application allows you to access power management functions using voice commands.

To access power manager, go to application launcher and say **“Power Manager”**.

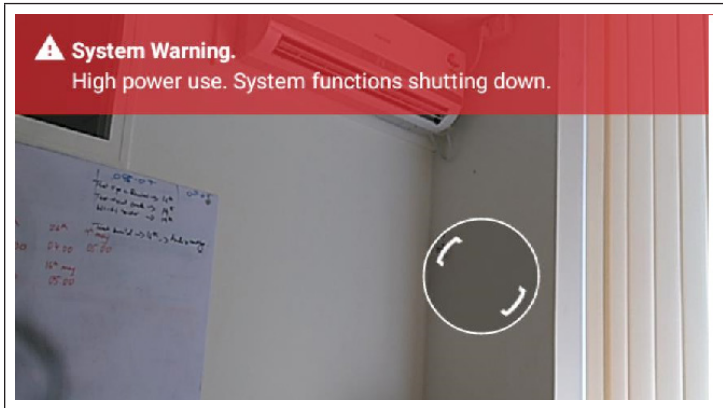


Voice Command	Action
“Go To Sleep”	Puts HMT-1Z1 into sleep mode. Press the Power On button to wake up
“Power Off”	Switches Off HMT-1Z1 device
“Reboot Device”	Restarts HMT-1Z1 device

Power manager also generates system warning when there is high power consumption. You must leave the device in idle state till the warning disappears.

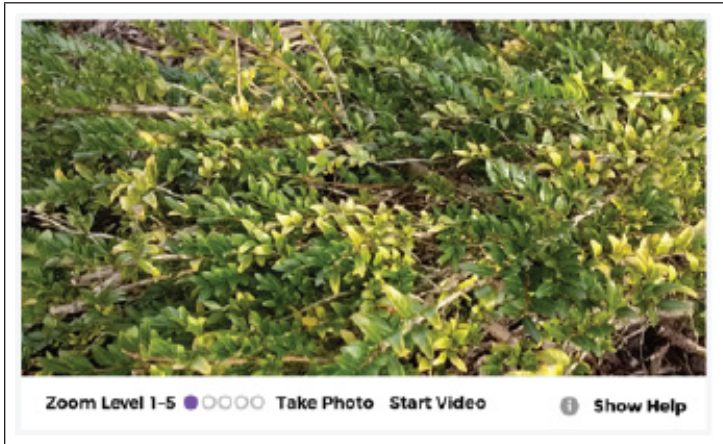


If you continue to use the device, the power manager would automatically start shutting down the device functions Wifi, Bluetooth, GPS, Flashlight, Backlight and speaker.



Accessing My Camera

The camera is a hands-free application for taking photographs and videos.



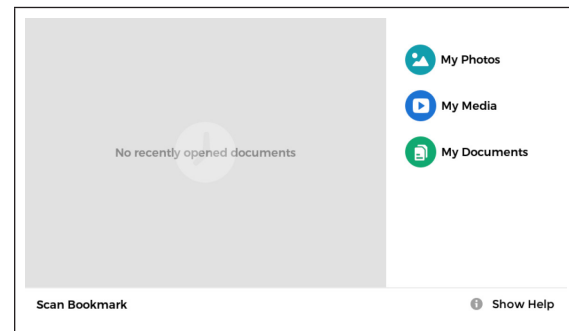
Camera Functions

Voice Command	Action
"Zoom Level – 1 to 5"	Zooms the camera view by setting the level to specific value – 1 to 5 To set the zoom level for clear scanning say "Zoom level 1–5". For example to set the zoom level to 3, say "Zoom level 3".

Voice Command	Action
"Take Photo"	Takes a photo and saves it to the My Photos folder as JPEG file The filename saved is displayed on screen for reference.
"Start Recording"	Starts recording a video To stop recording, say "Stop recording". The recorded video file is saved as an MP4 file to My Media folder and the file name is displayed, for reference.
"Stop Recording"	Stops the ongoing video recording
"Auto focus" / "Manual focus"	Sets the camera to auto focus or manual focus mode By default, the camera is set to auto focus mode. To toggle to manual focus say "Manual focus". If Manual focus is ON, a four corner bracket with an M is displayed in the lower right corner of the display screen, to indicate that the camera is in manual focus mode. In manual focus mode :– 1. To set the zoom level for clear scanning say "Zoom level 1–5". For example, to set the zoom level to 3, say "Zoom level 3" 2. Say "Take photo" to take a photograph or "Start recording" to start a video recording
"Flashlight ON/OFF"	Switches On/Off flashlight
"Show Help"	Displays extra commands

Accessing File Browser

You can view the documents, photos and video files locally stored in your HMT-1Z1 using the file browser application.



Voice Command	Action
"My Media"	Displays files stored in the Movies folder and videos recorded using the HMT-1Z1 camera and stored in DCIM folder. The supported file formats are: MP3, 3GP, AMR, OGG, WAV, WMA, AVI, MOV, MP4, WEBM, MKV
"My Documents"	Displays files stored in the Document folder The supported file formats are: PDF

Voice Command	Action
"My Photos"	'Displays files stored in the Pictures folder and Photos captured using the HMT-1Z1 camera and stored in DCIM folder The supported file formats are: JPEG, BMP, PNG, TIFF
"Show Help"	Displays extra commands

File Manager Functions

To select a specific file, you need to use the number assigned to it. For example, you can say "**Select item 1**" to select the first file, or "**Select item 2**" to select the second file. You can also use the filename without the extension.

Using Media Player

If you select an audio or video file from the file manager, it is played using the media player.

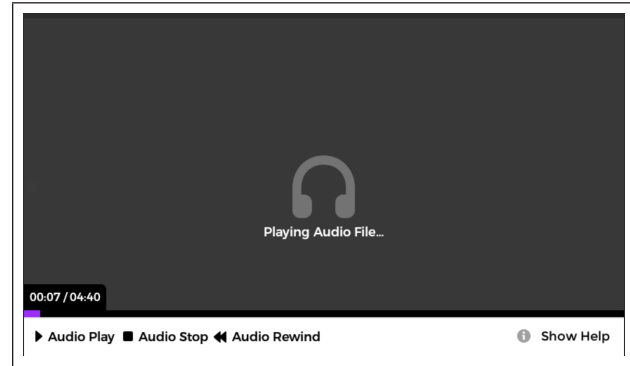


Media Player Functions

Voice Command	Action
"Video Pause "	Pauses video while playing
"Video Play"	Plays paused video
"Video Stop"	Stops the video and goes to My Media screen
"Video Rewind"	Rewinds video by 30 seconds
"Show Help"	Displays extra commands

Playing Audio Files

You can play audio files using the media player.

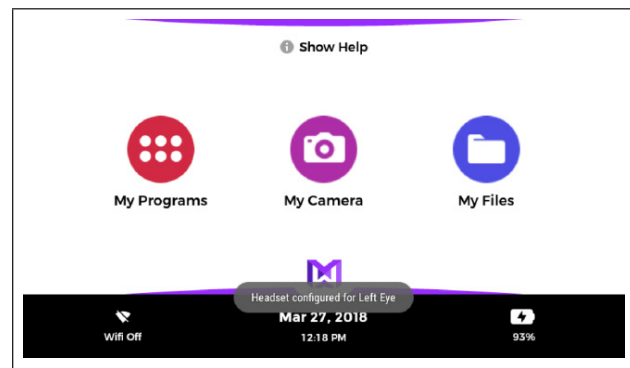


Audio Player Functions

Voice Command	Action
"Audio Pause"	Pauses audio while playing
"Audio Play"	Plays paused audio
"Audio Stop"	Stops the audio and goes to My Media screen
"Audio Rewind"	Rewinds Audio by 30 seconds
"Select Volume – 1 to 5"	Sets the default volume level of the device to specified value For example, to set the volume to 3, say " Select volume 3 ".
"Show Help"	Displays extra commands

Microphone Left Eye/Right Eye Indication

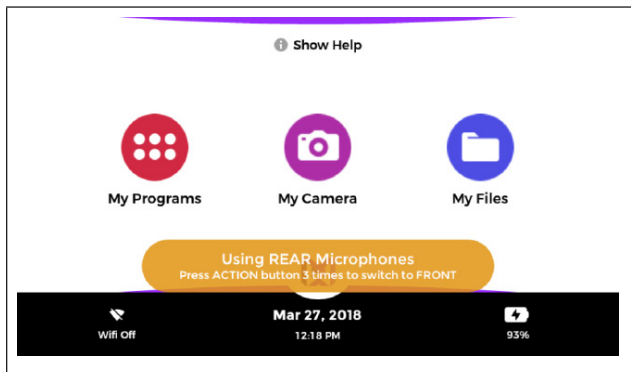
When the user changes the orientation of HMT-1Z1 from right to left eye or vice versa, a toast message appears on the screen indicating the change in the orientation.



Front/Back Microphone Switch

Under normal circumstances the front microphones are enabled. The front microphones are built into the display pod. However, when the display pod is folded back, you can use a second set of microphones that are built into the frame of HMT-1Z1.

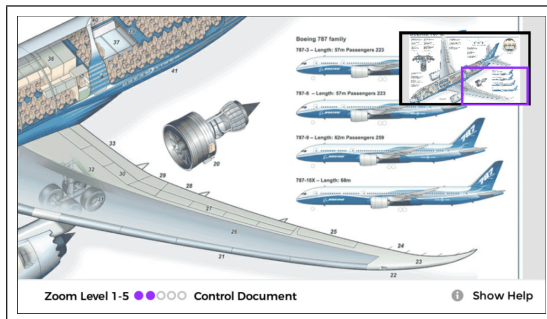
To switch between front and rear microphones, press the **Action** button three times quickly. When the rear microphones are active, an audio notification is played and a warning message is displayed on the screen. When the front microphones are active the warning message is removed.



Using Document Viewer

You can open PDF files and image files using document viewer with hands-free control.

If you select a PDF or image file from the file manager, it is opened using the document viewer.



Document Viewer Functions

Voice Command	Action
"Zoom Level – 1 to 5"	Zooms the document view size by setting the level to specific value – 1 to 5
"Freeze Document"	Prevents the document from scrolling in response to head gestures
"Control Document"	Unfreezes the document and enables document scrolling in response to head gestures

Using Document Viewer – Multi Page Document

To view documents with multiple pages, you need to use the following navigations controls.

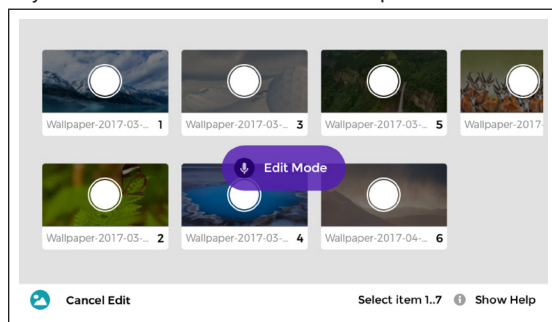
Voice Command	Action
"Go to page 1, Go to page 2, Go to page 3, ..."	Scrolls to the specified page For example, to go to page 5, say "Go to page 5".
"Next Page/ Previous Page"	Scrolls to next/previous page
"My Bookmarks"	Displays the bookmarks currently saved in the device, for the open document
"Add Bookmark"	Adds a desired page as a bookmark for easier access To add a page as a bookmark, you must go to that page and say "Add Bookmark".
"Delete Bookmark"	Deletes the bookmark set to a desired page To delete a bookmark, you must go to that page and say "Delete bookmark".
"Show Help"	Displays extra commands

Deleting Files from File Manager

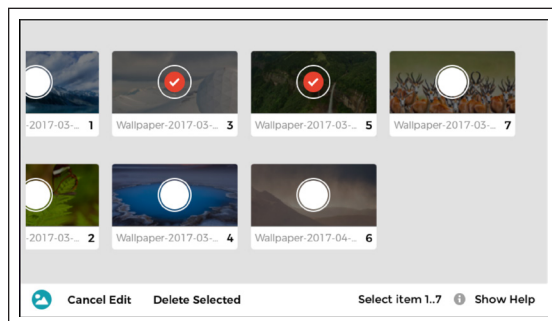
You can delete the files from My Media, My Documents or My Photos folder.

To delete one or more files,

1. Go to **My Media/My Documents/My Photos** folder.
2. Say **"Edit Mode"**. The Edit screen with option to select one or more files is displayed.

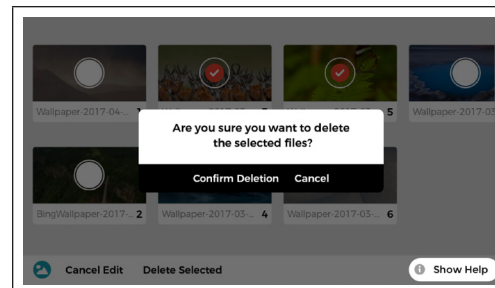


To select a specific file, you need to use the number assigned to it. For example, you can say **"Select item 3"**, to select the third file, or **"Select item 5"**, to select the fifth file.



3. To select all the files say **"Select All"**.

4. To delete the selected files, say **"Delete selected"** and **"Confirm deletion"**.



To cancel the delete and retain the files, say **"Cancel"**.

Using Barcode Scanner

You can use the handsfree barcode reader built-in with the HMT-1Z1, to scan any barcode. When launched, the barcode reader scans any barcode that is detected and displays the details automatically. You can also scan bookmarks, URL and application QR codes to open the respective items.



Voice Command	Action
"Zoom Level – 1 to 5"	Zooms the camera view by setting the level to specific value – 1 to 5 For example, to set the zoom level to 4, say "Zoom level 4" .
"Flashlight ON/OFF"	Switches On/Off flashlight

Supported Barcode Types

The supported barcode types are – UPC, EAN, QR Code, Data Matrix, and Code 128.

Limited Warranty and Software License

The following terms (“**Terms**”) give you specific legal rights. You may also have other rights that vary depending on local law.

Definitions

“**RealWear**” means RealWear’s designated sales entity for your region.

“**Hardware**” means the RealWear HMT-1Z1 head-mounted tablets (excluding Software). “**Software**” means any software, library, utility, tool, or other computer or program code, in object (binary) form embedded in or pre-installed on the Hardware, including any updates made available to you by RealWear. “**Documentation**” means the Product related media, printed materials, online and electronic documentation provided by RealWear, including copies. “**Products**” means Hardware, Software, and Documentation collectively. The Products are solely for your internal use and not for resale. The Products are intended for professional use and are not marketed or promoted for consumer, non-professional, or leisure use. These Terms are the only agreement between RealWear and You regarding your use of the Products and they supersede any other terms, agreements, or documents. If you purchased through a reseller who offered additional terms, that agreement is between you and the reseller.

Software and Documentation

The Software and Documentation are licensed not sold, and are provided “**AS IS**”, without any warranty. RealWear and its licensors retain all rights in the Software and Documentation, and grant you only the following limited, personal, non-transferrable licenses:

A. Documentation: You may reproduce a reasonable number of copies of the Documentation for your internal use.

B. Software: You may run and execute the Software only on the specific Hardware on which it was delivered to you, and may not copy, extract, or decompile the Software. The Software contains certain open source software components. The applicable open source license (indicated in the header files), and not this license, applies to those open source components.

C. No Other Rights or Licenses: No other rights or licenses are granted or implied, and the licenses expressly granted in this Section are your only licenses. Except as expressly permitted by applicable law, you may not decompile, attempt to derive source code from, or otherwise reverse engineer any Software. The licenses granted to you by these terms will automatically terminate if you violate any of the license terms.

Limited Hardware Warranty

A. Registration: This warranty is valid only if you register your hardware within 30 days after purchase, and is non-transferrable and is limited to you, the original registered owner, unless applicable law expressly prohibits such a limitation. This is the only warranty RealWear gives for your Hardware and RealWear gives no other guarantee, warranty, or condition, express, statutory, implied, or collateral. No one else may give any guarantee, warranty, or condition on RealWear’s behalf.

B. Express Limited Warranty: For 1 year after the date you register the Hardware, or 15 months from the date of manufacture (if applicable law prohibits requiring registration) (the “Warranty Period”), RealWear warrants that the Hardware will be free of defects in materials or workmanship that cause it to malfunction when used in accordance with the instructions in the RealWear published instruction manual for the Hardware (“Normal Use Conditions”).

C. Effect of Applicable Law on Limited Warranty: If, despite the disclaimers, limitations, and exclusions in this limited warranty, applicable law gives you any implied warranty, including an implied warranty of merchantability or fitness for a particular purpose, its duration is limited to the Warranty Period, unless applicable law expressly prohibits such a limitation. This limited warranty gives you specific, limited rights. You may also have other rights under applicable law.

D. How to Get Warranty Service:

- i. Before starting the warranty process, please use the trouble-shooting tips at <http://www.realwear.com>.
- ii. If the troubleshooting tips do not resolve your problem, then follow the online process at <http://www.realwear.com>. If you do not have

Internet access, you can phone +1(669) 235-5751.

- iii. Before sending your Hardware to RealWear for service, be sure to keep a copy of any data you want to save, and delete anything you consider confidential. RealWear is not responsible for your data and may erase it.

E. RealWear's Responsibility:

- i. After you return your Hardware to RealWear (at your cost, unless RealWear is required by applicable law to pay) RealWear will inspect it.
- ii. If RealWear, in its sole discretion, determines that: (a) a defect in materials or workmanship caused the Hardware to malfunction during the Warranty Period under Normal Use Conditions, and (b) none of the exclusions in Section F apply, then RealWear will (at its option) repair or replace the Hardware, or refund the purchase price to you. Unless restricted by applicable law, repair may use new or refurbished parts and replacement may be with a new or refurbished unit. RealWear's responsibility to repair or replace your Hardware, or to refund the purchase price, is your exclusive remedy.
- iii. After repair or replacement, your Hardware will be covered by this warranty for the longer of the remainder of your original Warranty Period or 95 days after RealWear ships it to you. Where required by applicable law, the original Warranty Period will be extended for a period of time equal to the time that your Hardware was in RealWear's possession.
- iv. If your Hardware malfunctions after the Warranty Period expires, RealWear provides no warranty of any kind. After the Warranty Period expires, RealWear may charge you a fee for its efforts to diagnose and service any problems with your Hardware.

F. Warranty Exclusions: RealWear is not responsible and this warranty does not apply if your Hardware is:

- i. intentionally abused or used in other than Normal Use Conditions (as determined by RealWear in its sole judgment);
- ii. used with any battery not provided by RealWear;

- iii. damaged by use with products or accessories not sold or licensed by RealWear (including, for example, software not provided by RealWear, chargers, memory cards, or other accessories not manufactured by RealWear, etc.);
- iv. opened, modified, disassembled, or tampered with (including circumvention of any security system); repaired by anyone other than RealWear or a RealWear authorized repair center; its serial number or any proprietary marking is altered or removed; or
- v. damaged by any external cause (including, for example, by being dropped, intrusion of water or other liquid, etc.; or failure to follow instructions in the instruction manual for the Hardware, for example, failure to tightly affix port covers in wet conditions, etc.).

G. Accessories and Consumable Parts:

- i. Realwear branded accessories are covered by the Hardware warranty. But batteries and soft cases are warranted for 90 days only; and
- ii. consumable parts such as foam pads, straps, hard-hat clips, etc. are not covered by warranty.

Exclusion of Certain Damages, Limitation of Liability

A. Exclusion of Certain Damages: REALWEAR WILL NOT BE LIABLE FOR ANY LOST REVENUE, INCOME, PROFIT, OR SAVINGS; LOST OR CORRUPTED DATA OR SOFTWARE; LOST BUSINESS OPPORTUNITY; PROCUREMENT OF SUBSTITUTE PRODUCTS OR ANY OTHER INCIDENTAL, INDIRECT, PUNITIVE, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THESE TERMS OR THE PRODUCTS.

B. Limitation of Liability: REALWEAR'S TOTAL LIABILITY FOR ANY AND ALL CLAIMS ARISING OUT OF OR IN CONNECTION WITH THESE TERMS OR THE PRODUCTS WILL NOT EXCEED THE TOTAL AMOUNT RECEIVED BY REALWEAR FROM YOU DURING THE PRIOR 12 MONTHS FOR THE SPECIFIC PRODUCT GIVING RISE TO THE CLAIM.

C. Application of Limitations: THE LIMITATIONS, EXCLUSIONS, AND DISCLAIMERS IN THESE TERMS APPLY TO ALL CLAIMS FOR DAMAGES, WHETHER BASED IN CONTRACT, WARRANTY, STRICT LIABILITY, NEGLIGENCE, TORT, OR OTHERWISE. THESE LIMITATIONS OF LIABILITY ARE AGREED ALLOCATIONS OF RISK CONSTITUTING IN PART THE CONSIDERATION FOR REALWEAR'S SALE OF PRODUCTS TO YOU, AND WILL APPLY NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY AND EVEN IF REALWEAR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LIABILITIES.

Governing Law, Dispute Resolution

A. Arbitration: Any dispute relating to this Agreement ("Dispute") will be resolved by binding arbitration according to the then-current Commercial Arbitration Rules of the American Arbitration Association (the "AAA Rules"). The existence, content (including all documents and materials submitted to the arbitrators), and results of any arbitration are Confidential Information. The arbitrator will be a neutral practicing attorney or retired judge with experience in similar cases and appointed in accordance with the AAA Rules. The arbitrator must agree in writing to maintain the confidentiality of the arbitration. The arbitration will be governed by the Federal Arbitration Act, 9 U.S.C. §§1 et seq. The prevailing party will be entitled to recovery of arbitration expenses (including reasonable attorney's fees). The arbitrator's award will include provisions for this recovery. The arbitrator's award will be binding and final. Any court having jurisdiction may enter judgment upon the award. The arbitration will be in conducted in English and held in Vancouver, WA.

B. Governing Law: This Agreement is governed by, and the arbitrator will apply, the substantive laws of the State of Washington excluding its conflicts of law provisions. The United Nations Convention on Contracts for the International Sale of Goods does not apply to this Agreement. Claims must be brought within 1 year of the date the claim arose, otherwise the claim will be permanently barred.

C. Class Action Waiver: All proceedings will be conducted solely on an individual basis. No arbitration will be combined with another without the prior written consent of all parties to all affected arbitrations or proceedings.

You will not seek to have any dispute heard as a class action, private attorney general action, or in any other proceeding in which you act or propose to act in a representative capacity.

Exclusion of Certain Damages, Limitation of Liability

A. Exclusion of Certain Damages: REALWEAR WILL NOT BE LIABLE FOR ANY LOST REVENUE, INCOME, PROFIT, OR SAVINGS; LOST OR CORRUPTED DATA OR SOFTWARE; LOST BUSINESS OPPORTUNITY; PROCUREMENT OF SUBSTITUTE PRODUCTS OR ANY OTHER INCIDENTAL, INDIRECT, PUNITIVE, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THESE TERMS OR THE PRODUCTS.

B. Limitation of Liability: REALWEAR'S TOTAL LIABILITY FOR ANY AND ALL CLAIMS ARISING OUT OF OR IN CONNECTION WITH THESE TERMS OR THE PRODUCTS WILL NOT EXCEED THE TOTAL AMOUNT RECEIVED BY REALWEAR FROM YOU DURING THE PRIOR 12 MONTHS FOR THE SPECIFIC PRODUCT GIVING RISE TO THE CLAIM.

C. Application of Limitations: THE LIMITATIONS, EXCLUSIONS, AND DISCLAIMERS IN THESE TERMS APPLY TO ALL CLAIMS FOR DAMAGES, WHETHER BASED IN CONTRACT, WARRANTY, STRICT LIABILITY, NEGLIGENCE, TORT, OR OTHERWISE. THESE LIMITATIONS OF LIABILITY ARE AGREED ALLOCATIONS OF RISK CONSTITUTING IN PART THE CONSIDERATION FOR REALWEAR'S SALE OF PRODUCTS TO YOU, AND WILL APPLY NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY AND EVEN IF REALWEAR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LIABILITIES.

Governing Law, Dispute Resolution

A. Arbitration: Any dispute relating to this Agreement ("Dispute") will be resolved by binding arbitration according to the then-current Commercial Arbitration Rules of the American Arbitration Association (the "AAA Rules"). The existence, content (including all documents and materials submitted to the arbitrators), and results of any arbitration are Confidential Information. The arbitrator will be a neutral practicing attorney or retired judge with experience in similar cases and appointed in accordance with the AAA Rules. The arbitrator must agree in writing to maintain the confidentiality of the arbitration. The arbitration will be governed by the Federal Arbitration

Act, 9 U.S.C. §§1 et seq. The prevailing party will be entitled to recovery of arbitration expenses (including reasonable attorney's fees). The arbitrator's award will include provisions for this recovery. The arbitrator's award will be binding and final. Any court having jurisdiction may enter judgment upon the award. The arbitration will be conducted in English and held in Vancouver, WA.

B. Governing Law: This Agreement is governed by, and the arbitrator will apply, the substantive laws of the State of Washington excluding its conflicts of law provisions. The United Nations Convention on Contracts for the International Sale of Goods does not apply to this Agreement. Claims must be brought within 1 year of the date the claim arose, otherwise the claim will be permanently barred.

C. Class Action Waiver: All proceedings will be conducted solely on an individual basis. No arbitration will be combined with another without the prior written consent of all parties to all affected arbitrations or proceedings. You will not seek to have any dispute heard as a class action, private attorney general action, or in any other proceeding in which you act or propose to act in a representative capacity.

Exclusion of Certain Damages, Limitation of Liability

A. Exclusion of Certain Damages: REALWEAR WILL NOT BE LIABLE FOR ANY LOST REVENUE, INCOME, PROFIT, OR SAVINGS; LOST OR CORRUPTED DATA OR SOFTWARE; LOST BUSINESS OPPORTUNITY; PROCUREMENT OF SUBSTITUTE PRODUCTS OR ANY OTHER INCIDENTAL, INDIRECT, PUNITIVE, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THESE TERMS OR THE PRODUCTS.

B. Limitation of Liability: REALWEAR'S TOTAL LIABILITY FOR ANY AND ALL CLAIMS ARISING OUT OF OR IN CONNECTION WITH THESE TERMS OR THE PRODUCTS WILL NOT EXCEED THE TOTAL AMOUNT RECEIVED BY REALWEAR FROM YOU DURING THE PRIOR 12 MONTHS FOR THE SPECIFIC PRODUCT GIVING RISE TO THE CLAIM.

C. Application of Limitations: THE LIMITATIONS, EXCLUSIONS, AND DISCLAIMERS IN THESE TERMS APPLY TO ALL CLAIMS FOR DAMAGES, WHETHER BASED IN CONTRACT, WARRANTY, STRICT LIABILITY, NEGLIGENCE, TORT, OR OTHERWISE. THESE LIMITATIONS OF LIABILITY

ARE AGREED ALLOCATIONS OF RISK CONSTITUTING IN PART THE CONSIDERATION FOR REALWEAR'S SALE OF PRODUCTS TO YOU, AND WILL APPLY NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY AND EVEN IF REALWEAR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LIABILITIES.

Governing Law, Dispute Resolution

A. Arbitration: Any dispute relating to this Agreement ("Dispute") will be resolved by binding arbitration according to the then-current Commercial Arbitration Rules of the American Arbitration Association (the "AAA Rules"). The existence, content (including all documents and materials submitted to the arbitrators), and results of any arbitration are Confidential Information. The arbitrator will be a neutral practicing attorney or retired judge with experience in similar cases and appointed in accordance with the AAA Rules. The arbitrator must agree in writing to maintain the confidentiality of the arbitration. The arbitration will be governed by the Federal Arbitration Act, 9 U.S.C. §§1 et seq. The prevailing party will be entitled to recovery of arbitration expenses (including reasonable attorney's fees). The arbitrator's award will include provisions for this recovery. The arbitrator's award will be binding and final. Any court having jurisdiction may enter judgment upon the award. The arbitration will be conducted in English and held in Vancouver, WA.

B. Governing Law: This Agreement is governed by, and the arbitrator will apply, the substantive laws of the State of Washington excluding its conflicts of law provisions. The United Nations Convention on Contracts for the International Sale of Goods does not apply to this Agreement. Claims must be brought within 1 year of the date the claim arose, otherwise the claim will be permanently barred.

C. Class Action Waiver: All proceedings will be conducted solely on an individual basis. No arbitration will be combined with another without the prior written consent of all parties to all affected arbitrations or proceedings. You will not seek to have any dispute heard as a class action, private attorney general action, or in any other proceeding in which you act or propose to act in a representative capacity.

Regulatory Statements

WARNING: Changes or modifications made to this equipment not expressly approved by RealWear, Inc. for compliance could void the user's authority to operate the equipment.

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.

FCC Caution

1. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
2. 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 usage only.

IC Statement – English

1. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
 - This device may not cause interference, and

2. 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.
3. This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference.
4. 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.
5. The Country Code Selection feature is disabled for products marketed in the US/Canada.

IC Statement – Français

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:

- l'appareil ne doit pas produire de brouillage, et
 - l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement
6. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
 7. Cet appareil est conforme à la norme RSS-310 d'Industrie Canada. L'opération est soumise à la condition que cet appareil ne provoque aucune interférence nuisible.
 8. 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.
 9. La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

IC Statement – FOR WLAN 5GHZ DEVICE Caution

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 e.i.r.p. limit.
3. The maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. 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 e.i.r.p. 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 cause interference and/or damage to LE-LAN devices.

Avertissement

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.

Declaration of Conformity

EU Regulatory Conformance

Hereby, We, i.safe MOBILE GmbH declare that the radio equipment type T1100S is in compliance with Directive 2014/53/EU.

Declaration of Conformity

EU Declaration of Conformity (DoC)		RF_067_Issue 01
Hereby,		
Name of manufacturer:	i.safe MOBILE GmbH	
Address:	J. Park Tauberfranken 10 97922 Lauda-Koenigshofen.	
City:	Lauda-Koenigshofen.	
Country:	Germany	
declares that the DoC is issued under its sole responsibility and that this product:		
Product description:	Head Mounted Tablet	
Type designation(s):	T1100S	
Trademark:	realwear	
Object of the declaration: T1100S is a Head Mounted Tablet which incorporates WIFI, Bluetooth® and GPS/GLONASS.		
is in conformity with the relevant Union harmonization legislation: Radio Equipment directive: 2014 / 53 / EU and Restriction of Hazardous Substances Directive: 2011/65/EU and Waste Electrical and Electronic Equipment Directive: 2012/19/EU.		
with reference to the following standards applied:		
1. Health (Article 3.1(a) of Directive 2014/53/EU)		
Applied Standard(s):		
<ul style="list-style-type: none"> ■ EN 50566: 2017 ■ EN 50360: 2017 ■ EN 62209-1: 2016 / -2 : 2010 ■ EN 62479 : 2010 		
2. Safety (Article 3.1(e) of Directive 2014/53/EU)		
Applied Standard(s):		
<ul style="list-style-type: none"> ■ EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + A2: 2013 ■ EN 50332-1: 2013 / -2: 2013 		
3. Electromagnetic compatibility (Article 3.1 (b) of Directive 2014/53/EU)		
Applied Standard(s):		
<ul style="list-style-type: none"> ■ Draft EN 301 489-1 V2.2.0 / -17 V3.2.0 / -19 V2.1.0 ■ EN 55032: 2015 + AC: 2016 ■ EN 55024: 2010 		
4. Radio frequency spectrum usage (Article 3.2 of Directive 2014/53/EU)		
Applied Standard(s):		
<ul style="list-style-type: none"> ■ EN 300 328 V2.1.1 ■ EN 301 893 V2.1.1 ■ EN 303 413 V1.1.1 		
The Notified Body Telefication B.V., with Notified Body number 0560 performed: Module: B+C and issued the EU-type examination certificate.		
Signed for and on behalf of:		
Date:	March 26, 2018	
City:	Lauda-Koenigshofen.	
Name:	Dirk Amann	
Title:	Manager	
Signature:	