# VUZIX BLADE®

**SMART GLASSES** 



User's Manual version 1.0

# Table of Contents

Introduction to Vuzix Blade	03
Package Contents	04
Device Layout and Components	04
Charging	05
User Controls	06
Power Button	06
Touchpad	06
Navigation Basics	06
Basic Gestures	
Advanced Gestures	07
First Time User Experience	80
Turning Blade ON	08
Turning Blade OFF	09
Toggling Display ON/OFF	09
Rebooting Blade	09
Turning Airplane Mode ON/OFF	09
Hard Shutdown	09
Onboard Apps	10
Home Screen	10
Camera App	11
Capturing Pictures	11
Recording Video	11
Additional Camera Actions	12
Control (Music) App	13

Games
Photos App
Viewing Pictures and Videos . 1
Settings App
Companion Link
USB Mode
Haptic Feedback 1
Time and Date
Bluetooth
Wi-Fi
Software Update 1
Audio
Keyboard 1
Companion App
Learning More2

## Introduction to Vuzix Blade

Congratulations and welcome to the Vuzix Blade AR Smart Glasses!

The Vuzix Blade delivers enhanced functionality for your on-the-go, handsfree, mobile computing requirements. Stay connected and keep your phone in your pocket!

The Blade Quick Start Guide, included in your Blade package, provides concise information on the basic use of the Blade AR Smart Glasses.

This User's Manual provides more comprehensive and detailed information for setup, configuration and use.

Be sure to read this manual and retain it for future reference.

#### Read Me First

Read the Safety and Warranty document at https://www.vuzix.com/support/safety-warranty-blade before proceeding.

Product, features and operation descriptions are based on the device's default settings and may change without notice.

Some content and operation descriptions may differ from your device depending on your region, service provider options, and/ or software.

Display brightness and content requiring high CPU and RAM usage will affect the overall performance of the device and its battery life.

Some Android applications and content may not work as expected due to the Vuzix Blade Smart Glasses' design characteristics and its application.

Vuzix is not liable for performance issues caused by applications supplied by other

providers or alteration of the device, its settings, or software.

Attempting to customize the device or software may result in improper operation and voiding of the device's warranty.

Software, data, images, and other media provided with this device are licensed for limited use. Using or incorporating these materials for commercial or other purposes is an infringement of copyright laws

You may incur additional charges for services provided by third parties, such as, but not limited to, an ISP, Wi-Fi provider, software or other service providers.

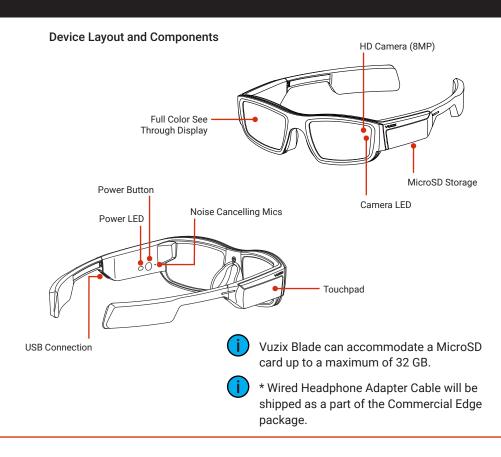
Applications provided with the device are subject to updates and discontinuation without prior notice.

## Introduction to Vuzix Blade

## **Package Contents**

Please be sure your Vuzix Blade came with all the contents shown. If you are missing any items contact Vuzix at www.vuzix.com/support/blade-smart-glasses.





# Charging

Your Blade is equipped with internal rechargeable batteries and is shipped with a partial charge. It is recommended that the battery be fully charged for first time use.

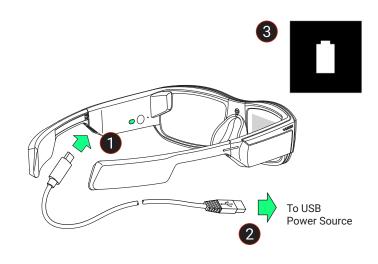
- Connect the included micro USB connector into the device.
- Connect the USB connector to any standard USB power source.
- 3 Check that the device has entered charger mode.

Blade will automatically enter charger mode when it is connected to a USB power source. It will turn off if disconnected from the power source while in charge mode.

For speed charging connect to 5V 2A source. (Blade will draw a maximum of 5V 1A.)

The Power LED will indicate the various battery and charging states using the following blink patterns:

- Fast blink battery is less than 15%
- Slow breathing battery is charging, up to 90%
- Off battery is fully charged
- Fast breathing battery has minimal charge, too low to boot device

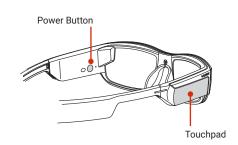


There are only two physical interfaces on the device, the power button and the touchpad (see illustration on page 4).

#### **Power Button**

The power button has multiple functions including:

- display ON/OFF, press and release the power button.
- power ON/OFF, with display on, hold power button for 3 Seconds to get the menu.
- reboot, with display on, hold power button for 3 Seconds to get the menu.
- airplane mode ON/OFF, with display on, hold power button for 3 Seconds to get the menu.
- hard shutdown\*, hold power button for 7-8 Seconds for a hard shutdown.
- \* This may lose or corrupt data, and is not recommended unless the device becomes unresponsive.

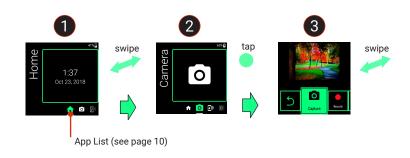


#### Touchpad

The touchpad is the primary means to interact with the Blade. Taps and swipes are the basic gestures.

#### **Navigation Basics**

- Swipe forward or backward to navigate through the App List.
- 2 Tap to select the "in focus" app.
- 3 Swipe to navigate to actions or return to the *App List*.



#### **Basic Gestures**

These two simple gestures will quickly get you started using your Blade.

## **One-Finger Tap**

- turn on display and wake up (if in sleep mode)
- · select an item (app, action or feature)
- · display action list (if in full screen mode)



#### One Finger Swipe Forward and Backward

- · navigate features, lists and App List
- scrub video
- navigate keyboard



#### **Advanced Gestures**

Two finger gestures combined with the basic gestures are all you need to navigate the device.

## **Two-Finger Tap**

- move backward
- · close action bar



# Two-Finger Swipe Up / Down

- increase or decrease volume
- navigate to recovery options



#### Two-Finger Hold One second

return to home



## Two-Finger Swipe Forward

- delete action
- clear current notification
- · delete photo or video
- add space (keyboard)



#### One-Finger Hold One second

- open menu
- displays options for keyboard characters



# Two-Finger Swipe Backward

backspace (keyboard)

**One-Finger Swipe** 

· navigate vertical lists

Up / Down

 available gesture definable within app





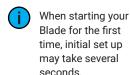
## First Time User Experience

- 1 Ensure Blade has enough power (see page 5).
- 2 To turn ON press and hold the power button for three seconds.
- When the Blade boots for the first time, the welcome animation will play, followed by the Welcome screen showing how to swipe forward on the touch pad. The user also has to accept End User License Agreement and Safety & Warranty.

## **Turning Blade ON**

- 4 Ensure Blade has enough power (see page 5).
- To turn ON press and hold the power button for three seconds.
- 6 At start up, the welcome animation will play, followed by the home screen. Every time Blade boots, the users will notice a message to read Health & Safety document under settings.





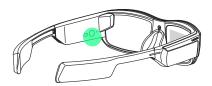


The power LED will light and remain on when Blade is on.





3 sec. power ON/OFF





## **Turning Blade Off**

- Press and hold the power button for three seconds.
- Select Power Off from the menu.

## Toggle Display On/Off

3 Press and release (one second).

## **Rebooting Blade**

- Press and hold the power button for three seconds.
- 5 Select Reboot from the menu.

## Turning Airplane Mode ON/OFF

- Press and hold the power button for three seconds.
- Select Airplane mode from the menu.

#### Hard Shutdown

8 Press and hold the power button for seven seconds.















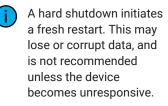












The Vuzix Blade comes pre-installed with five standard applications.

- Home
- Camera
- Control (Music)
- Photos
- Settings

The Vuzix Blade comes with four preinstalled games.

- Dino Hunt
- Golf
- Racers
- Space Miners

#### Home Screen

The *Home App* screen consists of the fields identified in the illustration.

Icons for all other apps appear in the *App List* with the current app "in focus" (larger and highlighted).













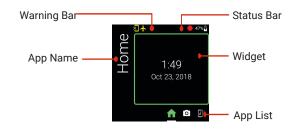






A widget is a snapshot of an applications current state and functionality. It exists to provide insightful information about an application without having to open it. Example: Settings widget, which shows the state of the Blade's Wi-Fi and Companion App

connections.



## Camera App

The Camera App is where you will find all of Vuzix Blade's picture taking and video recording features.

## **Capturing Pictures**

- 1 Tap to launch the Camera App.
- 2 Tap to capture a picture.

Use the *Photos App* to view your pictures. (See later pages)

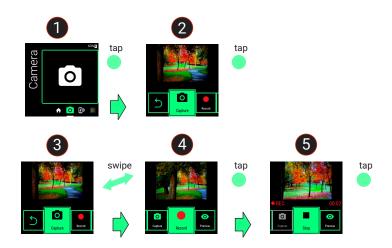
## Recording Video

- Tap to launch the Camera App.
- Swipe to navigate to Record.
- Tap to start recording.
   Tap again to stop recording.

When the Camera App is launched, the camera LED will turn ON.

When video is being recorded, you can navigate away from the Camera App to enjoy other Blade features.

While recording, the red, on screen, REC icon will blink.
The length of recording time will also be displayed.



## Camera App (continued)

## **Additional Camera Actions**

Within the Camera App, there are actions that are common between the Capture and Record modes.

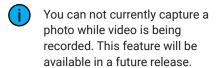
- 1 Back returns to the app's main screen
- Preview displays an image of the picture or video being captured.

Preview mode can be ON or OFF.

When the preview is off, the Blade's display is not obstructed with the preview image and the user can see the real world. When preview is off, a reticle is displayed to indicate the approximate center of the frame.







## Control (Music) App

The *Control App* allows the Blade to control music being played on your smart-phone. The app shows 3 lines indicating the track details. These details are also shown on the widget. Controls that are available are return, go to previous track, play/pause and go to next track.













#### Games

The Blade is pre-installed with 4 games.

- Dino Hunt
- Golf
- Racers
- Space Miners



Golf



Golf



Racers



Racers



Space Miners



Space Miners



Dino Hunt



Dino Hunt

## **Photos App**

The *Photos App* allows you to navigate through and view pictures and videos captured on the Blade.

A preview of the most recent media will be displayed on the home screen.

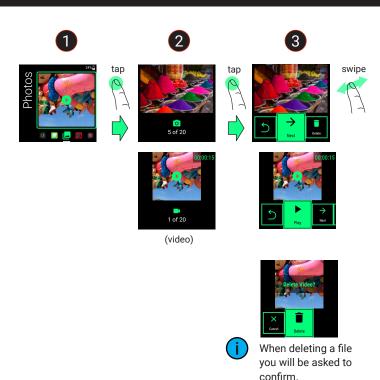
Note: The Blade is pre-loaded with four videos and 16 photos.

## Viewing Pictures and Videos

- 1 Tap to launch the Photos App.
- 2 Tap to view the first image (most recent photo or video).
- 3 Navigate the available actions with a one-finger swipe, forward or backward. Select an action with a one-finger tap.

To delete, you can use the advanced gesture, two-finger swipe forward.

To scrub a video use a one-finger swipe forward/backward gesture.



## **Settings App**

The Settings App is where users can go to adjust the Blade's settings or check the status of any of the Blade's features.

## Included features are:

- Battery
- · Companion Link
- Connectivity (Wi-Fi, Bluetooth and Airplane Mode)
- Device (USB Mode, Display, Volume, Apps)
- System (Software Update, Date & Time, About)











## Companion Link

The Companion Link App will allow you to connect a smart-phone (Android phones or iPhones) to your Blade. More details on Companion App are in later pages.

Your Blade will have three potential connected states.

- 1 Not linked Blade is not linked with the phone. Default state.
- 2 Connected Blade is connected and linked with the phone.
- 3 Linked but not connected Blade and the phone are linked but are not actively connected because Bluetooth is either OFF or not in range.









## **Settings App**

#### **USB Mode**

Blade currently has three USB modes.

MTP - This is the default mode. Your connected device will show Blade with media icon under Devices and Drivers. It will show Blade's SD Card (if installed) and internal storage. Internal storage will show all available folders including: DCIM, Alarms, Download, Movies, Music, Notifications, Pictures, Podcasts and Ringtones.

PTP - Your connected device will show Blade with camera icon under Devices and Drivers. It will only show Blade's internal storage even if an SD card is installed. Internal storage will only show the DCIM and Pictures folders.

Charge Only - The device will not show internal storage and media files.



## Haptic Feedback (Vibration)

The haptic feedback feature on Blade is currently under development and is functioning on a limited basis.

The vibration can be turned ON/OFF and there is test to check vibration on both sides of the Blade.

#### Time and Date

You can adjust the date and time settings to meet your specific needs. Adjustable features include: Date, Time, Time Zone and 12/24 Hour Format.





#### Bluetooth

Blade is Bluetooth capable and can be paired with any standard Bluetooth device, including: headsets, headphones, speakers and mouse.

Through the Settings App you can turn Bluetooth ON/OFF, add/remove devices and pair devices.





#### Wi-Fi

Blade is Wi-Fi enabled. The Settings App allows you to turn Wi-Fi ON/OFF, add networks and save networks. Network specific settings and details are also accessible.

## **Settings App**

## Software Update

Software updates are installed via Wi-Fi directly onto your Blade. Here you can: check for and install updates, check the current build of your Blade and change the frequency of *Update Alerts*.



Be sure battery level is at 50% or higher before running an update.



Blade will reboot automatically when installation is complete.



Updating the software does not remove any personal data.



#### **Audio**

The Blade has two built-in microphones that are used during video recording and by applications that require voice input. To listen to audio from the Blade, you can either connect a Bluetooth speaker, Bluetooth headphones, or wired headphones.

The Wired Headset Adapter cable allows any wired earbuds or headphones with a standard 3.5mm connector to be connected to the Blade. To connect, plug the adapter cable into the USB port of the Blade, and plug the headphones into the headphone jack of the adapter cable.

The wired headphone adapter cable does not support microphone input. The built-in microphones on the Blade will continue to be used whether or not the attached wired headphones include a microphone.

A USB charging cable may optionally be connected to the wired headphone adapter cable to charge the Blade while using headphones. Only USB charging functionality is available through this adapter cable, USB data connections to a computer are not possible.

# Keyboard

Several task specific keyboards are included in the BladeOS. When character entry is required, the appropriate keyboard will appear automatically.

For example, if text is required to be entered, a text specific keyboard will be displayed. If a numeric password needs to be entered, a numeric keyboard will be displayed.



A one-finger hold gesture on a key will show options for that character.



a à á â ã ä å æ ā ă ą

## **Text Keyboards**

#### Text



#### Multiline Text

abcdefghijklm ♥
nopqrstuvwxyz 
#%& ABC',.?!◀▶ ← ✓

#### Symbols



#### Caps Lock

A B C D E F G H I J K L M ♥
N O P Q R S T U V W X Y Z ↓
#%& ABC', . ?! ◀ ▶ ✓

#### Numeric Keyboards

#### Numbers

1234567890 🗷

#### Date and Time



#### Numeric Passwords



#### Date



#### Phone Number



#### Time



# Companion App

Companion App is an app used to control Blade's settings from your smart-phone. To enable advanced features like installing apps, updating settings, and receiving notifications, connect your Vuzix Blade to your iOS or Android phone via the Companion App.

- Install the Vuzix Blade Companion App. Find the Vuzix Blade Companion App on the App Store or Google Play Store (Search for "Vuzix Blade") and install it on your phone.
- To link Vuzix Blade, on your Phone, open the Companion App and select "Start Setup", follow the instructions to link your Blade with the Companion App.
- After linking your Blade to your phone, select Settings > General Settings > Login, to log into your Vuzix Account. Your Blade is now linked to the Vuzix Apps Store and will show up under your devices.



2





VUZIX BLADE







Companion App has three tabs, Home tab showing the Blade dashboard, Apps tab to install/ uninstall applications on to the Blade and Settings tab to configure the settings of the Companion app and also to configure the settings on the Blade.



The ability to transfer photos and videos from Blade to smartphone will be available in future releases.

# Learning More

Please register your Vuzix Blade AR Smart Glasses in the Developer Center at **www.vuzix.com/developers**.

As a developer, registration gives you access to Vuzix's suite of developer tools including: product documentation, sample code, and more.

Visit www.vuzix.com/support/blade-smart-glasses to reference the documentation on Vuzix Blade.

Visit **www.vuzix.com/contact** for technical support and other Vuzix contacts.

For safety, warranty and regulatory information, go to the Vuzix legal page at https://www.vuzix.com/support/legal.

Additional information on the Vuzix Blade AR Smart Glasses is available at

vuzix.com | vuzix.eu | vuzix.jp

© Vuzix 2018. This user manual is subject to change. Before using this product, please read the online Safety Instructions at https://www.vuzix.com/support/legal. All trademarks belong to the respective owners.

447PB0001 (0001)-USER'S MANUAL, BLADE, US