

M100 Smart Glasses Quick Start Guide



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About your Vuzix M100 Smart Glasses

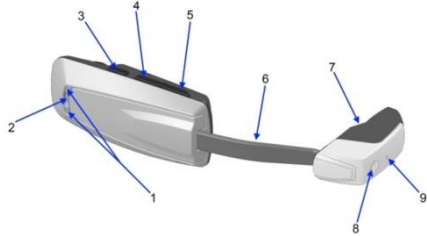
Congratulations on your purchase of the latest wearable display technology from Vuzix, the M100 smart glasses. Vuzix M100 is the world's first enhanced "Hands Free" smartphone display and communications system for on-the-go data access from your smartphone and the Internet. Vuzix smart glasses offer a wearable visual connection directly to the Cloud, through your smartphone or other compatible connected device, wherever you go.

Support

This guide provides you with the information you need to get started with your M100 smart glasses. For more information and additional support please visit Vuzix website www.vuzix.com

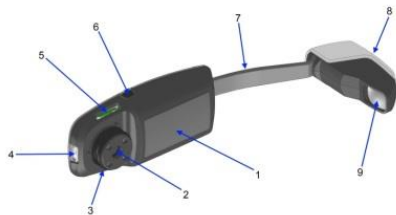
M100 Smart Glasses Hardware Features

1. Blue and white LED indicators
2. Gesture, proximity and light sensor
3. Back / Select button
4. Volume down button
5. Volume up button
6. Eye piece arm
7. Eye piece / display window
8. HD camera
9. Camera recording indicator



M100 smart glasses - front view

1. FCC and product label
2. Speaker
3. Universal mount
4. Micro USB connector
5. Micro SD card slot
6. Power button
7. Eye piece arm
8. Eye piece
9. Eye piece display window



M100 smart glasses - back view

Setting up your M100

Charging the M100 smart glasses

Before turning on your smart glasses for the first time charge it fully.

Connect the charge cable to the micro USB connector at the end of the M100. Use a standard USB charger and plug the USB cable into its USB connector. Plug the charger into a standard AC wall outlet or if you are using USB from your computer, turn your computer on. The M100 turns on and indicates its charge state with the white LED flashing if charging. When charging is complete the white LED will remain solid, disconnect the micro USB cable from the M100 and remove the USB charger from the AC wall outlet or remove the cable from your computer.

Indicators if the M100 is not connected to a power source:

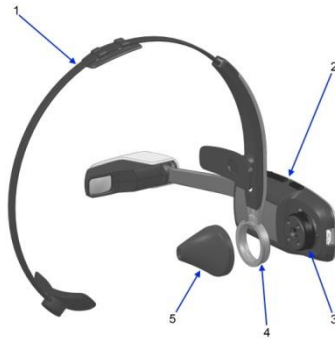
- If the M100 is powered off and not connected to an external charger, there are no LEDs lit.
- If the M100 is powered on, but is not connected to an external power source, and has a low battery, the blue led flashes 3 times every 5 seconds and a low battery indicator appears on the display in the eye piece.

Indicators if the M100 is connected to a power source:

- The white led on the device will pulse every 2 seconds until fully charged.
- The white led will remain solid when the M100 is fully charged and plugged into a power source.
- If the M100 is powered on, the user can fully operate the device even when it is connected to an external power source.

Head band Assembly

The M100 has a universal mount built into the main body and is designed around the audio speaker. This mount will connect to many different head worn options. The M100 ships with an "over the head" mounting option and a "safety glasses" mounting option. To assemble the over the head mounting option to the M100, push the head band mounting ring 4 onto the universal mount 3 on the main body of the M100. This will require a fair amount of force as this is a tight fitting connection. Once secured, the ear bud 5 is then slid onto the ring edge on the outside rim of the mounting arm 4.



M100 smart glasses - headband mount

1. Head band
2. Main body of M100 smart glasses
3. Universal mount
4. Mounting ring with integrated ear bud option
5. Ear bud

Congratulations, your smart glasses are now ready to be adjusted to fit your specifications.

Fitting your M100

Now that your smart glasses are assembled you can begin fitting them to your particular needs. There are many adjustments that can be made to get the best performance and fitting for each user. Your M100 has been designed to work with or without glasses and can accommodate either left or right eye users. This section describes all of the adjustments available to accommodate this and the varied ergonomics of different users from around the world.

As can be seen in the figure below, the ear bud can be rotated anywhere in a 360 degree circle about the mount ring of the headband adjusting the offset of the M100 body around the users ear canal. The head band also itself retracts and expands into the mounting arm, adjusting for different head sizes.



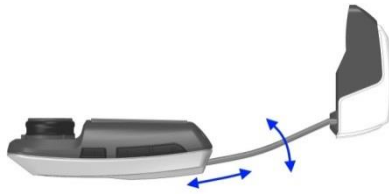
Ear bud rotation and headband retraction

As shown below, the entire headband also rotates around the universal mount which will allow for different positions of the head band over the users head. This movement also allows the eye piece to be positioned up and down in the user's field of vision.



Eye piece tilt

Once the head band has been optimally adjusted, we turn our attention to the eyepiece. As shown above, the eye piece can be tilted towards the eye by as much as plus or minus 15 degrees from center. This allows for the optimum placement of the display eye piece in your vision field from low near the cheek to high near the eyebrow while allowing the eyepiece to be tilted towards the user's eye.



Eyepiece arm adjustment

The adjustability of the eye piece arm has been designed to accommodate users with or without prescription eye glasses. To accommodate this and to place the eyepiece left to right in front of the user, the eye piece arm bends as shown and slides in and out of the M100 body. These adjustments allow the eye piece to be positioned comfortably in front of the user's eye even while using prescription glasses.

It is important to note that there is no focus required for the M100. The M100's optics has been designed so that the image appears, from a focus perspective, to be about 10 feet away. For this reason only users that need glasses for distance vision will need their glasses while using the M100. Users with presbyopia, or that need reading glasses, will not need them to operate the M100.



Left / Right eye configuration*

Finally, it is well known that users have an eye preference that is tied to their eye dominance. For this reason, the M100 has been designed to be used in either left or right eye configurations. To use the M100 on either eye, simply rotate the body of the M100 around the headband arm mount 180 degrees. The display, camera, and other functions will automatically flip to accommodate this change.

*The left eye configuration has not been enabled in this build of the M100 OS. Please visit the Vuzix website for updates.

Turning your smart glasses on and off

To turn the smart glasses on, press and hold the power/home button until the LED (white or blue) illuminates.

To turn the smart glasses off,

- a) Hold the power button until the Power Menu appears
- b) Hold the Back/Select button to select the Power Off option
- c) Hold Volume Up to move the selector to the right
- d) Hold Back/Select to select the OK option and power off the device

The first time the smart glasses are switched on, the user is taken to the pairing mode set-utility to allow pairing with a partner device. If the smart glasses are already paired, your Home desktop is displayed.

M100 Smart Glasses Manager (For your Smartphone)

Installing the M100 Smart Glasses manager app

To install the manager download the APK from the following website:

www.vuzix.com/downloads

Push the manager to your phone using the Android developer tools or one of the many APK side loading tools.

Note: The smart glasses manager app will soon be available for download from the Vuzix app store.

Launching the M100 manager

From within your smartphone's application page tap the Smart Glasses Manager icon

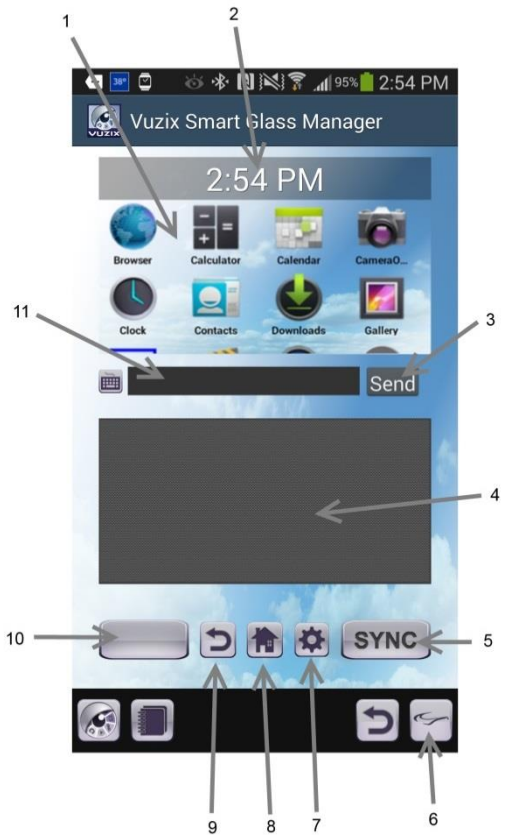


If the M100 has been paired with your smart phone it will automatically sync with your phone and the desktop will appear on your phones display screen. See more information below

Navigating the M100 Smart Glasses Manager

The M100 application manager not only helps to manage your applications on the M100 and is the tool for updating and loading new applications onto your M100, it is also a user interface to the M100 with a keyboard and mouse implementation.

1. M100 desktop – Does not mirror applications while running
2. Partner device current time
3. To send text to the M100 that is entered (11)
4. Mouse pad
5. Sync button to M100
6. Vuzix App store (coming soon)
7. M100 Menu button
8. M100 Home button
9. M100 Back button
10. Mouse select button
11. M100 Text entry box (brings up the keyboard when selected)



Pairing the M100 to the smartphone

The first time the smart glasses are switched on, they default to pairing mode with a partner device. If the M100 are already paired, your Home desktop page is displayed. To pair your M100 to your smart phone follow the below procedure:

- 1) Activate Bluetooth on your Smart phone
 - a) From the desktop, press the Applications button to open the App List.
 - b) Navigate to the Settings app and tap it to open it.
 - c) Tap the "Bluetooth" list item in the Wireless & Networks section to open the Bluetooth Settings page.
 - d) Tap "Search For Devices" to begin scanning for discoverable Bluetooth devices.
- 2) Tap Scan to start Searching.
- 3) Tap M100 to pair it with your phone
- 4) Once you see the Pairing Complete message, touch home to exit.

WiFi Connection with your M100

Using your smart phone manager app to control the M100 proceed as follows.

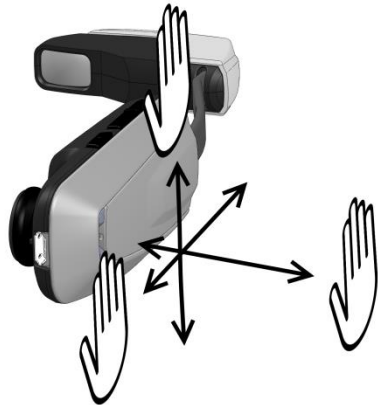
1. Using the scroll buttons on the M100 scroll down to the Setting icon and select it. Or, use the manager app to slide to the settings app and select it through the phone.
2. Use the mouse from the smartphone manager to select Wi-Fi and turn the toggle or button to "On."
3. The device will display all of the networks in range.
4. When you see your network's name, select it, enter your password using the phones manager app and hit "Connect."
5. You are now connected to a Wi-Fi network.

How to navigate and run applications

The M100 smart glasses have several user interface modes you can employ to navigate and run applications. The M100 can be used standalone with the hardware buttons and through the gesture engine. The M100 can also be controlled through the application manager, or by other third party connected device like keyboards, mice and other human interface devices. Finally, the M100 can also be controlled remotely under software control from the cloud.

Hardware and Gesture Engine*

The M100 smart glasses have a built in gesture sensor that looks out from the body of the smart glasses into the real world. This sensor is always on so if the M100 is sleeping when it detects a motion past the front of the sensor the M100 wakes up in preparation for action. The sensor recognizes hand/finger motions forward and back, up and down, and in and out. These functions have been mapped to the Android OS to allow the basic D pad functions enabling motion around the desktop and selecting applications to execute.



*The gesture engine has not been enabled in this build of the M100 OS. Please visit the Vuzix website periodically for updates as this functionality is enabled.

Physical buttons on the M100

The four physical buttons on the M100 can also be used to interface with the M100. At the desktop the volume up and down button navigates around your various application icons. The back/select button runs and/or exits from an application. Natively these buttons are used like the standard android buttons on a phone; volume up and down, home and the power button. Any given application can remap these buttons as desired.

M100 Smart Glasses Manager

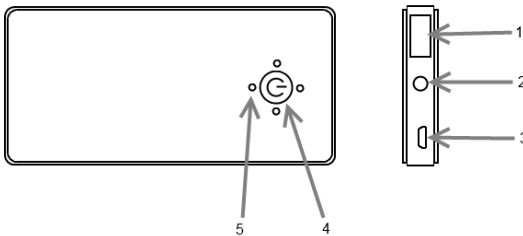
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PowerPak 3800

Because Vuzix anticipates that Enterprise users will want to perform heavy duty tasks with longer running time applications, the M100 comes equipped with a 3800 mAh battery that can extend its run time 6.5 times that of the base battery in the M100. Please ensure to fully charge the PowerPak 3800 before using it.



The battery is connected to the M100 through a light weight USB cable. The cable that ships with the M100 is designed for right eye dominant users (although it can be used for either). Custom left eye cables will be available on the Vuzix web site.



1. Power out to the M100 Smart Glasses
2. Multifunction LED light
 - a. Press Power for 2 seconds to turn on and off
 - b. Press twice for flashing
3. Micro USB input for charging
4. Power on/off
5. Charge level
 - a. Press Power once to activate

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Important Notice

For a copy of the latest Safety & Warranty Information, go to the Downloads and Drivers page of the Vuzix web site:
http://www.vuzix.com/support/downloads_drivers.html

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