



USER MANUAL

English

Quaha Zono X

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Quha Zono X User Manual

Contents

Quha Zono X mouse	3	Quha Zono X setup software	15
Compatibility and requirements	4	Gestures	20
Package contents	4	Troubleshooting	23
Product overview	5	Technical information	25
Charging the battery	7	Safety	26
Bluetooth® pairing	8	Contraindications	27
Turning the mouse on and off	11	Cleaning the mouse and the ear clip	27
Resetting the mouse	11	Battery replacement	27
Wearing the mouse	12	Warranty	27
Using the mouse	13	Product disposal	28
Summary of power on/off switch functions	13	Compliances	28
LED indicator	14	Copyrights and trademarks	31

Quha Zono X User Manual version 1.5, 2024-02-20. This user manual corresponds to Quha Zono X mouse version 1.3 onwards.

Disclaimer: All features described in this user manual are not necessarily included in all versions of Quha Zono X mouse.

Quha Zono X mouse

Welcome to the Quha Zono X mouse. This user manual will guide you through the functions and features of your device. Please read these instructions carefully before you start using your Quha Zono X mouse.

The Quha Zono X computer mouse is intended to be used for computer control for augmentative and alternative communication (AAC) and/or for computer access purposes as an alternative mouse input device for people that have challenges in their ability to access a computer due to injury, disability or illness.

Quha Zono X is a *Bluetooth*[®] computer mouse which uses motion detection. Its user can perform all regular mouse functions without hands. The user wears the mouse using one of the included clips and moves the mouse cursor with simple head movements. Quha Zono X can be used in any position.

Key features

- Bluetooth[®] connectivity
- Pixel perfect accuracy
- Lightweight, easy to use for hours
- Convenient and comfortable wearing accessories
- Simple set-up software for Windows
- Can be set up on four devices
- Easy charging with a magnetic charging dock
- Multi-device switching

Compatibility and requirements

Quha Zono X is compatible with computers and mobile devices that support Bluetooth[®] Low Energy wireless technology. Ensure that your device is Bluetooth[®] enabled.

The mouse requires separate dwell software or a switch for mouse clicks and dragging (selections). The Quha Dwell software for clicking is included. Any available dwell software can be used, and many devices also have a built-in dwell selection functionality as part of the operating system accessibility settings. NOTE! The mouse device itself does not have a dwell selection function.

Package contents

In the sales box, you will find the following items:

- Quha Zono X mouse
- Magnetic charging dock
- USB-C charging cable
- Ear clip and replaceable ear tips
- Eyeglass clip
- Quha Dwell software license and quick guide
- User manual and download instructions
- Warranty card

Product overview

Quha Zono X mouse:

1. Power on/off switch
2. LED indicator
3. Contacts for charging and external switch
4. Magnets for attaching the mouse to the ear clip and to the charging port
5. Serial number



Ear clip:

6. Ear hook
7. Magnetic holder for the Quha Zono X mouse
8. Ear tip holder and replaceable ear tip

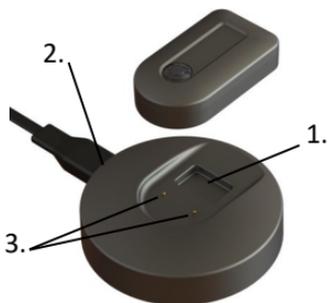


Eyeglass clip:

Clip for attaching the Quha Zono X mouse to your eyeglasses. See p. 12.

Magnetic charging dock:

1. Slot for the Quha Zono X mouse for charging
2. USB-C port for the charging cable
3. Charging contacts



Buzzer

The mouse has a buzzer that plays notification sounds to assist you in using the device:

- Power on/off sound: ascending/descending sequence
- Low battery alarm: 1 beep every 1 minute
- When the mouse connects to the charger: 1 beep
- When the mouse enters pairing mode (see p. 8) : 1 beep
- When the mouse enters reset mode (see p. 11) : 3 beeps
- Notifications that help you perform gestures (see p. 20)
- Multi-device switching: 2 short beeps

The buzzer is turned on by default. You can turn it off in the Quha Zono X setup software (see p.15). We recommend keeping the buzzer on when you first learn how to use the mouse.

Charging the battery

The Quha Zono X mouse has a rechargeable battery that needs to be charged before the first use. To charge the battery

1. Connect the charging dock to the USB port of a computer or to a separate USB charger using the provided USB-C cable. Only use an approved charger.
2. Place the mouse into the slot on the magnetic charging dock. It will snap into the correct position automatically, and charging will begin immediately on contact. A flashing green LED indicates that the battery is charging.

It takes approximately 2 hours to fully charge an empty battery. The LED indicator will turn solid green once the battery is fully charged. The mouse will turn off automatically once you lift it off the charging dock.

You can use the mouse for up to 18 hours on a single charge. You can leave the mouse on the charger overnight. When the battery charge level gets low during use, the LED will start flashing red and the buzzer will start playing a low battery alarm sound (1 beep every 1 minute).

If you have connected the mouse to a computer, you can check its battery percentage in your computer's Bluetooth settings. Check the instructions on your computer.

NOTE! If the mouse turns off because of low battery charge, it will not activate again until you connect it to the charger.

Bluetooth® pairing

The Quha Zono X mouse connects to computers and mobile devices via Bluetooth®. To start using your mouse, first you need to pair it with your device. You can connect the mouse to up to four different devices and swap between them.

To pair the mouse with the first device

1. Go to your device's Bluetooth settings and turn on Bluetooth. Keep the Bluetooth settings window/screen open. You may need to make some additional selections on the screen to allow your device to search for a new Bluetooth device. Follow the instructions on your device.
2. To turn your Quha Zono X mouse on, press the power switch for 1 second. The LED will flash turquoise once. It will then start flashing blue and red alternately, indicating that the mouse is in pairing mode and discoverable.
3. To pair, select “Zono X” when it appears on the screen. Follow any additional on-screen instructions to complete the pairing process.

Once the mouse is connected, the LED will flash green every 5 seconds. The mouse cursor will appear on the screen and you will see “Zono X” in your device's connected devices. If the cursor moves or drifts by itself after pairing, place Zono X on a table for a few seconds until the cursor stops.

After a Bluetooth connection has been established, the mouse will connect to the paired device automatically whenever the device is within range with Bluetooth on.

To pair the mouse with a second device

1. Turn off Bluetooth on any previously paired device that's in the same space, so that the mouse can't connect to it automatically. Turn on Bluetooth on the device you want to pair with your mouse and enable adding a new Bluetooth device.
2. To turn the mouse on, press the power switch for 1 second. Once the mouse is turned on, the LED starts flashing blue, indicating that the mouse is currently not connected to any previously paired device.
3. To place the mouse in pairing mode, press the power switch for 5 seconds. The LED will start flashing blue and red alternately once the mouse enters pairing mode.
4. To pair, select "Zono X" when it appears in the list of available devices on the screen. Follow any additional on-screen instructions.

Once the mouse is connected to the new device, the LED will flash green every 5 seconds. The mouse cursor will appear on the new device's screen and you will see "Zono X" in its connected devices.

Multi-device switching

Multi-device switching is a feature that allows easy switching between Bluetooth devices which are paired and active. Quha Zono X can be paired with up to four separate devices. Zono X can connect to and swap between these devices. Switching between devices is done by pressing the power button quickly or with a gesture. Switching happens between the devices that are paired and have their Bluetooth turned on.

When Zono X connection has been switched to a device, the mouse cursor of the device can be controlled with Zono X movements.

To switch between devices by the power button, click the power button briefly. The mouse will then start to control the next paired Bluetooth device.

See how to switch between devices via a gesture on p. 21.

Unpairing

If you want to uninstall the mouse on your device, you need to remove “Zono X” from its paired devices. Refer to the instructions on your device for information on how to remove Bluetooth devices.

Turning the mouse on and off

NOTE! When you turn the mouse on for the first time, it will go into Bluetooth pairing mode automatically, so that it's ready to connect to the first computer or mobile device (see p. 8).

To turn the mouse on, press the power switch for 1 second. You will hear a start-up sound and The LED indicator will first flash turquoise once. Once the mouse is connected to your computer or mobile device, the LED will start flashing green every 5 seconds, indicating that the mouse is in normal usage mode. The mouse cursor will appear on the screen.

NOTE! If the LED flashes blue, the mouse is not connected to your paired device. Make sure that Bluetooth is turned on, that the devices are close to each other and that there are no obstacles between them.

To turn the mouse off, press the power switch for 1 second. You will hear a power-down sound and the LED will flash red once before the mouse turns off.

Resetting the mouse

Resetting the mouse clears its pairing history and any other changes to its settings. To reset the mouse, first turn it on. Then press the power switch for 15 seconds. You will hear 3 beeps and the LED will turn red for a while. Once the reset is finished, the mouse will turn off. When you turn the mouse on after a reset, it will go into pairing mode automatically.

Wearing the mouse

Using the ear clip

1. Attach one of the included ear tips to the ear tip holder. Handle the ear tip carefully when you attach or detach it to avoid tearing it. Do not wear the ear clip without an ear tip, as doing so may irritate your ear.
2. Place the ear clip on your right ear: place the ear hook around the back of your ear and insert the ear tip into your ear. The front edge of the magnetic holder should point directly forward.
3. Bring the mouse close to the magnetic holder and the magnets will grab it into the correct position automatically. The mouse stays firmly in place, but is also very easy to detach from the holder.

Using the eyeglass clip

Fold the clip around the arm of your eyeglasses so that the magnetic slot remains below the arm. Bring the mouse close to the slot to attach it.



Using the mouse

The Quha Zono X mouse uses a motion sensor to detect movement and transforms the movement into mouse cursor movement on-screen. While wearing the mouse, just turn your head and the mouse cursor will follow your head movements. Moving the cursor is intuitive and can be adopted in a few seconds.

For clicking and dragging you can use any available dwell clicker software, the in-built dwell clicker function of your computer or mobile device, Bluetooth switches or a Quha Zono X compatible switch.

You can adjust the mouse features according to your needs with the Quha Zono X setup software (see p. 15). As Quha Zono X is a standard Bluetooth® mouse, you can also use your device's mouse settings.

Summary of power on/off switch functions

Press duration	Function	LED indicator
< 0.5 seconds	Multi-device switching	N/A
1 second	Power on	Flashes turquoise once
1 second	Power off	Flashes red once
5 seconds	Activates pairing mode	Starts to flash blue and red alternately
15 seconds	Resets the mouse	Turns red for a while

LED indicator

Color	LED indicator Status	Device Status
Green	Flashes slowly	Battery is charging.
Green	Solid	Battery is fully charged.
Green	Flashes every 5 seconds	Mouse has been turned on, and it is connected and in normal usage mode.
Turquoise	Flashes turquoise once	Power switch has been pressed for 1 second. Mouse will turn on.
Blue	Flashes	Mouse has been turned on and is waiting to connect to a paired device.
Blue/Red	Flashes blue and red alternately	Power switch has been pressed for 5 seconds and mouse is in pairing mode.
Red	Flashes once	Power switch has been pressed for 1 second. Device will turn off.
Red	Flashes every 5 seconds	Mouse has been turned on and is in usage mode but battery charge is low.
Red	Turns red for a while	Power switch has been pressed for 15 seconds and mouse is resetting.
-	Turned off	Mouse is turned off.

Zono X setup software

You can adjust the features of your Quha Zono X mouse easily with a simple setup application. The mouse will work with the default settings without the setup software, but we recommend downloading it on your device and familiarizing yourself with its functions.

The Zono X setup software will run on Windows and Android.

Download the software from www.quha.com/downloads. Run the Quha Zono X setup software and follow the on-screen instructions. When the installation is complete, there will be a Quha Zono X icon on your computer desktop/mobile device screen. Double click the icon to start the application.

You can use the software when your Quha Zono X mouse is turned on and connected to your device. If the application shows a “Zono X not found” error message, make sure that the mouse is turned on and connected via Bluetooth.

NOTE! You can only have one Zono X paired to your computer when using the application.

TIP! Select the info ⓘ mark next to a feature name to see more information about the feature.

The settings made with the setup software will remain in the Quha Zono X mouse internal memory and will automatically be active when the mouse is connected to any computer or mobile device.

Horizontal and vertical sensitivity/speed

With the sensitivity sliders you can adjust the amount of head movement required to move the mouse cursor on the screen. You can adjust horizontal and vertical sensitivity separately, which is useful for users whose head movement is more limited in one of the directions. High cursor accuracy and precision will be maintained automatically even when mouse sensitivity is set to the maximum.



Tremor filter

The tremor filter reduces unwanted cursor movement caused by shaking. The exact effect depends on the individual movements of each user, so you need to try the filter to see how the different positions suit your needs.



Gestures on/off

You can turn gestures on and off. Learn more about gestures on p. 20.

Gestures ⓘ

On



Wearing side

You can choose whether you wear Quha Zono X on the right or the left side of your head. Wearing Zono X on the left side requires a wearing accessory that supports left side wearing. Note that the round end of the Zono X points forward when worn on the left side.

Wearing side ⓘ ⓘ

Left



Right

TIP! Wearing side selection is a new feature in Quha Zono X mouse version 1.3. Download the latest version of the Zono X setup software that supports wearing side selection from www.quha.com/downloads.

Double-click assistant

The double-click assistant helps you perform a double-click more easily. It stops the cursor for a short time period after the first click, making it easier to click the second time without moving the cursor between the clicks.

NOTE! The double-click assistant will not make the mouse double-click automatically. You can turn the double-click assistant on and off and adjust the length of the delay after the first click.



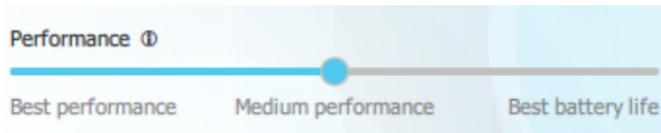
Buzzer on/off

You can turn the buzzer on and off. NOTE! Turning the buzzer off will mute all of the notification sounds.



Performance settings

You can choose from 3 different performance modes.



Best performance. Highest performance and highest battery consumption.

Default. Medium performance and medium battery consumption.

Best battery life. Automatic power saving functions are on and the mouse will turn off if not used for 30 minutes.

Changing the mode will have an effect on the Bluetooth® range of your mouse and on how smoothly the mouse cursor moves on the screen (see technical details on p. 25). The high power mode may be the best choice in some situations for tasks requiring constant precise cursor control or if there are obstacles between the Zono X mouse and the computer. In other situations the best battery life mode will provide sufficiently smooth cursor movement and you may prefer to extend battery life. We recommend trying the different modes to see how they suit your purposes.

Gestures

The Quha Zono X mouse has built-in gesture detection for activating commonly used mouse features hands free. Gestures are turned off by default. You can turn them on and off with the Quha Zono X setup software.

To activate a gesture action, you need to turn your head right and left or up and down a certain number of times. The buzzer will help you perform the movements correctly: you will hear one beep once you have completed one part of the required motion pattern; an ascending sound sequence will confirm that you have completed the entire gesture (except for the exit gesture). All the gestures start by first holding the mouse still for about 1 second.

Pause

To activate: hold still 1 s - move right - left - right - left

Pause stops the mouse cursor and keeps it still until you make the exit gesture. Depending on the settings of your computer or mobile device, the mouse cursor may or may not disappear once the pause mode is activated.

Scroll

To activate: hold still 1 s - move up - down - up - down

With the scroll function you can scroll a window by turning your head up and down. Once you have completed the scroll gesture, you will have 5 seconds for moving the mouse cursor on the window you want to scroll. The buzzer will beep rapidly during the 5 seconds. Once 5 seconds have passed,

you will hear a sound sequence confirming that the scroll mode is active, and you can now scroll the window with head movements. To end scrolling, make the exit gesture.

Center

To activate: hold still 1 s - move right - left - up - down

Centering moves the pointer in the central area of the screen, making it easier for you to move your head into a more comfortable position before you start moving the cursor again. The pointer path is shown while moving.

Multi-device switching

To switch to the next device: hold still 1 s - move right - up - left - down (draw an anti-clockwise square)

To switch to the previous device: hold still 1 s - move left - up - right - down (draw a clockwise square)

Multi-device switching is a feature that allows easy switching between Bluetooth devices which are paired and active. When Zono X has been paired with more than one device, the multi-device switching gesture transfers cursor control to another device.

Exit pause/scroll

To activate: hold still 1 s - move right - left

To exit the pause or scroll mode, you need to make the exit gesture. After the exit gesture the mouse cursor will move in the usual way again.

Gesture quick reference

Gesture	Step 1	Step 2	Step 3	Step 4	Step 5
Pause	 1 s				
Scroll	 1 s				
Center	 1 s				
Switch to next device	 1 s				
Switch to previous	 1 s				
Exit pause / scroll	 1 s				

NOTE! Always remember to first hold the mouse still, otherwise the mouse will not register your head movements as parts of a gesture.

Troubleshooting

TIP! Answers to many questions regarding the Quha Zono X mouse can be found in the frequently asked questions (FAQ) page at www.quha.com/support/frequently-asked-questions/.

Why is the cursor drifting when I'm not moving the mouse?

The Quha Zono X mouse has a motion sensor that detects the mouse movements and transforms these movements into cursor motion. The motion sensor is a highly accurate electric component and is affected by ambient temperature among other things. If the cursor drifts, do the following:

1. Place the turned on device on a table so that it keeps still
2. Wait until the cursor stops moving
3. The mouse functions now without cursor drift

Why are gestures not working?

Make sure that gestures are turned on in the Quha Zono X setup software. You may also need to practice the head movements a little to learn how to perform the gestures. Keep the buzzer on while you are learning.

What if I can't/don't want to use the gestures and I find it difficult to center the cursor?

Readjusting the mouse by pushing the mouse cursor off screen is a standard way of repositioning the mouse cursor. If you notice your head is not in a comfortable position when the cursor is in the middle of the screen, turn your head so that the cursor moves to the edge of the screen and beyond.

Why has the mouse cursor suddenly stopped/disappeared?

You may have unintentionally performed the pause gesture and the cursor has been paused. You need to make the exit gesture to release the cursor.

Why are the mouse cursor movements jumpy/not smooth?

The mouse may be so far from the computer that the wireless signal is disrupted and some mouse movements are lost. Try using the high performance mode (p. 19).

Technical Information

Quha Zono X mouse

Measurements:	Length 44 mm / 1.7 inches, width 25 mm / 1.0 inches, thickness 13 mm / 0.5 inches, weight 12 g / 0.4 ounces
Operating Temperature:	+10 °C - +35 °C / +50 °F - +95 °F
Storage temperature:	+0 °C - +45 °C / +32 °F - +113 °F
Bluetooth® range:	Up to 10 meters / 30 ft
Bluetooth® transmit power:	+4 dBm in Best performance mode, +3 dBm in Medium mode, +3 dBm in Best battery life mode
Battery:	LiPo (Lithium Polymer) 90 mAh. Active usage time is up to 18 hours depending on power saving/performance mode
Mouse refresh rate:	208 Hz

Magnetic charging dock

Connection:	USB-C
Charging time:	2 hours

Safety

The mouse device and the charging dock include sensitive electronic components and are not user serviceable. Device service and battery replacement may only be done by a Quha certified service point.

The mouse cannot be used while its battery is being charged.

The mouse and the charging dock are for indoor use only. Do not allow them to get wet. Before charging, ensure the USB-C port is clean.

Do not let metal objects come into contact with the charging contacts of the charging dock, as that may cause a short circuit and damage the charger.

Do not let children play with the product. The product contains small parts that may pose a choking hazard.

If the mouse swells or gets hot, or its casing is cracked, the battery is probably faulty. Stop using the device immediately and have the device serviced. Report any serious incident to the manufacturer.

If you feel any pain or discomfort during the mouse usage, stop using the mouse for a while.

The mouse may be used only for its intended purpose.

The mouse, the charging dock, the ear clip and eyeglass clip contain magnets. Do not place it close to magnetically sensitive devices such as pacemakers, hearing devices, credit cards, mechanical watches, data storage media etc. as they may get damaged.



Any modifications not approved by Quha could void the user's authority to operate the device.

Contraindications

The device should not be used by persons with a spine or neck injury that prevents them from moving their head safely, or moving their head for long periods could cause harm to them.

Cleaning the mouse and the ear clip

The mouse and ear clip surfaces can be cleaned by wiping its outside plastic surfaces with a mild detergent.

Battery replacement

When the device usage time is significantly shortened from its design length, you can have the battery replaced by a Quha certified service point.

Warranty

2 years. You can find the warranty card in the sales box. See the entire warranty text on our website (www.quha.com/warranty).

Product disposal

When the device has reached its end of life it should be recycled as electric and electronic waste.



European compliance

The manufacturer of this product conforms that this product complies with the European Union regulations for safety, health, environmental and consumer protection.



Industry Canada compliance

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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 : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC compliance

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 the 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 or more 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.

UKCA compliance



UK RESPONSIBLE PERSON

AVENTIDO Limited, Bridgewater House, Century Park, Caspian Road
Altrincham, Cheshire, WA14 5HH United Kingdom

Other compliances



R 204-810005



R-C-ULX-ANNA-B112

內含發射器模組:



CCAI18LP2200T2



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