



**QuhaVento**

USER MANUAL

# Quha Vento Standalone Puff Switch

Welcome to the Quha Vento Standalone Puff Switch. Before you start using your Quha Vento, for the best user experience, please read this manual carefully first.

Quha Vento is a generic standalone puff switch. Vento can be used for various purposes such as activating environment control, nurse calls and computer mouse clicks.



Figure 1- Quha Vento

## Quha Vento Controls and Main Parts

1. Quha Vento main unit
2. Sensor arm
3. Puff sensor
4. 3.5 mm connector plug
5. Connector cable
6. Indicator lights



Figure 2

# Quha Vento Controls and Main Parts

- 7. Back lid bracket
- 8. Switch (1) for buzzer sound indicator
- 9. Switch (2) for puff sensor sensitivity
- 10. UNC 1/4" mounting thread
- 11. Battery slot for AAA battery
- 12. Flexible attachment loop
- 13. Back lid / Battery slot cover



Figure 3

## Installation

Before using Quha Vento there are a few things to do.

1. Select the settings (See Settings on page 6) to be used with Vento.
2. Place a new AAA battery in the battery slot observing the correct orientation.
3. Insert the flexible attachment loop into the battery slot cover and close the battery slot cover by pushing it onto Vento.
4. Mount Vento to its attachment.
5. Connect the 3.5 mm connector plug (Figure 2: 4) to the device to be controlled with the switch.

## Replacing the Battery

1. Open the battery slot cover (Figure 3: 13) by carefully lifting both of its edges.
2. Remove the old battery and place a new AAA battery in its place observing the correct orientation.
3. Insert the flexible attachment loop into the battery slot cover and close the battery slot cover by pushing it onto Vento.

## **Attaching Vento to a Mount**

Vento has a standard UNC 1/4" camera thread (Figure 3:10) on its rear side. Attach Vento to a mount with this thread.

Alternatively, the flexible attachment loop (Figure 3:12) can be used to mount Vento to Quha Vento Headband.

Cable tie can also be used to mount Vento. In this case the cable tie is wrapped around the narrowest part of Vento.

## **Settings**

There are two switches (Figure 3: 8, 9) that control the user selectable features of Vento. The switches are located under the battery slot cover. The switches can be set using a flathead screwdriver included in the sales package.

Sensitivity switch changes the sensitivity of the puff sensor.

Off - Low sensitivity

On - High sensitivity

Buzzer switch turns the switch buzzer sound indicator on and off.

Off - Buzzer sound off

On - Buzzer sound on

High sensitivity setting can be used when faster response to a puff is required. Low sensitivity is useful if the puff sensor picks unwanted clicks.

## **Indicator Lights**

There are two indicator lights (Figure 2: 6) on the front panel of Vento. When the puff sensor detects air flow that activates the

switch, one of the indicator lights is lit. Green light indicates the battery condition is good for use, red light indicates the battery needs to be replaced soon.

Vento can be used as a switch for various purposes such as environment control, nurse calls and computer mouse clicks.

## Using Quha Vento

Quha Vento detects the air flow - puff - coming from the user's mouth. The puff sensor is located at the end of the sensor arm. The more air flow there is to the sensor, the more accurately the switch can be controlled. Therefore, it is necessary to position the sensor so that the air flow can reach it.

The flexible sensor arm is adjusted so that the sensor is located in front of the user's mouth at a comfortable distance. A typical distance is 1-5 cm (0.4-2 inch). Try different positions to find the one most suitable for you. Because the air flow strength varies greatly between users, it is possible to find a good position with some experimenting in a few minutes.

Testing the switch is simple. Puff into the sensor and the switch is activated. Puff and keep puffing into the sensor and the switch remains active as long as the puff continues.

## Compatibility

Quha Vento is compatible with devices with a 3.5 mm switch connector.

## Troubleshooting

### **Switch activation is not happening every time when a puff is made**

Make sure that the sensor arm is positioned close enough to the mouth and that the air flow reaches the sensor.

### **Random switch activation**

Talking creates an air flow similar to puffing into the sensor and the sensor picks this up. A good way to prevent random switch activation created by talking is placing the puff sensor in front of the chin slightly lower than the lower lip. Another way is to increase the distance between mouth and the sensor.

If the puff sensor rubs the user's clothing or skin, this may be picked up by the sensor.



## Technical Specifications

Dimensions	Length 98 mm, width 41 mm, height 26 mm, Vento arm length 220 mm and weight 97 g without battery. Cable length 180 cm.
Battery	Easily replaceable AAA battery, battery life up to 2 years depending on use and battery type.
Mounting	¼" UNC thread (camera mount)
Output	3.5 mm audio plug (mono), Opto-isolated normally open (NO) output, load current up to 100 mA, isolation 1500 V <sub>RMS</sub>
Operating temperature	From +10°C to +35°C (from +50°F to +95°F)
Storage temperature	From +0°C to +45°C (from +32°F to +113°F)

## Keeping Quha Vento Clean

As a contactless puff switch, Quha Vento is easy to keep clean. If dust or saliva gets on the plastic surfaces, they can be cleaned with a physiologically sensitive area cleaning agent.

## 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 confirms that this product complies with the European Union regulations for safety, health, environmental and consumer protection.



## 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.



## Limited Warranty

Warranty on the product is 2 years from the date of purchase.

# Product and Safety Information

The device includes sensitive electronic components and the user should not try to open or service the device themselves.

This device is for indoor use only. Do not allow the device to get wet.

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

Keep the device clean. Do not clean the device with solvents, toxic chemicals or strong detergents as they may cause damage to the product. Store your device only on flat surfaces. Do not drop or shock the product as it may be damaged.

Follow all instructions in the user guide to ensure the longest lifespan of your device. Damage or poor performance caused by failure to follow warnings and instructions can void your manufacturer's warranty.

Do not store your device near magnetic fields. Your device may malfunction from exposure to magnetic fields.

This product is RoHS compliant.

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Finland by Quha.

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