alex-N5

Wearable Posture Tracker&Coach

User Guide

Model: ALEX-N5

Version 1.0

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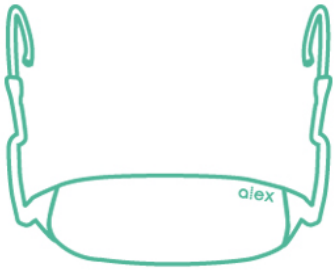
Start

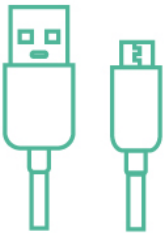
ALEX is a smart wearable device that measures the posture of neck and head in a real time manner to alert users at their bad posture, thereby inducing the users to have a good posture in a daily life.

Parts

ALEX-N5 Parts:



ALEX-N5



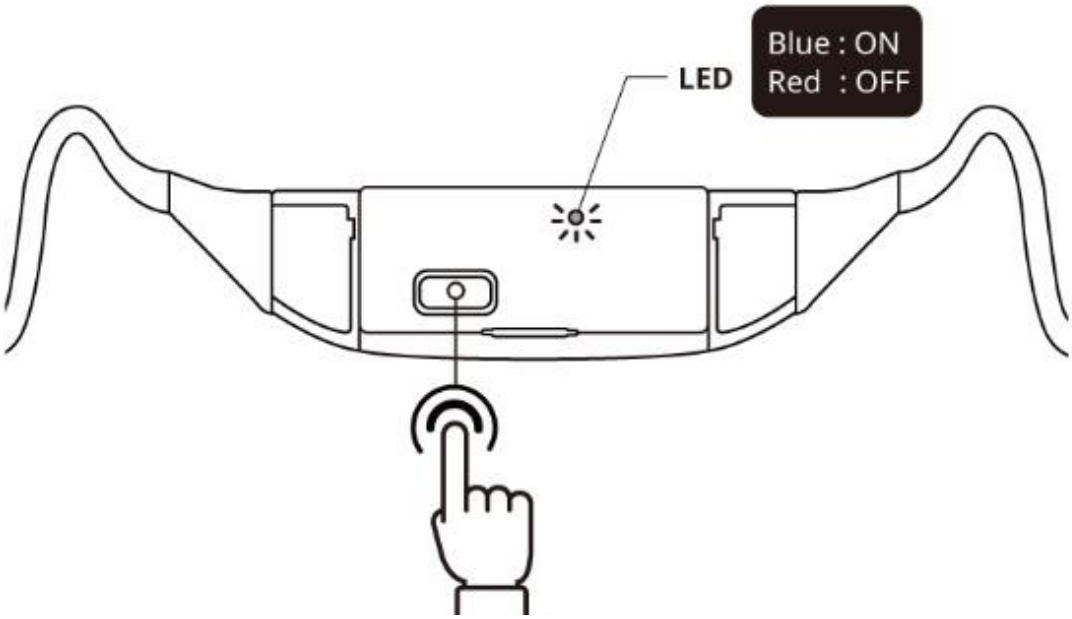
Usb Cable

Pouch

About This Guide

This user guide is designed to guide the users to quickly set up ALEX-N5. ALEX can synchronize the data with mobile application. The detailed information is imported from statistical records. This device allows the users to track the changes of posture and change the vibration reminder and alarm.

Power On/Off



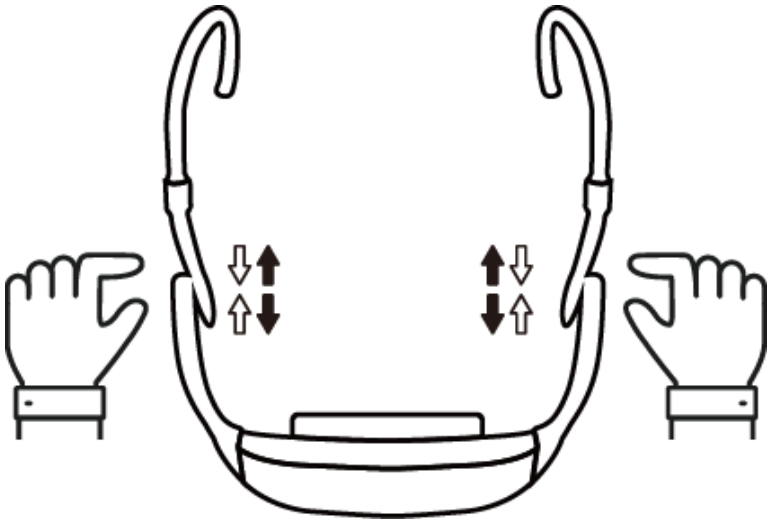
- As shown in the above figure, blue LED is blinking and power is turned on with vibration by pressing the button in the front.

  - Red LED is blinking without vibration and power light is ON if pressing the button shortly while power is ON.

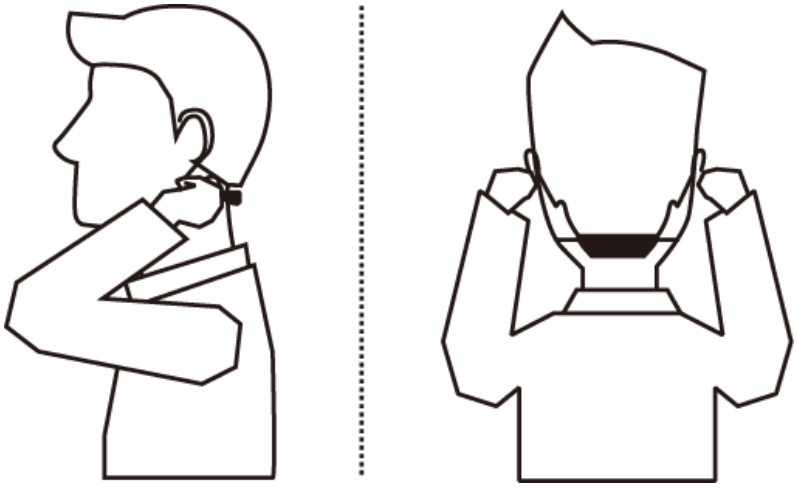
- Red LED is blinking and turned off with vibration if pressing the button at least 2 seconds while power is ON.

- If device is placed on a static position while power is ON, the device is automatically turned OFF about 8 minutes later for battery saving (automatic OFF).

Wearing



1) Adjust the above areas marked with an arrow fit into your head size to control the legs.



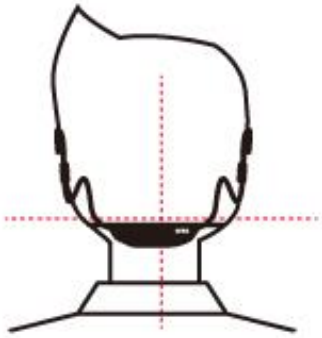
2) Hold the device with both heads to hang back wheels on your back. ALEX should be located at a horizontal angle to a center hairline in the back of your neck.

3) Move your neck if anything is uncomfortable to you. Check if device is unintentionally taking off.

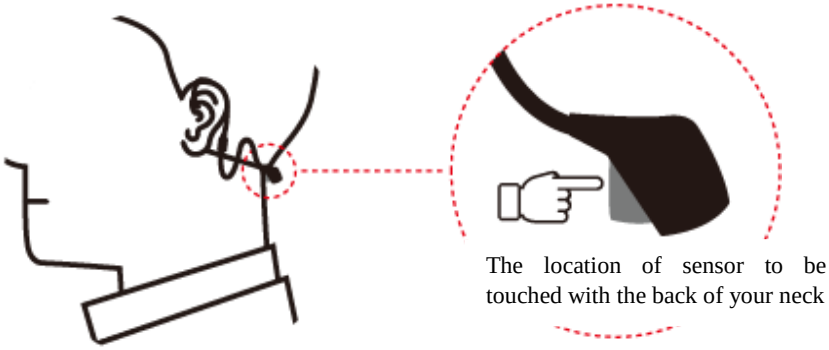
※ ALEX main body placed on the collar or hang in the back of neck may cause its improper operation.

How to Properly Wear an ALEX

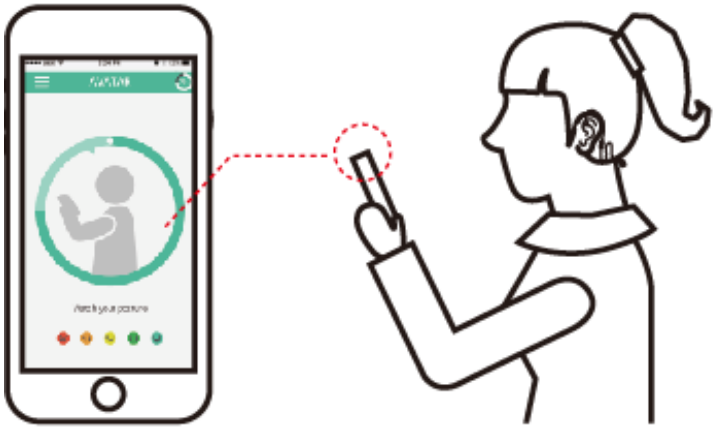
1) ALEX should be located at a horizontal angle to a center hairline in the back of your neck. After wearing it, adjust the length of legs to place them at a horizontal angle to the end hairline in the center of your neck in order to help ALEX properly operate.



2) The overall sides of sensor in ALEX should touch the back of your neck. It fails to accurately measure your posture if sensor is lean on one side or is not properly touching the neck.

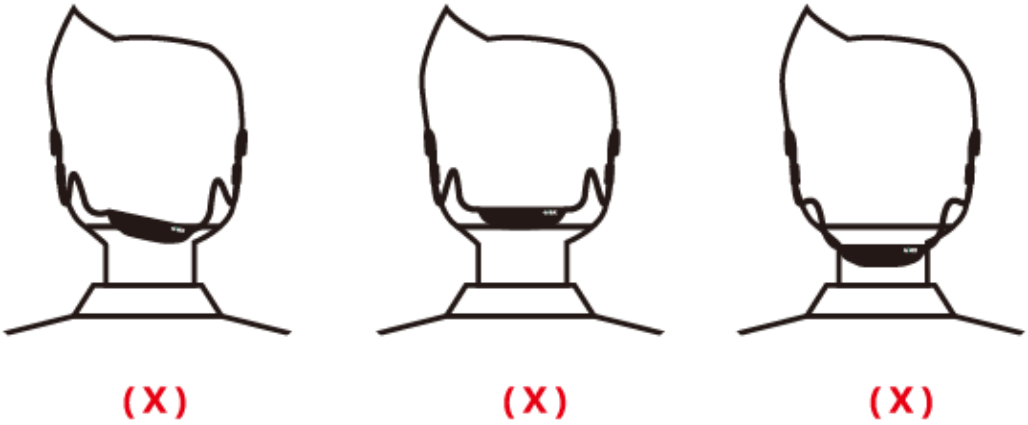


3) Run AVATAR mode in the application to check if you properly wear an ALEX. Move your neck to front or back to check if AVATAR is properly working.

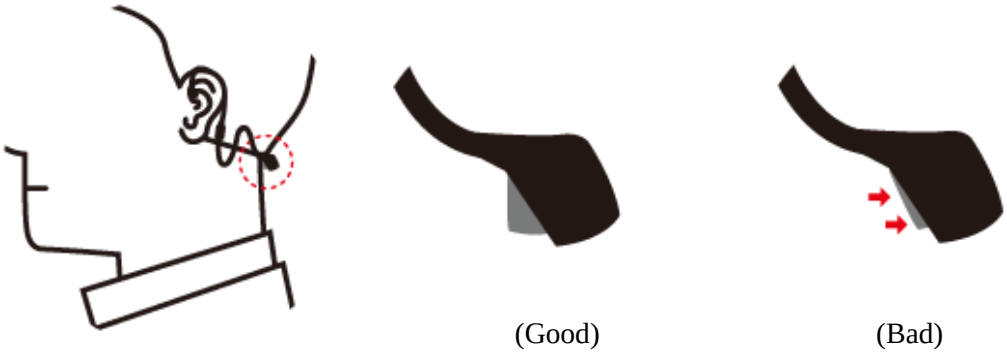


Improper Wearing of ALEX

1) If sensor is slanted, or higher or lower than the end hairline

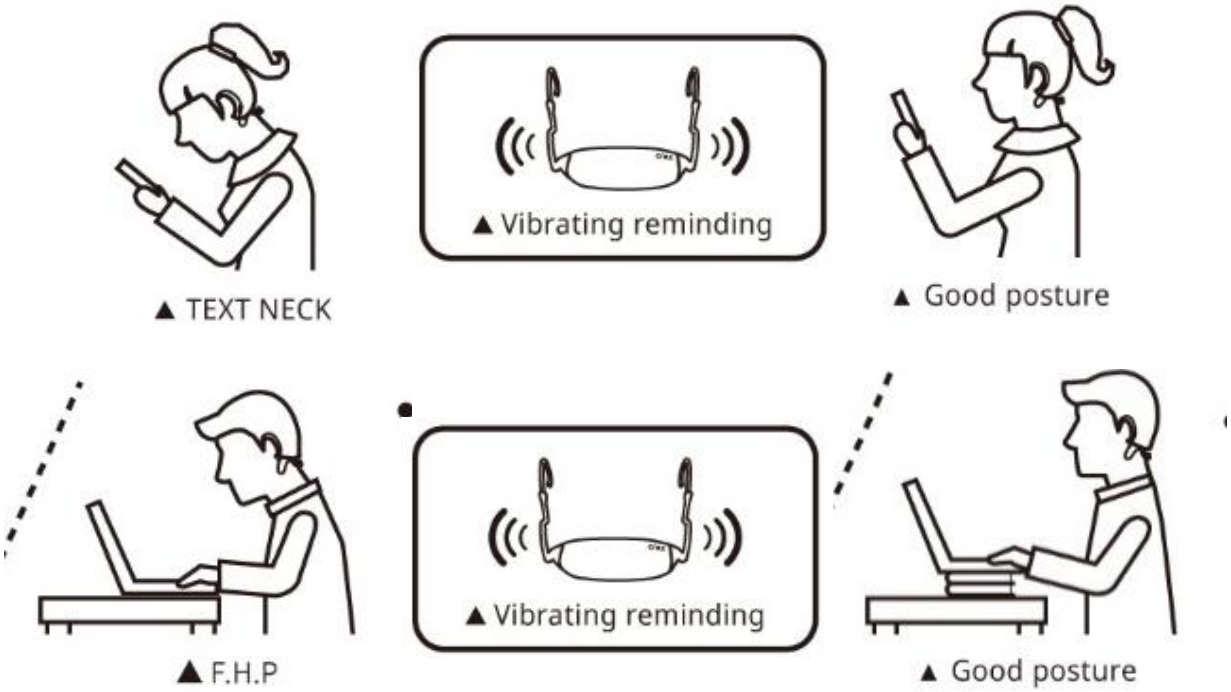


2) If sensor is being pressed due to tightly worn device



3) If device is not properly fit into the neck so it is not touching the surface of your neck, or only the upper side of sensor is touching the neck

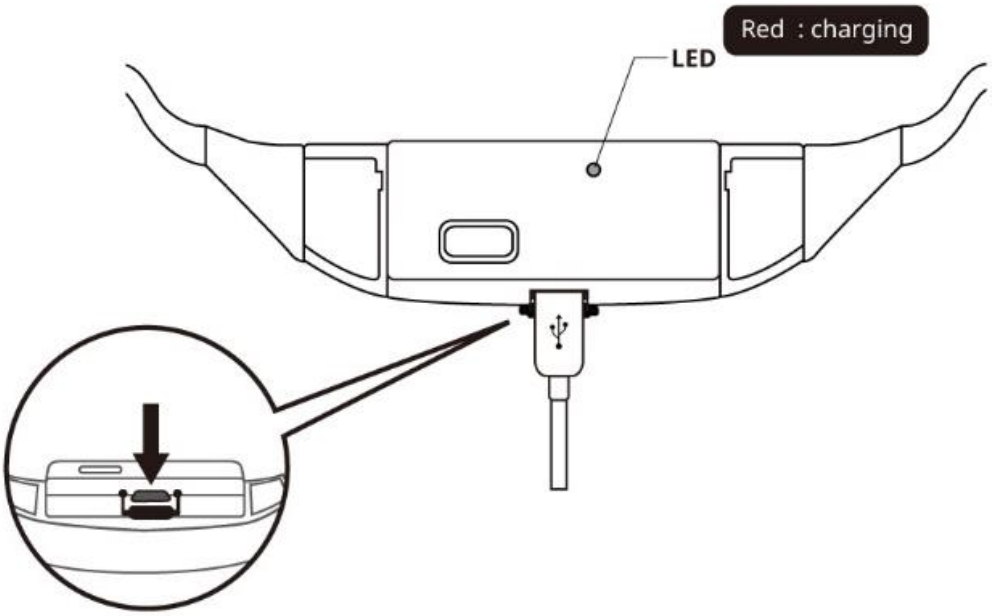
Vibrating Reminding



- ALEX provides vibrating reminder to users if keeping bad posture for a certain period of time in order to help user to keep a correct posture.
- The pivoting mechanism of ALEX can detect both postures: 1) Text Neck – lowering the head; and 2) Forward Head Posture: moving head to the front.

Charging

* Open the cover located at the lower ALEX and connect a micro USB cable for charging.



- If it starts charging, red LED is turned on to inform users of charging.
- If it is completely charged, the blue LED is turned on to inform users of the completion of charging.

※ It may depend on the performance of charger but it usually takes about 2 to 3 hours to fully charge the device.

※ AELX is automatically turned off if the remaining battery is not sufficient.

Mobile Connect (iOS/Android)

ALEX-N5 can be set up through ALEX application for each iOS and Android.

Requirements

- ALEX is compatible to any mobile models if the following specifications are met.

  - iOS 8.0 or higher, and iPhone 4S or later version
  - Android 4.4(KitKat or Lollipop) or higher, and the device supports Bluetooth 4.0(BLE) or higher

- Please refer to the homepage (www.alexposture.com) for more detailed information on compatible smartphone models.

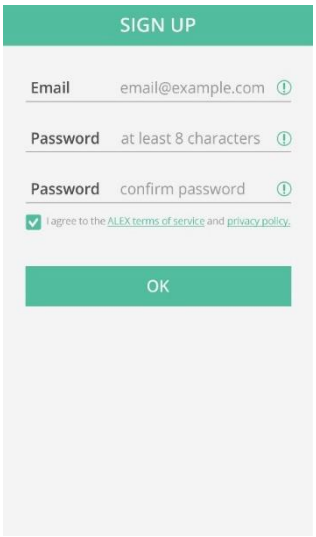
App Installation

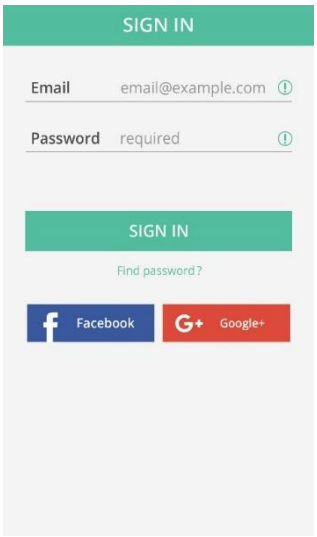
- Set ALEX based upon the purpose of user's use. Install ALEX app in your smartphone to manage your posture data.
  * The device is operated with the default settings at launching if not reset.

- Search "ALEX posture coach" in the apps tore or play store and download the app on the right for the installation.

- App download link:

1. Sign up





1) 1) The user can sign up using the account in Facebook, Google+ or e-mail.

2) Enter the simple information to complete the sign up.

3) Simply log-in to start ALEX app after first sign-up.

2. Register Device

* Please turn on Bluetooth in Smartphone before connecting.

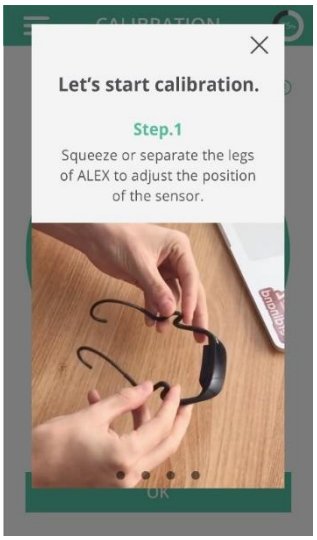
1) Double-click the power button to connect it with the app.

2) Press a NEXT to move onto the following settings.

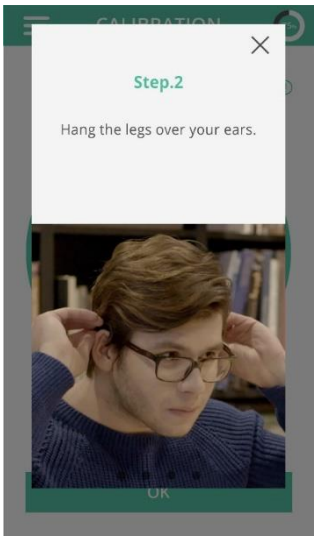
※ Please check the following is ALEX app fails finding ALEX device.
- Check if ALEX is turned on.
- Check if ALEX battery is fully charged.
- Check if ALEX app and ALEX are located close to each other.

3. Calibration

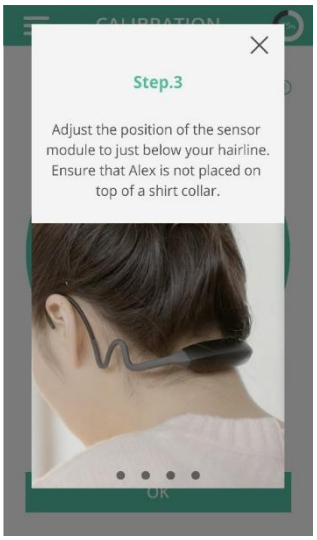
* Follow the direction given by app after ALEX is completely connected to app.
  (Please refer to **“START”** section in this guide for more detailed information on how to properly wear ALEX)



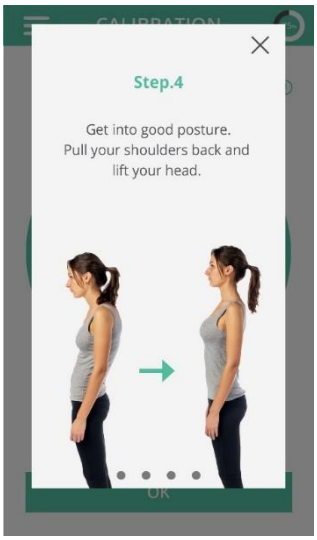
1) Adjust the legs fit into user’s head size.



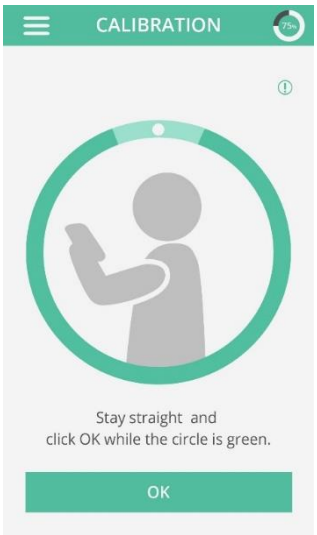
2) Hold ALEX with both hands to hang the legs over user’s ear.



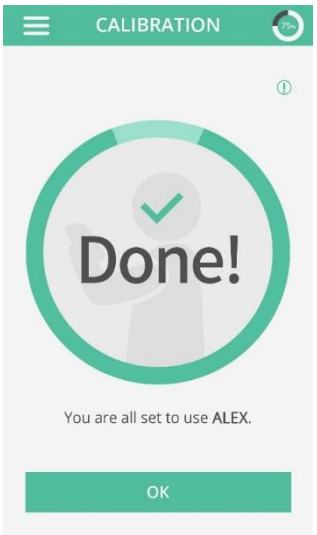
3) Place ALEX at horizontal angle to the end of hairline in the center of your neck.



4) Get into a good posture and wear an ALEX.



5) Stand properly and touch the OK button.

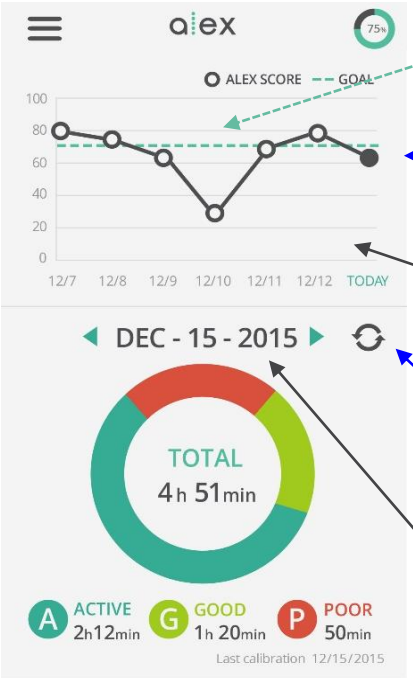


6) Your correct posture is successfully set up.

ALEX Application

1. Data View

The users can check the daily and weekly postures through the graph displayed in the first screen of ALEX app.



Green dotted line: User's goal (Challenge)

Click the black circle to check the hourly changes of posture on a specific date.

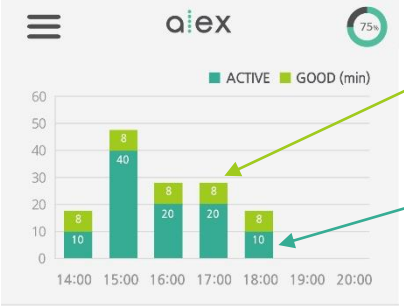
Slide this part to left and right to check the weekly changes of posture.

Press this button to refresh the posture data.

Press the date in the center to check a posture of the day. Use the arrows located at the both sides to check the graph of the other day.

※It is important to maintain a good posture in a daily life; however, it is not good to maintain a specific posture for a long time. Do not sit down for a long time but stand up and move your body on a regular basis.

Touch the black circle in the above graph to check the hourly postures throughout a day.

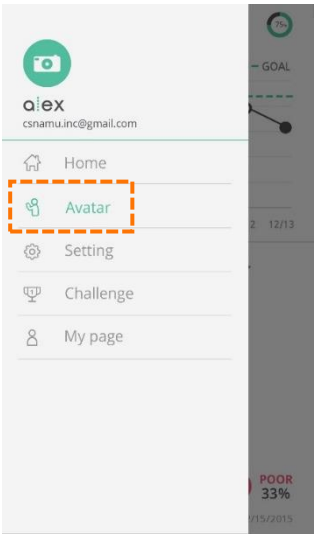


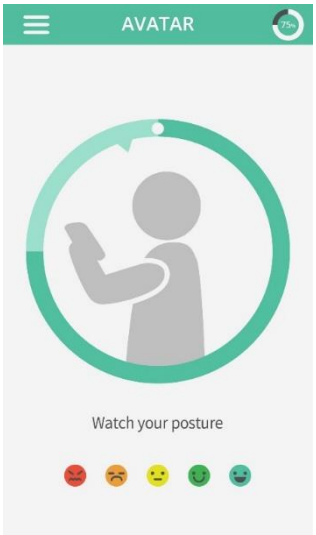
Yellow green bar graph: Hourly cumulative times of good posture kept in a day

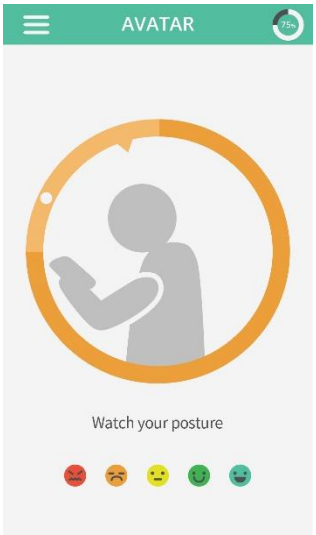
Green bar graph: Hourly cumulative of active posture in a day

2. AVATAR MODE

* The users are allowed to check the neck posture on a real-time manner through AVATAR mode in





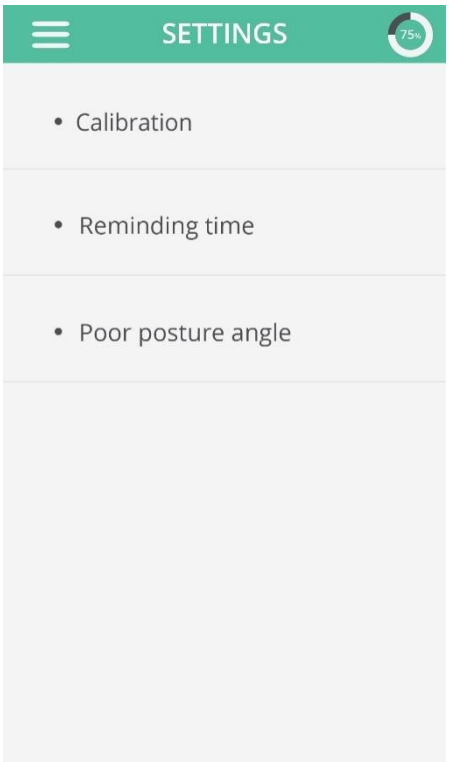


the menu.

※ If AVATAR mode is not properly working, the user is highly likely worn it in improper way. Please refer to the **"Wearing"** in this user guide to learn how to wear it properly.

3. Settings

* ALEX can be set at the settings in the menu upon user's preference.



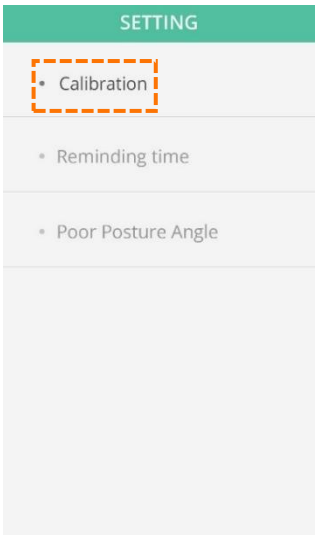
Calibration:
The accuracy of posture measurement in ALEX highly depends on the method and posture of wearing. The users can set their correct postures on a regular basis through Calibration in the menu.

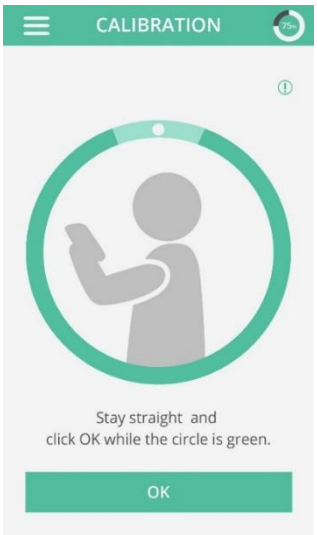
Reminding Time:
Vibration alarm can be set upon the user's prefer time.

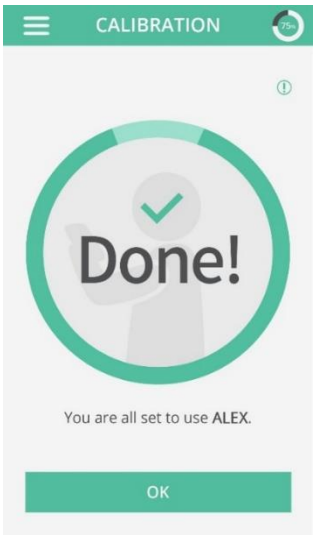
Poor Posture Angle:
The angles to receive the vibration alarm can bet set in the ALEX. Manage your posture in more strictly and comfortably.

3-1. Calibration

The accuracy of measurement in ALEX highly depends on the method and posture of wearing. The users can reset their correct posture as it was in the first setting in the ALEX. Properly and accurately manage your postures on a regular basis through the calibration!

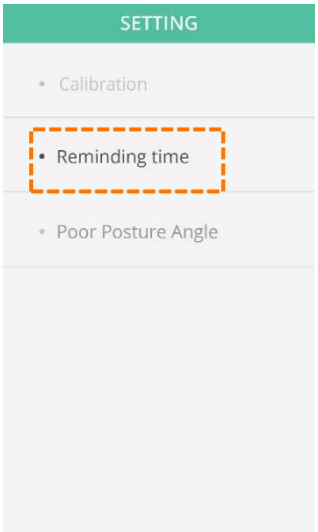


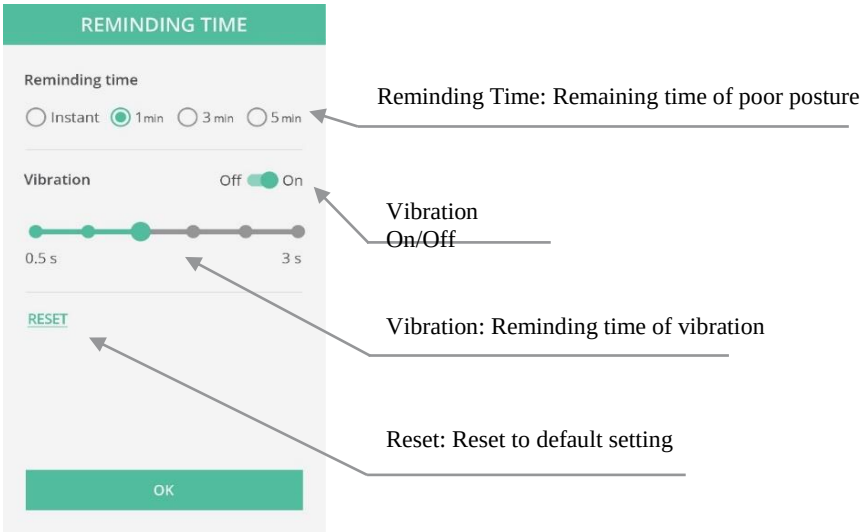




3-2. Reminding Time

The users can change the settings, i.e. the reminding time for incorrect posture, power ON/OFF for vibration and vibration remaining time. Change the settings in ALEX based on your preference and circumstance.



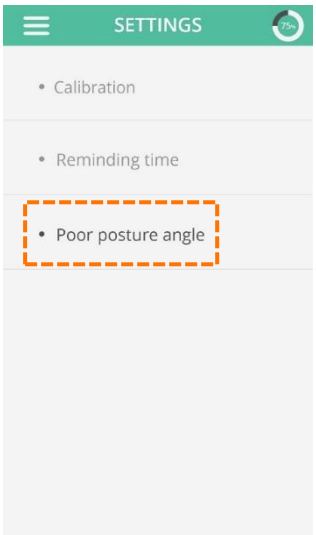


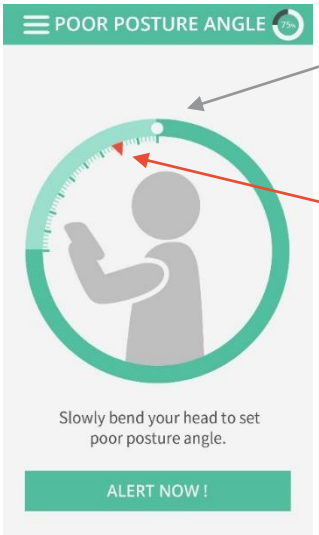
3-3. Poor posture angle

At the poor posture angle in the setting dialog, the users can set the angle to receive the vibration to help them voluntarily change their posture habit to good one. ALEX provides vibration if posture goes beyond a specific angle at a certain time.

4. Challenge

Set your weekly goal for ALEX Score that is calculated considering the setting angle, real-time posture and wearing time of ALEX through the Challenge in the menu.

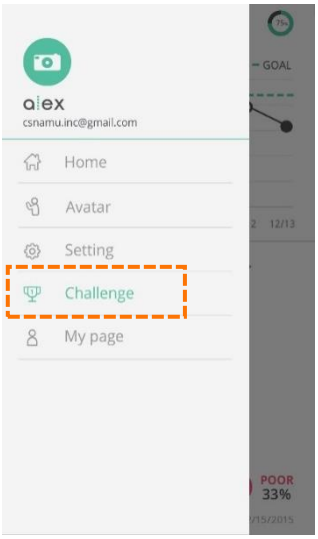


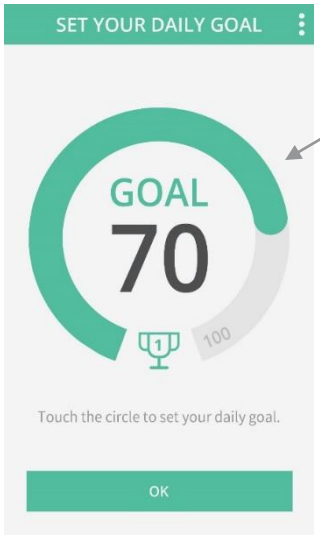


White circle: Poor posture to be newly set

Red triangle: Currently set poor posture

* The goal points are marked in green dotted line in the posture data at the upper home screen.

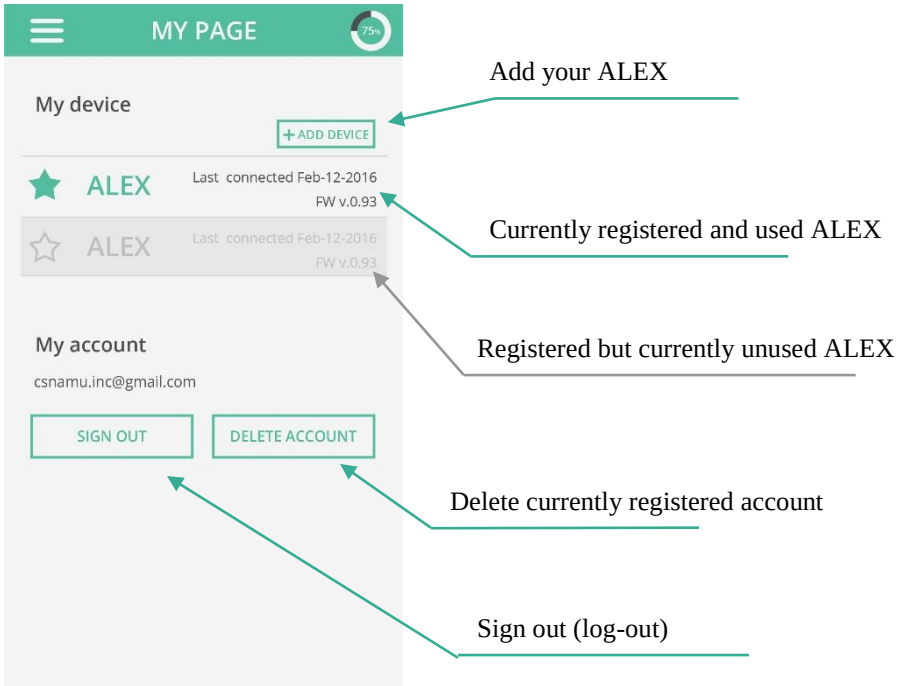




Touch this area to set your goal.

5. My Page

* The users can check the firmware information, log out or delete the account in My Page.



Specification

1. Exterior Specification

Size	(W x L x H) 80 X [105~160] X [100~170]mm
Weight	25g
Color	Black
Material	Sensor: ABS, PC / Leg: Silicon
UI	LED with 3

2. Hardware Specification

Processor	32-bit ARM® Cortex™-M0(nRF51822)
Operating Temperature	50°C
Display	LED BLUE and RED
Memory	Int.ROM : 256KB, Int.RAM : 16KB, Ext.Flash : 64KB
Sensor	10bit,digital,triaxial acceleration sensor(BMA250)
Bluetooth	Bluetooth low energy 2.4GHz RF
Switch	Tact switch
Battery	Lithium-Polymer 110mA, 4.0x12x30mm
Battery lifespan	7 days
Power consumption	Active(ON) : 0.84mA / Sleep (OFF) : 0.04mA

3. Other Specification

- **Smartphone compatibility O/S**
  iOS 8 or higher / Android 4.4 or higher

- **Manufacturing Date / Country**
  April 2016 / Korea

Important Notes

Tips for Managing and Wearing the ALEX

- Use a clean, dry and soft fabric to clean the device on a regular basis. ALEX is not a waterproof device; therefore, it should avoid contacting with liquid. Soft neutral detergent can be used to clean the device but liquid should not get into button area.
- Do not be too conscious of ALEX while wearing. Wear it comfortably. If you are too conscious of it, your neck will be stiffening so is not good for your health.
- Do you wear ALEX for more than 24 hours to refresh skin contacting area with fresh air.
- Do not open the cover to disassemble ALEX.
- The battery is embedded in the device. Do not improperly discard it.
- Do not put device into dish washer, laundry or dryer.
- Do not expose this device in extremely hot or cold temperature.
- Do not store the device under direct sunlight for a long time.
- The device may be explored in the fire.
- Do not wear ALEX while charging.
- Do not charge ALEX if it is wet.
- Do not wear the device if it is heated.

Safety Guideline

- Adverse reaction may be caused on the skin in case of continuous contact between ALEX and skin. Stop using this product and discuss with physician if adverse reactions including hot spots are found on the skin.
- ALEX is operated by electronic energy. Improper operation may cause injury.
- ALEX is not a medical device; therefore, it is not manufactured for the purposes of diagnosing, treating and preventing the disease.
- Consult with physician for the potential negative effects of ALEX if you have some related disease.
- The data is not accurately measured if vibration is interrupted such as driving. Do not wear the device while vibration is interrupted.
- ALEX is not a toy. Do not let your children or animal to touch it. The device may choke your neck.
- Do not use it under extremely wet conditions such as shower, swimming or wet sauna.

Notes for Internal Battery

- The users cannot change the internal battery. If you apply heat or open sensor module by force, the device cannot be covered by warranty and may be exposed to risk. The device must be charged through the cable using the charger certified by a certification institute. This manual provides how to charge the device.

Please fully understand the notice for certification and safety, repair policy and quality assurance stated in the ‘user guide’. Please download the ‘user guide’ in the ALEX homepage.
www.alexposture.com

Warranty

NAMU Inc. (Hereinafter referred to as "NAMU") provides a warranty against defects in materials and workmanship under normal conditions of use for a period of one (1) year (365 days) from the date of purchase of electronic device (“product”).

NAMU does not assure that this product must not stop operating or contain errors. This warranty provided by NAMU does not cover the damages caused by failure to comply with the user guide.

This limited warranty does not cover the software embedded in the product or service provided to product from manufacturer NAMU. Please refer to the terms and conditions of software and service, and license agreement for the more detailed information on the rights related to product uses.

Remedies

Upon NAMU’s own will, NAMU can (1) repair the product using a new part or refurbished parts at no costs; or (2) exchange to new product or refurbished product up to the limits acceptable by laws for the valid requests received during the valid warranty period. If defect is found, the above-described is your exclusive and only remedies up to the limits acceptable by law. Excluding the cases prohibited by applicable laws, shipping and handling costs are claimed. This limited warranty is only valid in the districts under jurisdiction where the product is sold by NAMU, official reseller or agent. It is also only valid to the scopes accepted by the applied laws of jurisdiction. The replacement of all hardware products is warranted for the remaining period of original warranty or thirty (30) days, whichever is longer period, or is warranted for the additional period applied in the jurisdiction.

Warranty Service

The product must be returned in its original or equivalent packaging to the place designated by NAMU in order to receive a warranty service. In accordance with the relevant laws, NAMU requires the users to provide the information on the purchase certificate and comply with the registration requirements prior to the receipt of warranty service. The users are fully responsible for data back-up, including the data stored or owned in the product, software or others. Such data, software or other data may be lost or backed up again while in the service; however, NAMU is not responsible for such damages or loses. Please visit the webpage of NAMU (alexposture.com/kr) for more detailed information on guideline how to receive a warranty service against the product.

Exempted and Limited Warranty

This limited warranty is applied to products manufactured by NAMU, which are identifiable by “ALEX” trademark, transaction name or logo. Such limited warranty is not applied to: (a) other product or service manufactured or provided by NAMU than this device, (b) non-authenticated hardware product, (c) consumables (example: battery) or (d) software (though the goods included in the package or sold along with this product).

This warranty is not applied to product remodeled or modified by unauthorized persons (example: functional modification) or components or products that are inserted or installed on the case not provided by NAMU. In addition, this limited warranty does not cover (a) the damages caused by the combined uses of this product and other branded product; (b) the damages caused by accident, overuse, misuse, flood, fire, earthquake or other external circumstances; (c) the damages caused by the uses beyond the accepted or intended uses priorly described by NAMU, or the damages caused by improper operation using improper voltage or power supplier; or (d) the damages caused by the service (including upgrade and expansion) executed by unauthorized person. The software program, and recovery and reinstallation of user data are not included in this limited warranty.

NAMU reseller, agent and employee are not authorized to revise, expand or add this limited warranty. In the case of presence of provisions that are illegal or unable to fulfill, the legality or fulfillment of other remaining provisions are not affected or damaged.

Implied Warranty

All implied warranties (including the warranty against the merchantability and suitability of a specific purpose) are excluded from a period of this limited warranty excluding the limits prohibited by the applied laws. Some districts under jurisdiction do not accept the limitations for a valid period of implied warranty; therefore, such limitation may not apply to you.

Limited Liability

NAMU is not responsible for the damages caused by explicit or implied warranty or breach of agreements, or subsidiary, indirect, specific or consequential damages in accordance with other legal principles (the damages of profit, income or data are included but it is not limit dot them) excluding the limitations prohibited by the applied laws, though NAMU informs of such potential damages. Some districts under jurisdiction do not accept the exemptions or limitations of subsidiary, indirect, specific or consequential damages; therefore, the afore-mentioned limitations or exemptions may not apply to you.

Governing Law

This limited warranty is governed by the laws of Korea regardless of conflicts of laws principles.

Exchange or Return

If you are not satisfying with the product you made purchase at alexposture.com, you can request a refund within 7 days upon receipt of product. The following conditions must be met for your refund.

1. Only the device purchased at alexposture.com can be refunded. You must follow the relevant conditions if you made a purchase at different online/offline store.
2. You need to request an RMA (Return Merchandise Authorization) to customer service within 7 days upon receipt of product. Please contact support team at alex@alexposture.com to request an RMA.
3. The device to be returned must include RMA number.
4. The device is not refundable if LED protective film is removed from the product. The product to be returned must stay its satisfactory state (product with physical breakdown or damages is not refundable). The accessories and authenticated box must be included in the product when returned.

5. The costs incurred by shipping, handling and tax (example: liquor tax, tariff, VAT) are not subject to refund.
6. The customers are obligated to pay for return shipping on “buyer changed mind” or any repair costs caused by carelessness or improper handling. The customers are also responsible for the lost and damages during return transit.
7. NAMU has right to refuse the refund against (a) product without RMA; (b) missing of parts included in the original package; or to claim the 15% of the original price for refilling the stock or missing accessory whichever the more expensive thereof.
8. Refund is handled and paid within 2 weeks after NAMU receives the product.

A/S Information

Contact Headquarter of NAMU at +82-52-259-1418, alex@alexposture.com

CE 2200

Hereby, NAMU Inc. declares that this ALEX-N5 is in compliance with the essential requirements and other relevant provisions of directive 1999/5/EC.)

FCC (Federal Communications Commission)

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 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 technical for help.

WARNING: *This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.*

This device complies with Part 15 of the FCC`s 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 undesirable operation.

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