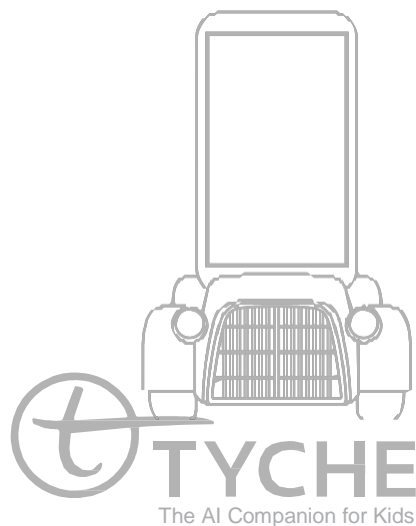




# TYCHE

## USER GUIDE

For AGE 8+/English



## MANUAL CONTENTS

02 Introduction   04 Information   06 Overview   08 APP Installation   09 Talk to Tyche  
10 Plan and Move   12 BYOI   13 Vision App   14 Remote Communication   15 Avatar  
Mode 16 Voice Communication   17 FAQs   18 Warranty

Thank you for purchasing TYCHE, a product of AlBrain Inc, Tyche is an AI companion robot named after the Greek goddess of fortune. Tyche brings good fortunes by creating an atmosphere that promotes learning, socializing, and playing, and enhances the imagination and creativity of young minds. Using a smartphone as its brain, Tyche's talking, listening, thinking, reasoning, planning, and problem solving abilities continue to improve with each release. An ever-growing number of applications that show off Tyche's capabilities available for download on both Google Play™ and Apple Store.

Several cutting-edge technologies have been built and integrated to bring Tyche to life. Interested developers can also innovate and add to Tyche's capabilities.

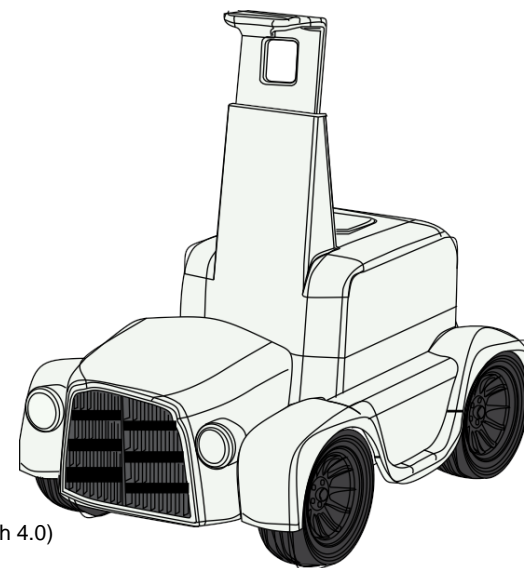
Tyche can help your child live a smarter, more creative life through technology. Enjoy!

### PACKAGE CONTENTS:

- 1 x TYCHE
- 1 x User's guide
- 1 x Power adapter
- 1 x Ni-MH battery pack
- \*Smartphone is NOT include*

### SPECIFICATIONS:

- Version: Tyche Classic 1.0
- Color: White
- Sensor: Ultrasonic sensor
- Communication: BLE (Bluetooth 4.0)
- Size: 260 x 170 x 210 (mm)
- Net Weight: - 612g
- Battery: Ni-MH battery pack
- Battery Charger: 7.5V, 250mA



Smartphone's Minimum System Requirements to run Tyche Applications:

*\*Android™ 5.0 and above*

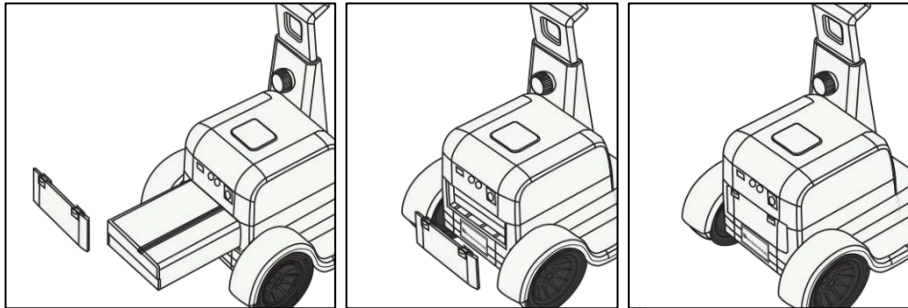
*\*Apple's iOS 10 and above supported.*

**\*Smartphone is NOT included**

### BATTERY PACK INSTALLATION:

Tyche's Battery Pack and the car body are separately included in the box. Follow the instructions below to install the Battery Pack into the car.

*\*Note: The Battery Pack ships uncharged. See the section labeled "Charging the Battery Pack" on Page 4 for instructions*



Be sure the robot power switch is in the **off** position before inserting battery pack.

Push the battery pack completely.

Replace the battery pack cover tightly

### BATTERY INSTALLATION:

- Be sure the robot power button is in the **off** position before installing the battery.
- Install the provided battery as shown with the polarity on the correct position.
- Replace the battery cover tightly.
- Charge the battery while properly inserted into battery charger as shown.
- Remove from the charger after 4 hours of straight charging. (100%).
- Remove the battery from the robot body if Tyche is not going to be used for some time.

### LOW BATTERY INDICATOR:

- When Tyche's battery is low, the movement speed and general performance will be affected. Please power **off** and recharge the battery as recommended.



*\*Tyche battery DOES NOT charge/recharge Smartphone.*

*\*Power OFF Tyche while not in use.*

### CHARGING THE BATTERY PACK:



Battery Charger



Battery



Positive terminal

Negative terminal

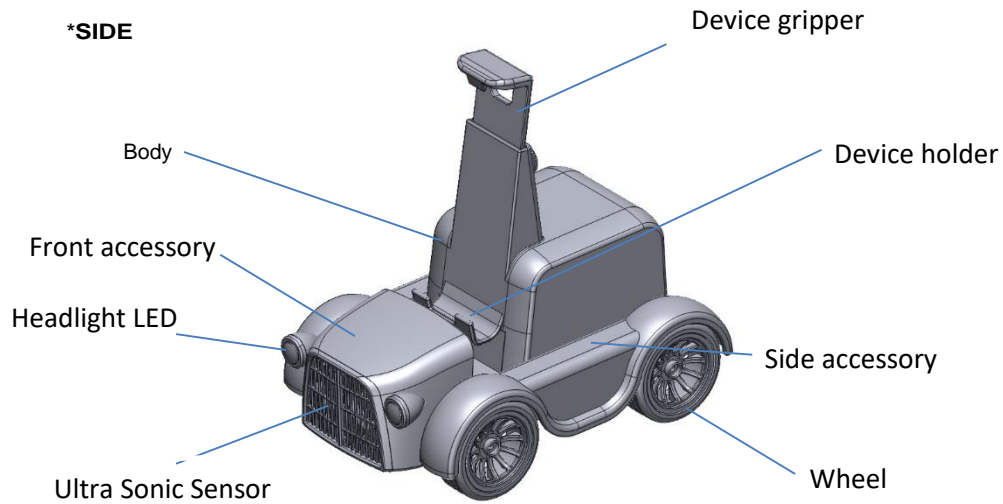
Red Button



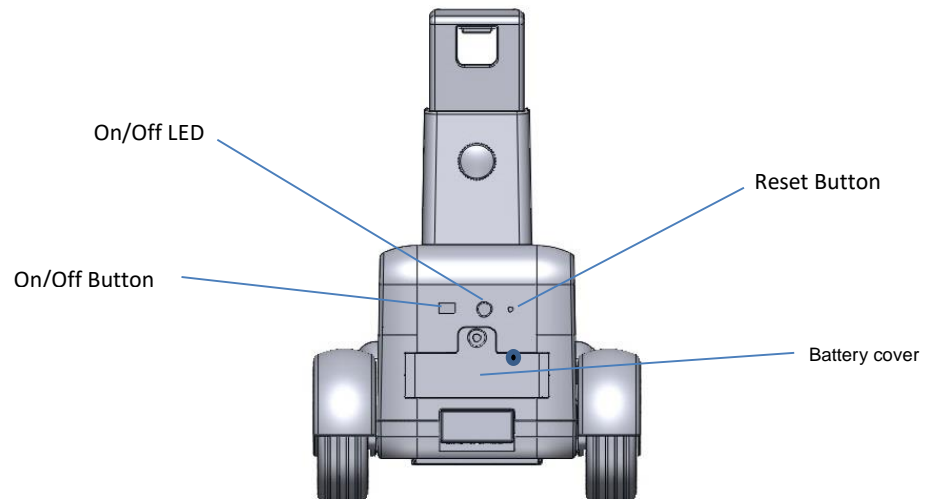
- Insert the battery as shown by the arrows.
- Press the red button on the charger for ease of insertion or removal of the battery from the charger.

**COMPONENTS OVERVIEW:**

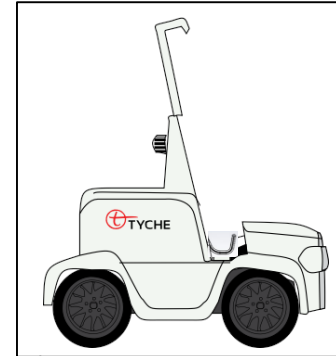
**\*SIDE**



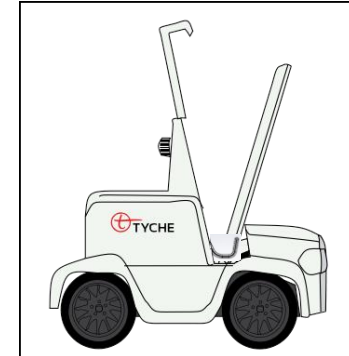
**\*BACK**



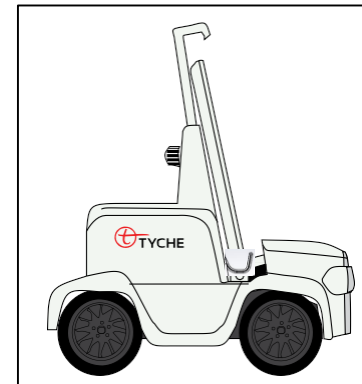
**CONNECTING SMART DEVICE:**



• Unscrew the support frame and pull it upwards to find space for smartphone.



• Dock the smartphone onto the smartphone holder



• Lower the support frame after docking the phone and tighten the screw at the back for tight grip.



\*The phone screen should be facing the front of the robot body. Tyche uses the smart device web- cam for some of the applications.

# TYCHE

## Getting Started

### GETTING STARTED:

After confirming that the battery of Tyche and the smartphone is fully charged, you are ready to get started. Search & install Tyche AI Dashboard app from Google Play™ or Apple Store. Turn your smartphone on and dock it on the smartphone holder tight. On the back of the Tyche robot, turn the power switch to the on position. On the smartphone display window, execute Tyche AI Dashboard app.

### TYCHE iOS APPLICATIONS:

For iOS devices, go to Apple Store and search for Tyche AI Dashboard App by AIBrain.

The rest of the process remain the same as the Android version explained below. Follow the instructions to install all Tyche apps on your device.

*\*Full functionality requires Internet connection*

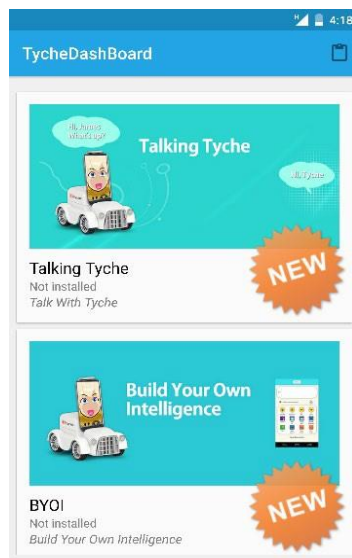
### BASIC FUNCTIONS:

Tyche relies on your Android™/ iOS powered smartphone to be the brain that runs its body. In each app, you can connect to Tyche by touching the connection button. If your smart phone turns off Bluetooth, remember to turn on Bluetooth by accepting the request in the app. Once the smartphone is connected to Tyche through Bluetooth, the power to think, reason, plan, execute actions and talk can now be unleashed!

### TYCHE OPERATION TEST:

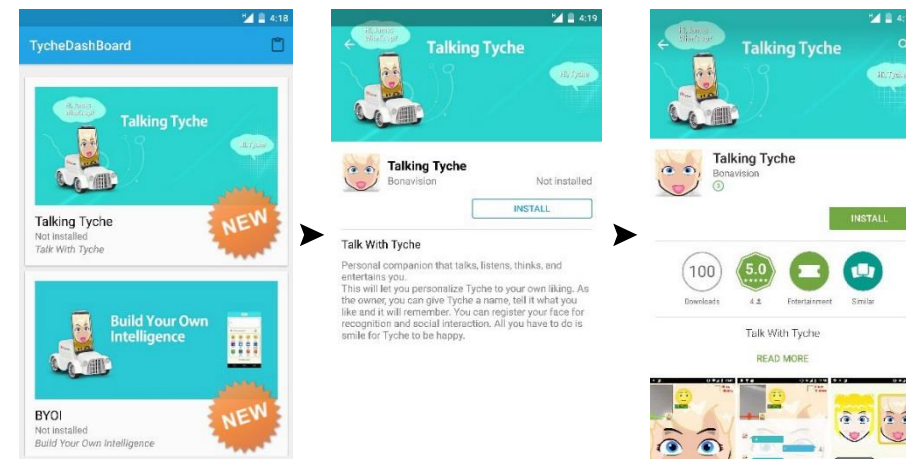
- Place your smart device on Tyche.
- Turn on Tyche and execute Tyche AI Dashboard app.
- Click on the icon at the top-right corner of the Tyche Dashboard to run the test tool.
- Follow the instructions from the test tool for basic operations of Tyche such as movements and lights on and off actions.

*\*If Tyche is functioning normally, you can now proceed to install Tyche's currently available applications listed on the Dashboard.*



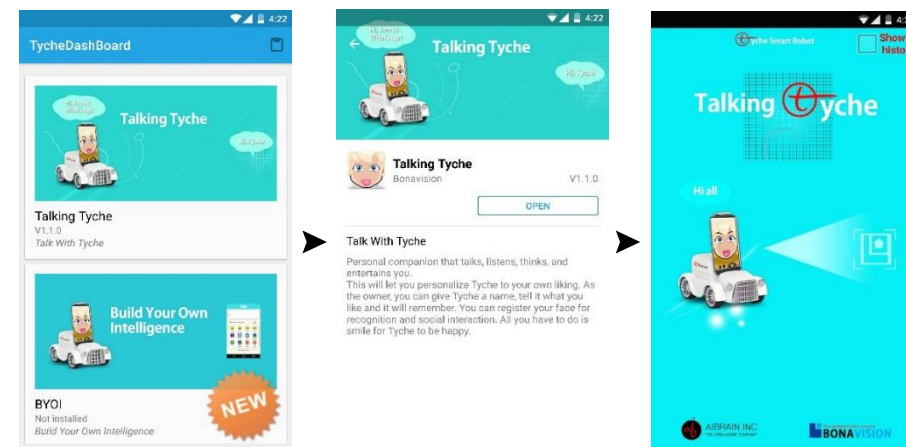
# TYCHE

## APP Installation



### INSTALL AND EXECUTE TYCHE APPLICATIONS:

Tyche applications: Talking Tyche, Build Your own intelligence (BYOI), Tyche Vision, Tyche remote Communication, and Plan and Move. Select an application and click to install. Talking Tyche app installation is provided here as an example. All other apps can be installed the same way.



### MAIN FEATURES:

**Talking Tyche:** allows you to talk to Tyche freely and intelligently. Tyche knows who the owner is and gives him/her special privileges.

**BYOI:** A jumpstart to learning how to program through building your own AI implementations.

**Tyche Vision:** shows detection and tracking capabilities of Tyche, including facial expressions, face, ball, and markers.

**Remote Communication:** Control Tyche remotely and see what it sees!

**Plan and Move:** Draw a path for Tyche to follow.



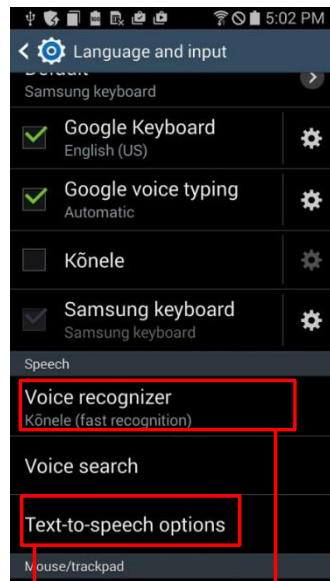
# TYCHE

## Talk to Tyche

### TALK TO TYCHE:

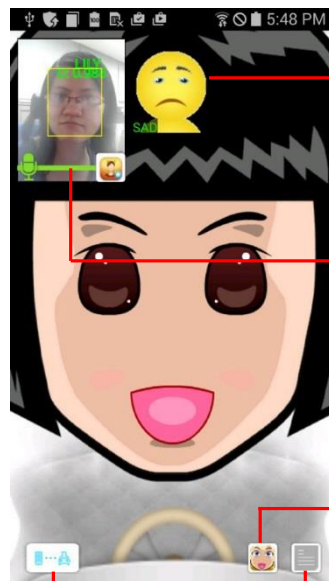
Personal companion that talks with, listens to, and entertains you. You can personalize Tyche to your own liking. Give it a name, tell it what you like, register your face for recognition and social interaction, smile for Tyche to be happy, and many other interesting talks!

- Preparation 1: setting your device to improve Talking Tyche performance
- Preparation 2: Download Talking Tyche app from google Play™. (Keyword: Tyche or AIBrain Inc.)



Make sure your phone supports Text To speech for English.

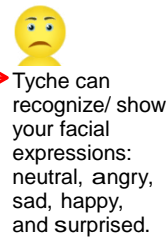
Make sure your phone supports google Voice recognition service for English. The performance of Tyche listening capacity depends on the version of google recognition service of your phone.



Tyche car body and phone connection



Not connected. (Please check if Tyche and/or Bluetooth is turned on)

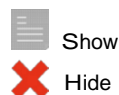


Tyche can recognize/ show your facial expressions: neutral, angry, sad, happy, and surprised.

Microphone condition  
on : You can speak to Tyche  
Mute : Please wait for seconds.

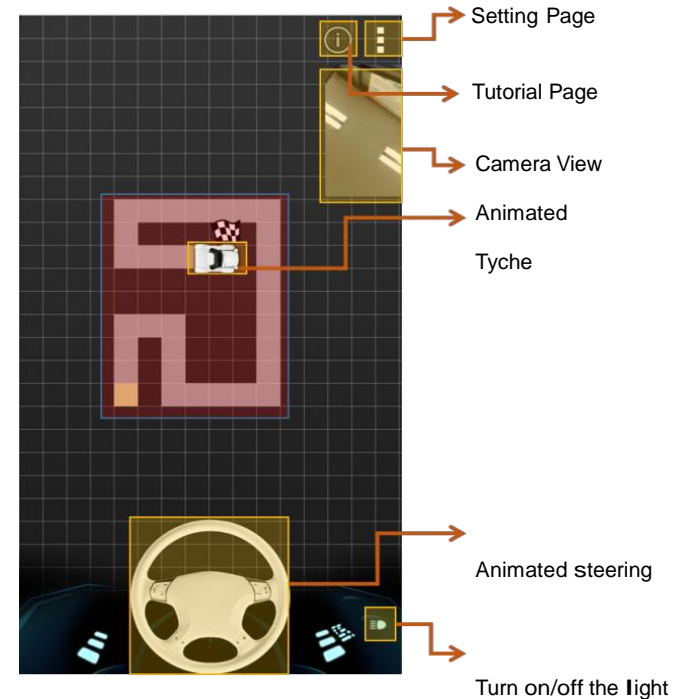
Change Tyche's avatar setting.

Show / hide the conversation content (text)



# TYCHE

## Plan and Move



### PLAN AND MOVE APPLICATION:

Draw a path for Tyche to follow

- Tyche moves along the defined path.
- Check the collision detection box to avoid obstacles.
- Can take a picture and return with the go n back execution.



Download Plan and Move App manual from [www.tyche.club](http://www.tyche.club) for more explanation

# TYCHE BYOI APP

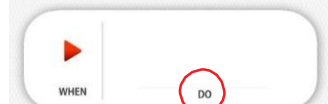


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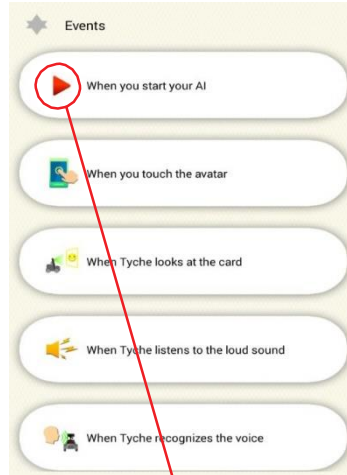
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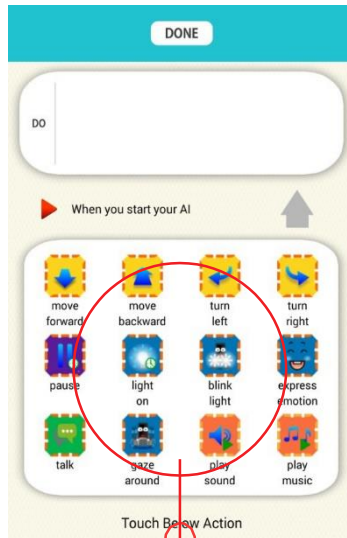
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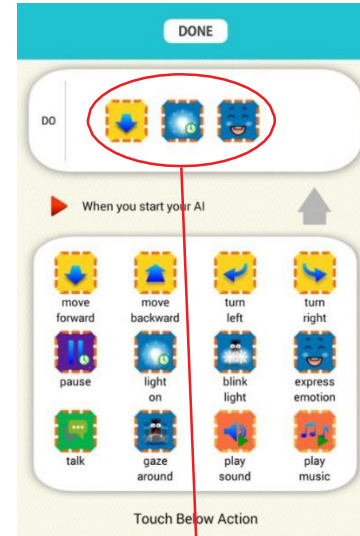


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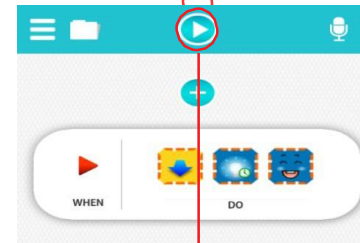


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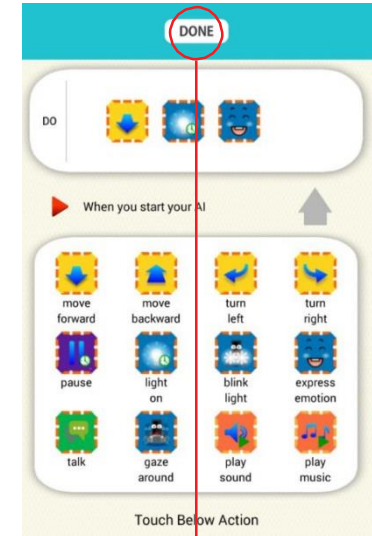
# TYCHE BYOI APP



6



8



7

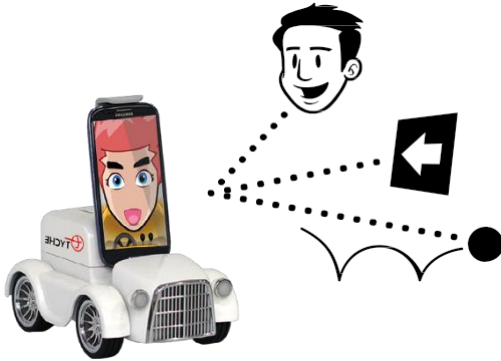
## BUILD YOUR OWN INTELLIGENCE (BYOI) APPLICATION:

BYOI is based on intelligent Robot Software Platform (iRSP), an advanced robot building and control tool that can be used to extend and customize Tyche and other robots. For iRSP, follow the link below the page to learn more. BYOI application provides the basics to assemble simple actions through simplified event buttons. Some of the fun events include Music, sound, Move, Vision, and many others. The app will give you the power to;

- imagine, create, learn, and have fun with BYOI
- Jumpstart your programming skills
- Play social interaction games with other Tyches



Download BYOI App manual from [www.tyche.club](http://www.tyche.club) for more explanation.

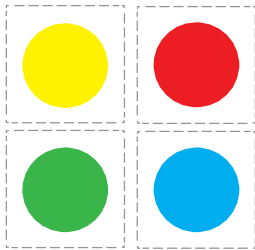


**VISION APPLICATION:**

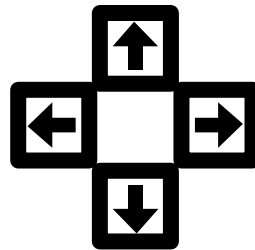
Face tracking, ball tracking, and marker tracking are some fun features of Tyche. Tyche knows what you look like and can follow your face to keep you in its view. Hold up arrows to direct Tyche and have it navigate around the house.



FACE



BALL



MARKER

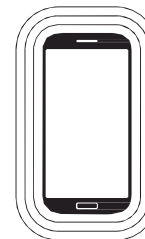


Download Vision App manual and the tracking symbols (balls and markers) from [www.tyche.club](http://www.tyche.club) for more explanation.



**REMOTE COMMUNICATION:**

Two devices can be connected through Wi-Fi™ or Bluetooth® services. The online manual explains the connection process. When connected, you can see through Tyche's eyes!

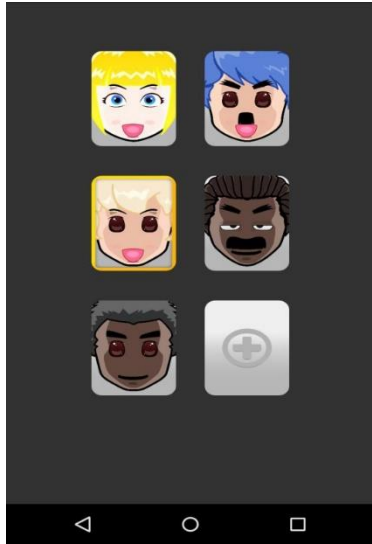


Download Remote Communication App manual from [www.tyche.club](http://www.tyche.club) for more explanation.



## TYCHE

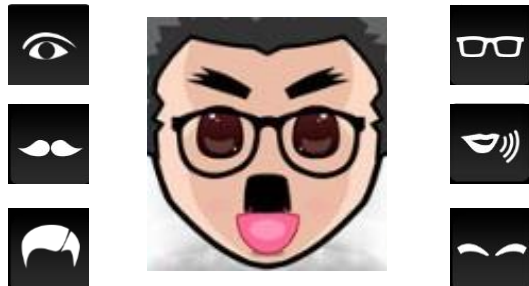
### Avatar Mode



#### AVATAR CREATION:

Customize Tyche to your liking! Choose from different face shapes, hair styles, and many other features to bring Tyche to life. Tyche's avatar even responds to touch events. Play around and see how Tyche reacts!

1. The list shows the created avatars
2. A yellow rectangle forms around the currently selected avatar
3. Up to 9 different avatars can be added by clicking on the plus (+) button
4. Click on any avatar to make it main, edit or delete

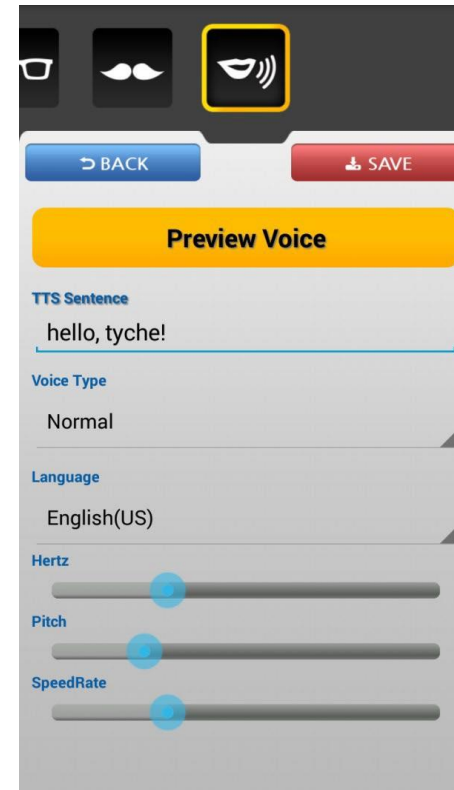


#### AVATAR COMPONENTS SUPPORTED:

Swipe through the choices to select the best combination for your own Tyche avatar. Save for the changes made to take effect.

## TYCHE

### Voice Communication



#### VOICE CUSTOMIZATION:

Tyche's voice can also be customized by adjusting the settings as shown. Save for changes to take effect.

# TYCHE

## FAQs

### FAQS

#### Q. TYCHE DOES NOT RESPOND WHEN I GIVE IT COMMANDS.

A. after checking the connection between Tyche and your smartphone device, please try executing the commands again. Some applications like Talking Tyche and BYOI depend on the internet for speech recognition. Make sure you are connected and try again.

#### Q. ALTHOUGH THE APPLICATION IS TERMINATED, TYCHE CONTINUES TO MOVE AND TURN ON THE LIGHTS.

A. Please turn off Tyche's power button to reset the robot.

#### Q. TYCHE MOVEMENTS ARE SLOW AND IMPRECISE.

A. This happens due to low battery. This problem can be solved by recharging Tyche.

### CERTIFICATION AND SAFETY:

FCC ID: 2AJ3Z-TYCHEV10

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.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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:

- o Reorient or relocate the receiving antenna.
- o Increase the separation between the equipment and receiver.
- o Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- o Consult the dealer or an experienced radio/TV technician for help.

# TYCHE

### CERTIFICATIONS:

- ASTM and CPSIA certification (USA):

Testing/inspection for hazardous substances that are either banned for use or restricted to certain limits in toys and stationary products to protect children from possible danger that could happen while playing.

- FCC certification (USA):

Electromagnetic wave safety inspection

- UL certification (USA & Canada):

The Battery Pack stability.

- Un DOT certification (USA & Canada):

Battery Pack safety during transportation by aircraft.

- KCC (Korea):

Electromagnetic wave safety inspection

- KC Battery certification (Korea):

Battery Pack safety during transportation.

- KC Safety Inspection Standards (Korea):

Testing/inspection for hazardous substances that are either banned for use or restricted to certain limits in toys and stationary products to protect children from possible danger that could happen while playing.

### ANDROID LICENSE:

Android is a trademark of Google Inc. The Android robot is reproduced or modified from work created and shared by Google and used according to terms described in the Creative Commons 3.0 attribution license.

Thank you for purchasing Tyche™ from AIBrain Inc,. Our warranty obligations for Tyche™ are limited to the terms set forth below. AIBrain Inc, warrants to the original end-user purchaser that this Product (Tyche™), will be free from defects in materials and workmanship under normal use for a period of 1year from the date of retail purchase (the “Warranty Period”). This warranty is extended only to the original end-user purchaser of a new product that was not sold “as is”.

if a defect arises:

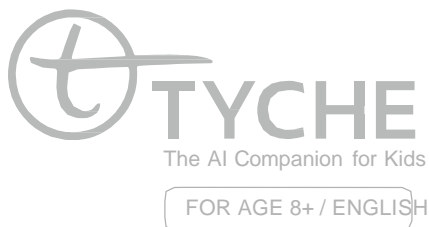
- (1) you may within 30 days from the date of retail purchase (or such other period specified by the return policies of the place of purchase) return this Product to the place of purchase, together with the original proof of purchase and either the original box or the UPC code label from the box, and this Product will be replaced or, in the event that a replacement for this Product is not available at the place of purchase, either a refund of the purchase price for this Product or a store credit of equivalent retail value will be provided; or
- (2) you may after the day that is 30 days from the date of retail purchase (or such other period specified the return policies of the place of purchase) and within the Warranty Period contact AIBrain Inc, Customer support to arrange for the replacement of this Product. notwithstanding the foregoing terms of this warranty, AIBrain Inc, reserves the right at all times, at its sole option and discretion, to refund to you the purchase price paid by you for this Product in full and final settlement of Bonavision's obligations under this warranty. A purchase receipt or other proof of the date of retail purchase and purchase price is required in order to claim the benefit of this warranty. If this Product is replaced, the replacement product becomes your property and the replaced Product becomes AIBrain Inc,'s property. If the place of purchase refunds the purchase price of this Product or issues a store credit of equivalent retail value, this Product must be returned to the place of purchase and becomes Bonavision's property. If AIBrain Inc, refunds the purchase price of this Product, this Product must be returned to AIBrain Inc, and becomes AIBrain Inc,'s property.

**EXCLUSIONS AND LIMITATIONS:**

This warranty covers the normal and intended use of this Product. This warranty does not apply: (a) to damage caused by accident, abuse, unreasonable use, improper handling and care or other external causes not arising out of defects in materials or workmanship; (b) to damage caused by service performed by anyone who is not an authorized representative of AIBrain Inc,; (c) to any hardware, software or other add-on components installed by the end-user; (d) if this Product has been disassembled or modified in any way; (e) to cosmetic damage, including but not limited to scratches, dents or broken plastic, or normal wear and tear, (f) items intended to be periodically replaced by the purchaser during the normal life of the Product, including, without limitation, batteries, bulbs, or cables .

AIBRAIN'S RESPONSIBILITY FOR PRODUCT DEFECTS IS LIMITED TO THE REPLACEMENT OF THIS PRODUCT OR THE REFUND OF THE PURCHASE PRICE FOR THIS PRODUCT. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN TIME TO THE TERM OF THIS LIMITED WARRANTY. NO WARRANTIES, WHETHER IMPLIED OR EXPRESS, WILL APPLY AFTER THE EXPIRATION OF THE LIMITED WARRANTY PERIOD. If any term of this warranty is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW, AIBRAIN INC, IS NOT RESPONSIBLE FOR DIRECT SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES HOWSOEVER CAUSED RESULTING FROM THE BREACH OF WARRANTY OR CONDITION OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE. THE FORGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS.



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Customer service: [help@aibrain.asia](mailto:help@aibrain.asia) / [www.tyche.club](http://www.tyche.club)

Customer support is only available in English for international and Korean for Korean market. We recommend that you retain our address for future reference. Product and colors may vary. Packaging printed in Korea.

WARNING! This product is recommended for children of 8 years and above.

This user manual should be kept as it contains important information.

Made in Korea



AIBRAIN INC. USA

68 Willow Rd. Menlo Park, CA 94025

AIBRAIN INC.Asia

511, Institute of Computer Technology, Seoul National University 1,  
Gwanak-ro, Gwanak-gu, Seoul, Korea 08826

[www.tyche.club](http://www.tyche.club)