timeTec
Hubot
QUICK START GUIDE

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1. READ ME FIRST

Congratulations on your purchase of the 'Hubot'!

Please check this Part List carefully to ensure you have received all the parts.
This hubot package includes the following items:

ITEM	QUANTITY	DESCRIPTIONS
Loomo Unit	1	Self-Balancing Robot
Tablet Unit	1	Huawei Mediapad M5
'Hubot' Housing	1	Outer Casing that hold Tablet unit and Loomo Unit as one
ACCESSORIES		
Power Adapter	1	58.8V, 120W
USB Type-C Cable	1	Connector between Tablet Unit and Loomo Unit

Complete the steps in Section 4, "Quick Setup and Operation Guide" to start using the *'Hubot'.*

Complete the steps in Section 5, "General Maintenance Guide" for general maintenance of the *'Hubot'.*

Thank you for your purchase and do contact us (see Section 6, "Support and Warranty") if you required any assistance.

IMPORTANT

The 'Hubot' can be damaged by excessive power levels from the instruments. Please adhere strictly to the power levels recommended in the instructions.

⚠ **CAUTION: There are movable parts when the *'Hubot'* is power up. Handle with care to avoid accidental injuries.**

WARNING:

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED AND COULD VOID THE USER'S WARRANTY.

2. PRODUCT OVERVIEW

'Hubot' is a locally developed universal and programmable smart mobile robot, loaded with various interesting autonomous features, tailored to suit various cloud-based solutions.

'Hubot' has few interesting main features as below:

I.   Can be used as a mobile service robot

II.   Able to do indoor navigation smartly

III.   AI based face, speech and OCR recognition

IV.   Enable proactive engagement with customers

V.   Human detection and tracking.

Additionally, it has open architecture that suitable to be used as a development platform.

There are 2 models available: (i) Hubot XV and (ii) Hubot DV are designed with various features to cater to all aspects of your requirements. The detail features of each model of Hubot are explained below:

| TYPE	HUBOT XV	HUBOT DV
Main Function	Visitor Management Software	AI Development Platform for Developers and Researchers
Features / Functions	Built-in with Visitor Management System that has been programmed to interact with humans through vision, speech and body language in achieving automation and security for the visitor management for office towers and residential communities. The Hubot XV is taking artificial intelligence (AI) to the next level for a better, safer and more efficient community. Main Interesting features: • Interact with visitors • Register walk-in visitors • Verify pre-registered visitors • Receive and dispatch deliveries on behalf of the recipients • Perform security patrol • • Report to the control room and many more.	For developers and researchers to jumpstart their AI development projects by building their own user applications on top of the Hubot's Loomo platform. Additionally, it is an open platform for engineers and designers to create a personal robot by building applications and accessories. Main Interesting features: • Hubot SDK develops a high-level user interface (UI) and it communicates well with Loomo base module • Sample Android Apps are available to demonstrate basic functions such as indoor navigation, obstacle avoidance, object detection and more. • Loomo SDK mainly used to control base movement and access built-in sensor data. • Aligned RGB-depth images • Location information from Inertial Measurement Unit (IMU) • • Built-in perception functions (mic-array based voice recognition)

3. PRODUCT SPECIFICATIONS

3.1 Hardware Specifications

SPECIFICATIONS	DESCRIPTIONS
Movement	Traversable along pave road and sidewalks, packed dirt, slopes, obstacles (1cm), gaps (3cm)
Driving Wheels and Encoders	Two differential driving wheels, nominal power 400W x 2 with high precision hall and magnetic encoders
Camera	Front Facing Camera: 720p, HD
Input	Keyboard, Camera
Output	Voice Greeting Guidance
On Board Sensors	Ultrasonic Sensors, Voice Distance Sensors, encoders, IMUs
On Board System	Android 5.1
Connectivity	WiFi (820/b/g/n), NFC and Bluetooth
Battery Specs	Battery Capacity 6450mAh, nominal voltage 51 Vdc, maximum charging voltage 58.8 Vdc
Working Duration	8 Hours
Weight	Approx. 32kg

3.2　Dimensions

SIDE VIEW

FRONT VIEW

1219.8mm

314mm

574mm
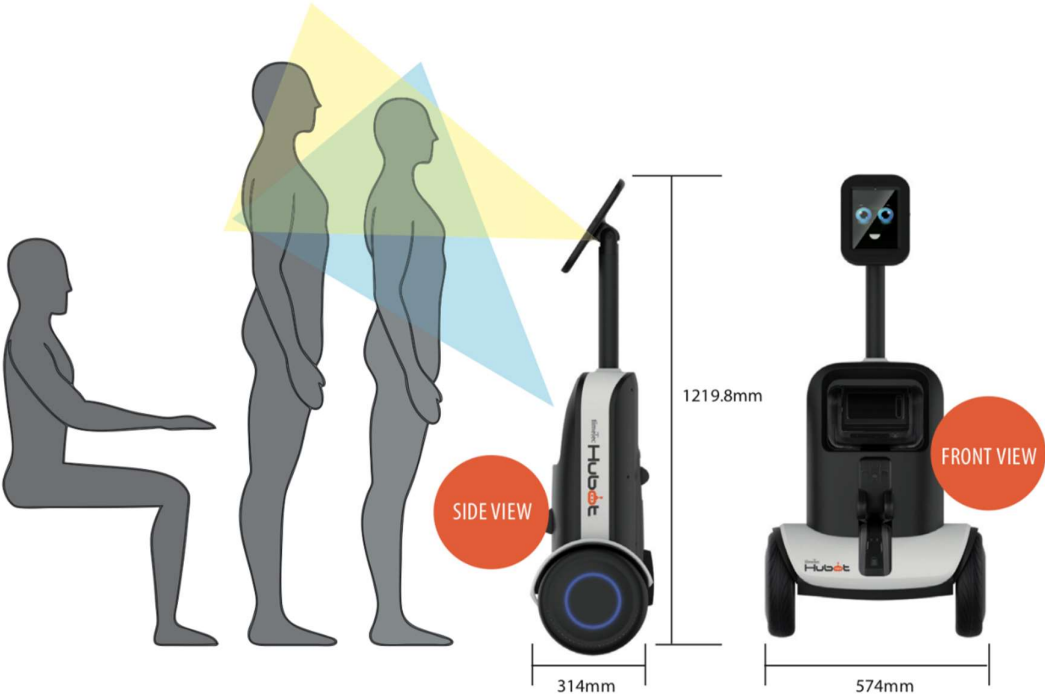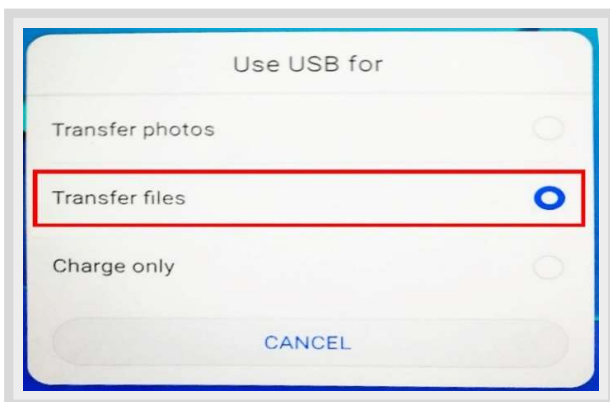
4. QUICK SETUP AND OPERATION GUIDE
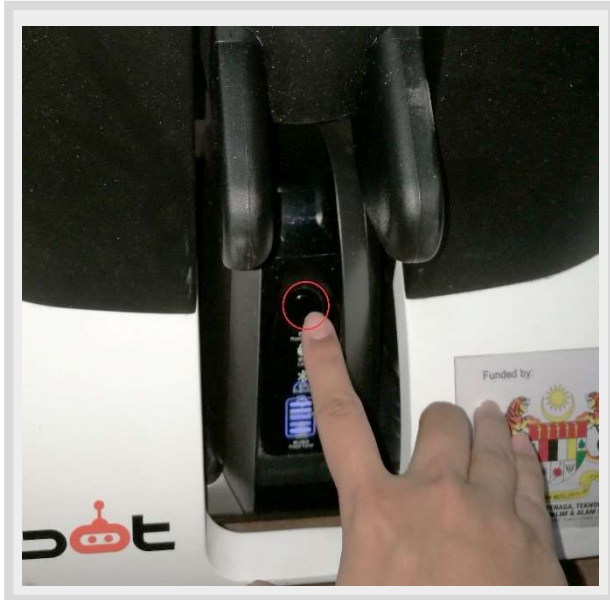
01
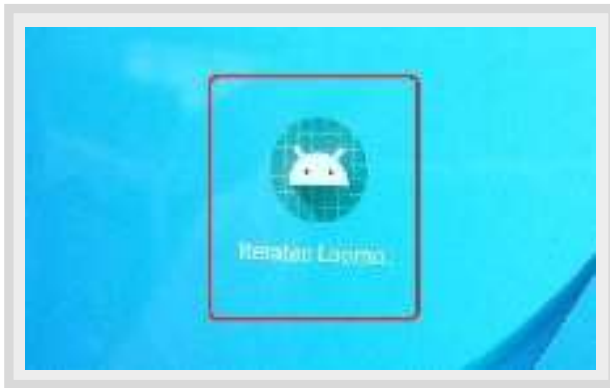Turn on the power switch to Boot up 'Hubot'.

02
Make sure the USB Type-C cable of the Tablet unit is connected to the 'Loomo' unit.

03
When the 'Use USB for' screen appeared in Tablet, select 'Transfer files' option.

04

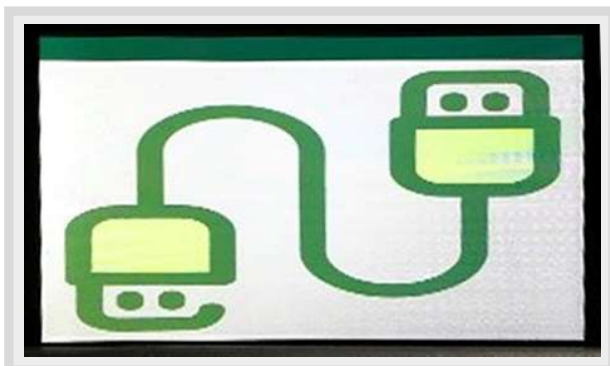Open the 'Iteratec Loomo' app that has been installed into Tablet.

05

Switch on the the 'Hubot' 'transform' button.

06

Open the 'LoomoUsb' app on the 'Loomo' unit.

07

Then, wait for the USB connection icon to appear on the 'Loomo' unit LCD screen.
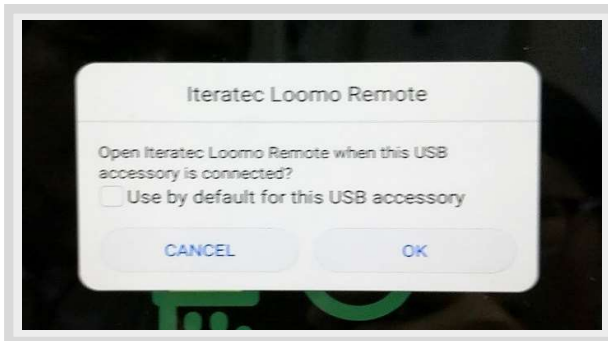
08

Then, wait for the USB connection icon to appear on the 'Loomo' unit LCD screen.

09

A message box prompt will appear at the 'Loomo' unit LCD screen to request for access grant for 'LoomoUsb', click 'OK'.

10

Next, 'Iteratec Loomo remote' message prompt will appear at Tablet unit screen. Click 'OK'.

11

Next, prompt to request user to grant access for 'LoomoUsb' will re-appear again at 'Loomo' unit, click OK.

12

Finally, the 'Hubot' demo app is boot up successfully.

13

User should be able to see an interactive eyes UI at Tablet unit's screen and Live captured images appear at the 'Loomo' unit's screen.

5. GENERAL MAINTENANCE GUIDE

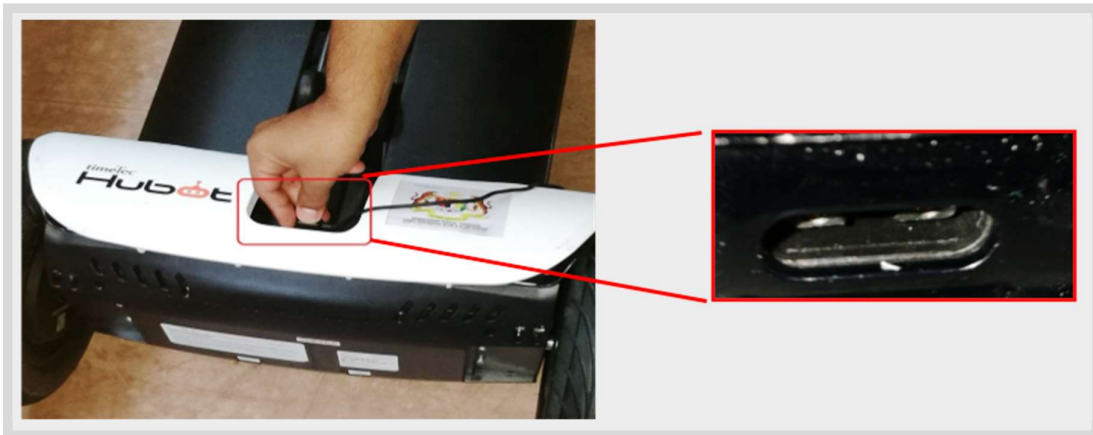To charge up the Hubot, users are advised to carefully follow below steps:

01

Lie down the Hubot on the ground carefully.

02

Turn off the Hubot's power button.

03

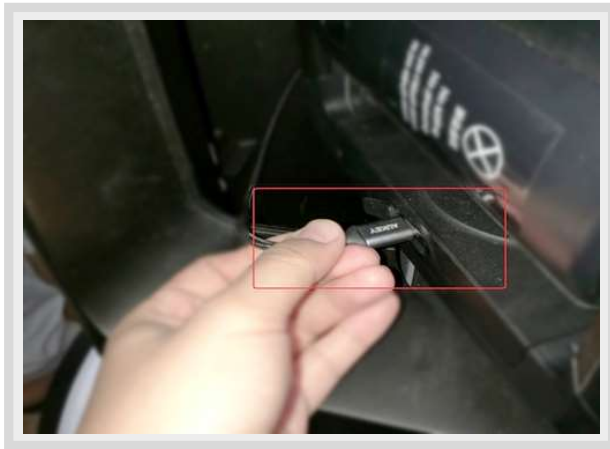Plug the charger onto the Hubot's charger port.

04

Connect the 3-pins AC power cord onto the wall plug socket.

05

Turn On the wall plug's switch to start charging 'Hubot'.

06

When the 'Hubot' is fully charged, switch off the wall plug switch.

07
Connect the Tablet Unit's USB Type-C cable to the Loomo unit.

08
Turn on the Hubot's power button, and it should charge the Tablet Unit automatically.

6. SUPPORT AND WARRANTY

BY USING HUBOT PRODUCT, YOU AGREE TO BE BOUND BY THE TERMS OF THE HUBOT LIMITED WARRANTY ("WARRANTY") AS SET OUT BELOW.ALL PRODUCT(S) MUST BE RETURNED IN THEIR ORIGINAL PACKAGING, TOGETHER WITH PROOF OF PURCHASE, TO THE ADDRESS SPECIFIED BY TIMETEC. IT IS RECOMMENDED THAT YOU KEEP THE ORIGINAL PACKAGING FOR AT LEAST ONE (1) YEAR FROM THE DATE OF DELIVERY. PLEASE NOTE THAT THIS WARRANTY CONTAINS A MANDATORY ARBITRATION OF DISPUTES PROVISION THAT REQUIRES THE USE OF ARBITRATION ON AN INDIVIDUAL BASIS TO RESOLVE DISPUTES IN CERTAIN CIRCUMSTANCES, RATHER THAN JURY TRIALS OR CLASS ACTION LAWSUITS.

I. Warranty Coverage and Period of Coverage

The Hubot Limited Warranty ("Warranty") provided by TimeTec Computing Sdn Bhd, ("TimeTec") is applicable to your Hubot device, including any Hubot branded accessories provided to you with such device (collectively the "Product").

The Warranty is effective upon TimeTec's receipt of your payment in full for such Products.

We make no warranties, whether statutory, express or implied, regarding the Product except those expressly stated in this Warranty.

TimeTec warrants the Product contained in the original packaging against defects in materials and workmanship when used normally in accordance with TimeTec's published guidelines for a period of up to ONE (1) YEAR ("Warranty Period") from the delivery date of the end-user's pre-order purchase depending on the parts as specified in "Part List and Warranty Coverage". TimeTec's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications. If a defect arises during the Warranty Period, TimeTec, at its option will (1) repair the Product at no charge or (2) replace the Product with the same model.

Any Product that has either been repaired or replaced under this Warranty will be covered by the terms of this Warranty for the remaining time left in the original Warranty Period.

When a Product or part is replaced, any replacement item becomes your property and the replaced or refunded item becomes TimeTec' property.

This Warranty extends to original purchasers only.

II. What This Warranty Does Not Cover

1. Damage caused by modifications, alterations, tampering, disassembly, or improper maintenance or repairs;

2. Damage due to use, handling, storage, installation, or testing not in accordance with the TimeTec's published guidelines including but not limited to information contained in technical specifications, user manuals and service communications;

3. Acts of God, including but not limited to lightning, flood, tornado, earthquake, or hurricane;

4. Damage caused by not using the included Hubot battery and/or charger;

5. Normal wear and tear, including cosmetic damage such as scratches, dents or chips;

6. Damages or defects to Products purchased through channels not officially authorized by TimeTec;

7. Damages or defects to Products for which the valid warranty period has expired;

8. Malfunction or damage caused by abusing, misusing, or forcibly using the product beyond the normal use conditions;

9. Damages due to dismantling or repairs performed by third parties not authorized by TimeTec;

10. Damages caused by adding or replacing existing parts with components or accessories not authorized or sold by TimeTec;

11. Damages occurred during the shipping process due to non-compliance with the packaging and shipping requirements specified by TimeTec when returning the Product for service under this Warranty;

12. Damages caused by human errors (including but not limited to letting liquid into the vehicle, tire puncture, collision, marks and damage to outer parts caused by normal use, etc.)

III. Your Responsibilities

Since your Product capable to store software programs, data and other information, you should make periodic backup copies of the information contained in the storage media to protect the content and as a precaution against possible operational failures.

Before providing warranty service, TimeTec may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues and follow TimeTec's procedures for obtaining warranty service.

Before submitting your Product for warranty service, you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect and disable all security passwords.

During warranty service it is possible that the contents of the product's storage media will be lost, replaced or reformatted.

In such an event TimeTec and its agents are not responsible for any loss of software programs, data or other information contained in the storage media or any other part of the product serviced.

Following warranty service your Product or a replacement device will be returned to you as your Product was configured when originally purchased, subject to applicable updates. TimeTec may install system software updates as part of warranty service that will prevent the Product from reverting to an earlier version of the system software.

You will be responsible for reinstalling all other software programs, data and information. Recovery and reinstallation of other software programs, data and information are not covered under this Warranty.

IV. How to Obtain Warranty Service

Please access and review the online help resources at TimeTec Support Portal before seeking warranty service. If the Product is still not functioning properly after making use of these resources, please contact us at support@timeteccloud.com. TimeTec customer service representatives will help determine whether your Product requires service and, if it does, will inform you how TimeTec will provide it.

All Product(s) must be returned in their original packaging, together with proof of purchase, to the address specified by TimeTec. Original packaging is required to ensure the protection of the Product during the transportation process and to complete returns processing, so it is recommended that you keep the original packaging for at least ONE (1) YEAR from the date of delivery. It is your responsibility to retain a copy of the shipping label with the applicable tracking number signed by an agent of the carrier, as proof that the possession of the returned product shipment was transferred to the carrier.

If your claim is determined by TimeTec to be covered by this Warranty, TimeTec shall bear the shipping costs associated with return of the original Product and shipment of the replacement or repaired Product to you. Any Product that is returned to TimeTec without a valid warranty claim through support@timeteccloud.com may be rejected, returned to you at your cost or kept for 30 days for your pick-up and then disposed of in TimeTec' sole discretion.