

Time Clock

- NT8000 -



User's Manual

Version 1.0

Preface

About This Manual

Thank you for purchasing the product.

This manual explains how to install, operate and maintain our product.

No part of this publication may be reproduced or used in any form, or by any electrical or mechanical means, such as photocopying, recording, or information storage and retrieval systems, without permission in writing from the manufacturer. The material in this manual is subject to change without notice.

Regulatory Compliance Statements

FCC Warning Statement

This device 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 with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with 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.
1. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
 2. This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF

exposure requirements, avoid direct contact to the transmitting antenna during transmitting.

3. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

FCC Label Statement

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

RF Radiation Exposure Statement

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

Canadian Compliance Statement

This Class B Digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la classe B respecte les exigences du Reglement sur le material brouilleur du Canada.

European Conformity Statement

This product is in compliance with the essential requirements and all other provisions of the RED 2014/53/EU directive, the EMC 2014/30/EU directive and the Low Voltage 2014/35/EU directive.

CE RF Exposure Compliance

This device meets EU requirements (2014/53/EU) on the limitation of exposure of the general public to electromagnetic fields by way of health protection. For body-worn operation, this device has been tested and meets the ICNIRP guidelines and the European Standard EN 62209-2, for use with dedicated accessories, SAR is measured with this device at a separation of 0.5 cm to the body, while transmitting at the highest certified output power level in all frequency bands of this device. Use of other accessories which contain metals may not ensure compliance with ICNIRP exposure guidelines.

CE Mark Warning



This equipment complies with the requirements of Directive 2014/53/EU of the European Parliament and Commission from 24 May, 2014 governing Radio and Telecommunications Equipment and mutual recognition of conformity.

RoHS Statement

This device conforms to RoHS (Restriction of Hazardous Substances) European Union regulations that set maximum concentration limits on hazardous materials used in electrical and electronic equipment.

Waste electrical and electronic equipment (WEEE)



Our company has set up a policy and process to meet the EU directive 2012/19/EC concerning electronic waste disposal.

For more detailed information of the electronic waste disposal of the products you have purchased directly from us or via our resellers, you shall contact your local supplier.

Taiwan NCC Warning Statement

低功率電波輻射性電機管理辦法

第十二條：經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條：低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機需忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

注意事項：

減少電磁波影響，請妥適使用。

LED Information

The product contains LED indicator(s) or LED ring whose luminance is not harmful to human eyes during normal operation, user maintenance or prescribed service operations.

*LED information only applies to the products with LED components.

Battery Notice

1. To guarantee optimal performance, it is recommended that rechargeable batteries be replaced every year, or after 500 charging cycles are completed. It is normal for the battery to balloon or expand after one year or 500 cycles. Although it does not cause damage, it cannot be used again and must be disposed of according to the location's safe battery disposal procedures.
2. If a battery performance decreases more than 20%, the battery is at the end of its life cycle. Stop use and ensure the battery is disposed of properly.
3. The length of time that a battery lasts depends on the battery type and how the device is used. Conserve the battery life by doing the following:
 - Avoid fully uncharging the battery because this places additional strain on it. Several partial uncharges with frequent charges are better than a fully uncharged battery. Charging a partially charged battery does not cause harm to the unit.
 - Keep the battery cool. Avoid hot vehicles. For prolonged storage, keep the battery at a 40% charge level.
 - Do not leave the battery uncharged and unused for an extended period of time, the battery will wear out and the longevity of the battery will be at least half of one with frequent charges.
4. Protect battery life by not over or under charging the battery.
5. Please do not leave battery unused for long time without charging it. Despite our company's safety precautions, the battery pack may begin to change shape. If so, stop using it immediately. Please check to see if you are using a proper power adapter to charge the battery or contact your service provider for service.
6. If you cannot charge the battery after it has been idle for an extended period of time and it begins to heat up, please do not try to charge it. It may not be functional anymore.
7. Please only use the original battery from our company. Using a third party battery can damage our products. Please note that when such damage occurs, it is not covered by your warranty.

CAUTION!

- RISK OF EXPLOSION IF BATTERY IS REPLACED INCORRECTLY.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
- 如果更換不正確之電池行事會有爆炸的風險
請依製造商說明書處理用過之電池
- 如果更換不正確之電池行事會有爆炸的風險
請依製造商說明書處理用過之電池

Battery charge notice

It is important to consider temperature when the battery pack is charging. Charging is most efficient at normal room temperature or in a slightly cooler environment. It is essential that batteries are charged within the stated range of 0°C to 40°C. Charging batteries outside of the specified range could damage the batteries and shorten their life cycle.

CAUTION! Do not charge batteries at a temperature lower than 0°C. This will and make the batteries unstable and dangerous. Please use a battery temperature detecting device for a charger to ensure a safe charging temperature range.

CAUTION! To ensure the unit working properly, please keep all connectors away from the contaminants staying inside of them such as dust, grease, mud, and water. The negligence may cause the unit with no communication, short circuited, overheated and so on.

CAUTION! If the connector is damaged, please ensure the connector is being fully repaired before use the unit to avoid causing short circuited.

Storage and safety notice

Although charged batteries may be left unused for several months, their capacity may be depleted due to build up of internal resistance. If this happens, they will require recharging prior to use. Batteries may be stored at temperatures between -20°C to 60°C, however they may deplete more rapidly at higher temperatures. It is recommended to store batteries at room temperature.

** The message above only applies to the usage of the removable batteries.
For the products with non-removable batteries / without batteries, please refer to the specification of each product.*

Product Operation and Storage Notice

The product has applicable operation and storage temperature conditions. Please follow the limitation of suggested temperature conditions to avoid failure, damage or malfunction.

**For applicable temperature conditions, please refer to the specification of each product.*

Adapter Notice

1. Please do not leave the power adapter in the socket when it is not connected to the product for charging.
2. Please remove the power adapter when the battery is fully recharged.
3. The bundled power adapter that comes with the product is not meant to be used outdoors. An adapter exposed to water or rain, or a very humid environment can cause damage to both the adapter and the product.
4. Please only use the bundled power adapter or same specification of adapter to charge the product. Using the wrong power adapter can damage the product.

** The message above only applies to the product connected to the adapter.
For the products without using the adapters, please refer to the specification of each product.*

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Chapter 1 - Overview

1.1 Package

Please make sure the following contents are in the NT8000 gift box.
If something is missing or damaged, please contact your unitech representative.

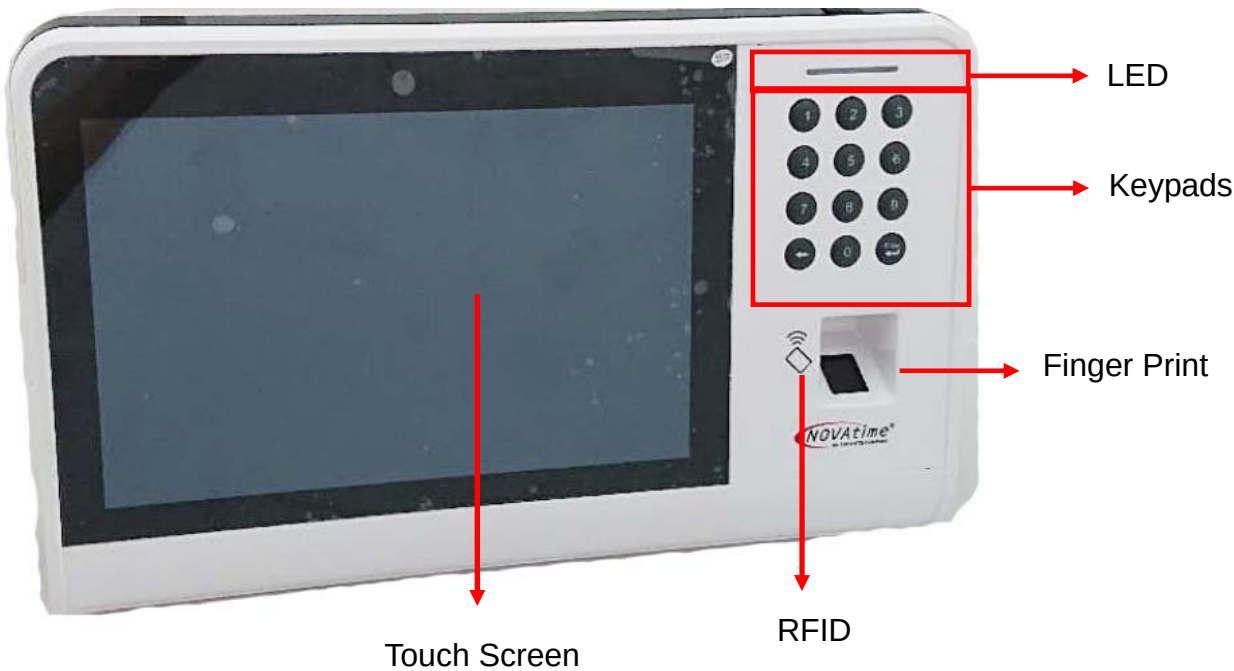
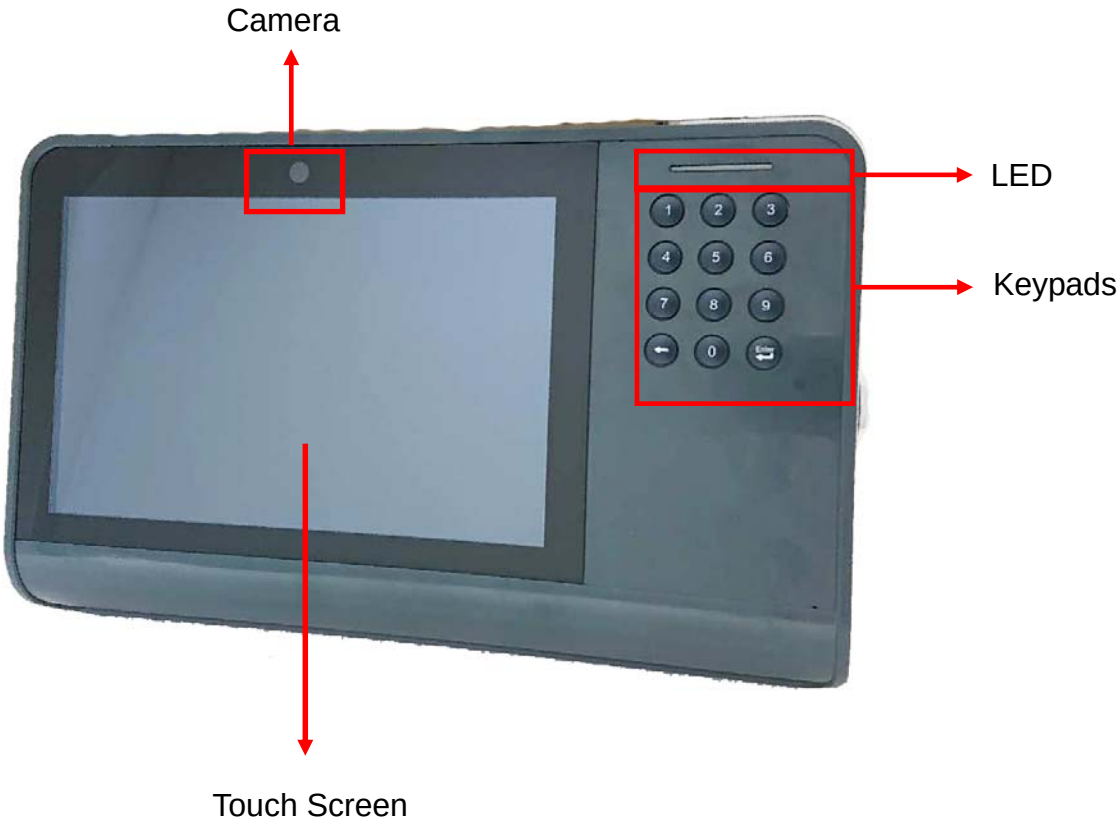
Package contents

- NT8000 Time Clock
- Power supply / Power cord
- Battery
- Terminal Blocks & keys

Optional accessories

- Wall mount kit (On wall)

1.2 Product Detail



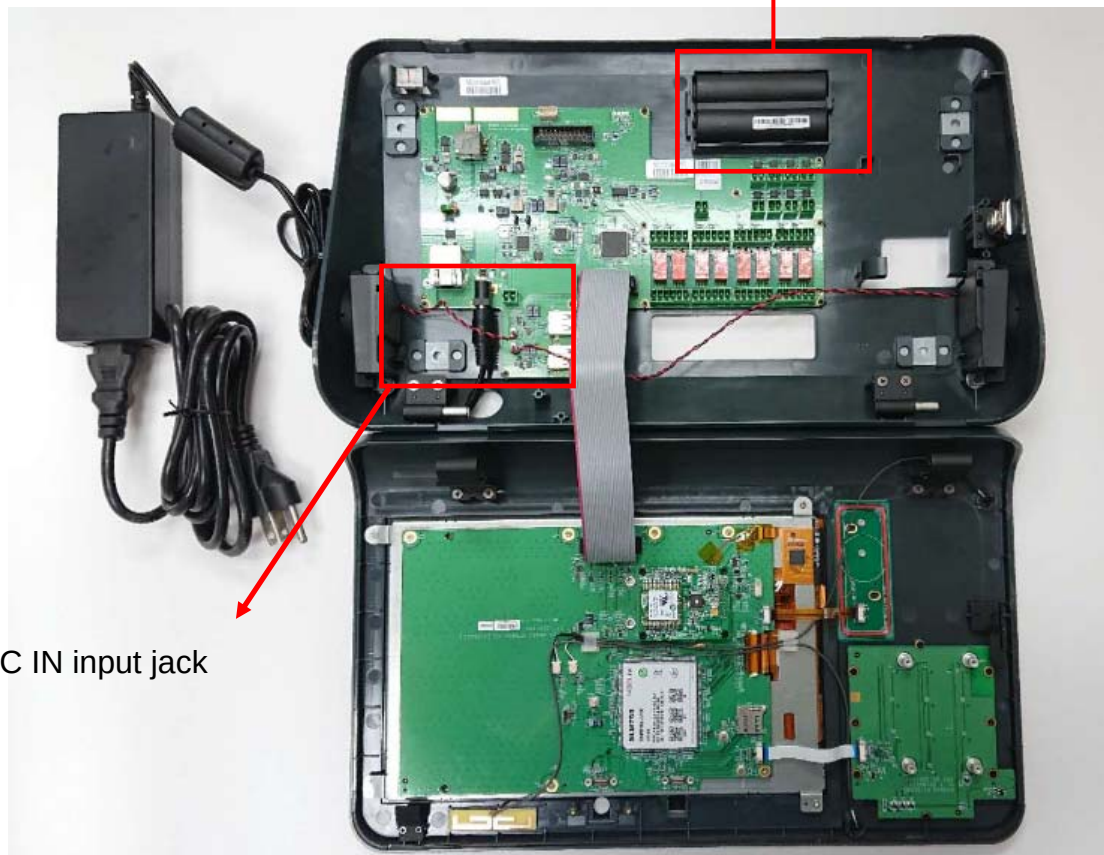


1.3 Main Board

The Main board can be access via unlocking the right side lock of the NT8000 and removing the upper and bottom cases.



Battery Pack



DC IN input jack

1.4 Specifications

Platform	
Processor	Qualcomm SDM450 CPU: Octa-core A53 (64bit) 8*1.8GHz GPU: Adreno™ 506(64bit)/600MHZ DSP: Hexagon™
eMCP	RAM: LPDDR3 32bit 3GByte ,933MHz(max.) Flash: eMMC 5.1 32GByte
OS	Android 7.1.2
Keyboard	
■ Full alpha numeric with backspace, ENTER, ESC ■ 12 Switch Keys(3x4) ■ Material: Plastic + Rubber ■ Switch force 160±50gf	
Mass Storage (Micro SD)	
■ Supports dual-voltage SD 3.0 ■ Support up to 128GB ■ Support standard SD, SDHC ■ Without card detect	
Camera	
● 5M Camera, Qualcomm certified camera ■ Portrait mount ● An option available to connect an extra USB camera in the future, mounted inside housing.	
Display (LCM)	
Pixel configurations	1920*1200(16:10)
Technology	TFT, Transmissive, Normally Black
View direction	Full viewing angel 70 degree
Backlight	WD3132E-SOT23-6
Brightness	400 cd/m ²
10.1" Type	
16.7M Color Panel	
MIPI interface	

Touch Panel	
■ Capacitive type touch panel ■ Support 5 point touch	
LED	
Indicators	Red+Green+Blue LED * 3 LED will display only one color at one incident
Keypad LED (Illuminate Keypad)	White LED * 12
Audio	
Speaker	■ (8 ohm / 1W) *2 output ■ Support for over 90 dB at 10cm distance from top side when push doorbell
MIC	■ Directivity: Omni-directional ■ Sensitivity: -42±3dB (@1K Hz) ■ Signal to Noise Ratio > 60dB (@1K Hz) ■ With echo cancellation ■ Active type ■ Optional two
Interface	
USB	■ Client * 1 ■ Host * 2
RJ45	■ Ethernet 10/100M ■ POE+ (Onboard) , power rating conformed to industrial standard.
Micro SD connector	■ Support Micro SD memory card
■ Digital input * 8 ■ RELAY * 8 ■ RS485 * 1 ■ Weigand * 8 ■ RESET Switch ■ DC-JACK, Adapter 12V/5A/60W, 1.8 feet long power cable	
RF Module	
Wireless LAN module	IEEE 802.11 a/b/g/n
Bluetooth module	Bluetooth 4.1 LE Built-in BLE with Beacon profile

RFID/LF EM module	■ Use UART connected to CPU ■ Baud rate up to 19.2Kbps ■ Support ◆ ISO-11784 ◆ ISO-11785 ■ Minimum reading distance is 3cm
Battery	
7.4V/2750mAh support 2 hours operation	
Reserve battery capacity keeping RTC data 6 days	
Power	
DC power	12V/5A/60W
POE+	RJ45 connector, Power rating conformed to industrial standard
ESD	
Contact	8KV
Air	12KV
True grounding	
Physical Appearance	
Dimension	■ L => 351mm ■ H => 213mm ■ W => 87.1mm
Weight	■ 1.75Kg
Environmental	
Operating temperature	-10°to 50° C (No Battery)
Storage temp.	-20°to 70° C
Humidity	10~90% relative humidity non-condensed
Environmental Sealing	IP 63 dust & water resisted shall be achieved (only front face)
Regulatory Approvals	
CE, FCC	

1.5 Getting Started

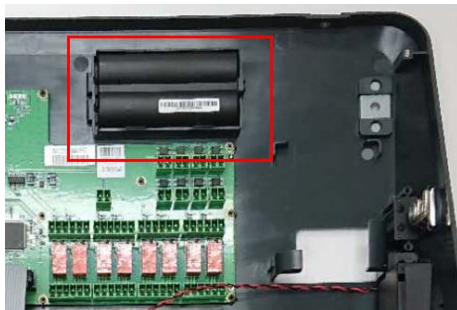
1.5.1 Connecting Power

Connect power to the NT8000 through the following instruction: Plug the Power Adapter Cable into the NT8000's DC input jack and then connect the other end of the Power Adapter into an electrical outlet.



1.5.2 Change the Battery

Please see the photo below to change the battery pack. You can also charge the battery before the first use.



1.5.3 Turning on the terminal

The NT8000 automatically powers on when the power adapter plugs into an external power source. The NT8000 welcome screen appears.



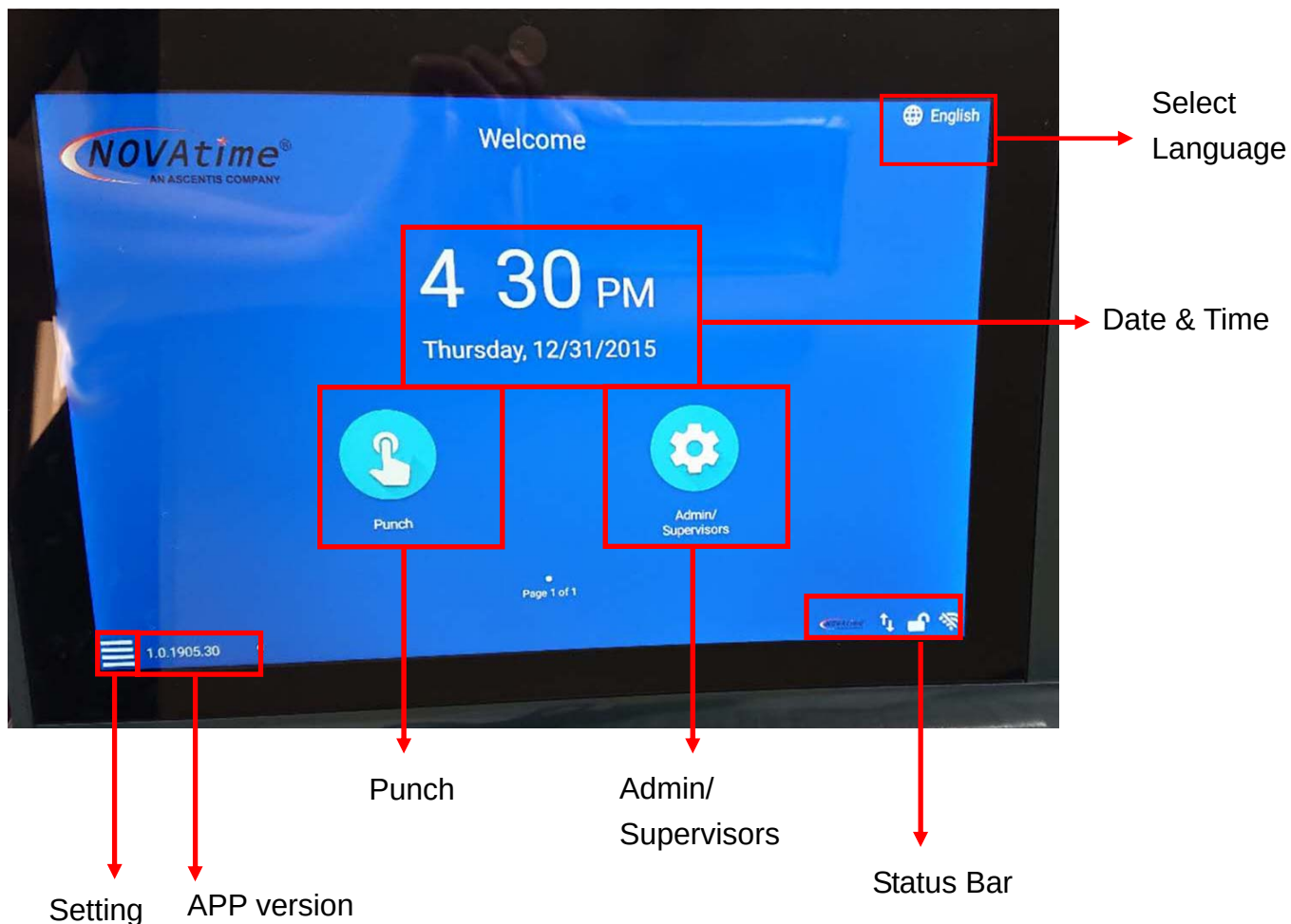
Chapter 2 – Installation & Operation

2.1 Main Menu

Here are the introductions on the main menu:

Touch panel is only applicable on the main menu for each setting.

Please use RFID card to excute NT8000.



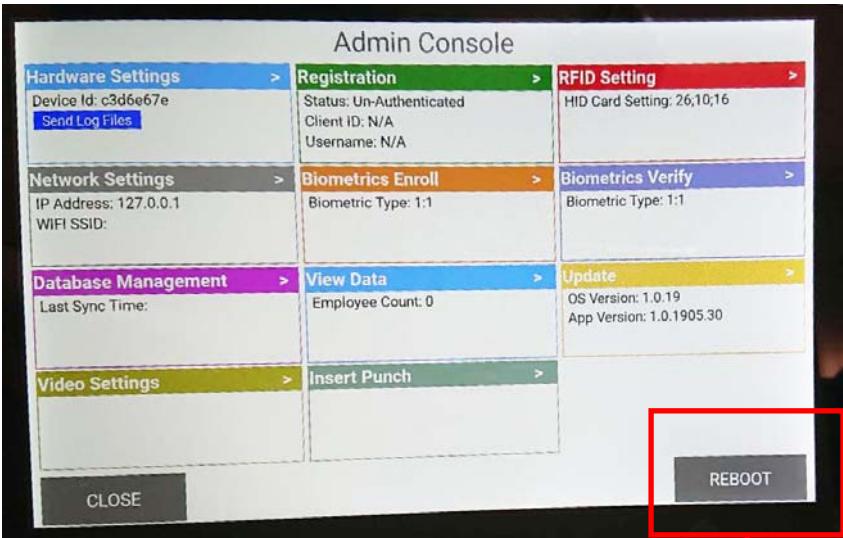
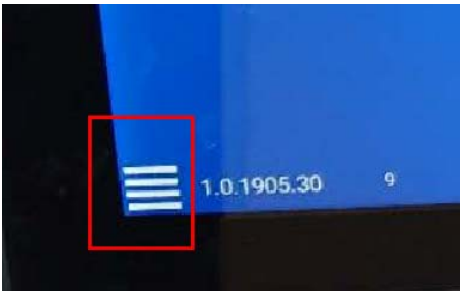
2.2 Language setting

To change the language, please tap the top right corner of the screen to choose the language.



2.3 Setting

To enter the admin console, please tap the bottom left corner of the screen to enter the setting section.



Reboot the system

2.4 Hardware Reset

To perform a hardware reset, press the Hardware Reset button with a stylus or a sharp object for about 5 seconds.

Caution: If you perform the hardware reset, there is a possibility that the settings you have done will be lost!

