

User Manual

NT3

V02

Mar. 30, 2020



ATrack Technology Inc.

8F., No. 13, Ln. 120, Sec. 1, Neihu Rd.,
Neihu Dist., Taipei City 11493, Taiwan
Tel: +886-2-27975852
Fax: +886-2-27974030
<http://www.atrack.com.tw>

Table of Contents

1. Notification.....	3
1.1. Disclaimer.....	3
1.2. Copyright.....	3
1.3. Warning.....	3
1.4. Document Amendments	3
2. Installation	4
2.1. Package Content	4
2.2. How to open NT3's case	4
3. Hardware Features.....	5
3.1. Built-in (SOS) Push Button.....	5
3.2. Configuration Port and Setting	5
3.3. Buzzer Operation.....	6
3.4. Power Supply	6
3.5. SIM Card Installation	6
3.6. LED Indication	7
4. Configuration	8
4.1. Connecting a Device Using HyperTerminal	8

1. Notification

1.1. Disclaimer

This document, and all other related products, including device, firmware, and software, are exclusively developed by ATrack Technology Inc.

Due to the continuous developments and improvements of device functionalities, changes in the protocol, specification, and firmware functions are subjects to change without notice. ATrack Technology Inc. reserves the right to modify all documentations based on its own timelines. Document modification notices will be released to ATrack Technology Inc.'s customers upon completion.

ATrack Technology Inc. products are not intended to be used as life support or rescue equipment. ATrack Technology Inc. is not liable for any loss or injury caused by using or referencing to any of its products. Any possible means of using or integrating ATrack Technology Inc. products shall be avoided.

1.2. Copyright

© ATrack Technology Inc. All Rights Reserved

ATrack Technology Inc. holds all parts of intellectual rights applicable in the copyright laws in all the countries. Any and all contents of this document shall not be exposed, delivered, and/or disclosed to non-authorized 3rd party without any form of approval and consent from ATrack Technology Inc. Any form of, including but not limited to, verbal, duplicate, or internet sharing, of releasing or exposing information to an unauthorized party shall be prohibited. ATrack Technology Inc. reserves the rights of litigation in the violation of copyright laws.

1.3. Warning

Connecting of the input wires can be hazardous to both the installer and your vehicle's electrical system if not done by an inexperienced installer. This document assumes you are aware of the inherent dangers of working in and around a vehicle and have qualified understanding of electrical behaviors.

1.4. Document Amendments

Rev.	Pub. Date	Comments	F/W Version
V02	Mar. 30, 2020	<ul style="list-style-type: none"> Deleted Introduction Chapter Reformed page layout 	
V01	Sep. 27, 2019	<ul style="list-style-type: none"> Initial release 	

Note: For the F/W Version column with specific firmware number, it means the modification(s) on the Comments column is done on this corresponding firmware version (and the versions thereafter). Please make sure you upgrade the firmware to the specified version before applying any changes made in this protocol.

2. Installation

2.1. Package Content

Check if you received the following items in the package:



1x NT3 Device



1x USB Configuration Cable

2.2. How to open NT3's case

Hold NT3 firmly on your left hand and pull the plastic band to open NT3's case as below steps.



Note: Remember to remove the plastic band and the cigar plug plastic wrap before using it. Also, do not try to open the cigar plug as it will damage the device.

3. Hardware Features

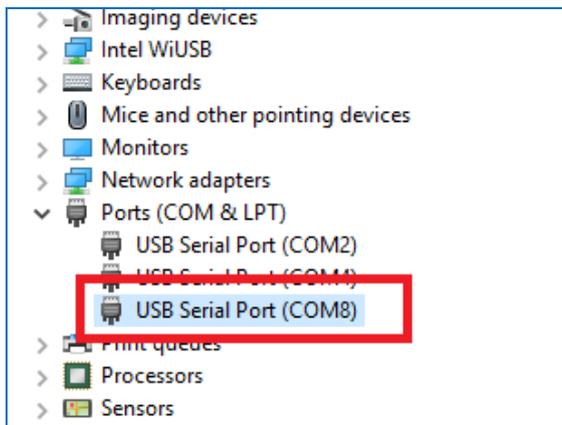
3.1. Built-in (SOS) Push Button

A push button is embedded on the side case. This button works as an SOS signaling in emergency situation.



3.2. Configuration Port and Setting

The configuration cable is used to connect to the socket inside the NT3 and PC for configuring parameters and firmware upgrade. When the configuration cable is connect to your PC/laptop, a "USB Serial Port" will show up in the device manager. This will be used as serial port to communicate with NT3. Please note down the COM port in order to select it correctly when using a terminal emulator.



Next, connect the 4-pin board-to-board connector as shown below:



Note that the black wire (GND) is on the side of GPS patch-type antenna, and yellow wire is on the side of polar-type antenna. Once it is done, please open a terminal emulator with serial port as noted before with setting of 57600-N-8-1 and line characters of "\r\n" (or 0x0D 0x0A).

3.3. Buzzer Operation

The internal buzzer of **NT3** can be configured by any events or triggered by a remote server. Please refer to **ATrack Protocol Document** for details.

When a device is configured and plugged into a cigarette lighter socket, it performs some basic function tests. You can simply verify whether it is installed properly or not via buzzer indication.

Please refer to the following table for details:

Buzzer Indication	Description
Short Beep 1 time	Device Power ON
Short Beep 3 times	GSM/GPRS Connected
Short Beep 4 times	GPS Fix
Long Beep 1 time	G-Sensor Calibrated

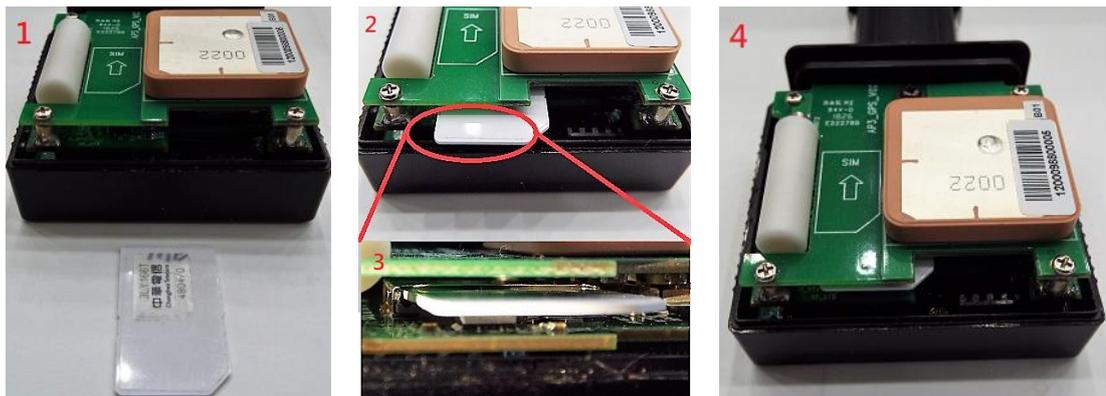
3.4. Power Supply

The NT3 device is connected to the cigarette lighter socket of a vehicle and draws power from the socket. No additional power cabling is required for the operation.

3.5. SIM Card Installation

NT3 supports SIM cards with 1.8V (ISO/IEC 7816-3 class C) or 3V (ISO/IEC 7816-3 class B) operating voltages.

To install SIM, remove the cover. Find the SIM card socket. Align the orientation. Push it in.



3.6. LED Indication

The following table describes the LED states:

LED	Color	Indication	Description
GPS	Blue	Solid OFF	GPS Power OFF
		Blinking Every 1 Second	GPS Not Fix
		Solid ON	GPS Location Fix
GSM	Red	Solid OFF	GSM Power OFF
		Blinking Every 1 Second	GSM No Signal
		Blinking Every 2 Seconds	GSM Registered
		Blinking Twice Every 2 Seconds	GPRS Connected
		Solid On	Connected to Server

4. Configuration

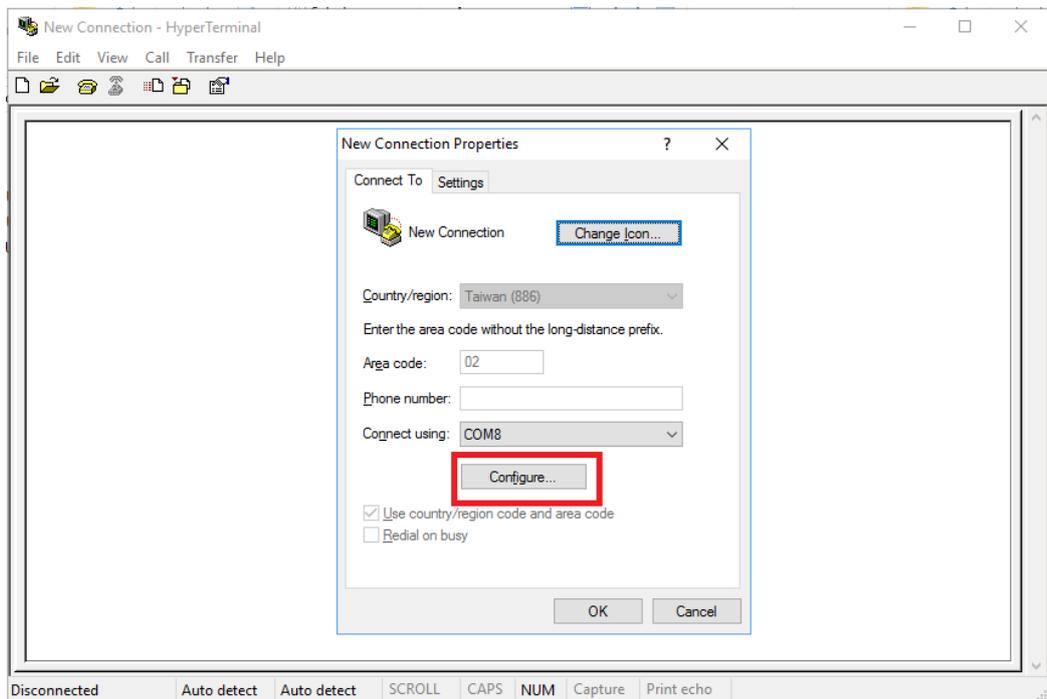
You can explore many of NT3’s great features through AT commands. The commands can be sent to NT3 via configuration cable, SMS or cellular network (e.g. GPRS/CDMA/UMTS).

4.1. Connecting a Device Using HyperTerminal

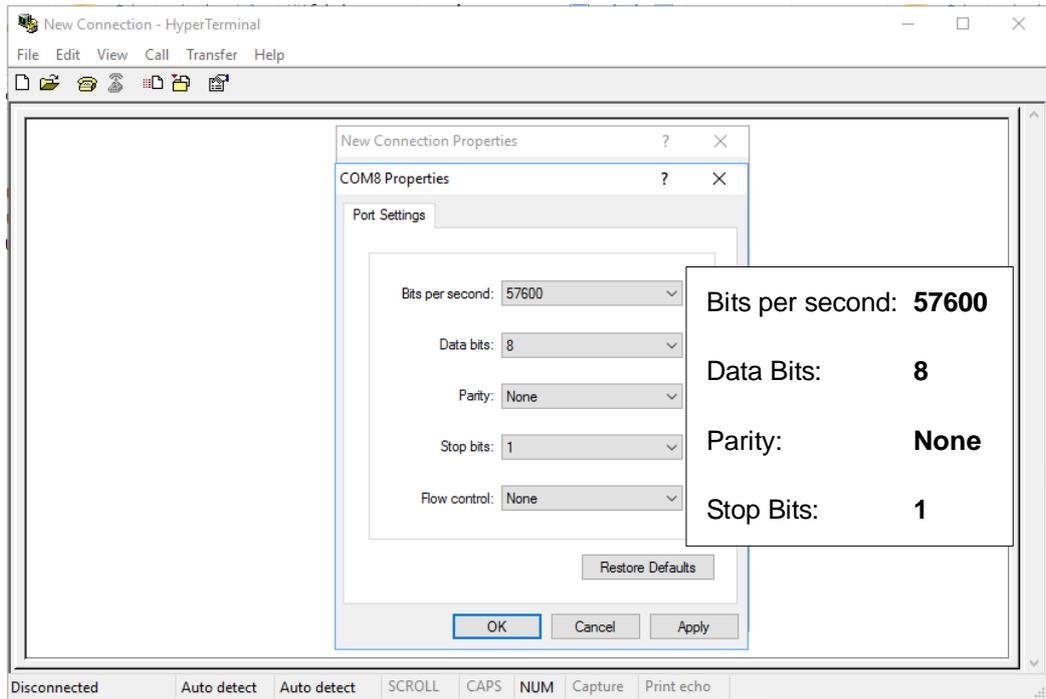
The following example shows how to connect **NT3** through Hyper Terminal.

You may use other popular terminal emulators such as **Putty** or **Tera Term Pro** to establish a console session with **NT3**.

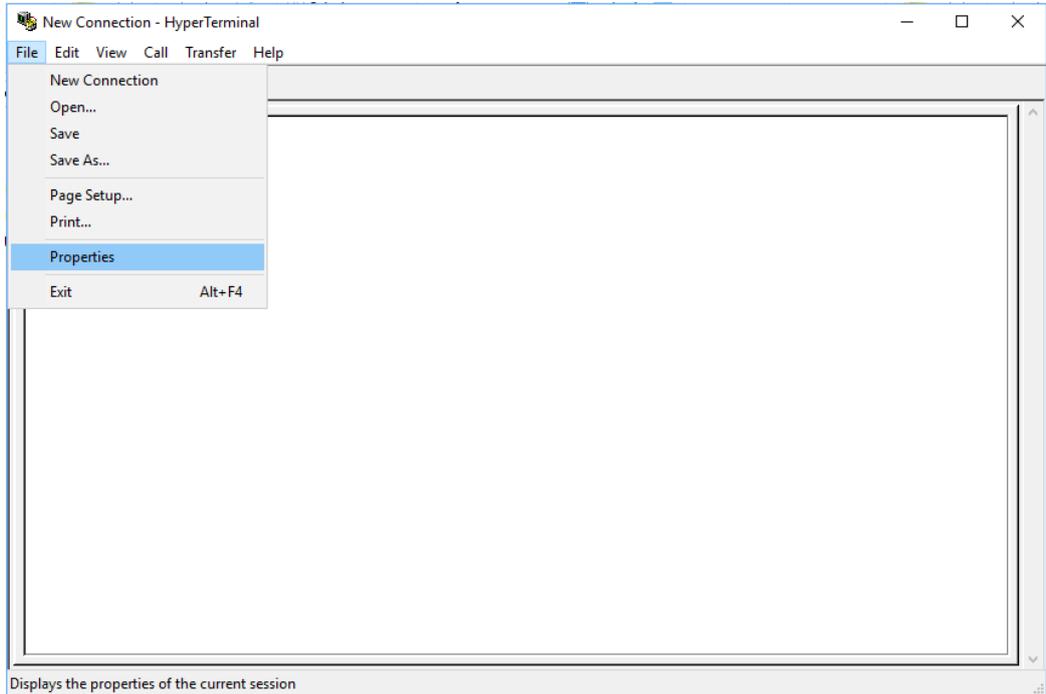
1. Run HyperTerminal and select the correct COM port and click on the [**Configure...**] button.



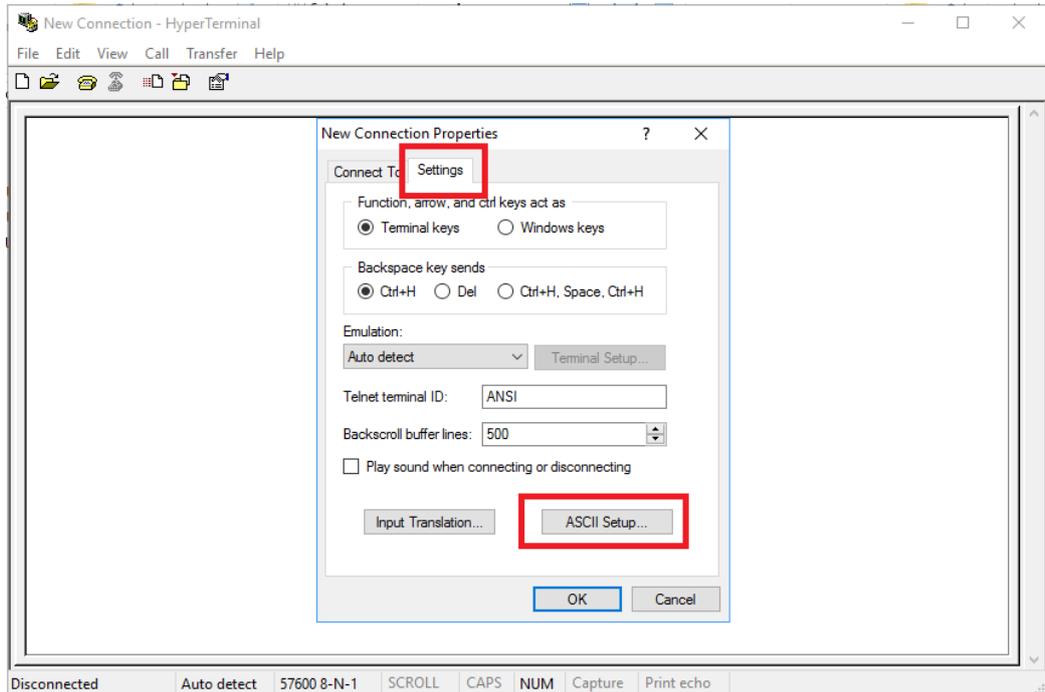
- The Port Settings should be as follows. Click on the [OK] button to close the **Properties** window.



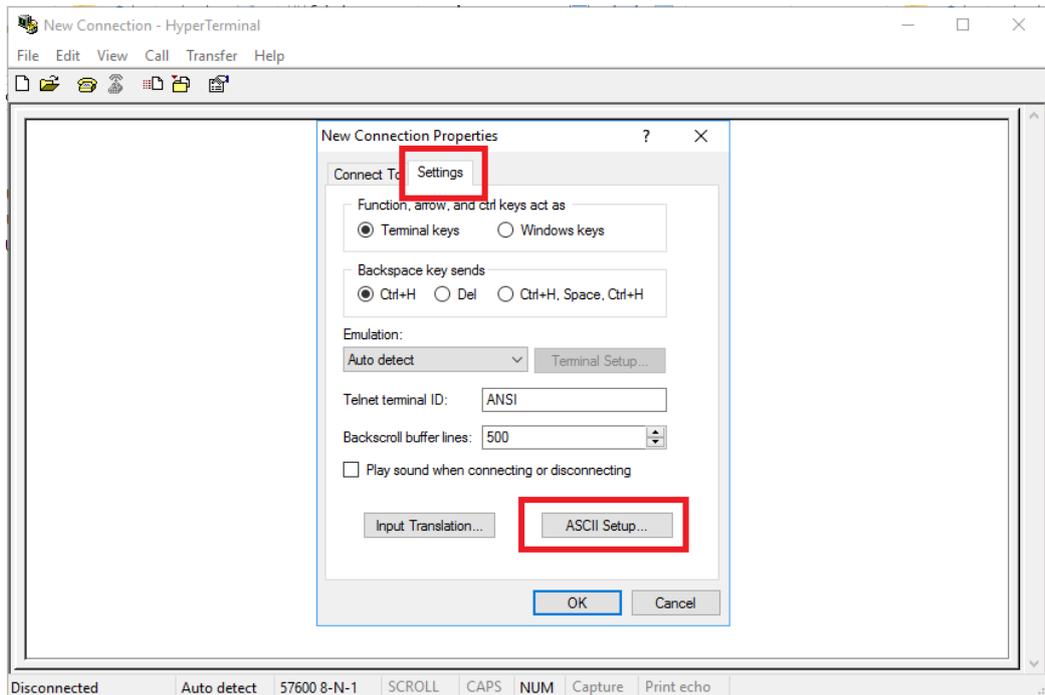
- Click on [File] → [Properties].



- Click on the **[Settings]** tab and click on the **[ASCII Setup...]** button.



- Check the following options and click on the **[OK]** button.



- Power up the device. Now you can send the **AT commands** to query the device. Please refer to the **ATrack Protocol Document** for details.

