How to use H1 well

NIU

BMS_Info DB_Info N1S_DB LCU_Info

V2_ECU V3_ECU FOC_Info LOCK_Info

BCS_Info BCS_BMS1 BCS_BMS2 FC_Info

Page 1- Info(Information)

BMS_UP BCS_UP DB_UP LCU_UP

V2_ECU_UP V3_OTA RE_V3 FOC_UP

S_FOC_UP LOCK_UP FC_UP Module_UP

CHANGES

ECU_UP → V2_ECU_UP

V3_UP → V3_OTA

BMS_Log Comm_Log V_Log Comm_Data

Set_Clock SET_UTC+9 Mi/Km VOLTAGE

LOCK_TEST BMS_29A Setting USB

Page 3- About LOG and Setting

NIU
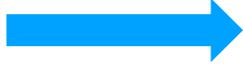
Comm_Data → ==Read== communication data reply rate between different electronic parts

Comm_Log → ==Record and save logs of== communication data between different electronic parts

Terminology

ECU	Electronic Control Unit	LCU	Light Control Unit
V2 ECU	2nd Version ECU 2G	DIS	Display
V3 ECU	3nd Version LTE+ u-blox GPS	DB	Dashboard
Re_V3	Reboot V3 ECU	LOCK	Lock Controller Unit
BMS	Battery Management System	COMM	Communication
BCS	Battery Control System	VIN	Vehicle Identification Number
OTA	Over The Air Update	SN	Serial Number
FOC	Field Oriented Controller	LOG	Logging History
S_FOC	Sharing FOC Motor Controller	FC	Fast Charger
IAP	In-Application Programming	Lock Test	Test all the lock Commands
INFO	Information		
ISP	In-System Programming		
UP	Update		
BIN	Binary Format File		
OS	Operating System		

H1 Handheld Diagnostic Device

H1 Handheld Diagnostic Device is designed to use as a tool for NIU electric scooters Maintenance, features including:

- Check RS485 Bus Communication between ECU<->Other Electronic components
- Vehicle Data Analysis
- Read BMS Data
- Read ECU Data
- ECU Update
- Read LCU Data
- LCU Update
- Read DB Data
- DB Update
- Read FOC Data
- FOC Update
- Set Time(Dashboard Digital Clock)
- Check Battery Charging History

How to Operation:
H1 can be operated by **pressing physical buttons**, but also features can also be selected by **touching the screen**.

Touch Screen

∧ → **Up**

‹ ○ › → **Left/OK/Right**

∨ → **Down**

↩ → **Return**

Charging
Fully charged
Constant: USB Connection
Flashing: Sleep Mode

USB port for Diagnostic Cable

MICRO SD

Power

USB port for PC connection

Memory Card Slot(Micro SD)
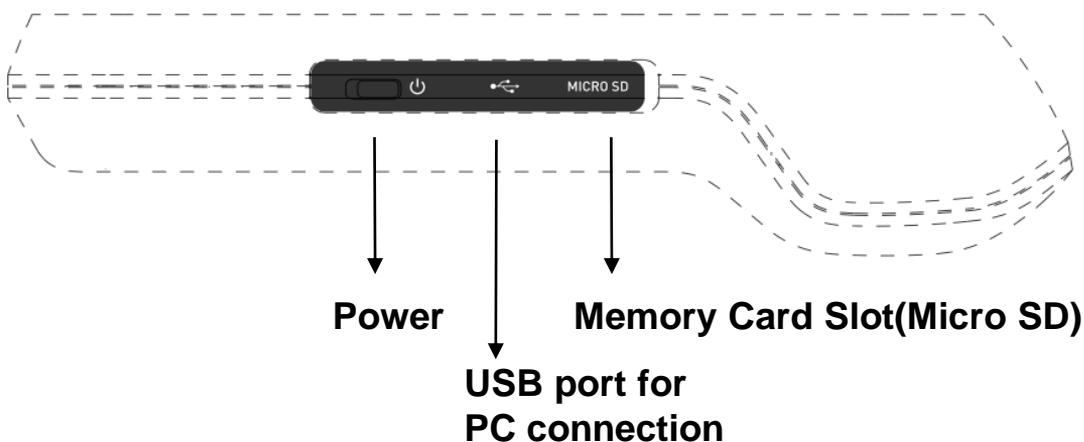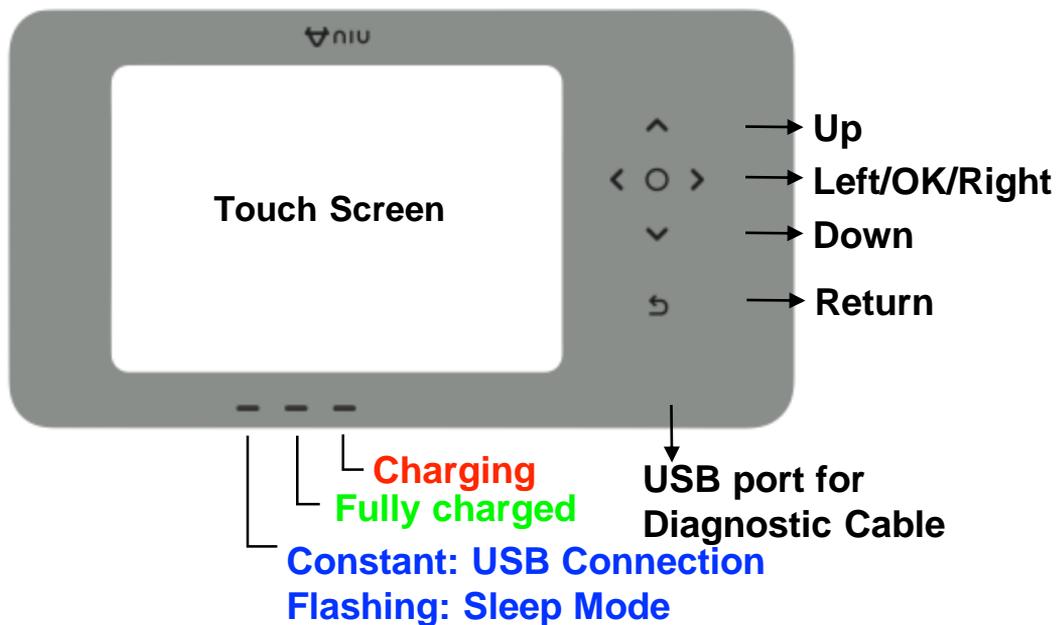
Before Starting

Each H1 Pack should contain the following items:

1* **H1 Device**

1* **USB Cable**(H1 to PC connection)

1* **M1 Diagnostic Cable**

1* **N1S Diagnostic Cable**

1* **Micro SD Memory Card**(inserted)

Please make sure H1 is fully charged and the Memory Card is inserted before use
note: H1 will be automatically charged as soon as the device is connected to a vehicle or a battery
Make sure the Memory Card is inserted into H1 then
Connect the M1/N1 Diagnostic cable to H1

NIU

Starting H1

Switch the Power ON to enter **Main Pages**
note: H1 will go into Energy saving mode
after a while, please press Return key ⟳
to continue
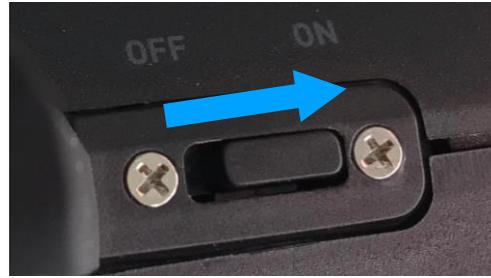
First Main Page(Read Data Functions)

14:55

BMS_Info   ECU_Info   DB_Info   LCU_Info

FOC_Info

Second Main Page(Update Functions)

14:55

ECU_UP   LCU_UP   DB_UP   BMS_29A

BMS_Log   FOC_UP   Set_Clock

Third Main Page(Other Functions)

14:58

Comm_Data   Comm_Log   USB   Setting

NIU

How to Read BMS Information

Step 1: Press ⚡ (BMS_Info) to Read BMS Information

14:55

BMS_Info ECU_Info DB_Info LCU_Info

FOC_Info

• ∘ ∘

Step 2:
If the battery is connected on the scooter, connect the cable to the Charging port.
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
Or H1 can also be connected to Battery Pack Directly
then Press the Screen to Continue and Keep the scooter power is turned OFF during process

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

You Can Also Connect H1 To Battery Pack Directly

Press The Screen To Continue

↰

Step 3:
BMS information will be shown as below:

BMS_STATE : No_Load   ONLINE

Soft_Ver: 1.15   Hard_Ver: 1.10   BMS_SN: BN1GPM2B22200395

Cycle: 0001   Capacity: 29000mAh   SOC: 036 %

Voltage: 61600mV Charge_C: 00000mA   DisCharge_C: 00200mA

T1: 021°C   T2: 021°C   T3: 021°C   T4: 021°C

3.63 3.63 3.63 3.63 3.63 3.62 3.62 3.62 3.62 3.62 3.62 3.62

3.62 3.62 3.62 3.62 3.62

NIU
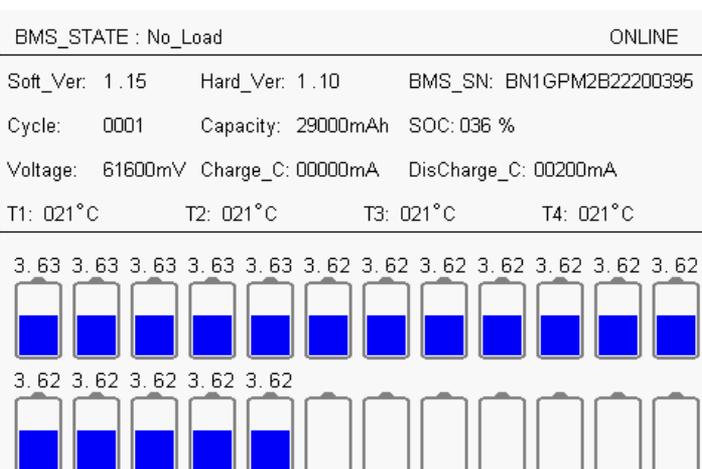
How to Read BMS Information

BMS_STATE: No Load

No Load	currently not in use
Discharging:	currently discharging
Charging:	currently charging
Over-Charged:	Battery Overcharged, please check Total Voltage and Voltage of Cells
Over-Discharged:	Battery Over Discharged, please check Total Voltage and Voltage of Cells
Charging Over-Current	Charging current is High
Discharging Over-Current	Discharging current is High
Over Temperature	Battery temperature is High
Temperature Low	Battery temperature is Low
Other Warning	Open Circuit detected/ Difference between Cell Voltages is higher than 0.3V or other
Short Circuit	Battery short circuit
Water Detected	Moisture inside battery pack detected
BMS MOS Failure	BMS MOS Malfunction, BMS Failed
ONLINE/OFFLINE	BMS Functioning, OFFLINE(BMS Failure)
Soft_Ver: 1.15	Software Version: 1.15
Har_Ver: 1.10	Hardware Version: 1.10
BMS_SN: BN1GPM2B22200395	Battery Serial Number: BN1GPM2B22200395
Cycle: 0001	Number of Cycles Charged: 0001 Cycles
Capacity: 29000mAh	Battery Total Capacity: 29Ah
SOC: 036%	Remaining Battery Level: 36%
Voltage: 61600mV	Battery Total Voltage: 61.6V
Charge_C: 00000mA	Charging Current: 0mAh(real time)
DisCharge_C: 00200mA	Discharging Current: 200mAh(real time)
T1: 021°C	Temperature Sensor 1: 21°C
T2: 021°C	Temperature Sensor 2: 21°C
T3: 021°C	Temperature Sensor 3: 21°C
T4: 021°C	Temperature Sensor 4: 21°C
4 temperature sensors should give similar readings	
Individual Battery Cell Voltages	Individual Battery Cell Voltages: 3.62V/3.63V

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How to Read V2 ECU Information(Applied to N1S/M1S/M+/Upro)

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press [icon] to Read V2 ECU Information

21: 39

BMS_Info	V2_ECU	DB_Info	LCU_Info
FOC_Info	VOLTAGE	V3_ECU	RE_V3
N1S_DB	LOCK_Info	BCS_Info	

● · · ·

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue and Keep the scooter power is turned OFF during

[icon]

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue

Step 3:
ECU Data information will be shown as below:

Hard_Version:	V2.0
Soft_Version:	TRA01V08
ECU_Battery_Voltage:	310
ECU_SN:	MASH3G6R319F46H5
IMEI:	862723033190327
GPRS_Version:	NEO6M590R2V024190515V12240214OK
SIM_Number:	89430103216222026446

Hardware Version: V2.0

Software Version: TRA01V08

ECU Battery Voltage: 3.1V

ECU SN: ECU Serial Number

IMEI: 862723033190327

GPRS Module version number

SIM Card Number

GPRS Signal Strength

How to Read V3 ECU Information (Applied to N-GT/N-Pro/N Sharing scooters)

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press [V3_ECU icon] to Read V3 ECU Information

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue and Keep the scooter power is turned OFF during process

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue

Step 3:
ECU Data information will be shown as below:

Hard_Version:	V2.0
Soft_Version:	TRA01V08
ECU_Battery_Voltage:	310
ECU_SN:	MASH3G6R319F46H5
IMEI:	862723033190327
GPRS_Version:	NEO6M590R2V024190515V12240214OK
SIM_Number:	89430103216222026446

Hardware Version: V2.0

Software Version: TRA01V08

ECU Battery Voltage: 3.1V

ECU SN: ECU Serial Number

IMEI: 862723033190327

GPRS Module version number

SIM Card Number

GPRS Signal Strength

![NIU]

How to Read Display(DB) Information

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press ⊙ to Read DB Information (This functions only applies to M and N scooters homologated under EEC 168/2013)
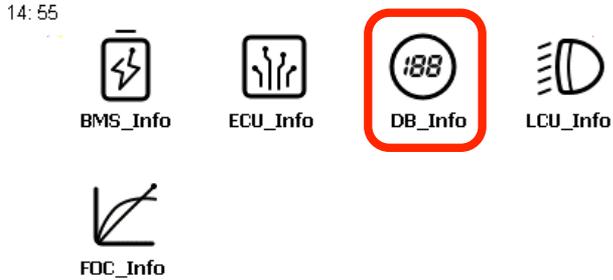
Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue

Step 3:
Turn Power to ON by turning the key to the right
then Press the Screen to Continue

Please Turn The Power ON

Press The Screen To Continue

Step 4: DB Software Version will be shown as below
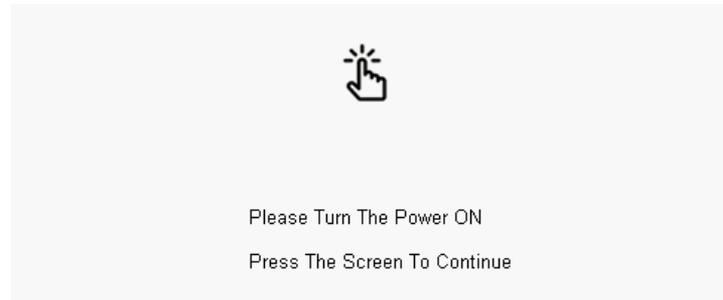
DB Software Version: MHC01A03

How to Read Display(N1S DB) Information (only for scooters produced before July 2017)

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press ⬚ to Read N1S DB Information (only for scooters produced before July 2017)

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue

Step 3:
Turn Power to ON by turning the key to the right
then Press the Screen to Continue

Please Turn The Power ON

Press The Screen To Continue

Step 4: DB Software Version will be shown as below:

DB Software Version: MHC01A03

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How to Read Lock Controller (Lock)Information

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press [icon] to Read the lock controller information.(Only for sharing scooters use)

LOCK_Info
21: 39
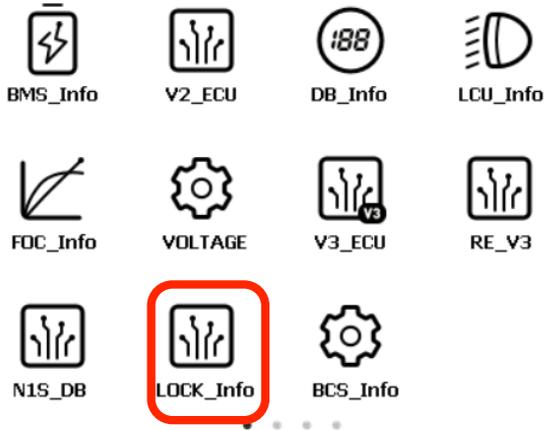
BMS_Info	V2_ECU	DB_Info	LCU_Info
FOC_Info	VOLTAGE	V3_ECU	RE_V3
N1S_DB	LOCK_Info	BCS_Info	

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue
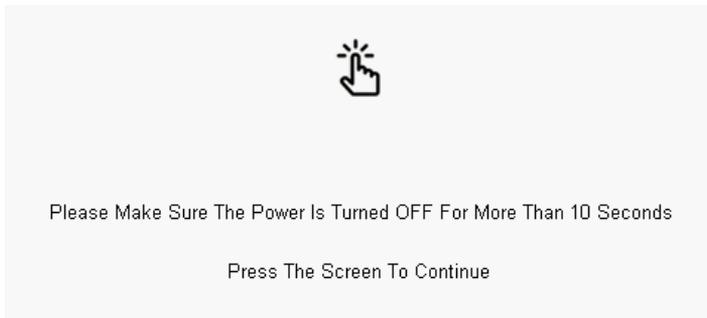
Step 3: Lock Controller information will be shown as below

LOCK_Control Software_Version: NRF01V20

Press The RETURN Key , Back To The Main Interface

How to Read BCS(Battery Control System)Information

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press [BCS_Info icon] to Read the BCS information.(Only for scooters use dual batteries)

21: 39

BMS_Info	V2_ECU	DB_Info	LCU_Info
FOC_Info	VOLTAGE	V3_ECU	RE_V3
N1S_DB	LOCK_Info	**BCS_Info**	
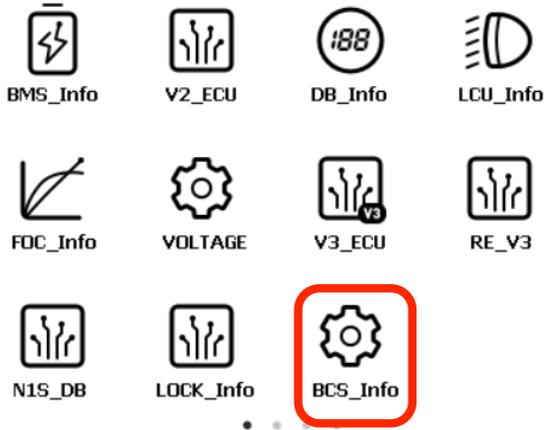
Step 2:
H1 is getting BCS information. Please wait for 10 seconds!

H1 Is Geting BCS Information,Plaease Wait For 10 Seconds !

Step 3: BCS information will be shown as below

Soft_Version: NXM01V12

Hard_Version: NXM01V15

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How to Read Fast Charger(FC_Info)Information

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press   to Read the BCS information.(Only for scooters use dual batteries)

Step 2:
H1 is getting fast charger information. Please wait for 10 seconds!

Step 3: Fast Charger information will be shown as below

How to Read Light Control Unit(LCU) Information

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press ![LCU_Info icon] to Read DB Information (This functions only applies to N scooters homologated under EEC 168/2013)

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Step 3:
Turn Power to ON by turning the key to the right
then Press the Screen to Continue

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How to read FOC Motor Controller Information

Step 1:
Connect the battery to the scooter and connect H1 to the Charging port
Press [icon] to Read FOC Information

FOC_Info

14:55

BMS_Info   ECU_Info   DB_Info   LCU_Info

FOC_Info

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Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue

Step 3:
Turn Power to ON by turning the key to the right

Please Turn The Power ON

Press The Screen To Continue

How to read FOC Motor Controller Information

Step 4: FOC Software/Hardware Version will be shown as below:

```
FOC Software Version:    0.0
FOC Software ID:         0000
FOC Software Mode:       00000000
FOC Software SN:         MN146B2B23300253
FOC Rated Voltage(V):    0060
FOC Min Voltage(V):      0052
FOC Max Voltage(V):      0075
FOC Rated Current(A):    00000040
FOC State:               Side Stand Switch ON
                         Motor Hall Malfunction
```

Table of FOC State

Normal Running	正常行驶(前行/倒车)
FOC CONTROLLER FAILURE	驱动电源故障
Enable/Disable Ride	允许/禁止骑行
MOSFIT Malfunction	功率管故障
Voltage High	过压
EBS in Active	EBS 状态
Over Current	过流
Voltage Low	欠压
Brake Switch ON	刹车断电状态
Phases Missing	缺相
FOC Controller Over Temperatured	控制器过温
Locked	锁车状态
Motor Hall Malfunction	HALL 故障
Twist Grip Malfuction	转把故障
Speed Locked	速度锁定状态
Locked Rotor	堵转

NIU

How to Update V2_ECU Program (Applied to N1S/M1S/M+/Upro)

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press ![ECU_UP] to Update V2 ECU Software
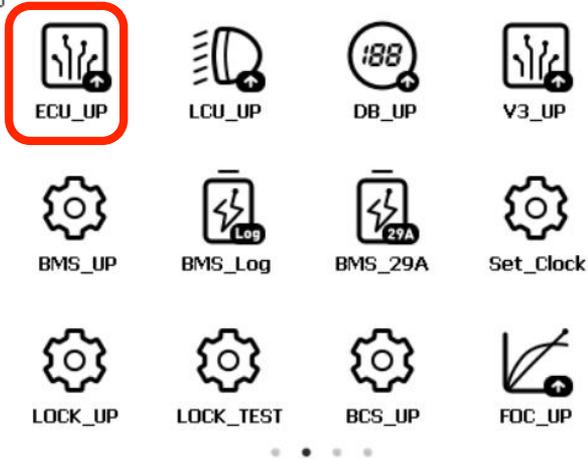
Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue
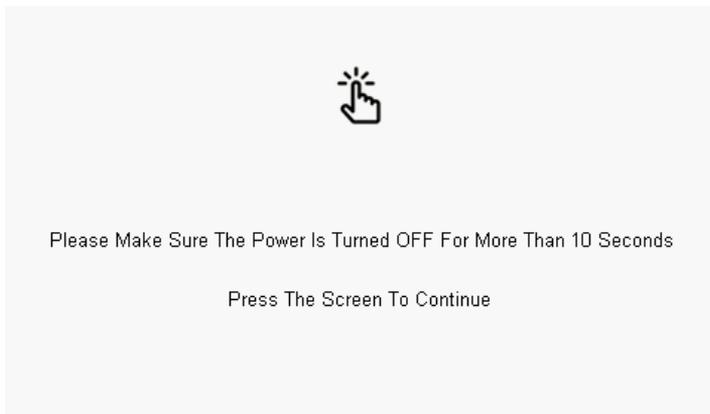
Step 3:
ECU softwares will be shown as below(see <How to import files into H1>):
Select correct ECU program .BIN file by pressing on the file name to Continue

ECUV08.BIN

How to Update V2 ECU Program

Step 4: Update process will start automatically and press Return key after completion

```
Success To Open .bin File
ECU Restarting
ECU Restarted
Ready To Update
NO. 41    Packet File Has Been Sent To Device
NO. 41    Packet Has Been Received By Device
Last Data Packet Is Sending,Please Wait 10 Seconds
Success To Send CRC Packet



Success To Update The ECU

Press The RETURN Key , Back To The Main Interface
```

Incase of update failed, please restart both the scooter and H1 and try again.

```
Success To Open .bin File
ECU Failed To Enter Slaver_Mode
```

nıu

How to Update V3_ECU Program (Applied to NGT-Npro-N Sharing)

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press   to V3-OTA to update Software

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Step 3:
ECU softwares will be shown as below(see <How to import files into H1>):
Select correct ECU program .BIN file by pressing on the file name to Continue

How to Update LCU Program

Step 1: Press to Update LCU Software(This functions only applies to N scooters homologated under EEC 168/2013)

NIU
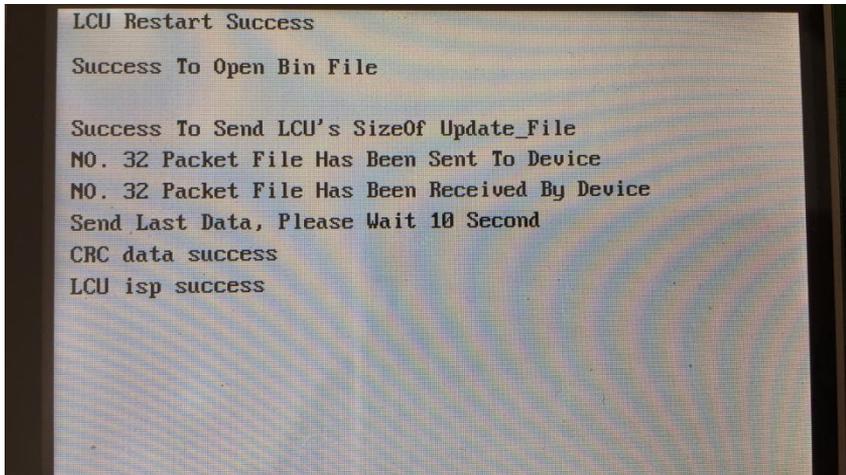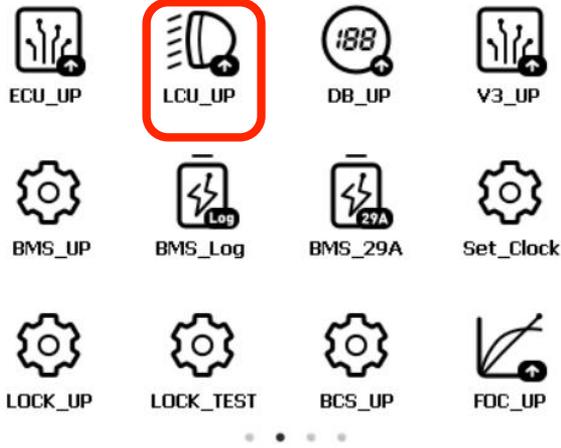
How to Update Display(DB) Program

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press to Update LCU Software

21:40
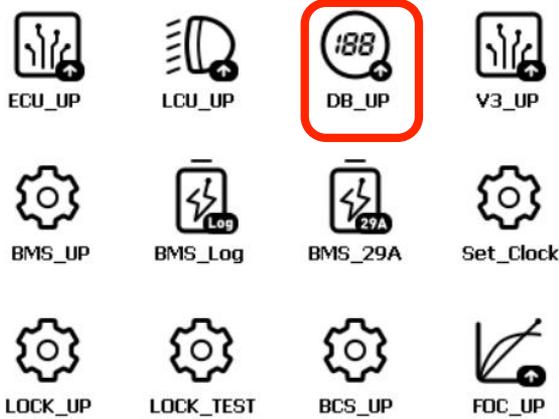
ECU_UP   LCU_UP   **DB_UP**   V3_UP

BMS_UP   BMS_Log   BMS_29A   Set_Clock

LOCK_UP   LOCK_TEST   BCS_UP   FOC_UP

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue
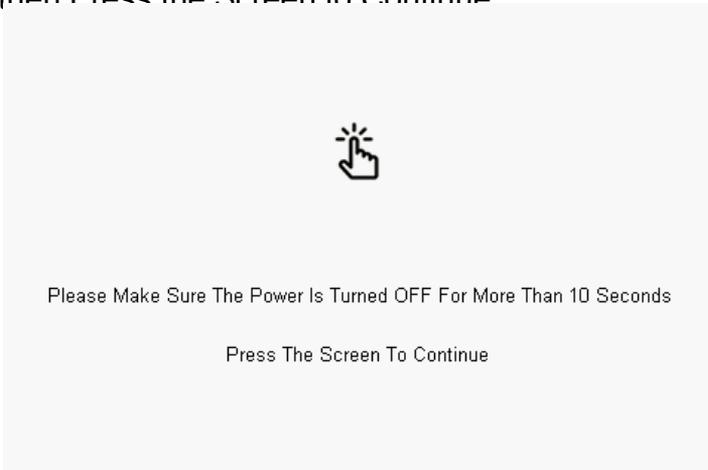
Step 3:
the following information will show when it's ready to update
Turn the Power ON then Press the Screen to Continue

Please Turn The Power ON

Press The Screen To Continue
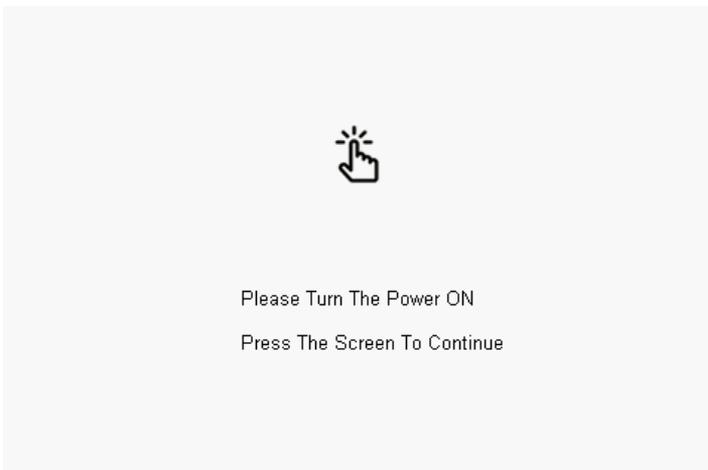
How to Update Display(DB) Program

Step 4:
DB softwares will be shown as below(see <How to import files into H1>):
Select correct DB program .BIN file by pressing on the file name to Continue

DISA03.BIN

Step 5: Update process will start automatically and New Display Software Version will be displayed.(file name will be shown differently to Software_Version)

```
Success To Open The BIN File
Success To Restart Display

Success To Send SizeOfBinFile Packet
NO.  35    Packet File Has Been Sent To Device
NO.  35    Packet Has Been Received By Device
Last Data Packet Is Sending,Please Wait 10 Seconds
Success To Send CRC Packet

Success To Update The Display
Wait A Moment , Querying New Version Number

NEW Display Software_Version:        MHC01A05

Press The RETURN Key , Back To The Main Interface
```

How to Read Light Control Unit(LCU) Information

Step 4: LCU Software/Hardware Version will be shown as below:

LCU Software Version: NCB01A03

LCU Hardware Version: HD_V1.30

LCU MPU6050 has been calibrated

niu

How to update N scooter 60V29Ah battery setting

Step 1:
Connect H1 to the N scooter 60V29Ah battery pack(only for scooters produced before July 2017)

Press BMS_29A to Update N scooter 60V29Ah battery setting

14: 55

| ECU_UP | LCU_UP | DB_UP | BMS_29A |

| BMS_Log | FOC_UP | Set_Clock |

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Step 2: Confirm "The New BMS Current Protection Value: 029000mA"

```
Querying BMS SN , Please Wait A Moment
BMS SN: BN1GPM2B22200395
Querying BMS Current Protection Value......
Query BMS Current Protection Value Is Successful
BMS Current Protection Value:              029000    mA
Set The BMS Current Protection Value......


Success To Set The BMS Current Protection Value
The New BMS Current Protection Value:          029000    mA
```

How to Read BMS Logs

Step 1: Connect H1 to Battery Pack Directly to read BMS Charging History

Press to Read BMS Charging History(This function only applies to M scooter battery and N scooter battery which is homologated under EEC 168/2013)
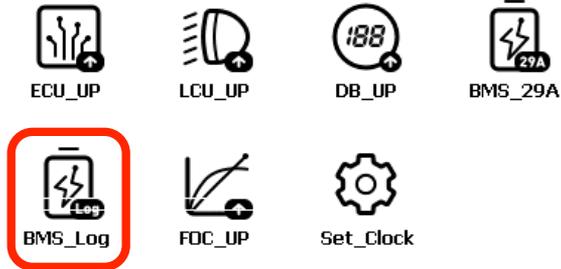
Step 2: H1 will read all data of the BMS and then filter out events related to Charging Reading All BMS log may take a while

```
The Size Of All BMS Log Is :            0008
The Size Of Readed BMS LOG Is :         0008      Finish_Reading
17-05-16  21:26:32  Start_Charging.  Voltage: 46110 mV
17-05-17  06:40:03  Stop_Charging.   Voltage: 54090 mV
17-05-17  11:44:32  Low_voltage.     Voltage: 44410 mV
17-05-17  13:18:48  Start_Charging.  Voltage: 42830 mV
17-05-17  16:38:02  Stop_Charging.   Voltage: 48850 mV
```

Charging History will be shown in pairs of **Start_Charging** and **Stop_Charging** with Voltages and time.
for long period of storage, it's required to perform a charge/discharge once in every two months.
Failed to do so will invalidate product warranty.

NIU

How to update FOC Motor Controller Program

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press [FOC_Info icon] to update FOC Motor Controller Program

14:55
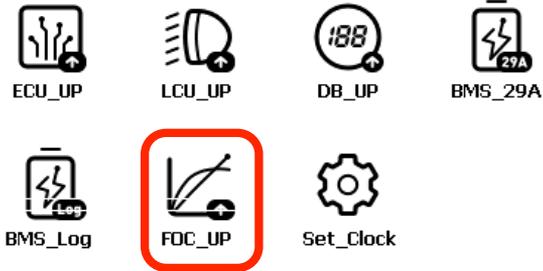
ECU_UP   LCU_UP   DB_UP   BMS_29A

BMS_Log   **FOC_UP**   Set_Clock

• • •

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Please Make Sure The Power Is Turned OFF For More Than 10 Seconds

Press The Screen To Continue

Step 3:
FOC softwares will be shown as below(see <How to import files into H1>):
Select correct ECU program .BIN file by pressing on the file name to Continue

FOC002.BIN
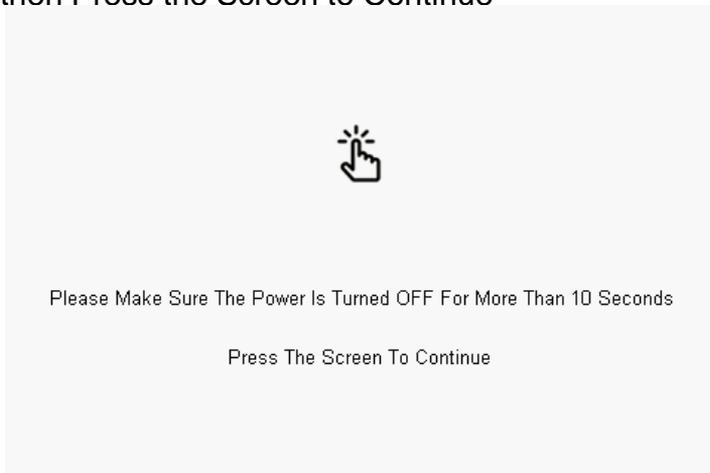
How to update FOC Motor Controller Program

Step 4: Press the screen then Immediately turn ON the power to update FOC Motor
Controller Program

Keep The Power Turned ON

Success To Get FOC Info

Try To Update FOC,Please Wait A Moment

Success To Update FOC

Press The RETURN Key , Back To The Main Interface

niu

How to update Sharing version FOC Motor Controller Program (S_FOC_UP)

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press   to update FOC Motor Controller Program

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Step 3:
FOC softwares will be shown as below(see <How to import files into H1>):
Select correct ECU program .BIN file by pressing on the file name to Continue

niu

How to update Lock Controller (LOCK)Program

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press   to update Lock controller Program

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Step 3:
FOC softwares will be shown as below(see <How to import files into H1>):
Select correct ECU program .BIN file by pressing on the file name to Continue

niu

How to update BCS Program

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press   to update BCS Program

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Step 3:
FOC softwares will be shown as below(see <How to import files into H1>):
Select correct ECU program .BIN file by pressing on the file name to Continue

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How to update Fast Charger(FC_UP)Program

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press   to update Fast Charger Program

Step 2:
please make sure the Power of the scooter is turned OFF for more than 10 seconds before continue
then Press the Screen to Continue

Step 3:
FOC softwares will be shown as below(see <How to import files into H1>):
Select correct ECU program .BIN file by pressing on the file name to Continue

How to Set Time on Display

Step 1: Press ⚙ Set_Clock to set Time on Display (This function only applies to M and N scooters homologated under EEC 168/2013)
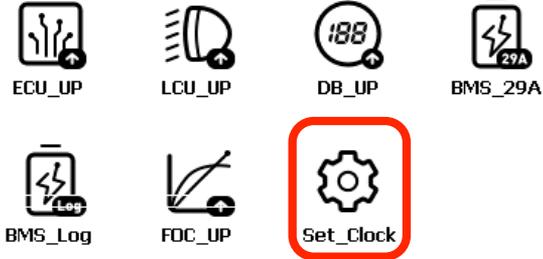
For Europe countries,
Set + 01 Hour 00 Minute for Winter time
Set + 02 Hour 00 Minute for Summer time

For other countries, please set according to UTC difference.

Restart the scooter and take it to an open area with good GPS signal.

How to Set MI/KM unit change

Step 1: Press   to set MI/KM unit

For other countries, please set according to UTC difference.

Restart the scooter and take it to an open area with good GPS signal.

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How to Read Vehicle Communication Data

Step 1: Connect the battery to the scooter and connect H1 to the Charging port

Press ⚲ Comm_Data to read Comm Data

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| Comm_Data | Comm_Log | USB | Setting |

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Step 2:
Message Number will be 00000
Communication Response Rate will be 000%
Turn the scooter Power ON to start reading data

ECU --> DB Messages Number:	00092
DB --> ECU Messages Number:	00091
Communication Response Rate:	098 %
ECU --> LCU Messages Number:	00000
LCU --> ECU Messages Number:	00000
Communication Response Rate:	000 %
ECU --> BMS Messages Number:	00093
BMS --> ECU Messages Number:	00093
Communication Response Rate:	100 %
ECU --> FOC Messages Number:	00090
FOC --> ECU Messages Number:	00090
Communication Response Rate:	100 %

ECU—>DB/LCU/BMS/FOC Messages Number:
Total Number of messages ECU has SENT to DB/LCU/BMS/FOC

DB/LCU/BMS/FOC—>ECU Messages Number:
Total Number of messages DB/LCU/BMS/FOC has REPLIED to ECU

Communication Response Rate:
ECU should get a reply for each of the requests it sent to other electronic components which means Response Rate should be 100% if everything is working properly.

Try to read Comm Data a few times(60 seconds per attempt), If Response Rate is lower than 95%, please check the corresponding components.
If ECU is not sending data to any components, check the ECU or check the charging port cable connection.

How to use Comm_Log to record vehicle data

Step 1 Connect H1 with computer via the usb cable. And click "USB" icon on H1 to make your PC recognize the TF card inside H1. Then open the H1 folder to delete all the files to avoid mix with the new generated files. Then just quit from PC.

Step 2 Connect H1 with scooter's charging interface in the helmet bucket. Then turn on H1 to select Comm-Log icon. Notice there is Comm data and Comm log. Don't mix them
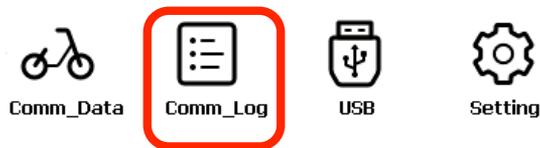
Step 3 Then H1 would prompt recording page.

For example 1—Catch the log of error code
Before we turn on the scooter, just do follow step 1 to Step 3
Then turn on the scooter till you saw the error code (i.e 99, 111..)
Keep waiting for more 2 minutes, return the record page.
And now you have already captured all the 485 data. Follow Step 1 to find the files and export.
Please copy all the files like xxxx.txt, bcs.txt,BMS.txt,Code.txt,Code.txt,DB.txt,FOC.txt into one folder for us to analysis.

For example 2-Catch the speed drop
Before we turn on the scooter, just do follow step 1 to Step 3
Then turn on the scooter to ride. (Leave the H1 in helmet bucket to keep recording)
When you successfully met the speed drop issue, keep riding on 1 or 2 minutes. Then turn off the scooter. Disconnect the H1.
Follow Step 1 to find the files and export.
Please copy all the files like xxxx.txt, bcs.txt,BMS.txt,Code.txt,Code.txt,DB.txt,FOC.txt into one folder for us to analysis.

For example 3-Catch the log that scooters would suddenly powered off when having a ride.
Before we turn on the scooter, just do follow step 1 to Step 3
Then turn on the scooter to ride. (Leave the H1 in helmet bucket to keep recording)
Until you successfully met the issue. Then turn off the scooter. Disconnect the H1.
Follow Step 1 to find the files and export.
Please copy all the files like xxxx.txt, bcs.txt,BMS.txt,Code.txt,Code.txt,DB.txt,FOC.txt into one folder for us to analysis.

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How to Import Files to H1

Step 1: Connect PC and H1 with the USB Cable
Make sure the Memory Card is inserted inside H1

Press [USB icon] to connect H1 to PC

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Comm_Data   Comm_Log   USB   Setting

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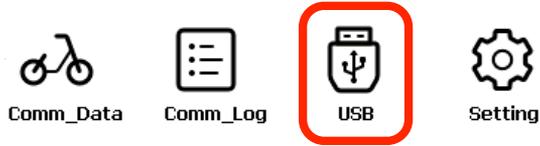
Step 2: when connection is successful, Blue indicator on H1 will be On
then find the device on your PC, the disk name can be "H1","No Name" or "Untitled"
depending on the operating system.

Please Wait a Moment

Success To Connect PC

H1   No Name

Untitled
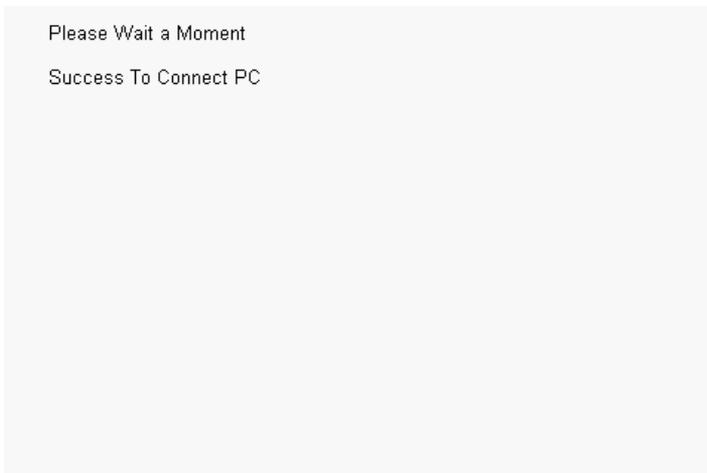
Step 3: Open the disk on PC and copy the downloaded .bin update files ie
ECU/FOC/LCU/DB into the disk.

Untitled

DISA03.bin   ECUV08.bin   FOC002.bin
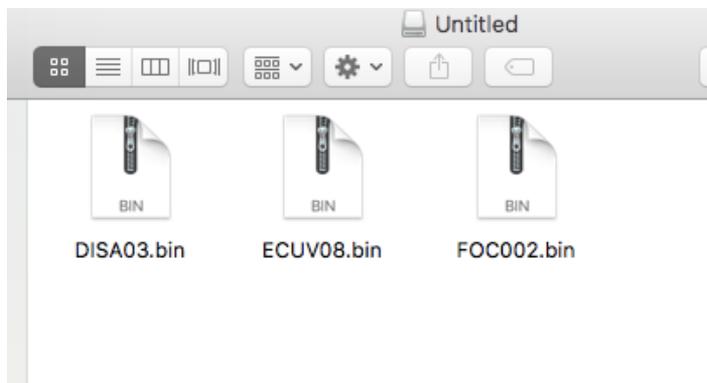
Right click to eject.
Note: Reading Comm Data and BMS Log may create files which will be saved in the
memory stick. these files can be deleted unless required.

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H1 Setting

Step 1:Press ⚙️ **Setting** to enter H1 Setting page

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🚲 **Comm_Data**   📋 **Comm_Log**   🔌 **USB**   ⚙️ **Setting**

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Update H1_OS: see how to <How to import files into H1>

Hardware_Version: V_1.40   Battery Level: 100%
Software_Version: H1A01V04   Release time: 2017-8-8
S/N : H101B33200004

UPDATE NIU_H1_OS

SET SYSTEM TIME

.... 2017 NIU Co. ....

Success To Open The BIN File
System Is Writing File,Please Wait A Moment
Success To Update The NIU_H1_OS
System Will Restart After 3 Seconds
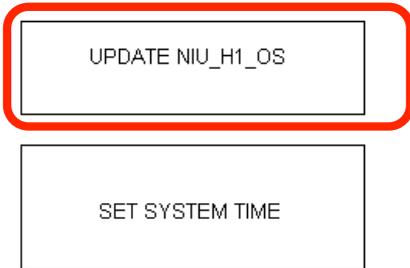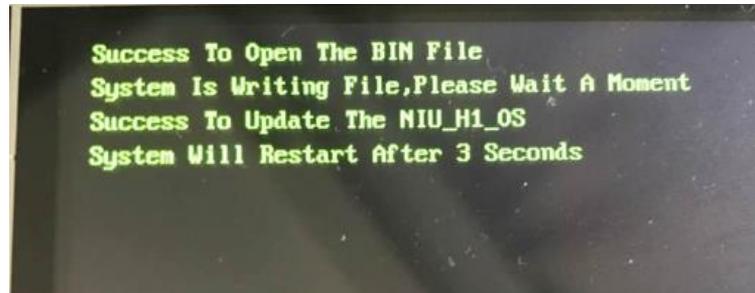
Note: Import H1_OS update file first
before clicking on Update NIU_H1_OS
H1 will restart once update is complete

Set H1 System Time

Hardware_Version: V_1.40   Battery Level: 100%
Software_Version: H1A01V04   Release time: 2017-8-8
S/N : H101B33200004

UPDATE NIU_H1_OS

SET SYSTEM TIME

.... 2017 NIU Co. ....

TIME: 14: 56: 25
            --
DATE: 17 -08 -01
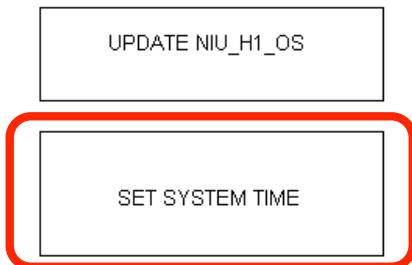
SAVE TIME

Right click to eject.
Note: Reading Comm

Use UP/DOWN/LEFT/RIGHT Buttons to set time and click SAVE TIME to set H1 Clock