GUIDE BOOK

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MỤC LỤC

I. INTRODUCTION 4
1. GENERAL INTRODUCTION....4
2. FEATURES 5
2.1. DIAGNOSTIC FUNCTION 5
2.1.1. Scan engine 5
2.1.2. Scan ABS 5
2.1.3. Support function list 5
2.1.4. Function table....5
2.2. Smart key/ Keyless Honda, Yamaha and Suzuki....10
2.2.1. Manual programing: 10
2.2.2. Auto programming: 10
2.2.3. Special functions 10
2.2.4. Smart key list 10
2.2.5. Detailed function table 11
2.3. PIAGGIO/VESPA 12
2.3.1. Function....12
2.3.2. List function 13
2.4. Odometer adjustment 13
2.4.1. Function....13
2.4.2. List function 14
3. SPECIFICATIONS....16
3.1. Main....16
3.2. List of accessories 17
II. DETAILED FUNCTIONS GUIDE 18
1. DIAGNOSTIC....18
1.1. ENGINE – PGM FI SCAN....18
1.1.1. Parameter meaning 18
1.1.2. OBD Connector Position 19
1.1.3. Detailed instruction 20
1.2. ABS SCAN....24
1.2.1. Parameters meaning....24
1.2.2. Detailed Functions....24
2. PROGRAM KEY 26
2.1. Auto program for Honda 26
2.1.1. SCU 1 connector 26
2.1.2. SCU 2 Connector....31
2.2. Manual program function 35
2.2.1. Add key by key:....35

2.2.2. All keys lost:.....35
2.2.3. OFF the missing FOB 36
2.2.4. Test SCU ←→ FOB.....37
2.3. YAMAHA, T-MAX AND SUZUKI 37
2.3.1. AUTO PRGRAM.....37
2.3.2. Manual program.....39
2.4. HÃNG PIAGGIO/VESPA 41
2.4.1. Read IC/ECU ACI6XX.....42
2.4.2. Reset KEYID MIUG3/ RIU1.....42
3. ODO METTER 43
3.1. Overview 43
3.2. Function ODO auto program.....43
3.2.1. Smart ODO.....43
3.2.2. Function READ/WRITE EEPROM.....45
3.3. Odometer Correct Function 46
3.3.1. EEPROM 93Cxx (ex: AIR BLADE (2018 - 2019) _93C66) 46
3.3.2. EEPROM 24Cxx (ex: CLICK 2013_24C04).....47
3.3.3. R5F (ex : Suzuki Raider FI (R5F)).....47
3.3.4. PIC 16F (Ex: Yamaha Janus 16F1947) 48
3.3.5. Reset ODO function:.....49
3.4. Some common errors.....50
4. USER GUIDE OF AUTOMATIC UPDATING.....50
4.1. Preparation:.....50
4.2. Perform 50

I. INTRODUCTION

1. GENERAL INTRODUCTION

- SMARTTOOL 2 is a perfect product of AUTOSHOP SJC. We research, develop and distribute it all the world. The aim of SMARTTOOL 2 tend to become a multi-functions device, "All in one" such as: Engine diagnostic, ABS diagnostic, LED Headlights test, programing magnetic key, Smart key and ODO correction for all brands such as: HONDA, YAMAHA, PIAGIO, SUZUKI, SYM, KYMCO.
- It is useful for motorbike, motorcycle repair workshop and locksmiths. The handset is convenient without computer.
- Support editing, reading, erasing, erasing KeyID and automatic registration, sync keys and Smart key control Unit (SCU) on SMARTTOOL
- Simple interface
- Many languages: English, Vietnamese
- Free online update: 12 months
- Warranty: 12 months

2. FEATURES

2.1. DIAGNOSTIC FUNCTION

2.1.1. Scan engine

- Read/erase DTC current
- Read/erase DTC history
- Show engine data
- Active test actuator
- Test sensor
- Reset ECU (initialize ECU to factory reset value)
- Analysis emission
- Reset IACV value
- Set A/F value
- Reset TPS
- ECU info

2.1.2. Scan ABS

- Read/erase DTC
- Show engine data
- Active test actuator
- ACU info

2.1.3. Support function list

- All for HONDA, YAMAHA, PIAGGIO, SYM, SUZUKI và KYMCO

2.1.4. Function table

HONDA	AUTO CONNECT	READ/ERASE DTC CURRENT, HISTORY	RESET ECU	ENGINE DATA	ACTIVE TEST	ANALYSIS EMISSION	SET A/F VALUE	RESET TPS	UPGRADE ECM SOFT	RESET IACV VALUE	READ/ERASE DTC ABS	ECU ABS DATA	ACTIVE TEST	SMART KEY	ODO METER	RESET ECMID IN ECM(*)
AIRBLADE(08-10)	✔	✔	✔	✔		✔				✔						
AIRBLADE(10-12)	✔	✔	✔	✔		✔				✔					✔	
AIRBLADE(13- now)	✔	✔	✔	✔		✔				✔					✔	
AIRBLADE SMARTKEY	✔	✔	✔	✔		✔				✔	✔	✔	✔	✔	✔	✔
CBR 250	✔	✔	✔	✔		✔				✔					✔	
CLICK-I	✔	✔	✔	✔		✔				✔						
CLICK-125I/ 150I	✔	✔	✔	✔		✔				✔				✔	✔	
LEAD 110/ SCR 110	✔	✔	✔	✔		✔				✔						
LEAD 125	✔	✔	✔	✔		✔				✔					✔	
LEAD 125 SMARTKEY	✔	✔	✔	✔		✔				✔				✔	✔	✔

HONDA	AUTO CONNECT	READ/ERASE DTC CURRENT, HISTORY	RESET ECU	ENGINE DATA	ACTIVE TEST	ANALYSIS EMISSION	SET A/F VALUE	RESET TPS	UPGRADE ECM SOFT	RESET IACV VALUE	READ/ERASE DTC ABS	ECU ABS DATA	ACTIVE TEST	SMART KEY	ODO METER	RESET ECMID IN ECM(*)
FUTURE FI	✔	✔	✔	✔		✔				✔					✔	
PCX (08-15)	✔	✔	✔	✔		✔				✔					✔	
PCX (16-20)	✔	✔	✔	✔		✔				✔	✔	✔	✔	✔	✔	✔
PCX SMART KEY	✔	✔	✔	✔		✔				✔	✔	✔	✔	✔	✔	✔
X-ADV	✔	✔	✔	✔		✔				✔	✔	✔	✔	✔	✔	✔
PS	✔	✔	✔	✔		✔				✔						
VISION	✔	✔	✔	✔		✔				✔						
VISION SMART KEY	✔	✔	✔	✔		✔				✔				✔		✔
SONIC 150	✔	✔	✔	✔		✔				✔					✔	
SH 125i/ 150i	✔	✔	✔	✔		✔				✔					✔	
SH125/150 SMART KEY	✔	✔	✔	✔		✔				✔	✔	✔	✔	✔	✔	✔
SH 300i	✔	✔	✔	✔		✔				✔					✔	✔
SH 300i ABS	✔	✔	✔	✔		✔				✔	✔	✔	✔	✔	✔	✔
SH MODE	✔	✔	✔	✔		✔				✔	✔	✔	✔	✔	✔	✔
SUPPER CUB C125	✔	✔	✔	✔		✔				✔						
WAVE RSX FI	✔	✔	✔	✔		✔				✔						
WINNER 150	✔	✔	✔	✔		✔				✔					✔	
WINNER X	✔	✔	✔	✔		✔				✔					✔	
MSX 125	✔	✔	✔	✔		✔				✔					✔	
SCOOPY-i	✔	✔	✔	✔		✔				✔					✔	
VARIO 150	✔	✔	✔	✔		✔				✔				✔	✔	✔
WAVE 110i	✔	✔	✔	✔		✔				✔						
WAVE 125i	✔	✔	✔	✔		✔				✔						
ZOOMER-X	✔	✔	✔	✔		✔				✔					✔	

	AUTO CONNECT	READ/ERASE DTC CURRENT, HISTORY	RESET ECU	ENGINE DATA	ACTIVE TEST	ANALYSIS EMISSION	SET A/F VALUE	RESET TPS	UPGRADE ECM SOFT	RESET IACV VALUE	READ/ERASE DTC ABS	ECU ABS DATA	ACTIVE TEST	SMART KEY	ODO METER	RESET ECMID IN ECM(*)
ACZURO	✔	✔	✔	✔	✔	✔	✔			✔						
CUXI	✔	✔	✔	✔	✔	✔	✔			✔					✔	
JANUS	✔	✔	✔	✔	✔	✔	✔							✔	✔	✔
EXCITER 150 GP	✔	✔	✔	✔	✔	✔	✔								✔	
EXCITER 150i 2019	✔	✔	✔	✔	✔	✔	✔								✔	
FREEGO 2019	✔	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔	✔
FZ 150	✔	✔	✔	✔	✔	✔	✔			✔					✔	
TFX	✔	✔	✔	✔	✔	✔	✔								✔	
YZC	✔	✔	✔	✔	✔	✔	✔			✔					✔	
YBR	✔	✔	✔	✔	✔	✔	✔			✔					✔	
JUPITER FI	✔	✔	✔	✔	✔	✔	✔								✔	
LATTE 2019	✔	✔	✔	✔	✔	✔	✔			✔					✔	
LUVIAS GTX FI	✔	✔	✔	✔	✔	✔	✔			✔					✔	
NM-X	✔	✔	✔	✔	✔	✔	✔								✔	
NOZZA	✔	✔	✔	✔	✔	✔	✔			✔					✔	
NOUVO LX	✔	✔	✔	✔	✔	✔	✔								✔	
NOUVO SX RC	✔	✔	✔	✔	✔	✔	✔			✔					✔	
NVX 155	✔	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔	✔
NVX 155 ABS	✔	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔	✔
RIS	✔	✔	✔	✔	✔	✔	✔			✔					✔	
SIRIUS RC FI	✔	✔	✔	✔	✔	✔	✔								✔	
GRAND. Fi	✔	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔	✔
FZ1 FAZER	✔	✔	✔	✔	✔	✔	✔			✔					✔	
YZF-R3	✔	✔	✔	✔	✔	✔				✔					✔	

Note: (*) Updating

PIAGGIO	AUTO CONNECT	READ/ERASE DTC CURRENT, HISTORY	ENGINE DATA	ACTIVE TEST	ANALYSIS EMISSION	SET A/F VALUE	RESET TPS	UPGRADE ECM SOFT	IC/ECM INFO	READ/ERASE DTC ABS	ECU ABS DATA	ACTIVE TEST	SMART KEY	ODO METER
BEVERLY 125/350/300 MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
FLY 125/150 MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
FLY 125/150 3V MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
FLY 125/150 AC19I/20IAC191/201	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
FLY 125/150 AC II/2I/5I/8I/13I	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
LIBERTY 3V PGN04/PGS02/PGT01/ PGU09	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
LIBERTY 125/150 AC191/201	✔	✔	✔	✔			✔		✔				✔	✔
LIBERTY 125 AC II/2I/5I/8I/13I	✔												✔	✔
LIBERTY 150 3V MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
LIBERTY ABS PGS06	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔
X10 125 MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
X10 350 MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
MEDLEY 125 PGQ16	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔
MEDLEY 150 PGQ16	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔
VESPA 946 125/150 3v MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
GTS 125/150 MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
LXV 125/150 3V MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
GTS 125/300 ABS MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
LT 125/150 3V MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
LX 125/150 MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
LX 125/150 AC19I/20I AC191/201	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
LX 125/150 ACII/ 2I/5I/8I/13I	✔												✔	✔
LX 125/150 3V PGN04/ PGS02/PGT01/PGU09	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
LXV125 2V MIUG3	✔	✔	✔	✔	✔	✔	✔	✔	✔				✔	✔
LXV 125/150 3V MIUG3	✔	✔	✔	✔	✔	✔			✔				✔	✔

PIAGGIO	AUTO CONNECT	READ/ERASE DTC CURRENT, HISTORY	ENGINE DATA	ACTIVE TEST	ANALYSIS EMISSION	SET A/F VALUE	RESET TPS	UPGRADE ECM SOFT	IC/ECM INFO	READ/ERASE DTC ABS	ECU ABS DATA	ACTIVE TEST	SMART KEY	ODO METER
PRIMAVE 125/150 MIUG3	✔	✔	✔	✔	✔	✔			✔				✔	✔
PRIMAVE 125/150 PGN04/ PGS02/ PGT01/ PGU09	✔	✔	✔	✔	✔	✔			✔				✔	✔
PRIMAVERA ABS	✔	✔	✔	✔	✔	✔			✔				✔	✔
S 125/150 MIUG3	✔	✔	✔	✔	✔	✔			✔				✔	✔
S 125/150 3V MIUG3	✔	✔	✔	✔	✔	✔			✔				✔	✔
SPRINT 125 3V PGN04/ PGS02/ PGT01/ PGU09	✔	✔	✔	✔	✔	✔			✔			✔	✔	✔
SPRINT 150 3V PGN04/ PGS02/ PGT01/ PGU09	✔	✔	✔	✔	✔	✔	✔	✔					✔	✔
SPRINT ABS	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔	✔	✔

SYM	AUTO CONNECT	READ/ERASE DTC CURRENT, HISTORY	ENGINE DATA	ACTIVE TEST	ANALYSIS EMISSION	SET A/F VALUE	RESET TPS	UPGRADE ECM SOFT	ECU INFO
ATTILA-V SMART IDLE	✔	✔	✔	✔	✔	✔			✔
ELIZABETH SMART IDLE	✔	✔	✔	✔	✔	✔			✔
ELIZABETH 110	✔	✔	✔	✔	✔	✔			✔
ELIZABETH SMART	✔	✔	✔	✔	✔	✔			✔
JOYRIDE	✔	✔	✔	✔	✔	✔			✔
SHARK 125 FI	✔	✔	✔	✔	✔	✔			✔
PASSING EFI	✔	✔	✔	✔	✔	✔			✔
POWER EFI	✔	✔	✔	✔	✔	✔			✔
VENUS EFI	✔	✔	✔	✔	✔	✔			✔
VENUS 125 SMART IDLE	✔	✔	✔	✔	✔	✔			✔

KYMCO	AUTO CONNECT	READ/ERASE DTC CURRENT, HISTORY	ENGINE DATA	ACTIVE TEST	ANALYSIS EMISSION	SET A/F VALUE	RESET TPS	UPGRADE ECM SOFT	ECU INFO
PEOPLE S FI	✔	✔	✔	✔	✔	✔			✔
PEOPLE 16 FI	✔	✔	✔	✔	✔	✔			✔
MANY MACAROL FI	✔	✔	✔	✔	✔	✔			✔
MANY FI	✔	✔	✔	✔	✔	✔			✔
LIKE FI	✔	✔	✔	✔	✔	✔			✔
JOCKEY FI	✔	✔	✔	✔	✔	✔			✔

2.2. Smart key/ Keyless Honda, Yamaha and Suzuki

2.2.1. Manual programing:

- Add key by key.
- OFF/Disable the missing keys.
- Register new keys in the all keys lost case.
- Sync SCU-ECM.
- Replace new ECM.

2.2.2. Auto programming:

- Read KEYID and ECMID.
- Erase KEYID.
- Register new keys by RESET CODE. (*)
- OFF/Disable the missing keys by dump.
- Sync SCU automatically.
- Change new ECMID automatically
- Check the synchronization between FOB and SCU

2.2.3. Special functions

- Change ON / OFF key status
- Edit, Sync, Change new ECMID
- Re-use the Honda "used FOB" (*)
- Sync FOB - SCU automatically.
- Reflash EEPROM or Main data of SCU
- Change the part number of SCU. (*)
- Erase the missing key code.
- Register up to 6 keys at once bike Honda SH, PCX, X-ADV 750, FORZA 300

2.2.4. Smart key list

- HONDA: AIRBLADE (2018-2020), CLICK 125i (2018-2020), LEAD 125 (2017-2020), PCX(2016-2020), SH 125/150/300(2016-2020), SH MODE

(2016-2020), VISION (2018-2020), VARIO 125/150 (2018-2020), **X-ADV 750, FORZA 300 (2018-2020).**

- YAMAHA : AEROX (2018-2020), GRANF FILANO, JANUS (2018-2020), NVX(2018-2019) , QBIX, XMAX, NMAX, **T-MAX 530i*, T-MAX DX*, T-MAX DX*, T-MAX SX SPORT*, T-MAX IRON MAX***
- SUZUKI: RAIDER FI (2016-2020), GSX FI (2016-2020).

2.2.5. Detailed function table

- **HONDA**

HONDA	Manual Programing					Auto Programing							Edit Data SCU									
	Add key by key	OFF key	All keys lost	Replace new SCU	Replace new ECM	Read KEYID	Read ECMID	Erase KEYID	All keys lost	OFF key	Replace new SCU	Replace new ECM	Display key registered	Status ON / OFF key register	Writer ECMID to SCU	One key used many bike	Re-use the Honda "used FOB"	Register new keys by RESET CODE	Reflash EEPROM	Change the part number of SCU	Check the synchron-ization FOB and SCU	Register up to 6 keys at once bike
AIR BLADE (2018-2019)	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓				✓		✓	
CLICK 125i (2018-2019)	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓				✓	✓	✓	
LEAD 125 (2018-2019)	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓				✓		✓	
PCX (2015-2019)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VISION (2018-2019)	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓				✓	✓	✓	
SH 125 (2015-2019)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SH 150 (2015-2019)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SH 300i ABS (2015-2019)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SH MODE (2017-2019)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Super Cub C125	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VARIO (2017-2019)	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓				✓	✓	✓	
X-ADV 750	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FORZA (2018-2019)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

- **YAMAHA**

YAMAHA	Add key by key	OFF key	All keys lost	Replace new SCU	Read KEYID	Erase KEYID	Read ECM ID	Status ON / OFF key register	Reflash EEPROM
AEROX (2018-2020)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
GRANDE (2019)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
GRANF FILANO (2018-2020)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
FREE GO (2019)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
LEXI (2018-2020)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
NMAX (2018-2020)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
JANUS PREMIUM (2018-2020)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
NVX 125 DELUXE (2017-2020)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
NVX 155 ABS (2017-2020)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
QBIX	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
XMAX	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
TMAX 530i*	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
TMAX DX*	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
TMAX SX SPRORT*	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
TMAX IRON MAX*	✓	✓	✓	✓	✓	✓	Updating	Updating	✓

- **SUZUKI**

SUZUKI	Add key by key	OFF key	All keys lost	eplace new SCU	Read KEYID	Erase KEYID	Read ECM ID	Status ON / OFF key register	Reflash EEPROM
GSX 150 FI (2017-2019)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓
RAIDER FI (2017-2019)	✓	✓	✓	✓	✓	✓	Updating	Updating	✓

2.3. PIAGGIO/VESPA

2.3.1. Function

- Register the new keys in the all keys lost case.
- Reset, erase all keys of IC / ECM.
- Support register new keys.
- Support list : AC13I, AC191, AC19I, AC20I, AC21I, AC23I, AC24I, AC25I, AC27I, AC32I, AC5I, AC8I, ACI600, AC601, ACI602, ACI603, ACII, AC2I, AC5I, AC8I, AC13I, MIU1, MIU2, MIU G3/RIU1, MIU4, PGU09, PGN04/PGS02/PGS06/PGT01.

2.3.2. List function

PIAGGIO	Add key by key	All keys lost	Reset, erase all keys of IC / ECM	Vespa	Add key by key	All keys lost	Reset, erase all keys of IC / ECM
BEVERLY 125 MIUG3	✓	✓	✓	VESPA 125/150 3V MUIG3	✓	✓	✓
BEVERLY 300 MIUG3	✓	✓	✓	GTS 125/150 MIUG3	✓	✓	✓
BEVERLY 350 MIUG3	✓	✓	✓	LXV 125 3V MIUG3	✓	✓	✓
FLY 125 MIUG3	✓	✓	✓	GTS 125/300 ABS MIUG3	✓	✓	✓
FLY 150 MIUG3	✓	✓	✓	LT125/150 3V MIUG3	✓	✓	✓
FLY 125 3V MIUG3	✓	✓	✓	LX125 MIUG3	✓	✓	✓
FLY 150 3V MIUG3	✓	✓	✓	LX 125 AC19I/AC20I	✓	✓	
FLY 125 AC19I/20I	✓	✓		LX 125 AC191/AC201	✓	✓	
FLY 150 AC 19I/20I	✓	✓		LX 125 ACII/AC2I/AC5I	✓	✓	
FLY 125 AC 191/201	✓	✓		LX 125/150 E1MIUG3	✓	✓	✓
FLY 150 AC 191/201	✓	✓		LX 150 3V MIUG3	✓	✓	✓
FLY AC II/AC2I/	✓	✓		LX 150 AC19I/AC20I	✓	✓	
AC5I/AC8I	✓	✓		LX 150 AC191/AC201	✓	✓	
LIBERTY 125 3V PGN04/PGS02 /PGT01	✓	✓		LX 150 ACII/AC2I/AC5I	✓	✓	
LIBERTY 150 3V MIUG3	✓	✓		LX 125/150 3V PGN04/PGS02/PGT01	✓	✓	
LIBERTY 150 3V PGN04/PGS02 /PGT01	✓	✓		LXV 125/150 2V/3V MIUG3	✓	✓	✓
LIBERTY 125 AC19I/20I	✓	✓		PRIMAVE 125/150 MIUG3	✓	✓	✓
LIBERTY 150 AC19I/20I	✓	✓		PRIMAVE 125 150/PGN04/PGS02/PGT01	✓	✓	
LIBERTY 125 AC191/201	✓	✓		PRIMAVERA ABS	✓	✓	
LIBERTY 150 AC191/201	✓	✓		S125/150 MIUG3	✓	✓	✓
LIBERTY AC II/AC2I/AC5I/AC8I	✓	✓		S125/150 3V MIUG3	✓	✓	
LIBERTY ABS PGS06	✓	✓		SPRINT 125 3V PGN04	✓	✓	
MEDLEY 125 PGQ16	updating	updating	updating	SPRINT 150 3V PGN04	✓	✓	
MEDLEY 150 PGQ16	updating	updating	updating	SPRINT ABS	✓	✓	
X10 125 MIUG3	✓	✓	✓	X10 350 MIUG3	✓	✓	✓

2.4. Odometer adjustment

2.4.1. Function

- Correct odometer value of motorcycle dashboard.
- Restore the original data
- All Honda, Yamaha, Suzuki and Piaggio.
- Read data EEPROM and save to SD card
- Automatic program ODO, no need to select the correct vehicle name (for models using EEPROM 93CXX)

2.4.2. List function

HONDA	EEPROM	Connection diagrams	Read ODO	Adjustment ODO	RESET ODO	YAMAHA	EEPROM	Connection diagrams	Read ODO	Adjustment ODO	RESET ODO
AIR BLADE (2013- 2014)	93C66	✔	✔	✔	✔	ACRUZO	93C66	✔	✔	✔	✔
AIR BLADE (2015-2017)	93C66	✔	✔	✔	✔	JANUS	PIC16Fxx	✔	✔	✔	✔
AIR BLADE (2018 - 2019)	93C66	✔	✔	✔	✔	NVX	PIC16Fxx	✔	✔	✔	✔
AIR BLADE (2020)	24C04	✔	✔	✔	✔	TFX	PIC16Fxx	✔	✔	✔	✔
BEAT (2018-2019)	93C66	✔	✔	✔	✔	MSLAZ	PIC16Fxx	✔	✔	✔	✔
CBR 15DR/150/250	24C04	✔	✔	✔	✔	GRANDE 2016	93C66	✔	✔	✔	✔
CBR1000	93C56	✔	✔	✔	✔	EXCITER (2015-2018)	93C66	✔	✔	✔	✔
CBR 150 (2019)	24C04	✔	✔	✔	✔	EXCITER 150 (2019)	93C66	✔	✔	✔	✔
SUPPER CUB (2018-2019)	24C04	✔	✔	✔	✔	FZ150/150i/FZ16	93C66	✔	✔	✔	✔
CLICK (2013)	24C04	✔	✔	✔	✔	GRANDE (2018)	93C66	✔	✔	✔	✔
CLICK (2014-2015)	24C04	✔	✔	✔	✔	GRANDE 2019	93C66	✔	✔	✔	✔
CLICK (2016-2017)	24C04	✔	✔	✔	✔	NOUVO LX/4	93C56	✔	✔	✔	✔
CLICK (2018 - 2019)	24C04	✔	✔	✔	✔	NOUVO SX/5	93C66	✔	✔	✔	✔
FUTURE NEO FI	93C46	✔	✔	✔	✔	NOVO ELEGENCE	93C56	✔	✔	✔	✔
FUTURE X	93C46	✔	✔	✔	✔	QBIX (2017-2019)	93C66	✔	✔	✔	✔
LEAD 125 (2013-2016)	93C66	✔	✔	✔	✔	R15 2016	24C04	✔	✔	✔	✔
LEAD 125 (2017-2019)	93C66	✔	✔	✔	✔	FREE GO 2019	93C66	✔	✔	✔	✔
MSX 125/150	93C66	✔	✔	✔	✔	GRAND FILANO	93C66	✔	✔	✔	✔
PCX (2008-2013)	24C04	✔	✔	✔	✔	XMAX (2017-2019)	93C66	✔	✔	✔	✔
PCX (2014-2017)	24C04	✔	✔	✔	✔	TMAX(2017-2019)	93C86	✔	✔	✔	✔
PCX (2018-2019)	24C04	✔	✔	✔	✔	MT07 (2018-2019)	93C86	✔	✔	✔	✔
SCOOPY-I	93C66	✔	✔	✔	✔	MT09 (2018-2019)	93C86	✔	✔	✔	✔
SH 125/150 (2015-2016)	93C56	✔	✔	✔	✔	NMAX ABS 2018	93C66	✔	✔	✔	✔
SH 125/150 (2017-2019)	93C66	✔	✔	✔	✔	R15 (2017-2018)	93C66	✔	✔	✔	✔
SH 125/150	24C04	✔	✔	✔	✔	GRANDE FILANO	93C66	✔	✔	✔	✔

HONDA	EEPROM	Connection diagrams	Read ODO	Adjustment ODO	RESET ODO	**YAMAHA**	EEPROM	Connection diagrams	Read ODO	Adjustment ODO	RESET ODO
(2020)											
SH 300I ABS 2007	93C56	✔	✔	✔	✔	FREEGO	93C66	✔	✔	✔	✔
SH 300I ABS (2008-2016)	93C66	✔	✔	✔	✔	**SUZUKI**					
SH MODE (2015-2016)	93C66	✔	✔	✔	✔	RAIDER	R5F	✔	✔	✔	✔
SH MODE (2017-2019)	93C66	✔	✔	✔	✔	GSX	R5F	✔	✔	✔	✔
SONIC (2016/2017)	93C66	✔	✔	✔	✔	AN 150	93C56	✔	✔	✔	✔
SONIC (2018)	93C66	✔	✔	✔	✔	EN 150	93C56	✔	✔	✔	✔
VARIO (2013-2016)	24C04	✔	✔	✔	✔	RAIDER	93C56	✔	✔	✔	✔
VARIO (2017-2019)	24C04	✔	✔	✔	✔	RAIDER (2013-2015)	93C66	✔	✔	✔	✔
WAVE 125	93C46	✔	✔	✔	✔	GSX (2009-2015)	93C66	✔	✔	✔	✔
WINNER 150	93C66	✔	✔	✔	✔	SYM GTS 125	24C02	✔	✔	✔	✔
WINNER X 2019	24C04	✔	✔	✔	✔	**KAWASAKI**					
ZOOMER X	93C66	✔	✔	✔	✔	Z1000R	93C66		✔	✔	
CBR 500	93C66	✔	✔	✔	✔	Z125	93C66		✔	✔	
FORZA 2018	93C76	✔	✔	✔	✔	NINJA 250	93C56		✔	✔	
SCOOPY 2018	93C66	✔	✔	✔	✔	VERSY 650	93C66		✔	✔	
XADV 2018	93C66	✔	✔	✔	✔	Z300	93C46		✔	✔	
FORZA	93C66	✔	✔	✔	✔	Z900	93C66		✔	✔	
PIAGGIO/ VESPA											
LIBERTY (2017-2019)	93C66	✔	✔	✔	✔	LIBERTY (2014-2016)	R5F	✔	✔	✔	✔
PRIMAVERA(2017-2019)	93C66	✔	✔	✔	✔	PRIMAVERA (2014-2016)	R5F	✔	✔	✔	✔
SPRINT (2017-2019)	93C66	✔	✔	✔	✔	SPRINT (2014-2016)	R5F	✔	✔	✔	✔

NOTE: (*) Depending on the product package and depending on the distribution market, the device will have different functions

3. SPECIFICATIONS

3.1. Main

3.2. List of accessories

Note: *Depending on the function of the device package will have accessories attached*

II. DETAILED FUNCTIONS GUIDE

1. DIAGNOSTIC

1.1. ENGINE – PGM FI SCAN

1.1.1. Parameter meaning

No	PARAMETER	CONTENT	UNIT
1	Eng. Speed	Engine Speed	V/p
2	Injector	Injector	ms
3	IGN Advance	Ignition Advance	*C
4	Throttle Pos	Throttle Position Sensor	*C, mV
5	O2 Sensor	Oxygen Sensor	mV
6	Eng. Temp	Engine Temperature	*C, mV
7	Air Temp	Intake Air Temperature	*C, mV
8	MAP	MAP Sensor	Kpa, mV
9	Battery	Battery	V
10	Fuel Stream	Fuel Stream	
11	Environment	Environment	
12	VSS Speed	Vehicle Speed Sensor	Km/h
13	Fuel Pump	Fuel Pump	ON/OFF
14	Side Stand	Side Stand	ON/OFF
15	Start SW	Start Switch	ON/OFF
16	Start Status	Start Status	ON/OFF
17	SCS	Service Check	ON/OFF
18	MIL	Malfunction Indicator Light	ON/OFF
19	IACV	Intake Air Control Valve	
20	FISV	Fast Idle Speed Valve	ON/OFF
21	ISC	Idle Speed Control Valve	Step
22	IGT Pulse	IGT Pulse	ms
23	IACV Target	IACV Target	Step
24	Engine Status	Engine Status	ON/OFF/Run
25	Throttle	Throttle Status	Close/Open/Full
26	Start Engine	Start Engine Status	Yes/No
27	DTC	DTC No	
28	Total DTC	Total DTC	
29	Atmospheric	Atmospheric	Kpa
30	Tilt angle	Tilt angle	mV
31	IGN Standard	IGN Standard Valve	*
32	Key	Key	
33	O2 Heater	O2 Heater	
34	First set	First set	
35	Hall 1	Hall 1	
36	Hall 2	Hall 2	
37	Hall 3	Hall 3	
38	Sta&Stp Light	Start & Stop Light	ON/OFF
39	Oil Pressure	Oil Pressure	
40	Start SW	Start SW	ON/OFF
41	Running Eng	Running Engine Status	
42	Stop Eng	Stop Engine Status	
43	Air Temp	Air Temp	*
44	Pulse ISC	Pulse Idle Speed Control Valve	ms
45	Pulse Fa/Cos	Pulse Fa/Cos Headlight	%
46	Incorrect key	Incorrect key	
47	Antenna fault	Antenna fault	
48	Gear Pos.	Gear Position	
49	IGN Sys.	IGN System Status	Good/Bad

1.1.2. OBD Connector Position

BRAND	OBD PORT ON THE VEHICLE	SMARTTOOL CABLE
HONDA		
	Red connector, near battery	
YAMAHA		
	Type 1: 3 pins – white connector	
	Type 2: 1 pin – green male pin	
PIAGGIO		
	Yellow or Red Connector, 2-3 pins	

BRAND	OBD PORT ON THE VEHICLE	SMARTTOOL CABLE
SUZUKI		
	White connector, 6 pins	
SYM		
	Black connector, in the rear	
KIMCO		
	3 pins connector, near battery	

1.1.3. Detailed instruction

a) Read/ Erase DTC

- **Manipulation**

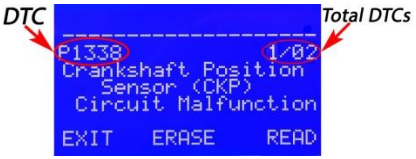
- Connect DLC Cable
- Turn ON IG

- **On Smarttool**

Step 1: Select "SCAN ENGINE"

Step 2: Select model

Step 3: Select "READ DTC"



Step 4 :Press(←) or (→) to show other fault. Press (↑) to select erase quickly

b) Erase DTC

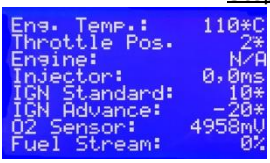
Step 1: Select "ERASE DTC"

Step 2:Press ENT

Step 3: Erase success

c) View Engine Data

Step 1: Select "ENGINE DATA"

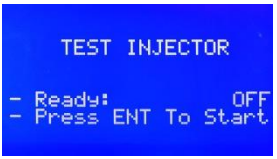


Step 2: Press(←) or(→) to show the full information

d) Active Test Component

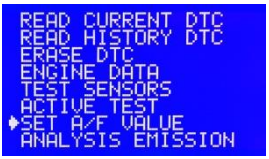
Step 1:Select "ACTIVE TEST"

Step 2: Select the system to activate

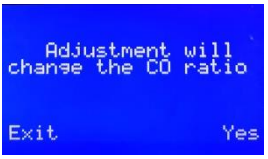


Step 3: Press ENT to start testing

e) Set A/F Value



Step 1:Select "SET A/F VALUE"



Step 2: Press ENT to select "YES"

Step 3: Turn off then turn on Ignition Switch and Press ENT

Step 4: Press(←) or(→) to select the value

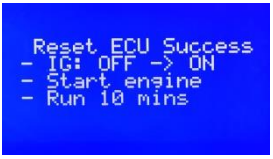
- **Note:**
- (+) icon: it means increase A/F ratio, tend to rich A/F
- (-) icon: it means decrease A/F ratio, tend to lean A/F

f) Reset ECM

Restore ECU settings to the factory original state of HONDA, PIAGGIO motorcycle

Step 1: Select "RESET ECM"

Step 2: Press ENT to select "Yes"



Step 3: Start engine in 10 mins

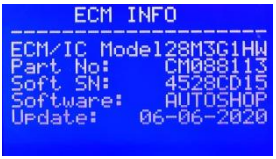
- **Note:** After reset, pls run engine 10 minutes at idle speed, ECM will configure parameter automatically

g) Upgrade ECM Software

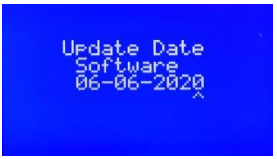
Support Honda, Piaggio: upgrade new software or upload the original manufacturer's software, in order to fix software errors during engine operation

Step 1: Select "UPGRADE ECM SOFT"

Step 2: Press ENT



Step 3: Press ENT



Step 4: Enter update date

Step 5: Software upgrading

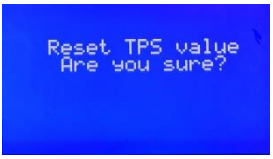
Step 6: Upgrade successfully

- **Note**

- Ensure good battery power. Don't turn OFF IG when device upload data
- When it show success screen, OFF -> ON IG SW, then press ENTER

h) Reset TPS sensor Piaggio/ Vespa

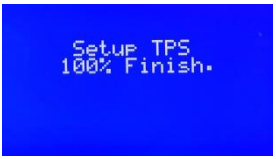
Step 1: Select "RESET TPS"



Step 2: Press ENT

Step 3: Full close

Step 4: Full Open



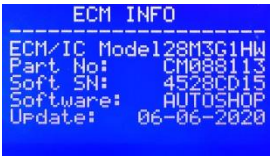
Step 5: Setup successfully

- **Note**

- If not success, check sensor, wires and ECM then try again

i) IC/ECM info

Step 1: Select "IC/ECM INFO"



Step 2: Show ECM info

1.2. ABS SCAN

1.2.1. Parameters meaning

NO	PARAMETER	CONTENT	UNIT
1	Front Spd	Front Speed Sensor	Km/h
2	Rear Spd	Rear Speed Sensor	Km/h
3	Front Sensor	Front Sensor Status	
4	Rear Sensor	Rear Sensor Status	
5	Brake SW	Brake Switch	ON/OFF
6	Relay Pump	Relay Pump	
7	Battery	Battery	V
8	Pump ABS	Pump ABS	V
9	Relay Protect	Relay Protect Power Supply To Pump	
10	Frt Hold Valve	Front Hold Valve	
11	Frt Release Val	Front Release Valve	
12	Rear Hold Valve	Rear Hold Valve	
13	Rear Release Val	Rear Release Valve	
14	ABS Light	ABS Light	
15	Ampe Battery	Current of Battery	A
16	First set	First set Value	

1.2.2. Detailed Functions

a) Read DTC

- **Manipulation**

- Connect SmartTool to motorcycle via OBD connector
- Turn ON Ignition SW

- **On SmartTool**

Step 1: Select "SCAN ABS"

Step 2: Select brand

Step 3: Select "READ DTC"

Step 4: Press button (←) or(→) to show other fault ABS

b) Erase/ Clear DTC

Step 1 : Select "ERASE DTC "

Step 2 : Press ENT

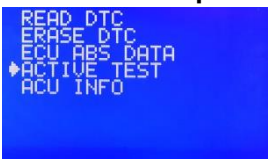
Step 3: Erase success

c) View ECU ABS Data

Step 1: Select "ECU ABS DATA"

Step 2: Press button (←) or(→)to Display more specifications ABS

d) Active Test Component



Step 1: Select "ACTIVE TEST"

Step 2: Select the system to activate

Step 3: Press ENT to active

e) ECU ABS/ ACU Info

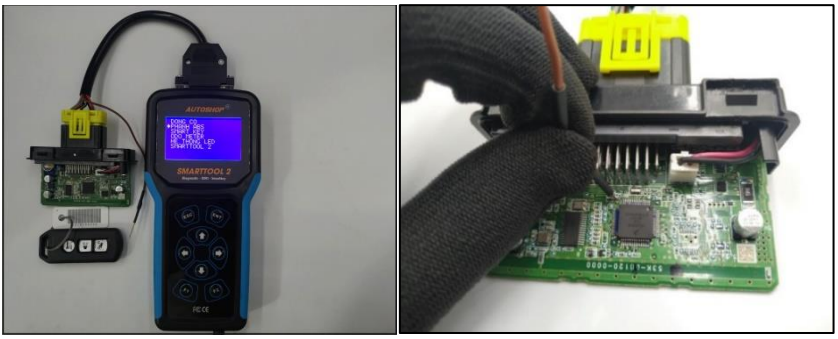
Step 1: Select "ACU INFO" Step 2: Show info

2. PROGRAM KEY

2.1. Auto program for Honda

2.1.1. SCU 1 connector

Search diagram on the "ALLMOTO"



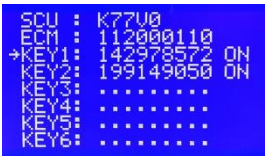
a) Read KEYID - ECMID store in SCU and auto OFF/ON FOB

- **Purpose**

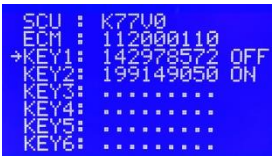
- Read KEYID and ECMID to add new key.
- OFF or ON FOB without the original FOB.

- **The steps taken on the Smart Tool**

Select "SMART KEY" →"HONDA"→"SCU- 1 CONNECTOR" →"AUTO PROGRAM"



Step 1: Select "READ FULL KEYID" Step 2: KEYID and ECMID



Step 3(if need): Use "(→) or (←)" symbol to ON/OFF

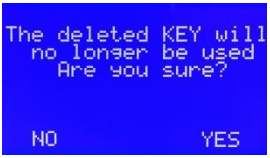
- **Notes:**
- Check cable, connection points carefully.
- To ON/OFF use the left button or the right button on SMART TOOL and press ENT

b) Erase KEYID.

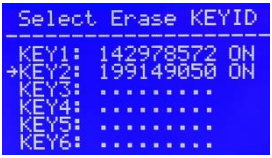
- **Purpose:**
- Add more new FOB When SCU data is full of KeyID
- Erase KeyID of the FOB that has been dropped.
- **The steps taken on the SmartTool**

Select "SMART KEY" →"HONDA"→"SCU- 1 CONNECTOR" →"AUTO PROGRAM"

Step 1 : Select "ERASE KEYID"

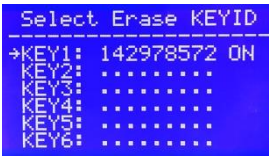


Step 2 : Press ENT



Step 3: Select KEYID to erase

Step 4: Press ENT



Step 5: Erased successfully

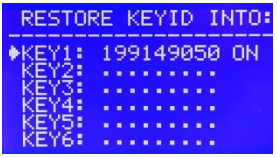
- **Notes:**
- Check cable, connection points carefully.
- Select "RESTORE KEYID" to restore the erased KeyID if you did wrong step

c) Restore KeyID

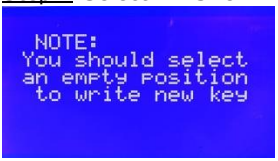
- **Purpose:**
- We can restore the erased KeyID.

- **The steps taken on the Smart Tool.**
  Select "SMART KEY" →"HONDA"→"SCU- 1 CONNECTOR" →"AUTO PROGRAM"

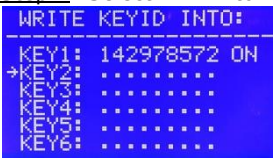
Step 1:Select "RESTORE KEYID"



Step 2: Select KEYID to restore



Step 3: Press ENT



Step 4: Select write KEYID into

Step 5: Restore successfully

- **Notes:**

- Check cable, connection points carefully.
- Select the empty position to write.

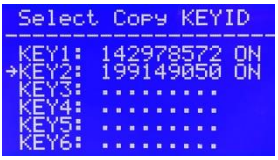
d) Copy KEYID.

- **Purpose:**

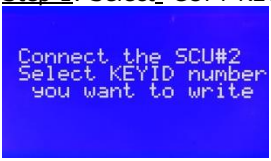
- Register 1 FOB for many bikes.
- Replace new SCU and keep all of the used key

- **The steps taken on the Smart Tool:**
  Select "SMART KEY" →"HONDA"→"SCU- 1 CONNECTOR" →"AUTO PROGRAM"

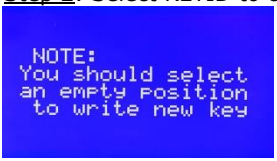
Step 1: Select "COPY KEYID"



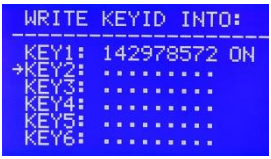
Step 2: Select KEYID to copy



Step 3 : Connect the 2nd SCU



Step 4: Press ENT



Step 5: Select write KEYID into

Step 6: Copy success

e) Write KEYID

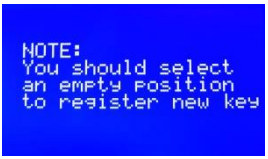
- **Purpose:**

- Make 1 FOB work for 2,3,4… many bikes.
- Reuse the registered FOB.

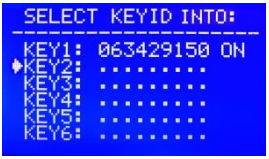
- **The steps taken on the Smart Tool.**

Select "SMART KEY" →"HONDA"→"SCU- 1 CONNECTOR" →"AUTO PROGRAM"

Step 1 : select "WRITE KEYID"



Step 2 : Press ENT



Step 3 : Select position to write

Step 4 :Enter KEYID

Step 5 : Enter RESET FOB code

Step 6 : Write successful

- **Notes:**

- Check cable, connection points carefully.
- Select the blank position to register a new KEYID. Shouldn't select the position had code.
- Use Mobile app "ALLMOTO" to get Reset Code
- Download from CH PLAY, APPSTORE or website: www.autoshopvn.com

f) Copy SCU

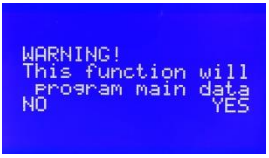
- **Purpose:**

- Replace SCU by copy SCU function without synchronization ECM

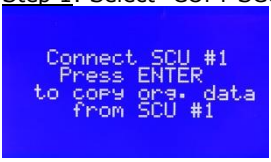
- Keep FOB of the old SCU.

- **The steps taken on the Smart Tool.**
  Select "SMART KEY" →"HONDA"→"SCU- 1 CONNECTOR" →"AUTO PROGRAM"

Step 1: Select "COPY SCU"

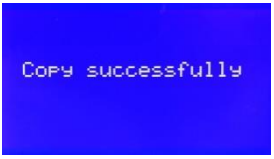


Step 2: Press ENT



Step 3: Connect the 1st SCU to copy data

Step 4: Connect the 2nd SCU to write data



Step 5 : Copy success

g) Edit ECMID.

- **Purpose:**

- Edit ECMID
- Sync ECM & SCU without bikes
- Advantages: easy to manipulate, high accuracy, save time.

- **The steps taken on the Smart Tool.**
  Select "SMART KEY" →"HONDA"→"SCU- 1 CONNECTOR" →"AUTO PROGRAM"

Step 1: Select "WRITE NEW ECMID"

Step 2: Enter ECMID

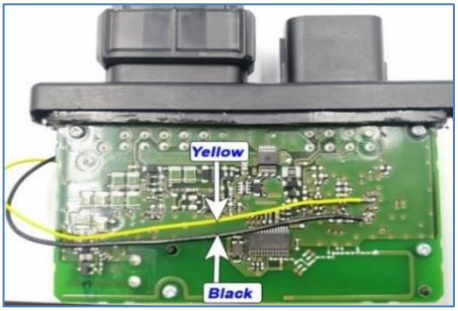
Step 3: Successfully

- **Notes:**

- Check cable, connection points carefully.
- This function changes data of SCU.
- To know ECMID, select "READ KEYID".

2.1.2. SCU 2 Connector

Search diagram on the "ALLMOTO"



a) Read KeyID

- **Purpose:**

- When all keys lost
- Read KeyID to register new FOB.

- **Special notes:**

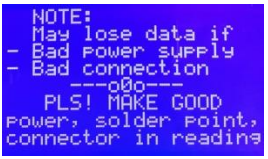
- Check cable, solder, make sure the machine is firmly fixed.
- When reading KeyID, don't touch and move the smart box
- Wait to complete 100% reading KeyID and display KeyID.
- During reading, if the connection was disconnected or loose the solder, the device will automatically calculate the KeyID at the moment. Then to repair SCU, use the function "REFLASH SCU" and " REPLACE SCU "to synchronize the data for SCU.
- If unsuccessful reading (not enough 100%, unread ID), pls continue reading 2, 3 times until finish 100% and get KeyID on the screen.
- Should read by menu "QUICK READ KEYID". If unsuccessful reading, try "FULL READ KEYID".

- **The steps taken on the Smart Tool**

Way 1: Select "READ KEY ID" (priority)

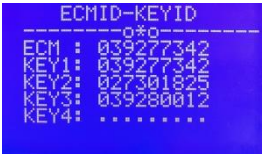
Step 1: Select "SCU-2 CONNECTORS" Step 2: Select "AUTO PROGRAM"

Step 3: Select "READ KEYID"



Step 4: Press ENT

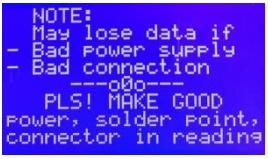
Step 5: Wait to 100%



Step 6: Key ID code

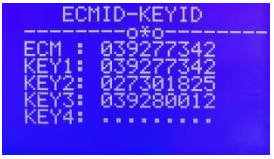
Way 2: Select " READ FULL KEYID" (when the 1st way can't be showed KeyID)

Step 1: Select "READ FULL KEYID"



Step 2: Press ENT

Step 3: Wait to 100%



Step 4: Key ID code

- **Notes:**
- Check the connection points, cable carefully.
- QUICK READ KEYID"- it take about 1 - 1,5 minutes to read KEYID
- Ensure a stable power source.
- If the reading KeyID is faulty, continue reading until 100%.

b) Read ECMID

- **Purpose:**
- When SCU is broken, it is necessary to replace.
- Reading ECMID from SCU.
- ECMID need to synchronize between the engine box (ECM) and Smart key box (SCU).
- **The steps taken on the Smart Tool**

Select "SMART KEY"→"HONDA"→"SCU- 2 CONNECTORS" →"AUTO PROGRAM"

Step 1: Select "READ ECMID"

Step 2: ON Key (FOB)

Case 1: Key not Found or Key turned OFF

Case 2: ECMID code

- **Notes:**

- Reading ECMID without soldering.
- To read ECMID, the FOB must be synced with SCU

c) View the latest ID

- **Purpose:**

- View the latest KeyID without reading again.

- **The steps taken on the Smart Tool.**

Select "SMART KEY"→"HONDA" →"SCU - 2 CONNECTORS"→"AUTO PROGRAM"

Select "VIEW THE LASTEST ID"

- **Notes:**

- Reading KeyID successfully before using this function.

d) Restore SCU

- **Purpose:**

- Restore data of SCU, repair the SCU which software error

- **The steps taken on the Smart Tool.**

Select "SMART KEY"→"HONDA"→"SCU – 2 CONNECTORS" →"AUTO PROGRAM"

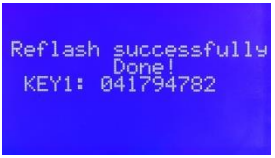
Step 1: Select " RESTORE SCU DATA"

Step 2 : Select model

Step 3: Press ENT

Step 4: Press ENT

Step 5: Enter ECMID of SCU



Step 6: Reflash successfully

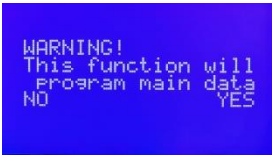
- **Notes:**
- When restoring data of SCU then all old data is erased.
- In step 4 enter ECMID of ECM or ECMID previously read from SCU
- In step 5 enter KEYID random or not enter and select ENT

e) Copy SCU

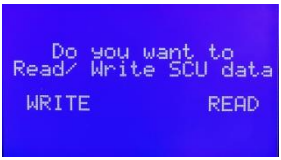
- **Purpose:**
- Replace SCU by copy SCU function without synchronization ECM
- Keep FOB of the old SCU.
- **The steps taken on the Smart Tool.**

Select "SMART KEY" →"HONDA"→"SCU - 2 CONNECTOR" →"AUTO PROGRAM"

Step 1: Select "COPY SCU"

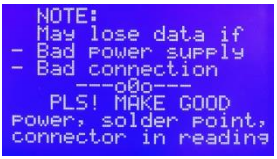


Step 2: Press ENT

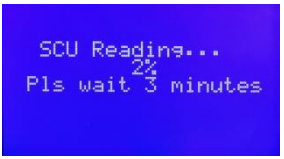


Step 3: Press ENT to select "READ"

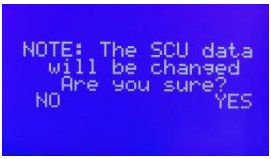
Step 4: Connect to old SCU



Step 5: Press ENT

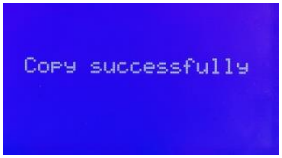


Step 6: Wait about 4-5 minutes



Step 7 : Press ENT to select "YES"

Step 8: Connect to new SCU



Step 9: Copy successfully

2.2. Manual program function

2.2.1. Add key by key:

- **Purpose:**

- Add new key (FOB)
- On FOB again

- **The steps taken on the Smart Tool.**

Select "SMART KEY" →"HONDA" →" SCU – 1 CONNECTOR" →"AUTO PROGRAM"

Step 1: Select "ADD NEW KEY"

Step 2: On original Key and new KEY

Step 3: Turn OFF the original FOB

Step 4: Successfully

- **Notes:**

- Only use when the original FOB is available.
- Turn OFF all unused keys.

2.2.2. All keys lost:

- **Purpose:**

- Register new key when all keys lost

- **The steps taken on the Smart Tool.**

Select "SMART KEY" →"HONDA"→"SCU – 1 CONNECTOR" →"MANUAL PROGRAM"

Step 1:Select "ALL KEYS LOST"

Step 2: Enter KEYID

Step 3: Turn on FOB

Step 4: Wait in 2-3 minute

Step 6: Successfully

- **Notes:**

- Quick step to program new key by F2 button after reading KEYID
- Turn OFF all FOBs are not used.

2.2.3. OFF the missing FOB

- **Purpose:**

- OFF all keys except the original key.

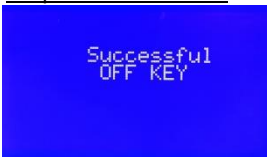
- **The steps taken on the Smart Tool:**

  Select "SMART KEY" →"HONDA" →" SCU – 1 CONNECTOR" →"MANUAL PROGRAM"

Step 1: Select "OFF THE MISSING KEY"

Step 2: Turn on FOB

Step 3: Turn off FOB



Step 4: Successfully

2.2.4. Test SCU ←→ FOB

- **Purpose:**

- After registering FOB, we should test sync between SCU and FOB.

- **The steps taken on the Smart Tool:**

  Select "SMART KEY" →"HONDA"→"SCU – 1 CONNECTOR" →MANUAL PROGRAM"

Step 1: Select "CHECK FOB←→FOB"

Step 2: Turn on FOB

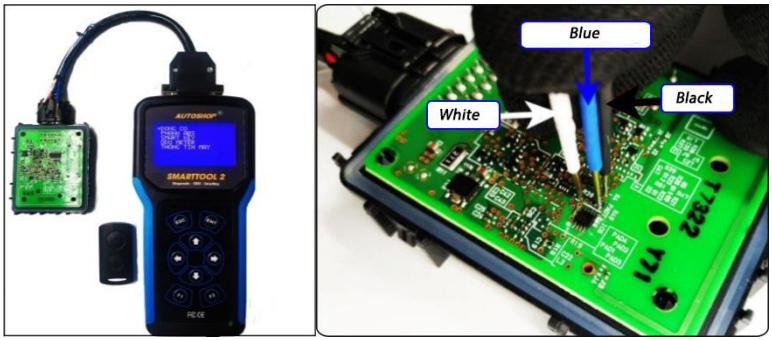
Case 1: FOB has not been registered

Case 2: FOB has been registered

2.3. YAMAHA, T-MAX AND SUZUKI

2.3.1. AUTO PRGRAM

Search diagram on the "ALLMOTO"



a) Read KEYID

- **Purpose:** Read KeyID and register the new key when all keys lost

- **The steps taken on the Smart Tool.**

  Select "SMART KEY" →"YAMAHA"

Step 1: Select "SCU (12 PINS)"

Step 2 : Select "AUTO PROGRAM"

Step 3: Select "READ FULL KEYID"

Step 4: Show KEY ID

- **Notes:**

- Check connection points, cable carefully.
- After reading, save it.

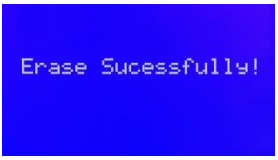
b) Erase KEYID.

- **Purpose:** If SCU is full of 6 keys code, we can delete the unused KEYID and add new key.
- **The steps taken on the Smart Tool.**
  Select "SMART KEY" →"YAMAHA" →"AUTO PROGRAM"

Step 1: Select "ERASE KEYID"

Step 2 : Press ENT

Step 3 : Step 3: Use </> button to select location of the KEYID



Step 4 : Erase success

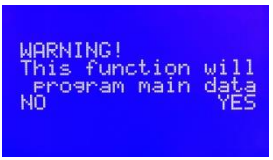
- **Notes:**

- The FOB of the KEYID can't use after erasing it
- Step 3, use "</>" on keyboard to control.
- Should erase from the 2nd KEYID.

c) Copy SCU.

- **Purpose:** Replace SCU by "Copy SCU" without programing ECMID.
- **The steps taken on the Smart Tool:**
  Select "SMART KEY " →"YAMAHA" →"AUTO PROGRAM"

Step 1 : Select "COPY SCU"



Step 2 : Press ENT

Step 3: Connect to old SCU

Step 4 : Connect to new SCU

Step 5 :Copy success

- **Notes:**

- After copying, data of the 2nd SCU will be changed.
- Check connection points, cable carefully.

2.3.2. Manual program

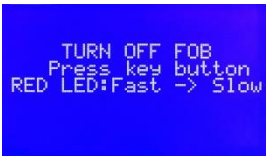
a) Add FOB

- **Purpose**

- Register new key when all keys lost, or add new FOB
- Add new FOB on the table, without bike.

- **The steps taken on the Smart Tool:**
  Select "SMART KEY"→"YAMAHA"→"MANUAL PROGRAM"

Step 1 : Select "ADD NEW KEY"

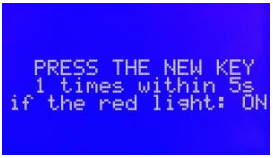


Step 2 : Off old FOB

Step 3 : Enter KEYID

Step 4 : On new FOB

Step 5: Wait 1-2 mins



Step 6: Press key button of FOB

Step 7: Success

- **Note**

- KeyID code is the code read from SCU or can pry the original FOB cover to get the KeyID
- Quick step to program new key by F2 button after reading KEYID

b) All keys lost:

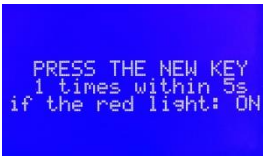
- **Purpose:** Register new key when all keys lost
- **The steps taken on the Smart Tool:**
  Select "SMART KEY" →"YAMAHA" →"MANUAL PROGRAM"

Step 1: Select "ALL KEYS LOST"

Step 2: On new FOB

Step 3: Off FOB

Step 4: Wait 1-2 mins



Step 5: Press key button of FOB

Step 6: Success

- **Note** : Quick step to program new key by F2 button after reading KEYID

c) OFF the missing FOB.

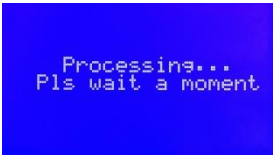
- **Purpose:** Turn OFF the FOB which lost or not used.
- **The steps taken on the Smart Tool:**

  Select "SMART KEY" →"YAMAHA" →"MANUAL PROGRAM"

Step 1: Select "OFF THE MISSING KEY"

Step 2 : Off FOB

Step 3: Enter KEYID



Step 4: Wait 1-2 mins

Step 5: On FOB

Step 6 : Off success

- **Notes:**

- After the FOBs turn OFF, we can't use them.
- After entering KeyID, you use SMTF04 - Yamaha cable to connect to SCU.

2.4. HÃNG PIAGGIO/VESPA

Search diagram on the "ALLMOTO"

2.4.1. Read IC/ECU ACI6XX

- **Purpose:** Register new FOB when all keys lost.
- **Steps taken on the Smart Tool:**
  Select " SMART KEY" → "PIAGIO/VESPA"

Step 1: Select "ACI6XX"

Step 2: On IG (if directly connect)

Step 3: Wait 2-3 mins

Step 4: Success

- **Notes**

- Way 1: Connect directly to OBD - diagnostic connector by OBD – Kline cable (near battery)
- Way 2: Connect on the table, to IC/ECU connector. Search diagram on mobile app "ALLMOTO"
- After reading keyID, write T5 immo chip by TmPro, CnMini, VVDI, KDX2, KDYZ…
  (Do the same for the other IC series of Piaggio/Vespa)

2.4.2. Reset KEYID MIUG3/ RIU1

- **Purpose**

- Turn OFF the lost keys.
- When using "reset KeyID" function, we have to register FOB manually.

- **Steps taken on the Smart Tool:**
  Select " SMART KEY" → "PIAGIO/VESPA"

Step 1: Select "MIUG3/RIU1"

Step 2: Select RESET KEYID

Step 3: On IG (if directly connect)

Step 4: Wait 2-3 mins

Step 5: Reset success

- **Notes**

- When using "reset KeyID" function, we can register FOB by manual procedure on the motorcycle.

3. ODO METTER

3.1. Overview

- Odometer of each bikes have general principles is the value is saved in internal of external EEPROM memory, so the fact is that we change ODO value means we change the EEPROM data on the processor.

3.2. Function ODO auto program

3.2.1. Smart ODO

a) Function

- An unique function of SMARTTOOL 2, this is "SMART ODO". It automatically searches and reads the current odometer value and corrects new value excatly without name of the vehicles
- Adjust ODO values for both cars and motorcycles
- Support 93Cxx series chips

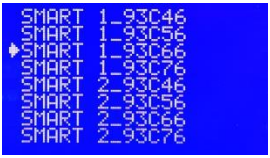
b) Steps taken on the Smart Tool:

- The fist, connecting dashboard with Smarttool via ODO cable, connection diagram can be searched on "ALLMOTO" app

Jack plug position EEPROM 93Cxx

Select "ODO METER" →"ODO SMART"

Step 1: Select "SMART ODO"



Step 2: Select type EEPROM

Step 3: Press ENT to select "YES"

Step 4: Enter new value

Step 5: Success

c) Note

- If "SMART 1" read incorrectly, pls select "SMART 2" menu
- If the device reads correctly the current kilometer, continue to adjust ODO
- If not, pls check the name of chip, soldering points position, wires connection
- Another way, take the chip and solder it into the extend board, plug the EEPROM into the corresponding position as image below, then continue

solder, plug position EEPROM 93Cxx

3.2.2. Function READ/WRITE EEPROM

a) Function

- Support adjusting ODO value for new motorcycles or big one
- Backup EEPROM data to the memory card
- Restore the original data

b) Steps taken on the Smart Tool:

- **Read data**

- Select "ODO METER" →"READ/WRITE EEPROM"

Step 1: Select "READ/WRITE EEPROM"

Step 2: Select type chip

Step 3: Select "READ DATA"

Step 4: Read success

- **Write data**

Step 1: Select "WRITE DATA"

Step 2: Reflash successfull

3.3. Odometer Correct Function

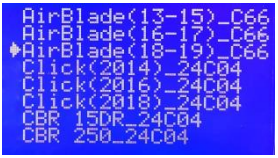
3.3.1. EEPROM 93Cxx (ex: AIR BLADE (2018 - 2019) _93C66)

a) Connect diagram:

Search diagram on the "ALLMOTO"

b) Steps taken on the Smart Tool

- Select " ODO METER" →" HONDA"



Step 1: Select "Airblade(18-19)_C66"

Step 2: Select "SET NEW ODO"

Step 3: Press ENT to select "YES"

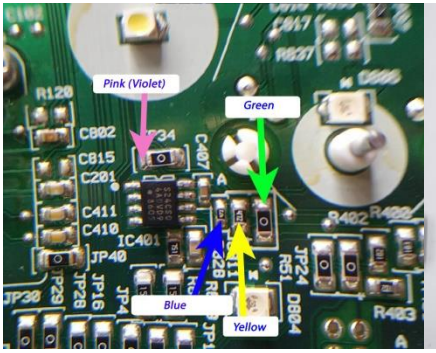
Step 4: Enter new ODO

Step 5: Success

3.3.2. EEPROM 24Cxx (ex: CLICK 2013_24C04)

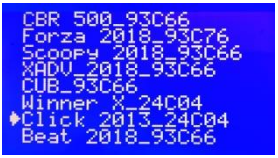
a) Connect diagram:

Search diagram on the "ALLMOTO"



b) Steps taken on the Smart Tool

- Select " ODO METER" → " HONDA"



Step 1: Select "CLICK (2014)_24C04"

Step 2: Select "SET NEW ODO"

Step 3: Press ENT to select "YES"

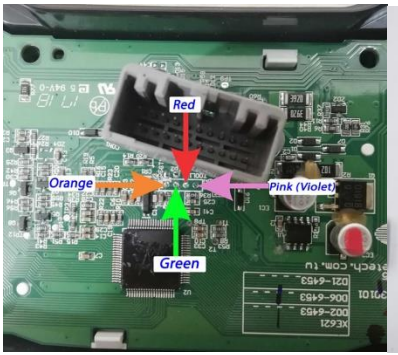
Step 4: Enter new ODO

Step 5: Success

3.3.3. R5F (ex : Suzuki Raider FI (R5F))

a) Connect diagram:

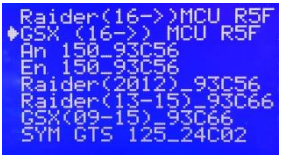
Search diagram on the "ALLMOTO"



b) Steps taken on the Smart Tool

- Select "ODO METER→ SUZUKI"

Step 1: Select "SUZUKI"



Step 2: Select "Raider MCU R5F"

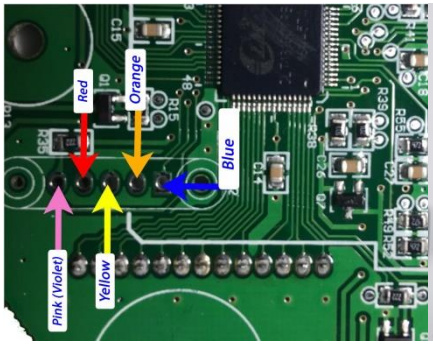
Step 3: Press → or ← to select new ODO

Step 4: Success

3.3.4. PIC 16F (Ex: Yamaha Janus 16F1947)

a) Connect diagram

Search diagram on the "ALLMOTO"



b) Steps taken on the Smart Tool

Select " ODO METER" → " YAMAHA"

Step 1: Select "Janus"

Step 2: Select "SET NEW ODO"

Step 3: Press ENT to select "YES"

Step 4: Enter new ODO

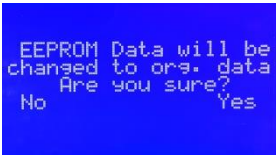
Step 5: Success

3.3.5. Reset ODO function:

- Used when EEPROM data of ODO is error:
- The ODO screen shows (----------)
- Show wrong speed, fuel meter (fuel is available but notify empty)
- The ODO screen don't show the kilometer value.
- Used for : 93Cxx, 24Cxx, PIC 16F

Ex: Reset ODO for Yamaha Yanus 16F 1947

Step 1: Select "RESTORE ORG. DATA"



Step 2: Press ENT

Step 3: Select model

Step 4: Reflash successfull

3.4. Some common errors

a. Read wrong present value of ODO

- Reason: Bad connection of solder points, EEPROM, select wrong bike year.
- Repair: Check connection diagram again, bike version, processor type.

b. Report SD Card error

- Reason: SD card isn't plugged; contact is not good or null.
- Repair: Check plug, update SD card.

c. Show EEPROM error.

- Reason: Incorrect solder connection, EEPROM plug, bike version.
- Repair: Check connection diagram again, bike version, processor type.

4. USER GUIDE OF AUTOMATIC UPDATING

4.1. Preparation:

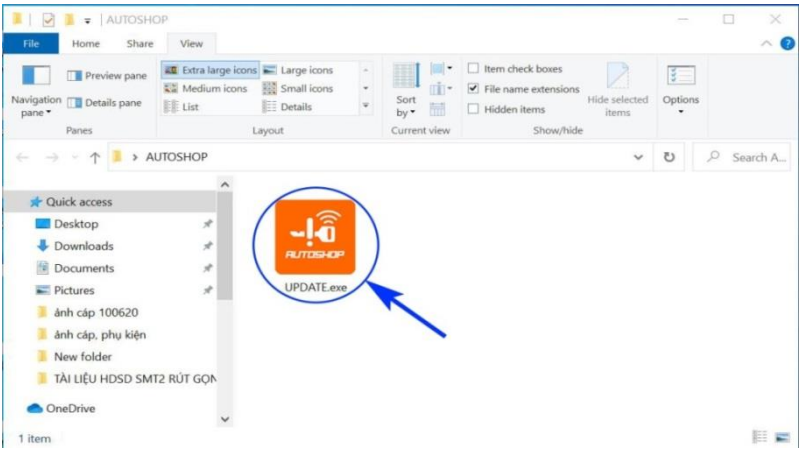
- Computer
- SMARTTOOL 2, update cable

4.2. Perform

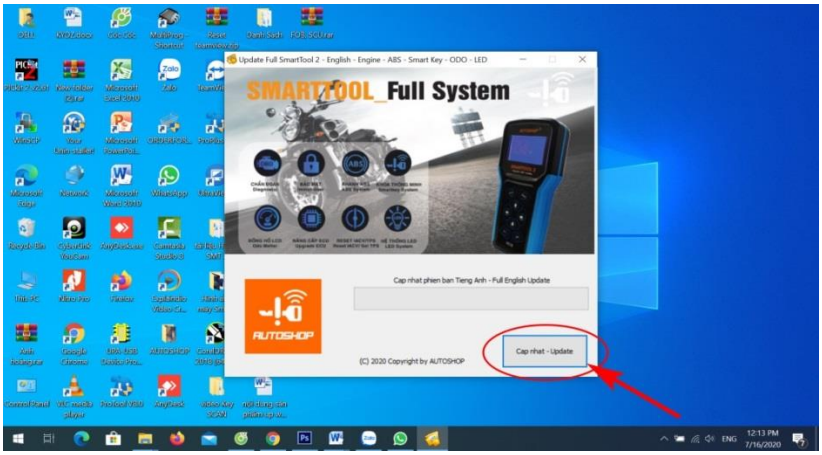
Step 1: Download update software of Autoshop on website :*http://autoshopvn.com/update*

Step 2: Connect SMARTTOOL 2 with computer by update cable

Step 3: Double click to software "Update"



Step 4: Click "Update", wait about 3 minute to the software updates auto.



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    - **Version 9.5 revised: February 2020**

We greatly appreciate your kind words!!!