

# Ultrascan-B USER MANUAL

#### **WARRANTY POLICY**

Providing that this product has been installed and used as instructed in this operating manual, SKYAUTONET will repair Ultrascan-B module with new or reconditioned parts, free of charge for

- Two (2) year for full kit base

from the date of original purchase in the event of defect in materials or workmanship.

For a Full Kit Ultrascan-B, during the first 1 year of this 2-year warranty period, SKYAUTONET will cover the freight cost for return trip of the Ultrascan-B module for repair service, and for the remaining second 1 year period, the customer shall pay the return trip freight cost while the labor and part costs are still covered by SKYAUTONET.

Functioning accessories including cables and connectors are warranted for 1 year from the data of original purchase.

Non-functioning parts and consumable accessories including but not limited to base unit plastic case, carry case and parts thereof, plastic bags, printed material and CD or DVD.

The warranty is extended solely to the original purchaser. A purchase receipt or other proof of evidencing the date of original purchase will be required to be presented before providing necessary warranty service.

You are required to register Ultrascan-B and user information to SKYAUOTNET website immediately. SKYAUTONET holds the right to refuse provision of any service for the product that has not been registered.

This warranty only covers failures caused by defects in materials or workmanship, which may occur during normal use. It does not cover damage occurs during shipment or failures which may be caused by products, non-genuine parts or accessories not supplied by SKYAUTONET, or failures resulting from act of god, alteration, accident, misuse, introduction of liquid material or any other foreign matter into the product, abuse, neglect, improper installation, maladjustment of consumer controls, improper maintenance, modification or service conducted by any one unauthorized by SKYAUTONET

SKYAUTONET SHALL NOT BE LIABLE FOR LOSS OF DATA OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

SKYAUTONET's entire liability and your exclusive remedy under this warranty shall be limited to the replacement, or any defective parts or functions in the products, which is returned to SKYAUTOENT or its authorized local distributor, together with a copy of the purchasing receipt, during the aforementioned warranty period. Anything in the foregoing to the contrary notwithstanding, SKYAUTONET shall have no obligation for any defects in the product resulting from your storage thereof, or for defects that have been caused by operation of the product other than on the operation manual or in environmental conditions other than those specified by SKYAUTOENT or by alteration, accident, misuse, abuse, neglect, mishandling, misapplication, installation, maladjustment of consumer controls, improper maintenance, modification or damage that is attributed to acts of God.

This limited warranty gives you specified legal rights, and you may also have other rights, which vary from country to country. The laws of Republic of Korea, without regard to its conflict-of-laws rules, will govern this Limited Warranty.

A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements

Product name	Descriptions
Model	
Manufactured date	
Seller	
Buyer (User)	
E-mail	
Address	
Telephone	
Warranty service	A customer shall have the right of warranty service within 2-year after an original of purchase date when a product has problems
Non-warranty service	It does not cover damage occurs during shipment or failures which may be caused by products, non-genuine parts or accessories not supplied by SKYAUTONET, or failures resulting from act of god, alteration, accident, misuse, introduction of liquid material or any other foreign matter into the product, abuse, neglect, improper installation, maladjustment of consumer controls, improper maintenance, modification or service conducted by any one unauthorized by SKYAUTONET

## **DISCARD OF USED EQUIPMENT**

WEEE (Waste Electrical and Electronic Equipment) symbol as shown in Fig. 1 is indicated. Please note that Ultrascan-B is subject to this regulation for disposal of Waste Electrical and Electronic Equipment, therefore you are kindly requested to follow the suggested rules.



WEEE is applied to EU member nations as well as Non-EU member European countries with separate waste collection systems.

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help conserve natural resources. For more information on recycling of this product, please contact your community authority, your household waste disposal service or your local distributor.

#### **CAUTIONS BEFORE USE**

A warnings and cautions for safe and proper use of this product, therefore it is recommended that every user should read this section carefully before using the product and make sure that such warnings and precautions are well observed and comprehended.



Dangerous consequences may arise, with the possibility of fire, death or serious injury to the user, if the product is not handled properly as instructed below.

The user shall be fully liable for any direct or consequential damage or loss caused by not following the instructions provided in this G-scan user's manual.

- Make secure connections of all cables and connectors. Be careful not to let the any cables or power cable gets disconnected while the ULTRASCAN-B is operating.
- Do not disassemble or dismantle the Ultrascan-B module in any case.
- Use only the parts and accessories authorized by SKYAUTONET
- Use Ultrascan-B only for the original purposes as it was designed for.
- Beware that the user shall be fully liable for any direct or consequential damage or loss caused by not following the instructions provided in this Ultrascan-B user's manual.
- Beware that only the service personnel authorized by SKYAUTONET is entitled to provide aftersales service for Ultrascan-B.
- SKYAUTONET is not liable for any loss or damage cause from using parts or accessories that SKYAUTONET has not supplied.



## Caution

Dangerous consequences may arise, with the possibility of serious injury to the user and or damage to the product, if not handled properly as instructed below.

The user shall be fully liable for any direct or consequential damage or loss caused by not following the instructions provided in this Ultrascan-B user's manual.

- Avoid humidity and dusts when storing and using Ultrascan-B in order to prevent electric shock or fire.
- Be careful not to cause damages to the cables by heat from the engine or the moving parts in the engine compartment when Ultrascan-B connection is made.
- Stow the parts and accessories that are not in use in the Ultrascan-B carry case.
- Avoid following hazards for storing Ultrascan-B
  - Very high or low temperature

- Very high or low humidity
- Exposure to direct sunlight
- Avoid physical impart and vibration when carrying Ultrascan-B.
- Keep away from moisture when storing or using Ultrascan-B.
- Keep away from flammable substances or static inducing environment when storing or using Ultrascan-B keep away from chemical or acid material that may damage Ultrascan-B module or accessories.
- Do not expose Ultrascan-B to X-ray or microwave, otherwise it may cause serious damage
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
  - (1) This device may not cause harmful interference, and
  - (2) This device must accept any interference received, including interference that may cause undesired operation.

Caution: Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

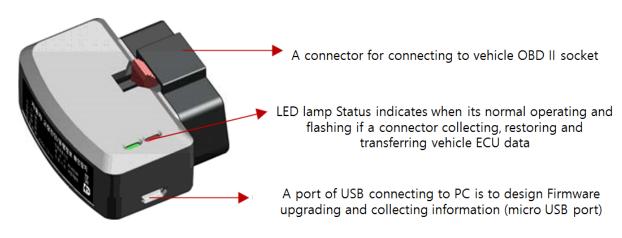
- This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.
- Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
  - (1) l'appareil ne doit pas produire de brouillage, et
  - (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
- Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

### [Ultrascan-B INTRODUCTION]

This is designed to track a vehicle driving information through PC connection, CDMA wireless communication device or Bluetooth and to collect vehicle abnormal trouble codes, to analyze driver's driving patterns and behaviors by connecting device to vehicle OBD II(On-board diagnostic) socket.

Product/Model	Low-Powered Wireless Device/Ultrascan-B
CPU	STM32F103RCT6
Vehicle Protocols	ISO-9141, ISO-14230, CAN
Bluetooth	Class2 (within 10m)
Diagnostic systems	ECU(Engine Control Unit), ABS
Operating	-30C ~75C
Temperature	
Dimensions(Exterior)	53mmx44mmx24mm
Weights	65g
Frequency	2402MHz~2480MHz
Channel	79EA
Transmission output	1dBm
Voltage	12 VDC
Antenna type	Dielectric Chip Antenna
Modulation system	GF5K/DQPSK/8DPSK

#### [Ultrascan-B PART]



On-board diagnostics (OBD) is an automotive term referring to a vehicle's self-diagnostic and reporting capability. OBD systems give the vehicle owner or repair technician access to the status of the various vehicle subsystems. The amount of diagnostic information available via OBD has varied widely since its introduction in the early 1980s versions of on-board vehicle computers. Early versions of OBD would simply illuminate a malfunction indicator light or "idiot light" if a problem was detected but would not provide any information as to the nature of the problem. Modern OBD implementations use a standardized digital communications port to provide real-time data in addition to a standardized series of diagnostic trouble codes, or DTCs, which allow one to rapidly identify and remedy malfunctions within the vehicle.

## [KEY FUNCTIONS]

- (1) Collection of daily vehicle driving information
  - Storage functionality for daily driving record
  - Data collected as daily driving record for insurance standardization applied
- ② Details for driving information (optional)
  - Driving speed (Max speed-average speed, speed distribution) sampling
  - Sampling data for the rapid acceleration and deceleration.
- 3 Self-Diagnostic function(optional)
  - Generator Low-High temperature warning function
  - Cool-temperature warning function when its' high
  - Engine oil warning function when its' high

## [INSTRUCTIONS FOR USE]

- 1. Be sure Ignition must be OFF before Ultrascan-B connecting.
- 2. Check a connection location then connecting Ultrascan-B
- After Ignition ON, LED of Ultrascan-B's module lighting and will be operating normally with a few minutes LED lighting.
- 4. After checking power on of Ultrascan-B module, try to activate Android application to connect to Bluetooth. This step is for BT pairing.
- 5. By Bluetooth connection, it can be started to communicate ECU of motorcycle and reading.
- 6. After diagnosing, you close application and BT by disconnection.





Once you see socket location on the vehicle, please push hard to the vehicle's socket and check LED lamp of ULTRASCAN-B module after ignition on

Ignition (OFF)
Ignition ON, LED of ULTRASCAN-B's module lighting and will be operating normally with a few minutes LED lighting.

# [Ultrascan-B DIAGNOSTIC COVERAGE]





#### **Supporting Models**

Small / Compact			Middle / Sedan			RV / SUV		
New Matiz	0.8	08~	Lacetti	1.6	08~	Tosca	2.0 L6	08~
Matiz C	1.0	09~	Lacetti	Diesel 2.0	08~	Tosca	2.5 L6	08~
Matiz Classic	0.8	08~	Lacetti Wagon	Diesel 2.0	08~	Tosca	1.8	08~
New Kalos	1.6	08~	Lacetti Premier	1.6	08~	Tosca	Diesel 2.0	08~
Gentra	1.2	08~	Lacetti Premier	1.8	08~	Winstorm	Diesel 2.0	08~
Gentra	1.6	08~	Lacetti Premier	Diesel 2.0	08~	Winstorm	2.4	08~
							Diesel 2.0	08~



i30 Avante MD

Diesel 1.6

1.6

08~

10~

YF SONATA

New EQUUS

HIDHI	Supporting Models									
Small / Compact				Middle / Sedan			RV / SUV			
New Click	1.4 1.6	05~	Tuscani	2.0	01~02	LAVITA	1.5 1.6	01~07		
New Click	Diesel 1.5	06~	Tuscani	2.0 CVVT	02~08	LAVITA	1.8	01~05		
Click	1.3 1.5	02~05	Tuscani	2.7	01~08	TERRACAN	Diesel 2.9	00~06		
Verna	1.6 CVVT	05~	SONATA (NF)	2.0	04~09	TRAJET XG	2.0 2.7	99~07		
Verna	1.4	05~	SONATA (NF)	2.4	04~09	TRAJET XG	Diesel 2.0 WGT	01~07		
Verna	Diesel 1.5	05~	SONATA (NF)	3.3	04~09	TRAJET XG	Diesel 2.0 VGT	01~07		
New Verna	1.3 1.5	04~05	SONATA (NF)	Diesel 2.0	04~09	Santafe CM	Diesel 2.0	06~		
New Verna	CVVT	04~05	SONATA (NF)	LPI 2.0	04~09	Santafe CM	Diesel 2.2	06~		
New Verna	1.3 1.5	04~05	EF SONATA	1.8 2.0	01~03	Santafe	Diesel 2.0 WGT	00~05		
Verna	1.5 lean-burn	99~03	NEW EF SONATA	1.8 2.0	03~05	Santafe	Diesel 2.0 VGT	00~05		
Verna	1.3 1.5	99~00	Grandeur XG	2.0 2.5	98~01	TUCSON	Diesel 2.0 WGT	04~05		
Avante HD	1.5 lean-burn	06~10	New Grandeur XG	2.0 2.5	02~05	TUCSON	2.0 CVVT	04~09		
Avante HD	1.6 CVVT	06~10	New Grandeur XG	LPI 2.7	02~05	TUCSON	Diesel 2.0 VGT	04~09		
Avante HD	2.0 VVT	06~10	Grandeur TG	2.7	05~10	TUCSON IX	Diesel 2.0 VGT	09~		
New Avante XD	Diesel 1.6	04~06	Grandeur TG	3.3 3.8	05~10	TUCSON IX	2.0	09~		
New Avante XD	1.5 1.6	04~06	Grandeur TG	2.4	07~10	VERACRUZ	Diesel 3.0 VGT	07~		
New Avante XD	2.0 WT	04~06	Grandeur TG	LPI 2.7	05~10	VERACRUZ	3.8	08~		
Avante XD	Diesel 1.5	99~01	EQUUS	3.0 3.5	03~06	Libero	Diesel 2.5	04~		
Avante XD	1.5 lean-burn	99~03	EQUUS	3.3 3.8 Lambda	05~09	STAREX	Diesel 2.5	01~06		
Avante XD	1.5 2.0	99~03	EQUUS	4.5 MPI	03~09	GRAND STAREX	Diesel 2.5	06~		
Avante XD	2.0	02~03	Genesis	3.3 3.8	08~					
i30	2.0 CVVT	08~	Genesis Coupe	2.0 3.8	08~					
i30	1.6	08~	YF SONATA	2.0 2.4	09~					

LPI 2.0

3.8 4.6

09~

09~



#### Supporting Models

	Intermediate / Full		SUV			RV			
Chairman H	2.8	08~	ACTYON	Diesel 2.0	08~	Rodius	Diesel 2.7	08~	
Chairman H	3.2	08~	NEW KYRON	Diesel 2.0	08~				
Chairman W	3.2	08~	NEW KYRON	Diesel 2.7	08~				
Chairman W	3.6	08~	NEW REXTON	Diesel 2.0	08~				
Chairman W	5	00	NEW PEYTON	Diocal 2.7	00				



#### RENAULT SAMSUNG MOTORS

#### **Supporting Models**

Small / Compact			Middle / Sedan			RV / SUV			
NEW SM3	1.5	08~	NEW SM5	2.0	08~	QM5	Diesel 2.0	08~	
NEW SM3	1.6	08~	NEW SM5 (NEW)	2.0	09~	QM5	2.5	08~	
NEW SM3 (NEW)	1.6	09~	SM7	2.3	08~				
			SM7	3.5	08~				



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KIA MOTORS	Supporting Models							
	Small / Compact			Middle / Sedan			RV / SUV	
Pride	1.6 CVVT	05~	OPTIMA	1.8	02~05	CARENS II	Diesel 2.0	02~06
Pride	1.4 DOHC	05~	OPTIMA REGAL	1.8	02~05	CARENS II	2.0 CVVT	02~06
Pride	Diesel 1.5	05~	LOTZE	1.8 2.0	05~10	NEW CARENS	Diesel 2.0	06~
Morning	1	04~07	LOTZE	2.4	05~10	NEW CARENS	LPI 2.0	06~
Morning	1.0	08~	LOTZE	Diesel 2.0	06~10	SPORTAGE	Diesel 2.0	04~10
CERATO	Diesel 1.6	05~	LOTZE	LPI 2.0	05~10	SPORTAGE	2.0 CVVT	04~10
CERATO	Diesel 1.5	05~06	K5	2.0 2.4	10~	SORENTO	Diesel 2.5 WGT	02~04
CERATO	1.5 1.6 CVVT	03~09	K5	LPI 2.0	10~	SORENTO	Diesel 2.5 WGT	02~04
CERATO	2.0	03~09	K7	2.4 2.7	09~	Xtrek	Diesel 2.0	06~
FORTE	Diesel 1.6	09~	K7	3.5	09~	GRAND CARNIVAL	Diesel 2.9 WGT	05~06
FORTE	1.6 CVVT	09~	K7	LPI 2.7	09~	GRAND CARNIVAL	Diesel 2.9 WGT	07~09
FORTE	2.0 CVVT	09~	OPIRUS	2.7	02~06	GRAND CARNIVAL R	Diesel 2.9 WGT	10~
SOUL	Diesel 1.6	09~	OPIRUS	3.0 3.5	02~06	GRAND CARNIVAL	LPI 2.7	08~
SOUL	1.6 CVVT	09~	OPIRUS	2.7	07~	MOHAVE	Diesel 3.0	08~
SOUL	2.0 CVVT	09~	OPIRUS	3.3 3.8	07~	MOHAVE	3.8 4.6	08~
			OPIRUS	LPI 2.7	03~	SPORTAGE R	Diesel 2.0	10~
						SPORTAGE R	2.0 CWT	10~
						SORENTO R	Diesel 2.0 2.2	09~
						SORENTO R	2.0 CVVT	09~