# Manual of SMART KEY ECU

Product: Smart Key ECU Model Name: IBU-4E02

## 1. GENERAL DISCRIPTION

The SMART KEY ECU is a part of START-STOP BUTTON SYSTEM.

It is possible to output the LF(125kHz) signal by pushing the button of door handle and SSB. If the button of door handle or SSB button is pressed, SMART KEY ECU output the LF(125kHz) signal.

LF signal output for engine start

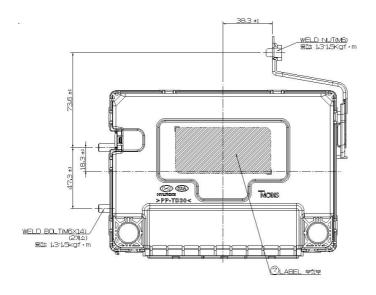
1) SSB button is pressed, SMART KEY ECU output LF signal through the interior LF antenna for Fob searching.

### 2) LF signal output for door lock/unlock and trunk release

The button of door handle or trunk is pressed, SMART KEY ECU output LF signal through the exterior LF antenna for Fob searching

#### 2. ELECTRICAL CHARACTERISTICS

model name	SMART KEY ECU
Operating voltage	9V ~ 16V
Dark current	5mA Max.
Operating frequency	125KHz
Modulation	ASK
Operating temperature	-30°C ~ +75°C



#### **FCC Warning**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

#### **IC Warning**

"This device complies with Industry Canada licence-exempt RSS standard(s)."

Operation is subject to the following conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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 provoquer de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.