

Car AVN User Manual

Model Name : VCUEB

1. Overview and Specifications

(1) Overview

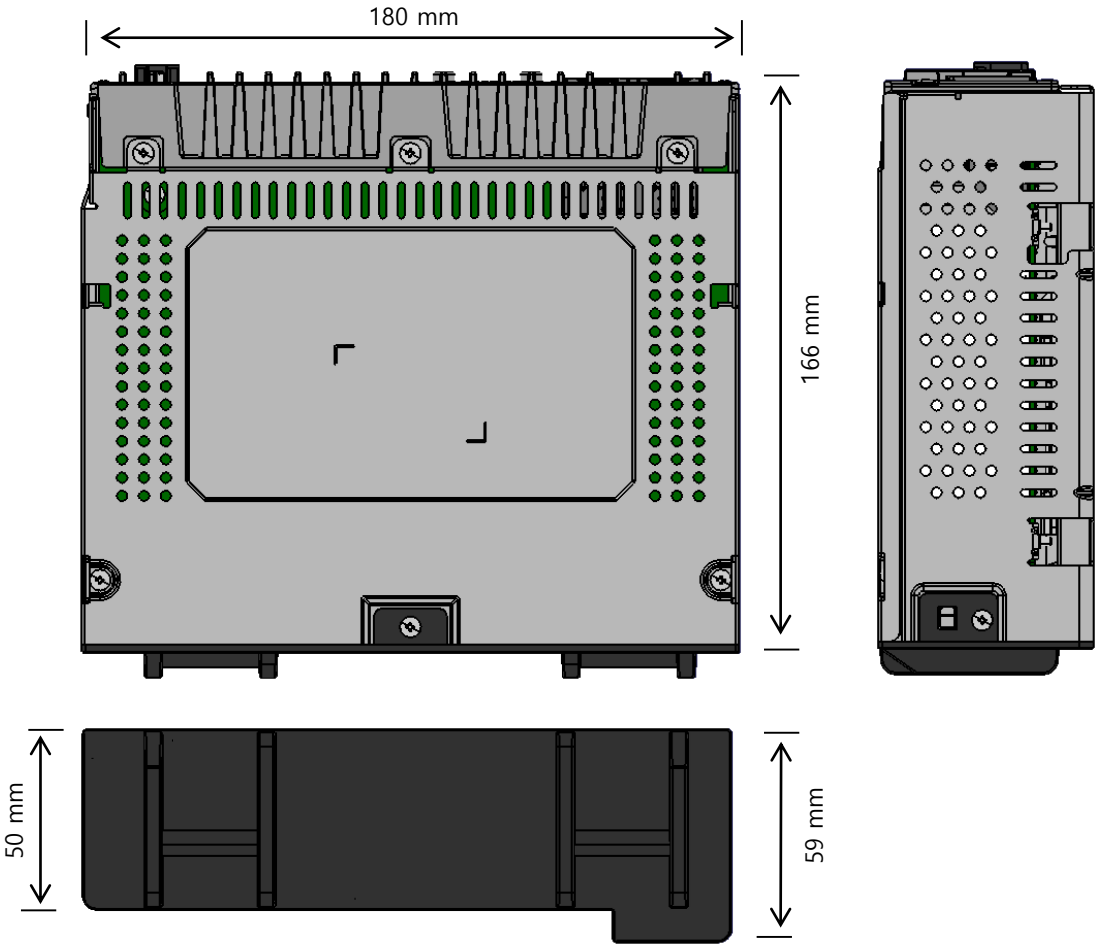
- 1) The Infotainment system provides Infotainment in your car, using the latest technology. See your dealer to have the system or software updated and upgraded.
- 2) The radio can be easily used by registering up to 25 FM or AM with the PRESET button[1 to 5] per every 5 pages.
- 3) The Infotainment system can play the USB storage device or iPod/iPhone products.
- 4) The Bluetooth phone connection function allows for the use of wireless hands-free Phone calls, as well as a phone music player.
In addition, the WiFi function is provided.
- 5) Connect a portable music player to the auxiliary sound input to enjoy the rich sound of the Infotainment system.

(2) Specifications

*Product

Item	Categories	Specifications
Specification	Product Name	VCU Entry
	Model	VCUEB
	Dimensions	Refer to image
	Weight	Base: 823g
	Power source	DC 12V
	Operational temperature range	-30 °C ~ 85 °C

< Basic Design Concept >



***RF specifications**

[BT]

Item	Specifications	Unit
Frequency	2400 ~ 2483.5	MHz
Modulation Type	GFSK, $\pi/4$ DQPSK, 8 DPSK	
BT Power	4 (BT Class2)	dBm
Data rate	1 ~ 3	Mbps
Channel spacing	1	MHz
BT version	BT 5.0+EDR	MHz

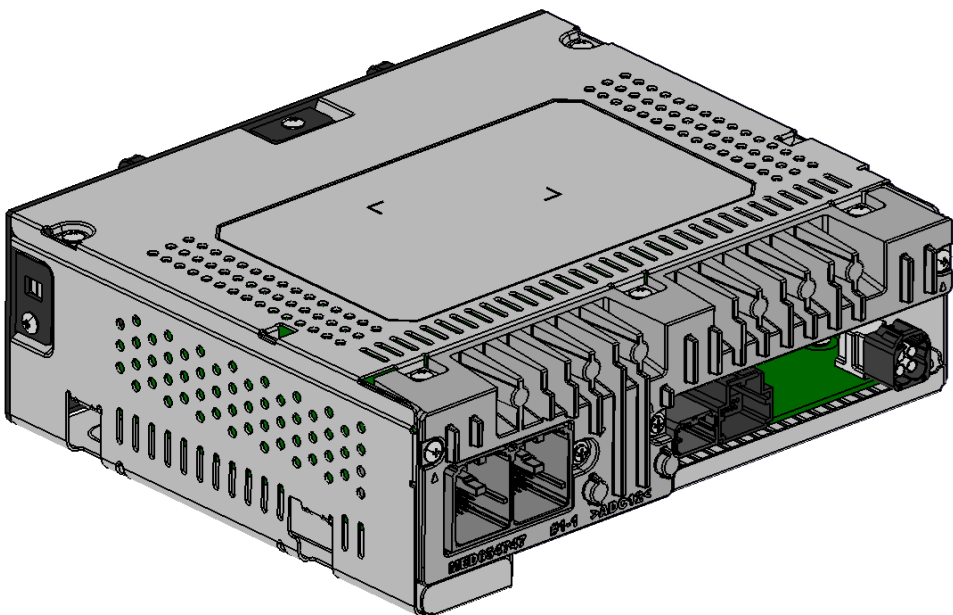
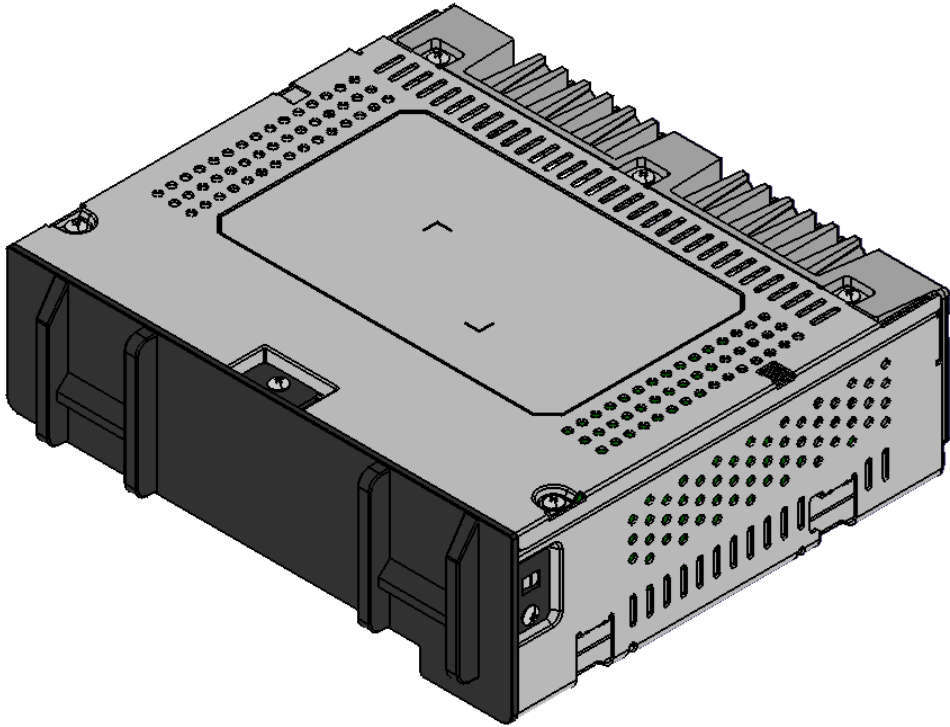
[Wi-Fi]

Item				Specifications	Unit
Standard				IEEE 802.11 a/b/g/n/ac	
Frequency	2.4G			2401 ~ 2495	MHz
	5G			5150 ~ 5835	MHz
Bandwidth				20 / 40 / 80	MHz
Data rate	2.4G	802.11 b	20M	1, 2, 5.5, 11	Mbps
		802.11 g	20M	6, 9, 12, 18, 24, 36, 48, 54	Mbps
		802.11 n	20M	6.5, 13, 19.5, 26, 39, 52, 58.5, 65	Mbps
	5G	802.11 a	20M	6,9,12,18,24,36,48,54	Mbps
		802.11 n	20M	6.5, 13, 19.5, 26, 39, 52, 58.5, 65	Mbps
		802.11 n	40M	13.5, 27, 40.5, 54, 81, 108, 121.5, 135	Mbps
		802.11 ac	20M	6.5, 13, 19.5, 26, 39, 52, 58.5, 65, 78	Mbps
		802.11 ac	40M	13.5, 27, 40.5, 54, 81, 108, 121.5, 135 162, 180	Mbps
		802.11 ac	80M	29.3, 58.5, 87.8, 117, 175.5, 234 263.3, 292.5, 351, 390	Mbps
Modulation				DSSS, BPSK, 16-QAM, 64-QAM, 256-QAM	
Mode				AP, Station, AP and station coexistence	

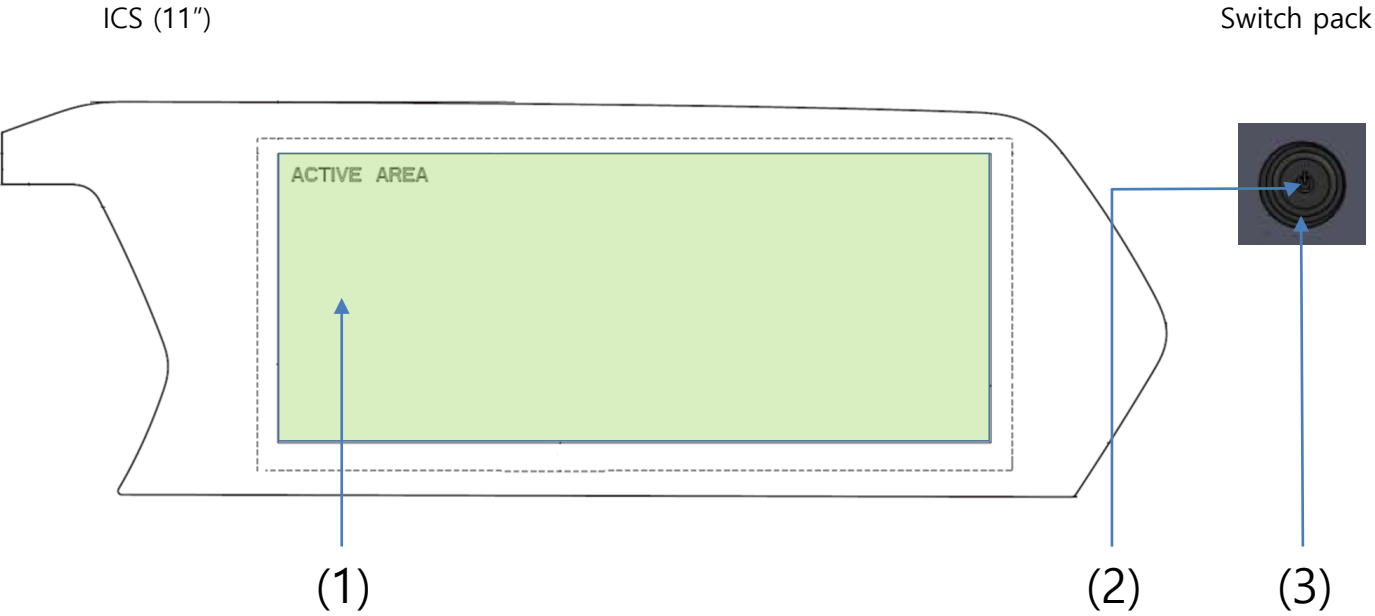
[Wi-Fi power setting]

Item			Specifications	Unit
Power Setting	2.4 GHz	802.11b	16	
		802.11g	16	
		802.11n_HT20	16	
	5 GHz	802.11a	16	
		802.11n_HT20	17	
		802.11n_HT40	16	
		802.11ac_VHT20	16	
		802.11ac_VHT40	13	
		802.11ac_VHT80	12	

2. Component

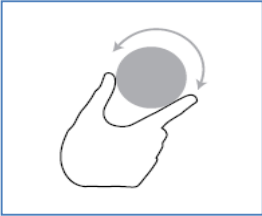
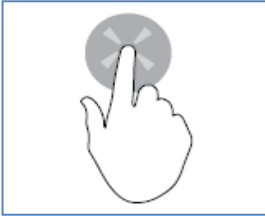


3. Operation

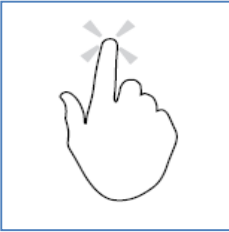
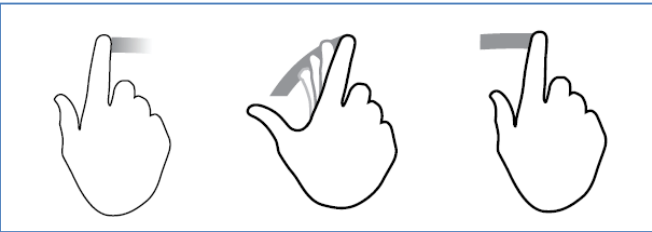
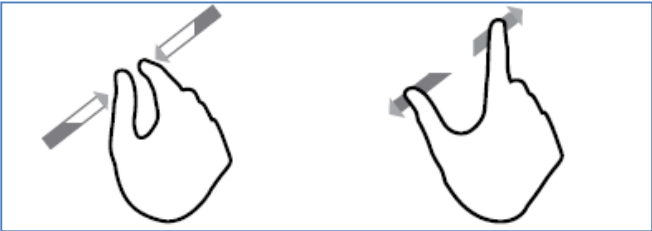


Item (#No.)	Descriptions
(1) Display	Display for Play/Reception/Menu state and information.
(2) POWER button 	Press and hold this button to turn the power on/off. Press this button to turn the mute function on/off.
(3) Volume knob	Rotate the Volume knob to adjust the volume.

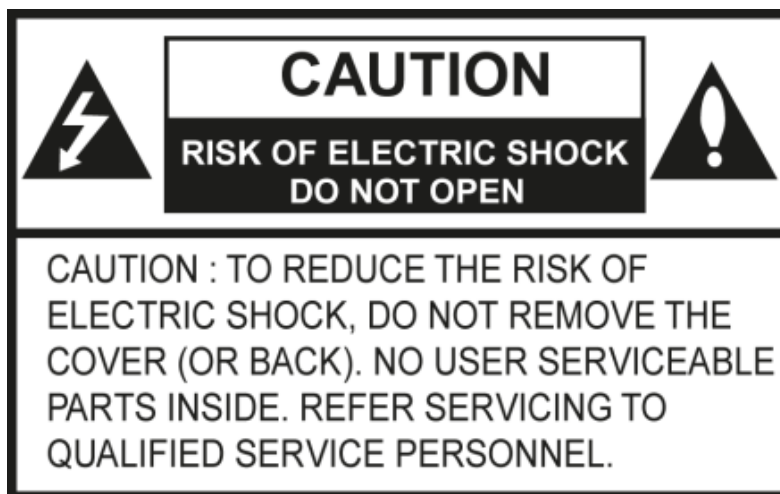
(4) Interactions | Rotary Knob

*Rotate Users can rotate the Volume knob on the faceplate.	*Push Users can press on the center of the rotary-push knob to mute volume.
	

(5) Touch Gestures

*Tap	*Press & Hold
	
*Fling/Swipe	
	
*Pinch & Spread	
	

4. Precautions



- 1) Always operate the vehicle in a safe manner. Do not become distracted by the vehicle while driving and always be fully aware of all driving conditions. Do not change settings or any functions. Pull over in a safe and legal manner before attempting such operations. To promote safety, certain functions are disabled unless the parking brake is on.
- 2) To reduce the risk of electric shock, do not remove the cover or back of this product. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.
- 3) To reduce the risk of fire or electric shock, do not expose this product to dripping or splashing water, rain, or moisture.
- 4) When driving your vehicle, be sure to keep the volume of the unit low enough to allow you to hear sounds coming from the outside.
- 5) Do not drop it and avoid heavy impacts at anytime.
- 6) The driver should not watch the monitor while driving. If the driver watches the monitor while driving, it may lead to carelessness and cause an accident.

FCC Information to User

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 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

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information : 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.

IMPORTANT NOTE:

FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

French Canadian Compliance Statements

"Operation is subject to the following two 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 n' 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.

"This Class B digital apparatus complies with Canadian ICES-003."

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

"This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter."

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnant en conjonction avec une autre antenne ou transmetteur.

"This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body"

Cet équipement doit être installé et utilisé à une distance minimale de 20cm entre le radiateur et votre corps.