

ICS User Manual

GM V2 ICS

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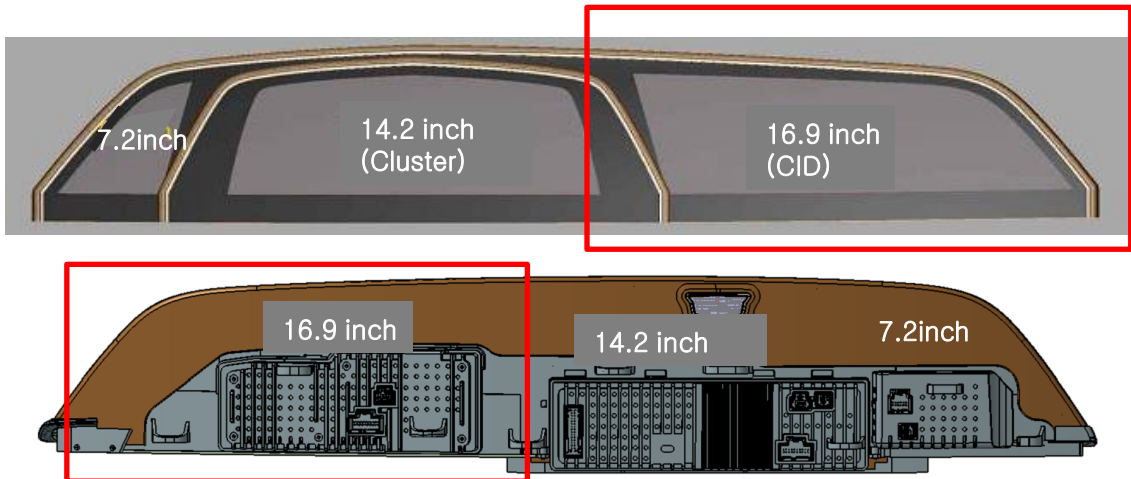
1. Product overview and Specifications

(1) Product overview

- 1) ICS(Integrated Center Stack)can not be used by itself.
ICS is connected to Head Unit(CSM) in the vehicle, and it displays status and information of vehicle.
- 2) User can use the function of Head Unit by operating ICS.
- 3) ICS can not be connected to any other devices except for the Head Unit.
- 4) ICS has below additional function to help User interface for CSM
 - .NFC
 - .IR Proximity
- 5) ICS is part of the body with IPC(Cluster).

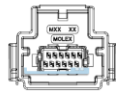

(2) Specification

	Item	Detail
Spec.	Product	CAR Center Information Display
	Model	COGD14FGA01
	Display	16.9inch is ICS Screen
	Operating Voltage	DC 12V (9V ~ 16V)
	Operating Temperature	-40℃ ~ +85℃



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2. Feature list

Items	Specification	Remark	
Display	Screen Size	16.9"	0.141(H) x 0.141(V) mm
	Resolution	2940x 816	H x V
	Active Area	414.54x115.056mm	H x V
	Luminance	Min. 500 cd/m2	@Center
		60%	@+/-30degrees(H)
		32%	@+/-45degrees(H)
	Contrast	Typ 10,000	@center
		>=14:1	ambient@5,000lux
		>=10:1	ambient@45,000lux
Uniformity White	≥80%	Area scan	
Color Gamut	100%		
Dimming Range	0 ~ 100%		
Touch Method	Resolution	1024 x 540	
MCU	CPU Clock	24 MHz	
CAN	Standard	HS-CAN I/F	
	Data rate	up to 2 Mbit/s	
Video Interface	Frame Rate	60Hz	
	Color Depth	24bit	
	Data Rate	3 [Gb/s]	2-Lane
	Interface	FPD Link III	
	Cable Length	10[M] STP	
Connector	HSD (12pin)	PIN: 34862-1106 KEY OPTION A COLOR: BLACK 	Video Interface (2-Lane)
	Main Connector (20pin)		.Battery Power .CAN .Telltale Output

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3. External Connector

-HSD Connector (Video Interface)

Pin	Signal Name	Function
CN301_1	Pair Drain (A)	From CSM
CN301_2	DOUT +/RIN+ (A)	From CSM
CN301_3	DOUT -/RIN- (A)	From CSM
CN301_4	NC	NC (Reserved for LVM)
CN301_5	NC	NC (Reserved for LVM)
CN301_6	NC	NC (Reserved for LVM)
CN301_7	Pair Drain (B)	From CSM
CN301_8	DOUT +/RIN+ (B)	From CSM
CN301_9	DOUT -/RIN- (B)	From CSM
CN301_10	NC	NC (Reserved for LVM)
CN301_11	NC	NC (Reserved for LVM)
CN301_12	NC	NC (Reserved for LVM)

-Main Connector Pin Assignment

Pin No	Signal Name	Function
CN101_1	BATTERY	Secondary Fused Battery Positive Voltage
CN101_2	HSCAN+	AUTOSAR CAN Serial Data (+)
CN101_3	HSCAN+	AUTOSAR CAN Serial Data (+)
CN101_4	UART_RX	NC
CN101_5	GND	GND
CN101_6	HSCAN-	AUTOSAR CAN Serial Data (-)
CN101_7	HSCAN-	AUTOSAR CAN Serial Data (-)
CN101_8	UART_TX	NC
CN101_9	OUT 01	Air_Bag_RED (From IPC)
CN101_10	OUT 02	ABS_AMBER (From IPC)
CN101_11	OUT 03	Brake_USA_RED (From IPC)
CN101_12	OUT 04	Brake_RED(From IPC)
CN101_13	OUT 05	Preheat_AMBER(From IPC)
CN101_14	OUT 06	Seatbelt_RED(From IPC)
CN101_15	OUT 07	MIL_AMBER(From IPC)
CN101_16	OUT 08	Pressure_AMBER(From IPC)
CN101_17	OUT 09	ESC_OFF_AMBER(From IPC)
CN101_18	OUT 10	ESC_AMBER(From IPC)
CN101_19	LED DIM+	LED_PWR(From IPC)
CN102_20	GND	NC

3. Cautions

1) Do not use the product while driving.

Please operate the product after stopping the car in a safe and legal manner.

2) Do not stare at the screen(monitor) while driving.

While driving, staring at the screen (monitor) can be the cause of the accident.

3) Do not open the back cover in order to prevent the risk of electric shock.

There is no user-serviceable part inside the product.

Please request a repair to qualified service personnel.

4) Do not expose the product to water, rain, moisture in order to reduce the risk of fire or electric shock.

5) Please maintain a low enough volume that allow signal (such as emergency sirens) outside the vehicle to be easily heard.

6) Please be careful dropped or impact.

FCC 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.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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 correct the interference by one or more of the following measures:

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

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

"CAUTION : Exposure to Radio Frequency Radiation.

Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

"ATTENTION: L'exposition aux rayonnements à fréquence radioélectrique.

Antenne doit être montée de telle manière à minimiser le risque de contact humain pendant l'utilisation normale. L'antenne ne doit pas être contacté pendant le fonctionnement pour éviter la possibilité de dépasser la limite de l'exposition aux fréquences radio de la FCC.

IC Information

This device complies with Industry Canada license-exempt RSS standard(s). 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 ne doit pas produire de brouillage;
- 2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.