AVM System Input/Output

1. Camera input

Item		Specification
Lens angle of view		190 degrees
Angle of view	Horizontal	186 degrees
	Vertical	135 degrees
Function		Provides the original image of the wide angle image (no additional function)
Application location		Same camera applied to the front, rear, left and right

2. AVM image output
   The AVM unit carries out distortion compensation and video merging on the image from 4 cameras installed around the vehicle, indicates steering interlocking guidelines and others, and sends the output in analog.

3. AVM switch
   When the switch is ON, this is used as a control input signal that operates the front view mode.

4. Ignition input
   The AVM unit displays images only when IGN2 ON. With IGN2 OFF, it is in AVM OFF state, and limits image output.
   AVM unit uses signal input from IGN pin or M_CAN communication to determine whether IGN2 is ON or OFF.

5. Output switch indicator lamp
   AVM units sends output power in PWM waves from the LED located in the AVM switch to show the user that the switch is pressed.

6. Input chassis CAN (C_CAN)
   The AVM unit uses C_CAN to receive information about the vehicle's condition and to decide whether to carry out main AVM operations.

7. Multimedia CAN input/output (M_CAN)
   M-CAN signal is changed to C-CAN signal by IGPM (routing function or central gateway) and then AVM unit can use this C-CAN signal.
   M_CAN is used to communicate with ICU to send and receive the following information.
   - Send AVM mode conversion requests for AVM output images (e.g. Navi mode→AVM mode)
   - Send requests for user AVM view conversion
   - Send compensation coordinates for tolerance compensation
   - Send warning messages to be displayed on the AVN
   - Send any user option changes