AUDIO AMPLIFIER id092000011200

Purpose, Function

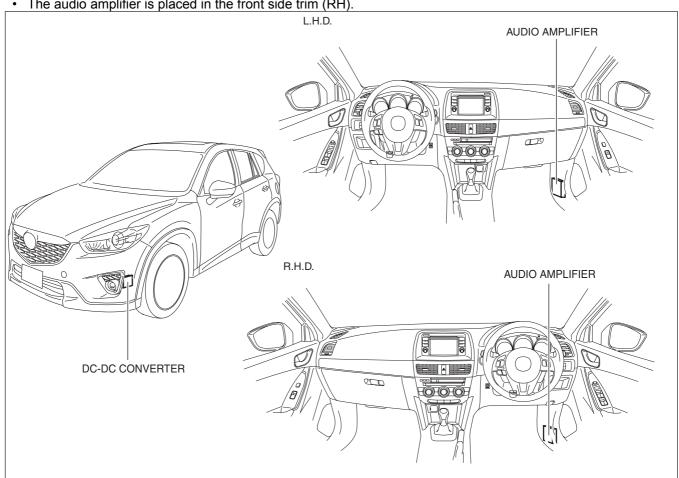
• The audio signal (analog voltage waveform) output from the unit equipped on the vehicle is converted into a digital pulse. The converted digital pulse signal is amplified and sent to the speakers.

Function

· When the audio amplifier receives a voltage increase request signal from the PCM, output current to the speakers is controlled at 10 A or less to assure input voltage to the DC-DC converter when the engine is re-started by the i-stop control. (With i-stop system)

Construction

· The audio amplifier is placed in the front side trim (RH).



ac5jjn00001056

Terminal Layout and Signal

L.H.D.

H.D. Terminal		Signal
Terrinia	1A	——————————————————————————————————————
10 1M 1K 1I 1G 1E 1C 1A 1P 1N 1L 1J 1H 1F 1D 1B	1B	
	1C	_
	1D	_
	1E	Front door speaker input LH (-)
	1F	Front door speaker input LH (+)
	1G	Front door speaker input RH (-)
	1H	Front door speaker input RH (+)
	11	Rear door speaker input LH (-)
	1J	Rear door speaker input LH (+)
	1K	Rear door speaker input RH (-)
	1L	Rear door speaker input RH (+)
	1M	-
	1N	_
	10	AudioPilot ®2 microphone (+)
	1P	AudioPilot ®2 microphone (-)
20 2M 2K 2I 2G 2E 2C 2A 2P 2N 2L 2J 2H 2F 2D 2B	2A	D-pillar speaker (+)
	2B	D-pillar speaker (-)
	2C	Tweeter input RH (+)
	2D	Body select
	2E	Tweeter input RH(-)
	2F	AMP control (SW B+)
	2G	Tweeter input LH (-)
	2H	Vehicle speed signal
	21	Tweeter input LH (+)
	2J	AudioPilot [®] 2
	2K	Rear door speaker output RH (-)
	2L	i-stop control*
	2M	Rear door speaker output RH (+)
	2N	-
	20	Rear door speaker output LH (+)
	2P	Rear door speaker output LH (-)
	3A	B+
	3B	Ground
	3C	Front door speaker output RH (+)
3G 3E 3C 3A	3D	Front door speaker output RH (-)
3H 3F 3D 3B	3E	Front door speaker output LH (-)
	3F	Front door speaker output LH (-)
	3G	Front door speaker (+)
	3H	Front door speaker (-)

^{*:} With i-stop system

Terminal		Signal
	1A	
	1B	_
	1C	_
	1D	_
10 1M 1K 1I 1G 1E 1C 1A 1P 1N 1L 1J 1H 1F 1D 1B	1E	Front door speaker input RH (-)
	1F	Front door speaker input RH (+)
	1G	Front door speaker input LH (-)
	1H	Front door speaker input LH (+)
	11	Rear door speaker input RH (-)
	1J	Rear door speaker input RH (+)
	1K	Rear door speaker input LH (-)
	1L	Rear door speaker input LH (+)
	1M	_
	1N	-
	10	AudioPilot ®2 microphone (+)
	1P	AudioPilot ®2 microphone (-)
20 2M 2K 2I 2G 2E 2C 2A 2P 2N 2L 2J 2H 2F 2D 2B	2A	D-pillar speaker (+)
	2B	D-pillar speaker (-)
	2C	Tweeter input LH (+)
	2D	Body select
	2E	Tweeter input LH(-)
	2F	AMP control (SW B+)
	2G	Tweeter input RH (-)
	2H	Vehicle speed signal
	21	Tweeter input RH (+)
	2J	AudioPilot ®2
	2K	Rear door speaker output LH (-)
	2L	i-stop control
	2M	Rear door speaker output LH (+)
	2N	-
	20	Rear door speaker output RH (+)
	2P	Rear door speakeroutput RH (-)
3G 3E 3C 3A 3H 3F 3D 3B	3A	B+
	3B	Ground
	3C	Front door speaker output LH (+)
	3D	Front door speaker output LH (-)
	3E	Front door speaker output RH (-)
	3F	Front door speaker output RH (-)
	3G	Front door speaker (+)
	3H	Front door speaker (-)

Operation

Note

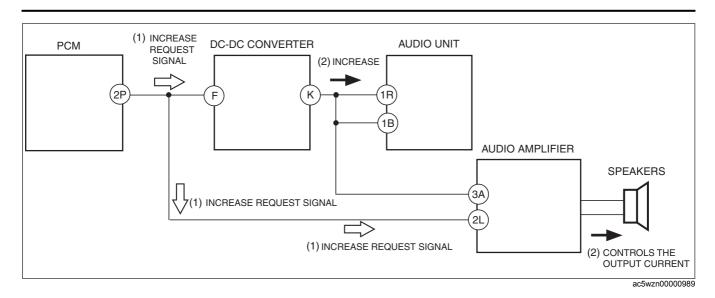
• For the audio amplifier operation, refer to the AUDIO SYSTEM.

Engine restart by i-stop (With i-stop system)

- 1. The PCM sends a boost request signal to the DC-DC converter and audio amplifier when the engine is restarted by the i-stop control.
- 2. The DC-DC converter increases the electric current voltage to the audio unit, and when the audio amplifier receives the increase request signal, it controls the output current to the speakers at 10 A or less.

Note

• If the audio amplifier performs current control when the audio volume is 50 or more, the audio volume may decrease for approx. 0.3 s.



Fail-safe

Function not equipped.