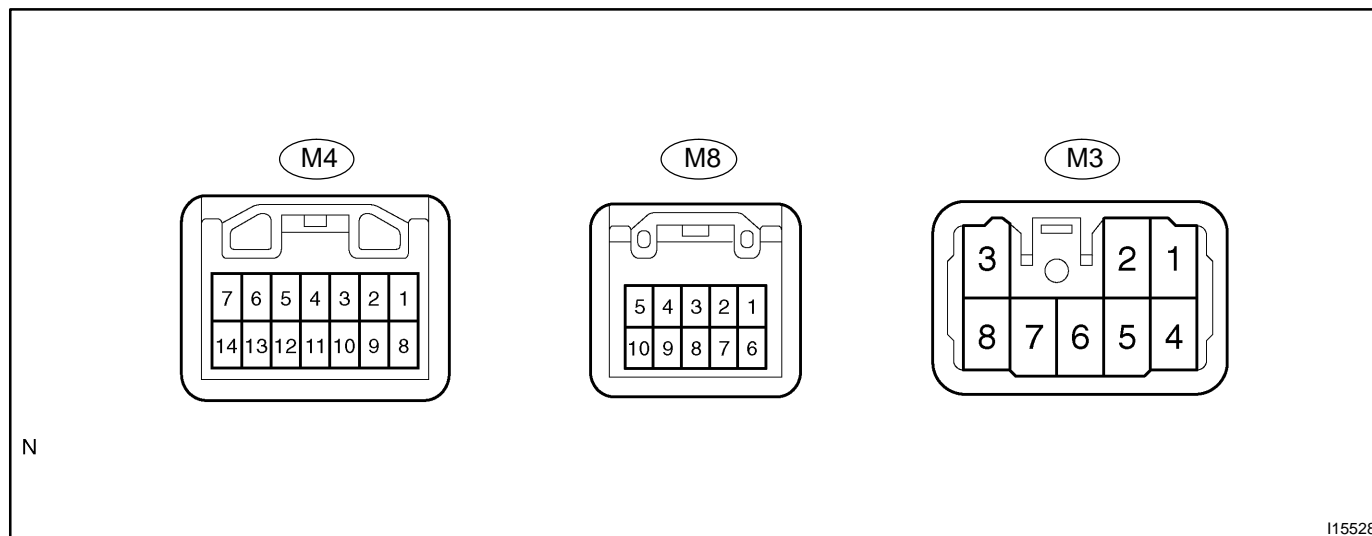


TERMINALS OF ECU

MULTI DISPLAY

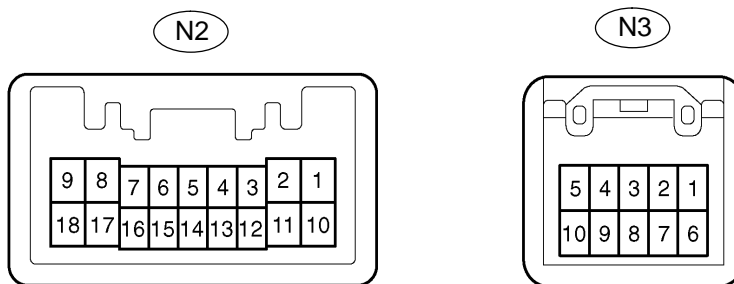


Symbols (Terminal No.)	Condition	STD Voltage (V)	Problem symptom when open circuit is detected.
			Problem symptoms when short circuit is detected.
+B ↔ GND1 (M3-1 ↔ M3-6)	Constant	10-14	Navigation system does not operate.
IG ↔ GND1 (M3-2 ↔ M3-6)	Ignition switch ON	10-14	Navigation system does not operate.
ACC ↔ GND1 (M3-4 ↔ M3-6)	Ignition switch ACC	10-14	Navigation system does not operate.
GND1 ↔ Body ground (M3-6 ↔ Body ground)	Constant	Continuity	Navigation system does not operate.
			Navigation system is normal.
TX1+ (M4-3)	AVC-LAN communication circuit	—	Navigation system does not operate.
SPD ↔ GND1 (M4-5 ↔ M3-6)	Ignition switch ON, and driving wheel rotated smoothly	Repeatedly changes from below 1 to 9 V	Fuel efficiency cannot be calculated.
TX3+ ↔ GND1 (M4-4 ↔ M3-6)	Ignition switch ACC or ON	About 2.5	Screen is disorder.
TX1- (M4-10)	AVC-LAN communication circuit	—	Navigation system does not operate.
TX3- ↔ GND1 (M4-11 ↔ M3-6)	Ignition switch ACC or ON	About 2.5	Screen is disorder.
PKB ↔ GND1 (M4-13 ↔ M3-6)	Ignition switch ON, and parking brake switch ON (parking brake pedal released)	5	The system cannot enter Diagnostic system mode.
			Navigation system is normal
TC ↔ GND1 (M4-14 ↔ M3-6)	Ignition switch OFF and connect terminals TC and E1 of check connector	Continuity	Navigation system is normal.
			The system does not exit Service check mode.
VR ↔ VG (M8-1 ↔ M8-6)	Constant	Continuity	Screen noise or other types of noise occur.
R ↔ VG (M8-2 ↔ M8-6)	Diagnosis display check screen is white (Using an oscilloscope)	$0.7 \pm 0.1 \times 2$	Screen color turns to blue

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B ↔ VG (M8-3 ↔ M8-6)	Diagnosis display check screen is white (Using an oscilloscope)	0.7 ± 0.1 *2	Screen color turns to yellow
G ↔ VG (M8-7 ↔ M8-6)	Diagnosis display check screen is white (Using an oscilloscope)	0.7 ± 0.1 *2	Screen color turns to red-purple.
SYVC ↔ VG (M8-8 ↔ M8-6)	Display ON (Using an oscilloscope)	$0.5 - 1.3$ *1	Screen is in disorder

NAVIGATION ECU

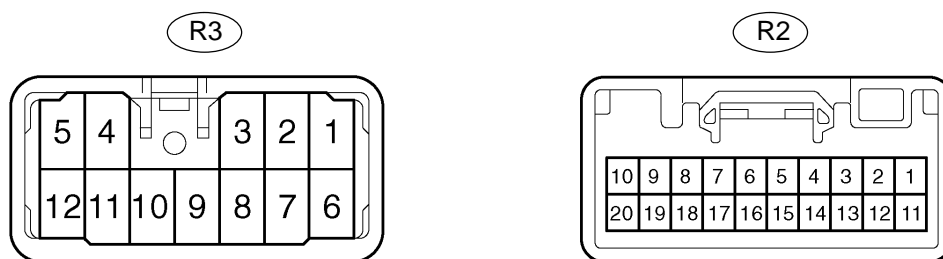


I22027

Symbols (Terminal No.)	Condition	STD Voltage (V)	Problem symptom when open circuit is detected.
			Problem symptom when short circuit is detected.
VR ↔ VG (N3-1 ↔ N3-6)	Constant	Continuity	Screen noise or other types of noise occur. Navigation system does not operate.
R ↔ VG (N3-2 ↔ N3-6)	Diagnosis display check screen is white (Using an oscilloscope)	0.7 ± 0.1 *1	Screen color turns to blue.
B ↔ VG (N3-3 ↔ N3-6)	Diagnosis display check screen is white (Using an oscilloscope)	0.7 ± 0.1 *1	Screen color turns to yellow.
TX+ (N3-5)	AVC-LAN Communication circuit	—	Navigation system does not operate.
G ↔ VG (N3-7 ↔ N3-6)	Diagnosis display check screen is white (Using an oscilloscope)	0.7 ± 0.1 *1	Screen color turns to red-purple.
SYNC ↔ VG (N3-8 ↔ N3-6)	Display ON (Using an oscilloscope)	$0.5 - 1.3$ *1	Screen is in disorder.
TX- (N3-10)	AVC-LAN Communication circuit	—	Navigation system does not operate.
AUI+ ↔ GND (N2-1 ↔ N2-17)	Radio switch ON	5 – 7	Driver's side speaker does not sound.
AUI+ ↔ GND (N2-2 ↔ N2-17)	Radio switch ON	5 – 7	Driver's side speaker does not sound.
SPD ↔ GND (N2-5 ↔ N2-17)	Ignition switch ON, and driving wheel rotated smoothly.	Repeatedly changes from below 1 to 9 V	Fuel efficiency cannot be calculated.
AUI- ↔ GND (N2-10 ↔ N2-17)	Radio switch ON	5 – 7	Driver's side speaker does not sound.
AUI- ↔ GND (N2-11 ↔ N2-17)	Radio switch ON	5 – 7	Driver's side speaker does not sound.
+B ↔ GND (N2-9 ↔ N2-17)	Constant	10 – 14	Navigation system does not operate.

REV ↔ GND (N2-11 ↔ N2-17)	A/T shift position R	5	The direction of advance of the vehicle is different from that of cursor.
MUTE ↔ GND (N2-15 ↔ N2-17)	Radio switch ON	5	Pop sound etc.
			Navigation system does not operate.
GND ↔ Body ground (N2-17 ↔ Body ground)	Constant	Continuity	Audio system is normal
ACC ↔ GND (N2-18 ↔ N2-17)	Ignition switch ACC	10 – 14	Navigation system does not operate.

AUDIO HEAD UNIT

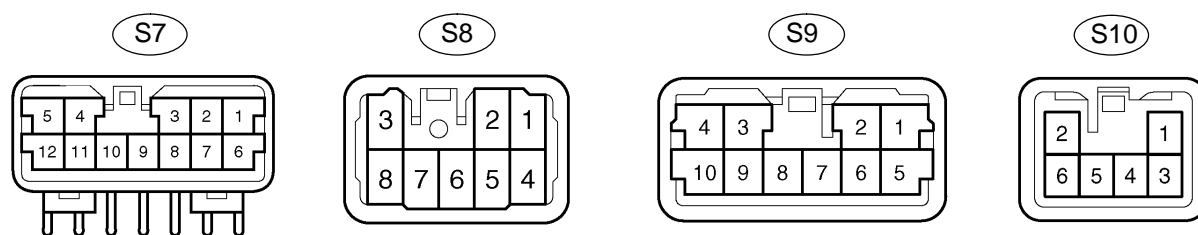


N

I21093

Symbols (Terminal No.)	Condition	STD Voltage (V)	Problem symptom when open circuit is detected.
			Problem symptoms when short circuit is detected.
B ↔ GND (R2-1 ↔ R2-20)	Constant	10 – 14	Audio system does not operate.
ILL+ ↔ GND (R2-2 ↔ R2-20)	Light control switch TAIL	10 – 14	Audio head unit illumination does not light up.
			Fuse is blown.
ANT ↔ GND (R2-4 ↔ R2-20)	Radio switch ON	10 – 14	Antenna does not extend.
BUS+ (R2-5)	AVC-LAN Communication circuit	–	Audio system does not operate.
MUTE ↔ GND (R2-7 ↔ R2-20)	Radio switch ON	5	Pop sound etc.
			Audio system does not operate.
R+ ↔ GND (R2-8 ↔ R2-20)	Constant	10 – 14	Sound from right side speaker is small.
L+ ↔ GND (R2-9 ↔ R2-20)	Constant	10 – 14	Sound from left side speaker is small.
ACC ↔ GND (R2-11 ↔ R2-20)	Ignition switch ACC	10 – 14	Audio system does not operate.
ILL- ↔ GND (R2-12 ↔ R2-20)	Light control switch TAIL	Below 0.5	Audio head unit illumination does not light up.
			Fuse is blown.
ANTB ↔ GND (R2-13 ↔ R2-20)	Radio switch ON	10 – 14	Antenna does not extend.
ANTA ↔ GND (R2-14 ↔ R2-20)	Radio switch ON	10 – 14	Antenna does not extend.
BUS- (R2-15)	AVC-LAN Communication circuit	–	Audio system does not operate.
L- ↔ GND (R2-19 ↔ R2-20)	Constant	10 – 14	Sound from left side speaker is small.
GND ↔ Body ground (R2-20 ↔ Body ground)	Constant	Continuity	Audio system is normal.

TX– (R3–9)	AVC–LAN Communication circuit	–	Audio system does not operate.
TX+ (R2–10)	AVC–LAN Communication circuit	–	Audio system does not operate.

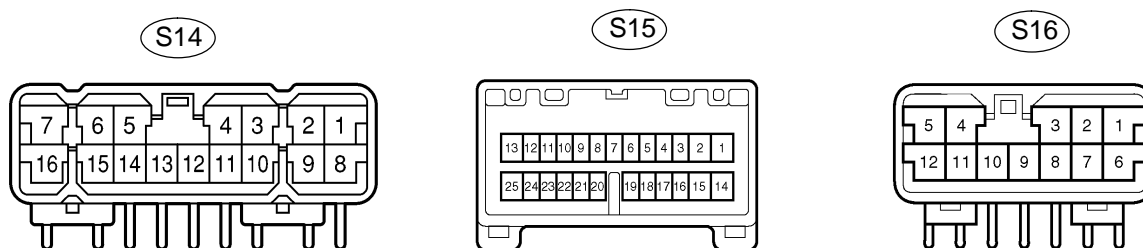
STEREO COMPONENT AMPLIFIER (PIONEER made)

N

I21094

Symbols (Terminal No.)	Condition	STD Voltage (V)	Problem symptom when open circuit is detected.
			Problem symptoms when short circuit is detected.
R+ (S7-1)	—	—	RH side speaker does not sound.
L+ (S7-2)	—	—	LH side speaker does not sound.
MUTE ↔ E (S7-4 ↔ S9-7)	Radio switch ON	5 V	Pop sound etc.
			Audio system does not operate.
R- (S7-6)	—	—	RH side speaker does not sound.
L- (S7-7)	—	—	LH side speaker does not sound.
BUS+ (S7-9)	AVC-LAN Communication circuit	—	Audio system does not operate.
BUS- (S7-10)	AVC-LAN Communication circuit	—	Audio system does not operate.
ACC ↔ E (S7-12 ↔ S9-7)	Ignition switch ACC	10 – 14 V	Audio system does not operate.
TXM+ (S8-1)	AVC-LAN Communication circuit	—	Audio system does not operate.
CDR+ (S8-2)	—	—	Sound from right side speaker is small.
CDL+ (S8-3)	—	—	Sound from left side speaker is small.
TXM- ↔ E (S8-4)	AVC-LAN Communication circuit	—	Audio system does not operate.
CDR- (S8-5)	—	—	Sound from right side speaker is small.
MUTE ↔ E (S8-6 ↔ S10-7)	CD auto changer switch ON	5 – 7 V	Pop sound etc.
			Audio system does not operate.
CDL- (S8-8)	—	—	Sound from left side speaker is small.

FR+ ↔ E (S9-1 ↔ S9-7)	Radio switch ON	5 – 7 V	RH side speaker does not sound.
FL+ ↔ E (S9-2 ↔ S10-7)	Radio switch ON	5 – 7 V	LH side speaker does not sound.
FR- ↔ E (S9-5 ↔ S9-7)	Radio switch ON	5 – 7 V	RH side speaker does not sound.
FL- ↔ E (S9-6 ↔ S9-7)	Radio switch ON	5 – 7 V	LH side speaker does not sound.
E ↔ Body ground (S9-7 ↔ Body ground)	Constant	Continuity	–
N-MU (S9-10)	AVC-LAN Communication circuit	–	Navigation system does not operate.
RR+ ↔ E (S10-1 ↔ S9-7)	Radio switch ON	5 – 7 V	Rear RH side speaker does not sound.
RL+ ↔ E (S10-2 ↔ S9-7)	Radio switch ON	5 – 7 V	Rear LH side speaker does not sound.
RR- ↔ E (S10-3 ↔ S9-7)	Radio switch ON	5 – 7 V	Rear RH side speaker does not sound.
WF+ ↔ E (S10-4 ↔ S9-7)	Radio switch ON	5 – 7 V	Woofer does not sound.
WF- ↔ E (S10-5 ↔ S9-7)	Radio switch ON	5 – 7 V	Woofer does not sound.
RL- ↔ E (S10-6 ↔ S9-7)	Radio switch ON	5 – 7 V	Rear LH side speaker does not sound.

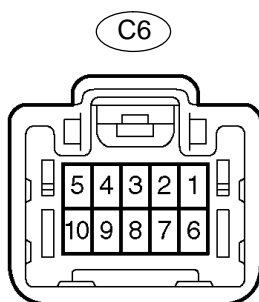
STEREO COMPONENT AMPLIFIER (MARK LEVINSON made)

I22028

Symbols (Terminal No.)	Condition	STD Voltage (V)	Problem symptom when open circuit is detected.
			Problem symptoms when short circuit is detected.
RR+ ↔ GND4, GND5 (S14-3 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	Rear RH side speaker does not sound.
RL+ ↔ GND4, GND5 (S14-4 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	Rear LH side speaker does not sound.
WF+ ↔ GND4, GND5 (S14-6 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	Woofer does not sound.
FR- ↔ GND4, GND5 (S14-8 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	RH side speaker does not sound.
RR- ↔ GND4, GND5 (S14-10 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	Rear RH side speaker does not sound.
RL- ↔ GND4, GND5 (S14-11 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	Rear LH side speaker does not sound.
GND4 ↔ Body ground (S14-12 ↔ Body ground)	Constant	Continuity	–
GND5 ↔ Body ground (S14-13 ↔ Body ground)	Constant	Continuity	–
WF- ↔ GND4, GND5 (S14-15 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	Woofer does not sound.
FR+ ↔ GND4, GND5 (S15-1 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	RH side speaker does not sound.
FL+ ↔ GND4, GND5 (S15-2 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	LH side speaker does not sound.
BUS+ (S15-6)	AVC-LAN Communication circuit	–	Audio system does not operate.
N-MU (S15-9)	–	–	Navigation system does not operate.
R+ (S15-11)	–	–	RH side speaker does not sound.
L+ (S15-12)	–	–	LH side speaker does not sound.

FL- ↔ GND4, GND5 (S15-15 ↔ S14-12, 13)	Radio switch ON	5 – 7 V	LH side speaker does not sound.
BUS- (S15-19)	AVC-LAN Communication circuit	–	Audio system does not operate.
ACC ↔ GND4, GND5 (S15-20 ↔ S14-12, 13)	Ignition switch ACC	10 – 14 V	Audio system does not operate.
R- (S15-23)	–	–	RH side speaker does not sound.
L- (S15-24)	–	–	LH side speaker does not sound.
CDR+ (S16-1)	–	–	Sound from right side speaker is small.
CDL+ (S16-2)	–	–	Sound from left side speaker is small.
MUTE ↔ GND4, GND5 (S16-4 ↔ S14-12, 13)	Radio switch ON	5 V	Pop sound etc.
			Audio system does not operate.
CDR- (S16-6)	–	–	Sound from right side speaker is small.
CDL- (S16-7)	–	–	Sound from left side speaker is small.
TXM+ (S16-10)	AVC-LAN Communication circuit	–	Audio system does not operate.
TXM- ↔ GND4, GND5 (S16-9 ↔ S14-12, 13)	AVC-LAN Communication circuit	–	Audio system does not operate.

CD AUTO CHANGER

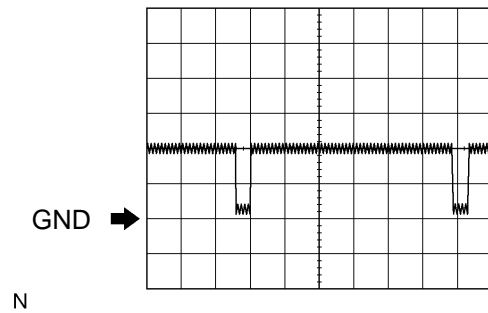


I04235

Symbols (Terminal No.)	Condition	STD Voltage (V)	Problem symptom when open circuit is detected.
			Problem symptoms when short circuit is detected.
CDR+ (C6-1)	—	—	Sound from right side speaker is small.
CDL+ (C6-2)	—	—	Sound from left side speaker is small.
MUTE ↔ GND (C6-3 ↔ C6-8)	Radio switch ON	5	Pop sound etc.
			Audio system does not operate.
TXM+ ↔ GND (C6-3 ↔ C6-8)	Ignition switch ON	2 – 3	Audio system does not operate.
B ↔ GND (C6-5 ↔ C6-8)	Constant	10 – 14	CD auto changer does not operate.
			Audio system does not operate.
CDR- (C6-6)	—	—	Sound from right side speaker is small.
CDL- (C6-7)	—	—	Sound from left side speaker is small.
GND ↔ Body ground (C6-8 ↔ Body ground)	Constant	Continuity	Audio system does not operate.
TXM- ↔ GND (C6-3 ↔ C6-8)	Ignition switch ON	2 – 3	Audio system does not operate.
ACC ↔ E (C6-10 ↔ C6-8)	Ignition switch ACC	10 – 14	CD auto changer does not operate.

The diagram shows a rectangular connector labeled 'G6' above it. Inside the rectangle, there is a 2x8 grid of pins. The top row of pins is numbered 7, 6, 5, 4, 3, 2, 1 from left to right. The bottom row of pins is numbered 14, 13, 12, 11, 10, 9, 8 from left to right. The connector has a central latch mechanism and side tabs.

2001 LEXUS GS300/GS430 (RM791U)

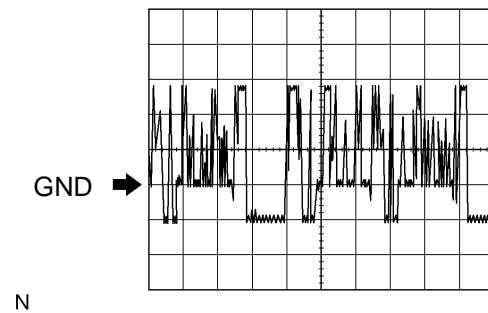


Oscilloscope

*1: wave1

- Measure terminal: SYNC ↔ GND1
- Measure set: 500 mV/DIV 10 μs/DV
- Condition: Navigation display is displayed

I15531



Oscilloscope

*1: wave1

- Measure terminal: R, G, B ↔ GND1
- Measure set: 200 mV/DIV 10 μs/DV
- Condition: Navigation map is switched

I15532