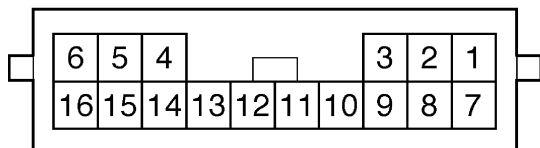


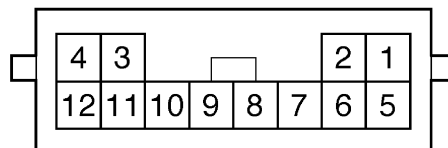
TERMINALS OF ECU

1. DISPLAY ECU

Connector "A"



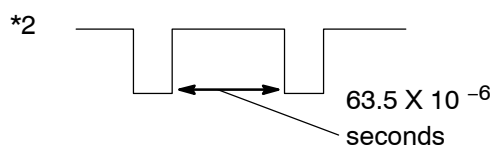
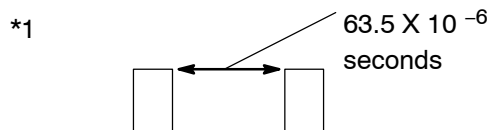
Connector "B"



I04230

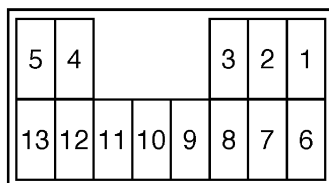
Terminals	Condition	Specified value	Problem symptom when open circuit is detected.
Symbols			Problem symptom when short circuit is detected.
A1 – Body ground	Constant	Continuity	Screen noise or other types of noise occur.
GND1 – Body ground			LEXUS navigation system is normal.
A2 – A1	Ignition switch ACC or ON (Using an oscilloscope)	10 – 14 V	A/C does not operate.
MPX1 – GND1		1 V or below	
A3 – A1	Ignition switch ACC or ON	2 – 3 V	LEXUS navigation system does not operate.
TX1+ – GND1			
A4 – A1	Seat belt unfastened	0.5 V or below	Seat belt warning light does not light up.
PBEW – GND1			Seat belt warning light lights up.
A5 – A1	Light control switch TAIL (Using an oscilloscope)	10 – 14 V	Panel switch illumination does not light up.
ILL– – GND1		0.5 V or below	Light control rheostat does not operate.
A6 – A1	Constant	10 – 14 V	LEXUS navigation system does not operate.
+B1 – GND1			Fuse is blown.
A8 – A1	Ignition switch ACC or ON (Using an oscilloscope)	10 – 14 V	A/C system does not operate.
MPX2 – GND1		1 V or below	
A9 – A1	Ignition switch ACC or ON	2 – 3 V	LEXUS navigation system does not operate.
TX1– – GND1			
A15 – A1	Light control switch TAIL	10 – 14 V	Panel switch illumination does not light up.
ILL+ – GND1			Fuse is blown. (Panel switch illumination does not light up.)

A16 – A1	Ignition switch ACC or ON	10 – 14 V	LEXUS navigation system does not operate.
ACC – GND1			Fuse is blown. (LEXUS navigation system does not operate.)
B1 – B5	Constant	Continuity	Screen noise or other types of noise occur.
VR – VG			LEXUS navigation system does not operate.
B2 – B5	Display ON (Using an oscilloscope)	0.5 – 1.3 V *2	Screen is in disorder.
SYNC – VG			
B3 – A1	Ignition switch ACC or ON	2 – 3 V	Cellular phone does not operate.
DTX+ – GND1			LEXUS navigation system does not operate.
B4 – A1	Ignition switch ACC or ON	2 – 3 V	LEXUS navigation system does not operate.
TX+ – GND1			
B5 – A1	Constant	Continuity	Screen noise or other types of noise occur.
VG – GND1			LEXUS navigation system is normal.
B6 – B5	Diagnosis display check screen is white. (Using an oscilloscope)	0.7 V \pm 0.1 V *1	Screen color turns to yellow.
B – VG			Screen color turns to red–purple.
B7 – B5			
G – VG			Screen color turns to light blue.
B8 – B5			
R – VG			
B11 – A1	Ignition switch ACC or ON	2 – 3 V	Cellular phone does not operate.
DTX– – GND1			LEXUS navigation system does not operate.
B12 – A1	Ignition switch ACC or ON	2 – 3 V	Audio system does not operate.
TX– – GND1			LEXUS navigation system does not operate.

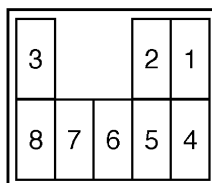


2. NAVIGATION ECU

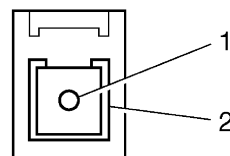
Connector "C"



Connector "D"



Connector "E"

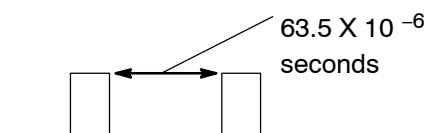


I04231

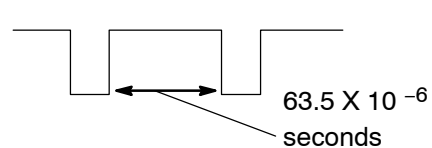
Terminals	Condition	Specified value	Problem symptom when open circuit
Symbols			Problem symptom when short circuit
C1 – C8 AUI+ – GND1	Radio switch ON	5 – 7 V	Driver's side speaker does not sound.
C2 – C8 AUO+ – GND1	Radio switch ON	5 – 7 V	Driver's side speaker does not sound.
C5 – C8 +B – GND1	Constant	10 – 14 V	The set route can not be memorized. (The route disappears by turning the ignition switch OFF.) Fuse is blown.
C6 – C8 AUI– – GND1	Radio switch ON	5 – 7 V	Driver's side speaker does not sound.
C7 – C8 AUO– – GND1	Radio switch ON	5 – 7 V	Driver's side speaker does not sound.
C8 – Body ground GND1 – Body ground	Constant	Continuity	LEXUS navigation system does not operate. LEXUS navigation system is normal.
C12 – C8 SPD – GND1	Ignition switch ON and driving wheel rotated slowly.	Repeatedly changes from below 1 V to 9 V	Navigation operation is available during driving, or a cursor on present site does not move.
C13 – C8 ACC – GND1	Ignition switch ACC	10 – 14 V	LEXUS navigation system does not operate. Fuse is blown.
D1 – D6 R – VR	Diagnosis display check screen is white. (Using an oscilloscope)	0.7 V ± 0.1 V *1	Screen color turns to light blue.
D2 – D6 SYNC – VR	Ignition switch ACC or ON (Using an oscilloscope)	0.5 – 1.3 V *2	Screen is in disorder.
D3 – C8 TX+ – GND1	Ignition switch ACC or ON	2 – 3 V	LEXUS navigation system does not operate.

D4 – D6	Diagnosis display check screen is white. (Using an oscilloscope)	$0.7\text{ V} \pm 0.1\text{ V}^{*1}$	Screen color turns to red-purple.
G – VR			Screen color turns to yellow.
D5 – D6			
B – VR			
D6 – D7	Constant	Continuity	Screen noise or other types of noise occur.
VR – VG			LEXUS navigation system does not operate.
D7 – C8	Constant	Continuity	Screen noise or other types of noise occur.
VG – GND1			LEXUS navigation system does not operate.
D8 – C8	Ignition switch ACC or ON	2 – 3 V	LEXUS navigation system does not operate.
TX – GND1			
E1	–	–	–
GPS			
E2 – Body ground	Constant	Continuity	GPS signal reception error
GND1 – Body ground			

*1

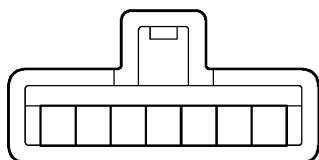


*2

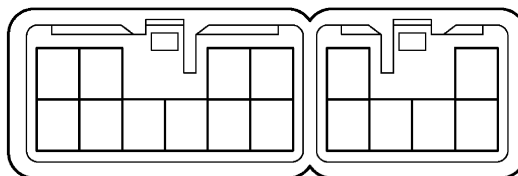


3. AUDIO HEAD UNIT

Connector "F"



Connector "G"



I04232

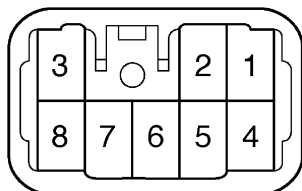
Terminals	Condition	Specified value	Problem symptom when open circuit
Symbols			Problem symptom when short circuit
F1 – G2	Ignition switch ACC or ON	2 – 3 V	LEXUS navigation system does not operate.
TX– – GND			
F2 – G2	Ignition switch ACC or ON	2 – 3 V	LEXUS navigation system does not operate.
TX+ – GND			
F3 – G2	Radio switch ON	10 – 14 V	Antenna does not extend.
ANTB – GND			
F4 – G2	Radio switch ON	10 – 14 V	Antenna does not extend.
ANTA – GND			
F5 – G2	Radio switch ON	10 – 14 V	Antenna does not extend.
ANT – GND			
G1 – G2	Ignition switch ACC or ON	10 – 14 V	Audio system does not sound.
ACC – GND			
G2 – Body ground	Constant	Continuity	Audio system is normal.
GND – Body ground			
G4 – G2	Light control switch TAIL	10 – 14 V	Audio head unit illumination does not light up.
B – GND			Fuse is blown.
G5 – G2	Constant	10 – 14 V	Audio system does not operate.
ILL+ – GND			Fuse is blown.
G6 – G2	Light control switch TAIL	10 – 14 V	Audio head unit illumination does not light up.
ILL– – GND		0.5 V or below	Light control rheostat does not operate.
G7	–	–	Sound from right side speaker is small.
R+			
G8	–	–	Sound from left side speaker is small.
L+			

DIAGNOSTICS – LEXUS NAVIGATION SYSTEM

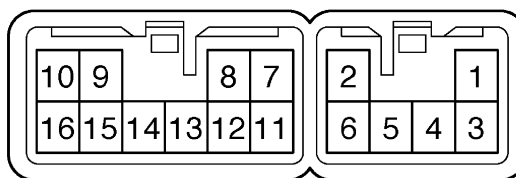
G9 – G2	Radio switch ON	10 – 14 V	Audio system does not sound.
ACC – GND			
G11	–	–	Sound from right side speaker is small.
R–			
G12	–	–	Sound from left side speaker is small.
L–			
G14 – G2	Radio switch ON	5 V	Pop sound etc., during key operation.
MUTE – GND			
G15 – G2	Ignition switch ACC or ON	2 – 3 V	Audio system does not operate.
BUS– – GND			LEXUS navigation system does not operate.
G16 – G2	Ignition switch ACC or ON	2 – 3 V	LEXUS navigation system does not operate.
BUS+ – GND			

4. POWER AMPLIFIER – 1

Connector "H"



Connector "I"



I04233

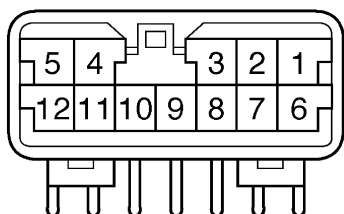
Terminals	Condition	Specified value	Problem symptom when open circuit
Symbols			Problem symptom when short circuit
H1 – I13	Ignition switch ACC or ON	2 – 3 V	Audio system does not operate.
TXM+ – E			LEXUS navigation system does not operate.
H2	–	–	Sound from right side speaker is small.
CDR+			
H3	–	–	Sound from left side speaker is small.
CDL+			
H4 – I13	Ignition switch ACC or ON	2 – 3 V	Audio system does not operate.
TXM+ – E			LEXUS navigation system does not operate.
H5	–	–	Sound from right side speaker is small.
CDR–			
H6 – I13	CD auto changer operation	5 V	Pop sound etc..
CDMT – E			
H7 – Body ground	Constant	Continuity	Audio system is normal.
SGND – Body ground			
H8	–	–	Sound from left side speaker is small.
CDL–			
I1 – I13	Radio switch ON	5 – 7 V	Rear RH speaker does not sound.
SRR+ – E			Rear speaker does not sound.
I2 – I13	Radio switch ON	5 – 7 V	Rear LH speaker does not sound.
SRL+ – E			Rear speaker does not sound.
I3 – I13	Radio switch ON	5 – 7 V	Rear RH speaker does not sound.
SRR– – E			Rear speaker does not sound.
I4 – I13	Radio switch ON	5 – 7 V	Woofer does not sound.
WF+ – E	Radio switch ON	5 – 7 V	Woofer does not sound.
I5 – I13	Radio switch ON	5 – 7 V	Woofer does not sound.
WF– – E			

DIAGNOSTICS – LEXUS NAVIGATION SYSTEM

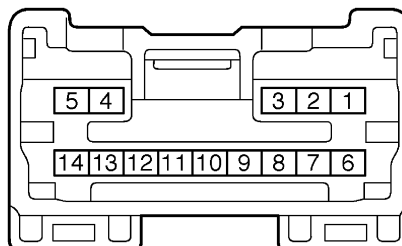
I6 – I13	Radio switch ON	5 – 7 V	Rear LH speaker does not sound.
SRL– – E			Rear speaker does not sound.
I7 – I13	Radio switch ON	5 – 7 V	Rear RH speaker does not sound.
SFR+ – E			Rear speaker does not sound.
I8 – I13	Radio switch ON	5 – 7 V	Rear LH speaker does not sound.
SFL+ – E			Rear speaker does not sound.
I10 – I13	Constant	10 – 14 V	Audio system does not sound.
+B – E			Fuse is blown.
I11 – I13	Radio switch ON	5 – 7 V	Rear RH speaker does not sound.
SFR– – E			Rear speaker does not sound.
I12 – I13	Radio switch ON	5 – 7 V	Rear LH speaker does not sound.
SFL– – E			Rear speaker does not sound.
I13 – Body ground	Constant	Continuity	Audio system is normal.
E – Body ground			
I14 – I13	Cellular phone system is switched.	5 V	Pop sound.
TLMT – E			

5. POWER AMPLIFIER – 2

Connector "J"



Connector "K"

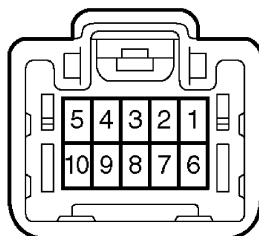


I04234

Terminals	Condition	Specified value	Problem symptom when open circuit is detected.
Symbols			Problem symptom when short circuit is detected.
J1	–	–	RH side speaker does not sound.
R+			
J2	–	–	LH side speaker does not sound.
L+			
J3 – Body ground	Constant	Continuity	Audio system is normal.
SGND – Body ground			
J4 – J3	Radio switch ON	5 V	Pop sound etc..
MUTE – SGND			Audio system does not sound.
J6	–	–	RH side speaker does not sound.
R–			
J7	–	–	LH side speaker does not sound.
L–			
J9 – J3	Ignition switch ACC or ON	2 – 3 V	Audio system does not sound.
RTX– – SGND			LEXUS navigation system does not sound.
J10 – J3	Ignition switch ACC or ON	2 – 3 V	Audio system does not sound.
RTX+ – SGND			LEXUS navigation system does not sound.
J12 – J3	Ignition switch ACC or ON	10– 14 V	Audio system does not sound.
ACC – SGND			

6. CD AUTO CHANGER

Connector "L"



I04235

Terminals	Condition	Specified value	Problem symptom when open circuit is detected.
Symbols			Problem symptom when short circuit is detected.
L1	–	–	Sound from right side speaker is small.
CDR+			
L2	–	–	Sound from left side speaker is small.
CDL+			
L3 – Body ground	Constant	Continuity	Audio system does not sound.
SGND – Body ground			
L3 – L8	Radio switch ON	5 V	Pop sound etc..
MUTE – SGND			Audio system does not sound.
L4 – L8	Ignition switch ACC or ON	2 – 3 V	CD auto changer does not operate.
TXM+ – GND			LEXUS navigation system does not operate.
L5 – L8	Constant	10 – 14 V	CD auto changer does not operate.
+B – SGND			Fuse is blown.
L6	–	–	Sound from right side speaker is small.
CDR–			
L7	–	–	Sound from left side speaker is small.
CDL–			
L8 – Body ground	Constant	Continuity	Audio system is normal.
GND – Body ground			
L9 – L8	Ignition switch ACC or ON	2 – 3 V	CD auto changer does not operate.
TXM– – GND			LEXUS navigation system does not operate.
L10 – L8	Ignition switch ACC or ON	10 – 14 V	CD auto changer does not operate.
ACC – GND			Fuse is blown.