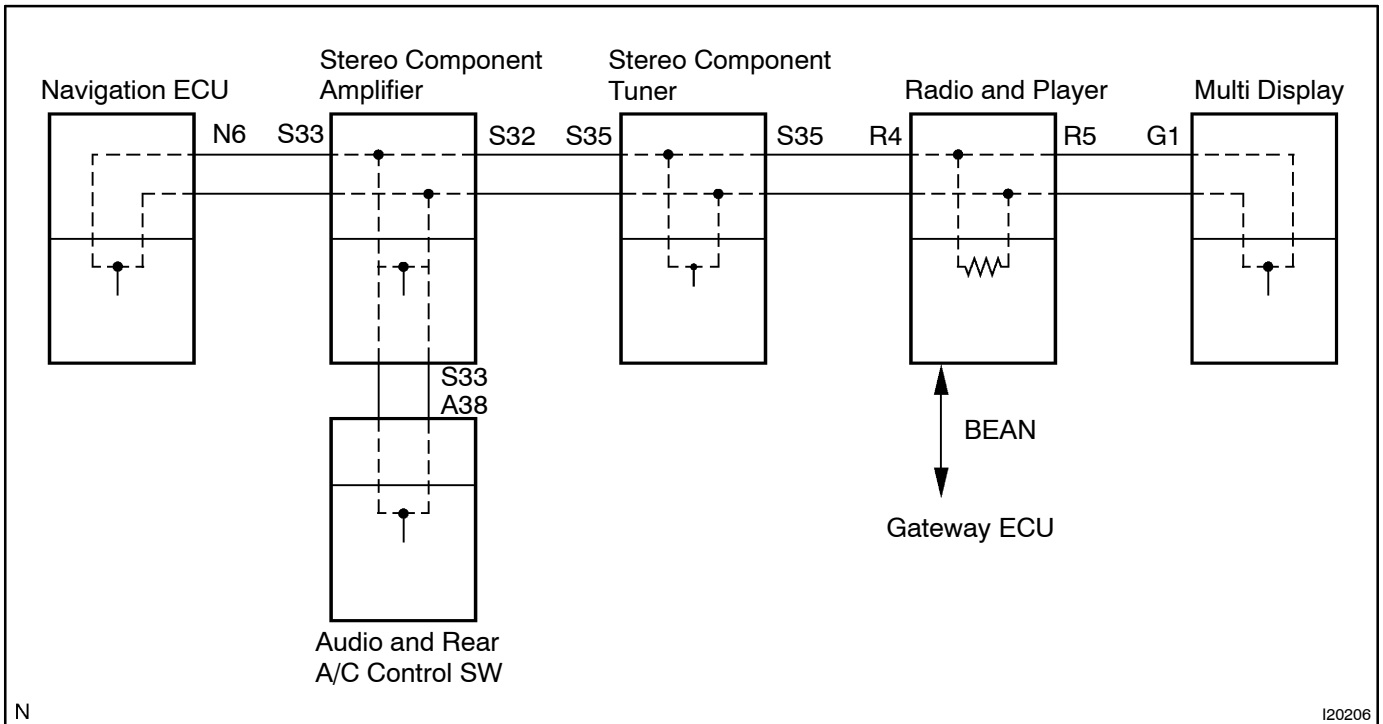DI7PL−03

AVC−LAN (Communication bus) Circuit

CIRCUIT DESCRIPTION

Each unit of the LEXUS navigation system connected with AVC−LAN (communication bus) transmits a signal of each switch.

When +B short or GND short occurs in this AVC−LAN, the LEXUS navigation system will not function normally as the communication is discontinued.

In this AVC−LAN, the radio and player becomes the master of the communication, having a resistance necessary for transmitting the signals.
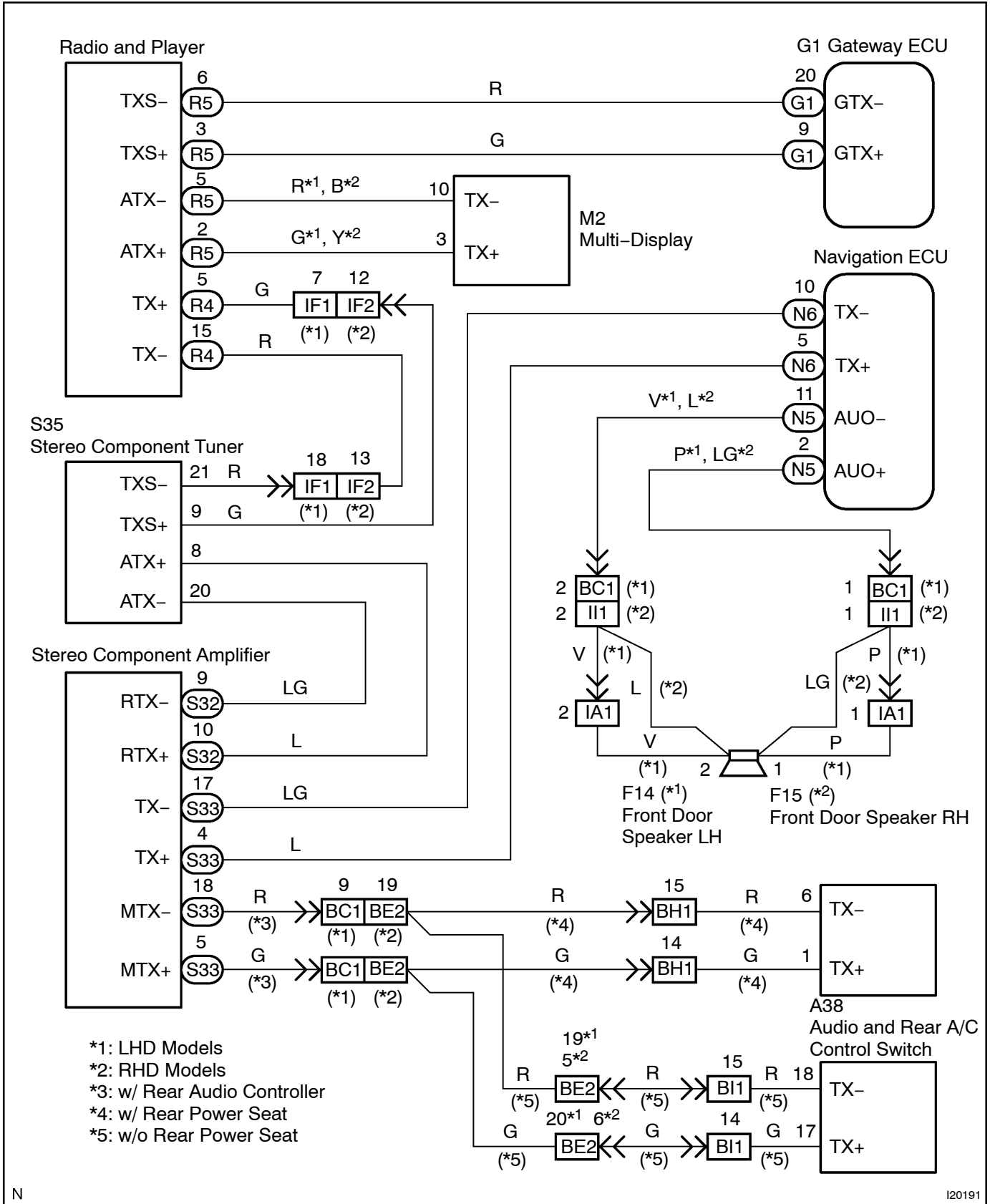
AVC−LAN

WIRING DIAGRAM

Radio and Player

G1 Gateway ECU

	6	R	20	
TXS–	R5		G1	GTX–
	3	G	9	
TXS+	R5		G1	GTX+

ATX– — 5 R5 — R*1, B*2 — 10 TX–

M2 Multi–Display

ATX+ — 2 R5 — G*1, Y*2 — 3 TX+

TX+ — 5 R4 — G — 7 IF1 — 12 IF2 (*1) (*2)

TX– — 15 R4 — R

S35 Stereo Component Tuner

Navigation ECU

10 N6 TX–
5 N6 TX+
11 N5 AUO–   V*1, L*2
2 N5 AUO+   P*1, LG*2

TXS– — 21 R — 18 IF1 — 13 IF2 (*1) (*2)
TXS+ — 9 G
ATX+ — 8
ATX– — 20

Stereo Component Amplifier

2 BC1 (*1) / 2 II1 (*2)   1 BC1 (*1) / 1 II1 (*2)

V (*1)   P (*1)
L (*2)   LG (*2)

2 IA1   1 IA1

V   P
(*1) 2 ◁ 1 (*1)

F14 (*1) Front Door Speaker LH
F15 (*2) Front Door Speaker RH

	9	LG		
RTX–	S32			
	10	L		
RTX+	S32			
	17	LG		
TX–	S33			
	4	L		
TX+	S33			

MTX– — 18 S33 — R (*3) — 9 BC1 (*1) — 19 BE2 (*2) — R (*4) — 15 BH1 (*4) — R (*4) — 6 TX–

MTX+ — 5 S33 — G (*3) — BC1 (*1) — BE2 (*2) — G (*4) — 14 BH1 (*4) — G (*4) — 1 TX+

A38 Audio and Rear A/C Control Switch

*1: LHD Models
*2: RHD Models
*3: w/ Rear Audio Controller
*4: w/ Rear Power Seat
*5: w/o Rear Power Seat

R (*5) — 19*1 / 5*2 BE2 — R (*5) — 15 BI1 — R (*5) — 18 TX–

G (*5) — 20*1 / 6*2 BE2 — G (*5) — 14 BI1 — G (*5) — 17 TX+

N

I20191

INSPECTION PROCEDURE

1	Disconnect ”N6” connector of navigation ECU and check if AVC−LAN will be recovered normally.

CHECK:
Check that the display will change by pressing either of the Panel switch on the display.
HINT:
If the display is changed, recovery of AVC−LAN can be confirmed.

OK ▷ **Replace navigation ECU (See page IN−35).**

NG

2	Disconnect connector ”A38” of audio and rear A/C control switch and check if AVC−LAN will be recovered normally.

CHECK:
Check that the display will change by pressing either of the Panel switch on the display.
HINT:
If the display is changed, recovery of AVC−LAN can be confirmed.

OK ▷ **Replace audio and rear A/C control switch.**

NG

3	Disconnect connector ”S33” of stereo component amplifier, check if AVC−LAN will be recovered normally.

CHECK:
Check that the display will change by pressing either of the Panel switch on the display.
HINT:
If the display is changed, recovery of AVC−LAN can be confirmed.

OK ▷ **Replace navigation ECU and stereo amplifier, amplifier and rear control switch (See page BO−181).**

NG

| 4 | Disconnect the "S32" connector of stereo component amplifier and check if AVC–LAN will be recovered normally. |

CHECK:
Check that the display will change by pressing either of the Panel switch on the display.
HINT:
It can be judged that AVC–LAN is recoveredif the display is changed.

OK Replace the stereo component amplifier. (**See page IN–35**)

NG

| 5 | Disconnect the "S35" connector of the stereo component tuner and check if AVC–LAN will be recovered normally. |

CHECK:
Check that the display will change by pressing either of the Panel switch on the display.
HINT:
It can be judged that AVC–LAN is recoveredif the display is changed.

OK Replace the stereo component tuner. (**See page IN–35**)

NG

| 6 | Disconnect the "R4" connector of the radio and player and check if AVC–LAN will be recovered normally. |

CHECK:
Check that the display will change by pressing either of the Panel switch on the display.
HINT:
It can be judged that AVC–LAN is recoveredif the display is changed.

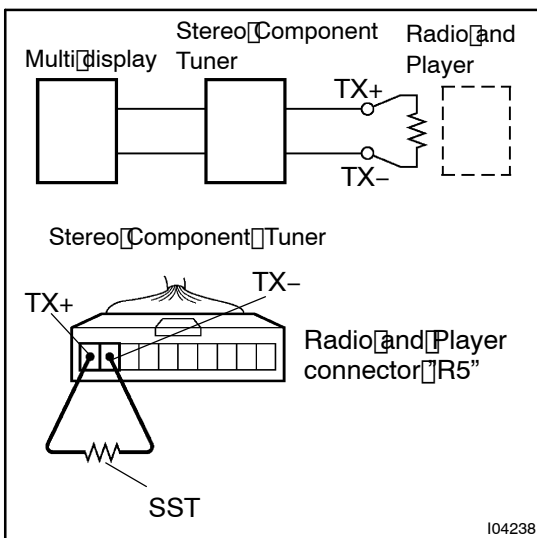**NG** ⟩ **Repair or replace wire harness or connector between radio and player and stereo component tuner (See page IN–35).**

OK

7	Check wire harness and connector between radio and player and multi display (See page IN–35).

NG ⟩ **Repair or replace wire harness or connector between radio and player and multi display (See page IN–35).**

OK

8	Skip radio and player and check AVC–LAN.

Multi display Stereo Component Tuner Radio and Player

TX+

TX–

Stereo Component Tuner

TX+ TX–

Radio and Player connector "R5"

SST

I04238

PREPARATION:
(a) Disconnect radio and player "R5" connector.
(b) Using SST (Navigation Check Wire P/N 09843–18050), connect terminal TX+ to terminal TX– of "R5" connector of the radio and player.

CHECK:
Operate the panel switch of the display and check that the navigation system functions.
(Check that AVC–LAN is recovered.)

OK ⟩ **Replace radio and player (See page IN–35).**

NG

Replace multi display (See page IN–35).