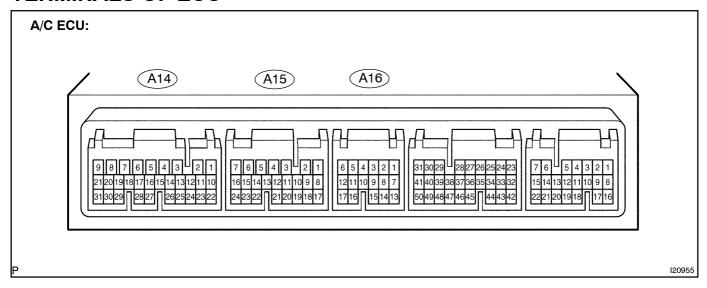
TERMINALS OF ECU





Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
GND ↔ Body ground (A14–1 ↔ Body ground)	W–B ↔ Body ground	Always	Below 1.0 Ω
MPX+ (A14-2)	GR-B	Multiplex communication circuit	-
ACC ↔ GND (A14-3 ↔ A14-1)	GR ↔ W-B	Turn ignition switch to ACC.	10 – 14 V
MPX- (A14-4)	GR-B	Multiplex communication circuit	-
BLW ↔ GND (A14–5 ↔ A14–1)	LG-B ↔ W-B	Blower fan speed OFF → M2 → HI	Pulse generation
SOL+ ↔ SOL- (A14-6 ↔ A14-7)	P ↔ Y-B	A/C magnetic clutch to ON.	Pulse generation
RDFGR ↔ GND	5	IG ON. Rear deforgger switch to OFF.	10 – 14 V
(A14−8 ↔ A14−1)	W ↔ W-B	IG ON. Rear deforgger switch to ON.	Below 1.0 V
IG ↔ GND		IG ON.	10 – 14 V
(A14-9 ↔ A14-1)	LG-R ↔ W-B	IG OFF.	0 V
TSDr ↔ GND	L*1 ↔ W-B	IG ON. Solar sensor subjected to electric light.	0.8 – 4.3 V
(A14–19 ↔ A14–1)	G-R *2 ↔ W-B	IG ON. Solar sensor cover by a cloth.	Below 0.8 V
TSPa ↔ GND	G-R*1 ↔ W-B	IG ON. Solar sensor subjected to electric light.	0.8 – 4.3 V
(A14-20 ↔ A14-1)	L *2 ↔ W-B	IG ON. Solar sensor cover by a cloth.	Below 0.8 V
+B ↔ GND (A14-21 ↔ A14-1)	W-R ↔ W-B	Always	10 – 14 V
DGS ↔ SG-1 *2,*3 (A14-29 ↔ A16-8)	BR-R ↔ Y	After 30 seconds from IG ON and the sensor is exposed to the exhaust gas.	1.0 – 4.5 V
DS1 ↔ GND (A15–1 ↔ A14–1)	$V \leftrightarrow W-B^{*1}$ $R-B \leftrightarrow W-B^{*2}$	IG ON. Blower motor: Operate Mode selector: BI-LEVEL Intelligent swing register: ON	Pulse generation
DS2 ↔ GND (A15-2 ↔ A14-1)	$G \leftrightarrow W-B^{*1}$ $B \leftrightarrow W-B^{*2}$	IG ON. Blower motor: Operate Mode selector: BI-LEVEL Intelligent swing register: ON	Pulse generation

	1	T	
PS1 ↔ GND (A15–3 ↔ A14–1)	$R-B \leftrightarrow W-B^{*1}$ $V \leftrightarrow W-B^{*2}$	IG ON. Blower motor: Operate Mode selector: BI-LEVEL Intelligent swing register: ON	Pulse generation
PS2 ↔ GND (A15-4 ↔ A14-1)	$B \leftrightarrow W-B^{*1}$ $G \leftrightarrow W-B^{*2}$	IG ON. Blower motor: Operate Mode selector: BI-LEVEL Intelligent swing register: ON	Pulse generation
PS3 ↔ GND (A15–5 ↔ A14–1)	$P \leftrightarrow W-B^{*1}$ $B-R \leftrightarrow W-B^{*2}$	IG ON. Blower motor: Operate Mode selector: BI-LEVEL Intelligent swing register: ON	Pulse generation
PS4 ↔ GND (A15–6 ↔ A14–1)	$Y-R \leftrightarrow W-B^{*1}$ $G-B \leftrightarrow W-B^{*2}$	IG ON. Blower motor: Operate Mode selector: BI-LEVEL Intelligent swing register: ON	Pulse generation
DUAL ↔ DrGND	O ↔ LG-R	IG ON. Dual switch ON.	Below 1.0 V
(A15–7 ↔ A15–11)	O W Ed Ti	IG ON. Dual switch OFF.	10 – 14 V
DS3 ↔ GND (A15-8 ↔ A14-1)	B-R ↔ W-B *1 P ↔ W-B *2	IG ON. Blower motor: Operate Mode selector: BI-LEVEL Intelligent swing register: ON	Pulse generation
DS4 ↔ GND (A15–9 ↔ A14–1)	G-B ↔ W-B *1 Y-R ↔ W-B *2	IG ON. Blower motor: Operate Mode selector: BI-LEVEL Intelligent swing register: ON	Pulse generation
DUIND+ ↔ DUIND-		Driver temperature and passenger temperature are different.	5 – 14 V
(A15–10 ↔ A15–13)	G–R ↔ B–W	Driver temperature and passenger temperature are the same.	Below 1.0 V
S5-2 ↔ SG-5 (A15-15 ↔ A16-12)	V-R ↔ LG	IG ON.	4.5 – 5.5 V
S5-4 ↔ TSRr		IG ON. Rear solar sensor subjected to electric light.	0.8 – 4.3 V
(A15–16 ↔ A14–30)	GR ↔ W-L	IG ON. Rear solar sensor cover by a cloth.	Below 1.0 V
PRS ↔ SG-5		Refrigerant pressure 0 Mpa (0 kgf·cm, 0 psi).	0.5 V
(A15–17 ↔ A16–12)	L-O ↔ LG	Refrigerant pressure 2.9 Mpa (30 kgf·cm, 427 psi).	4.5 V
TAMOUT \leftrightarrow GND *4 (A15-18 \leftrightarrow A14-1)	L ↔ W-B	IG ON.	Pulse generation
PaDN ↔ PaGND		Push passenger temperature switch OFF.	10 – 14 V
(A15–19 ↔ A15–12)	R-W ↔ GR-L	Push passenger temperature switch ON.	Below 1.0 V
PaUP ↔ PaGND		Push passenger temperature switch OFF.	10 – 14 V
(A15–20 ↔ A15–12)	W ↔ GR-L	Push passenger temperature switch ON.	Below 1.0 V
DrDN ↔ DrGND		Push driver temperature switch OFF.	10 – 14 V
(A15–21 ↔ A15–11)	P-L ↔ LG-R	Push driver temperature switch ON.	Below 1.0 V
DrUP ↔ DrGND	V-W ↔ LG-R	Push driver temperature switch OFF.	10 – 14 V
(A15–22 ↔ A15–11)	V-VV ~ LG-R	Push driver temperature switch ON.	Below 1.0 V
PS+B ↔ GND (A15-24 ↔ A14-1)	R-G ↔ W-B	Always	10 – 14 V
TFACEPa ↔ SG-4	GR-L ↔ Y-G*1	IG ON. Passenger side duct sensor temperature 25 °C (77 °F).	1.8 – 2.2 V
(A16–14 ↔ A16–11)	GR-R ↔ R-W*2	IG ON. Passenger side duct sensor temperature 50 °C (122 °F).	0.8 – 1.2 V
TFACEDr ↔ SG-3	GR-R ↔ R-W*1	IG ON. Passenger side duct sensor temperature 25 °C (77 °F).	1.8 – 2.2 V
(A16-15 ↔ A16-10)	GR-L ↔ Y-G *2	IG ON. Passenger side duct sensor temperature 50 °C (122 °F).	0.8 – 1.2 V

TR ↔ SG-2	W. I. V. B	IG ON. Room temperature 25 °C (77 °F).	1.8 – 2.2 V
(A16–16 ↔ A16–9)	W-L↔ Y-B	IG ON. Room temperature 40 °C (104 °F).	0.8 – 1.2 V
NOX \Leftrightarrow SG-1*2,*3 (A16-17 \Leftrightarrow A16-8)	L-B ↔Y	After 120 seconds from IG ON and the sensor is exposed to the exhaust gas.	1.0 – 4.5 V
AMDr1 ↔ GND (1 ↔ A14-1)	BR ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AMDr2 \leftrightarrow GND (2 \leftrightarrow A14-1)	BR-B ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AMDr3 \leftrightarrow GND (3 \leftrightarrow A14-1)	BR-W ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AMDr4 \leftrightarrow GND $(4 \leftrightarrow A14-1)$	BR-Y↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AODr1 ↔ GND (5 ↔ A14-1)	L ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AODr2 \leftrightarrow GND (6 \leftrightarrow A14-1)	L-B ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
WVS ↔ GND	G-W ↔ W-B	IG ON. Set temperature control MAX. COOL	Below 1.0 V
(7 ↔ A14–1)	G-VV ↔ VV-D	IG ON. Set temperature control MAX. HOT	10 – 14 V
ABOPa ↔ GND	G-B ↔ W-B	During actuator check mode. Display code 0.	10 – 14 V
(8 ↔ A14–1)		Display code 9.	Below 1.0 V
ABSPa ↔ GND	G-0 ↔ W-B	During actuator check mode. Display code 0.	Below 1.0 V
(9 ↔ A14–1)		Display code 9.	10 – 14 V
AMDB ↔ GND (10 ↔ A14-1)	R-B ↔ W-B	Always	10 – 14 V
AODr3 ↔ GND (12 ↔ A14-1)	L-W ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AODr4 ↔ GND (13 ↔ A14-1)	L-R ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
WVIG ↔ GND	O W B	IG ON.	10 – 14 V
(14 ↔ A14–1)	O ↔ W–B	IG OFF.	0 V
WVO ↔ GND	G ↔ W-B	IG ON. Set temperature control MAX. COOL.	10 – 14 V
(15 ↔ A14–1)	G ↔ W-B	IG ON. Set temperature control MAX. HOT.	Below 1.0 V
ABODr ↔ GND	GR ↔ W-B	During actuator check mode. Display code 0.	10 – 14 V
(16 ↔ A14–1)		Display code 9.	Below 1.0 V
ABSDr ↔ GND	GR-R ↔ W-B	During actuator check mode. Display code 0.	Below 1.0 V
(17 ↔ A14–1)		Display code 9.	10 – 14 V
S5–3 ↔ SG (18 ↔ 19)	R-W ↔ W-B	IG ON.	4.5 – 5.5 V
TPI ↔ SG	B.V. W.5	IG ON. Push REC switch.	4.0 V
(20 ↔ 19)	B–Y ↔ W–B	IG ON. Push FRESH switch.	1.0 V
TPBPa ↔ SG-7	<u> </u>	Change display code 9 to display code 0.	3.5 – 4.5 V
(21 ↔ 37)	B-L ↔ W-L	Change display code 2 to display code 3.	Pulse generation Pulse generation Below 1.0 V 10 - 14 V 10 - 14 V Below 1.0 V 10 - 14 V 10 - 14 V Pulse generation Pulse generation Pulse generation 10 - 14 V 0 V 10 - 14 V Below 1.0 V Below 1.0 V To - 14 V Below 1.0 V 10 - 14 V Below 1.0 V 10 - 14 V A.5 - 5.5 V 4.0 V 1.0 V
AODB ↔ GND (22 ↔ A14–1)	R-Y ↔ W-B	Always	10 – 14 V

DIAGNOSTICS - AIR CONDITIONING SYSTEM

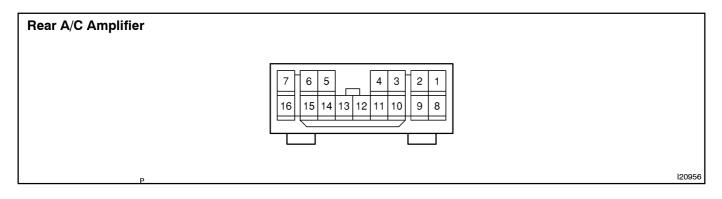
AMPa1 ↔ GND (23 ↔ A14-1)	LG ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AMPa2 ↔ GND (24 ↔ A14-1)	LG-B ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AMPa3 ↔ GND (25 ↔ A14-1)	LG-W ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AMPa4 ↔ GND (26 ↔ A14-1)	LG-R ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AOPa1 ↔ GND (27 ↔ A14-1)	P ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AOPa2 ↔ GND (28 ↔ A14-1)	P-B ↔ W-B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AOPa3 ↔ GND (29 ↔ A14-1)	P–G ↔ W–B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
AOPa4 ↔ GND (31 ↔ A14-1)	P–L ↔ W–B	During actuator check mode. Change display code 0 to display code 9.	Pulse generation
S5–5 ↔ SG–7 (33 ↔ 37)	R ↔ W-L	IG ON.	4.5 – 5.5 V
AMPB ↔ GND (35 ↔ A14-1)	Y ↔ W-B	Always	10 – 14 V
AIF ↔ GND		IG ON. Push REC switch.	Below 1.0 V
(38 ↔ A14-1)	G-R ↔ W-B	IG ON. Push FRESH switch.	10 – 14 V
AIR ↔ GND		IG ON. Push FRESH switch.	Below 1.0 V
(39 ↔ A14-1)	G-Y ↔ W-B	IG ON. Push REC switch.	10 – 14 V
TE ↔ SG-7	1 3/ 34/ 1	IG ON. Evaporator temperature 0 °C (32 °F).	2.0 – 2.4 V
(42 ↔ 37)	L-Y ↔ W-L	IG ON. Evaporator temperature 15 °C (59 °F).	1.4 – 1.8 V
TPBDr ↔ SG		Change display code 9 to display code 0.	Pulse generation Pulse generation Pulse generation Pulse generation 4.5 - 5.5 V 10 - 14 V Below 1.0 V 10 - 14 V Below 1.0 V 2.0 - 2.4 V
(46 ↔ 19)	B-R ↔ W-B	Change display code 2 to display code 3.	0.5 – 1.8 V
AOPB ↔ GND (48 ↔ A14-1)	Y-R ↔ W-B	Always	10 – 14 V
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*1: LHD Models

*2: RHD Models

*3: LHD, Eurpoe Models

*4: w/o LEXUS Navigation System

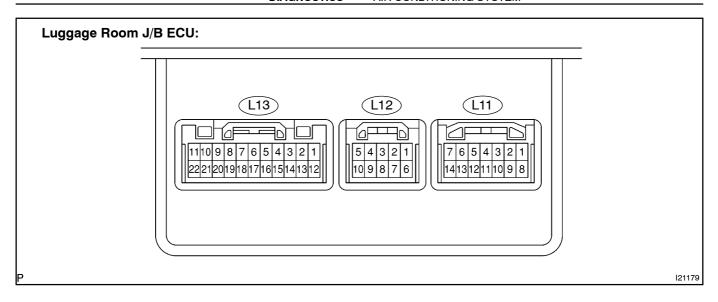


Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
RLO ↔ GND (1 ↔ 6)	Y ↔ W-B	IG ON. Rear A/C blower switch manual OFF.	Below 1.0 V
		IG ON. Rear A/C blower switch manual LO.	10 – 14 V
RSLO ↔ GND (2 ↔ 6)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	IG ON. Rear A/C switch OFF.	Below 1.0 V
	W-Y ↔ W-B	IG ON. Rear A/C switch AUTO.	10 – 14 V
$R-B \leftrightarrow GND$ $(3 \leftrightarrow 6)$	L-W ↔ W-B	Always.	10 – 14 V
		IG ON. Front A/C blower motor operates. Push "REC" switch.	10 – 14 V
SFRS ↔ GND (4 ↔ 6)	V ↔ W-B	IG ON. Front A/C blower motor operates. Push "FRS" switch. Ambient temperature Below -1 °C	Below 1.0 V
RMGV ↔ GND *1		IG ON. Rear A/C switch OFF.	10 – 14 V
(5 ↔ 6)	G-Y ↔ W-B	IG ON. Rear A/C AUTO mode. Rear A/C switch ON.	Below 1.0 V
RHI ↔ GND		IG ON. Rear A/C blower switch OFF.	Below 1.0 V
(8 ↔ 6)	L-R ↔ W-B	IG ON. Rear A/C manual mode. Blower switch HI.	10 – 14 V
RAUTO ↔ GND		IG ON. Rear A/C manual mode	10 – 14 V
(9 ↔ 6)	W–L ↔ W–B	IG ON. Rear A/C AUTO mode	Below 1.0 V
IG ↔ GND (10 ↔ 6)	B-R ↔ W-B	IG ON.	10 – 14 V
		IG ON. Rear A/C blower motor speed except to HI.	10 – 14 V
to	G-B ↔ W-B	IG ON. Rear A/C blower motor speed to HI.	Below 1.0 V
RFR2 ↔ GND *2 (11 ↔ 6)		During actuator check mode. Display code 0.	10 – 14 V
		Display code 2.	Below 1.0 V
DIO ↔ GND (12 ↔ 6)		IG ON. Front A/C blower motor operates. Rear A/C blower motor speed to HI. Rear A/C switch ON.	10 – 14 V
	Y–B ↔ W–B	IG ON. Front A/C blower motor operates. Rear A/C blower motor speed to HI. Rear A/C switch OFF.	Below 1.0 V
EXO ↔ GND (13 ↔ 6)		IG ON. Front A/C blower motor operates. Push "FRESH" switch. Rear AUTO mode. Rear A/C switch ON.	10 – 14 V
	G-W ↔ W-B	IG ON. Front A/C blower motor operates. Push "FRESH" switch. Rear AUTO mode. Rear A/C switch OFF. Ambient temperature Below -1 °C	Below 1.0 V

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ROO ↔ GND *1 (14 ↔ 6)		IG ON. Front A/C blower motor operates. Rear A/C blower motor speed to HI. Rear A/C switch OFF.	10 – 14 V
	L-B ↔ W-B	IG ON. Front A/C blower motor operates. Rear A/C blower motor speed to HI. Rear A/C switch ON.	Below 1.0 V
		IG ON. Rear A/C blower motor speed except to HI.	10 – 14 V
DED4 OND *1		IG ON. Rear A/C blower motor speed to HI.	Below 1.0 V
RFR1 ↔ GND*1 (15 ↔ 6)	G-B ↔ W-B	During actuator check mode. Display code 0.	10 – 14 V
		Display code 2.	Below 1.0 V
RHR ↔ GND (16 ↔ 6)		IG ON. Rear A/C manual mode. Rear A/C blower motor does not operate.	10 – 14 V
	G–O ↔ W–B	IG ON. Rear A/C manual mode. Rear A/C blower motor speed LO or HI.	Below 1.0 V
		During actuator check mode. Display code 0.	10 – 14 V
		Display code 2.	Below 1.0 V

*1: w/ Rear Cooler *2: w/o Rear Cooler



Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
RMGV ↔ Body ground *1	G-Y ↔ Body	IG ON. Rear A/C switch to ON.	Below 1.0 V
(L13–11 ↔ Body ground)	ground	IG ON. Rear A/C switch to OFF.	10 – 14 V
SMOK ↔ Body ground (L13–16 ↔ Body ground)	P–G ↔ Body ground	IG ON. Rear A/C switch to AUTO. By using cigarette smoke.	Above 4.0 V
		IG ON. Rear A/C switch to AUTO. By not using cigarette smoke.	Below 1.0 V
AUTO ↔ Body ground	W–L ↔ Body	IG ON. Rear A/C rear seat AUTO indicator light up.	Below 1.0 V
(L13–17 ↔ Body ground)	ground	IG ON. Rear A/C rear seat AUTO indicator does not light up.	10 – 14 V
	G-O ↔ Body	IG ON. Rear A/C manual mode. Rear A/C blower motor does not operate.	10 – 14 V
RHR ↔ Body ground (L13–18 ↔ Body ground)		IG ON. Rear A/C manual mode. Rear A/C blower motor speed LO or HI.	Below 1.0 V
	ground	During actuator check mode. Display code 0.	10 – 14 V
		Display code 2.	Below 1.0 V
		IG ON. Rear A/C blower motor speed except to HI.	10 – 14 V
RFR ↔ Body ground (L13–19 ↔ Body ground)		IG ON. Rear A/C blower motor speed to HI.	Below 1.0 V
	G-B ↔ Body ground	During actuator check mode. Display code 0.	10 – 14 V
		Display code 2.	Below 1.0 V
FRS ↔ Body ground	GR-L ↔ Body	IG ON. Front A/C blower motor operates. Push "FRS" switch. Ambient temperature Below –1 °C	10 – 14 V
(L13–20 ↔ Body ground)	ground	IG ON. Front A/C blower motor operates. Push "REC" switch.	Below 1.0 V

^{*1:} w/ Rear Cooler