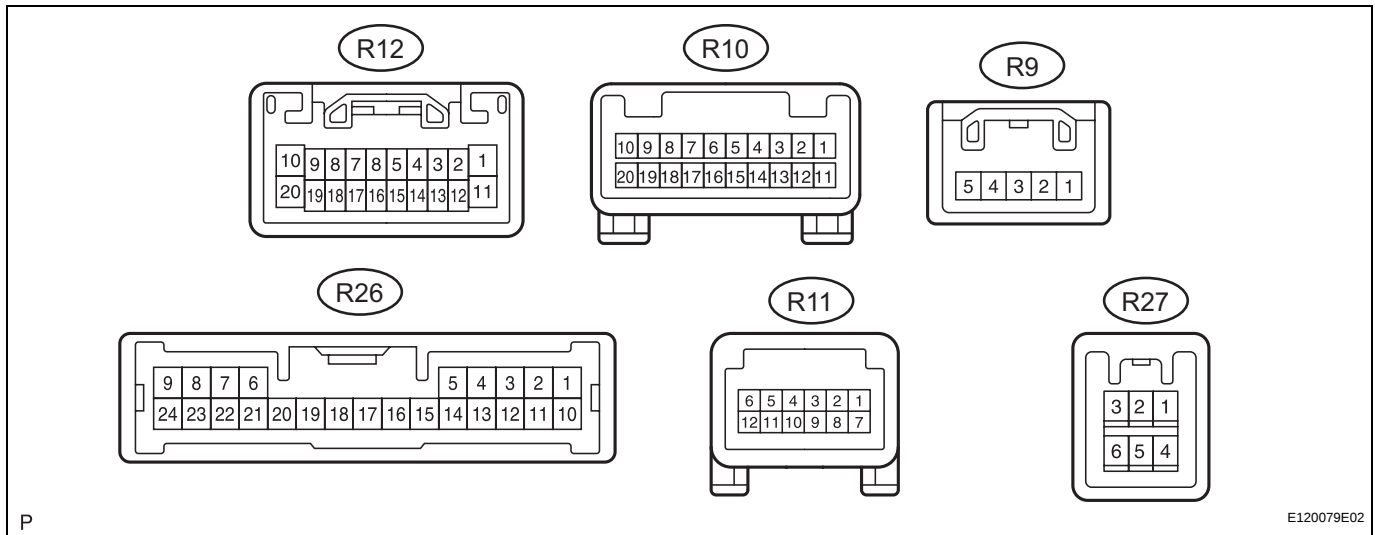


TERMINALS OF ECU

1. RADIO AND NAVIGATION ASSEMBLY



Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
PKB (R9-1) - GND (R12-20)	LG - BR	Parking brake signal	See "Vehicle Signal Check" (See page NS-22)	-
SPD (R9-3) - GND (R12-20)	R - BR	Speed signal from combination meter	See "Vehicle Signal Check" (See page NS-22)	-
REV (R9-5) - GND (R12-20)	Y - BR	Reverse signal	See "Vehicle Signal Check" (See page NS-22)	-
SWG (R10-6) - Body ground	W-R - Body ground	Steering pad switch signal	Always	Below 1 V
SW1 (R10-7) - SWG (R10-6)	V-W - W-R	Steering pad switch signal	No switch is pushed → SEEK+ switch pushed → SEEK- switch pushed → VOL+ switch pushed → VOL- switch pushed	4 V or more → Approx. 0.5 V → Approx. 0.9 V → Approx. 2.0 V → Approx. 3.4 V
SW2 (R10-8) - SWG (R10-6)	Y-B - W-R	Steering pad switch signal	No switch is pushed → MODE switch pushed → ON HOOK switch pushed → OFF HOOK switch pushed → VOICE switch pushed	4 V or more → Approx. 0.5 V → Approx. 0.9 V → Approx. 2.0 V → Approx. 3.4 V
IVO+ (R10-11) - GND (R12-20)	L - BR	Voice guidance signal	Voice guidance is provided	A waveform synchronized with sounds is output
IVO- (R10-12) - GND (R12-20)	P - BR	Voice guidance signal	Voice guidance is provided	A waveform synchronized with sounds is output
SLD1 (R10-13) - Body ground	Shielded - Body ground	Voice sound signal shielded ground	Always	Below 1 V
CSLD (R11-1) - Body ground (*1)	Shielded - Body ground	Shielded ground	Always	Below 1 V
CDR+ (R11-2) - GND (R12-20) (*1)	B - BR	RSE system sound signal	RSE system is playing	A waveform synchronized with sounds is output
CDR- (R11-3) - GND (R12-20) (*1)	W - BR	RSE system sound signal	RSE system is playing	A waveform synchronized with sounds is output
CDL+ (R11-4) - GND (R12-20) (*1)	R - BR	RSE system sound signal	RSE system is playing	A waveform synchronized with sounds is output

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
CDL- (R11-5) - GND (R12-20) (*1)	G - BR	RSE system sound signal	RSE system is playing	A waveform synchronized with sounds is output
MUTE (R11-6) - GND (R12-20) (*1)	V - BR	Mute signal	RSE system is playing→ Source is changed with remote controller (signal from RSE system)	Above 3.5 V → Below 1 V
TXM+ (R11-9) - GND (R12-20) (*1)	R - BR	AVC-LAN communication signal	Turn ignition switch to ACC	2 to 3 V
TXM- (R11-10) - GND (R12-20) (*1)	G - BR	AVC-LAN communication signal	Turn ignition switch to ACC	2 to 3 V
B (R12-1) - GND (R12-20)	L-Y - BR	Battery	Always	10 to 14 V
ILL+ (R12-2) - GND (R12-20)	G - BR	Illumination signal	Turn ignition switch ON Light control switch OFF → TAIL or ON	Below 1V → 10 to 14 V
ATX+ (R12-5) - GND (R12-20)	B - BR	AVC-LAN communication signal	Turn ignition switch to ACC	2 to 3 V
MUTE (R12-7) - GND (R12-20)	W-R - BR	Mute signal	Audio system is playing→ Changing	Above 3.5 V → Below 1 V
R+ (R12-8) - GND (R12-20)	B - BR	Sound signal (Right)	Audio system is playing	A waveform synchronized with sounds is output
L+ (R12-9) - GND (R12-20)	R - BR	Sound signal (Left)	Audio system is playing	A waveform synchronized with sounds is output
SLD (R12-10) - Body ground	Shielded - Body ground	Shielded ground	Always	Below 1 V
ACC (R12-11) - GND (R12-20)	GR - BR	Accessory (ON)	Turn ignition switch OFF→ ACC or ON	Below 1 V → 10 to 14 V
ILL- (R12-12) - GND (R12-20)	W-G - BR	Illumination signal	Turn ignition switch ON Light control switch OFF → TAIL or ON	Below 1 V → 10 to 14 V
ANT (R12-13) - GND (R12-20)	B - BR	Power source of antenna	Radio switch ON and AM or FM	10 to 14 V
ATX- (R12-15) - GND (R12-20)	W - BR	AVC-LAN communication signal	Turn ignition switch to ACC	2 to 3 V
R- (R12-18) - GND (R12-20)	W - BR	Sound signal (Right)	Audio system is playing	A waveform synchronized with sounds is output
L- (R12-19) - GND (R12-20)	G - BR	Sound signal (Left)	Audio system is playing	A waveform synchronized with sounds is output
GND (R12-20) - Body ground	BR - Body ground	Ground	Always	Below 1 V
MIC+ (R26-19) - GND (R12-20)	L - BR	Microphone voice signal	See "Microphone Check" (See page NS-27)	-
MIC- (R26-20) - Body ground	P - Body ground	Microphone voice signal	See "Microphone Check" (See page NS-27)	-
MACC (R26-17) - GND (R12-20)	W - BR	Microphone AMP power supply	Turn ignition switch OFF → ON	Below 1 V → 5 V
TSW- (R26-12) - GND (R12-20)	B - BR	Telephone relation switch signal	Always	Below 1 V
SGND- (R26-18) - GND (R12-20)	B - BR	Ground	Always	Below 1 V
CA+ (R26-24) - GND (R12-20)	R - BR	Television camera power supply	Turn ignition switch ON, shift lever in R position	Approx. 6 V
CGND (R26-21) - Body ground	W - Body ground	Ground	Always	Below 1 V
V+ (R26-22) - CGND (R12-21)	B - W	Television camera image signal	Turn ignition switch ON, shift lever in R position	Pulse generation (Refer to waveform 2)
V- (R26-23) - CGND (R12-21)	Shielded - W	Shielded ground	Always	Below 1 V

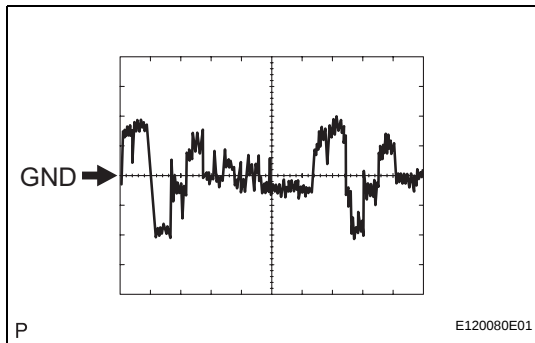
Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
VV+ (R27-1) - GND (R12-20) (*1)	P - BR	Display signal	DVD is played on radio and navigation assembly	A waveform synchronized with display signals is output. (Refer to waveform 1)
VV- (R27-4) - Body ground (*1)	L - Body ground	Ground	Always	Below 1 V
VAR+ (R27-2) - GND (R12-20)	G - BR	Sound signal (Right)	External device is playing (When stereo jack is used)	A waveform synchronized with sounds is output
VAL+ (R27-3) - GND (R12-20)	R - BR	Sound signal (Left)	External device is playing (When stereo jack is used)	A waveform synchronized with sound is output
VA- (R27-5) - Body ground	Shielded - Body ground	Shielded ground	Always	Below 1 V
ADPG (R27 - 6) - GND (R12-20)	L - BR	External device connection detection signal	External device is connection	Below 1 V

*1: with Rear Seat Entertainment System

(a) Reference: waveform 1

HINT:

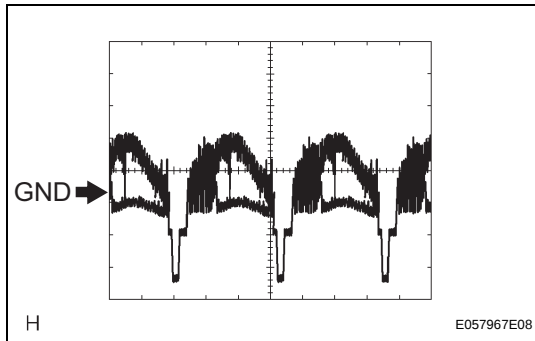
- Terminal: VV+ - VV-
- Gauge set: 200 mV/DIV, 10 μ s/DIV
- Condition: DVD is played on radio and navigation assembly



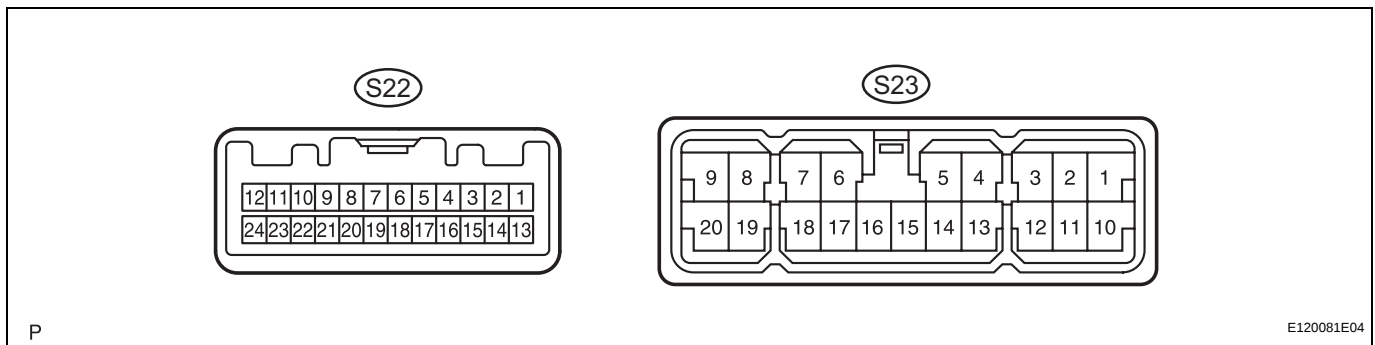
(b) Reference: waveform 2

HINT:

- Terminal: V+ - CGND
- Gauge set: 0.2 V/DIV, 0.2 μ s/DIV
- Condition: Ignition switch: ON, shift lever: R position



2. STEREO COMPONENT AMPLIFIER



Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
MUTE (S22-1) - GND2 (S23-15)	W-R - BR	Mute signal from radio receiver	Audio system is playing → Changing	Above 3.5 V → Below 1 V

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
L- (S22-2) - GND2 (S23-15)	G - BR	Sound signal (Left)	Audio system is playing	A waveform synchronized with sounds is output
L+ (S22-3) - GND2 (S23-15)	R - BR	Sound signal (Left)	Audio system is playing	A waveform synchronized with sounds is output
R- (S22-4) - GND2 (S23-15)	W - BR	Sound signal (Right)	Audio system is playing	A waveform synchronized with sounds is output
R+ (S22-5) - GND2 (S23-15)	B - BR	Sound signal (Right)	Audio system is playing	A waveform synchronized with sounds is output
SLD (S22-6) - Body ground	Shielded - Body ground	Shielded ground	Always	Below 1 V
TX- (S22-7) - GND2 (S23-15)	W - BR	AVC-LAN communication signal	Turn ignition switch to ACC	2 to 3 V
TX+ (S22-8) - GND2 (S23-15)	B - BR	AVC-LAN communication signal	Turn ignition switch to ACC	2 to 3 V
SPD (S22-11) - GND2 (S23-15)	V-R - BR	Speed signal from combination meter	Turn ignition switch to ON. Drive wheels are turned slowly	Pulse generation
ACC (S22-12) - GND2 (S23-15)	GR - BR	Accessory (ON)	Turn ignition switch OFF → ACC	Below 1 V → 10 to 14 V
INT- (S22-22) - GND2 (S23-15)	P - BR	Voice guidance signal	Voice guidance is provided	A waveform synchronized with sounds is output
INT+ (S22-23) - GND2 (S23-15)	L - BR	Voice guidance signal	Voice guidance is provided	A waveform synchronized with sounds is output
+B (S23-1) - GND2 (S23-15)	W-L - BR	Battery	Always	10 to 14 V
CTR+ (S23-3) - GND2 (S23-15)	G - BR	Sound signal (Front Center)	Audio system is playing	A waveform synchronized with sounds is output
RL+ (S23-4) - GND2 (S23-15)	B - BR	Sound signal (Rear Left)	Audio system is playing	A waveform synchronized with sounds is output
RR+ (S23-5) - GND2 (S23-15)	R - BR	Sound signal (Rear Right)	Audio system is playing	A waveform synchronized with sounds is output
FL+ (S23-6) - GND2 (S23-15)	P - BR	Sound signal (Front Left)	Audio system is playing	A waveform synchronized with sounds is output
FR+ (S23-7) - GND2 (S23-15)	LG - BR	Sound signal (Front Right)	Audio system is playing	A waveform synchronized with sounds is output
WFL+ (S23-8) - GND2 (S23-15)	BR - BR	Sound signal (Woofer Box)	Audio system is playing	A waveform synchronized with sounds is output
WFR+ (S23-9) - GND2 (S23-15)	L-B - BR	Sound signal (Woofer Box)	Audio system is playing	A waveform synchronized with sounds is output
+B2 (S23-10) - GND2 (S23-15)	W-L - BR	Battery	Always	10 to 14 V
CTR- (S23-12) - GND2 (S23-15)	G-B - BR	Sound signal (Front Center)	Audio system is playing	A waveform synchronized with sounds is output
RL- (S23-13) - GND2 (S23-15)	Y - BR	Sound signal (Rear Left)	Audio system is playing	A waveform synchronized with sounds is output

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
RR- (S23-14) - GND2 (S23-15)	W - BR	Sound signal (Rear Right)	Audio system is playing	A waveform synchronized with sounds is output
GND2 (S23-15) - Body ground	BR - Body Ground	Ground	Always	Below 1 V
GND (S23-16) - Body ground	BR - Body ground	Ground	Always	Below 1 V
FL- (S23-17) - GND2 (S23-15)	V - BR	Sound signal (Front Left)	Audio system is playing	A waveform synchronized with sounds is output
FR- (S23-18) - GND2 (S23-15)	L - BR	Sound signal (Front Right)	Audio system is playing	A waveform synchronized with sounds is output
WFL- (S23-19) - GND2 (S23-15)	G-W- BR	Sound signal (Woofer Box)	Audio system is playing	A waveform synchronized with sounds is output
WFR- (S23-20) - GND2 (S23-15)	L-R - BR	Sound signal (Woofer Box)	Audio system is playing	A waveform synchronized with sounds is output

3. TELEVISION DISPLAY ASSEMBLY (See page [AV-155](#))